

**Analysis of Regulatory Statutes, Voluntary Incentives and Regulatory Assistance Programs
Lower Yakima Valley (LYV) Groundwater Management Area (GWMA) Regulatory Work
Group – August, 2016**

Regulatory Framework Purpose Statement:

To educate the Groundwater Advisory Committee (GWAC) on the existing regulations, policies and guidelines in regards to all uses and sources of nitrates in the Groundwater Management Area (GWMA). To determine the level of compliance of all regulations, policies and guidelines through contact with the agencies that have regulatory authority and educate the GWAC on the levels of compliance. Identify overlaps and alternative management strategies in current regulatory and non-regulatory strategies and programs that will support GWMA goals.

1. The Environmental Protection Agency (EPA) under the Safe Drinking Water Act (SDWA) addresses groundwater (From Feb. 19, 2015 presentation)

- Monitored – Monitoring takes place after a complaint is filed and accepted
- Enforced – Can engage in enforcement actions under section 1431 of the SDWA. See EPA Emergency Enforcement under Section 1431 of the SDWA at <https://www.epa.gov/foia/region-4-virtual-reading-room-section-1431-safe-drinking-water-act-42-usc-section-300i>
- Measured – May require water monitoring pursuant to court orders
- Effectiveness – Effective in individual cases.
- Potential changes

2. EPA under the Clean Water Act (CWA) addresses surface water (From Feb. 19, 2015 presentation)

- Monitored – EPA sets standards and requires states to meet the standards.
- Enforced – National Pollution Discharge Elimination System (NPDES) permitting is the backbone for implementation of the CWA. NPDES applies mostly to point sources (NPS). The CWA was amended to include NPS. The NPS is primarily incentive based (319 Funds).
- Measured – Mandated state reporting
- Effectiveness – U.S. General Accounting Office (GAO) says “Changes Needed If Key EPA Program Is to Help Fulfill the Nation’s Water Quality Goals” <http://www.gao.gov/assets/660/659496.pdf>
- Potential changes – Ongoing litigation – Clean Water Rule Litigation Statement. <https://www.epa.gov/cleanwaterrule/clean-water-rule-litigation-statement>

3. The Washington State Department of Ecology (Ecology) under RCW 90.48 Water Pollution Control and WAC 173 – 200. WA Department of Health (DOH) under RCW 43.20. (From Feb. 19, 2015 presentation)

<http://apps.leg.wa.gov/rcw/default.aspx?cite=90.48>

<http://app.leg.wa.gov/wac/default.aspx?cite=173-200>

<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.20&full=true>

- Monitored – State is responsible for well head protection, groundwater and surface water. State monitors municipal water supplies but not private wells.
- Enforced – DOH enforces a mandate for potable water in Group A systems. Group B systems are regulated by local health districts.*
- Measured – Testing is required for Type A and Type B water systems. Private well testing is the responsibility of well owners. There is a state program for testing surface waters but nitrates are not high on the list of priorities.
- Effectiveness – Achieves safe drinking water for municipalities. Ecology administers the Drinking Water State Revolving Fund (DWSRF), Centennial Funds and 319 Funds for Non-point sources.
- Potential changes – Subject to changes and revisions in the CWA and SDWA.

4a. Ecology discharge permitting under WAC 173- 216 (From Sept. 19, 2015 presentation)

<http://app.leg.wa.gov/wac/default.aspx?cite=173-21>

- Monitored – Yes, when a permit is in place
- Enforced - Yes
- Measured - Yes
- Effectiveness – Full coverage for boatyards, bridge & ferry terminals, fresh fruit packing, sand & gravel, stormwater, upland fin-fish, water treatment plants and wineries
<http://www.ecy.wa.gov/programs/wq/permits/genpermits.html>
- Potential changes – Ongoing discussion regarding WA State General Permit for CAFOs
<http://www.ecy.wa.gov/programs/wq/permits/cafo/index.html>

* “Group A public water system” means a public water system with fifteen or more service connections, regardless of the number of people; or a system serving an average of twenty-five or more people per day for sixty or more days within a calendar year, regardless of the number of service connections; or a system serving one thousand or more people for two or more consecutive days. "Group B public water system" means a public water system that does not meet the definition of a group A public water system. RCW 70.119A.020

4b. Ecology Non-Point Source Pollution (from Sept. 19, 2015 presentation)

- Monitored – Difficult
- Enforced – voluntary measures. See Washington’s Water Quality Management Plan to Control Non-Point Source Pollution
<https://fortress.wa.gov/ecy/publications/documents/1510015.pdf>
- Measured – through Total Maximum Daily Load (TMDL) studies. Return flows are highly monitored here since the Lower Yakima River is on the 303(d) list of impaired streams
- Effectiveness – Difficult
- Potential changes – Probably need additional forms of NPS groundwater monitoring

5. Natural Resources Conservation Service (NRCS) (From April 23, 2015 presentation)

- Monitored – Ongoing assessment of state resources. See 2012 National Resources Inventory: <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/nri/>
- Enforced – NRCS is non-regulatory. Only investigate funded activities. Guidelines from Washington State Field Office Technical Guide (FOTG) are only required for producers who are under contract to NRCS. <https://efotg.sc.egov.usda.gov/treemenuFS.aspx> Growers and producers must meet criteria for cost sharing.
- Measured – Must meet conservation requirements for funding. Compliance only for the duration of the project. Standards were not designed to be regulatory. NRCS only reviews funded activities. NRCS guidelines are applicable to dairies as referenced in RCW 90.64.
- Effectiveness – Offers voluntary assistance to eligible landowners to provide financial and technical assistance to help manage natural resources in a sustainable manner. Agricultural Management Assistance (AMA), Conservation Resources Program (CRP) and Environmental Quality Incentives Program (EQIP). WA Field Office Technical Guide (FOTG) provides current recommendations. All recipients of federal funds must have their projects undergo an Environmental Review (ER) under the National Environmental Policy Act (NEPA). NRCS performs assessments on all past practices and standards to determine efficacy. Ecology funded projects on Sulfur Creek and the Granger Drain are examples of successful voluntary programs. No cost share data for Yakima County. Nutrient Management acres = 500 in 2013 and 65 in 2014. FOTG practices are reviewed every five years
- Potential changes – Subject to Funding. Based on NRCS State Resource Assessment 2012: Priority Resource Concerns Washington State. Available on the NRCS website at <https://www.nrcs.usda.gov/wps/portal/nrcs/site/wa/home/>

6. South Yakima Conservation District (SYCD) (From June 10, 2015 presentation)

- Monitored – Participates in specific monitoring projects. Monitoring depends on the funding source. There is screening criteria prior to approval. If specifications are met SYCD assumes that goals are met. Technical assistance is provided (financial when able) to farmers to provide Best Management Practice (BMP) implementation to protect natural resources.
- Enforced – Conservation Districts are stand alone, non-regulatory agencies. Cooperates with other agencies and acts through cost sharing methodology.
- Measured – Reporting from individual dairies per Nutrient Management Plans (NMPs). SYCD reviews records, discusses and makes changes to update NMPs but does not retain them.
- Effectiveness – Reviews and certifies dairy nutrient management plans. No enforcement. SYCD believes that NMPs are effective if followed. Most of SYCD staff time is spent on dairy management. SYCD provides technical and financial assistance when able to farmers to provide BMP implementation on soil and water resource protection.
- Potential changes

7. Washington State Department of Agriculture Dairy Nutrient Management Program (WSDA DNMP) (From June 10, 2015 & Aug. 12, 2015 presentations)

- Monitored – Scope – WSDA conducts routine and investigative inspections of all dairies to survey for discharges to waters of the state and monitor implementation of NMP. DNMP reviews land application recordkeeping (including soil tests and nutrient budgets). DNMP collects and analyzes information that is reviewed during inspections. See *Implementation of nutrient management training program for farmers* (2016) and *Dairy Nutrient Management Program Regulatory Framework Workgroup August 12, 2015 and Dairy Nutrient Management Program for GWMA* (2014)
- Enforced – Authority - Dairies are required to have nutrient management plans but there is not a regulatory requirement to follow them. The NMP is an important tool for the dairy producers. And although the NMP is not enforceable, it is important to remember that the inspection reports are. During the inspections, the elements in the nutrient management plan are evaluated for implementation (collection, conveyance and storage of manure and all records related to land application of all nitrogen sources including manure, compost and commercial fertilizer). If an issue is identified during the inspection process, DNMP does have enforcement options including informal (warning and notices of corrections) and formal (civil penalty).
- Measured – Dairies are inspected every 18 – 22 months, at a minimum. When issues are identified, the dairy is inspected more frequently. Dairies are required to keep records of

soil testing, nutrient testing, application and export. These records are kept on dairy premises and not with the agencies.

- Effectiveness – Improving
- Potential changes – WSDA has recommendations for regulatory changes. Please refer to Regulatory Work Group Meeting Summaries from June 10, 2014 & August 12, 2015

8. Composting of agricultural wastes (From Sept. 9, 2015 presentation)

- Monitored – None noted
- Enforced – There are requirements under WAC 173-350-220. There is no evidence of enforcement in Yakima County
- Measured - There are requirements under WAC 173-350-220. There is no evidence of enforcement in Yakima County
- Effectiveness - No
- Potential changes

9. National Pollution Discharge Elimination System (NPDES) Permitting under Ecology (From Sept. 9, 2015 presentation)

- Monitored - Yes
- Enforced - Yes
- Measured - Yes
- Effectiveness – Yes when permits are in place. There are general permits for boatyards, bridge & ferry terminals, concentrated animal feeding operations (CAFOs), fresh fruit packing, sand & gravel, storm water runoff, fin fish operations, vessel deconstruction, wineries and water treatment plants. See <http://www.ecy.wa.gov/programs/wq/permits/genpermits.html>
- Potential changes – New NPDES policy for CAFOs scheduled for implementation in March, 2017.

10. Biosolids under Ecology and Yakima Health District (YHD) (From Sept. 9, 2015 presentation)

- Monitored – Yes
- Enforced - Yes
- Measured - Yes

- Effectiveness – Effective when growers and Ecology work together. There have been some disconnects and people are working on this.
- Potential changes

11. Yakima County (from Oct. 14, 2015 & Nov. 18, 2015 presentations)

- Monitored – Does not monitor nitrogen balance in the county
- Enforced – Zoning and Code Enforcement to prevent inappropriate land use. Protection for critical access areas.
- Measured – Yes. The county can give a conditional use permit a determination of significance (DS), determination of non-significance (DNS) or a mitigated determination of non-significance (MDNS). The DS can occasionally lead to an Environmental Impact Statement (EIS) under the State Environmental Protection Act (SEPA)
- Effectiveness – Data for compliance with current codes only. No data for nitrogen balance.
- Potential changes – Implementation of the Voluntary Stewardship Program. There are ongoing updates to the County Comprehensive Plan in compliance with the Growth Management Act (GMA).

12. Atmospheric Deposition

- Monitored – No
- Enforced – There are air quality laws in place for facilities that emit certain levels of toxic pollutants. Chapter 173-460 WAC Controls for New Sources of Toxic Air Pollutants (TAPs). <http://apps.leg.wa.gov/WAC/default.aspx?cite=173-460&full=true>
- Measured - No
- Effectiveness – Unable to assess, insufficient data
- Potential changes

13. Irrigation Districts (from March 9, 2016 presentation)

- Monitored – For water quantity and at times for coliform bacteria
- Enforced – Irrigation Districts have no regulatory authority. They create policy and require members to comply.
- Measured – There is testing for temperature, turbidity and bacteria
- Effectiveness – Has been effective in reducing turbidity in the drains
- Potential changes

14. Yakama Nation (From March 9, 2016 presentation)

- Monitored – Quantity only
- Enforced – the Yakama Nation is accountable to the Bureau of Indian Affairs (BIA) and numerous federal agencies regarding air and water quality
- Measured – Studies on water quantity and flow
- Effectiveness – Success in Toppenish Creek and within the Yakima Integrated Plan (YIP)
- Potential changes – Greatest concerns are needs of the people, followed by the water and fish. See Yakama Nation Statement on Climate Change
https://www.researchgate.net/publication/260990050_Climate_change_and_Yakama_Nation_tribal_well-being

15. WSDA – Chemigation & Fertigation (From April 13, 2016 presentation)

- monitored – For compliance with licensing and policy
- enforced - Yes
- measured - Yes
- effectiveness - Yes
- potential changes -

Acronyms

AMA - Agricultural Management Assistance

BIA – Bureau of Indian Affairs

BMP – Best Management Practice

CAFO – Concentrated Animal Feeding Operations

CRP - Conservation Resources Program

CWA – Clean Water Act

DNMP – Dairy Nutrient Management Program

DNS – Determination of Non-Significance

DOH – Department of Health

DWSRF – Drinking Water State Revolving Fund

DS – Determination of Significance

Ecology – Washington State Department of Ecology

EIS – Environmental Impact Statement

EPA – Environmental Protection Agency

EQUIP - Environmental Quality Incentives Program

ER – Environmental Review

FOTG – Field Operations Technical Guide

GAO – General Accounting Office

GMA – Growth Management Act

GWMA – Groundwater Management Area

GWAC – Groundwater Advisory Committee

MDNS – Mitigated Determination of Non-Significance

NEPA – National Environmental Policy Act

NMP – Nutrient Management Plan

NPDES – National Pollutant Discharge Elimination System

NPS – Non-Point Source

RCW – Revised Code of Washington

SDWA – Safe Drinking Water Act

SEPA – State Environmental Policy Act

SYCD – South Yakima Conservation District

TAP – Toxic Air Pollutants

TMDL – Total Maximum Daily Load

VSP – Voluntary Stewardship Program

WAC – Washington Administrative Code

WSDA – Washington State Department of Agriculture

YIP – Yakima Integrated Plan

YHD – Yakima Health District

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