Environmental Performance Partnership Agreement

State Fiscal Years 2022-2023
July 1, 2021 – June 30, 2023

June 2021, Publication 21-01-002

Environmental Performance Partnership Agreement
For July 1, 2021 - June 30, 2023

Between the Washington State Department of Ecology and the U.S. Environmental Protection Agency – Region 10

We, the undersigned, Laura Watson, Director of the Washington State Department of Ecology and Michelle Pirzadeh, Acting Regional Administrator for the United States Environmental Protection Agency, Region 10, enter into this Environmental Performance Partnership Agreement for the protection of Washington's air quality and water quality and sound management of hazardous waste.

This Agreement reflects the relationship between Ecology and EPA Region 10. It is a partnership with each other and with the people of Washington in protecting, enhancing, and restoring our natural environment. In this Agreement, we have identified clear environmental priorities and desired results.

Both Ecology and EPA Region 10 will exert their best efforts in the performance of this Agreement. Disputes regarding the performance of either party to this Agreement will be resolved, consistent with applicable regulatory dispute resolution procedures, at the lowest level possible within our organizations. If this is not feasible or successful, the next level for dispute resolution will be the managers responsible for the program area in question. The final level of appeal will be the Director of Ecology and Regional Administrator for EPA Region 10.

It is our belief that this Agreement will improve environmental protection in Washington State. In addition, we hope the Agreement communicates to local communities, tribal governments, and all Washingtonians our mutual goals and priorities for the 2021-2023 state biennium.

Signed,

Laura Watson

Digitally signed by Laura Watson
Date: 2021.06.21 15:31:09 -07'00'

Laura Watson
Director
Washington Department of Ecology
Olympia, Washington 98504

DATE: 06/21/21

MICHELLE PIRZADEH

Digitally signed by MICHELLE PIRZADEH
Date: 2021.06.21 15:19:58 -07'00'

Michelle Pirzadeh
Acting Regional Administrator
U.S. Environmental Protection Agency Region 10
Seattle, Washington 98101

DATE: 06/21/21

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Contact Information

Sean Lundblad
Washington State Department of Ecology
300 Desmond Drive
P.O. Box 47600
Olympia, WA 98504-7600
Phone: 360-407-6822
FAX: 360-407-7534
E-mail: sean.lundblad@ecy.wa.gov

Michelle Wilcox
United States Environmental Protection Agency, Region 10
Washington Operations Office
300 Desmond Drive, Suite 102
Lacey, WA 98503
Phone: 360-753-9469
FAX: 360-753-8080
E-mail: wilcox.michelle@epa.gov

Website[1]: Washington State Department of Ecology

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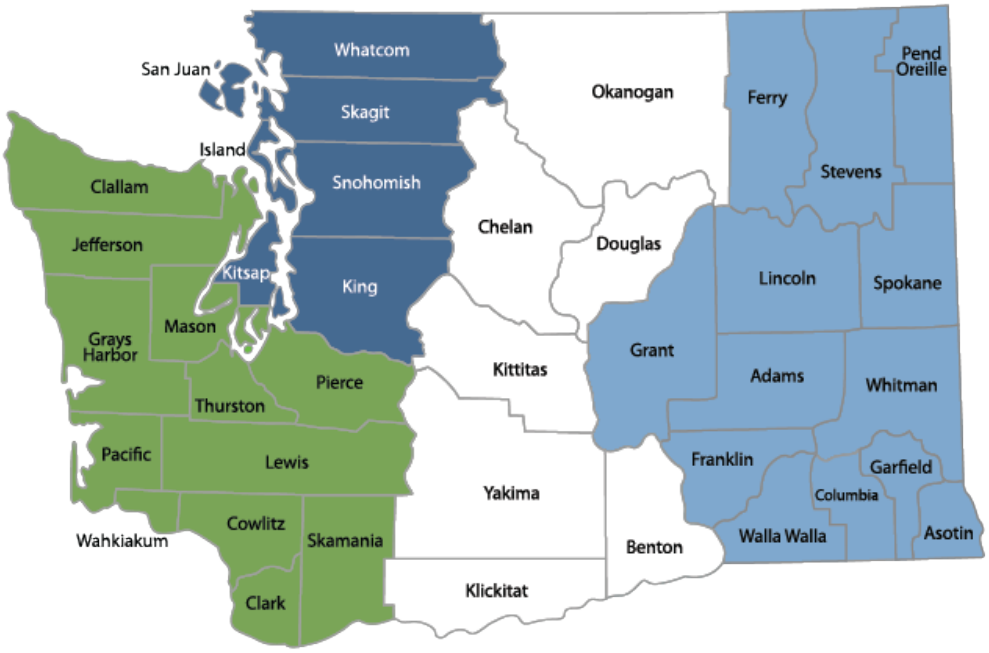
[1] www.ecology.wa.gov/contact

Department of Ecology's Regional Offices

Map of Counties Served



Southwest Region 360-407-6300	Northwest Region 425-649-7000	Central Region 509-575-2490	Eastern Region 509-329-3400

Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	3190 160th Ave SE Bellevue, WA 98008	425-649-7000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
Headquarters	Across Washington	PO Box 46700 Olympia, WA 98504	360-407-6000

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May 2021 | Publication 21-01-002 – Public Comment Draft

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Chapter 1 - Performance Partnership Overview

Introduction

This Environmental Performance Partnership Agreement (Agreement) documents commitments between the Washington State Department of Ecology (Ecology) and the U.S. Environmental Protection Agency (EPA). All aspects of this Agreement regarding EPA are managed through EPA Region 10, Seattle, Washington. This Agreement describes EPA-funded activities carried out by Ecology programs that address:

- Water quality
- Air quality
- Hazardous waste[2]
- Nuclear waste

This Agreement covers July 1, 2021 to June 30, 2023, and does not restrict EPA's or Ecology's legal oversight or enforcement authority.

Decisions made by Ecology and EPA are the basis for the commitments and plans in this Agreement. Before both parties sign this Agreement, the Department of Ecology will conduct a 30-day formal public review period. Comments received during this period, and responses, will be provided in an appendix in the final report.

Purpose

Ecology and EPA share responsibility to meet environmental and related public health priorities of Washington State. The purpose of this Agreement is to:

- Recognize mutual environmental goals, strategies, activities, and performance measures.
- Reinforce our commitment to eliminating environmental and health disparities across Washington communities and integrating environmental justice throughout agency programs.
- Use indicators that reflect environmental conditions, trends, and results to measure environmental progress.
- Collaborate on opportunities to advance children's health.
- Collaborate with Tribes and other governments.
- Describe the joint Resource Conservation and Recovery Act (RCRA) Work Plan and resource allocations for managing the federal grant dollars that EPA provides to Ecology for air quality, water quality, and hazardous waste management.

[2]Washington law uses the term *dangerous* waste. Federal law uses the term *hazardous* waste. Washington's definition of dangerous waste includes some wastes that are not included in the federal definition. For this Agreement, the term *hazardous waste* is used, respecting the distinction between the two terms.

Budget

Final state and federal budgets for the time period of this Agreement will determine actual capacity for some of the plans and commitments described here. A general consideration for state activities is that, while state costs for salaries and benefits, equipment, etc. continue to rise; federal grant dollars have stayed level or decreased somewhat. This is a real constraint that impacts the extent to which deliverables can be committed to.

To address the time lag between writing and signing this Agreement's budget details and implications, both agencies agree to meet by the end of calendar year 2021. The meeting(s) will address specific budgets for each program area and how they may affect the related plans and commitments in this Agreement. If other budget adjustments are needed during the period of the Agreement, both agencies will meet to coordinate related impacts, activities, and deliverables.

Overarching goals and objectives

As part of this Agreement, EPA and Ecology recognize the following overarching goals and objectives. Although not always specifically addressed within this Agreement's details, they are still core values to the Agreement and both agencies. They are tied to EPA's National Environmental Performance Partnership Guidance (2022-2023)[3].

Goal 1: Conduct joint strategic planning that reflects performance partnership principles.

- Identify opportunities for enhanced work sharing, resource and workload flexibility, and phased implementation of program requirements, especially where budget reductions have negatively affected states' programs.
- Identify and pursue collaborations to improve Ecology-EPA business processes. Promote continuous improvement by applying the Lean Management System or similar techniques.
- Use this Agreement to organize and articulate mutual compliance and enforcement priorities and plans.
- Advance performance partnership principles through effective collaboration on policy and implementation issues, making full use of the issue resolution process to ensure that requests for flexibility and innovation are addressed and resolved at the highest levels needed.

[3] https://www.epa.gov/planandbudget/national-program-guidances#fy20222023.

Goal 2: Support EPA's Region 10 priorities.

- Address climate change and improve air quality.
- Integrate environmental justice considerations throughout Agency programs.
- Support communities through effective EPA water infrastructure investments.
- Ensure continued clean-up of hazardous waste sites to make them available for beneficial re-use in their communities.
- Ensure full compliance with environmental laws and rules.
- Rely on sound science and ensure transparency in decision-making.
- Make timely permitting-related decisions.

Goal 3: Support Ecology's strategic framework goals.

- Support and engage our communities, customers, and employees to ensure equitable delivery of our services and resources.
- Reduce and prepare for climate impacts.
- Prevent and reduce toxic threats and pollution.
- Protect and manage our state's waters.
- Protect and restore Puget Sound.

Goal 4: Foster programmatically sound and fiscally responsible grant management practices.

What is not covered in this agreement

This Agreement is between Ecology and EPA only.

- The Washington State Leaking Underground Storage Tank cooperative agreement and work plan between EPA and Ecology are separate from this agreement.
- EPA grant funding for the Safe Drinking Water Act with the Washington State Department of Health (Drinking Water Program) is not subject to this agreement.
- EPA grant funding for pesticides (Federal Insecticide, Fungicide, and Rodenticide Act) with the Washington State Department of Agriculture is not subject to this Agreement.
- Indian Country and tribal resources are also not covered under this Agreement. The state and EPA have and will continue to develop separate environmental agreements with individual tribes. Still, Ecology and EPA recognize that collaboration with individual and regional tribes is important for better environmental management and advancing environmental justice.

Ecology and EPA will continue coordinated work on a number of other commitments not included in this Agreement. Many of those commitments are referenced within this Agreement's program-specific chapters. Those commitments include, but are not limited to:

- Requirements under the Endangered Species Act
- Approval of the National Pollutant Discharge Elimination System (NPDES) Program
- State Revolving Loan Fund Operating Agreement
- State Revolving Loan Fund Intended Use Plan

- National Estuary Programs
- Nonpoint Source Annual Report
- Water Quality Management Plan to Control Nonpoint Source Pollution
- Operating Agreement for Clean Water Act Section 319 Nonpoint Source Grants Management
- Enforcement Response Policy for Resource Conservation and Recovery Act
- Resource Conservation and Recovery Act Memorandum of Agreement

Ecology's primary programs covered in this agreement

Three Ecology programs are the primary recipients of EPA funds to carry out the work addressed in this Agreement:

- Air Quality
- Water Quality
- Hazardous Waste and Toxics Reduction

EPA either delegates or authorizes these programs pursuant to the following respective federal laws:

- The Clean Air Act
- The Clean Water Act
- The Resource Conservation and Recovery Act (RCRA)

Ecology's Industrial Section, within the Solid Waste Management Program, and the Nuclear Waste Program also conduct activities covered by these same federal laws. Those activities are also covered by this Agreement.

Ecology programs carry out many other activities and administer many other laws that are not covered by this Agreement. Those activities are funded by other means, including some from EPA, but not by the grants specific to this Agreement.

Strategic priorities

During the period of this Agreement, Ecology and EPA will focus on the following strategic priorities:

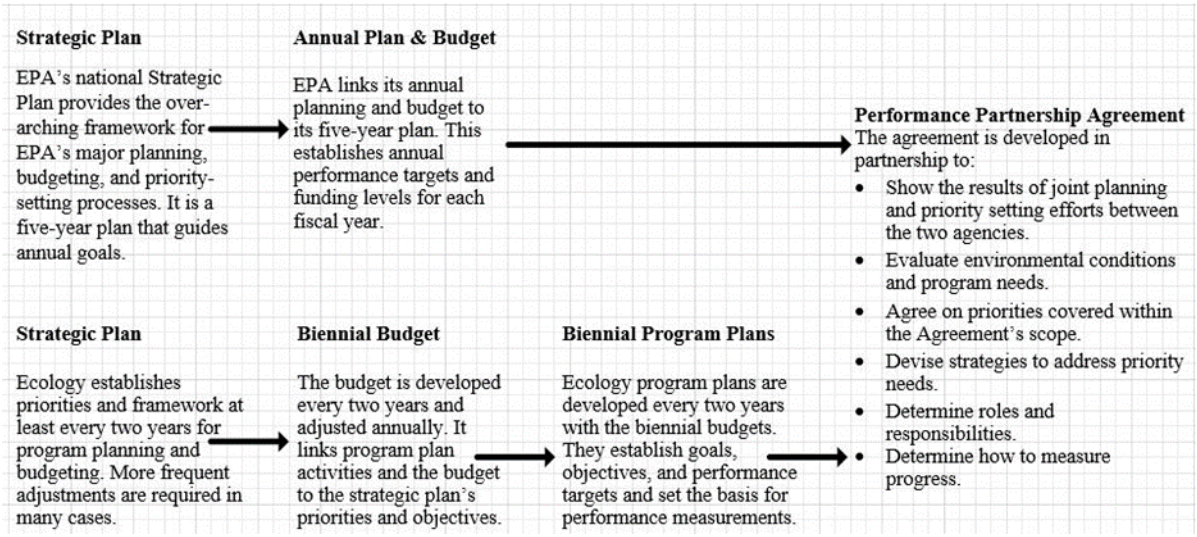
- Reduce and prepare for climate impacts
- Prevent and reduce toxic threats and pollution
- Protect and manage Washington's waters
- Protect and restore Puget Sound and the Columbia River Basin
- Lead the effective and efficient cleanup of Hanford
- Support and engage our communities for right-to-know
- Address environmental and health inequities by incorporating environmental justice considerations into our work and decisions.

Performance management priorities

- Increase efficiencies and minimize wasted efforts.
- Explore improved ways to partner.
- Make timely decisions.
- Maintain open, creative, and positive communication.
- Accurately measure performance and communicate results to the public.
- Ensure transparency and accountability.
- Apply flexible and innovative strategies to achieve environmental results.
- Use EPA-provided trainings and webinars as opportunities to learn and collaborate.

Ecology's and Environmental Protection Agency's planning processes

Ecology's and EPA's planning processes start with broad strategic goals and end with specific work plans to implement those goals. The chart below shows each step and how they relate to each other.



Tribal relations

Ecology and EPA have important relationships with federally recognized Indian tribes. The federally recognized tribes are sovereign nations with regulatory authority within Indian Country. Their rights and resources are reserved by their treaties or by other means. The U.S. government has a unique trust responsibility to these tribal governments through:

- Treaties
- State and federal laws
- Executive orders
- Court decisions

Relationships with Indian groups and communities that are not federally recognized as tribes are also important to our agencies, but do not include the same trust or treaty agreements or equivalent laws.

Indian Country and tribal trust resources are not addressed within this Agreement. This Agreement is not intended to define or modify tribal relationships. Ecology and EPA have, and will continue to develop, separate environmental agreements with individual tribes outside of this Agreement. However, in mutual recognition of tribal collaboration as part of this Agreement, EPA and Ecology will continue to provide each other with copies of our respective environmental agreements with tribes upon request.

EPA Indian Policy established in 1984 commits EPA to operate in a government-to-government relationship with Indian tribes. The policy supports the self-governance principle for tribes that manage federal environmental programs in Indian Country. When other agencies implement environmental programs, EPA emphasizes the importance of working with tribes. EPA also encourages cooperation between state, tribal, and local governments to resolve environmental issues of mutual concern. It is very important for Ecology and EPA to work with tribes to address Endangered Species Act issues related to the current and proposed listings of several species in Washington State.

Under the 1989 State/Tribal Centennial Accord[4] and Government-To-Government Relationship With Indian Tribes law[5], Ecology maintains a relationship with tribes. Ecology is fully committed to the principals of government-to-government consultation and cooperation with tribes consistent with our mission to protect, preserve, and enhance Washington's environment, for current and future generations.[6]

Environmental Protection Agency grants to Ecology

This Agreement includes joint Ecology and EPA activities related to air quality, hazardous waste management, and water quality. Ecology is delegated by EPA to administer Clean Air Act and Clean Water Act activities addressed in this Agreement. Those activities are funded in part through EPA's consolidated "Performance Partnership" grant. Ecology is authorized to administer the Resource Conservation and Recovery Act (RCRA) regarding hazardous waste management activities, also addressed in this Agreement. Reflecting this legal difference between "delegation" and "authorization," Ecology receives a RCRA grant that is separate from the Performance Partnership grant. For the remainder of this Agreement, the terms "delegated" and "authorized" are considered the same for general purposes, respecting there is a legal distinction between the two terms.

[4] https://goia.wa.gov/relations/centennial-accord
[5] https://app.leg.wa.gov/rcw/default.aspx?cite=43.376&full=true
[6] https://ecology.wa.gov/About-us/How-we-operate/Strategic-plan

This Agreement does not cover all Ecology work funded by EPA grants. The table below lists the grants that are included in this Agreement (not including Ecology matching funds).

Table 1: Agreement Grants – State Fiscal Years 2022-2023

Grant Number and Title	Estimated Two Year EPA Grant Amount	End Date
FB00 - Air Grants (ECY) 66.605 - Performance Partnership Grant (EPA)	$7,100,000	6/30/23
M221 – Hazardous Waste RCRA (ECY) 66.801 - Hazardous Waste Management Support (EPA)	$3,300,000	6/30/23
FB00 - Water Grants (ECY) 66.605 - Performance Partnership Grant (EPA)	$11,120,660	6/30/23

Performance Partnership grant

The purpose of the Performance Partnership grant is to:

- Reduce administrative burden by consolidating several air and water grants into one.
- Increase the flexibility to reallocate resources between grants and programs to meet the highest environmental priorities in the state.

Funding sources for the Performance Partnership Grant include the:

- Surface Water 106 Grant (Base Water Grant)
- Groundwater 106 Base Grant
- Underground Injection Control Grant
- Clean Air Act Section 105 Base Grant

Resource Conservation and Recovery Act grant

Hazardous waste activities described in this Agreement are funded in part by a federal Resource Conservation and Recovery Act (RCRA) 3011 grant to Ecology. The RCRA grant is separate from the Performance Partnership Grant.

Assessment process

All elements of this Agreement are important to both agencies and will be open to assessment, enhancement, and correction as needed. Ecology and EPA will regularly, together and independently, assess the progress of the specific activities covered in this Agreement. These assessments will focus on activities subject to the air quality, water quality and hazardous waste elements funded by the grants noted above. Other parts of the Agreement will be open to assessment as the need arises.

Assessments of this Agreement will identify any actions needed to assure success and compliance. Ecology and EPA will use the regular assessments to consider work adjustments,

and, if necessary, amend the Agreement. If a formal amendment is needed, there will be a public review and comment process before its completion.

The midterm assessment will include the following elements:

- **Compliance:** Are Ecology and EPA in compliance with the Agreement?
- **Budget implications:** Are budget constraints impairing the Agreement's work?
- **Effectiveness:** Does the work covered in the Agreement apply resources to the highest environmental priorities and improve environmental outcomes?
- **Public access to review and engage:** Does the work covered in the Agreement advance environmental justice, community access, and public engagement related to that work?
- **Fiscal soundness and program accountability:** Are the funds used for the Agreement managed in an efficient, legal, effective, and economical manner?
- **Accomplishments and changes:** Significant accomplishments or critical changes needed relative to the Agreement

About 18 months into this Agreement's term (early 2023), the combined assessments will form the basis for the next agreement's priorities and negotiations. That will help ensure accountability for this Agreement's completion and continuity with the next agreement's priorities. As with this Agreement's finalization, public review and comment will be part of the next agreement's finalization, before this Agreement expires.

The specific midterm assessments, combined with the next public review/comment process in 2023, provide annual (at least) assessments relative to this Agreement. As always, both agencies welcome questions about the Agreement's activities, at any time.

Chapter 2 - Quality Assurance

Introduction

It is critical for the Department of Ecology (Ecology) to generate and use environmental data of known and documented quality, as we assess and report on the condition of the air, water, and land to understand problems and take corrective actions. This is necessary to support the joint agency priorities identified in the Mutual Priorities chapter of this agreement.

Most of EPA's grant money to Ecology requires certification that Quality Assurance Plans are developed and implemented. This ensures the millions of dollars spent on environmental sampling and analysis, analysis of existing data, and environmental modeling provide data of known quality that is usable for its intended purpose.

Quality assurance requirements for grants and cooperative agreements to state and local governments are implemented in U.S. law (2 CFR parts 200 and 1500 and quality assurance requirements for State and Local Assistance in 40 CFR Part 35). The following paragraphs describe how Ecology will continue to meet those requirements.

Quality assurance policies

Ecology has implemented several agency-wide policies specifying quality assurance activities.

Ecology Policy 22-01 - Establishing Quality Assurance
This policy requires development and approval of Quality Assurance Project Plans (QAPPs) for all projects that generate or use environmental data, including modeling efforts, before the projects begin. It also establishes the documentation of the quality system in Ecology's Quality Management Plan.

Ecology Policy 22-02 - Requiring the use of Accredited Environmental Laboratories
This policy requires the use of accredited labs and analytical methods for all data accepted by or generated by Ecology. Ecology's Laboratory Accreditation Unit supports this requirement.

Water Quality Program Policy 1-11 Chapter 2 Ensuring Credible Data for Water Quality Management
This policy establishes a set of rigorous quality requirements. This policy applies when data related to water quality standards, 303(d) and 305(b) assessments, and Total Maximum Daily Load (TMDL) allocations are submitted to Ecology.

Quality management plan

Ecology's Quality Management Plan (QMP) was last revised and approved in 2020. The plan conforms to the Environmental Protection Agency's (EPA) format and content requirements and aligns Ecology's plan with EPA's requirements for environmental data quality. This QMP was approved by EPA Region 10's Quality Assurance Manager and the director of the Washington Operations Office. Based on that approval, Ecology is delegated the authority to review and approve Quality Assurance Project Plans (QAPPs), based on procedures documented in the QMP. EPA approves the QMP on a five-year cycle, and Ecology expects to submit the next revision to EPA for review and approval in December 2025.

Standard operating procedures

Ecology uses many standard operating procedures (SOPs) that describe detailed field sampling methods, field measurement techniques, and laboratory analysis methods. On average, Ecology tracks about 300 SOPs which are usually recertified on a three-year cycle.

Following Ecology's QMP, the QA Officer tracks all SOPs across the agency, but the individual program QA Coordinators recertify their program SOPs. In the case that a program QA Coordinator is the author of the SOP, the QA Officer recertifies the SOP

Quality Assurance Project Plans

Quality Assurance Project Plans (QAPPs) are a critical component of Ecology's QA system. In late 2020, Ecology updated its QAPP template, used by Ecology staff and external parties, to meet accessibility requirements. We continue to use the companion QAPP review checklist that helps staff review QAPPs that are based on the latest template. Continuously improving the template and checklist are part of the standard work. The QAPP template and checklist are available on the agency's internal website or upon request. Some of the individual programs have also developed QAPP templates for specific types of projects (e.g. NEP, WQP). The agency QA Officer has reviewed these templates to ensure consistency and conformance with QMP requirements.

All projects funded through EPA adhere to Ecology's QA policies consistent with the delegated signature authority that Ecology has from EPA. As such, Ecology's QA Officer approves QAPPs on behalf of EPA for the projects using EPA funds.

National Estuary Program activities

In 2011, Ecology approved an addendum to its 2010 Quality Management Plan. The addendum described the initial QA program for National Estuary Program (NEP) funded activities and the new NEP Quality Coordinator position (NEP QC).

In 2019, Ecology revised that addendum to describe its continued QA oversight role under the new NEP funding model.

For the two-year period ending on or about October 15, 2020, the NEP QC:

- Reviewed, commented on, and facilitated approval of 63 QAPPs and 85 QAPP waivers (148 QA documents total).
- Conducted an informational QAPP webinar for NEP grant recipients.
- Updated guidance for NEP quality assurance procedures on Ecology's website.
- Commented on three final project reports.

It is difficult to accurately predict workload for the next two years of the agreement. However, based on results from the two years ending October 2020, and the growing knowledge of upcoming projects, we estimate the NEP QC will need to facilitate approval of about 80 QAPPs during the period of the agreement. The NEP QC is also expected to:

- Provide technical assistance and QA training to grantees.
- Shepherd the approval of about 100 QAPP waivers.
- Audit projects.
- Comment on final reports.

All NEP QC activities, e.g., number of QAPPs approved and QA challenges, are documented in biannual reports, as has been the practice since 2012.

Status reports

Ecology's QMP specifies that the agency QA Officer must prepare a status report for management every three years. This status report also includes recommendations for improvements to the QMP and its implementation. The most recent report is Washington State Department of Ecology Quality Report to Management (QRM) July 2015–June 2018.[7]

Ecology expects to issue the next QRM in mid-2022.

Environmental Protection Agency quality system review

EPA Region 10's Quality Assurance Manager and QA Team audits approved state environmental programs within the region. EPA's quality reviewer's most recent audit of Ecology occurred in January 2017 and resulted in no findings. This indicated the agency was implementing its quality system in an acceptable manner. The audit recommended developing greater capacity to conduct QA training, perform internal audits, and document corrective actions. Additional observations included the following.

- Quality Assurance Coordinator (QAC) responsibilities needed clarification.
- Ecology's Manchester Environmental Lab's SOP for manual chromatographic peak integration needed more detail.
- Ecology programs that generate environmental data, especially if funded by EPA, needed to incorporate more frequent analysis of split samples (equivalent portions of the same sample analyzed by different labs).

[7] www.ecy.wa.gov/programs/eap/quality.html

- Ecology has responded to some of these observations, but is still addressing others:
- The new QA Officer is expanding on a QA Training Plan drafted in late 2017. A final comprehensive plan is targeted for completion in 2022.
- The next update to Ecology's QMP is expected in 2025. The next update to the Ecology QMP will include plans for annual reviews of QAPPs and better guidelines for cleanup sites.

Developing greater capacity for QA training, auditing projects, and issuing corrective action notices when needed remains a longer-term goal largely dependent on having enough staff resources to do the work

Quality assurance training

Ecology supports staff training related to program-specific topics, such as:

- Air quality monitoring.
- Freshwater monitoring field methods.
- Hazardous waste sampling.
- Wetland delineation.

The agency and individual programs promote and conduct new-employee training, but the emphasis on the agency's QA system varies between trainings. Resources to provide more in-depth QA training are more limited. Opportunities to send staff to comprehensive QA training outside the agency, e.g., EPA, are rare.

Within Ecology, the agency QA Officer is responsible for coordinating more detailed QA training. This is typically comprised of seminar presentations and lengthier workshops that are held at irregular intervals. In the fall of 2018, the agency held a QA "lessons learned" seminar and broader QA workshop. In addition, a comprehensive QA Training Plan (see above), expected late 2022, will feature proposals such as:

- Onboarding of all new staff that includes key QA topics.
- An annual self-certifying, web-based, QA basics course for all staff.
- A more extensive set of web-based QA materials for annual review by all staff who are directly involved in generating or using environmental data.

QA training conducted by the QA Officer and Ecology programs will be documented in the QRM.[8]

[8] www.ecy.wa.gov/programs/eap/quality.html

Chapter 3 - Information Management

Introduction

Ecology and EPA recognize that easy access to quality information plays an important role in helping both agencies achieve their environmental goals. Finding solutions to current environmental problems require the accurate and efficient capture, query, presentation, and sharing of data. It is also important to protect and secure this data.

Data sharing

High quality information must be readily shared among the growing number of interested organizations and individuals. This requires information systems that are easy to access, integrated (facilities, permitting, compliance, etc.) and cross-program or cross-agency in nature (water quality/quantity, hazardous/toxic/solid waste, and air, etc.) to support scientific and administrative business needs. Both Ecology and EPA Region 10 continue to expand data sharing resources to make data easily accessible to everyone.

Both agencies will foster more data sharing with tribes, communities, and local and regional governments. Ecology and EPA recognize this as a basic part of advancing environmental justice. See Ecology's website for the many publicly accessible databases.[9]

As planned, since the last agreement, Ecology completed the Water Quality Assessment Automation (WQAA) system. The WQAA system provides data to Ecology's WQ Assessment Tracking System (WATS) and EPA's Assessment and Total Maximum Daily Load Tracking and Implementation System (ATTAINS). Ecology continues to look for opportunities to further integrate data and automate information sharing between Ecology and EPA.

Ecology and EPA will continue to develop and support common architectures and data standards to better organize, manage, and integrate the region's environmental data. This effort will help ensure the data is readily accessible for cross-program and cross-agency analysis. At Ecology, this work continues through the Information Technology (IT) Governance process, which is responsible for:

- IT strategic planning, policies, and priorities.
- Ongoing development of enterprise architecture.
- Ongoing implementation and support of the Exchange Network (EN).

[9] https://ecology.wa.gov/About-us/Online-tools-publications/Online-tools-databases

National Environmental Information Exchange Network

EPA and Ecology will continue to cooperate in the development and enhancement of the National Environmental Information Exchange Network (NEIEN). EPA is committed to working with Ecology and providing resources for the development of protocols needed to expand the number of data flows to priority national data systems via the NEIEN. It is EPA's goal that all of Ecology's national data flows to EPA's Priority National Data Systems via the NEIEN. Ecology continues to prioritize resources toward meeting this goal and both agencies will continue to work together on data flows.

Ecology continues to regularly flow TurboWaste data into RCRAInfo regularly. TurboWaste data generally flows weekly. On occasion, a physical check of a paper file is required to provide accurate data, but data still flows at least monthly.

As planned, since the last agreement, Ecology completed the Total Maximum Daily Load project to flow water quality assessment data using the 2019 schema for the ATTAINS Information System.

In addition, Ecology is considering the use of E-Enterprise Digital Strategy (EEDS) which prioritizes building a modern environmental protection enterprise that is information-centric and based on shared platforms. As part of this strategy, the EN will evolve to keep pace with new business requirements and technologies. The EN data flows will continue to serve as critical mechanisms for sharing large volumes of programmatic data among states, tribes, and EPA. As programs and systems modernize, agencies can take advantage of new technological capabilities and new patterns of data exchange. Large, infrequent data payloads may be replaced by smaller, real-time exchanges of data.

The next generation of the EN will make use of REST-based Application Programming Interfaces (APIs) to help make this transition possible. The EE/EN is actively developing an API Management Framework that will include new guidance, standards, and tools for developers of APIs and other services.

Chapter 4 – Environmental Justice

Introduction

The Department of Ecology (Ecology) is committed to environmental justice and shares the Environmental Protection Agency's (EPA) goal to provide all people:

- The same degree of protection from environmental and health hazards.
- Equal access to the decision-making process.
- A healthy environment in which to live, learn, and work.

Environmental justice means the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.[10] This includes addressing disproportionate environmental and health impacts in all laws, rules, and policies with environmental impacts by prioritizing vulnerable populations and overburdened communities, equitably distributing resources and benefits, and eliminating harm.

Practices and principles of this definition are supported by Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The agencies will consult on effective practices to integrate environmental justice into programs, policies, and activities to ensure the involvement and protection of everyone in Washington. Specific focus is on the fair treatment and meaningful involvement of communities of color, low-income, Tribal, indigenous, overburdened and underserved communities, and sensitive populations.

Both agencies agree to collaborate on identifying strategies to prioritize and advance environmental justice, and seek input from communities in Washington State. The environmental justice coordinators of each agency will lead this ongoing effort and administer the activities described in this chapter with available resources.

Accountability

- Develop metrics for measuring environmental justice and Title VI progress on commitments in this Agreement within Ecology programs.
- Quarterly updates from Ecology to EPA's Environmental Justice Coordinator on environmental justice and Title VI progress on commitments in this Agreement.

Authorities

- Title VI of the Civil Rights Act of 1964
- Title IX of the Education Amendments of 1972
- Section 504 of the Rehabilitation Act of 1973
- Age Discrimination Act of 1975

[10] https://www.epa.gov/environmentaljustice,

- Federal Water Pollution Control Act Amendments of 1972
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- Executive Order 14008, Tackling the Climate Crisis at Home and Abroad
- Executive Order 13166, Improving Access to Services for Persons with Limited
- English Proficiency
- Executive Order 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis
- Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government

For more information about environmental justice work in the respective agencies, contact:

Ecology
Millie Piazza, PhD
Environmental Justice & Title VI Senior Advisor
Phone: 360-407-6177
E-mail: millie.piazza@ecy.wa.gov

EPA
Sheryl Stohs, PhD
Environmental Justice Coordinator
Phone: 206-553-0250
E-mail: stohs.sheryl@epa.gov

Environmental justice activities

Title VI compliance

Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, and national origin, including limited English proficiency, by recipients of federal financial assistance. Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency," requires federal agencies to:

- Examine the services they provide.
- Identify any need for services to those with limited English proficiency (LEP).
- Develop and implement a system to provide those services so LEP persons can have meaningful access to them.

The Executive Order also requires federal agencies work to ensure recipients of federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.[11]

[11] https://www.govinfo.gov/content/pkg/FR-2000-08-16/pdf/00-20938.pdf,

To help achieve compliance with Title VI, and E.O. 13166 guidance, EPA and Ecology will establish regular communication about emerging Title VI guidance, policies, and trainings provided by EPA. Ecology and EPA will continue to develop clear, compliant, and trackable practices to address Title VI obligations, including requirements for recipients of Ecology funding directly received from EPA.

Ecology continues to engage in activities that raise awareness and build capacity around Title VI compliance and non-discrimination best practices. This includes:

- Strengthening compliance with the Title VI Procedural Safeguards Checklist.[12]
- Using mapping tools to examine demographic, environmental, and health data for communities affected by agency activities.
- Training employees on providing meaningful access for people with limited English proficiency, including when to consider translation and interpretation services and how to research population language data.
- Developing guidance on communication strategies that are culturally effective and responsive, linguistically appropriate, and address barriers to access. This includes the use of:
    - Infographics.
    - Representative images.
    - Social media and ethnic media.
    - Virtual communications options.
- Providing meaningful access for people with disabilities, including:
    - Accessible in person meeting spaces.
    - Appropriate auxiliary aids.
    - Accessible electronic information technology.

Activities

1. Coordinate efforts to provide Title VI compliance information to federal sub-recipients.
2. Host regional call on Title VI compliance and best practices.

Regional coordination

EPA and state environmental agency environmental justice leads in Region 10 (Washington, Oregon, Alaska, and Idaho) will participate in monthly meetings to share information about current environmental justice issues, activities, training and resources. Ecology convenes the meetings and participants facilitate the meetings on a rotating basis. EPA also convenes and facilitates a monthly Western States environmental justice meeting.

[12] https://www.epa.gov/sites/production/files/2020-02/documents/procedural_safeguards_checklist_for_recipients_2020.01.pdf

The goals of both meetings are to increase knowledge, share resources, and collaborate on environmental justice issues, including discussion focused on:

- Areas with potential and recognized environmental justice concerns.
- Emerging environmental justice tools, policies, and practices.
- National developments and intergovernmental environmental justice activities.
- Funding opportunities and regional environmental justice grant recipients.

Activity

1. Monthly meetings for Region 10 and Western States.

Data and tools sharing

Each agency will share data and access to tools that help better identify environmental justice considerations in Washington's communities. A primary goal of this effort is to improve tracking and assessing environmental justice progress across the state. This includes using screening and mapping tools such as EPA's Environmental Justice SCREEN[13] and the Washington Tracking Network[14], to identify populations potentially at higher risk of negative environmental and health impacts. EPA and Ecology will coordinate best practices on integrating available demographic and environmental data into agency decision-making and adjust work efforts accordingly. Priority efforts include integrating environmental justice analysis, to better address the needs of overburdened communities and underserved populations, into programs, such as:

- Compliance and enforcement.
- Site cleanup.
- Rulemaking.
- Grant and loan processes.
- Development of remedial actions.

As available, EPA will provide training on Environmental Justice SCREEN and guidance on integrating environmental justice data and mapping into Ecology's work.

Ecology and EPA will strive to make the data collected by each agency better understood by, and more accessible to, the public. Both agencies are committed to government transparency, and strive to strengthen meaningful community engagement and partnerships.

Activities

1. Region 10 and Western States meeting on using environmental justice data and tools for prioritizing environmental justice considerations in agency practices (for example, funding, enforcement, site cleanup).
2. Public education on how to access, use, and improve environmental justice data and tools.

[13] www.epa.gov/ejscreen
[14] https://www.doh.wa.gov/DataandStatisticalReports/EnvironmentalHealth/WashingtonTrackingNetworkWTN

Environmental justice learning partnerships

Ecology and EPA will promote environmental justice networking and learning events to strengthen the understanding of environmental justice and Title VI among Ecology subrecipients and delegated authorities. Both agencies will work together on efforts to build partnerships, educate, and collaborate to strengthen compliance and eliminate harm to overburdened communities. Activities may include hosting events that provide learning opportunities on issues related to:

- Environmental Justice and Title VI.
- Climate change and resiliency.
- Data access and mapping.
- Environmental health equity.

These events will not replace or substitute statewide or site-specific public outreach, permitting, rulemaking, or similar public engagement activities required by either agency.

Activity

1. EPA and Ecology will host an environmental justice learning event or webinar.

Environmental justice training

Both agencies recognize the mutual value of coordinating environmental justice training opportunities and fostering shared training for each agency's environmental justice staff, general work force, and management. EPA will welcome Ecology staff to attend and participate in Region 10 environmental justice training opportunities. Likewise, Ecology will welcome EPA participation in their training opportunities.

Training content may include:

- Environmental justice analysis promising practices, lessons learned (for example, see National Environmental Policy Act's promising practices document from 2016).[15]
- Tools and resources to explore and support environmental justice analysis and review, including the application of social vulnerability mapping, health, equity measures, and EJSCREEN.
- Tools and resources that support community engagement to influence environmental justice outcomes, access grants and funding, strengthen technical capacity, improve public comments, and provide environmental reporting.
- Employee and subrecipient responsibilities related to Title VI of the Civil Rights Act of 1964.

These trainings will promote compliance with federal laws and mandates. Additionally, these trainings will strengthen agency, subrecipient, and delegated authority awareness of responsibilities related to environmental justice, and proper management of federal resources. Agencies will also track and alert counterparts to other environmental justice training

[15] https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf

opportunities (such as those sponsored by local communities, academic institutions, organizations, and other agencies).

Activities

1. Ecology will develop an online employee environmental justice training.
2. Ecology and EPA will promote awareness and participation in EPA's environmental justice training webinar series.

Climate change and resiliency

The importance and urgency of addressing climate change is the focus of 2021 Presidential Executive Order (EO) 14008 Tackling the Climate Crisis at Home and Abroad. The EO emphasizes the federal role in addressing environmental justice, and underscores the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities. Communities with environmental justice concerns are typically under-supported and the least able to prepare for, respond to, or recover from climate change related environmental, health, and economic impacts.

Ecology and EPA will work together to ensure coordination and information sharing between agency climate and environmental justice initiatives. This includes building a common understanding of communities most at risk, and focusing strategic planning and resource allocation to the areas and people most vulnerable. These efforts will build from tools that integrate climate related data, such as the Department of Health's Washington Tracking Network map layer on Climate Change Projections and the EJSCREEN NOAA data on climate change flood risk areas.

Activities

1. Support agency development of environmental justice guidance on climate change and resiliency planning, drawing from other entities' efforts as relevant and appropriate.
2. Develop agency environmental justice guidance related to environmental emergency preparedness and planning.

Chapter 5 - Compliance Assurance

Introduction

To get improved environmental benefits, Ecology and the EPA rely on both traditional regulatory approaches and innovative methods to ensuring compliance. Ecology and EPA share a desire for a strong compliance assurance program that achieves environmental protection by:

- Identifying compliance problems.
- Providing technical assistance.
- Returning facilities to compliance.
- Taking appropriate actions against violators.
- Deterring future violations.

Compliance principles

Enforcing environmental laws is a vital part of EPA's strategic plan to protect human health and the environment. EPA's Fiscal Year 2018-2022 Strategic Measures list includes the following goals related to civil and criminal enforcement work:

- Reduce the time between the identification of an environmental law violation and its correction.
- Increase environmental law compliance rate.
- Reduce the number of non-attainment areas.
- Reduce the number of square miles of watershed with surface water not meeting standards [impaired water].

EPA also focuses enforcement and compliance resources on the most serious environmental violations by developing and implementing national program priorities, previously called National Enforcement Initiatives, now called National Compliance Initiatives[16] or NCIs. For Fiscal Years 2020-2023, EPA will prioritize enforcement work in support of these six NCIs:

1. Creating Cleaner Air for Communities by Reducing Excess Emissions of Harmful Pollutants
2. Stopping Aftermarket Defeat Devices for Vehicles and Engines
3. Reducing Hazardous Air Emissions from Hazardous Waste Facilities
4. Reducing Risks of Accidental Releases at Industrial and Chemical Facilities
5. Reducing Significant Non-Compliance with National Pollutant Discharge Elimination System (NPDES) Permits
6. Reducing Non-Compliance with Drinking Water Standards at Community Water Systems

[16] https://www.epa.gov/enforcement/national-compliance-initiatives

Ecology and EPA Region 10 will coordinate their respective compliance and enforcement efforts to maximize results with available state and federal resources. Coordination will occur through:

- Collaborative planning on inspections and compliance initiatives.
- Information sharing and data responsibilities.
- Work and technology sharing, where appropriate.
- Recognizing and respecting the state as the preferred implementing entity for national regulatory programs for which the local or state agency has delegation or authority.
- Periodic joint work planning with state and local partners.

Consideration of economic benefits of non-compliance

When issuing environmental penalties, EPA is directed to consider the economic benefit of noncompliance when making a penalty assessment. EPA's policy on issuing environmental penalties includes directing regulators to recoup the economic benefit of noncompliance in penalty assessments.

EPA expects Ecology, as a matter of course, to consider economic benefit as part of penalty calculations, and to assess and collect economic benefit when deemed significant as defined in policy. EPA will evaluate Ecology on its implementation of this policy under the State Review Framework. EPA has a computer program called BEN[17] that Ecology can use as a model to calculate the economic benefits of non-compliance. To support EPA's expectations, Ecology's Compliance Assurance Manual (July 2015) includes a statement that Ecology should consider economic benefit in their penalty calculations when appropriate to do so.

Alternative methods of achieving compliance

Ecology is involved in many activities intended to assure compliance with applicable environmental laws and rules. Consistent with our national strategic plan, EPA supports the full use of the enforcement toolkit to address issues that might arise. These include traditional enforcement and compliance activities such as inspections, administrative orders, fines, and other types of penalties along with:

- Educational programs
- Compliance assistance initiatives
- Public engagement
- Technical assistance
- Pollution prevention

[17] https://www.epa.gov/enforcement/penalty-and-financial-models

Evaluating compliance assurance programs

EPA and the Environmental Council of States (ECOS) together have developed a process and method, called the State Review Framework (SRF), for evaluating state compliance and enforcement programs for air, water, and hazardous waste. Each year, EPA reviews Ecology's enforcement programs under the SRF using data metrics. Full SRF reviews, with both data metric analysis and file reviews, occur about every four to five years.

EPA works with Ecology to develop plans to address any necessary improvements to compliance assurance programs. EPA will kick off its next review of Ecology programs in the Spring of 2021 and issue its report in December 2021. Ecology will address areas of improvement based on the information EPA identifies in the final report.

Chapter 6 - Mutual Priorities for EPA and Ecology

Introduction

This chapter focuses on major strategic priorities for Ecology and EPA over the next two years. Recognizing there are many other mutual priorities, these are highlighted because of their unique complexities, substantial challenges, and because they rely upon strategic, multi-agency coordination to achieve success. These priorities require focused energy and creative leadership by both agencies, along with our many partners, to make real progress on protecting human health and the environment, and improving our quality of life. The mutual priorities are:

1. Reduce and prepare for climate impacts.
2. Prevent and reduce toxic threats and pollution.
3. Protect and manage Washington's waters.
4. Protect and restore Puget Sound and the Columbia River Basin.
5. Lead the effective and efficient cleanup of Hanford.
6. Support and engage our communities for right-to-know.
7. Address environmental and health inequities by incorporating environmental justice considerations into our work and decisions.

For more information about these and other high priorities, please see the agency websites.

- U.S. Environmental Protection Agency, Region 10[18]
- Washington State Department of Ecology[19]

Reduce and prepare for climate impacts[20]

Rising levels of carbon dioxide and other greenhouse gases (GHG) have warmed the earth and are changing the chemistry of the oceans. Washington State is already experiencing impacts consistent with a warming climate and changing ocean condition. Observed and projected impacts of GHG emissions include:

- Warmer temperatures and more severe heat waves.
- Larger and more intense wildfires.
- Drier summers, and wetter autumns and winters.
- Decreased snowpack and loss of natural water storage.
- More frequent and severe drought.
- More severe winter flooding.
- Sea level rise.
- More extreme weather events.

[18] https://www.epa.gov/aboutepa/epa-region-10-pacific-northwest
[19] https://ecology.wa.gov/
[20] https://ecology.wa.gov/Air-Climate/Climate-change

- Decreased ocean pH.

These environmental changes are affecting resources vital to Washington's economy, communities, and environment. These resources include, but are not limited to:

- Forests
- Agriculture
- Water resources
- Air resources
- Coasts
- Infrastructure
- Shellfish and fisheries

The extent and duration of the effects will largely be determined by our collective success in reducing future GHG emissions and adapting to changing conditions. We need to anticipate and address the implications of a changing climate for our programs, policies, rules, and operations.

Washington State is addressing the challenge of climate change by taking responsible and thoughtful legislative and executive actions. The state is taking a comprehensive approach to develop and implement practical and coordinated policies and solutions to:

- Meet the GHG emissions reduction levels adopted into law in 2020.
- Increase energy efficiency and transition to energy sources that do not emit GHGs.
- Phase out the use of hydrofluorocarbons (HFCs).
- Transition to a zero emissions transportation system, including investing in zero emissions fueling infrastructure and requiring automakers to sell greater numbers of zero-emission vehicles in Washington.
- Encourage innovation, investment, and job creation.

Washington also developed comprehensive and integrated strategic responses to enable state and local agencies, public and private businesses, nongovernmental organizations, and individuals to prepare for, address, and respond to the effects of climate change.

Broad coalitions of leaders, stakeholders, and the public have offered their thoughts and ideas as the state leads the way on reducing GHG emissions, and responds to effects of climate change and ocean acidification.

Reducing GHG emissions and taking action to respond to a changing climate are high priorities for Ecology and EPA. Ecology is working with the Governor's Office, legislators and various interests on advancing policies to reduce GHG emissions from transportation, electricity, and industrial uses.

EPA and Ecology will continue to forge a strong and effective partnership to build on the work done so far to reduce GHG emissions and respond to the environmental challenges from changing climate and ocean conditions.

Prevent and reduce toxic threats and pollution[21]

Washington is a national leader when it comes to enacting and implementing policies to clean up, manage, and prevent problems caused by the ongoing use of, and exposure to, toxic substances. Yet toxic substances and pollutants continue to pose risks to human health and the environment. They are in our air, water, and soil, and in our bodies. Some toxic chemicals:

- Impair development.
- Affect reproduction.
- Disrupt our body chemistry.
- Cause cancer.

Some chemicals have limited impacts on humans but can be devastating to fish or other wildlife. Tribal communities in Washington have long advocated for increased attention on toxics in fish due to high tribal fish consumption. Of the tens of thousands of chemicals in use today, we know the toxicity of very few. And we know even less about the combined effects of all these chemicals.

Ecology and EPA are working to reduce toxic threats in several ways. We have well established and effective programs to clean up and manage toxic substances. However, these programs were not designed to prevent many of the point or nonpoint releases of toxins we are now finding to be problematic. While EPA has some authority to regulate toxic substances in products through the Toxic Substance Control Act (TSCA), it is used infrequently. Efforts will be made to track and mitigate the release of toxic pollutants in our most vulnerable communities within Washington.

At the state level, Ecology is working to integrate across three strategies for reducing toxic threats to human health and the environment by:

- Preventing the use of toxic substances and identify safer alternatives.
- Limiting or reducing the amount of toxic substances released into the environment.
- Cleaning up after toxic substances have polluted air, land, water, or sediment.

In the area of prevention, Ecology works with the Washington Department of Health to implement a 2019 law through a program called Safer Products for Washington[22]. The law aims to reduce the use of toxic chemicals in consumer products by restricting use of those toxics when safer alternatives are available and feasible. With a focus on sensitive species and populations, the first five-year cycle is underway to address priority chemical classes and priority products.

[21] https://ecology.wa.gov/Waste-Toxics
[22] https://ecology.wa.gov/Waste-Toxics/Reducing-toxic-chemicals/Safer-products

EPA and Ecology will mutually support and coordinate on children's environmental health activities regarding: state consumer product laws, including:

- Washington's Children's Safe Products Act.[23]
- Children's environmental health rules and guidance.
- Related grant opportunities.
- Related activities with a potential for joint or coordinated involvement.
- Networking with other state agencies.

Ecology continues to refine NPDES permitting and compliance work to improve our ability to limit or reduce ongoing toxic releases. Both agencies continue to address the legacy left behind from the release of toxic substances through our cleanup programs. Releases of toxic chemicals contained in products and used in industrial processes may occur during use or at end-of-life, increasing risks to the environment and human health. Preventing the unnecessary use of toxic chemicals in the first place can reduce these risks, and the economic and regulatory burdens of hazardous waste management and cleaning up contamination.

While continuing the investments in cleanup and management, Ecology adopted the following goals for preventing toxic contamination:

- Improve our ability to protect the most vulnerable human and wildlife populations.
- Avoid preventable future impacts and costs.
- Promote a strong, protective federal chemical policy and preserve the state's ability to innovate in this area.
- Create an effective, fair, and economically feasible systems approach to reducing toxic threats.
- Reduce and phase out the use of the worst of these toxic substances, known as persistent, bioaccumulative, and toxic substances.
- Promote technological innovation and solutions.
- Increase compliance and enforcement of laws to limit or manage the use of toxic substances.
- Pursue innovative cleanup.
- Educate the public.

Both agencies are involved in remediating pollution at many toxic cleanup sites around the state. In addition to this work, both parties look forward to continuing coordination where there are opportunities to minimize exposure to toxic threats in Washington's environment, including:

- Sharing data on hazards and risks of emerging toxic chemicals, including overburdened communities.
- Participating in developing and implementing Chemical Action Plans.

[23] https://app.leg.wa.gov/RCW/dispo.aspx?cite=70.240

- Continuing support for the U.S. Department of Energy to establish a national elemental mercury repository.
- Encouraging research and identification of safer alternatives to chemicals or chemical classes of concern, including per- and polyfluoroalkyl substances (PFAS), polychlorinated biphenyls (PCBs), plasticizers, 6 p-phenylenediamine (6PPD)-quinone, flame-retardants, and other priority chemicals.
- Developing incentives to encourage manufacturers to reduce the use of toxic chemicals in consumer products, including EPA's Safer Choice consumer products recognition program.
- Continuing leadership on the Columbia River Basin Restoration Program Working Group.
- Monitoring implementation of the Frank R. Lautenberg Chemical Safety for the 21st Century Act.[24]

Protect and manage Washington's waters[25] [26]

Water management issues and their related challenges continue to be a high priority for this Agreement. Both agencies are committed to collaborating on the progress to clean up and protect Washington water's. Water protection and clean up is also directly tied to the mutual priorities noted earlier in this chapter.

EPA's website, specific to Washington State, lists priority topics. Many of the topics are about some aspect of managing Washington's waters. Likewise, Ecology's website also provides information on many water-related topics managed by the agency. While much of the cited work and priorities on the Ecology website are not directly tied to work carried out under this Agreement, many are impacted by or subject to program specific activities that are covered in this Agreement. For all of these reasons and issues, cleaning up and protecting Washington's waters will remain a priority for EPA and Ecology during the period of this Agreement.

Protect and restore Puget Sound and the Columbia River Basin [27]

EPA and Ecology are dedicated to the protection, cleanup, and restoration of Puget Sound. Puget Sound was the first of the estuaries of national significance named in EPA's National Estuary Program (NEP)[28] in 1987 and is one of the few estuaries in the United States with a dedicated appropriation in the federal budget. This recognition of the national importance of

[24] https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/frank-r-lautenberg-chemical-safety-21st-century-act
[25] https://ecology.wa.gov/Water-Shorelines/Water-supply
[26] https://www.epa.gov/aboutepa/epa-washington
[27] www.ecy.wa.gov/puget_sound/index.html
[28] https://www.epa.gov/nep

Puget Sound enables EPA to focus dedicated federal funds to Puget Sound cleanup goals and restoration efforts.

Washington State established the Puget Sound Partnership[29] in 2007 to succeed the Puget Sound Action Team and to reinvigorate the restoration and protection of Puget Sound. The Puget Sound Partnership finalized and EPA approved the 2018-2022 Action Agenda in February 2019.[30] The Action Agenda is a blueprint for restoring Puget Sound to a healthy state.

This Agreement highlights some key activities EPA and Ecology will focus on in Puget Sound over the next two years. This is not intended to be a comprehensive list of activities but a highlight of key actions.

Puget Sound priorities for EPA and Ecology

EPA and Ecology jointly agreed to focus major resources towards restoring and protecting the water quality within the Puget Sound Watershed. EPA selected Ecology as the Strategic Initiative Lead (SIL), through 2025, to manage the stormwater efforts for Puget Sound. Ecology will also continue as the lead agency for toxics and nutrients prevention, reduction, and reach scale riparian habitat projects. EPA provides funding to Ecology annually, as appropriations allow, under the authority of the NEP to support the priorities of the Action Agenda.

Starting in 2016, the Puget Sound Partnership updated the Puget Sound Action Agenda and EPA updated the NEP funding model to focus on stormwater, shellfish, and habitat. Ecology, working with local, tribal, federal, state, private, and nonprofit partners continues to help EPA and the Puget Sound Partnership to implement the Action Agenda by:

- Developing implementation strategies.
- Supporting science and monitoring for Puget Sound.
- Engaging members of the broader Puget Sound NEP Management Conference.

Discussed in the following text are summaries of some of the major Puget Sound program-specific projects EPA and Ecology have agreed to work on together, including some expected actions and outcomes.

Stormwater

Along with Ecology's role as the SIL for stormwater, Ecology, and the Puget Sound Partnership are working together to address stormwater impacts on Puget Sound, but more efforts are required. Stormwater priorities for the next two years include:

- Helping local jurisdictions prioritize stormwater retrofit projects to better direct state and local funding.
- Assisting western Washington jurisdictions with implementing new Phase I and II NPDES municipal stormwater permits, including low impact development requirements.
- Watershed-scale stormwater planning, and using creative approaches to help balance stormwater.

[29] https://www.psp.wa.gov/index.php
[30] https://www.psp.wa.gov/action_agenda_center.php

- Technical assistance for local government staff and private industry on low impact development design, inspection, and construction.
- Additional education efforts relative to the Puget Sound Starts Here education campaign.
- Leading the state and others in translating cutting edge stormwater science related to road run off to reduce impacts on salmon (Toxics in Fish Implementation Strategy).

Science and monitoring for Puget Sound

Ensuring appropriate science and monitoring are in place to support Puget Sound restoration and protection is essential. EPA will continue to work with Ecology and the other SILs along with the Puget Sound Partnership and Puget Sound Institute to prioritize science and monitoring needs and look for ways to fund and support them. This includes the development of implementation strategies for priority vital signs of the Action Agenda.

No discharge zone for Puget Sound

Ecology finalized their Puget Sound No Discharge Zone[31] in 2018 and continue to work with partners on full scale implementation, using NEP funding as appropriate.

Coordination with the Puget Sound Federal Task Force

In 2016, nine federal agencies signed a ten-year memorandum of understanding creating the Puget Sound Federal Task Force to strengthen and align the federal investment and support for Puget Sound recovery and protection.[32] During 2021, the Task Force is evaluating its first five-year Action Plan and developing the next that includes coordinating and collaborating activities with Washington State.

Nutrients reduction, control, and prevention

Ecology is working to address human sources of nutrients through the Puget Sound Nutrient Source Reduction Project (PSNSRP). This project's objective is to improve Puget Sound water quality by using the best available science to inform broader solutions for reducing human sources of nutrient pollution. The PSNSRP uses the Salish Sea model and focused stakeholder engagement to develop a Nutrient Reduction Plan (TMDL alternative) to meet dissolved oxygen criteria in the Sound.

Ecology formed a stakeholder advisory group, the Puget Sound Nutrient Forum, to establish a shared understanding of the science defining the nutrient problem and a collaborative environment for discussing potential implementation actions. The Forum meets regularly and includes:

- Government representatives (local, state, federal agencies).
- Tribes.
- Wastewater treatment operators.

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[31] https://ecology.wa.gov/Water-Shorelines/Puget-Sound/No-discharge-zone
[32] https://www.epa.gov/sites/production/files/2017-01/documents/puget-sound-federal-task-force-action-plan-interim-draft-2017-2021.pdf

- Environmental groups.
- Regional scientists.
- Concerned citizens.

The Environmental Assessment Program, conducted the first phase of the Salish Sea Modeling[33] in 2018. Results confirmed domestic wastewater treatment plants (WWTPs) discharging to Puget Sound are contributing to low dissolved oxygen that falls below water quality standards throughout areas within Puget Sound.

In 2020, Ecology made the decision to move forward with a Puget Sound Nutrient General Permit. This permit will cover nearly 60 domestic WWTPs. Ecology convened a General Permit Advisory Committee to develop recommendations for general permit conditions and released a draft preliminary permit, open for comment, in early 2021. The goal is to develop a formal draft permit in 2021, with opportunities for public comment and public hearings.

We continue to monitor sensitive areas in Puget Sound, including the collection of nitrogen and carbon data to feed into the Salish Sea Model. The first phase of Salish Sea Modeling also showed that meeting water quality standards will require nutrient reductions at both wastewater treatment plants discharging to Puget Sound and nutrient sources in watersheds.

In 2021, Ecology will publish part of the second phase of Salish Sea Modeling results in a technical memo. Ecology will work with the Nutrient Forum to discuss these results and develop the next phase of modeling scenarios to be evaluated by the Salish Sea model in 2021-2022. Salish Sea Modeling results will inform the point and nonpoint nutrient source reduction actions included in the Nutrient Reduction Plan. The plan will inform Ecology's regulatory and non-regulatory implementation actions, similar to a TMDL.

In addition to Ecology's TMDL alternative, Ecology is working with the Puget Sound Partnership to finalize a Marine Water Quality Implementation Strategy under the Puget Sound Action Agenda. Its purpose is to guide near-term actions, funded through the National Estuary Program, to improve marine water quality with respect to dissolved oxygen. This implementation strategy will also use information from the Salish Sea Model and Ecology's TMDL alternative to link NEP with implementation of nutrient reduction actions in Puget Sound.

Toxics prevention, reduction, and control

EPA and Ecology have worked together over the past few years to collect the information needed to guide decisions about toxic chemical control strategies for Puget Sound. In 2011, Ecology released a report that estimated the amount and sources of toxic chemicals entering Puget Sound. Ecology used this report, and other information on toxics, to set priorities for the NEP grant for Puget Sound. EPA and Ecology have a successful history for large urban sediment cleanups (e.g., Commencement Bay).

EPA and Ecology have an existing source control strategy for the Lower Duwamish Waterway and will continue to implement it concurrent with EPA's Superfund and Ecology's Model Toxics

[33] https://ecology.wa.gov/Research-Data/Data-resources/Models-spreadsheets/Modeling-the-environment/Salish-Sea-modeling

Control Act sediment investigation and cleanup plans, respectively. This work will rely on an integrated approach between Ecology's water quality and toxics cleanup programs, as well as EPA's water quality and Superfund programs. The effort will consider innovative approaches to deal with the challenges in this watershed.

Columbia River Basin and Lower Columbia National Estuary Program Partnership

Columbia River Basin Restoration Program

Congress amended the Clean Water Act in 2016, adding a new Section 123, which required EPA to establish a Columbia River Basin Restoration Program. This amendment authorized EPA to establish the Columbia River Basin Restoration Working Group[34] that is representative of states, tribal governments, industry, and other entities.

Section 123 also directed EPA to develop the Columbia River Basin Restoration Funding Assistance Program[35], a voluntary, competitive grants program for environmental protection and restoration programs throughout the Basin. The legislation provides a framework for future funding of toxic reduction, monitoring, and outreach actions.

EPA is coordinating with tribal, state, federal and other partners, as well as other regional Columbia River Basin restoration work efforts. In October 2019, Governor Inslee committed participation by the State of Washington in the Columbia River Basin Restoration Working Group.

Lower Columbia Estuary Partnership

The National Estuary Program provides money to local communities, who leverage those resources to:

- Improve habitat.
- Find solutions to difficult ecological issues.
- Support our coastal economies.
- Engage community members to care for their waterways.

The Lower Columbia Estuary Partnership (LCEP) is one of 28 estuaries of national significance. EPA and Ecology will continue to provide funding resources and collaborative support for the LCEP. EPA and Ecology, together with representatives from the Governor's office and the Washington Department of Fish and Wildlife, sit on the LCEP Board.

[34] https://www.epa.gov/columbiariver/columbia-river-basin-restoration-working-group
[35] https://www.epa.gov/columbiariver/columbia-river-basin-restoration-funding-assistance-program

Lead the effective and efficient cleanup of Hanford[36]

EPA and Ecology are actively working to oversee cleanup of Hanford's nuclear and hazardous waste legacy. This is a high priority for Ecology and EPA throughout the duration of this Agreement.

Hanford, in southeast Washington, is one of the most contaminated sites in the country. It is uniquely outstanding in technical complexity, cleanup costs, and it will take decades to safely carry out a comprehensive cleanup plan. There are many federal and state environmental rules, projects, plans, schedules, an overarching "Tri-Party Agreement" (TPA)"[37], and a federal court consent decree also dedicated to the Hanford cleanup. The U.S. Department of Energy, manager of this site, is the third party of the TPA, along with EPA and Ecology. There are also many other entities (such as governmental, tribal, environmental, economic, and local community) who are directly engaged in the Hanford cleanup.

From a regulatory standpoint, Hanford is considered one site even though it is 586 square miles in size. It contains thousands of contaminated sources and millions of gallons of radioactive and hazardous wastes. Ecology's Nuclear Waste Program is almost entirely dedicated to the regulatory management of the Hanford cleanup. Regulatory compliance and coordination is a challenge unlike anywhere else in the country. This includes coordinating with EPA's Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA[38]) Superfund Program.

In subsequent chapters of this Agreement, Hanford specific activities are addressed as they relate to the:

- Clean Air Act
- Clean Water Act
- Federal hazardous waste (RCRA) law

Support and engage our communities for right-to-know

EPA and Ecology will continue to work together to ensure industry complies with the requirements of Title III of the Superfund Amendments Reauthorization Act.

The overall goal of this section in this Agreement is to foster collaborative support for effective implementation of the federal Emergency Planning and Community Right-to-Know Act (EPCRA) in Washington as resources allow. Primary participants in this effort are:

- EPCRA Non-Toxics Release Inventory (TRI) leadership - Enforcement and Compliance Assurance Division (EPA)
- Toxic Release Inventory leadership – Office of Pollution Prevention and Toxics (EPA)

[36] https://ecology.wa.gov/Waste-Toxics/Nuclear-waste
[37] https://www.hanford.gov/page.cfm/TriParty
[38] https://www.epa.gov/laws-regulations/summary-comprehensive-environmental-response-compensation-and-liability-act

- EPCRA leadership (both TRI and non-TRI) - Hazardous Waste and Toxics Reduction Program (Ecology)

Primary themes addressed by this collaboration include:

- Support outreach opportunities to EPCRA stakeholders, including regulated facilities and their communities, Local Emergency Planning Communities, and the Washington State Emergency Response Commission (SERC).
- Identify disproportionate impacts in Washington communities using tools like EPA's EJ SCREEN or Washington Department of Health's WTN.
- Prioritize enforcement actions that mitigate environmental harm in communities with disproportionate impacts.
- Facilitate SERC/EPA coordination.
- EPCRA data sharing including:
  - Tier Two data from Ecology to EPA.
  - TRI data verification as available.
  - Compliance assistance.
- Updates on EPCRA enforcement.
- Quarterly calls or meetings to support mutual understanding of respective EPCRA-based roles, activities, and to foster coordination.

Background

EPCRA is implemented in Washington by the State Emergency Response Commission (SERC). Ecology, as a core member of the SERC, has specific responsibilities that include:

- Providing regulatory support to industry.
- Tracking industry reporting compliance.
- Outreach efforts.

EPA Region 10 serves in a key advisory and support role to the SERC because it provides compliance assistance to industry, and has authority to take enforcement action on facilities that fail to meet the EPCRA reporting and notification requirements. This relationship between Ecology, the SERC, and EPA is fundamental to the success of EPCRA compliance in Washington State.

Executive Order 13650 – Improving Facility Chemical Safety and Security (2013),[39] reinforces the significance of EPCRA. The Chemical Facility Safety and Security Work Group (co-chaired by the Secretary of Homeland Security, the EPA Administrator, and the Secretary of Labor) have key directives that include:

- Strengthening the state and local infrastructure created by EPCRA for emergency planning and preparedness, such as:
  - State Emergency Response Commissions.
  - Tribal Emergency Response Commissions.
  - Local Emergency Planning Committees.

[39] https://www.epa.gov/rmp/executive-order-improving-chemical-facility-safety-and-security

    - Tribal Emergency Planning Committees.
- Ensuring participation of key stakeholders.
- Engaging chemical facilities in preventing, preparing for, and responding to chemical accidents.
- Ensuring effective communications and notifications to the community members before, during, and following a chemical incident.

Through this Agreement, EPA and Ecology agree to continue to collaborate on EPCRA-related issues and work together to support and strengthen communities and stakeholders.

This work includes:

- EPA communicating revisions to EPCRA regulations.
- EPA providing compliance assistance and potential enforcement action, considering.
- EPA and Ecology collaborating on Supplemental Environmental Projects whenever appropriate.
- Ecology providing information on industry compliance.
- EPA sharing Toxics Release Inventory (TRI) report data via the Exchange Network.
- EPA and Ecology jointly providing EPCRA training at local workshops.

Address environmental and health inequities by incorporating environmental justice considerations into our work and decisions.

Ecology is committed to environmental justice and shares EPA's goal to provide all people:

- The same degree of protection from environmental and health hazards.
- Equal access to the decision-making process.
- A healthy environment in which to live, learn, and work.

Environmental justice means the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. [40] This includes addressing disproportionate environmental and health impacts in all laws, rules, and policies with environmental impacts by prioritizing vulnerable populations and overburdened communities, equitably distributing resources and benefits, and eliminating harm.

Please refer to the Environmental Justice chapter of this agreement for more information.

[40] Environmental Justice definition, abridged from, https://www.epa.gov/environmentaljustice

Chapter 7: Enhancing Public Health by Improving Air Quality

Introduction

The air in every community should be safe and healthy to breathe. Because air pollution crosses local, state, tribal, and federal borders, many agencies coordinate their activities to reduce and control air pollution. These agencies have worked together over the years to significantly improve Washington's air quality:

- Washington's seven local clean air agencies[41]
- Washington State Department of Ecology
- United States Environmental Protection Agency
- Federally Recognized Tribes[42]
- State of Washington Energy Facility Site Evaluation Council (EFSEC)

The number of days Washington's air quality violated federal health-based standards has greatly decreased because of these agencies' work.

This Agreement's purpose is to improve environmental quality by strengthening and extending the partnership between local clean air agencies, Ecology, and EPA. To achieve this, partners to the Agreement commit to the mission of protecting and improving air quality in Washington to achieve the vision of clean, healthy air and climate for all of Washington's residents.

This Agreement describes the actions and activities the partners will perform to achieve this mission. Ecology and EPA recognize the following activities will be carried out in a manner consistent with and mindful of advancing environmental justice. More information is available about environmental justice priorities as they apply to this Agreement in Chapter 4. The partners commit to:

- Prevent and reduce air pollution, which includes compliance with all air quality laws and rules.
- Reduce emissions of high priority air pollutants, especially fine particles ($PM_{2.5}$), ozone precursors, and air toxics.
- Prevent violations of federal air quality standards.
- Increase efficiencies and reduce transaction costs in air quality program administration and implementation.

The Agreement includes outputs and ongoing activities paid for with a combination of state and federal dollars. It does not cover many Ecology and local clean air agency activities funded by state and local sources.

[41] https://ecology.wa.gov/About-us/Our-role-in-the-community/Partnerships-committees/Clean-air-agencies
[42] While not a grantee under the Performance Partnership Agreement Public Participation Grant, Ecology, local clean air agencies, and EPA work with Tribes on several fronts, including through the Northwest Air Quality Communicators, smoke management efforts, and particulate matter reduction efforts.

Reductions in state budgets or federal 103 or 105 grant funds would likely impair the ability of Ecology and local clean air agencies to conduct their core work and fully meet their obligations under this Agreement. Some of the outputs and ongoing activities may be adjusted to reflect the final state budget, actual tax revenues received throughout the biennium, and the federal budget.

Ecology
Sean Lundblad
Air Quality Program
(360) 407-6822
sean.lundblad@ecy.wa.gov

EPA
Jeff Hunt
Air and Radiation Division
(206) 553-0256
Hunt.Jeff@epa.gov

Review process

The partners agree to meet as needed to maintain open communication. Washington Air Quality Managers Group meetings provide opportunities for dialogue, since all the partners participate in this group. Other inter-agency groups such as the Northwest Air Quality Communicators, Washington Air Permit Writers, and Washington Air Quality Compliance Forum may also be helpful in promoting clear, open communication.

EPA strategic plan alignment

The outcomes and objectives of this chapter correlate directly with EPA's 2018-2022 Strategic Plan under Goal 1, Objective #1.1, Improve Air Quality: "Work with states and tribes to accurately measure air quality and ensure more Americans are living and working in areas that meet high air quality standards."

Reduce criteria pollutants and regional haze

Objective

The objective is to meet air quality standards that protect public health and welfare. As part of this objective, emissions and ambient concentrations of criteria pollutants would decrease. The number of exceedances of ambient air quality standards would also decrease. We will also make progress to support EPA's strategic plan goal, that "By September 30, 2022, reduce the number of nonattainment areas to 101."

During periods of poor air quality, Ecology and/or local clean air agencies (in their respective areas) will notify the public and sensitive groups about the health effects of poor air quality, and how wood burning and other choices affect air quality and health. This includes education about how individual behaviors affect air quality and health.

Outcome Measures

1. Number of times $PM_{2.5}$ or ozone exceeds healthy levels.
2. Number of residents exposed to pollution measurements above federal standards.
3. Number of nonattainment areas.
4. Improvement in visibility in federally designated Class I areas (scenic parks and wilderness areas) on the 20 percent worst visibility days, as compared to the 2000 – 2004 baseline.

Outputs

1. Ecology will coordinate with local clean air agencies, EPA, and tribes to ensure compliance with all National Ambient Air Quality Standards (NAAQS).
2. Ecology, EPA, and the local clean air agencies will coordinate on designation recommendations and related nonattainment planning.
3. Ecology will develop a nonattainment area State Implementation Plan (SIP) for the Whatcom County 2010 sulfur dioxide (SO_2) nonattainment area.
4. Ecology and the local clean air agencies will submit the New Source Review (NSR) rules, to EPA, that are federally approvable and consistent with federal rules and guidance.
    a. Ecology will maintain an up to date NSR (both major and minor NSR) program including any necessary rule updates in the SIP.
    b. Ecology, EPA, and the local clean air agencies will continue to make progress in updating the SIP to reflect local air quality agency rules and jurisdiction.
5. Ecology will submit "infrastructure" SIP certifications for National Ambient Air Quality Standards (NAAQS) as required by sections 110(a)(1) and (2) of the Clean Air Act for any future NAAQS revisions.
6. Ecology will submit a SIP addressing the "transport" element section 110(a)(2)(d) of the Act for any future NAAQS revisions.
7. Ecology will develop and submit the regional haze SIP for the second implementation period (2018-2028), due July 31, 2021, and develop and submit any subsequent actions for identified source categories and adopting appropriate control strategies to achieve reasonable progress.
8. Ecology, EPA, and the local clean air agencies will coordinate to quickly and efficiently address ongoing Clean Air Act (CAA) requirements such as CAA 175A (2nd 10 -year maintenance plans) and CAA 110(l) plan revisions to maintain a modern, effective, and legally defensible air program reflected in the SIP.
9. Ecology, EPA, the local clean air agencies, and the Washington State Department of Natural Resources will coordinate on Smoke Management, including updates to the Washington Smoke Management Plan.
10. Ecology, in coordination with the Washington Department of Natural Resources, will submit an updated Smoke Management Plan to EPA in 2021.
11. Ecology will submit a SIP revision(s) to address the Start-up Shutdown and Maintenance SIP Call for the Southwest Clean Air Agency and EFSEC, pending resolution of national policy issues.

Ongoing Activities

1. Ecology and the local clean air agencies will seek state and federal funds to address wood stove use in communities where PM2.5 levels from wood smoke are high.
2. About 6 months before a significant SIP submittal is due to EPA, Ecology in cooperation with the local clean air agency will develop an initial SIP Development Plan.[43] The SIP Development Plan will include schedules negotiated with EPA. EPA will review and comment on draft SIP revisions before the public comment period. EPA will generally need at least four weeks to review draft SIP submissions before the public comment period.
3. Ecology, EPA, and local clean air agencies will discuss any new PM2.5, sulfur dioxide, or ozone violations and any possible designation recommendations.
4. EPA, Ecology, and affected local clean air agencies will communicate about the status of pending SIP submittals when applicable. They will also coordinate on prioritizing SIP review and approvals. EPA will share or update SIP workload status. Ecology will inform EPA of any new SIP submittals in a timely manner.
5. Ecology and the local clean air agencies will work with EPA to identify exceptional events with potential regulatory significance in accordance with the Exceptional Event rule, will use appropriate flag codes, and will coordinate with EPA on preparing documentation in accordance with the Exceptional Events rule and guidance documents.
6. With EPA's support, Ecology and local clean air agencies will:
    a. Implement wood stove burn ban programs.
    b. Advise the public when air quality is poor.
7. Ecology and local clean air agencies will:
    a. Manage their own permit programs.
    b. Provide public information and education.
    c. Oversee air quality advisory systems for outdoor burning.
    d. Revise rules as needed for effective air quality programs.
    e. Submit timely SIP revisions to EPA.
8. EPA will:
    a. Serve as regional smoke coordinator by working with other Northwest states and tribes to improve smoke management coordination and tools.
    b. Host at least one meeting per year on smoke management issues.
    c. Provide advice on Washington's Smoke Management Plan SIP revisions and share pertinent information on different states' approaches to Smoke Management Plans as appropriate.
9. Ecology and the local clean air agencies will amend their rules and plans as needed to maintain effective air quality programs and an up to date SIP and submit timely SIP revisions to EPA. Ecology will have the Attorney General's Office review Ecology rules for SIP submittals.

[43] For less significant or less time critical SIP submissions, Ecology and EPA have successfully used the bi-weekly staff call in lieu of a formal SIP Development Plan.

10. With Ecology and EPA assistance, local clean air agencies will review local rules to be included in the SIP.

Reporting

Ecology and local clean air agencies that submit data directly to EPA will submit criteria pollutant emissions data to EPA according to the federal air emissions reporting rule. To facilitate compilation of a complete statewide inventory at Ecology, local clean air agencies submitting data directly to EPA are asked to also send the data to Ecology in XML or MS Access Emission Inventory System staging table format.

Air toxics

Objectives

To characterize the health consequences of toxic air pollution in Washington, Ecology will collect and compile data about toxic air pollutants including health effects, and sources of toxic air pollutant emissions. The data will be used to:

- Identify strategies to reduce exposure and health risks from toxic air pollution emissions, focusing on sources or areas that have the greatest health risk.
- Identify emission reduction strategies that focus on reducing health risks from smoke and diesel exhaust that provide the greatest health benefits.
- Better characterize industrial emissions by using more efficient permit processes and improving partnerships with businesses.

As part of this objective, emissions of toxic air pollutants would decrease over time. The percentage of Washington residents at risk from toxic air pollutants would also decrease.

Outcome Measures

- Tons of diesel exhaust emitted statewide.
- Number of diesel engines retrofitted with air pollution control equipment.
- Number of woodstoves changed out.
- Emission levels of toxic air pollutants shown in the National Emission Inventory (NEI) report.

Outputs

1. Ecology will review EPA's 2017 National Emission Inventory (NEI) and start preparing the 2020 NEI. Ecology will augment the NEI with state-calculated criteria and toxics inventories for significant emissions sources where state data can improve EPA estimates. The point source inventory will include available air toxics data submitted to the state by local clean air agencies. Ecology will complete the work on the 2020 NEI by the end of 2022.
2. Ecology will provide EPA the toxics emissions point source data, submitted by facilities, and tracked in Ecology's Washington Emissions Inventory Reporting System (WEIRS), for the annual NEI. WEIRS contains emissions from major sources in Washington, except those under the jurisdiction of the Olympic Regional Clean Air Agency, Puget Sound Clean Air Agency, and Southwest Clean Air Agency.

Ongoing Activities

1. Ecology, in partnership with the local clean air agencies, will:
    a. Seek state and federal funds to develop and implement diesel reduction projects through the West Coast Diesel Collaborative, National and State Diesel Emissions Reduction Act (DERA) program, and other sources.
    b. Operate monitoring stations and evaluate field and analytic data to assure quality as outlined in the Technical Assistance Document.
    c. Collect toxics monitoring data where fully funded by EPA.
    d. Submit available point source toxics emission inventory data each year; within 12 months of the end of the calendar year.
    e. Review available National Emissions Inventory (NEI) data.
    f. Annually adopt and submit Part 60, 61, and 63 delegation requests to EPA for approval.
2. EPA will provide:
    a. NEI data.
    b. Guidance about national air toxic policies and programs.
    c. Background information and outreach from National Air Toxics Assessment and other state and national programs.
    d. Timely approval of Part 60, 61, and 63 delegation requests.

Reporting

1. For major and synthetic minor sources, the local clean air agencies, Ecology, and EPA will enter 40 C.F.R. Parts 60, 61, 62, and 63 sources into the Integrated Compliance Information System (ICIS)-Air. Local clean air agencies will also report the Minimum Data Reporting (MDR) elements.
2. Ecology will:
    a. Annually submit point source emission reports to EPA for the NEI.
    b. Do an initial submission of 2020 point, mobile, and nonpoint inventories to EPA for the NEI by December 31, 2021.
    c. Request local clean air agency reporting of toxic air pollutants and submit data received to EPA.
3. Local clean air agencies that submit inventory data directly to EPA will:
    a. Submit annual point source emission reports to EPA for the NEI.
    b. Submit the same data to Ecology to facilitate Ecology's effort to compile a complete statewide inventory.

Permitting and program delegation

Objective

Reduce, limit, and manage emissions through effective and efficient air quality permitting programs that meet CAA deadlines. This objective describes how Ecology and local clean air agencies will control and track emissions from industrial sources.

Outcome Measures

1. Average number of days it takes to process Notice of Construction permit applications.
2. Percentage of Title V permits that have been administratively extended past the expiration date.
    a. As appropriate for each agency, Ecology and local clean air agencies will update rules, delegations, and approvals to reflect new or revised rules under 40 C.F.R. Parts 51, 60, 61, 62, 63, 64 and 70.
    b. Ecology will maintain an up-to-date Prevention of Significant Deterioration (PSD) program. EPA will work with Ecology on revising the SIP and approving Title V program updates as needed, in a timely manner. Ecology will promote training and discussion with local permitting agencies to help ensure permit writers understand applicability of Major New Source Review.
3. Ecology will continue to:
    a. Enhance WEIRS, a web-based emission inventory system used to track "allowable" emissions data and "actual" emissions data (this system will be used to collect and track available allowable emissions data from Ecology and local air quality agency permittees).
    b. Communicate to permittees and local clean air agencies about the value of allowable emissions data, specifically by requiring PSD applicants to use allowables in their air quality impact modeling; and communicate to the PSD consulting community that it is the source's responsibility to compile an allowable inventory for impact modeling (although Ecology and local clean air agencies will assist if requested).

Ongoing Activities

Ecology and local clean air agencies will:

1. Administer the following air quality permitting programs for commercial and industrial sources:
    a. Preconstruction permits for new major sources or major modifications (PSD, NAA-NSR)
    b. Rules under 40 C.F.R. Parts 60, 61, 62, and 63 adopted by the state along with any additional rules under these Parts adopted by local clean air agencies
    c. Air Operating Permits (AOP) for existing and new sources
2. Use EPA approved models and methods, in accordance with 40 C.F.R. Part 51 Appendix W, for air quality analysis for commercial and industrial source permits, or seek EPA approval of alternative models or methods when applicable.

3. Ecology will, for PSD permits, conduct Best Available Control Technology (BACT) evaluations in a manner consistent with EPA's top-down, five-step procedure.
4. Ecology and the local clean air agencies will consider relevant EPA guidance and interpretations when determining the applicability of PSD and NNSR.
5. Ecology and the local clean air agencies will implement SIP pre-construction permitting (PSD, NNSR, and minor permits) as specified in the approved SIP and in state rules.
6. As resources and scheduling allow, EPA will co-host an in-person workshop with Ecology and the local clean air agencies on implementation of the NSR program.
7. EPA and Ecology will communicate with each other about permitting issues openly, directly, and in a timely manner.
8. Ecology will:
    a. Send EPA each major NSR permit application upon receipt.
    b. Notify EPA when a major NSR permit application has been determined to be incomplete or complete.
    c. Informally communicate draft major NSR permits and supporting information to EPA at the start of each public comment period.
    d. Communicate with EPA on modeling protocols at the start of any major NSR permit project.
    e. Ecology will provide EPA with NSR applicability determinations.
    f. Ecology and EPA will periodically discuss policy and program implementation.
9. Ecology and local clean air agencies will:
    a. Send EPA each Title V permit application upon receipt.
    b. Send EPA each draft Title V permit and supporting information at the start of each public comment period.
    c. Send EPA each proposed Title V permit and supporting information as required in 40 C.F.R. Part 70.
    d. Send EPA each final Title V permit and supporting information soon after issuance.
10. EPA will demonstrate to Ecology how to use the Electronic Permit System (EPS) database. Ecology can use EPS to submit draft permits to EPA for review and track reviews. Use of EPS is voluntary
11. EPA will arrange a discussion with Ecology upon completion of draft permit reviews with the intent of informally providing input to Ecology.

Reporting

Ecology and local clean air agencies will:

1. Report AOP activity using the Permit Register and complete development of a system to post all final Title V permits to the state's website within 10 days of permit issuance.
2. Post Best Available Control Technology (BACT) and Lowest Achievable Emission Reduction (LAER) determinations to the clearinghouse within 30 days of issuing the final permit (for major actions). Specify (a) the date the application was determined to be complete, and (b) the date the final permit was issued.
3. Submit major point source emissions data to the NEI within 12 months of the end of the calendar year.

4. Submit semi-annual Title V Operating Permit System (TOPS) reports consistent with EPA's deadline for compliance assurance.

Objective

Maintain an effective compliance assurance program that protects human health and the environment by preventing and reducing air pollution. Carry out a balanced program that includes:

- Compliance assistance.
- Compliance monitoring.
- Appropriate enforcement
- Follow-up to ensure return to compliance.

Outcome Measures

To assess the performance of compliance and enforcement programs, EPA uses the:

- Quadrennial SRF review.
- Annual data metrics analyses.
- Quarterly High Priority Violations (HPV) calls.
- Annual meeting discussions.
- Other EPA oversight efforts.

Outputs

1. Ecology, EPA, and local clean air agencies will follow:
    a. The national "Minimum Data Requirements (MDRs) for CAA Stationary Sources Compliance," January 2012.
    b. The national "Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS)," July 2014.
    c. The national HPV policy, "Timely and Appropriate Enforcement Response to High Priority Violations," August 2014.
    d. The national "Guidance on Federally-Reportable Violations for Clean Air Act Stationary Sources," September 2014 (FRV policy).
2. As part of the annual collaborative planning meetings (and the quarterly HPV calls, when needed), EPA, Ecology, and local clean air agencies will review and discuss compliance and enforcement programs for federally-delegated programs, including key activities, emerging issues, and program needs. EPA, Ecology and the local clean air agencies will also connect as necessary in the permit writer's forums and compliance forums.

Ongoing Activities

1. Ecology and local clean air agencies will conduct compliance programs according to the 2014 national Compliance Monitoring Strategy for those sources and activities to which the strategy applies.
2. Agencies will resolve high priority violations according to EPA's 2014 "Timely and Appropriate Enforcement Response Guidance for HPVs." Ecology, local clean air agencies, and EPA will hold quarterly conference calls to discuss:
    a. HPVs.

   b. Policy and strategy issues.
3. EPA will conduct compliance monitoring and enforcement on tribal lands.
4. For programs not delegated to the state or local clean air agency, EPA has sole authority for:
   a. Complaint response.
   b. Inspections.
   c. Priority enforcement actions.
   d. Other activities statewide
5. EPA retains authority to conduct inspections and enforcement actions under the Clean Air Act and will use this authority for national and regional priority work and as requested by state and local clean air agencies. Both parties adhere to a "no-surprises" policy for compliance activities and enforcement actions. If EPA inspects a facility to determine compliance with a non-delegated program requirement, and the facility is one that the state or local agency regularly inspects for delegated program purposes, EPA will notify the state or local agency before EPA takes an action. EPA will also provide advance notice of EPA's enforcement for delegated or approved programs.
6. Ecology and the local clean air agencies will continue to participate in the State Review Framework (SRF). Ecology and the local clean air agencies will work with EPA to implement recommendations and address areas that need attention as identified in the 2017 SRF review and report.
7. Ecology and the local clean air agencies will participate in the annual enforcement data verification process. Each fall EPA headquarters will post the specific set of data verification metrics on the database, "Enforcement and Compliance History Online" (ECHO). Ecology and the local clean air agencies will ensure any necessary data corrections are made in the program data systems.

Reporting

1. All agencies will meet timely and accurate reporting requirements contained in the national MDRs[44], CMS[45], FRV[46], and HPV[47] policies.
2. Ecology and local clean air agencies will update their databases, as needed, and enter timely, accurate and complete ICIS-Air data.

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[44] MDRs (FRVs are a subset of the MDRs): Minimum Data Requirements for CAA Stationary Sources Compliance, January 2012 http://www2.epa.gov/compliance/guidance-minimum-data-requirements-mdrs-caa-stationary-sources-compliance

[45] CMS Policy: Clean Air Act Stationary Source Compliance Monitoring Strategy, July 2014 http://www2.epa.gov/compliance/clean-air-act-stationary-source-compliance-monitoring-strategy

[46] FRV Policy: Guidance on Federally-Reportable Violations for Clean Air Act Stationary Sources, September 2014 http://www2.epa.gov/compliance/guidance-federally-reportable-violations-stationary-air-sources

[47] HPV Policy: Timely and Appropriate Enforcement Response to High Priority Violations, August 2014 http://www2.epa.gov/enforcement/revised-timely-and-appropriate-t-and-enforcement-response-high-priority-violations-hpvs

3. EPA will communicate to Ecology and affected local clean air agencies about EPA's enforcement actions in a timely manner, and before actions are finalized.

Monitoring and assessment

Objective

To characterize the health consequences of air pollution in Washington, agencies will collect data that has the greatest benefit for public health, and increase the public understanding of the health effects and costs of pollution.

Outcome Measures

1. Air monitoring delegated by EPA to Ecology and local clean air agencies meets all federal requirements. The monitoring will also provide enough information to:
    a. Collect data that has the most relevance to public health.
    b. Protect public health.
2. Air monitoring data meets EPA requirements for data completeness at each monitor.

Outputs

1. Ecology works with local clean air agencies to complete and submit a review of the air-monitoring network to EPA by July 1 of each year. EPA will respond within 120 days of Ecology submitting the monitoring network plan.
2. Ecology certifies its prior calendar year of ambient air monitoring to EPA by May 1 of each year.
3. Ecology, EPA, and local clean air agencies will use listservs, e-mails, and web pages to inform the public about air monitoring results.
4. Ecology, EPA, and local clean air agencies will use data resources to support communication and understanding about identified air pollution problems.

Ongoing Activities

1. Ecology and local clean air agencies will operate the statewide National Air Monitoring Site network, according to 40 C.F.R. Part 58.
2. Ecology will:
    a. Submit monitoring data to Air Quality System (AQS) within 90 days of the end of each quarter.
    b. Provide a quality assurance program for ambient data as required by 40 C.F.R. Part 58, Appendix A.
    c. Work with local clean air agencies to collect data and prepare emission inventory and air monitoring databases to support air quality modeling.
3. EPA will:
    a. Review and approve an annual monitoring network review within 120 days of Ecology's submittal.
    b. Provide annual quality assurance audits as required by 40 C.F.R. Part 58, Appendix A.
    c. Review and approve requests to modify the monitoring network outside of the ANP process, if necessary

d. Provide consistent, transparent criteria and guidance regarding the requirements for any modification to the network.

Reporting

Ecology will:

1. Submit AQS data to EPA within 90 days of the end of each quarter.
2. Write and submit quarterly Quality Assurance (QA) reports to EPA.
3. Notify EPA by email as soon as it is evident that any ambient air standards have been exceeded within the Washington State monitoring network.
4. Provide ambient data to EPA upon request.

Chapter 8 - Hazardous Waste

Introduction

Ecology implements the EPA authorized Hazardous Waste Program pursuant to the federal Resource Conservation and Recovery Act (RCRA), as amended. As the authorized RCRA Hazardous Waste Program in Washington, Ecology's rules act in lieu of the federal rules. The RCRA program is administered through the Washington State Dangerous Waste Regulations, Chapter 173-303 WAC.[48]

This chapter of the Agreement addresses RCRA implementation in Washington State. General procedures for assuring compliance, conducting corrective action and permitting, along with additional details on how EPA and Ecology manage RCRA authorization and activities in Washington State are included.

Questions about this work can be directed to:

Ecology
Kerry Graber
Hazardous Waste and Toxics Reduction Program
360-407-0241
kerry.graber@ecy.wa.gov

EPA
Barbara McCullough
RCRA and Tanks Branch
206-553-2416
mccullough.barbara@epa.gov

Assuring compliance

Ecology strives to assure that generators, transporters, and facilities that treat, store, or dispose of hazardous waste do so properly. This includes minimizing the risk of releases of hazardous wastes to the air, water, and land. Ecology does this by assuring compliance with state and federal rules and encouraging waste minimization practices. Ecology's RCRA permitting work follows the procedures of the federal laws as specified in 40 C.F.R. § 270.3, when those laws are applicable.

Ecology and EPA recognize the following RCRA activities will be carried out in a manner consistent with and mindful of advancing environmental justice. More information is available about environmental justice priorities as they apply to this Agreement in Chapter 4.

[48] http://app.leg.wa.gov/WAC/default.aspx?cite=173-303

Ecology's Resource Conservation and Recovery Act activities

Administratively, three of Ecology's organizational units work on RCRA activities as one authorized hazardous waste program:

- Hazardous Waste and Toxics Reduction Program (HWTR)[49]: The HWTR program is responsible for implementing most of the RCRA-based activities in the state.
- Industrial Section,[50] within the Solid Waste Management Program[51]: The Industrial section has specific RCRA responsibilities for:
  - Refineries.
  - Pulp and paper mills.
  - Aluminum smelters.
  - Other specific large industrial sites.
- Nuclear Waste Program (NWP)[52:] The NWP has specific RCRA responsibilities at Hanford and four other facilities that manage dangerous and/or mixed (radioactive and hazardous) waste:
  - Areva NP Inc. (Framatome)
  - Perma-Fix Northwest Richland Inc.
  - Puget Sound Naval Shipyard
  - Energy Northwest's Columbia Generating Station

EPA's Resource Conservation and Recovery Act activities

EPA Region 10 RCRA Program is managed by the Land, Chemical, and Redevelopment Division and the Enforcement and Compliance Assurance Division.

EPA is responsible for performing oversight of the state's RCRA program implementation including the areas of:

- State corrective action.
- Permitting
- Compliance and enforcement activities.

EPA also conducts in-depth reviews of state programs, such as the State Review Framework (SRF), which is an evaluation of the compliance and enforcement program, and the National Permit Oversight Policy review, which will be new in state fiscal year 2022. Ecology has begun participation in the latest State Review Framework to be completed in state fiscal year 2022.

[49] https://ecology.wa.gov/Waste-Toxics
[50] https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Industrial-facilities-permits
[51] https://ecology.wa.gov/About-us/Get-to-know-us/Our-Programs/Solid-Waste-Management
[52] www.ecy.wa.gov/programs/nwp/index.html

Evaluating activity commitments and levels of effort

Ecology's commitment and level of effort for the two-year period of this Agreement are presented in the RCRA Work Plan, addressed later in this chapter. Both agencies will review the progress on the activities as part of each RCRA Managers Quarterly meeting, and in other meetings throughout the PPA cycle, to assist Ecology with meeting the goals in its work plan. The RCRA Work Plan may be adjusted as needed by mutual agreement with the adjustments documented in writing.

Ecology and EPA will review this Agreement's commitments and progress at its midpoint. This midpoint review will start in the spring of 2022 culminating with a revised RCRA Work Plan that will become effective July 2022 for the second half of the Agreement. The RCRA Managers Quarterly meetings will be the primary venue to track this review.

Nothing limits EPA's ability to otherwise review decisions made by Ecology, including those subject to review under the *Resource Conservation and Recovery Act - Hazardous Waste Program Memorandum of Agreement* (RCRA MOA), signed in January 2017 between Ecology and EPA Region 10.

Resource Conservation and Recovery Act priorities and goals

EPA's Strategic Plan[53] for federal fiscal years 2018-2022 established goals for strategic planning and budgeting. EPA's overarching national goals and objectives that pertain to the hazardous waste program are outlined below.

- Objective 1.3: Revitalize Land and Prevent Contamination establishes a strategic measure to make additional RCRA corrective action facilities ready for anticipated use (RAU).
- Objective 2.1: Enhance Shared Accountability establishes goals to enhance compliance assurance tools in collaboration with the states.
- Objective 3.1: Compliance with the Law establishes timely enforcement goals and increased compliance rates.
- Objective 3.3: Prioritize Robust Science Refocus EPA's robust research and scientific analysis to inform policy making
- Objective 3.4: Streamline and Modernize to issue permits more quickly and to modernize permitting and reporting systems.

[53] https://www.epa.gov/planandbudget/strategicplan

To support EPA's goals above and meet state priorities, Ecology will work to achieve the following goals and priorities in state fiscal years 2022-2023:

1. Minimize environmental threats caused by mismanagement of hazardous waste by implementing effective compliance assurance activities, including fair and firm enforcement.
2. Continue to improve the Dangerous Waste Regulations and maintain an authorized RCRA program, no less stringent than the federal program.
3. Implement the State Solid and Hazardous Waste Plan.[54] This includes work to meet goals, including minimize or eliminate the use of toxic substances, and the generation of toxic wastes.[55]
4. Accomplish timely permitting to ensure protective and compliant permitting, closure, post closure, and corrective action.
5. Improve internal and external access to meaningful, quality information for use in accomplishing RCRA and related work, including collecting information to measure progress and success.
6. Work with EPA to minimize duplicative efforts, and coordinate in advance, to streamline EPA's review and approval of state actions when necessary.

Collectively, both agencies will pursue the RCRA priorities and goals through:

- Environmental and performance indicators.
- Grant performance outputs.
- Fund allocation and maximizing employee effectiveness.
- Quarterly reviews and implementation of the RCRA work plan.

Environmental and performance indicators

During the period of this Agreement, core performance measures corresponding to each of the following program elements will be used to assess the success of the RCRA program:

- Environmental compliance monitoring
- Corrective action
- Enforcement
- Pollution prevention and waste minimization activities
- Permitting

Data for these and other measures are available through EPA's RCRAInfo system, the Toxics Release Inventory, and EPA's Enforcement and Compliance History Online (ECHO) database.

[54] https://ecology.wa.gov/Regulations-Permits/Plans-policies/Washington-state-waste-plan

[55] https://ecology.wa.gov/Regulations-Permits/Plans-policies/Washington-state-waste-plan/Progress-report

Ecology's TurboPlan supports Ecology's pollution prevention and waste minimization activities. The core measures that Ecology and EPA will use for assessing performance are aligned with Ecology's goals and priorities noted above. They include:

- Adequacy of inspection coverage, as noted in the Compliance Monitoring Strategy.
- Number of inspections, violations, percentage of violations returned to compliance, percentage of violations returned to compliance in 30 days, rates of Significant Non-Compliance, and percentage of Significant Non-Compliance facilities that return to compliance.
- Progress on the number and percentage of sites subject to RCRA corrective action that have (a) current human exposures under control and (b) migration of contaminated ground water under control, as measured in the RCRAInfo database by event codes CA725YE and CA750YE, respectively.
- Percentage of facilities subject to corrective action where a final remedy has been constructed or an interim measure has been determined to be in place for the facility.
- Percentage of facilities subject to corrective action and where migration of contaminated groundwater is determined to be under control that have a final remedy constructed and the site is determined to be ready for anticipated use (RAU).
- Percentage of facilities subject to corrective action, where a determination has been made that no further corrective action is required at the facility or where corrective action is complete with or without controls in place.
- Number of enforcement actions taken and appropriateness to return facilities to compliance, as addressed through EPA's Enforcement Response Policy (2003) and the State Review Framework (SRF) process, addressed in detail at the end of this chapter.
- Number and dollar amount of penalties assessed, also addressed in the SRF.
- Pounds of hazardous waste generated per facility, per year.
- Pounds of toxic chemicals released to air, land, and water per year, as measured by the Toxics Release Inventory.
- Number of facilities that require either an operating permit, permit lite, permit modification, permit reissuance or post closure permit, where there are approved controls in place, as measured in the RCRAInfo database. An additional core measure is the number of enforceable documents in lieu of a post-closure permit for facilities subject to post closure permitting obligations. as defined in 40 CFR §270.1(c)(7) or WAC 173-303-400(3)(a).

In addition, Ecology will develop and propose performance measures that focus on permit renewals and the permit renewal schedule.

Grant related activities

For the purposes of EPA monitoring the RCRA grant, Ecology will, in accordance with the RCRA Workplan and the Data Management Agreement:

- Enter all appropriate RCRA information into EPA's national RCRAInfo database as defined in and within the timeframes of the RCRA Data Management Agreement between Ecology and EPA, dated 7/22/2019.
- Collect and process annual dangerous waste reports.
- Collect and process dangerous waste activity notifications and assign EPA/State ID numbers.
- Conduct inspections that meet statutory mandates, the National Compliance Monitoring Strategy for RCRA[56] and state priority hazardous waste inspections as specified in the RCRA Work Plan.
- Conduct appropriate follow-up and enforcement activities to address violations.
- Conduct technical assistance and compliance assistance visits.
- Track RCRA closure, post closure, and corrective action work to meet RCRA Workplan commitments necessary for achieving the Government Performance and Results Act (GPRA) goals.
- Conduct permitting work to meet the national GPRA permitting goals for RCRA.
- Maintain RCRA authorization and coordinate with EPA to revise and update regulations.
- Further integrate environmental justice into core RCRA activities, including inspection planning, community outreach, permitting, and technical assistance activities.

Fund allocation and full-time employee summary

Ecology staff will work on Ecology's RCRA activities that are funded in part by this Agreement's RCRA grant (see Chapter 1). For the purposes of this Agreement, one full-time employee (1 full time equivalent or FTE) equals $134,233 per year. Ecology's and EPA's RCRA funding and staffing for this Agreement are based on:

- The total number of Ecology FTEs funded by EPA RCRA grant under this Agreement is 16.0.
- At the time of the request for public comment, funding amounts have not yet been determined. In the previous Agreement, the first year total project amount was $2,409,212 which consisted of $1,806,910 (13.66 FTEs) federal money and $602,302 (4.54 FTEs) required State matching funds. Second year amounts were similar.

[56] https://www.epa.gov/compliance/compliance-monitoring-strategy-resource-conservation-and-recovery-act

Activities, review, FTEs, and the Resource Conservation and Recovery Act Work Plan

Activities in this Agreement apply to EPA's RCRA grant to Ecology for state fiscal years 2022 and 2023, which begin July 1, 2021 and July 1, 2022, respectively. This Agreement expires June 30, 2023. During this period, Ecology and EPA will review the RCRA activities and make necessary adjustments as described below.

Resource Conservation and Recovery Act Work Plan

Ecology's RCRA commitments are described in the RCRA Work Plan. Ecology will write a RCRA Work Plan for each year of this Agreement. The RCRA Work Plan includes commitments for the HWTR program, the NWP, and the Industrial section. The RCRA Work Plan will be mutually tracked during the Agreement. The RCRA Work Plan may be adjusted as needed by mutual agreement with the adjustments documented in writing.

Moving Washington beyond waste and toxics (Ecology)

Ecology is updating the state's Solid and Hazardous Waste Plan as required by state law (Chapters 70A.300.310 and 70A.205.210 RCW). Ecology completed the 2015 update of the state plan: *Moving Washington Beyond Waste and Toxics*.[57] COVID-19 disruptions delayed the 2020 update, but Ecology published a public review draft in December 2020.[58] Ecology is currently reviewing and responding to comments and expects to publish the final updated plan in 2021.

To move "beyond waste and toxics" is defined in the state plan's vision statement:

"We can transition to a society where waste is viewed as inefficient and where most wastes and toxic substances have been eliminated. This will contribute to economic, social, and environmental vitality."

The plan identifies goals and actions aimed at reducing waste and the use of toxic chemicals through policies and programs designed to protect the environment, human health, and economic health. [59] [60]

EPA will support Ecology's efforts in implementing the 2021 state plan actions and will coordinate its efforts under its Sustainable Materials Management Program and other related EPA initiatives where appropriate.

[57] https://apps.ecology.wa.gov/publications/SummaryPages/1504019.html
[58] https://apps.ecology.wa.gov/publications/SummaryPages/2004057.html
[59] http://www.governor.wa.gov/sites/default/files/exe_order/eo_05-01.pdf
[60] https://www.governor.wa.gov/sites/default/files/exe_order/18-01%20SEEP%20Executive%20Order%20%28tmp%29.pdf

Resource Conservation and Recovery Act authorization

Ecology will maintain an authorized program in compliance with federal requirements under Chapter 40 CFR Part 271.21.

Ecology will coordinate with EPA during any RCRA-related state rule modification to ensure the state RCRA program is at least as stringent as the federal RCRA program. This is necessary to maintain state RCRA authorization. Ecology and EPA will also work cooperatively throughout the development of Ecology's draft and final authorization revision application, which is anticipated during the period of this Agreement.

Resource Conservation and Recovery Act information management

Ecology will enter all appropriate RCRA data into the national RCRAInfo (hazardous waste) database. Each of the Ecology programs conducting RCRA work will be responsible for their respective data quality and data entry. Ecology's RCRA data and information management related activities include:

- Inspections and any resulting violations.
- Enforcement actions, including penalty data.
- Return to compliance information.
- Financial assurance reviews.
- Permit milestones.
- Closure and post-closure milestones.
- Corrective action milestones.
- Any other data necessary to track environmental and performance indicators in the RCRAInfo data system.

Ecology and EPA will continue to collaborate on EPA's national e-Manifest tracking system as needed during the period of this Agreement.

Ecology's and EPA's specific responsibilities and timelines for maintaining RCRA data are described in the RCRA Data Management Agreement updated in 2019.

Ecology will:

1. **Maintain procedures to assure data quality and timely data entry.** Inspection, compliance monitoring, and enforcement data will be entered/updated monthly in RCRAInfo. Within 30 days of the conclusion of a site visit, data will be entered in RCRAInfo, including at least the inspection type, date, and initial assessment whether or not compliance issues were observed. Additional compliance and enforcement data entry will occur within 30 days of completion of inspection reports, issuance of enforcement actions, or finalization of other documentation.
2. **Review all other facility specific RCRAInfo data** (including permitting, closure, corrective action, and facility status). Data will be reviewed for accuracy and entered into RCRAInfo within the timeframes of the RCRA Data Management Agreement between Ecology and

EPA, dated 7/22/2019. The data will also be reviewed and discussed as needed at the RCRA Managers Quarterly meetings.

3. **Collect and process annual reports.** Information from Ecology's TurboWaste data system, which supports all handler information, will be added to the RCRAInfo database. This information must be translated into RCRAInfo at least monthly as defined in the RCRA Data Management Agreement between Ecology and EPA, dated 7/22/2019. All information required for the biennial report must meet EPA's biennial report deadline.
4. **Maintain Ecology's TurboWaste Application and participate in the Region 10 RCRAInfo Workgroup.** This involves supporting data sharing and compatibility with RCRAInfo as needed. Examples include receipt of annual dangerous waste reports and withdrawing EPA/State ID#'s when appropriate. It also includes translation of handler data from Ecology's TurboWaste system into RCRAInfo. Participation in the RCRAInfo Workgroup helps ensure collaboration and data quality between TurboWaste and RCRAInfo.
5. **Collect and process notifications of dangerous waste activity forms.** Forms will be collected and processed for all reported Washington hazardous waste activities where Ecology has jurisdiction.
6. **Participate in national RCRAInfo Version 6 (V6) upgrade.** This involves participating and engaging in monthly national calls regarding implementation and updates to RCRAInfo V6.

EPA will:

1. **Assist in maintaining EPA's national RCRAInfo database.** This involves keeping data current, and participating in the RCRAInfo Workgroup. EPA will be responsible for collecting and entering data regarding hazardous waste activity on Tribal lands, including the Puyallup Reservation. However, Ecology is responsible for data on the Puyallup Reservation under the following conditions:
    a. The site is within the Puyallup Reservation boundaries.
    b. The property owner or operator is non-tribal.
    c. The land is classified as non-trust or fee land.

   These sites were identified in the 1873 Survey Area of the Puyallup Reservation and the August 27, 1988 Settlement Agreement.

1. **Maintain and provide Ecology access to RCRAInfo. EPA** will maintain the RCRAInfo report system and allow Ecology staff access via the internet.
2. **Provide RCRAInfo training.** This includes guidance and support for changes and new features in RCRAInfo.
3. **Refer assignment of EPA/State ID numbers to Ecology.** Ecology will assign all EPA /State ID numbers except for those on non-Puyallup Tribal Indian lands. This includes the assignment of EPA/State ID numbers for superfund sites and EPA spill sites.
4. **EPA will be responsible for extracting and using the RCRAInfo data to inform regional and national reporting needs.**

Compliance assurance

Ecology will conduct at least the number of facility inspections committed to in the *RCRA Work Plan*. Ecology will complete inspection reports within 150 days. Sites in significant non-compliance (SNC) in accordance with EPA Civil Enforcement Response Policy[61] will have the date of SNC determination entered in RCRAInfo, in addition to the standard evaluation data. Inspections that characterize sites as secondary violators in accordance with EPA Civil Enforcement Response Policy and sites where no violations were found will have those inspections recorded in RCRAInfo with appropriate evaluation and enforcement data.

Ecology and EPA will agree on what inspections are subject to the Compliance Monitoring Strategy by July 1st of each year, and Ecology will include those inspections in the RCRA Work Plan. If Ecology decides not to conduct an inspection identified as subject to the RCRA Work Plan, Ecology will immediately notify EPA in writing along with justification for this decision.

Ecology addresses violations and compliance issues in a manner consistent with the Compliance Section of the RCRA MOA. In its penalty calculations, Ecology captures economic benefits that businesses accrued through non-compliance, as guided by EPA's "BEN" computer model and other means. Data, including significant non-compliance, will be entered into RCRAInfo within 30 days of the determination of the non-compliant status, and reviewed for quality assurance monthly.

EPA will coordinate with Ecology on compliance issues, inspections, and enforcement actions that EPA will lead in Washington. EPA will implement compliance activities in Indian Country in coordination with the various tribal governments and Ecology. EPA will notify Ecology of this activity in advance when possible. To the extent possible, EPA will also share updates, copies, and/or summaries of findings that result from inspections they lead in Washington.

Corrective action

Ecology and EPA are working toward meeting the goals set by the federal Government Performance and Results Act (GPRA). GPRA establishes goals for the corrective action program using EPA's "2030 Corrective Action Baseline," which includes:

- Facilities on EPA's 2008 corrective action universe list. This includes 42 sites within the State of Washington.
- Other facilities that Ecology and EPA agree are appropriate to address under corrective action.

[61] https://www.epa.gov/sites/production/files/documents/finalerp1203.pdf

RCRA Corrective Action Program

Goal

Through 2030, the RCRA Corrective Action Program will ensure that RCRA cleanups are initiated and completed efficiently and quickly. Commitments regarding what work is planned and what progress is made will be visible to the public. An ambitious universe of cleanups will be identified for completion by 2030. For commitments and tracking, the program will use the relevant Corrective Action Program measures and will use flexible approaches appropriate for each region and state.

Corrective Action Program Measures

- Human Exposures Under Control (CA725)
- Migration of Contaminated Groundwater Under Control (CA750)
- Remedy Construction Complete (CA550)
- Cleanup Complete (CA900 or CA990)
- Ready for Anticipated Use (RAU)
- By 2030, the RCRA Corrective Action Program will eliminate or control adverse impacts beyond facility boundaries at RCRA Corrective Action facilities wherever practicable and the program will focus attention on cleanups that will not meet this target. The program will develop procedures to identify and address emerging risk issues (e.g., vapor intrusion, evolving science), and address timelines for facilities brought into the program post-2020.
- By 2030, the RCRA Corrective Action Program will ensure or confirm that land within facility boundaries at RCRA Corrective Action facilities will be safe for continued use or reasonably foreseeable new uses wherever practicable and the program will focus attention on cleanups that will not meet this target. The program will develop procedures to address timelines for facilities brought into the program post-2020.

Ecology's specific commitments for federal fiscal years 2022-2023 are identified in the RCRA Work Plan. Ecology's corrective action work contributes toward achievement of the nationwide goals established in EPA's strategic plans and EPA Region 10's specific commitments.

EPA Region 10's commitments for these measures and nationwide goals are made each year after consultation with Ecology and other authorized Region 10 states. Ecology's RCRA Work Plan will address the specific sites, which will assist EPA in meeting these commitments and goals.

Washington's Model Toxics Control Act (MTCA, the state's cleanup authority) will be used to satisfy corrective action requirements, including issuance of enforcement orders. A short permit shell (a framework permit or "Permit Lite") will be issued that incorporates by reference the MTCA enforcement order as a permit condition. This process eliminates duplication of work and allows the use of the MTCA process, which is generally faster than RCRA corrective action. It may also be more stringent and is familiar to the business community in Washington. A list of permits that both agencies will work on during this Agreement will be included in the RCRA Work Plan. Data for milestones achieved will be entered into RCRAInfo.

When an enforceable document is used in place of a permit Ecology will notify EPA in advance of sending over for review.

Quarterly and annual updates

Ecology will maintain and regularly update RCRAInfo with respect to the corrective action work described above. In addition to the RCRAInfo updates, Ecology and EPA will continue to work together on ways to stay better informed of corrective action progress. This could include updates on their RCRA Work Plan progress at the RCRA Managers Quarterly meetings as well as more in-depth discussions on site status.

Permitting and closure work commitments

Ecology and EPA will strive to meet EPA's national baseline for Treatment, Storage, and Disposal (TSD) facility permitting. The goal for permitting during federal fiscal years 2022-2023 is for 100 percent of the hazardous waste management facilities to have controls in place to prevent toxic releases to air, soil, surface water, and groundwater.

EPA also sets nationwide goals for issuing permit renewals within its strategic plan. Ecology permit renewal achievements form a portion of EPA Region 10's contribution towards accomplishment of the national goals. To this end, Ecology will invest the designated level of effort to ensure environmental protection at TSD facilities. Ecology will negotiate site-specific priorities, tools, and expectations with EPA. These negotiations will be conducted at the RCRA Managers Quarterly meetings and facility-specific discussions.

Ecology and EPA will continue to use a streamlined permitting process for RCRA corrective action facilities with no operating RCRA dangerous waste management units. Specific duties and responsibilities of Ecology and EPA for permitting and work sharing will be determined through annual program planning for both agencies, which may include the RCRA Work Plan, and through the RCRA Managers Quarterly meetings, in accordance with the RCRA MOA.

Ecology intends to work on "Permit Lite" and accompanying MTCA enforcement order negotiations, during the period of this Agreement, for facilities named in the RCRA Work Plan.

Ecology will work on re-issuing storage and treatment permits as specified in the RCRA Work Plan during the period of the Agreement, paying specific attention to those facilities whose permits have expired. Under EPA's new National Permit Oversight Policy, EPA will meet with Ecology to discuss the state's progress in reducing the permit renewal backlog. Ecology will develop a measure of permit renewal timeliness during the period of this Agreement.

Issuing a new Hanford Facility RCRA Permit, Dangerous Waste Portion, Revision 9, for the Treatment, Storage, and Disposal of Dangerous Waste (Site-wide Permit), WA7890008967 will continue to be the focus during the period of this agreement. EPA has and will continue to provide oversight, technical, and programmatic support for permit re-issuance.

The NWP is currently working with EPA and HWTR, specific to the reissuance of the Hanford Site-wide Dangerous Waste permit in the following ways:

- Require the Department of Energy to submit revised permit application information.
- Modify the 2012 draft Hanford Site-wide permit to address substantive comments and issues.
- Prepare a revised draft Hanford Site-wide permit that is scheduled for public comment in 2022.
- Address public comments from the comment period.
- Issue the final Hanford Site-wide permit.

Ecology will also continue to address the permit backlog to determine the appropriate next steps and move forward with the facility closure(s) or permit re-issuance action(s).

Technical assistance from Ecology

Ecology will provide technical assistance for compliance, waste minimization, and pollution prevention through:

- Site visits.
- Phone calls, emails, and video conferences.
- Outreach tools.

HWTR will assess outreach needs and use the tools appropriate for the audience. Outreach may include:

- Publications.
- Web pages.
- Videos.
- Webinars.
- Blog articles.
- Social media.
- Email distribution lists.
- Mailers.
- Other materials.

Ecology implements RCRA compliance on the premise that greater compliance results when technical assistance is available as a core element of the program.

Technical assistance from the Environmental Protection Agency

EPA will provide technical assistance to Ecology. This work will include technical and regulatory consultation as resources allow.

The Environmental Protection Agency's coordination

State review framework

The most recent review process was completed in 2017. Ecology worked with EPA to implement recommendations and address areas that needed attention as identified in the final SRF report.

EPA initiated a review in the Spring of 2021 using the SRF Round 4 process and procedures. Ecology will provide EPA with information and materials in developing the draft report. Upon receipt of the draft report, Ecology will work to identify the root causes of any identified inadequacies. Proposed Ecology changes addressing EPA's areas for attention and areas for improvement will be discussed with EPA. Ecology will include these changes in agency comments to EPA as appropriate for inclusion in the final report. Ecology will inform EPA of changes implemented as they occur so they can be verified and closed as items needing action.

Ecology will participate in the annual national enforcement data verification process. EPA headquarters will post the specific set of data verification metrics on its "Enforcement and Compliance History Online (ECHO)" database in the last quarter of each calendar year. To support ECHO data accuracy, Ecology will ensure related data corrections are made in the RCRAInfo data system.

Program coordination

EPA Region 10 State Coordinators provide general program coordination. This work includes:

- Joint inspections
- Oversight work
- Program reviews
- Grant administration
- Planning
- Training
- Assuring open communication between Ecology and EPA

Chapter 9 - Water Quality Program

Introduction

Ecology administers most of the federal Clean Water Act (CWA) based programs throughout Washington State. The EPA role is to:

- Oversee the implementation of State-authorized programs.
- Provide technical and analytical support for state-authorized programs.
- Directly implement non-authorized programs, in most cases with state assistance.

This Agreement reflects the mutual understandings between Ecology and EPA for program implementation and extent of oversight.

The objectives and activities listed in this Agreement cover many aspects of water quality protection in Washington State. However, EPA grants only fund a subset of these activities.

One of EPA's grants to Ecology is the Performance Partnership Grant (PPG) that is provided in accordance with Section 106 of the CWA. This Agreement will also serve as the work plan for PPG funds provided to Ecology. The specific activities in this work plan, funded by the PPG, are identified at the end of each numbered section below.

The total project amount for water quality projects and activities over the two-year period of the Agreement is still being finalized. Historically, the EPA water quality grant has funded 30 full time Ecology employees, including state match. Refer to the PPG and its associated detail for funding categories and specific amounts, such as number of Ecology full time employees (FTE) funded.

1. Administrative

Ecology
Becca Conklin
360-407-6499
becca.conklin@ecy.wa.gov

EPA
Michelle Wilcox
360-753-9469
wilcox.michelle@epa.gov

Objectives

- The Performance Partnership Agreement is managed for efficiency and accountability.
- Electronic data sharing is the preferred mechanism to transfer information.

Activities and Measures

1A. Ecology will develop water quality performance measures and will provide a written status report to EPA on a semi-annual basis by July 31 and February 28 of each year.

1B. Ecology and EPA water quality managers will meet annually to discuss key water quality issues and progress in meeting the commitments in this Agreement. Ecology will organize and host the annual meeting in odd years, and EPA will organize and host in even years.

1C. EPA will participate in Water Quality Program management meetings when necessary to coordinate an effective water quality program. EPA will provide Ecology with relevant information on implementing water quality regulatory programs including water quality protection programs of other states to assist Ecology. EPA will notify Ecology of any federal law, rule change, or policy interpretation that would necessitate a change in state law to maintain a delegated program. Ecology will work with EPA to develop appropriate responses to such notifications.

2. Nonpoint Source Pollution Control

Ecology
Ben Rau
360-407-6551
ben.rau@ecy.wa.gov

EPA
Michelle Wilcox
360-753-9469
wilcox.michelle@epa.gov

Objectives

- Programs are designed to prevent and clean up nonpoint source pollution, and protect water quality and human health.
- Programs are designed to prevent habitat alteration and restore aquatic habitats.
- Financial assistance is provided to water quality partners and is targeted to the highest environmental needs.

Activities and Measures

2A. Ecology will implement the Ecology actions identified in the 2015 Water Quality Management Plan to Control Nonpoint Source Pollution (also known as the Washington State Nonpoint Plan), depending on available funds.

2B. Ecology will submit to EPA an annual program report by April 15 of each calendar year. If more time is needed to complete the annual report, Ecology will notify EPA and set a mutually agreed to date to submit the report. At a minimum, the report shall contain a summary of progress, including rationale/evidence, in meeting the schedule of milestones in the approved management program and reductions in NPS pollutant loading and

improvements in water quality that has resulted from implementation of the NPS management program. The report will also include a section that pertains to non-grant related Best Management Practices (BMP) adoption and efforts identified related to the prior year's priority watersheds and will include the following information:

- Update about the status and progress of BMP guidance development.
- Description of updates to Washington funding guidelines based on BMP guidance development.
- Use of BMP guidance for technical assistance.
- Use of BMP guidance in new Water Quality Improvement Plans, also known as Total Maximum Daily Loads, including implementation plans, and Total Maximum Daily Load alternatives.
- BMP outreach and training materials developed provided to field staff.
- Number of watershed evaluations conducted per watershed.
- Number of complaints received and summary of complaint types.

EPA will use this report, along with other materials, as the basis for determining continued eligibility for future CWA Section 319 grants.[62]

2C. Per the settlement, Ecology will submit a Washington State Nonpoint Plan update to EPA by the end of 2022.[63] The update should include incorporation of the agricultural BMPs identified to date, and a commitment to use the BMPs for Washington's CWA section 319 grant funding program, to develop and implement Total Maximum Daily Loads (TMDL) and TMDL alternatives, including but not limited to Straight to Implementation projects, with nonpoint components, and for technical assistance work. Ecology shall complete the development of five chapters of the agricultural BMP guidance, including the chapter that addresses riparian areas on agricultural lands, on or before December 31, 2022.

2D. EPA will provide technical expertise to Ecology's process to develop the voluntary Clean Water Guidance for Agriculture.

2E. Ecology and EPA will submit and award the CWA Section 319 grant on a biennial basis rather than an annual basis. For the years in which Ecology applies for the grant, Ecology will submit a grant proposal no later than March 31 and EPA will process the grant and provide funding no later than July 1 of that same year. Annually Ecology will identify the priority watersheds in which Ecology will focus its non-grant implementation efforts (e.g., TMDL implementation, other nonpoint source control implementation) and will include a description of priority actions to be conducted in each priority watershed. Ecology will include this information with the grant proposal on years which Ecology applies for the grant. For years that Ecology does not submit a grant proposal Ecology will provide this information in a memo by July 1.

[62] CWA §319(h)(8) and EPA's Nonpoint Source Program and Grants Guidelines for States and Territories issued April 12, 2013
[63] Settlement Case 2:16-cv-01866-JCC, Document 175, filed 01/08/21

2F. Ecology will enter the data for all 319 projects, including load reduction estimates, as applicable, into the Grants Reporting and Tracking System (GRTS). Reports are due semi-annually in the fall and spring of each year, according to deadlines specified by EPA. Mandatory yearly load reduction data is due February 15 each year. Ecology will enter all other data for funded projects no later than March 31 each year.

2G. Ecology will continue to work with EPA to develop success stories. Ecology and EPA will meet at least once per year to discuss potential success stories and identify if past success stories need to be modified. The stories will show progress toward, or achievement of, water quality standards under EPA PAM WQ-10 guidance, as a result of nonpoint source (NPS) implementation measures. EPA will assist Ecology with entering success stories into GRTS.

2H. Ecology will coordinate with EPA on the implementation of the Washington State Nonpoint Plan. This work is funded by a combination of grants from EPA including Section 319 and NEP. Key focus areas include:

- Work on the voluntary Clean Water Guidance for Agriculture (guidance on BMPs).
- Support for the nonpoint compliance work of inspectors and other regional staff (complaint response, priority watershed clean-up projects and enforcement actions).
- Refinement of internal guidance on how we conduct nonpoint compliance work to improve consistency between regions.

2I. EPA will actively support Ecology as it implements its nonpoint strategy. EPA will make sure their strategies in other areas such as the NEP program do not conflict with the nonpoint efforts and the Washington State's Nonpoint Plan to the extent practicable.

2J. EPA will continue to track the progress and decisions of the Forest Practices Board committees and workgroups, particularly the Timber, Fish and Wildlife Policy Committee and the Cooperative Monitoring, Evaluation and Research Committee. Ecology and EPA will continue to work with Washington State Department of Natural Resources and other agencies to ensure forest practices rules are implemented to comply with the Habitat Conservation Plan, state water quality standards, and the Clean Water Act.

EPA will provide assistance where feasible to assist Ecology and the Adaptive Management Program to achieve this objective.

3. Point Source Pollution Control

Ecology
Jeff Killelea
360-407-6435
jeff.killelea@ecy.wa.gov

EPA
Susan Poulsom
206-553-6258
poulsom.susan@epa.gov

EPA
Jeff Kenknight (Compliance)
206-553-6641
kenknight.jeff@epa.gov

Objectives

- All discharge permits are current, protect water quality, human health, and aquatic habitat; and include water conservation and pollution prevention measures.
- All discharges comply with permits, water quality standards, best management practices, and other requirements to protect Washington's waters.
- All discharge permits implement applicable Waste Load Allocations from EPA-approved Total Maximum Daily Loads.
- Water quality laws are firmly and fairly enforced to ensure compliance.
- Requirements and procedures are clear and predictable.
- The National Pollutant Discharge Elimination System (NPDES) program is implemented effectively and in accordance with the current Memorandum of Agreement and Compliance Assurance Agreement.

Activities and Measures: Pretreatment

Ecology
Dave Knight
360-407-6277
dave.knight@ecy.wa.gov

EPA
Michael Le
206-553-1099
Le.Michael@epa.gov

3A. Ecology will conduct an audit of each delegated pretreatment program at least every five years and a pretreatment compliance inspection (PCI) or audit of each pretreatment Publicly Owned Treatment Works (POTW) at least every two years. If Ecology is unable to complete the required audits and inspections, then Ecology must provide a plan to EPA

addressing issues preventing completion of the requirements. The plan will outline proactive steps and a schedule Ecology will follow to meet audit and inspection targets. Ecology must submit the plan by the end of each federal fiscal year for which Ecology has not fully met the requirements by October 31 with the report described in sections 3C and 3D.

3B. Ecology will forward copies of pretreatment compliance inspection and pretreatment audit reports (EPA Form 3560-3) for Pretreatment POTW as soon as they are completed to:

Michael Le
Regional Pretreatment Coordinator
EPA Region 10, NPDES Permits Section (Suite 155)
1200 Sixth Avenue
Seattle, WA 98101

Alternatively, Ecology may e-mail a link to where the document has been added to PARIS, or email a scanned copy of each report to Le.Michael@epa.gov.

3C. Ecology will evaluate compliance status of all approved programs for non-compliance and report the facility names and permit numbers of POTWs with approved pretreatment programs in non-compliance to the Region 10 Pretreatment Coordinator by October 31 each year. The report will cover the previous federal fiscal year.

3D. Ecology will report the facility names and permit numbers of Significant Industrial Users (SIUs) discharging to NPDES POTWs without approved pretreatment programs and Categorical Industrial Users discharging to non—NPDES POTWs; and will identify the SIUs of that universe that have been determined to be in significant noncompliance to the Region 10 Pretreatment Coordinator by October 31 each year. The report will cover the previous federal fiscal year (October 1 – September 30).

3E. Ecology will enter all data required under activities 3A – 3D in to Ecology's Permit and Reporting Information System (PARIS). Ecology will continue to work to standardize documentation into PARIS with available data fields and provide EPA with a customized PARIS report that compiles available pretreatment related fields from the PARIS database. In addition, Ecology will work with EPA to update electronic reporting with the intent to streamline necessary reporting and comply with the NPDES electronic reporting rule.[64] . Ecology will promptly correct any reporting errors brought to their attention. Both parties recognize activities 3A – 3E relate to the State's implementation of federal pretreatment program requirements, and information reported under activities 3A, 3B, and 3C does not include non-NPDES POTW pretreatment programs authorized only by state law and rules.

[64] 40 CFR part 127

Activities and Measures: Compliance and Enforcement

Ecology
Rob Buchert
509-329-3536
Rob.Buchert@ecy.wa.gov

EPA
Brian Levo
206-553-1816
Levo.Brian@epa.gov

3F. On an as needed basis, EPA and Ecology managers will communicate to provide updates and discuss inspection and enforcement targeting. As needed, additional topics will include:

- Priorities and goals.
- Performance expectations.
- Enforcement program improvements.
- Roles and responsibilities.
- Work sharing.
- Avoiding duplication of efforts.

3G. Ecology will continue its inspection program of major and minor facilities. Ecology will implement the Clean Water Compliance Monitoring Strategy (CMS) to ensure adequate coverage of regulated entities. The CWA CMS is part of an ongoing compliance monitoring strategy developed by EPA to allow for more flexible use of resources for states performing inspections. Ecology will use the Region 10 National Pollutant Discharge Elimination System (NPDES) Compliance Monitoring spreadsheet for its annual CMS plan/report to be submitted to EPA by December 31 of each year for the previous state fiscal year. This CMS submittal is both a planning document for activities planned for the upcoming year and a reporting document to report on what occurred the previous state fiscal year. Ecology will ensure that each inspection report has a Quality Assurance review. This review could be done by a peer or a supervisor.

3H. Ecology will continue to work with EPA to ensure the upload of data from PARIS to the Integrated Compliance Information System (ICIS)-NPDES. Any errors that occur are to be resolved in a timely manner.

3I. Ecology will continue to participate in the State Review Framework (SRF). The next SRF process is likely to occur in 2021.

3J. Significant noncompliance (SNC) reduction is a nationwide effort. EPA wishes to have the percentage of facilities in SNC drop dramatically. To that end, EPA and Ecology will continue ongoing work to ensure a decrease in the percentage of facilities in SNC in Washington. This will include working on the PARIS/ICIS uploads to make sure the correct data for noncompliance is transferrable and reportable.

3K. Ecology will participate in regular meetings with EPA to discuss progress on reducing actual SNC at NPDES permitted facilities.

3L. Ecology will regularly evaluate compliance at permitted facilities and adequately respond to violations based upon the principles contained in the agency and program Compliance Assurance Manual.

3M. EPA will choose someone to be an ex officio member of the Water Quality Program's Enforcement Workgroup, which meets quarterly.

3N. Ecology will support and engage our communities, customers, and employees on Environmental Justice issues. Ecology will integrate Title VI (Civil Rights Act) and Americans with Disabilities Act and will support environmental justice priorities in compliance and enforcement decisions.

Activities and Measures: National Pollution Discharge Elimination System Permits

Ecology
Jeff Killelea
360-407-6435
jeff.killelea@ecy.wa.gov

EPA
Susan Poulsom
206-553-6258
poulsom.susan@epa.gov

3O. Ecology will share its NPDES permitting plan with EPA by June 30 of each year, for the upcoming state fiscal year. The plan will list the permits Ecology intends to issue, reissue, or modify.

3P. EPA will share its NPDES permitting plan with Ecology by October 1 of each year, for the upcoming federal fiscal year. The plan will list the permits EPA intends to issue, reissue, or modify.

3Q. EPA will attempt to review at least one Ecology permit per month, on average, subject to availability and EPA's draft permit review selection process.

- EPA reviews permits programmatically for consistency with state and federal rules and policies.
- EPA reviews major permits, with emphasis on larger facilities and dischargers with potential to significantly impact the environment.
- EPA also reviews permits as requested by Ecology.

When possible, EPA's review rotates among Ecology's regions. EPA's review will ensure that NPDES permits issued by Ecology comport with the CWA and federal rules.

3R. Ecology will improve permit and fact sheet shells and other tools through its Permit Writer's Workgroup. Ecology will continue to invite EPA to participate as a guest on the

Permit Writer's Workgroup so it has the opportunity to comment on Ecology's proposed changes to the permitting process.

3S. Ecology will participate in EPA's Permit Quality Review (PQR) of Ecology's NPDES Program. Ecology will report to EPA the status and completion of PQR action items semi-annually by March 30 and September 30 each year until actions items are complete.

3T. Ecology and EPA will review and implement procedures for designating major NPDES facilities including both industrial and domestic wastewater facilities.

3U. Permitting representatives from both EPA and Ecology will meet monthly to discuss substantive permit issues and coordinate permit issuance efforts.

3V. EPA and Ecology will meet on an annual basis to review the prior year's permitting activities and discuss anticipated actions in the coming year, consistent with EPA's National Permitting Oversight Policy (NPOP).

- This meeting will be separate from the water quality managers' meeting to discuss overall progress under the PPA (see item 1C).
- Using the NPOP framework (i.e. focus areas of Permit Quality, Permit Timeliness, and Program Integrity, participants will discuss:
    - NPDES goals, priorities, performance expectations, areas for program improvements as identified during program reviews.
    - Inspection and enforcement targets.
    - Roles and responsibilities.
    - Work sharing.
    - Avoiding duplicating efforts.

The annual review will take place by October 31. EPA's NPDES Permitting Section and Ecology's Program Development Section will coordinate the review. The meeting may include participants from other EPA and/or Ecology programs as needed to facilitate cross-program coordination and communication. Additional meetings may be needed to follow up on specific priorities, activities, and/or issues. Priorities, action items, and performance measures identified through this planning process may be reflected in future PPAs as appropriate.

3W. Ecology and EPA will coordinate their work for the timely review and processing of requests for state CWA 401 certification for NPDES permit under EPA's authority. These permits shall be provided during the annual meeting described in activity 3V.

4. Water Cleanup Plans, Standards, Assessments

Ecology
Melissa Gildersleeve
360-407-6461
mgil461@ecy.wa.gov

EPA - Water Cleanup Plans (TMDLs)
David White

206-553-0060
white.david@epa.gov

EPA - Water Quality Standards and Assessment
Hanh Shaw
206-553-0171
shaw.hanh@epa.gov

Objectives

- Water cleanup plans also known as Total Maximum Daily Loads are scheduled, completed, implemented, and their success is evaluated.
- Ecology will move to straight to implementation (STI) or other types of alternative restoration approaches (in advance of developing a TMDL) in the appropriate watersheds.
- Develop, maintain, and implement surface water quality standards that protect beneficial uses.
- Comprehensively assess water bodies in Washington to assign categories according to water quality, to meet CWA requirements in sections 303(d) and 305(b).

Activities and Measures: Total Maximum Daily Loads

Ecology - Water Cleanup Plans (TMDLs)
Ben Rau
360-407-6551
benr461@ecy.wa.gov

EPA - Water Cleanup Plans (TMDLs)
Jill Nogi
206-553-1841
nogi.jill@epa.gov

4A. Ecology will report and track Total Maximum Daily Loads (TMDLs) completed as well as STI and Alternative Restoration Plans that are developed to result in clean water. Ecology will prioritize and work on those TMDLs and alternative restoration approaches/STIs that Ecology has identified for EPA's measure WQ-27. These include:

- Central Regional Office:
  - Wide Hollow Creek Multiparameter TMDL
  - Moxee Drain Temperature TMDL Alternative (STI)
- Eastern Regional Office:
  - Hangman Creek dissolved oxygen (DO) and pH TMDL Alternative
  - Alkali Flat Creek TMDL Alternative (STI)
  - Spring Flat Creek TMDL Alternative (STI)
  - Almota and Little Almota Creek TMDL Alternative (STI)

- Northwest Regional Office:
  - Sammamish River Temperature/DO TMDL Alternative
  - Soos Creek Temperature, DO, Aquatic Habitat TMDL
  - French Creek Temperature and DO TMDL Alternative
  - South Skagit Bay Watershed Protection Project
- Bellingham Field Office:
  - Drayton Harbor Tributaries Bacteria TMDL
  - Whatcom Creek Bacteria TMDL
- Southwest Regional Office:
  - Lower White River pH TMDL
  - Burnt Bridge Creek Watershed Multiparameter TMDL Alternative
  - East Fork Lewis River Watershed Multiparameter TMDL Alternative
  - Budd Inlet DO TMDL
- Headquarters: The Puget Sound Nutrient Source Reduction Project.

Ecology will report standardized status updates on our WQ-27 priority projects quarterly to EPA (projects listed above). The status updates Ecology provides will be consistent with tracking key milestones in our water quality improvement projects within each region.

4B. Ecology will lead data entry of TMDL, STI, and Alternative Restoration Plan information (Action data) into EPA ATTAINS database and use that information to populate our internal TMDL tracking database. EPA will provide assistance with data entry, where requested.

4C. Ecology and EPA will meet once in July or August after Ecology's Environmental Assessment Program has finalized their annual resource planning to conduct workload planning and evaluation for the development and implementation of TMDLs. Ecology will provide EPA with information about the TMDLs Ecology anticipates will be completed for the upcoming year.

EPA will provide Ecology with information on EPA lead for TMDLs and TMDLs for federal facilities and tribal lands for the purposes of ongoing coordination. At this meeting, EPA will also provide Ecology with updates on key interpretations that change how EPA has been reviewing and commenting on TMDLs. The goal is to keep Ecology abreast of changes at EPA in the TMDL program and how TMDL submittals should be reviewed. EPA and Ecology will coordinate on any TMDLs that EPA proposes to develop before EPA begins work.

4D. Ecology will update the TMDL workload assessment. The workload assessment will identify and prioritize future TMDL, STI, and Alternative Restoration Plan work.

4E. Where Washington is engaged in a TMDL that crosses jurisdictions; EPA will provide leadership to bring any issues that arise to resolution. EPA will report to Ecology on TMDLs from Idaho or Oregon that may impact Washington waters and work to help ensure those states' TMDLs are written to meet Washington's downstream standards.

4F. Ecology will continue to monitor the progress of the Spokane River Regional Toxics Task Force (Task Force) as it implements the 2016 Comprehensive Plan to Reduce Polychlorinated Biphenyls (PCBs) in the Spokane River (Comprehensive Plan), by providing

recommendations and periodic status reports. Ecology has been a signatory to the Task Force since 2012, serving as a resource by providing professional, technical, and financial support. Ecology will continue in this role, which strategically addresses toxics issues and maximizes Ecology's ability to achieve water quality standards in the Spokane River. The comprehensive plan describes 28 categories of control actions grouped into five implementation categories. When implemented, these actions will prevent, control, remove, or reduce toxic pollution.

Ecology will continue to support the Task Force as it implements the control actions identified in Categories A through D of the Comprehensive Plan. Ecology will also continue the preparation of periodic Measurable Progress evaluations to assess the success of the Task Force towards reducing PCBs in the Spokane River and towards achieving the applicable water quality criteria for PCBs.

4G. As a complementary effort to implementing the Lower Duwamish Waterway Source Control Strategy, Ecology and EPA will continue to develop modeling tools to support a Pollutant Loading Assessment of toxics in the Green-Duwamish watershed, including the Lower Duwamish Waterway.

4H. Ecology will continue to move the Puget Sound Nutrient Source Reduction Project forward with the Salish Sea modeling to evaluate scenarios designed to meet standards, and our stakeholder and tribal engagement through the Nutrient Forum. Ecology will also start work on developing a watershed modeling strategy and outlining associated model development needs.

EPA will continue to provide expertise/evaluation of Puget Sound modeling work and to the extent possible prioritize funding to support the modeling needs of the project (SSM and watershed work). EPA will make sure their strategies in other areas such as the National Estuary Program (NEP) supports and is coordinated with the Puget Sound Nutrient Source Reduction Project.

4I. EPA will be re-issuing the Columbia and Lower Snake River Temperature TMDL. Ecology will work with EPA as the implementation plan is developed for the Columbia/Lower Snake River Temperature TMDL. EPA will coordinate with the states of Oregon and Washington as implementation actions are identified. EPA will support Ecology in conversations and collaborations with the federal dam agencies.

Activities and Measures: Water Quality Standards

Ecology
Chad Brown
360-407-6128
chad.brown@ecy.wa.gov

EPA - Water Quality Standards
Lindsay Guzzo
206-553-0268
guzzo.lindsay@epa.gov

4J. Ecology will finalize the water quality standards guidance manual. The manual is intended to instruct agency staff working on CWA programs by providing, a documentation of the proper application of the Water Quality Standards within these programs including documentation of institutional knowledge, impact of legal decisions, and interpretation of commonly applied water quality standards language.

4K. Ecology will initiate a review of all applicable water quality standards and conduct a public hearing in the summer 2021 timeframe, with the goal of completing the public review process by the end of calendar year 2021. Ecology will develop a responsiveness summary and work plan for addressing updates to the surface water quality standards, including providing an explanation for why revisions are not appropriate, to be submitted to EPA in the first quarter of 2022.

4L. Ecology will work with EPA to review the prioritization and rule development timeline for updates to toxic aquatic life criteria and other criteria identified in Ecology's triennial review work plan. This timeline will also include a review and assessment of updates needed to align with the revised antidegradation rules from 2015.

4M. Ecology will provide technical assistance to stakeholders during the development of use attainability analyses, variances, and other tools where a change in a standard appears appropriate. Ecology and EPA will work together throughout the development of such water quality standard revisions. EPA will provide timely review of use attainability analyses, variance submittals, and other water quality standards submittals from Ecology that require EPA action.

4N. EPA will take the lead in coordinating a process to resolve conflicts created when different standards are adopted for shared waters (tribal and state jurisdictional boundaries). EPA will coordinate with Ecology on pending agency decisions regarding tribal water quality standards in a timely manner, and will encourage the tribes collaborate with the state.

4O. Ecology will work on addressing priority nutrient problems to reduce current loadings of nitrogen and phosphorus to surface waters. Ecology will evaluate the applicability of EPA's 2020 draft ambient water quality criteria recommendations for nutrients in lakes and reservoirs for inclusion in Washington's surface water quality standards.

4P. EPA and Ecology will regularly share information and meet on an as needed basis, at least once a year, to discuss the status of ongoing and future water quality standard projects.

Activities and Measures: Water Quality Assessment

Ecology
Chad Brown
360-407-6128
chad.brown@ecy.wa.gov

EPA - Water Quality Assessment
Jill Fullagar
206-553-2582
fullagar.jill@epa.gov

4Q. Ecology will reassess data from 2006 and newer in the 2014, 2016, and 2018 Assessment, due to the listing policy revisions completed in November 2018 and the automated assessment tools developed. We expect many changes to the current list of impaired waters due to applying revised methods to previously assessed data. Ecology will include a tally and justification for Assessment Units that will be moved from the Integrated Reporting (IR) Categories 4 or 5 (impaired waters) to other Categories.

4R. After tribal and public reviews of the next 2014, 2016, and2018 Washington State Water Quality Assessment, Ecology will submit the Candidate 303(d) list and the 305(b) listings to ATTAINS by August 31, 2021 for EPA Region 10 review and action. Ecology will also update and maintain the State's Water Quality Atlas and WQ Assessment Search web tools for tribal and public review. EPA will take action on the submission via ATTAINS and will pull data directly from ATTAINS to calculate Measure WQ-35, Watershed Area Restored. The public will be able to view the final IR results in either the state database or EPA's How's My Waterway website.

4S. EPA will provide technical support as needed, including ATTAINS training and contractor support as appropriate.

4T. Ecology will continue to accept water quality monitoring data in its Environmental Information Management (EIM) database for use in the IR. Following EPA action on the 2014, 2016, and 2018 IR, Ecology will issue a public call for data to complete the combined 2020 and2022 IR. The data considered in the 2020 IR will include data available to Ecology with a field collection date in 2020 or earlier.

4U. Ecology will finalize a 303(d) assessment method to determine where fine sediments are impairing salmon spawning habitat once the criteria are developed based on Ecology's proposed salmon spawning habitat rule for fine sediments.

5. Stormwater (including combined sewer overflow and sanitary sewer overflows)

Ecology
Rachel McCrea (Combined Sewer Overflow (CSO) and Sanitary Sewer Overflow (SSO))
425-649-7033
rmcc461@ecy.wa.gov

Jeff Killelea (Stormwater)
360-407-6435
jeff.killelea@ecy.wa.gov

EPA - Compliance/Enforcement
Stacey Kim (Stormwater)
206-553-1380
kim.stacey@epa.gov

EPA – Permits
Misha Vakoc (Stormwater)
206 -553-6650
Vakoc.Misha@epa.gov

Objectives

- Provide best available science, information, and tools to local governments and industry to manage stormwater.
- Expedite stormwater project review and delivery.
- Provide a compliance pathway for businesses, industries, local governments and others to federal stormwater permit requirements.
- Implement a municipal stormwater permitting program for Phase I and Phase II that is consistent with federal permitting requirements and protects water quality and is consistent with other environmental programs such as Superfund and National Estuary Program Management Plans.
- All discharge permits implement applicable Waste Load Allocations from EPA- approved TMDLs

Activities and Measures

5A. Ecology will continue to manage the Phase I and Phase II stormwater permit program. This includes construction, industrial and municipal stormwater permits.

5B. Ecology will continue to implement Ecology's combined sewer overflow (CSO) reduction rule (Chapter 173-245 WAC)[65] in all NPDES permits issued to facilities that operate a combined sewer system (CSS). Per Ecology's rule, such permittees have approved CSO

[65] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-245

Reduction Plans in place. NPDES permits for CSS facilities include requirements for the submission of Annual CSO Reports and a CSO Reduction Plan Amendment at the end of each permit cycle.

Permits may also include a compliance schedule for the implementation of projects during the permit cycle. To comply with EPA's 1994 CSO Control Policy, Ecology will incorporate into NPDES permits the requirements to implement the Nine Minimum Controls (NMC), and Long Term Control Plan (LTCP) elements including:

- Public participation in the planning process.
- No feasible alternatives analysis for permits with authorized bypass language where appropriate.
- Post construction compliance monitoring as appropriate.

EPA will recognize the similarities, differences and seniority of Ecology's CSO reduction rule (filed 1/27/87) as compared to EPA's 1994 CSO Control Policy (codified in the Wet Weather Water Quality Act of 2000). EPA and Ecology will work together to resolve differences so permittees can securely implement CSO reduction projects to reach the level of control. EPA will perform some inspections of the CSO facilities in Washington.

5C. Ecology's Municipal Separate Storm Sewer (MS4) permit managers will continue to implement an audit/ inspection program plan for targeted MS4 facilities. Inspections will occur on a schedule per the Compliance Monitoring Schedule Ecology develops in Section 3G.

5D. Ecology will implement the industrial stormwater general permit by providing technical assistance and enforcement.

5E. EPA will work with Ecology to target industrial stormwater and/or construction stormwater facilities where EPA compliance monitoring and enforcement would address potential violations. EPA and Ecology will ensure that facilities identified for EPA involvement are agreed upon by both agencies.

6. Groundwater and Underground Injection Control

Ecology – Groundwater
Chad Brown
360-407-6128
chbr461@ecy.wa.gov

Ecology – Underground Injection Control
Mary Shaleen-Hansen
360-407-6143
maha461@ecy.wa.gov

EPA – Surface Water, Groundwater
Michelle Tucker
206- 553-1414
tucker.michelle@epa.gov

EPA – Underground Injection Control
Evan Osborne
266-553-1747
osborne.evan@epa.gov

Objectives

- Protect groundwater quality, beneficial uses and safe drinking water by ensuring that groundwater quality standards are met. All groundwater in Washington State is classified and protected as a potential source of drinking water.
- Provide groundwater quality technical assistance to the public; local, state and federal government; as well as permitted facility operators and permit applicants.

Activities and Measures: Groundwater – Base

Ecology has a comprehensive groundwater protection program and strategy whose goal is to protect Washington groundwater quality, beneficial uses, and safe drinking water by ensuring that the groundwater standards are met. This Program relies on:

- Designating all waters as a drinking water beneficial use.
- Developing protective groundwater standards.
- Developing source control programs.
- Implementing source control programs.
- Implementing groundwater protection through the State Waste Discharge program.
- Implementing the federal UIC Program.
- Providing technical assistance and enforcement where needed.

This program consists of many staff spread across the program at headquarters and in the regions to develop and implement the program, including the following activities and measures.

6A. Ecology will develop and implement source control protection programs for land uses which generate pollution but are not addressed through a permit program. The land uses are Forestry, Agriculture, and unregulated stormwater. Ecology reports on these activities in the nonpoint portion of this Agreement.

6B. Ecology will implement groundwater protection efforts on an Ecology region basis through the Washington State Waste Discharge program designed to protect groundwater and provide help for other groundwater discharge projects. This includes issuing groundwater permits and managing those permits.

6C. Ecology will protect safe drinking water through continued work with the Washington Department of Health (DOH), including incorporating the results of source water assessments of drinking water systems into education, technical assistance and enforcement efforts as resources allow.

6D. Ecology will provide technical and educational services to local jurisdictions as they implement actions for protections of groundwater necessary to comply with the growth management act.

6E. Ecology and EPA will coordinate on EPA-funded projects that have the potential to impact state groundwater resources.

6F. Ecology will work with DOH and the United States Geological Survey (USGS) to update nitrate data displayed within Ecology's nitrate prioritization storymap at least once within period of this Agreement.

Activities and Measures: Underground Injection Control

6G. Ecology will:

- Protect drinking water and groundwater quality by implementing the Underground Injection Control (UIC) program and associated UIC Rule (WAC 173-218).[66]
- Implement the UIC rule program by completing outreach activities to better educate the public and private well owners on the rule program, such as developing guidance on UIC well protective measures, and offering training as needed.
- Provide technical assistance to owners of private and publicly owned UIC wells.
- Submit reports to EPA in a timely manner, and continue to work with EPA to ensure the appropriate information is provided in a format that meets each agency's needs.
- Ecology will submit inventory, inspection, and closure information to EPA electronically. (Web-based reporting application, if available).
- If requested, Ecology will conduct joint UIC inspections with EPA. If UIC wells are found to be out of compliance, Ecology and/or EPA will take appropriate actions to correct the situation.

6H. Ecology's UIC program will continue to work closely with Ecology's stormwater program to update language in the stormwater manuals that shows how the stormwater program and

[66] https://apps.leg.wa.gov/wac/default.aspx?cite=173-218

the UIC program work closely together to protect groundwater. Ecology will provide updated outreach material to highlight how these programs work together and provide technical support to the water utility districts on the joint implementation of these programs.

7. Sediments

Ecology
Leonard Machut
360- 407-6923
leonard.machut@ecy.wa.gov

EPA
Erika Hoffman
360-753-9540
hoffman.erika@epa.gov

Objectives

- Cleanup and restore existing contaminated sediments and prevent future sediment contamination.

Activities and Measures

7A. Ecology will provide biannual reports online and maintain the Ecology databases to identify the status of identified sediment cleanup sites within Washington State.

7B. Sediment Cleanup User's Manual (SCUM), Ecology's main guidance for state sediment management standards, is a living document that Ecology will update as needed.

7C. Ecology sediment staff will provide ongoing support to water quality staff for the development of the next 303(d) Impaired Water Bodies list as related to sediment quality. This includes implementing the new policy and procedures for sediment impacted waterbodies.

7D. Ecology will continue to participate with the Bellingham Bay Pilot partners in implementing planned Bellingham Bay cleanup and restoration plan actions.

7E. Ecology will continue to implement the Lower Duwamish Waterway source control strategy.

8. Financial Assistance

Ecology - Financial Assistance
Jeff Nejedly
360-407- 6572
jeff.nejedly@ecy.wa.gov

Ecology- State Revolving Fund
Shelly McMurry
360-407-7132
shelly.mccmurry@ecy.wa.gov

EPA – State Revolving Fund
David Carcia
206-553-0890
carcia.david@epa.gov

Objectives

- Provide low-interest loans to public bodies for high priority water quality projects that improve and protect the water quality of Washington State.
- Protect the public health and the environment by funding sustainable improvements to existing wastewater infrastructure and construction of new efficient wastewater infrastructure.
- Provide loan subsidy to address water quality infrastructure projects needs in small, financially challenged communities.
- Provide funding for priority nonpoint source projects and for implementation of Washington's comprehensive estuary management plans.

Activities and Measures: Clean Water State Revolving Fund Loan Program

8A. Ecology will manage the Washington State Water Pollution Control Revolving Fund (SRF) program per Chapter 173-98 WAC, Uses and Limitations of the Washington State Water Pollution Control Revolving Fund.[67] Ecology will monitor and evaluate key management and policy aspects of the SRF program, including:

- Interest rate structure.
- Adequate program management and administration.
- Water quality outcomes.
- Benefits reporting.
- Perpetuity.

[67] https://apps.leg.wa.gov/wac/default.aspx?cite=173-98

Provided that timely Clean Water State Revolving Fund (CWSRF) Loan federal funding and timely state match funds are made available to the State of Washington SRF program, Ecology will:

- Apply for the CWSRF Capitalization Grant and include a final Intended Use Plan (IUP) no later than May 31 of any given federal fiscal year.
- Submit the SRF data through the National Information Management System (NIMS).
- Submit SRF Annual Reports to EPA by September 30 of each calendar year.
- Report project information and environmental outcomes for each SRF funded project through EPA's CWSRF Benefits Reporting System (CBR).
- Conduct informal Endangered Species Act consultations for SRF financed treatment works projects as EPA's non-federal representative, in accordance with the 2019 Operating Agreement.

9. Columbia River Basin

Ecology
Sage Park
Regional Director - Central Regional Office
509-457-7120
sage.park@ecy.wa.gov

EPA
Mary Lou Soscia
Columbia River Coordinator
503-326-5873
soscia.marylou@epa.gov

Objectives

- EPA will continue to coordinate with Ecology on the Columbia River Basin Restoration Program.
- Ecology will work with EPA to support the Columbia River Basin Restoration Program including the Working Group and the implementation of the Columbia River Basin Restoration Program grant program.

Activities and measures

9A. Ecology will participate in the Columbia River Basin Restoration Program Working Group and support EPA collaboration efforts for the Working Group.

9B. Ecology will support CWA Section 123 grants in Washington State, including:

- Monitoring
- Pesticide stewardship partnership
- Green infrastructure
- Pollution prevention
- Outreach

9C. Ecology will continue to support the Confederated Tribes and Bands of the Yakama Nation's efforts to establish the Columbia River Fish Tissue and Water Quality Monitoring Framework. This will establish a monitoring program for toxic contaminants in the Columbia River main stem from Bonneville Dam to the Canadian Border. Funding is from an EPA CWA Section 123 grant and also has support from the USGS.

Appendix A – Response to Public Comments

Comment from Dan Thompson:

Ecology and EPA are pursuing a nutrient reduction strategy in Puget Sound. Since the determination has been made that Puget Sound is impaired by excessive nutrients why hasn't Puget Sound been added to the 303d list? Why are Ecology and EPA implementing a TMDL alternative rather than a TMDL?

Ecology Response:

Many portions of the Puget Sound are identified as not meeting water quality standards and are on the 303(d) list. Ecology decided to try and address the dissolved oxygen 303(d) listings through an alternative TMDL effort because we thought that would provide more opportunities for solutions versus the traditional TMDL route.

Comment from Friends of Toppenish Creek:

The full comment letter and attachments from Friends of Toppenish Creek is contained in Appendix B of this document. References to specific comments found in Appendix B are in italics below.

Ecology Response:

The Environmental Performance Partnership Agreement is a joint two-year work plan for administering federal grant dollars that the Environmental Protection Agency (EPA) provides to Ecology for air quality, water quality, and hazardous waste management. The purpose of the agreement is to identify mutual goals, strategies, activities, and performance measures for the upcoming state biennium.

Multiple comments in the letter from Friends of Toppenish Creek are outside the scope of the 2021-2023 Environmental Performance Partnership Agreement. Ecology's responses to in-scope comments follow.

Comment #1 from Friends of Toppenish Creek:

2. Chapter 4. – Environmental Justice: A. Ecology EJ: d:

Ecology Response:

Ecology encourages Friends of Toppenish Creek to continue to work with Yakima Regional Clean Air Agency (YRCAA) regarding specific air quality complaints. YRCAA has the authority to investigate and take action on air quality concerns in Yakima County.

Comment #2 from Friends of Toppenish Creek:

2. Chapter 4. Environmental Justice, B. Moving Children's Health:

Ecology Response:

Ecology agrees with the importance of recognizing and addressing the unique vulnerability of children to environmental and health risks. For this reason, the children's health section was moved to "Chapter 6 – Mutual Priorities for EPA and Ecology" to elevate and broaden accountability to addressing potential impacts or harm to this population. This move establishes children's health as a mutual priority, broadening inclusion of all members of this sensitive population, regardless of race or income (as environmental justice is defined in federal Executive Order 12898). The health of children in communities of color and low-income populations will remain a vital part of environmental justice review and assessment. Chapter 4 on Environmental Justice is not a comprehensive list of the environmental justice activities each agency is engaged in, and only covers activities that are under the administrative lead of each agency's environmental justice coordinator. EPA's and Ecology's primary initiatives on children's health are implemented by the environmental programs within each agency and are not within the purview of the environmental justice coordinators.

Comment #3 from Friends of Toppenish Creek:

3. Chapter 7 – Enhancing Public Health by Improving Air Quality:

Ecology Response:

Yakima Regional Clean Air Agency (YRCAA) is an independent air authority and has been operational since July 1967. YRCAA is delegated to enforce certain federal regulations, the Washington Clean Air Act, state regulations and YRCAA regulations, within the boundaries of Yakima County. Ecology encourages the Friends of Toppenish Creek to continue to work with YRCAA enhancing public health by improving air quality in YRCAA's jurisdiction. Ecology is committed to working collaboratively with YRCAA by sharing resources for better air quality in Yakima County and environmental justice.

Comment #4 from Friends of Toppenish Creek:

4. Chapter 9 – Water Quality Program: A. Non-Point Sources:

Ecology Response:

The case referenced is Northwest Environmental Advocates vs. U.S. Department of Commerce, the National Oceanic and Atmospheric Administration and the U.S. Environmental Protection Agency. U.S. District Court West Case No. 2:16-cv-01866-JCC.

Comment #5 from Friends of Toppenish Creek:

4. Chapter 9 – Water Quality Program: B. Point Sources:

Ecology Response:

Ecology is committed to having concentrated animal feeding operation (CAFO) permits that are protective of water quality and that provide certainty for CAFO operators. Ecology developed the current CAFO general permits with significant input from water and soil scientists, agronomists, CAFO operators, environmental groups, and the public. Our permits protect both people and the environment while providing a reasonable regulatory framework for the CAFO industry that can provide them some protection from third party lawsuits.

As with all permits, the CAFO permit will be renewed every five years. Our stakeholders and the public will have an opportunity to comment and suggest changes to the permits. We will continue to listen and incorporate the feedback we receive into the permit program.

Comment #6 from Friends of Toppenish Creek:

4. Chapter 9 – Water Quality Program: C. NPDES Permitting:

Ecology Response:

Ecology announced the beginning of the CAFO permit renewal process through our email listservs, website, public meetings, and Agriculture and Water Quality Advisory Committee. Ecology facilitated listening sessions and provided the permit writer's contact information for further conversation.

Ecology will publish the draft CAFO general permits in July 2022 and open a 45-day comment period to receive feedback on the proposed revisions. In conjunction with the comment period, we will publicize the draft documents widely, hold workshops, publish detailed explanations of the revisions, and post on our blog. Ecology will work with media outlets, public agencies, and local organizations to reach interested parties.

Appendix B – Friends of Toppenish-Creek Comment Letter

Friends of Toppenish Creek

Please see our attached comments

May 14, 2021

Dear WA State Dept. of Ecology and U.S. Environmental Protection Agency:

Please accept these comments from the Friends of Toppenish Creek (FOTC) regarding the proposed 2021 – 2023 Environmental Performance Partnership Agreement (Agreement) between the WA State Dept. of Ecology (Ecology) and the U.S. Environmental Protection Agency (EPA).

Friends of Toppenish Creek is a 501 C (3) non-profit group in the Lower Yakima Valley:

Friends of Toppenish Creek is dedicated to protecting the rights of rural communities and improving oversight of industrial agriculture. FOTC operates under the simple principle that all people deserve clean air, clean water and protection from abuse that results when profit is favored over people. FOTC works through public education, citizen investigations, research, legislation, special events, and direct action.

FOTC believes that Ecology has failed to protect the air, water, and soil in the Lower Yakima Valley (LYV), in large part because the agency is cowed by the dairy industry. We will explain in this letter.

The Cow Palace Dairy and the WA Dairy Federation are currently suing the EPA in an effort to undo the EPA's work on a cluster of dairies in the LYV. EPA research found that 61% of domestic wells one mile downgradient from the dairies had nitrate levels above the safe drinking water standard. EPA monitoring wells at the site had some of the highest nitrate readings in the nation. This is beyond dispute, but the dairy industry continues to attack environmental protections, and the dairy industry enlists Ecology support.

Sincerely,

Jean Mendoza

Jean Mendoza

Executive Director, FOTC

3142 Signal Peak Road
White Swan, WA 98952

FOTC Concerns Regarding the Agreement

1. Chapter 2 - Quality Assurance:

On page 17 the agreement cites Water Quality Program Policy 1-11 Chapter 2 Ensuring Credible Data for Water Quality Management.

A. Ecology fails to do this for the LYV. In 2018-2019 a LYV Groundwater Management Area (GWMA), under Ecology's oversight, set up a system of 30 monitoring wells in alluvial fans where hydrogeology and geology vary significantly within small areas. The LYV GWMA drilled these wells without a research hypothesis, without a plan on how to use the data to prove or disprove improvement to water quality as BMPs are implemented. There is no strategy for measuring implementation of BMPs and no listing of the BMPs that will be evaluated[1].

B. The LYV GWMA contracted with the WA State Dept. of Agriculture (WSDA) to conduct a Nitrogen Availability Assessment (NAA) that lacked a QAPP and was contested by both the Yakima Farm Bureau and FOTC because the process was significantly flawed[2].

2. Chapter 4 – Environmental Justice:

A. **Ecology EJ**: Reading about Ecology subscribing to environmental justice (EJ) is like listening to a lecture on vegan diets by the cattlemen's association. It is hard to take seriously.

   a. Ecology has publicly stated, without proof, that there is no health risk when dairymen compost 950 bovine carcasses in 2,300 feet of windrows in a rural community, where 70% of the population is Latino[3]. The fact that bureaucrats with solid health care plans would make this determination from their climate controlled offices speaks volumes about Ecology's understanding of life at the poverty level.

   b. Ecology oversaw the LYV GWMA meetings in which a coalition of dairymen prevented any discussion of environmental justice. EJ was never addressed during the seven years in which the LYV GWMA Advisory Committee (GWAC) met. The LYV GWMA did not engage the 25% of the community who speak little or no English[2].

   c. Ecology is in charge of PFAS surveillance in WA State and does no monitoring in the Central Washington regions where over half of the sewage sludge is applied to cropland and the sludge is not tested for PFAS. It is disturbing that Ecology is willing to risk contamination of rich agricultural soils with a chemical that does not degrade[4].

---

1. Lower Yakima Valley Groundwater Management Area Program, Vol. I (2018) Available at https://www.yakimacounty.us/DocumentCenter/View/22177/GWMA-Volume1-July2019
2. FOTC Minority Report for the LYV GWMA (2018) Available at https://www.yakimacounty.us/2162/Minority-Report-GWMA-by-Jean-Mendoza
3. Yakima Herald Republic (2020) Composted Cows: A Success Story for Some, A Concern for Others. Available at https://www.yakimaherald.com/news/local/composted-cows-a-success-story-for-some-a-concern-for-others/article_4a007eb6-3947-574d-9f9a-1a355620fa1b.html
4. America's Dairyland May Have a PFAS Problem (2019) Natural Resources Defense Council. Available at https://www.nrdc.org/stories/americas-dairyland-may-have-pfas-problem#:~:text=Milk%20containing%20PFAS%20tends%20to,end%20up%20in%20their%20milk

d. Ecology refuses to intervene when the Yakima Regional Clean Air Agency (YRCAA) fails to investigate complaints regarding air pollution by LYV dairies. One third of all WA milk cows are housed in the LYV. Yakima County animal agriculture emits between 5,000 and 8,000 tons of ammonia per year, mostly from the LYV, and the YRCAA refuses to address the problem.
e. Ecology declined to participate in a forum on equity in the City of Yakima that was funded by the WA State legislature to inform and to gather EJ information.
f. Data is needed to prove pollution and compel sources of pollution to acquire NPDES permits or air quality permits. Ecology and the YRCAA do not conduct studies that would prove air and water pollution from LYV dairies. Ecology and YRCAA do not accept statements from the people who are impacted by pollution. Ecology and YRCAA reject the results of citizen science. The agencies say they cannot regulate these sources of pollution because there is no proof of pollution and they refuse to do the research.

B. **Moving Children's Health**: FOTC disagrees in the strongest terms with the decision to move Children's Health out of the Environmental Justice Chapter.
   a. Children are de facto a marginalized group with limited representation. Ecology commits environmental injustice by ignoring the impact of pollution on the next generation.
   b. FOTC only finds one reference to children's health in the Agreement and that reference requires coordination and networking with other agencies, a code for shifting responsibility. Keeping Children's Health under EJ acknowledges the importance of this population.
   c. Chapter 7 – Air Quality never mentions the major impact of polluted air on children's developing lungs. The impact on children is more serious than the impact on adults. This is an EJ issue. The population of the LYV is young with a high percentage of children.
   d. On behalf of the children FOTC asks you to 1. return Children's Health to Chapter 4 – Environmental Justice; 2. emphasize the importance of a safe environment for children; and 3. provide pathways so agencies, working together with citizens, can advocate for the next generation.

C. **Ecology Goals**: None of the three Ecology goals for EJ listed on page 23 of the Agreement are realized in the LYV. Those unattained goals are to provide all people:
   a. The same degree of protection from environmental and health hazards.
   b. Equal access to decision-making processes.
   c. A health environment in which to live, learn, and work.

3. Chapter 7 – Enhancing Public Health by Improving Air Quality:

The Clean Air Act in Washington is implemented in some counties, including Yakima, by Clean Air Agencies. Ecology acknowledges that Yakima County has the highest levels of

particle air pollution in Washington State[5]. The Yakima Regional Clean Air Agency (YRCAA) fails to adequately address this problem. Instead, the YRCAA pressures the state to give the agency more money, while simultaneously shielding the polluting dairy industry from any financial responsibility. This issue is so severe that FOTC will include an attachment regarding the YRCAA to our comments on the Agreement. Please read that attachment to better understand how the Clean Air Acts are subverted in Yakima County.

In brief, the YRCAA, with Ecology's tacit approval, has:

a. Rejected environmental justice.
b. Refused to address public health.
c. Received citizen complaints with disinterest or disdain.
d. Supported the dairy industry's interests and prevented citizen representation on the board of directors.
e. Ignored valid citizen science.
f. Failed to investigate citizen complaints in a timely manner, and often failed to investigate at all.

RCW 70A.15.1005 Declaration of public policies and purpose, states in paragraph 6: *It is the policy of the state that the costs of protecting the air resource and operating state and local air pollution control programs shall be shared as equitably as possible among all sources whose emissions cause air pollution.*

Ecology's 2011 County Emissions Inventory estimated ammonia emissions from animal agriculture in Yakima County at > 8,000 tons annually.

Nevertheless, the YRCAA decided in 2018 not to register LYV dairies and not to collect fees from the dairies.

4. Chapter 9 - Water Quality Program:

A. **Non-Point Sources:** To the best of our knowledge delivery of a Non-Point Source Pollution Plan has dragged on for years and there is a distinct possibility that the WA NPS Plan will not be delivered as scheduled. FOTC believes this is due in large part to Ecology's deference to large agricultural interests that hold too much sway over governance. The WA Cattle Feeders Association has acted as an equal partner with Ecology in developing a *Clean Water Guidance for Agriculture.* Industrial agriculture asserts that the industry should dictate best management practices. Industrial agriculture's opinion certainly has merit, but that group lacks expertise in environmental science and should not be allowed to veto valid BMP's. Ecology refuses to accept the role of expert on water quality and allows industry to override the agency scientists.

---

5. WA Dept. of Ecology (2021) Particle Pollution in Washington's Air. Available at https://ecology.wa.gov/Air-Climate/Air-quality/Air-quality-targets/Air-quality-standards/Particle-pollution

The first sentence on page 72, in part 2C, under Activities and Measures reads "Per the settlement, Ecology will submit a Washington State Nonpoint Plan update to EPA by the end of 2022." FOTC has been unable to find that case based on the footnote. Can you help us?

B. Point Sources: Concentrated animal feeding operations (CAFOs) are point sources of pollution. In 2017 Ecology issued two new NPDES General Permits for CAFOs in Washington State. A coalition of environmental groups challenged the permits before the WA State Pollution Control Hearings Board for the following reasons:

1. The Permits fail to require AKART for existing lagoons.
2. The permits failed to require AKART for composting areas, animal pens, and corrals.
3. Ecology failed to establish effluent limits and monitoring requirements necessary to ensure compliance with the State Water Quality Standards.
4. Ecology provided no explanation of how the permit will ensure compliance with Water Quality Standards.
5. The permits do not ensure compliance with State Water Quality Standards for Groundwater.
6. Ecology violated state and federal law by failing to require adequate monitoring.
7. The permit's Groundwater Quality Effluent Limitation is unenforceable without groundwater monitoring and violates Washington's Anti-Degradation Principle.
8. The permits fail to require monitoring to ensure compliance with effluent limits regarding surface water.
9. Ecology failed to comply with federal law by requiring the development of site-specific nutrient management plans subject to public scrutiny prior to permit issuance.
10. Ecology failed to ensure the permit accounted for the impacts of climate change.

The PCHB ruled against the petitioners in 2018. The WA State Court of Appeals heard our appeal in November 2020.

In the meantime, Ecology fails to enforce a major part of the Clean Water Act for Point Sources since < 25 of Washington's approximately 250 CAFO dairies are under permit. Thus, the objectives for water quality protection from point source pollution, listed on page 74 of the Agreement, have not been met and are unlikely to be met in the future.

The Friends of Toppenish Creek have asked Ecology to investigate discharges to surface water from an unpermitted LYV dairy that is located next to the Yakima River. Ecology has not tested the river for the presence of pollutants from the dairy, despite research proving a connection between ground and surface waters. Ecology has advised FOTC that the agency will not accept citizen research to demonstrate discharge. Thus, Ecology does not require the dairy to obtain an NPDES permit since there is no data to show a discharge.

FOTC requests EPA actions that require Ecology to issue a strong NPDES General Permit for CAFO's that protects ground and surface water in Washington State according to the requirements of the law. Perhaps, once upon a time there was a dairy that did not discharge to waters of the state. This hypothetical case is not sufficient to relieve Washington dairies of

the requirement to obtain NPDES permits. Ecology should require all Washington dairies to acquire NPDES permits, and the EPA should provide all the necessary support to make this happen.

C. **NPDES Permitting**: Ecology outreach regarding a 2022 CAFO General Permit is lacking.
   a. The permit writers did not advertise public meetings regarding permit renewal in the media. Instead, Ecology sent notices to select contacts within industry and the environmental community.
   b. Ecology did not send notices to many of the people who commented on the 2017 permit.
   c. Ecology did not inform people in Grant or Franklin Counties where there is significant pollution from large CAFOs.
   d. Ecology sent a doodle poll to potential participants and then chose a date and time when most environmental leaders were unable to attend.

5. Some Ecology administrators lack integrity:

A. **Working with Criminals**: Slightly over ten years ago Easterday Ranches, Inc. took steps to construct a 30,000 head feedlot in Franklin County. Easterday drilled a well into the Grande Ronde aquifer to water the cattle. Easterday estimated drinking water needs for 30,000 head at 450,000 to 600,000 gallons per day. Ecology helped Easterday to transfer water rights from a neighboring property that gave the operation another 316 acre feet per year for other feedlot purposes.

Neighbors sued to stop the feedlot under RCW 90.44.050, contending that such a large withdrawal of groundwater is not authorized by law, would dry up their domestic wells, and deplete the aquifer. Easterday disagreed and Ecology sided with Easterday. Ecology stood shoulder to shoulder with Easterday and trade groups in court and defended actions that deplete Washington groundwater stores.

The case progressed to the WA State Supreme Court which found in favor of Easterday. Now, thanks to Ecology's help, animal agriculture can withdraw unlimited amounts of water from declining aquifers.

Since that time, the Easterday family has engaged in political action, most notably through the WA Cattle Feeders Association. This group sits on Ecology's Agriculture and Water Advisory Committee and meets with the WA State Board of Health to advocate for changes in the law that benefit a few farmers and worsen public health.

In March 2021 Cody Easterday, President of Easterday Ranches, pled guilty to defrauding Tyson Foods of $244 million. Subsequently Easterday Ranches and Easterday Farms filed for bankruptcy. This is not new. The Easterday family has filed for bankruptcy before. Every time this happens innocent, hard working people incur losses because they are not paid for property they sold in good faith, or for services rendered.

Ecology has worked with criminals to dilute Washington's environmental laws, and at the same time Ecology provided legitimacy to a scamming operation.

B. **False Testimony:** In 2020 FOTC appealed Ecology's certification of the LYV GWMA. Then Water Quality Manager for Ecology's Central Offices, David Bowen, gave testimony in defense of a *Nitrogen Availability Assessment* commissioned by the GWMA advisory committee. FOTC now accuses Mr. Bowen of misleading the Pollution Control Hearings Board. We believe he gave false testimony when he said that sources of nitrates in groundwater are not significant when the sources have NPDES permits. See Attachment.

Thank you for evaluating the facts presented here by FOTC. We hope we have contributed towards an improved collaboration between Ecology and the EPA, that will result in a healthier environment in Washington State and the Lower Yakima Valley.

Sincerely,

Jean Mendoza

Jean Mendoza

Executive Director, FOTC

3142 Signal Peak Road
White Swan, WA 98952

Presentation to the Yakima County Commissioners

Arguments for Dissolving the Yakima Regional Clean Air Agency as Authorized by RCW 70A.15.2570

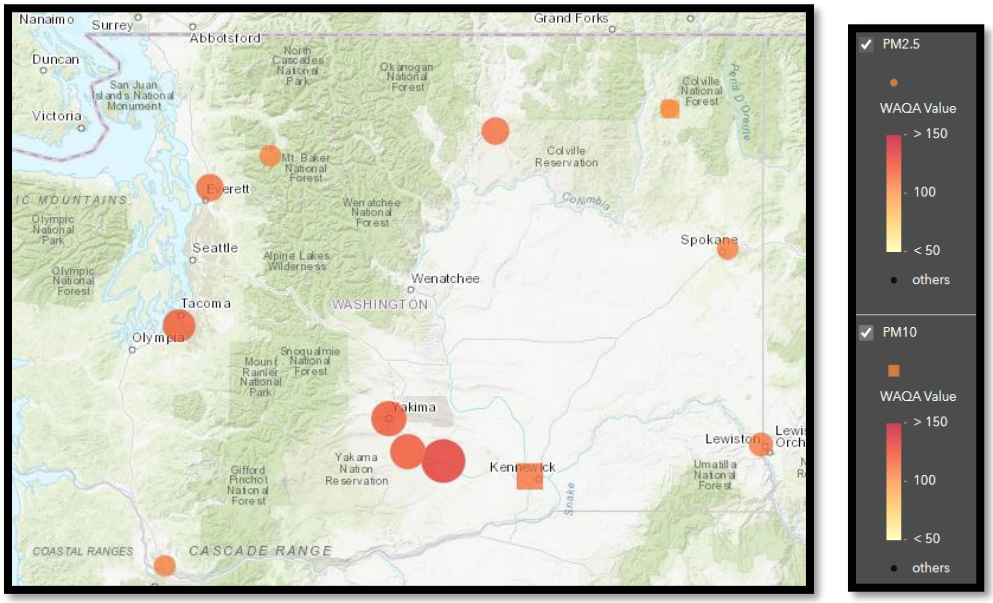
May 11 & 12, 2021

Friends of Toppenish Creek

The YRCAA should be dissolved because:

- We all care about the health and wellbeing of the people.
- The YRCAA lacks the expertise to address the most serious air pollution in WA State. Ecology has more resources.
- Yakima County is at risk for non-compliance with the Clean Air Act.

Introduction: WA Areas of Concern for Particle Air Pollution 2021



From https://ecology.wa.gov/Regulations-Permits/Plans-policies/Areas-meeting-and-not-meeting-air-standards

All States are required to compile an air emissions inventory every five years. Washington evaluates Criteria Air Pollutants and Precursors to Criteria Air Pollutants for this inventory. Ecology estimates emissions for:

- Ammonia (NH_3)
- Carbon monoxide (CO) (Criteria)
- Hazardous air pollutants
- Nitrogen oxides (NO_x) (Criteria)
- Particles (or particulate matter, PM) (Criteria)
- Sulfur dioxide (SO_2) (Criteria)
- Volatile organic compounds (VOCs)

In the Lower Yakima Valley about 31% of fine particulate matter (PM 2.5) is composed of ammonium nitrate. Ammonium nitrate is acidic when dissolved in water. Ammonium nitrate contributes to acid rain.

According to Ecology, in 2011 Yakima County livestock emitted 8,053.58 tons of ammonia into the ambient air. In 2017, using a different model, the number was 5,194 tons of ammonia = 10,388,000 lbs. = 28,460 lbs./day. Most of these emissions take place in the 500 square mile Lower Yakima Valley*.

*To put this into perspective, in 2020 the EPA fined Kenyon Zero Storage $34,000 for the accidental release of about 100 pounds of ammonia into the air from its cold storage facility in Grandview.

Why Yakima County Should Disband the YRCAA

Yakima County has public health problems related to air pollution.

The Yakima Regional Clean Air Agency has a duty to address this issue.

Much of the air pollution in Yakima County is related to emissions from concentrated animal feeding operations (CAFOs).

Those emissions include:

- Dust
- Odor
- Ammonia
- Hydrogen sulfide
- Volatile Organic Compounds (VOC's)

One third of all WA dairy cows are housed in the 500 square mile Lower Yakima Valley (LYV).

Large LYV dairies are major sources (a legal term) of air pollution.

The YRCAA does not register and regulate CAFO dairies as required by law.

The YRCAA marginalizes the citizens.

- Citizen complaints at public meetings are met with disinterest or disdain.
- Dairy industry interests are supported while there is no citizen representation on the YRCAA board.
- Site visits to investigate citizen complaints are not timely or do not happen at all.
- Valid citizen science is ignored.
- YRCAA has been successfully sued twice because of their lack of responsiveness to citizen requests.

Other counties use the WA State Department of Ecology to manage air quality issues.

Table of Contents

Public Health in Yakima County

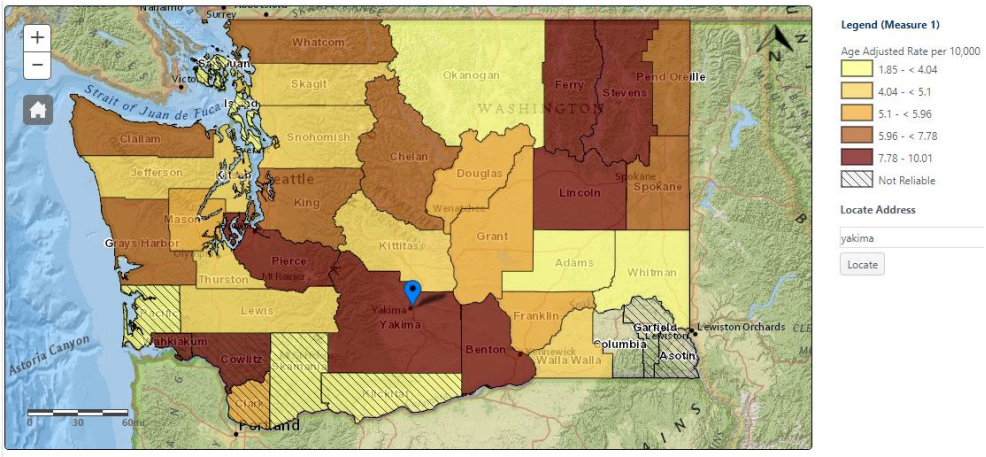
Health issues related to air pollution include:

- Premature Death
- Asthma Attacks
- Cardiovascular Disease
- Lung Cancer
- Developmental Damage
- Susceptibility to Infections
- Low Infant Birth Weight
- Wheezing, Coughing & Shortness of Breath
- Death rates from COVID 19 are higher in areas with elevated fine particulate matter.

Examples of increased disease in Yakima County, often related to air pollution:

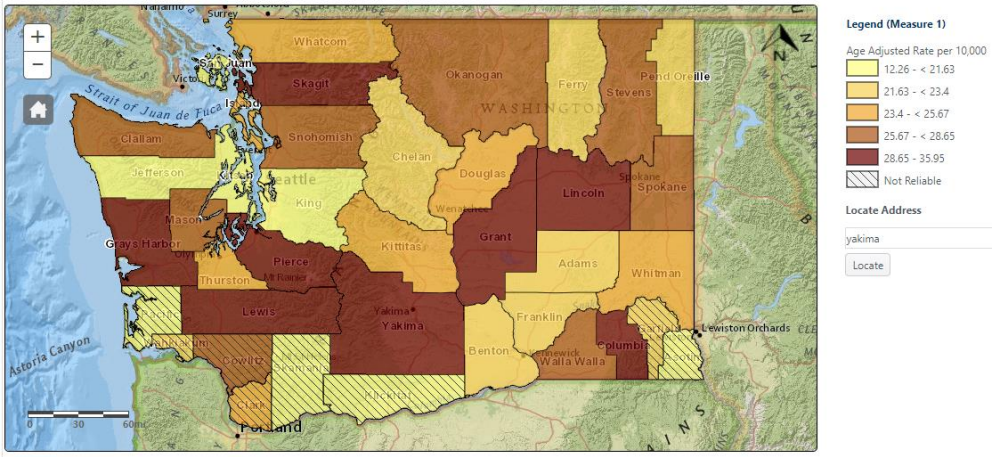
Asthma Hospitalizations: Age-Adjusted Rate per 10,000

Geography: County, Age Group: All (Combined), Time Period: 2010-2014



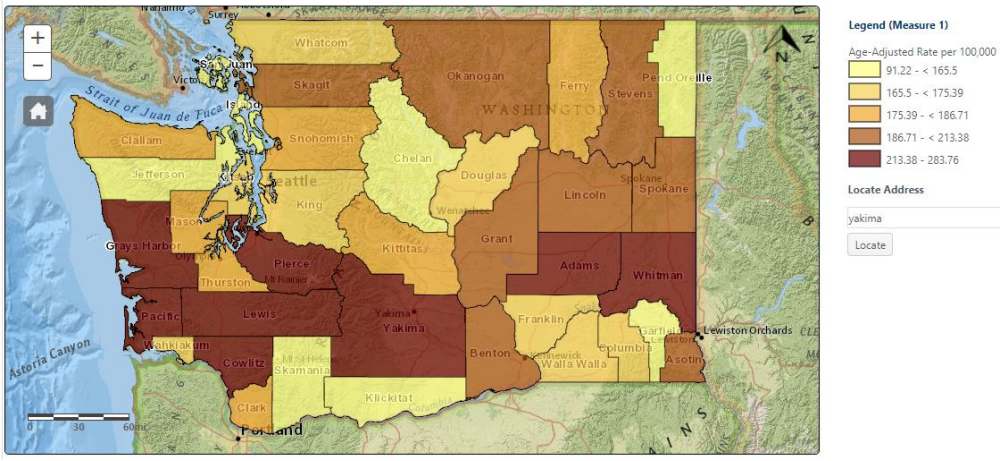
Heart Attack Hospitalizations: Age-Adjusted Rate per 10,000 (for specified age groupings)

Geography: County, Age Group: 35+, Sex: All (Combined), Time Period: 2010-2014



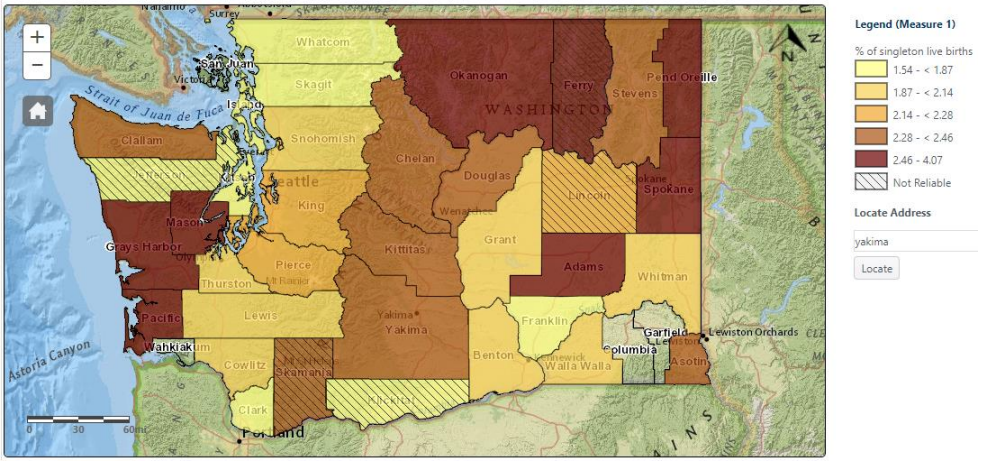
Cardiovascular Disease Mortality - Age Adjusted rate per 100,000

Geography: County, Sex: All (Combined), Time Period: 2015-2019



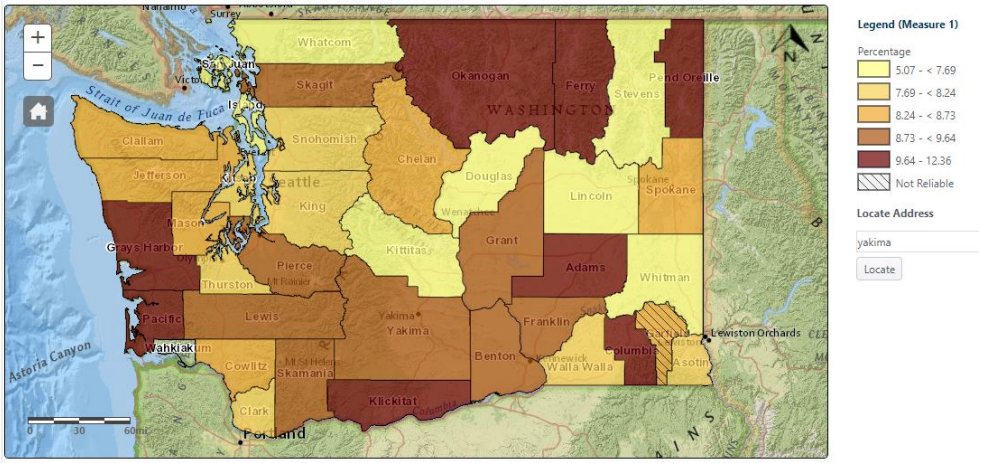
Low Birthweight (<2500 grams) Singleton Fullterm Births

Geography: County, Maternal Age: All (Combined), Time Period: 2015-2019



Preterm (less than 37 weeks) Singleton Births

Geography: County, Maternal Age: All (Combined), Time Period: 2015-2019



From the WA State Dept. of Health Washington Tracking Network at https://fortress.wa.gov/doh/wtn/WTNPortal/#!q0=370

Studies of Air Pollution and Health in Yakima County

Here is research that was performed in Yakima County regarding health impacts from air pollution. This research belongs on the YRCAA website, but it has never been posted.

This study provides evidence that PM2.5 in an agricultural setting contributes to elevated asthma morbidity.

> Loftus, C., Yost, M., Sampson, P., Arias, G., Torres, E., Vasquez, V. B., ... & Karr, C. (2015). Regional PM2. 5 and asthma morbidity in an agricultural community: a panel study. Environmental research, 136, 505-512. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4425279/

Ammonia concentrations were elevated in this community and strongly predicted by proximity to animal feeding operations. Ammonia's association with acute lung function decrements in children with asthma in the surrounding community may be causal or, alternatively, ammonia may be a marker for other pollutants from animal feeding operations associated with respiratory effects.

> Loftus, C., Yost, M., Sampson, P., Torres, E., Arias, G., Vasquez, V. B., ... & Bhatti, P. (2015). Ambient ammonia exposures in an agricultural community and pediatric asthma morbidity. Epidemiology (Cambridge, Mass.), 26(6), 794. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4587379/

Our findings indicate that children with asthma may experience short-term respiratory effects following increased exposure to airborne AFO pollutants, adding to a growing body of research evidence that AFO-related air pollution may cause community-level health effects.

> Loftus, C. (2015). Industrial Animal Agriculture in the Yakima Valley, Air Pollution, and Pediatric Asthma Morbidity (Doctoral dissertation). Available at https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/26152/Loftus_washington_0250E_13499.pdf?sequence=1

These findings demonstrate that dairy operations increase community exposures to agents with known human health effects. This study also provides evidence that airborne biological contaminants (i.e. cow allergen) associated with airborne particulate matter are statistically elevated at distances up to three miles (4.8 km) from dairy operations.

> Williams, D. L., Breysse, P. N., McCormack, M. C., Diette, G. B., McKenzie, S., & Geyh, A. S. (2011). Airborne cow allergen, ammonia and particulate matter at homes vary with distance to industrial scale dairy operations: an exposure assessment. Environmental Health, 10(1), 72. Available at https://ehjournal.biomedcentral.com/articles/10.1186/1476-069X-10-72

Air Quality in Yakima County

Percentage of Ammonium Nitrate in Fine Particulate Matter in WA State

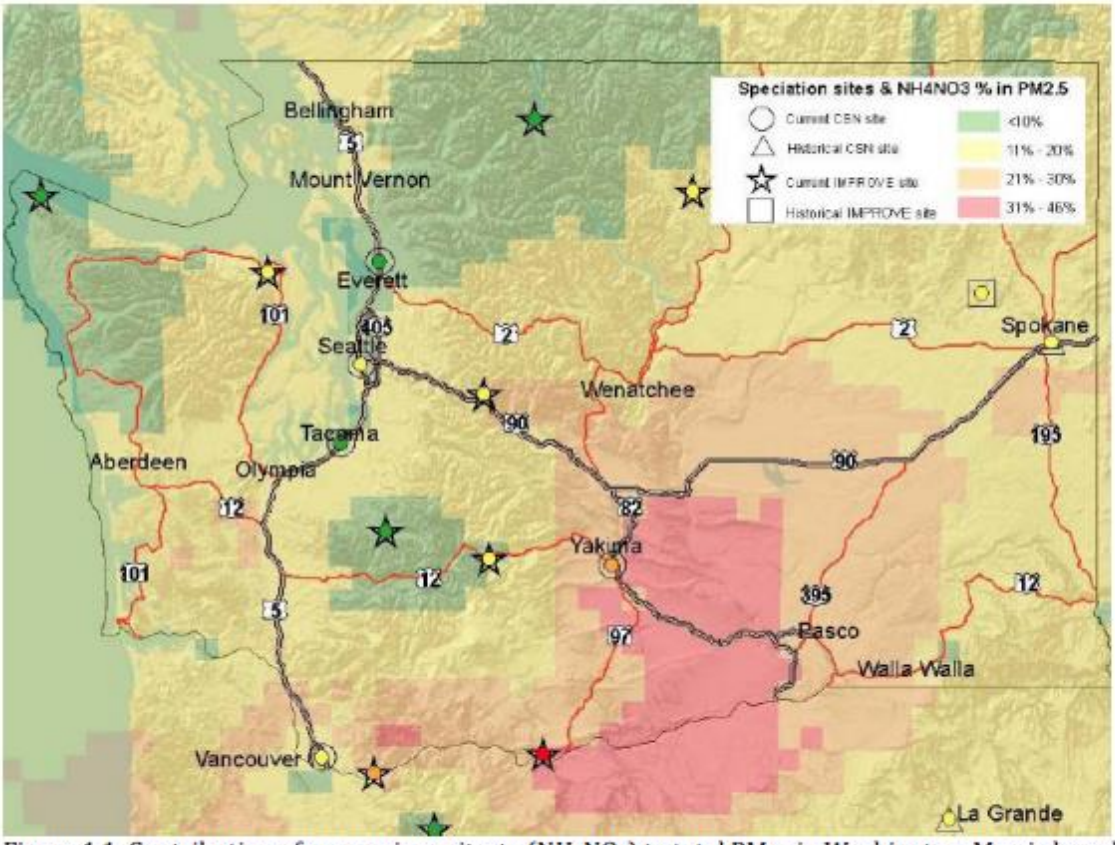


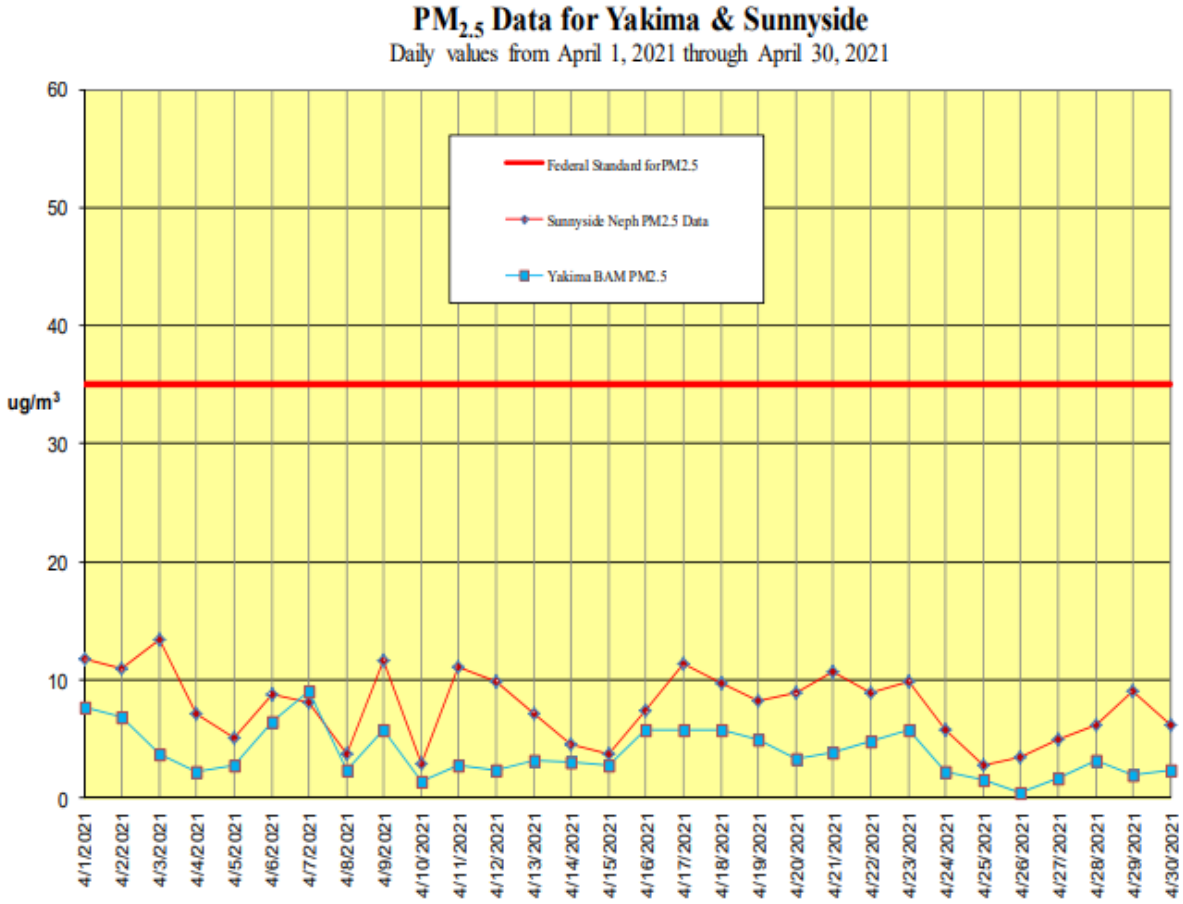
Figure 1.1. Contribution of ammonium nitrate (NH_4NO_3) to total $PM_{2.5}$ in Washington. Map is based on measured aerosol speciation data collected through 2009, spatially interpolated with CMAQ-modeled data at a 12km resolution. Map created and provided by Dr. Ranil Dhammapala, Washington Department of Ecology.

The 2015 Yakima Air Winter Nitrate Study found:

Episodes of elevated particulate nitrate in the Yakima Valley during winter result from a combination of factors. The wintertime meteorology of the region drives gas-particle equilibrium of ammonium nitrate strongly toward the particle phase, and high relative humidity enhances this effect. High ammonia emissions from agricultural sources in the area lead to elevated atmospheric concentrations of the pollutant. This excess ammonia drives virtually all available nitric acid into the particulate phase, forming particulate nitrate, and leads to a condition where any additional nitric acid production would lead directly to greater particulate nitrate levels. The production of particulate nitrate precursors is complicated and sensitive to the varying meteorological and chemical conditions in the valley. Given the backdrop of excess gaseous ammonia, there is usually sufficient reactive nitrogen in the valley to produce elevated levels of particulate nitrate if the right meteorological conditions take hold.

YRCAA Data: Air quality in the LYV is usually worse than air quality in the Upper Yakima Valley (UYV). Here is a recent typical example from a monthly director's report to the YRCAA Board of Directors.

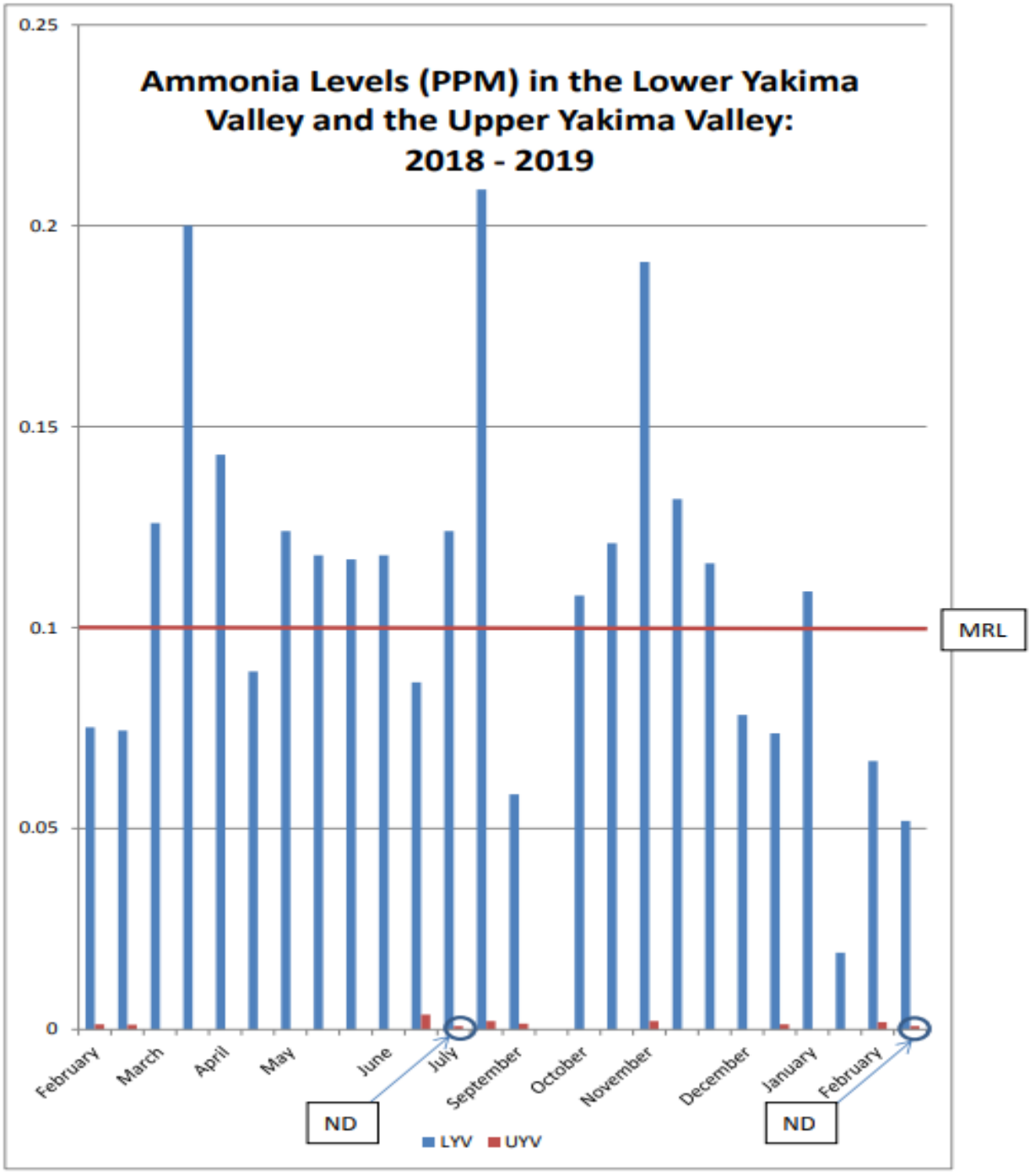
4. Air Monitoring Data for April 2021



Citizen Science: The Friends of Toppenish Creek measured average ammonia levels for two week periods from February 2018 to February 2019, at a home site in the LYV and a control site in the UYV. The average of all samples at the LYV site was 0.1092 parts per million (ppm) with a range of 0.0191 ppm to 0.209 ppm. The average of all samples at the UYV site was 0.0016 ppm. Ammonia levels in the lower valley averaged sixty eight times higher than those in the upper valley.

The Agency for Toxic Substances and Disease Registry (ATSDR) at the Center for Disease Control (CDC) has determined that the Minimum Risk Level (MRL) for long term (≥ 1 year) exposure to ammonia is 0.10 ppm. According to the CDC, "An MRL is an estimate of the daily human exposure to a hazardous substance that is likely to be without appreciable risk of adverse non-cancer health effects over a specified duration of exposure."

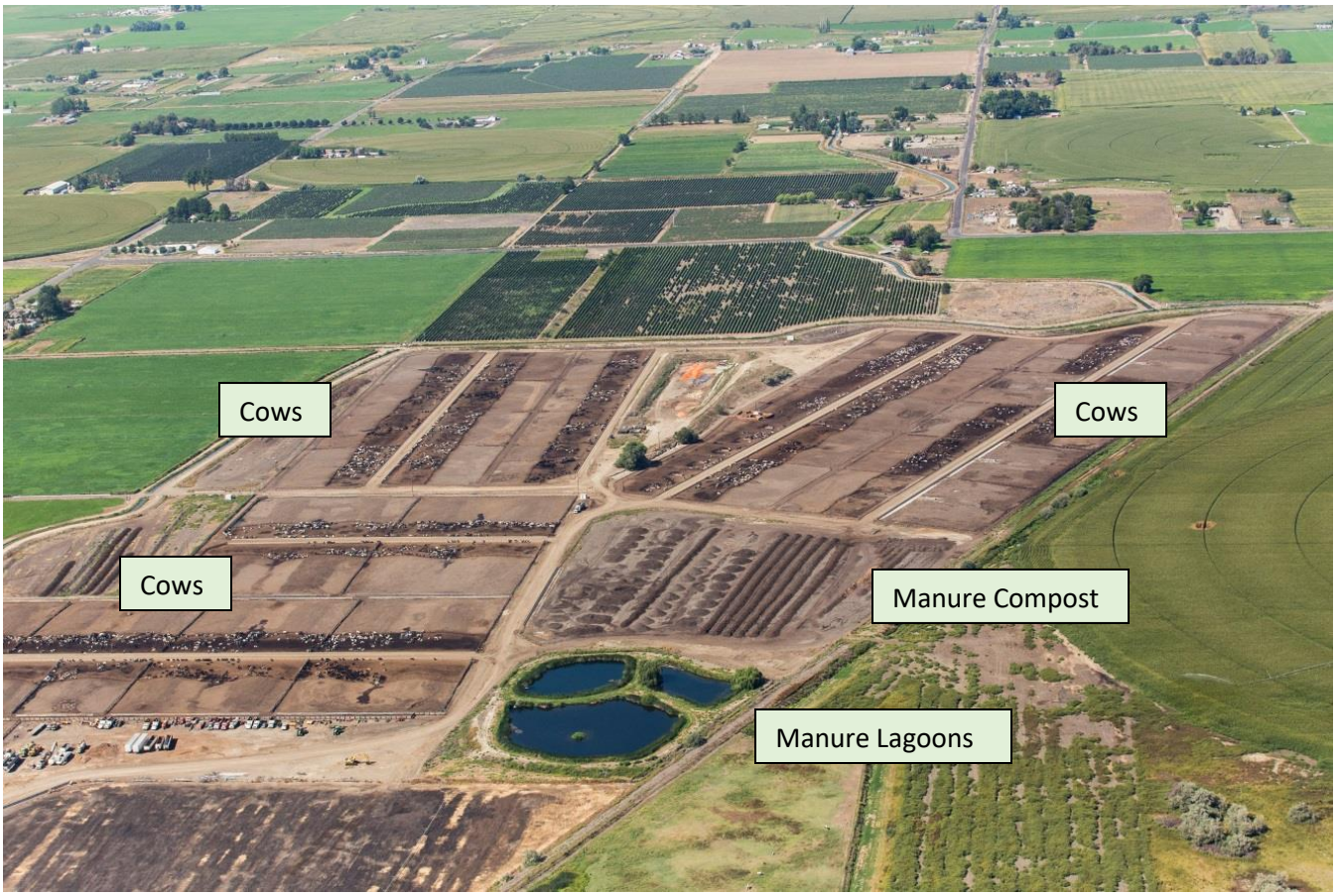
Below is a graph of the FOTC findings:



FOTC shared these results with the YRCAA. The agency did not respond.

In 2016 the YRCAA staff brought a proposed ammonia study to the YRCAA board for consideration. The board rejected the proposed study.

Dairy Emissions: This aerial photo shows the sources of emissions from LYV dairies:



The WA State Dept. of Agriculture estimates that 35% of the nitrogen in waste from dairy cows volatilizes and ends up in the atmosphere. This happens in the production area, before manure is composted or applied to crops. See Lower Yakima Valley Groundwater Report, Vol. I, page 25 at https://www.yakimacounty.us/DocumentCenter/View/22177/GWMA-VolumeI-July2019

Regulation of Air Pollution in Yakima County

Timeline

1967

The Yakima Regional Clean Air Authority, later the Yakima Regional Clean Air Agency, is formed per RCW 70.94.081

1997

YRCAA adopts a Beef Cattle Feedlot Air Policy

2002

YRCAA approves Confined Heifer Operations Dust Control Policy

2005

Les Ornelas, Director of the Yakima Regional Clean Air Agency tells a WSU Dairy Workshop in Sunnyside WA,

> *Now, I receive the largest number of odor complaints currently for my jurisdiction against feedlots, dairies, other kinds of chicken farmers, and other sorts of activities like this. We have people in the field who have been trained to evaluate odors, to be able to discern from a level 1, 2, 3 or 4 (4 typically is the one that causes a gag reflex). We go out and respond to all these numerous complaints every year and we have not yet issued a citation to any of the dairy people on odors in Yakima County, even though we have hundreds and some years over a thousand complaints.*

Not much has changed since then. The YRCAA still fails to cite Lower Yakima Valley dairies for odor and dust.

2010

YRCAA discussion re AQMP for Dairies begins

Publication of *Emission Data from Two Dairy Freestall Barns in Washington.* Study performed in the LYV by WA State University for the National Air Emissions Monitoring Study.

2011

John Hopkins study, *Airborne cow allergen, ammonia and particulate matter at homes vary with distance to industrial scale dairy operations: an exposure assessment.* The lead author presents the study to the YRCAA. There is no agency action.

February, YRCAA published public comments for the AQMP for dairies

February, YRCAA Board of Directors approved the dairy air policy as a pilot research project.

2012

Presentation of Draft AQMP for Dairies at YRCAA Board Meeting

2013

May, Citizens present a petition to ban spreading and spraying of manure during burn bans and air inversions. The YRCAA Director recommends rejecting the petition and the YRCAA Board agrees.

June, the YRCAA Board of Directors approves an *Air Quality Management Policy and Best Management Practices for Dairy Operations (AQMP).*

November, FOTC presents a critique of the Literature Review used to rebut a need for Ban on Spraying Manure during Inversions

2014

YRCAA adopts a *PM Advance Program Path Forward*

January, YRCAA forms an Agricultural Task Force and a Dairy Work Group

The Yakima Air Winter Nitrate Study is completed

November, Board Study Session review *Report to the YRCAA Board of Directors of the July, 2013 to October 2014 Policy Implementation Period* – two board members hear the report.

Publication of Ecology's *2011 County Emissions Inventory.*

2015

YRCAA Board of Directors tables a proposed Five-Year Strategic Plan

University of Washington publishes studies on asthmatic children in the Yakima Valley.

2016

FOTC asks the WA Dept of Health and the Yakima Health District for an "expert opinion on when and under what conditions it is safe to apply manures, especially aerosolized manures, to cropland when human and animal exposures and health risks are taken into consideration." To date there has been correspondence but there have been no substantive answers.

FOTC responds to an article in two local newspapers that quotes the YRCAA Director and states that ammonia emissions from animal agriculture are insignificant.

FOTC files a Civil Rights Complaint to the EPA re YRCAA

FOTC asks Ecology to investigate the YRCAA under RCW 70A.15.3000(8)

Complaints about Conflict of Interest for a YRCAA Board Member

2017

Steve George from the Yakima Dairy Federation tells the YRCAA Board of Directors that he can speak for the dairy farmworkers.

YRCAA denies a second petition to ban manure spraying during burn bans and inversions.

2018

AQMP for Dairies rescinded

2019

FOTC repeats a request for Ecology to investigate YRCAA. The request is denied.

Complaint because WA State helps a mushroom operation, with known odorous air emissions, to relocate from the west side of the state to the Sunnyside area.

The EPA Office of Civil Rights External Compliance comes to an agreement with the YRCAA regarding engagement of Spanish speaking residents.

FOTC analyzes ammonia emissions in Yakima County and shares the study with YRCAA. The YRCAA takes no action.

2020

University of Washington publishes studies on asthmatic children in the Yakima Valley.

Violations of Rules & Regulations

RCW 17A.15.2000(6) Wherever a member of a board has a potential conflict of interest in an action before the board, the member shall declare to the board the nature of the potential conflict prior to participating in the action review. The board shall, if the potential conflict of interest, in the judgment of a majority of the board, may prevent the member from a fair and objective review of the case, remove the member from participation in the action.

WAC 173-400-260 Conflict of interest: All board members and officials acting or voting on decisions affecting air pollution sources, must comply with the Federal Clean Air Act, as it pertains to conflict of interest (Section 128).

FOTC Comment: Dr. Steven Jones is a dairy nutritionist who works for the dairy industry in Yakima County. He was part of the group that developed the YRCAA Air Quality Management Policy (AQMP) for Dairies beginning in 2011. Dr. Jones has served on the YRCAA Board of Directors since January 2014 as the designee for the Yakima County Commissioners when the commissioners chose him over two citizen applicants. He has been reappointed without consideration of other candidates since that time.

- In 2015 Dr. Jones voted against a YRCAA Strategic Plan stating that he disagrees with the proponents of environmental justice. (Attachment L)
- In 2017 the YRCAA staff brought a proposed project to the board that would measure ammonia emissions in the LYV. The Dairy Federation opposed the project. Dr. Jones actively criticized the value of the project and voted against it. (Board Meetings March 2017 & April 2017).
- In 2017 the YRCAA Board of Directors made changes to the public comment section of board meetings at the request of the Dairy Federation. Dr. Jones voted in favor of the changes. (Board Meetings October 2017 & November 2017).
- In 2018 the YRCAA voted to rescind the AQMP for dairies. Dr. Jones voted for an option to rescind the AQMP, to eliminate a requirement for dairies to register and to eliminate registration fees for dairies. The elimination of registration fees resulted in a reduction of $20,000 to $22,000 that would have been used to address this source of air contaminants. This decision resulted in the reduction of YRCAA FTEs by one employee. (Board Meeting, October 2018)
- Dr. Jones has voted on every YRCAA budget since 2014.

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RCW 70A.15.1005 Declaration of public policies and purpose.

Paragraph 6 states:
It is the policy of the state that the costs of protecting the air resource and operating state and local air pollution control programs shall be shared as equitably as possible among all sources whose emissions cause air pollution.

RCW 70A.15.2270

Annual fees from operating permit program source to cover cost of program.

(1) The department and delegated local air authorities are authorized to determine, assess, and collect, and each permit program source shall pay, annual fees sufficient to cover the direct and indirect costs of implementing a state operating permit program approved by the United States environmental protection agency under the federal clean air act. . . . .

(2) The fee schedule developed by each permitting authority shall fully cover and not exceed both its permit administration costs and the permitting authority's share of statewide program development and oversight costs.

RCW 70A.15.3060

State financial aid—Application for—Requirements.

(1) Any authority may apply to the department for state financial aid. . . .

(2) Before any such application is approved and financial aid is given or approved by the department, the authority shall demonstrate to the satisfaction of the department that it is

fulfilling the requirements of this chapter. If the department has not adopted ambient air quality standards and objectives as permitted by RCW **70A.15.3000**, the authority shall demonstrate to the satisfaction of the department that it is acting in good faith and doing all that is possible and reasonable to control and prevent air pollution within its jurisdictional boundaries and to carry out the purposes of this chapter.

FOTC Comment: YRCAA acknowledges that CAFO dairies are a source of air pollution in Yakima County. YRCAA does not register dairies and collects no fees to pay for actions to address air pollution from this source. YRCAA does not do all that is possible and reasonable to control and prevent air pollution in Yakima County.

* * * * * * * *

WAC 173-400-100

Source classifications.

(1) **Source classification list.** In counties without a local air pollution control authority, or for sources under the jurisdiction of ecology, the owner or operator of each source within the following source categories must register the source with Ecology:

(j) Cattle feedlots with operational facilities which have an inventory of one thousand or more cattle in operation between June 1st and October 1st, where vegetation forage growth is not sustained over the majority of the lot during the normal growing season;

(l) Composting operations, including commercial, industrial and municipal, but exempting residential composting activities;

RCW 70A.15.3050

Emission control requirements.

(1) Every activated authority operating an air pollution control program shall have requirements for the control of emissions which are no less stringent than those adopted by the department of ecology for the geographic area in which such air pollution control program is located.

FOTC Comment: Rules and Regulations for Local Clean Air Agencies cannot be less stringent than state rules and regulations.

The YRCAA does not require registration of dairies, despite the fact that CAFO dairies are de facto cattle feedlots with inventories of one thousand or more cattle in operation year round, where vegetation forage growth is not sustained over the majority of the lot during the normal growing season. (Board Meeting, October 2018)

The YRCAA does not require registration of dairies, despite the fact that Ecology requires registration of cattle feedlots.

The YRCAA does not require registration of dairy composting operations despite the fact that there are over 500 acres in the LYV devoted to manure composting.

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RCW 70A.15.3150

Penalties.

(1) Any person who knowingly violates any of the provisions of this chapter or chapter **70A.25** RCW, RCW **70A.45.080**, or any ordinance, resolution, or regulation in force pursuant thereto is guilty of a gross misdemeanor and upon conviction thereof shall be punished by a fine of not more than ten thousand dollars, or by imprisonment in the county jail for up to three hundred sixty-four days, or by both for each separate violation.

(2) Any person who negligently releases into the ambient air any substance listed by the department of ecology as a hazardous air pollutant, other than in compliance with the terms of an applicable permit or emission limit, and who at the time negligently places another person in imminent danger of death of substantial bodily harm is guilty of a gross misdemeanor and shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for up to three hundred sixty-four days, or both.

FOTC Comment: Animal agriculture in Yakima County releases

- between 5,000 and > 8,000 tons of ammonia every year (Attachment M, page 101/108 & Attachment N. page 88/94).
- approximately 1,771 tons of PM 10 every year (Attachment N, page 82/94)
- approximately 366 tons of PM 2.5 every year (Attachment N, page 83/94)
- approximately 416 tons of volatile organic compounds (VOCs) every year (Attachment N, page 86/94)

(3) Any person who knowingly releases into the ambient air any substance listed by the department of ecology as a hazardous air pollutant, other than in compliance with the terms of an applicable permit or emission limit, and who knows at the time that he or she thereby places another person in imminent danger of death or substantial bodily harm, is guilty of a class C felony and shall, upon conviction, be punished by a fine of not less than fifty thousand dollars, or by imprisonment for not more than five years, or both.

(4) Any person who knowingly fails to disclose a potential conflict of interest under RCW **70A.15.2000** is guilty of a gross misdemeanor, and upon conviction thereof shall be punished by a fine of not more than five thousand dollars.

FOTC Comment: See Dr. Steve Jones' voting record on the YRCAA Board of Directors.

See the WA State Emissions Inventories for 2011 and 2017 (Attachments M & N)

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RCW 70A.15.4530

Odors or fugitive dust caused by agricultural activities consistent with good agricultural practices exempt from chapter.

(1) Odors or fugitive dust caused by agricultural activity consistent with good agricultural practices on agricultural land are exempt from the requirements of this chapter unless they have a substantial adverse effect on public health. In determining whether agricultural activity is consistent with good agricultural practices, the department of ecology or board of any authority shall consult with a recognized third-party expert in the activity prior to issuing any notice of violation.

FOTC Comment: To the best of FOTC's knowledge, the YRCAA has never consulted an expert to determine consistency with good agricultural practices. In Yakima County, due to a winter storm emergency, it is now an accepted agricultural practice to compost 950 dead cows in 2,300 feet of windrows. (Attachment O)

(2) Any notice of violation issued under this chapter pertaining to odors or fugitive dust caused by agricultural activity shall include a detailed statement with evidence as to why the activity is inconsistent with good agricultural practices, or a detailed statement with evidence that the odors or fugitive dust have substantial adverse effect on public health.

FOTC Comment: To the best of FOTC's knowledge, the YRCAA has never consulted an expert to determine whether there is evidence that fugitive dust and odor has a substantial adverse effect on public health. FOTC has provided YRCAA with research on the adverse public health effects of emissions from CAFO's. FOTC has offered the expertise of a physician and a masters prepared nurse to help YRCAA better understand health effects. YRCAA declined citizens' assistance.

(6) The exemption for fugitive dust provided in subsection (1) of this section does not apply to facilities subject to RCW **70A.15.2200** as specified in WAC 173-400-100 as of July 24, 2005, **70A.15.2210**, or **70A.15.2260**. The exemption for fugitive dust provided in subsection (1) of this section applies to cattle feedlots with operational facilities which have an inventory of one thousand or more cattle in operation between June 1st and October 1st, where vegetation forage growth is not sustained over the majority of the lot during the normal growing season; except that the cattle feedlots must comply with applicable requirements included in the approved state implementation plan for air quality as of July 23, 2017; and except if an area in which a cattle feedlot is located is at any time in the future designated nonattainment for a national ambient air quality standard for particulate matter, additional control measures may be required for cattle feedlots as part of a state implementation plan's control strategy for that area and as necessary to ensure the area returns to attainment.

FOTC Comment: WAC 173-400-100 requires registration of

(j) Cattle feedlots with operational facilities which have an inventory of one thousand or more cattle in operation between June 1st and October 1st, where vegetation forage growth is not sustained over the majority of the lot during the normal growing season;

(l) Composting operations, including commercial, industrial and municipal, but exempting residential composting activities;

CAFO dairies are de facto animal feedlots, yet YRCAA does not regulate them. There are over 500 acres of manure compost in the LYV, yet YRCAA does not regulate these operations.

YRCAA uses the exemption for odor and dust as a reason not to address emissions of ammonia, hydrogen sulfide and volatile organic compounds (VOCs). This is a false interpretation of the statutes.

* * * * * * * * *

RCW 70A.15.6200

Legislative declaration—Intent.

The legislature recognizes that:

(1) Acid deposition resulting from commercial, industrial or other emissions of sulphur dioxide and nitrogen oxides pose a threat to the delicate balance of the state's ecological systems, particularly in alpine lakes that are known to be highly sensitive to acidification;

(2) Failure to act promptly and decisively to mitigate or eliminate this danger may soon result in untold and irreparable damage to the fish, forest, wildlife, agricultural, water, and recreational resources of this state;

(3) There is a direct correlation between emissions of sulphur dioxides and nitrogen oxides and increases in acid deposition;

(4) Acidification is cumulative; and

(5) Once an environment is acidified, it is difficult, if not impossible, to restore the natural balance.

It is therefore the intent of the legislature to provide for early detection of acidification and the resulting environmental degradation through continued monitoring of acid deposition levels and trends, and major source changes, so that the legislature can take any necessary action to prevent environmental degradation resulting from acid deposition.

RCW 70A.15.6210

Definitions.

As used in RCW **70A.15.6200** through **70A.15.6220**, the following terms have the following meanings.

(1) "Acid deposition" means wet or dry deposition from the atmosphere of chemical compounds with a pH of less than 5.6.

(2) "Critical level of acid deposition and lake, stream, and soil acidification" means the level at which irreparable damage may occur unless corrective action is taken.

RCW 70A.15.6250

Evaluation of information on acid deposition in Pacific Northwest—Establishment of critical levels—Notification of legislature.

The department of ecology, in consultation with the appropriate committees of the house of representatives and of the senate, shall:

(1) Continue evaluation of information and research on acid deposition in the Pacific Northwest region;

(2) Establish critical levels of acid deposition and lake, stream, and soil acidification; and

(3) Notify the legislature if acid deposition or lake, stream, and soil acidification reaches the levels established under subsection (2) of this section

FOTC Comment: The pH of a 0.1 M solution of ammonium nitrate in water is 5.43. Ammonium nitrate contributes to acid rain.

Since 1993 Ecology has performed samplings of Washington waters for pH. WRIA 37 contains the Lower Yakima River. Ecology has recorded 25 samples from WRIA 37 with sufficient data to make determinations.

- 9 of the 25 samples (36%) were classified as "Waters of Concern".
- 11 of the 25 (44%) samples were classified as "Impaired".
- 5 of the 25 samples (20%) were classified as "meets the standard".

See Ecology's Washington State Water Assessment at
https://apps.ecology.wa.gov/ApprovedWQA/ApprovedPages/ApprovedSearchResults.aspx

Citizen Complaints

Excerpts from YRCAA Board Meeting Summaries

March 2012: Larry Fendell (Citizen) states, *I brought a few pictures showing the smell problems we have. They push up berms. Make lagoons wherever, usually on property lines. They spread it out to dry right next to people's homes. This is a rig spreading the manure out. This is what it looks like after they harrow it. They haul it everywhere. This is Roza Drive in one drive. How do you incorporate manure on asphalt? One of the pictures they have dead calves laying out there. Here are the Big Guns. This is brown water. There supposed to be cutting that with something. Dr. Pius has said this is the thing they can do. Aerating it through irrigation. Here is a barn that hasn't been cleaned.*

Jan Whitefoot (Citizen) states, *On Monday the day the wind was blowing, 40 miles or more. Helen and I invited a reporter to go with us on a poop tour. You couldn't hardly see the road. In the Best Management Plan, it said they wouldn't do anything in the wind. We saw truck after truck applying manure. They are not following it now. What will make them follow the plan?*

YRCAA Board Chairman Tom Gasseling states, *The problem with the pictures is you cannot tell what they are. They could be dust blowing or anything. . . . I'm getting real tired being told that I'm sneaky, deceitful, devious. . . I 'm getting real tired of being called devious. . . Don't come here every month and being told I'm some useless piece of crap. I personally, I'm fed up with it. This has got to stop. I'm not going to tolerate it anymore.*

Jan Whitefoot: *You were bad mouthing me in an email.*

Gasseling: *I meant what I said.*

April 2012: Doug Moore (Citizen) says, *There is a lagoon with 3 million gallons of raw manure 187 feet from my house. I've filed complaints against it. They bulldozed down cat tails because that was a wetland. One time the gate broke and the whole 3 million gallons drained into Black Rock Creek. Nothing has ever been done. I'm so mad I have just about given up.*

May 2012: Helen Reddout (Citizen) tells the YRCAA Board of Directors that the April YRCAA Board Minutes said she had been invited to be on the Dairy Work Group. In fact, she was never invited. Ms. Reddout stated, "If I had been invited, I would have been there with bells on."

Director Pruitt clarified that he had intended to invite her but never got the opportunity.

Ms. Reddout added that she would still like to be on the work group. That never happened.

December 2012: Larry Fendell (Citizen) Community meetings. I've asked a question for three meetings now. No answer. Why are dairies allowed to spread manure during burn bans? The reason we bring things to the board is when we bring things to the agency nothing happens. Need to have concerns recorded. For the last three months we have asked about ammonia. We have to

stop using wood stoves and fireplaces. We go out and they are spreading manure and the air is bad. I want the board to know that there is a problem.

Director Gary Pruitt: "You're so full of crap."

January 2013: Larry Fendell (Citizen) quotes from a TV interview of Mr. Pruitt, "Frankly the money just isn't there. Testing wouldn't produce credible evidence of anything. It would cost tens of millions of dollars to set up testing in the lower valley." Does that statement bother anyone?

November 2014: Jean Mendoza explained to the YRCAA Board that Dr. Nicole Embertson gave them mis-information in her Literature Review on the Spraying of Manure During Inversions. Among other points:

- Referenced 40 pieces of research. Only 13 pieces looked at community health. 12 of the 13 found significant health impacts related to public health.
- Incorrect statement of a chemical reaction
- Misstated statistics regarding the impact of ammonia on PM 2.5
- Stated that manure is not typically applied during winter months. This is not true in Yakima County.
- Misquoted the John Hopkins study and said it addressed pollutants carried by winds. It does not and the lead author said that Dr. Embertson's statements do not represent her work.
- Ignored other studies done in the Yakima Valley.

Dr. Embertson responded in writing that she did not have to justify her work. The YRCAA Board took no action.

March 2015: Jan Whitefoot asks the YRCAA to investigate solar panels as a way of reducing air pollution from wood smoke. No response.

April 2015: The contract for Smoke School was given to a newly retired YRCAA employee. The contract was broken into two parts, each < $25,000 so that there was no requirement for open bidding.

August 2015: Jan Whitefoot asks why the number of cows is not listed on the AQMP Dairy Air Score Cards. *If you don't know how many cows, how do you know how much ammonia or hydrogen sulfide?*

Director Pruitt replies, *There is no reason to look at cow numbers.*

September 2015: Request from FOTC that YRCAA address Global Warming. FOTC provides information on reactive nitrogen in the atmosphere. Director Pruitt replies that 80% of the atmosphere is nitrogen and it is not a pollutant.

Jean Mendoza offers to volunteer her time to help YRCAA with evaluation of Global Warming in the Yakima Valley. Not accepted.

December 2016:

Steve George from the Yakima Dairy Federation states: *The government is providing services to two chronic dairy complainers who have demonstrated that their complaints are frivolous, being used as harassment, and, according to agency staff that I have had conversations with, wasting public resources.*

Jim Dyjak (Citizen): *I'm going to rebut that. He just gave you a false statement, that all the complaints have never been verified at my house. Do you know why? Not one person from this agency in sixteen years has ever been to my house. Not one. When you report something on Monday and they might come out a week later, it ain't going to be there. The study he cites was done inside the barns. Dr. Pius is using an assumption that the drift is less. I resent being told my complaints are wrong when no (investigators) have ever been to my house.*

Larry Fendell (Citizen): *All the testing has been done on dairies. The neighbors really don't care what is on the dairy. We care about what comes across the fenceline. We care about all the fields where they apply manure, don't disc it in, make two or three applications. The neighbors get to smell it for a month. So, let's be fair about this. He (Steve George) is a paid person who gives you half-truths. Too many of us live with this. We want to know what is coming over the fence. We want it reported.*

Regarding an ammonia study, Steve George tells the YRCAA Board of Directors that, *Although the research reveals small amounts of ammonia emissions from farms, these emissions are insignificant and do not pose an overall risk to human health.*

March 2017: FOTC asks Dr. Jones to recuse himself from voting on the ammonia project.

April 2017: Mayor Childress votes to reject the proposed ammonia study. If they find something, then they will have to address a problem. Commissioner Anderson votes in favor of the ammonia project. Councilwoman Mendez, and Dr. Jones vote against the project.

May 2017: Jean Mendoza & Sandy Braden, after jumping through many hoops, arrived at the YRCAA offices for a scheduled community forum. Although the Director was in his office, he refused to have a meeting because his staff was not present. They were told that the meeting was cancelled, and they should come back in August.

Public testimony regarding the Agriculture Advisory Committee: The previous month's report sounded like everything was going well. Attendees disagree. YRCAA shared no data at the meeting. No data from the AQMP. The only evidence at the meeting was testimony from two people who live close to dairies. In one home a woman's son came to her and said he could not breathe.

The last report on the Air Quality Management Policy for Dairies was done in 2014. Beginning in 2015 dairies with a grade of D were supposed to be inspected every 6 months and dairies with a grade of C were supposed to be visited yearly. This was not done.

September 2017: Sandy Braden attempts to inform the YRCAA Board regarding the WA State Attorney General's opinion on conflict of interest. The Acting Chair cuts her off:

Acting Chair Norm Childress – *that item is not on today's agenda.*

Director Hurley – *You are absolutely correct. that item is not on the agenda. Her characterization is incorrect. It is wrong. It's off. There were three opinions.*

Braden - *Which were two maybes and a no*

Hurley – *No, it is pretty clear. Much more . . .*

Braden is forced to sit down.

After another citizen, who was invited by a County Commissioner to the meeting, is allowed to speak Ms. Braden is allowed to comment.

Jean Mendoza states that she tried and failed to get an item on the agenda. She asks how to do this. The Acting Board Chair and the YRCAA Director do not know the answer.

Francisco Maltos asks the YRCAA to address Global Warming. There is no response.

October 2017: Director Hurley incorrectly tells the YRCAA board that prohibiting spraying of manure during inversions would conflict with RCW 90.64 the Dairy Nutrient Management Act and RCW 90.48 the Water Pollution Control Act. Director Hurley incorrectly tells the Board that there is no evidence that spraying manure into the air during inversions has a negative impact on public health.

June 2018: FOTC shares research regarding "manure irrigation". A permit is required in Wisconsin. They looked only at bacterial infections. Three different bacteria – Salmonella, Campylobacteria and E-coli 0.157. They found an increase in infections when manure is sprayed and spread. In Wisconsin manure spraying is prohibited within 500 feet of a home. They recommended that manure irrigation should not take place during inversions. YRCAA takes no action.

August 2018: Study Session to Review the AQMP

Director Hurley introduces Laurie Crowe from the South Yakima Conservation District as an expert on nutrient management. He suggests that she has a doctorate. In fact, Ms. Crowe does not even have a bachelor's degree.

Ms. Crowe states, *Most eastside producers are doing a really good job*. This is untrue. One of the largest producers has applied manure to crops at up to seven times agronomic rates.

October 2018: Board votes to rescind the AQMP for dairies. Dr. Jones votes.

March 2019: Jean Mendoza (Citizen): *Am I allowed to talk about the study session?* Previously was a member of the AG task force and disagreed with Director Hurley's summary of the meeting. Asked to be put on the next agenda to make corrections at the nest meeting. Was not placed on the agenda. Emailed each of the board members. Asked them to let her know if they received the emails and there were no replies.

Sandy Braden (Citizen): Clarification of the type of burn permits and enforcement methods if an inspection officer determines that the permit is not the correct one. Initially talked to Director Hurley at a community forum. Relates a case. Appears that someone used an incorrect permit for land clearing and there were no consequences.

February 2020:

Sandy Braden (Citizen): Question for Director Hurley. 20 – 25 acres off of Washington and 64th due north of Ahtanum View Correction area. It appears they have taken out the orchard and there are house size piles of removed trees ready for burning. Appears to require a land clearing permit. There are restrictions, including population limitations.

Director Hurley: It is not land clearing so the restrictions for land clearing do not apply. Has visited and there have been approved burns because it is not land clearing. It is inside the UGA. Land clearing and residential are prohibited within the UGA. Ag burning within a UGA is permissible and permits have been permitted previously. Aware of citizen concerns on the internet. Will have a meeting with the orchardists to resolve issues. Must let stuff dry for at least 30 days before burning.

What type of permit?

Agriculture.

So, you are saying that land will be re-planted with something?

Yes

Ms. Braden later researched the property and learned that it was not zoned agricultural. Instead, it had been zoned as a Small Convenience Center District in 2008. Mr. Hurley mis-informed both Sandy Braden and the YRCAA Board of Directors.

December 2020: At a YRCAA Community Forum Director Hurley told citizens that the graphs on Ecology's air quality website do not show actual concentrations of particulate matter. When citizens asked him to explain what the graphs show, he said that he could not and advised us that we would have to get that information from Ecology. FOTC sent questions to Ecology and received answers four months later. It is disturbing that YRCAA does not understand these processes well enough to explain them to lay people. It is disturbing that citizens must use public records requests, study the technological processes on our own and then endure disparagement from the experts at YRCAA because we are not experts in air quality. Citizens should not have to acquire degrees in engineering and the law in order to compel the YRCAA to protect our appeal for clean air.

See Attachment B for a more comprehensive summary of YRCAA Board Meetings

Example of YRCAA Investigations of air quality complaints in the LYV

July 19, 2019 (Friday) at 7:35 PM a resident left a voice mail message with YRCAA that was picked up on Monday, July 22, 2019 at 3:00 PM.

> *CP says there's "Ambient cow pen dirt from Hornby west to Waneta and further. Particle dirt filling the air around us can be seen on video with lights. It smells like urine but you don't care about that."*

According to the report the complaint received a Response Level 3 and an investigation was not begun until eleven days later on July 30, 2019 at 3:00 PM.

July 21, 2019 (Sunday) at 11:30 PM the same resident left a message that was picked up on Monday, July 22, 2019 at 3:00 PM.

> *CP says that "Foul cloud of ambient open pen dirt and lagoon storage. Strong smell of ammonia/urine permitting our property and home. Gagging, sinus headache and inability to breathe even with high power filtering system."*

Although the resident clearly states health complaints that are impacting her, the complaint is assigned a Response Level 3 that implies no health risks. An investigation was begun eleven days later, on July 30, 2019 at 3:00 PM.

July 22, 2019 at 11:15 PM the complainant left another message:

> *CP says that "The ambient pen dirt air was sucked into her home and her sons through open windows around 11:00 PM when she was cooling her house down with the evening air. Horrible dirty feeling ambient pen dirt willed with horrid ammonia and manure AND*

The YRCAA recorded the message the next morning but took no action. Initially the assignment was Response Level 3.

July 24, 2019 at 9:35 AM the complainant called again, this time in the morning, but the message was not picked up until 22.5 hours later.

> *After wonderful rain and thunder showers last night no smells! Wonderful sweet clean air! But tonight, Wednesday, 7/24/2019 9:25, windows open screen doors letting in fresh air until this very moment! Boom ! Ambient pen ammonia stench coming in.*

YRCAA assigned a Response Level 4 that signifies no previous complaints. There was no investigation.

July 25, 2019 at 8:00 AM the complainant called and YRCAA documented the call 45 minutes later.

> *"Awoke to horrid smell of dead cow composting. Velduis Klompe CAFOs is composting turning dead cow compost and it's gross. The ambient air is bringing this cloud of stench to my property this morning! Go to sleep with smells of urine wake up to manure*

The YRCAA did not investigate and made a Response Level 3 assignment to the complaint.

July 25, 2019 at 8:27 AM the complainant called again and the YRCAA recorded the call one hour later.

> *"Kelsey this has to stop! More and more ambient air full of CAFOs stench. I've written several complaints and no response from yrcaa! Come on you guys! Do your job. Kathy Rogers"*

The YRCAA did not investigate and made a Response Level 4 assignment to the complaint.

July 25, 2019 at 11:15 PM the complainant called and left a message that was picked up the next morning at 9:00 AM.

> *CP says "Cool nights are once more and very appreciated. However, opening our windows and screened doors is a negative. The ambient pen dirt full of odor from the cafo open pens surrounding our home and the neighbors is restricting the enjoyment of fresh*

The YRCAA did not investigate and made a Response Level 3 assignment to the complaint.

July 26, 2019 (Friday) at 1:20 AM the complainant left an email message. YRCAA had all day Friday to pick up but they did not record the message until Monday morning on July 29, 2019. Not being able to sleep due to odor qualifies as a health concern but YRCAA made a Response Level 3 assignment and did not investigate.

> *CP says "Awakened by stench form ambient open pen dirt infiltrating our home! Cool night, windows open, sleeping well, then BOOM, I can't sleep because I'm breathing in this heavy dirt, band like dust in my house. Our large Austin Air filters is always*

July 29, 2019 with no time recorded the complainant left an email message that was picked up the next day at 9:55 AM.

> *CP says "Kelsey, once more Klompe CAFO is composting and the ambient dirt from that is just nasty at my home. The wind was blowing from the east as well. I believe they've been told not to compost in the wind. Kelsey I have photos! This needs to be handled*

The YRCAA initiated an "investigation" on July 30, 2019 at 1 PM. This was their investigation:

> *Dairies and CAFOs in the vicinity of Hornby, Stove, Braden and Tear Roads were contacted and made aware of the complaints*

This was the final response for all of the above odor complaints during this episode of foul air. YRCAA is well aware that FOTC research in this area found average ammonia levels that exceed the Minimum Risk Level (MRL) for chronic ammonia exposure. The YRCAA cannot

state that composting dead cows next to family homes is an acceptable agricultural practice. YRCAA performed no onsite investigations and took no odor measurements. Based on the evidence no one can state how high the odor or ammonia levels were during this week or what the risks were to complainant health. See Attachment C for more information.

Riverview Dairy: In March of this year seven citizens who live next to the Riverview Dairy signed a petition asking agencies, including the YRCAA, to address pollution from that dairy. The petitioners stated:

Respected Officials:

These are the facts:

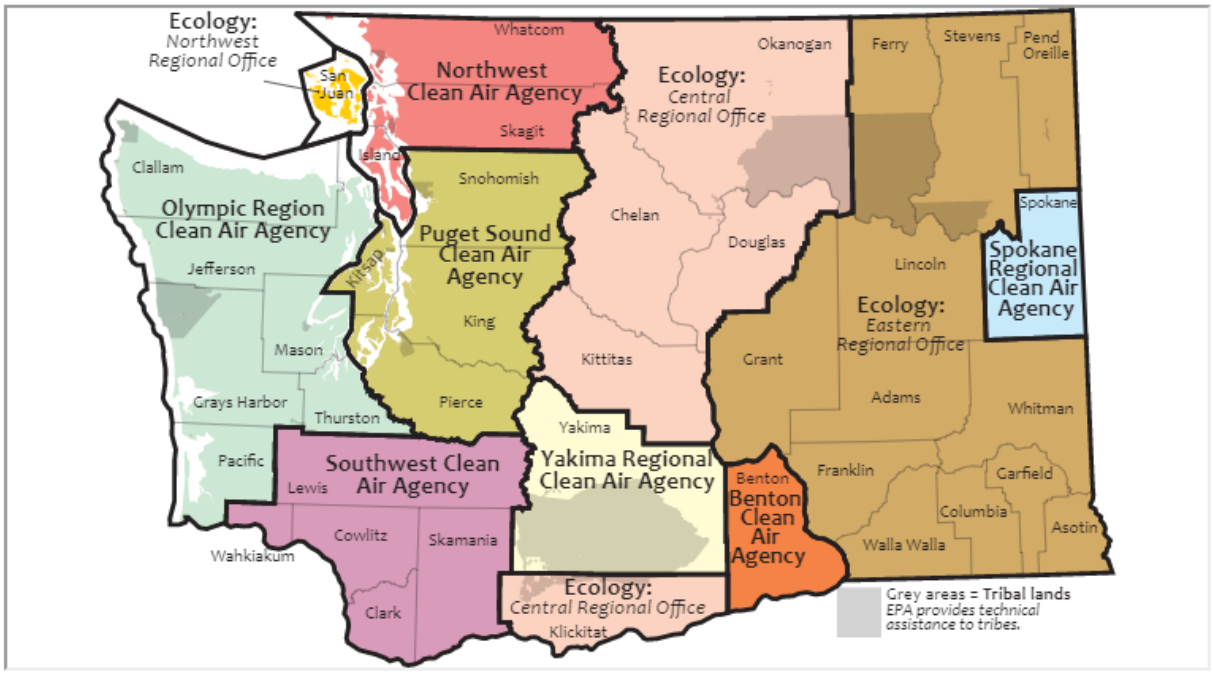
- *Rural county roads in the Lower Yakima Valley (LYV), for example Vance Road north of Mabton, are frequently covered with manure track out from trucks that transport manure from dairies to farmland.*
- *People in the LYV cannot walk to their mailboxes, cannot jog, without stepping in manure.*
- *Large trucks and heavy equipment on rural roads break down the edges of the pavement and create potholes.*
- *When dairies do not address the problem, flies from manure piles proliferate and make it impossible for rural neighbors to enjoy the outdoors, to barbecue or entertain family and friends.*
- *Dust from pens, corrals and compost areas are a major problem for rural neighbors, perhaps the biggest problem. We know that dust and fine particulate matter harm our health and reduce our life spans. There are actions that dairies can take to reduce dust, but they often do not take them. The Yakima Regional Clean Air Agency does nothing to address air pollution form dairies.*

For these reasons, we the undersigned, ask the Yakima County Commissioners to:

- *Estimate the cost to taxpayers for maintenance of rural county roads that experience heavy use by dairy trucks and heavy equipment.*
- *Assess whether users that damage the roads adequately compensate the county.*
- *Provide a hotline so people in the LYV can report manure spills to people who can compel quick clean up.*
- *Encourage Ecology and WSDA to enforce the anti-spill provisions of Nutrient Management Plans.*
- *Require the Yakima Health District to actively address the problem of flies from dairies.*
- *Require the Yakima Regional Clean Air Agency to respond to citizen complaints; to follow their own guidelines for complaint investigation, measure air quality near dairies, and appropriately issue citations.*

The YRCAA response was defensive and self-serving, with no acknowledgement of specific requests and no promise of relief. See Attachments T, U, & V.

Parts of Washington State where Ecology manages air quality.



From https://ecology.wa.gov/About-us/Our-role-in-the-community/Partnerships-committees/Clean-air-agencies

Air quality in large parts of Eastern Washington is managed by the WA State Department of Ecology.

Ecology's Easter Regional Office manages air in Ferry, Stevens, Pend Oreille, Lincoln, Grant, Adams, Whitman, Franklin, Walla Walla, Columbia, Garfield and Asotin Counties.

Ecology's Central Regional Office manages air in Okanogan, Chelan, Douglas, Kittitas, and Klickitat Counties.

See the chart below for Clean Air Agency Demographics

Clean Air Agency	# Counties	Total Pop.	Land Area in sq. mi.	Employees	People per FTE	Sq. Mi. per FTE	People per Sq. Mi.
NW CAA	Whatcom, Skagit, Island, San Juan = 4	446,087	4,220	24	18,587	176	105.7
Puget Sound CAA	Snohomish, King, Pierce = 3	3,871,323	5,766	25	154,853	231	671.4
Olympic CAA	Clallam, Jefferson, Grays Harbor, Mason, Thurston, Pacific = 6	541,946	8,058	16	33,872	504	67.3
SW CAA	Lewis, Wahkiakum, Clark, Skamania = 4	674,196	6,091	17	39,659	358	110.7
Yakima CAA	Yakima = 1	249,697	4,295	10	24,970	430	58.1
Benton CAA	Benton = 1	197,518	1,700	4	49,360	425	116.2
Spokane CAA	Spokane = 1	505,505	1,764	21	24,072	84	286.6

Thank you for considering our request that Yakima County dissolve the Yakima Regional Clean Air Agency and ask the WA State Dept. of Ecology to manage air quality in Yakima County.

Sincerely,

The Friends of Toppenish Creek & Others

Attachments

A: WSU Dairy Workshop – Les Ornelas Statements

B: Citizen Testimony at YRCAA Board Meetings

C: Descriptive Analysis of YRCAA response to citizen complaints

D: Public Comments on Air Quality Management Program Pilot Project (begin on page 24)

E: FOTC Ammonia study in the LYV

F: Literature review of health impacts from spraying manure commissioned by the WA Dairy Commission

G: FOTC response to Dairy Commission Literature Review

H: Letter to Ecology Director Bellon, January 2019

I: Letter to Ecology Director Bellon, March 2019

J: Timeline of YRCAA actions to address air pollution

K: Partial list of misinterpreted rules and regulations

L: Dr. Steve Jones statement on environmental justice

M: WA State County Emissions Inventory 2011

N: WA State County Emissions Inventory 2017

O: Agency's statement on composting dead cows

P: WSU study of air emissions from a LYV dairy for the National Air Emissions Monitoring Study (NAEMS)

Q: Yakima Air Winter Nitrate Study

R: Research related to health impacts from CAFOs

S: FOTC description of ammonia emissions in WA State 2016

T: Letter and petition from neighbors of Riverview Dairy

U: YRCAA reply to Riverview petition

V: FOTC response to YRCAA reply re Riverview

W: YRCAA Fact Sheet for New Source Review (NSR)

Washington State Pollution Control Hearings Board

PCHB No. 19-060

Friends of Toppenish Creek versus Washington State Department of Ecology and the Lower Yakima Valley Groundwater Management Area Advisory Committee

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Friends of Toppenish Creek Petition for Reconsideration

Table of Contents

I. Introduction

On March 19, 2021 the WA State Pollution Control Hearings Board (PCHB) ruled against the Friends of Toppenish Creek (FOTC) on all issues in PCHB Case No. 19-060. This is a petition for reconsideration of that ruling, authorized by WAC 371-080-550.

Although the issues are complex, FOTC will focus this request on two main problems with the PCHB decision. We believe the PCHB would have ruled differently with better information. We apologize for our ineptitude in presenting evidence to the board in September 2020.

The two issues we will pursue are:

1. In September 2020, after 14 months, and again in March 2020, after 18 months, the LYV GWMA Implementation Executive Committee had not fulfilled the three conditions for certification in Ecology's July 2019 Letter of Certification. *Ex. 1*
2. Ecology's expert witness, David Bowen, mis-informed and mis-led the PCHB when he defended a decision by unnamed persons to ignore nitrogen leaching from Underground Injection Control Wells (UICs), Bio-solids, and Municipal or Industrial Wastewater. *Ex. 2.* Because the PCHB trusted Mr. Bowen's testimony to be honest, the PCHB ruled against FOTC on Issue 4 in summary judgement on April 7, 2020. *Ex. 2.* This led to exclusion of evidence regarding a. the accuracy of GWMA research, and b. a comprehensive review of all nitrate sources during the September 2020 hearing.

II. Issue I

Has the LYV GWMA Implementation Executive Team followed through on Ecology's three requirements for LYV GWMA Program certification?

Facts & Arguments:

A. The Certification Letter, *Ex. 1,* required the Executive Team to name a lead entity and develop a Scope of Work to implement the goals and recommendations of the LYV GWMA Program.

The Executive Team met twice in 2019 and has not met since then. *Bowen testimony.* The South Yakima Conservation District (SYCD) agreed to serve as the lead entity for implementation. *Bowen testimony; Ex. 2.* SYCD is a small agency, currently with a staff of one plus clerical support. *Ex. 4, Mendoza Declaration.* It is impossible for one man to perform all his usual duties for the SYCD and also lead the Executive Team. To date there is no published Scope of Work.

B. The Certification Letter, *Ex. 1,* required the Executive Team to submit a prioritized implementation schedule to Ecology on or before May 31, 2020.

According to Ecology testimony at the September 2020 PCHB hearing, *Bowen testimony,* this has not been accomplished. Emails obtained by public records requests suggest that the SYCD created an informal priority list that was not approved by the Implementation Executive team, because that group had ceased meeting. That list omits provision of safe drinking water to impacted residents. *Exhibit 5, page 2/9.*

C. The Certification Letter, *Ex. 1,* required the Executive Team to seek funding and provide safe drinking water to the people in the LYV whose wells have nitrate levels above safety standards.

The Executive Implementation Team has not delivered safe drinking water to impacted LYV residents. According to David Bowen, *Bowen testimony,* he was working on this problem in September 2020. Mr. Bowen has since moved on to another division at Ecology. This is alarming since Ecology has known about unsafe drinking water since 2002 and the LYV GWMA had a stated goal of providing safe drinking water eight years ago in 2012 when meetings began. Danger to public health was the prime motivation for creation of a GWMA in 2012, and this goal has been steadily and continuously ignored by officials. Why do they disdain us so much?

III. Issue

Did Ecology's David Bowen mislead the PCHB when he testified that, "Municipal and industrial wastewater discharges, which are regulated by NPDES permits that require compliance with water quality standards, were not considered a significant source. Similarly, land application of biosolids and underground injection wells (UICs) must comply with water quality standards. Thus, these sources were also considered unlikely to be significant contributors to nitrates in groundwater."

FOTC postulates that this misinformation caused the PCHB to rule, "The Board concludes that as a matter of law, the Program has sufficiently identified and analyzed the sources of nitrate in the groundwater. As a result, Ecology is entitled to summary judgment as a non-moving party and Issue 4 is dismissed."

The Law

According to RCW 9A.72.010 (1) "Materially false statement" means any false statement oral or written, regardless of its admissibility under the rules of evidence, which could have affected the course or outcome of the proceeding.

Facts & Arguments

1. Mr. Bowen mis-informed in his Declaration in Support of Cross Motion for Summary Judgement *Exhibit 3,* when he said that "The (LYV GWMA Advisory) Committee met approximately 120 times over the course of 7 years." In fact, the GWAC only met 62 times over the course of 7 years. *Ex. 4, Mendoza Declaration*
2. In. 2015, the WSDA signed an agreement with Yakima County to deliver a Nitrogen Loading Assessment (NLA) for the LYV according to an agreed upon Scope of Work. *Ex. 5, page 458/1803.* According to WSDA, "The Nitrogen Loading Assessment is a mass-balance model." *Ex. 5, page 460/1803*
3. The WSDA and Yakima County did not deliver an NLA. Instead, the agencies delivered a Nitrogen Availability Assessment (NAA) that a. was not a mass balance study, and b. did not evaluate the following sources of nitrogen contamination of the groundwater – compost operations, municipal wastewater treatment plants, industrial wastewater treatment operations, application of biosolids to cropland, underground injection wells, abandoned wells, runoff from agricultural operations, stormwater runoff, and accidental spills/cleanups. *Ex. 6, Nitrogen Availability Assessment*

4. The LYV GWMA Advisory Committee (GWAC) never approved the NAA due to concerns about the accuracy of the data. *Ex. 4, Mendoza Declaration*

5. Although the technical committee may or may not have decided to remove these sources from consideration, the technical committee never informed the GWAC of this plan. Ecology has provided no documentation of discussions within the technical committee regarding this decision. *Ex. 4, Mendoza Declaration*

6. Yakima County promised the GWAC in public meetings that there would be an assessment of nitrates from bio-solids. The county did not follow through on this promise. Here are excerpts from GWAC Meeting Summaries.

    a. April 20, 2017: *Vern (Vern Redifer, Director of Public Services for Yakima County) added that Peter Severtsen of the Department of Ecology is preparing a separate analysis of bio-solids for the NAA because none had been included earlier.*

    b. May 18, 2017: *The group had learned through the comments made by members that biosolids and land application of wastewater (that has nitrogen loading) had not been included in the Nitrogen Availability Assessment (NAA). The Department of Ecology is working on a biosolid piece and the Port of Sunnyside is working on land application of wastewater piece for inclusion in the NAA.*

    c. November 2, 2017: *Vern stated that an analysis of biosolids would be included in the next draft of the NAA. The lack of analysis on compost was also raised. Gary (Gary*

Bahr, WSDA representative to the GWMA and NAA author) stated that this was being looked into by WSDA.

7. A 2012 EPA estimate of nitrogen sources in Yakima County found that application of biosolids to cropland, almost entirely within the LYV, resulted in an average of 186,423 lbs. of nitrogen to the land surface every year from 2005 to 2009 with a maximum of 419,174 lbs. in 2007. *Exhibit 7, page 14.*

Table 3: Amount of Biosolids Utilized in Yakima County

	2005	2006	2007	2008	2009
Total Lbs Nitrogen/year applied	58,305	105,669	419,174	175,300	173,667
# acres biosolids applied	346	831	2994	1982	1381
# fields biosolids applied	11	28	63	41	59

8. Mr. Bowen stated in his Declaration in Support of Cross Motion for Summary Judgement, "Municipal and industrial wastewater discharges, which are regulated by NPDES permits that require compliance with water quality standards, were not considered a significant source."

9. There are monitoring wells on LYV dairies that have NPDES permits, with nitrate readings over ten times the safety standard of 10 mg/L. *Exhibit 10, pages 3/13 & 12/13.* Possession of an NPDES permit does not ensure that no leaching takes place.

10. The Port of Sunnyside has an NPDES permit. Port of Sunnyside reports show high levels of nitrates in groundwater monitoring wells beneath that facility. David Bowen was aware of these readings. He signed the Port of Sunnyside NPDES permit in 2019. *Ex. 8*

a. The Port of Sunnyside is authorized to apply wastewater to 398 acres of land via spray irrigation. *Exhibit 8, page 9/61*

b. The Port of Sunnyside is authorized to apply up to 432 lbs. of nitrogen per acre per year or a total of 172,000 lbs. of nitrogen per year. *Exhibit 8, page 10/61*

c. From 2008 to 2013 Port of Sunnyside mid-field monitoring well 7 had a mean nitrate concentration of 18.4 mg/L with a maximum reading of 38.7 mg/L. *Exhibit 9, page 26/69*

d. From 2008 to 2013 Port of Sunnyside mid-field monitoring well 8 had a mean nitrate concentration of 34.1 mg/L with a maximum reading of 176 mg/L. *Exhibit 9, page 26/69*

e. According to Ecology's Water Quality PARIS data base, there have been 30 enforcement actions against the Port of Sunnyside since 2015.

11. The LYV GWMA Program lists the following sources of nitrogen as potentially available for transport to groundwater:

Table 4 – Estimated nitrogen available per acre from all sources at the low, medium, and high ranges

Source		Area (acres)	Low Scenario (lb/ac/yr)	Medium Scenario (lb/ac/yr)	High Scenario (lb/ac/yr)
Irrigated Agriculture		85,775	0-58	0-148	0-284
CAFO	Pens	2,096	67	480	892
	Lagoons	210	1,354	7,448	13,542
RCIM	Residential On-site sewage	398	223	403	662
	Large On-site sewage	3	195	209	225
	Commercial On-site sewage	30	163	173	183
	Residential fertilizer	4,381	4.7	11.7	18.6
	Small scale farms	2,096	4.3	10.7	17.1
Atmospheric deposition		87,082	1.53	2.05	6.15

This estimates Residential Fertilizer application at 20,000 to 84,000 lbs. nitrogen per year, and Small-Scale Farms application at 8,000 to 36,000 lbs. nitrogen per year.

12. The LYV GWMA Program included residential fertilizer and small-scale farms as significant sources but excluded biosolids and wastewater treatment spray fields, both with higher annual applications of nitrate. This does not make sense.

13. Ecology was aware of a clean-up action plan at the Bee-Jay Scales site in Sunnyside, under Washington's Model Toxics Control Act Regulations. *Exhibit 11.* Ecology never brought this spill to the attention of the GWAC. Spills and hazardous waste sites were not assessed in the LYV GWMA Program or in the GWMA NAA, as recommended by WAC 173-100-100 (2).

14. NPDES permits do not prohibit the discharge of nitrates to groundwater. NPDES permits simply regulate how much nitrate can be discharged. There are NPDES permits for food processing and other commercial operations in the LYV that authorize discharge of nitrogen and other pollutants. According to Ecology's Water Quality Permitting and Reporting Information System some of these businesses are: Con Ag Packing & Storage, Windy Point Packing Co., the USDA Research Station, Del Monte Plant 122, and the City of Grandview POTW. *Ex. 4 Mendoza Declaration*

15. The NAA simply did not address leaching from abandoned wells as recommended by WAC 173-100-100 (2), even though Ecology's expert on abandoned wells, Avery Richardson, spoke with three of the GWMA Work Groups – RCIM, Regulatory and EPO; and the

GWMA organized a meeting specifically to address abandoned wells. *Ex. 4, Mendoza Declaration*

IV. Conclusion

The Friends of Toppenish Creek make this petition to the WA State Pollution Control Hearings Board on behalf of the people who live in the Lower Yakima Valley. For the most part we are honest hardworking citizens and immigrant workers who do our best to survive amid agricultural chemicals and pollution. Safe drinking water is essential for our survival and we look to state and local government to protect this resource.

If our nation's enemies want to learn how to destroy faith in government, they can take lessons from the LYV GWMA. Ten years ago, agencies told the public that the GWMA would address problems with communication, egregious pollution, and unsafe drinking water. The GWMA failed to do so but officials will not admit this.

Despite vague promises, and after ten years, there is still no government program to provide safe drinking water. Even worse, as we have shown in this petition, the WA State Dept. of Ecology and others downplay the problem and do not acknowledge or address the real and imminent danger to people's health.

PCHB Case No. 19-060 gives the PCHB an opportunity to defend honesty in government. Please do so, for the people who live in Washington State today and for the children to come.

Respectfully submitted this 27th day of March 2021.

s/ Jean Mendoza

Jean Mendoza

Executive Director Friends of Toppenish Creek
3142 Signal Peak Road
White Swan, WA 98952

CERTIFICATE OF SERVICE

I hereby certify that on the 27th day of March 2021, I served one true and correct copy of the foregoing on the following individuals using e-mail, as stipulated by the parties in the above-captioned matter:

Washington Department of Ecology
Thomas J. Young Assistant Attorney General Ecology Division
P.O. Box 40117
Olympia, WA 98504-0117
Email: Thomas.young@atg.wa.gov
donna.fredricks@atg.wa.gov

Ladon Linde
Yakima County Commission
129 N. Second St.
Yakima WA, 98901
Email: ladon.linde@co.yakima.wa.us

s/ Jean Mendoza

Jean Mendoza
Executive Director Friends of Toppenish Creek
3142 Signal Peak Road
White Swan, WA 98952

Exhibits

Exhibit 1. Ecology Letter Certifying the LYV GWMA Program, July 29, 2019. Available at DOE-Certification-Letter (yakimacounty.us)

Exhibit 2. PCHB Ruling on Motion for Summary Judgement. Attached

Exhibit 3. Declaration of David Bowen in Support of Ecology's Cross Motion for Summary Judgement, January 29, 2020. Attached

Exhibit 4. Mendoza Declaration, March 26, 2021. Attached

Exhibit 5. LYV GWMA Program, Volume IV, Available at GWMA Volume IV - Member Contributions (yakimacounty.us)

Exhibit 6. LYV GWMA Nitrogen Availability Assessment, June 2018, Available at Nitrogen Availability Assessment | Yakima County, WA

Exhibit 7. EPA Nitrogen Screening Analysis, June 2012. Attached

Exhibit 8. Port of Sunnyside NPDES permit. Attached

Exhibit 9. Port of Sunnyside Fact Sheet. Attached

Exhibit 10. EPA Yakima Dairies Consent Order Update – 2014. Available at https://www.epa.gov/sites/production/files/2017-12/documents/lower-yakima-valley-groundwater-fact-sheet-december-2014.pdf

Exhibit 11. Bee Jay Scales Clean Up Action Plan. March 8, 2013. Attached.