

# **APPENDIX C: RESPONSE TO COMMENTS**

ON THE CONCENTRATED ANIMAL FEEDING OPERATION GENERAL  
PERMITS NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
AND STATE WASTE DISCHARGE GENERAL PERMITS

**DECEMBER 2022**



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## ADA Accessibility

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For document translation services, call Water Quality Reception at 360-407-6600. Por publicaciones en español, por favor llame Water Quality Reception al 360-407-6600.

## Summary of Permit Development

The Washington Department of Ecology (Ecology) issues this Response to Comments (RTC) as the Appendix to the June 2022 Fact Sheet that accompanied the formal draft of the National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge Concentrated Animal Feeding Operation (CAFO) General Permits.

The permits provide coverage for medium and large-scale operations that confine livestock for long periods of time in pens or barns and discharge pollution to surface or groundwater.

We began the reissuance process with informal listening sessions in January 2021. In June 2021, the Washington State Court of Appeals issued their [decision on the CAFO General Permit appeal](#).<sup>2</sup> The court affirmed part and reversed part of the October 2018 decision by the [Pollution Control Hearings Board](#)<sup>3</sup> (PCHB). The permits were remanded to Ecology for rewriting to make them consistent with the court's decisions. Because the court's decision required significant changes, we revised our reissuance schedule and held a second round of public listening sessions in Fall 2021. We accepted [written comments via our online comment form](#)<sup>4</sup> during the second round of public listening sessions.

Ecology accepted public comments on the draft permits from June 22, 2022, through August 17, 2022. We held public workshops and hearings via an online webinar on July 26, 2022, and July 28, 2022. Ecology received written and emailed comments during the public comment period. A summary of the comments and Ecology's responses are included in this Appendix to

<sup>1</sup> <https://ecology.wa.gov/accessibility>

<sup>2</sup> <https://www.courts.wa.gov/opinions/index.cfm?fa=opinions.showOpinion&filename=529521MAJ>

<sup>3</sup> <https://elaho.wa.gov/search/decision> (search for case no. P17-016c)

<sup>4</sup> <http://wq.ecology.commentinput.com/comment/extra?id=AmHth>

the June 2022 Fact Sheet. The full text of comments received are available for viewing on our [online comments form](https://wq.ecology.commentinput.com/comment/extra?id=5gTtQ)<sup>5</sup>.

After receiving, reviewing, and responding to public comments on the June 2022 draft permits, we are issuing the final, updated CAFO general permits.

## Organization of This Document

The table of contents lists the topics for which Ecology received comments. After the summary of permit development, the Response to Comments is divided into three parts:

- Part I: Contains the summary of comments and responses to comments on policy and process issues.
- Part II: Contains the summary of comments and responses to comments on specific permit sections.
- Part III: Contains the index that lists the name of each commenter and the submission code assigned by the comment database when originally submitted. The person who signed the comment letter (or email) is also listed. Submission codes are used to identify commenters in Parts I and II.

## Part I – General Comments and Process

### State Environmental Policy Act Compliance (SEPA)

The SEPA checklist did not provide sufficient information to make a determination.

**Commenters: I-193, I-357**

#### **Summarized Comments:**

- The determination of nonsignificance was based on incomplete information in the checklist.
- The checklist and Fact Sheet did not include an analysis of how climate change exacerbates the impact of CAFO discharges on the environment.
- Ecology did not consult with Tribes and other agencies when preparing the determination.

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<sup>5</sup> <https://wq.ecology.commentinput.com/comment/extra?id=5gTtQ>

**Ecology's Response:**

In non-project actions, the supplemental in Section D of the SEPA Checklist template is meant to support the decision maker because specific information on all possible locations where a facility might be sited is not available, including site-specific information on the public resources that may be impacted. We also cannot reasonably know all of facility management types and how they impact the environment. General permits thus require that this information comes at the SEPA review process when an individual facility is first sited or significantly expands its operation. Ecology can issue site-specific SEPA determinations for individual permit coverages.

In preparing the checklist, Ecology consulted with experts across the Agency. See the Permit Fact Sheet pp 24-25 for additional material used in the determination. External feedback was sought during the public comment period.

**Ecology should prepare an Environmental Impact Statement**

**Commenters:** I-117, I-237, I-357, O-26, O-4, O-8

**Summarized Comments:**

- The general permit is likely to significantly impact natural resources
- Significant impacts require the Agency to prepare an Environmental Impact Statement
- Environmental Impact Statements should be filled out by scientists, not Potential Polluting Parties

**Ecology's Response:**

Ecology disagrees there are probable significant impacts from issuing the CAFO general permits. The CAFO general permits do not propose to allow new discharges of waste to surface or groundwater. The goal of the CAFO general permits is to prevent the discharge of pollutants, which preserves water quality. The threshold for a determination of significance is the "reasonable likelihood" (not some distant possibility or anomalous circumstance) of a "more than moderately adverse" impact on environmental quality. Ecology does not believe CAFO management conducted in compliance with the permits results is exceeding that threshold, and accordingly does not require an Environmental Impact Statement.

Owners or operators proposing to build new or expand existing facilities must participate in the SEPA process. If, at the individual project-level, there are probable significant impacts, the lead agency would request the preparation of an environmental impact statement.

## **The permits do not consider the impacts of climate change**

**Commenters: I-13, I-14, I-17, I-18, I-22, I-273, I-337, I-349, O-10, O-15, O-29, O-30**

### **Summarized Comments:**

- When authorizing discharges from CAFOs, Ecology did not consider the impacts of climate change.
- Ecology failed to create a permit that is adaptive in the face of disrupted weather and water cycles.
- The draft permits do not address the possible increases in stormwater runoff and algal blooms.
- To effectively consider the impacts of climate change on CAFOs and future permitting requirements, Ecology should produce a supplemental report outlining how the new draft permits consider the effects of climate change and implement measures to mitigate them.

### **Ecology's Response:**

The permits are written as performance standards, such that a CAFO must respond and adapt to changes in weather patterns. The Permittees are required to demonstrate they have adequate storage capacity for the entire storage period. They must consider realistic estimates of precipitation amounts, which includes the impact climate change has on the frequency and intensity of storm events. Special condition S4.P requires permittees to develop emergency procedures. The procedures are an area where the permittee addresses the changing climate and prepares the CAFO for extreme weather events. Land application procedures in special condition S4.N permit CAFOs to make changes to their crop plans, such as using new climate adapted cultivars, so long as the supply and demand of nitrogen and phosphorus is balanced in each field.

## Economic Impact Analysis

### Reduce the cost of compliance for all CAFOs

**Commenters:** I-2, O-22, OTH-4

**Summarized Comments:**

- As for the small business impact statement, Ecology should be looking for ways to reduce the cost of compliance to all CAFO's. These added costs are not a requirement under the Clean Water Act (CWA). Ecology should stick to what is required to comply with the CWA when writing this permit and not go to extremes "just to make sure" it is going to work. Substantive due process would require you to identify the harm you are trying to prevent in order to regulate, and that the regulation be proportional. Ecology has exceeded that due process standard in this current draft. Please find a balance that allows for all food production without unnecessary regulation and cost.
- I am in support of care of the effects on water with raising animals, but we must be conscious of the fees, cost etc. that farmers receive, as it just passes down to the consumer. Farmers have a hard time as it is and they do it out of the love of the job, let's not burden them with cost they cannot afford.
- The proposed rule changes will drive up costs and impose unnecessary regulatory burdens on industry and agricultural workers, which in turn will drive up food costs for people already struggling in uncertain economic times.

**Ecology's Response:**

Thank you for your comments. The Economic Impact Analysis is required by state regulation in Washington Administrative Code (WAC) 173-226-120, which directs Ecology to determine if the permit imposes disproportionate burden on small businesses, and if it does, to mitigate the disproportion to the extent that is legal and feasible.

### Scope of the Economic Impact Analysis

**Commenters:** O-22

**Summarized Comments:**

- In addition to the concerns about the new proposals, the Northwest Chicken Council has additional concerns about the formation process of the new regulations. Is the Small Business Economic Impact Analysis (SBEIA) dated April 2022 still valid? It does not appear the Economic Analysis takes into account the historically high inflation the nation is facing. The SBEIA appears to underestimate the impacts on small poultry operations, which have relatively low margins due to their size, but still will have significant costs associated with compliance.

- The analysis is flawed in the assumption that all CAFOs are already compliant with the EPA's CAFO rule and State Law Chapter 90.64 RCW as baseline. The problem is that most smaller CAFO businesses are unaware of these regulations due to lack of permitting oversight. The state is now fulfilling that permitting oversight and incorporating federal standards, making them more stringent, but only looking at the costs associated with the more stringent portions of compliance.
- For completeness, the analysis should look at full compliance with the proposed general permit, regardless of the assumed baseline. It does not appear that the analysis takes into account the labor impacts for compliance monitoring.

**Ecology's Response:**

Thank you for your comments. Ecology notes that the Permits themselves are not regulations, but rather are regulating documents that are developed according to state and federal law and regulation. Ecology did not update the Economic Impact Analysis (EIA). EIAs do not include the costs of complying with existing laws and rules (see WAC 173-226-120(4)). Permittees are required to comply with state and federal law and regulation regardless of permit coverage.

## Notice of Intent (NOI) Form or Permit Application

### Unified Business Identifier

**Commenters:** O-22

**Summarized Comments:**

- On the NOI form, what does UBI stand for?

**Ecology's Response:**

A Unified Business Identifier or UBI number is a nine-digit number that registers you with several state agencies and allows you to do business in Washington State. A UBI number is sometimes called a tax registration number, a business registration number, or a business license number.

Ecology revised the NOI form to explain the acronym.



## Reporting Requirements for the NOI

**Commenters:** I-193

**Summarized Comments:**

- It doesn't require factory farms to report on all the waste they're creating

**Ecology's Response:**

Thank you for your comment. The application form or NOI for permit coverage requires CAFOs to report the estimated maximum amount of manure, litter, organic-byproducts, process wastewater, and contaminated stormwater generated and exported in a calendar year. Additionally, in the Annual Report (Appendix B of the permits), permittees must report the actual amount generated and exported by the CAFO in the past calendar year.

## Notifying Local Water Systems

**Commenters:**A-3

**Summarized Comments:**

- Would it be possible, as part of the permit application for new facilities, to notify local water systems of their application so that the CAFOs that pose a potential contaminant source to wellhead protection areas can be inventoried as required for SWP?

**Ecology's Response:**

Applicants to the Combined Permit must publish two public notices in a newspaper with local circulation. For applicants to the State-Only permit, Ecology will work with the Department of Health to notify local water systems.

## General Comments on the Permits

### Role of Conservation Districts in Water Quality Protection

**Commenters:** B-2, I-230, I-339, I-68, O-20, OTH-4

**Summarized Comments:**

- Ecology should use voluntary conservation as a first alternative to regulation.
- We should follow agreements already in place between Ecology and Conservation Districts to provide technical assistance and financial resources to farms.

**Ecology's Response:**

Ecology agrees with the commenter that technical assistance is an important part of ensuring water quality protection. We appreciate the partnership with local Conservation Districts.

Under the Federal Clean Water Act and State Water Pollution Control Act, Ecology is responsible for establishing best management practices, monitoring, and reporting requirements through water quality permits for certain industries. The CAFO general permits provide a set of requirements for facilities that discharge pollutants to waters of the state. These permits are Ecology's expectations for how medium and large CAFOs ensure water quality is protected.

When a small animal feeding operation discharges pollutants to surface or groundwaters, we start with technical assistance and referrals to local Conservation Districts. Ecology's Nonpoint Source Program uses a combination of public education, technical assistance, financial assistance, and regulatory tools to help residents understand and comply with state and federal water quality laws and regulations that protect water quality. For more information on Ecology's Nonpoint Source Program see [Washington's Water Quality Management Plan to Control Nonpoint Source of Pollution](https://apps.ecology.wa.gov/publications/SummaryPages/1510015.html).<sup>6</sup>

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<sup>6</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/1510015.html>

## Diversify stakeholders on Advisory Committee

**Commenters:** I-224

**Summarized Comments:**

- Tribes and other non-agricultural stakeholders are underrepresented on the Committee leading to biased solutions and best management practices in favor of agriculture. Washington state must be more inclusive, such as Oklahoma in these committees as shown in their roster below.

**Ecology's Response:**

Ecology established the Agriculture and Water Quality Advisory Committee to provide an open forum for agriculture producers and environmental interest groups to meet our staff and learn about our work. They provide valuable feedback as we tackle the challenge of ensuring that working lands keep working in an environmentally friendly way. The half-day meetings are held twice a year and are open to the public. Organizations interested in becoming a member of the Advisory Committee should contact Ben Rau at [ben.rau@ecy.wa.gov](mailto:ben.rau@ecy.wa.gov) or visit the [Committee's webpage](#).<sup>7</sup>

## Establish a working group of industry stakeholders

**Commenters:** O-22

**Summarized Comments:**

- The Northwest Chicken Council asks that a working group of industry stakeholders and associated Washington State department representatives be formed to address the challenges and shortcomings in the CAFO proposals as it now stands.

**Ecology's Response:**

Thank you for this suggestion. We held a series of listening sessions on the CAFO general permits in January and October of 2021 ahead of developing these draft permits. In those sessions and beyond, we listened to and sought input from industry stakeholders and others.

For future involvement, we refer the commenter to Ecology's Agriculture and Water Quality Advisory Committee. This advisory committee provides an open forum for agriculture producers and environmental interest groups to meet our staff and learn about our work. They provide valuable feedback as we tackle the challenge of ensuring that working lands keep working in an environmentally friendly way. Please visit the [Committee's webpage](#)<sup>8</sup> for more information.

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<sup>7</sup> <https://ecology.wa.gov/About-us/Accountability-transparency/Partnerships-committees/Agriculture-and-Water-Quality-Advisory-Committee>

<sup>8</sup> <https://ecology.wa.gov/About-us/Accountability-transparency/Partnerships-committees/Agriculture-and-Water-Quality-Advisory-Committee>

## Provide accessible opportunities to engage with Ecology

**Commenters:** O-24, I-360

**Summarized Comments:**

- Ecology should do more to engage with impacted communities. Ecology's outreach goals fall short of meaningful engagement.
- In future hearings, try harder to make commenting more accessible, especially to communities that don't speak English

**Ecology's Response:**

Thank you for your comment and interest in environmental justice. Ecology is committed to serving all people in Washington and being inclusive. In this recent action, we developed a communications strategy that went beyond the standard email communications. We developed a short 2-page brief on the permits in both English and Spanish. In addition to translating our communication materials, we worked with Spanish-language media outlets to promote our comment period and public hearings. Ads were published on social media and in newspapers in the counties where most of our permitted CAFOs are located.

We also acknowledge that the [first statewide law](#)<sup>9</sup> to create a coordinated and inclusive approach to environmental justice was passed by the Washington Legislature in 2021 – in the middle of our reissuance process. [Ecology's Office of Equity and Environmental Justice](#)<sup>10</sup> was established shortly after to lead our agency strategy to reduce pollution and health disparities in communities most at risk. This Office also helps us identify governmental barriers for at-risk communities and determines how we can remove them. Through this Office, we will continue to grow our public engagement strategy in all of the agency actions and decision-making regarding CAFOs.

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<sup>9</sup> <https://app.leg.wa.gov/rcw/default.aspx?cite=70A.02>

<sup>10</sup> <https://ecology.wa.gov/About-us/Who-we-are/Our-Programs/Equity-Environmental-Justice>

## There was no public involvement before drafting the permits

### Commenters: I-341

#### Summarized Comments:

- There was no public involvement or community outreach, prior to creating these rules and although many expert resources such as the Voluntary Stewardship Program (VSP) and the Conservation Districts are available in our communities, these were not consulted either, prior to drafting these rules.

#### Ecology's Response:

In preparing the draft permits, Ecology held two public and four small group listening sessions in January and February 2021 with a total of 100 participants. We held a second round of public listening sessions and had an online comment form available in October 2021 after the Washington State Court of Appeals issued their decision on the appeal of our 2017 permits. Invitations and information on the listening sessions was circulated through our email mailing list and our [permit website](#)<sup>11</sup>.

## Defining and Implementing AKART

### Commenters: I-13, I-14, I-17, I-18, I-19, I-273, I-337, I-7, O-15, O-30

#### Summarized Comments:

- Ecology has an obligation to define "All Known, Available and Reasonable Technology" (AKART) for CAFOs, and we don't see that definition in the permit.
- I'm concerned about implementation of all known and reasonable methods of prevention, control, and treatment for existing manure lagoons and compost areas

#### Ecology's Response:

The AKART (technology-based) effluent limitations in this permit are expressed as specific pollution prevention requirements for minimizing the pollutant levels in authorized CAFO discharges. In the context of this general permit, these requirements represent AKART and the best technologically available and economically practicable and achievable controls. Ecology has determined that the combination of pollution prevention approaches and structural management practices required by these limits are the most practical and environmentally sound way to control the discharge of pollutants from CAFOs. Pollution prevention (source control of pollutants) continues to be the cornerstone of the NPDES stormwater program. Ecology has determined that Permittees in full compliance with the Concentrated Animal Feeding Operation General Permits meet the state AKART requirements in Chapter 90.48 RCW.

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<sup>11</sup> <http://www.ecology.wa.gov/cafopermit>

## Combine the permits

**Commenters:** I-224

**Summarized Comments:**

- There is no rationale for the two permit system. The two permits should be combined into one permit to prevent confusion and duplication of efforts in updating and similar activities / sections.

**Ecology's Response:**

Thank you for your comment. Ecology has decided to again issue two general permit types.

## Access to documents referenced in comments

**Commenters:** I-335

**Summarized Comments:**

- Please post the supporting documents that Kevin Freeman and Scott Stephen reference in their comment letter on behalf of the Washington Dairy Federation.

**Ecology's Response:**

We posted the documents referenced in their comment letter to the public record at [Concentrated Animal Feeding Operation \(CAFO\) General Permits Reissuance Public Comment Period](#).<sup>12</sup>

## Comments from outside Washington State

**Commenters:** I-55

**Summarized Comments:**

- You should not consider any comments from individuals or groups from other states and countries.

**Ecology's Response:**

Ecology cannot reasonably determine which comments come from individuals or groups outside of Washington State. To provide the greatest access to participation, Ecology does not require commenters to provide their name or address.

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<sup>12</sup> <https://wq.ecology.commentinput.com/comment/extra?start=1&id=5gTtQ&frm>

## Public Access to Permit Documents

**Commenters:** I-193, I-224, O-3

**Summarized Comments:**

- Because of potential public harm to waters of the United States and groundwater, all documents, permits, testing results, and records related to / potentially affecting the environment and population singularly or general population must be made publicly available for any agricultural venture in Washington state of commercial scale.
- The permits obscure CAFO data, leaving the public in the dark about how much waste is being dumped onto our lands and into our waters

**Ecology's Response:**

Ecology makes permit documents available for each coverage through our [Permits and Reporting Information System \(PARIS\)](#).<sup>13</sup> This database contains information about water quality permits, inspections, enforcement actions, and discharge monitoring reports. Table 1 in the permits is a summary of the documents a CAFO permittee may submit that will be available to the public through PARIS. Certain information submitted by permittees under the State-only CAFO general permit may be redacted under RCWs 42.56.610 and 90.64.190, and instead provided in ranges (e.g., 1 to 99 animals).

Historical documents can be requested by [filing a records request through our public disclosure office](#).<sup>14</sup> All public record requests must be directed to the agency Public Records Officer through our online form or by mail.

## CAFOs and Water Supply Regulations

**Commenters:** O-4

**Summarized Comments:**

- Ecology needs to stop giving well permits and enforce any illegal wells drilled by CAFOs to CAFOs. Since a former ecology employee stated at a state water law conference, The Yakima River is over 400 per cent over allocated, Ecology will not allow any new CAFO wells to be dug effective immediately.
- Ecology will implement the proceedings to assist Yakima County with declaring Yakima County a sole source aquifer. Recharge rates will be reported to the public once a year. Fossil water areas will also be reported to public.
- Water meters will be put on all Dairy CAFO wells and users will pay water consumption rates according to local Ecology/local policies.

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<sup>13</sup> <https://ecology.wa.gov/PARIS>

<sup>14</sup> <https://ecology.wa.gov/Footer/Public-records-requests>

**Ecology's Response:**

Thank you for your comment. Issuing water supply permits and aquifer recharge is not within the authority of these water quality permits for CAFOs. Please direct your concerns and questions to our Water Resources Program. Contact information is available on Ecology's [water rights webpage](#).<sup>15</sup>

**Ecology should require CAFOs to reduce methane emissions**

**Commenters:** I-12, I-13, I-14, I-17, I-18, I-19, I-20, I-21, I-273, I-3, I-38, I-4, I-6, O-3, O-5

**Summarized Comments:**

- Require aeration of manure waste storage ponds to reduce methane emissions
- Build anaerobic digesters with power generation capabilities at all CAFOs.
- Keep animals in pasture to reduce methane emissions. Assist farmers in transitioning away from management practices that require use of waste storage infrastructure.

**Ecology's Response:**

Requiring reductions in methane emissions is beyond the scope of these water quality permits. CAFOs may choose to implement specific manure management practices and technologies that protect water quality and reduce their greenhouse gas emissions. Where there is an overlap with practices that protect water quality, we have included them in our permits. See the Fact Sheet section "Reduce and Prepare for Climate Impacts" for the discussion on land application practices that protect water quality and reduce greenhouse gas emissions.

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<sup>15</sup> <https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Water-right-permits>



## Dairy Compliance with Water Supply and Water Quality Laws

**Commenters:** I-126, O-12, O-3

**Summarized Comments:**

- I am deeply concerned by what I see happening to our Yakima Valley, specifically in the over usage and pollution of water in the lower valley by the large dairies. This concerns me because I have personal experience with what can happen to water resources if they are not properly managed.
- Ecology needs to step up by actively gathering the necessary data and requiring every dairy to have and implement their dairy management plan. That plan must be aggressively enforced by Ecology.
- Your new CAFO permit must recognize that our climate, our water supply and our water quality is changing dramatically right now.
- From aerial photos of a nearby dairy, it looks like there is an access road from the lagoon area to the river and a stockpile next to it. Does anyone check to see that these lagoons are not leaking? Without these tests, how do I know that my well water is not being contaminated by a nearby dairy?

**Ecology's Response:**

Thank you for your comments. Washington State Department of Agriculture, not Ecology, is responsible for implementing RCW 90.64 which requires dairies to develop and implement a dairy nutrient management plan. Ecology is responsible for compliance actions for non-dairy animal operations and all CAFOs with water quality permits. These agencies work together in implementing water quality activities under Chapter 90.48 RCW and Chapter 90.64 RCW. Additionally, Ecology is responsible for Clean Water Act compliance. For more on each agency's responsibility, please see the [Memorandum of Understanding Between the Washington State Department of Agriculture and the Washington State Department Of Ecology Related to the State Of Washington's efforts to protect water quality related to livestock activities](#).<sup>16</sup>

Issuing water supply permits and aquifer recharge is not within the authority of these water quality permits for CAFOs. Please direct your concerns and questions to our Water Resources Program. Contact information is available on Ecology's [water rights webpage](#).<sup>17</sup>

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<sup>16</sup> <https://ecology.wa.gov/DOE/files/6f/6f30de07-feb0-463a-958e-cf48df3a43bf.pdf>

<sup>17</sup> <https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Water-right-permits>

## CAFO Compliance and Enforcement

**Commenters:** I-224, I-349, I-358

**Summarized Comments:**

- The draft does not address fines for causing CAFO non-point pollution or repeated offenses.
- A schedule needs to be developed for punitive damages in the form of fines as well instead of relying on the toothless voluntary compliance. This voluntary approach only serves agricultural interests and does not protect water quality as the CAFO non-point pollution occurs repeatedly without repercussions.
- The protocols have not been made clear to the public and the public needs to know both the permit process and process for violations of the permit.
- Many CAFOs that either would require a permit and don't have one or that do have a permit but are in violation of the regulations are ignored by the Department of Ecology and the Department of Agriculture. The process for the public to submit complaints of violations by CAFOs should be streamlined and made easier to submit.

**Ecology's Response:**

Thank you for your comments. These water quality permits and the associated Fact Sheet regulate point source pollution from CAFOs.

Ecology starts with education, technical assistance, and cooperation-based programs to achieve voluntary compliance with water quality laws. When a permitted CAFO requires a more direct response to achieve compliance, we use other enforcement tools, ranging from warning letters to enforcement actions. Ecology's Enforcement Coordination Team developed the procedures outlined in the [Compliance Assurance Manual](#)<sup>18</sup> to help Ecology staff consistently and fairly enforce the state's environmental laws. Visit our webpage for more on [compliance and enforcement at Ecology](#).<sup>19</sup>

Ecology manages the Environmental Report Tracking System, a tool residents and businesses can use to report spills and environmental problems by web form, email, or phone. Visit our webpage to [report an environmental issue](#).<sup>20</sup>

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<sup>18</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/2101001.html>

<sup>19</sup> <https://ecology.wa.gov/Regulations-Permits/Compliance-enforcement/Overview-of-compliance-enforcement>

<sup>20</sup> <https://ecology.wa.gov/Footer/Report-an-environmental-issue>

## Small CAFO Compliance, Costs, and Permit Changes

**Commenters:** I-253, OTH-3

**Summarized Comments:**

- Our understanding is that Ecology does not anticipate heavily enforcing this permit. We understand that when Ecology is informed of a potential violation, the first response will be to provide technical assistance.
- It would be useful to see in writing the potential workload for staff because of the permit, what has changed in this draft versus the previous permit, and any potential cost to the agency. This will help our constituents be better informed about what the agency's intent is regarding the scope of the new permit.

**Ecology's Response:**

Thank you for your comment.

All facilities, regardless of size, are expected to meet requirements in Federal and State laws to protect water quality. When a small animal feeding operation discharges pollutants to surface or groundwaters, we start with technical assistance and referrals to local Conservation Districts. Ecology's Nonpoint Source Program uses a combination of public education, technical assistance, financial assistance, and regulatory tools to help residents understand and comply with state and federal water quality laws and regulations that protect water quality.

If discharges from small operations cannot be resolved with these tools, Ecology may elect to follow the significant contributor process guided by the criteria and steps laid out by the US Environmental Protection Agency at 40 CFR 122.23(c). Ecology will conduct a site visit, make a determination, and inform the operator in writing. The operator receiving a determination may appeal the Agency's decision.

Changes to the draft permit were published in the Fact Sheet and a redline copy of the permit was posted with the other materials on our website. Permit fees, required by state law RCW 90.48.465, fund the development and implementation of the permits.

## Permit Requirements are Impractical

**Commenters:** B-1, I-86

**Summarized Comments:**

- Our ranch is located near many water sources and 100-foot setbacks from surface water are burdensome, costly, and downright impracticable.
- Not only would this impact seasonal grazing and the subsequent fire-protection it abides to neighbors including fellow grain farmers who benefit from control of flammable grasses. 35-foot vegetative filter strips/dirt berms to mitigate nutrient leaching are burdensome and costly.
- Soil tests take weeks to be returned, undercutting the ability to apply nutrients to fields at crucial times, along with post-harvest soil tests with a hard deadline of Oct. 1 are impractical. Farmers and ranchers who are successful at tending to their ground know their ground, area and weather better than any bureaucrat.
- This method will be expensive, will place a heavy load on administrative staff, and will be full of unnecessary procedures.

**Ecology's Response:**

In the Combined permit, Ecology has used the minimum setbacks and buffers included in the federal CAFO rules at 40 CFR § 412.4(c)(5). The permit also includes the option to use appropriately sized and constructed berms as an additional option beyond the federal requirements. In the State only permit, the permittee determines which BMPs to use for compliance. The basic requirement is that the Permittee may not discharge to surface water from its land application fields.

In response to public comments, Ecology made changes to the permits in S4.J.3 Late Summer-Early Fall Soil Sampling and Analysis. See the response in Part II, S4.J Soil Sampling and Nutrient Analysis.

## Responding to the Court of Appeals Decision on Previous Permits

**Commenters:** I-117, I-42

**Summarized Comments:**

- Ecology has not regulated CAFOs as defined by the Clean Water Act nor has it followed the Washington State Court of Appeals' order to rewrite the Washington CAFO water pollution permit to protect Washington's waters from contamination and to take the climate crisis into account. Ecology must enact provisions requiring the use of modern pollution control technologies and practices in order to protect our communities.
- I'm greatly concerned that the draft permit does not require sufficient protections to prevent pollution from entering our waterways. These concerns have been raised by members of the public in the past, and the Appellate Court's recent opinion affirms that these issues must be addressed.

**Ecology's Response:**

Thank you for your comment. In modifying the Permits for reissuance, Ecology incorporated the findings of the Court of Appeals in addition to other information and experience. Ecology has also revised the permits based on input received during the public comment period. CAFO management conducted in compliance with the revised permits will protect water quality.

## Prohibit waste storage ponds from floodplains

**Commenters:** I-13, I-14, I-17, I-18, I-19, I-20, I-273, I-6, O-3

**Summarized Comments:**

- Some dairy lagoons are in flood plains. During flooding this would allow chemicals and pathogens to run onto domestic properties and homes, groundwater and nearby streams and rivers. No lagoons should be allowed in any flood plain.
- There are 53 CAFO dairies in Western Washington flood plains. Last fall, Ecology spent several hundred thousand dollars helping Whatcom County farmers pump manure out of lagoons to prevent overtopping during extreme flooding. With Climate Change, these extreme weather events will increase, including flooding that sends pollutants directly into the rivers and into Puget Sound.
- It does not consider the enormous financial and environmental costs of pumping manure lagoons in flood plains.

**Ecology's Response:**

Thank you for your comments. Ecology does not have authority to determine the areas in the state where CAFOs may be sited. This is typically under the jurisdiction of local governments.

The permits require facilities to ensure storage capacity for the volume of precipitation and contaminated stormwater generated by at least a 25-year, 24-hour storm. As our climate is changing, the amount of precipitation from this size storm event will increase in some regions. The permittee is expected to meet the revised storm volume requirements.

Under the permits, discharging waste from the production area during or after precipitation events smaller than the 25-year, 24-hour storm is prohibited. To remain in compliance with their permit, during prolonged periods of wet weather, CAFOs may need to find alternative storage for their waste or follow the emergency land applications procedures in the permit.

**Unclear expectations for complying with clean water laws**

**Commenters:** I-83

**Summarized Comments:**

- With the State Board of Health very recently revising WAC 246-203-130 to regulating "domestic livestock" manure for water quality issues, there is a concern that this will be coupled with small CAFOs when County health staff pass a complaint over to Ecology to manage as a small CAFO issue. It is not clear by the definitions provided whether this is indeed a possibility. Are CAFOs strictly maintained animal herds used as food animals? The fact that there is overlap between Ecology, Agriculture, and Board of Health in the management of livestock manure makes it difficult for hobby farmers to understand the expectations for complying with clean water laws.

**Ecology's Response:**

Thank you for your comment. When a small animal feeding operation discharges pollutants to surface or groundwaters, we start with technical assistance and referrals to local Conservation Districts. These services provide site-specific assistance in understanding and complying with state and federal water quality laws and regulations that protect water quality.

**CAFO inspections**

**Commenters:** I-27, I-6

**Summarized Comments:**

- Employees of the Washington State Department of Ecology should lobby the legislature to allow Ecology to monitor the CAFO permit performance rather than Agriculture. Agriculture is biased toward supporting dairies rather than improving the environment for innocent neighbors.

- Has the Department of Ecology requested private industry farmers to conduct their own investigations of CAFOs and to report their findings accordingly?

**Ecology's Response:**

Thank you for your comment. This is beyond the scope of these permits.

**Science-based policy and a focus on water quality**

**Commenters:** I-277, OTH-2

**Summarized Comments:**

- In reviewing the updated CAFO documents we support the Washington State Dairy Federation and the Washington Farm Bureau comments calling out concerns related to implementation standards for CAFOs that rely on unproven, flawed, or irrelevant scientific standards. This includes concerns over post-harvest testing required beginning October 1, changes to testing standards such as reversion to the Total Kjeldahl Nitrogen (TKN) standard, general application of T-Sum 200 statewide, and reliance on large, no-touch buffers (big dumb buffers) not based on science.
- This program and associated permit requirements should stay focused on water quality and must not become a forum or tool to address other desired, but unrelated, public policy issues. A number of new requirements (as addressed specifically by the Dairy Federation) include policy recommendations that go beyond the direct impact of livestock operations. Ecology should resist including additional regulations beyond the direct focus of the CAFO program.

**Ecology's Response:**

Thank you for your comments. Ecology revised the permits using the best available science.

In response to public comments, Ecology has made changes to several special conditions. See responses in Part II- S4.J, S4.K, and S4.N for changes to soil testing, land application, and field discharge management practices.

## Oppose the CAFO permits in general

**Commenters:** I-103, I-116, I-132, I-138, I-146, I-150, I-172, I-175, I-180, I-183, I-184, I-204, I-205, I-217, I-220, I-232, I-233, I-246, I-255, I-257, I-272, I-289, I-292, I-295, I-300, I-310, I-318, I-319, I-325, I-334, I-351, I-44, I-45, I-46, I-49, I-5, I-51, I-52, I-53, I-55, I-88, I-90, I-91, I-97

### Summarized Comments:

- I do not approve of the CAFO rules.
- This proposal oversteps Ecology's jurisdiction and control. It attempts to control agriculture/animal husbandry in an already over-burdened regulatory state.
- As an unelected agency, you do not have the consent of the governed to do anything, especially make life difficult for American farmers practicing their trade in Washington State.
- We the people have the right to raise our own food.
- I am against this proposed CAFO regulation because it will be used to prevent the reasonable use of private property without just compensation being paid to the private property owner for public use of the property. Such actions are against both the federal and state constitutions that require just compensation for such takings.
- We don't need anyone else dictating what we do with our land. Enough rules.
- Just stop already. Our farmers are already struggling. More fees and regulations are in my view, designed to bankrupt them to push the political green agenda. Just stop. Leave them alone.
- This is a violation of people's rights to life liberty and pursuit of happiness.
- Individuals, villagers, and towns like ours have held livestock in pens, barns, and fields for centuries without any harm to the environment.

### Ecology's Response:

Ecology has the delegated responsibility of developing and implement water quality permits for CAFOs. One of the mechanisms for achieving the goals of the federal Clean Water Act is the NPDES system of permits. The EPA has delegated responsibility and authority to administer the NPDES permit program to the State of Washington. In addition to this delegation under the Clean Water Act, the state legislature in Revised Code of Washington (RCW) 90.48 defines Ecology's authority and obligations in administering the NPDES permit program. RCW 90.48.260. Ecology directly implements the Code of Federal Regulations (CFRs) when developing state NPDES permits.

Under state law, all known, available, and reasonable methods must be used by industries and others to prevent and control pollution. In addition, it is unlawful for any person to discharge pollutants to waters of the state (RCW 90.48.080). The only time a discharge is lawful is when a permit to discharge is obtained from Ecology prior to the discharge occurring (RCW 90.48.160).



Compliance with these water quality permits does not constitute takings of private property by the State of Washington.

## CAFO Moratorium

**Commenters:** I-16, I-18, I-21, I-21, I-21, I-38, I-7, O-4

### Summarized Comments:

- Ecology, immediately needs to implement a moratorium on all CAFO new permits and expansions in Washington State since Ecology has refused to design, implement, and enforce CAFO rules that protect the health and water quality of Washington State citizens.
- CAFO's should not exist. They are unhealthy places for both cows and those that consume them, and for the world due to their polluting and toxic contributions.
- Ecology will acknowledge and honor Yakama Nation Tribal resolutions T103-92 and T174-08 banning any new Dairy CAFOs and or expansions within the Yakama Reservation boundaries.

### Ecology's Response:

Thank you for your comment. Moratoriums on new or expansions of existing CAFOs is not within the authority of these water quality permits. Further, Ecology does not have the authority to issue NPDES permits to CAFOs that are federal or tribal facilities (except for some limited areas on Puyallup tribal land).

## Protect water quality

**Commenters:** I-11, I-15, I-17, I-18, I-20, I-22, I-22, I-349, I-36, I-39, I-8, I-9, I-98, O-4

### Summarized Comments:

- Please be sure our water remains safe without excess pollutants. Thank you.
- I live near the perpetually toxic Anderson Lake in Jefferson Co. Other county lakes are also starting to show this annual toxic algal bloom, to the extent that they are no longer safe for swimming. Agriculture can do a better job dealing with dairy waste, and if it raises the price of milk, so what? We need clean water more than milk!
- The draft NPDES permits for CAFO's are not stringent enough to protect Washington state waters.
- We need to take better care of what is left of our environment, for wildlife, marine life, plant life, and people.

- I'm greatly concerned that the draft permit does not require sufficient protections to prevent pollution from entering our waterways, including but not limited to adequate technology to prevent leaks from manure storage, best management practices for fields such as science-based riparian buffers, sufficient controls for land-based manure application, or sufficient water quality monitoring and reporting.
- While positive steps have been taken to strengthen the proposed CAFO permits in Washington, these changes not yet gone far enough. Loopholes and a lack of enforcement must be closed and addressed in order to ensure a safe and healthy environment for all those who make Washington home.
- Ecology will revamp CAFO, NPDES discharge permits so they protect the waters of the State, not the potential polluting parties.

**Ecology's Response:**

Thank you for your comment. Ecology believes CAFO management in compliance with these permits will protect water quality.

**Animal Welfare Concerns**

**Commenters:** I-1, I-13, I-21, I-25, I-38, I-38, I-38

**Summarized Comments:**

- CAFO treatment of animals is inhumane and unethical. What Ecology permits is damage to human health and an increase in human health problems and medical costs.
- The permit guidelines do not seem to address the inhumane living conditions of the cattle in these large facilities. If animals were not confined in these ways, our environment would be better, cows and human workers would be better off too. Farmers need realistic and thoughtful guidance to transition away from CAFOs.

**Ecology's Response:**

Thank you for your comments. Animal welfare concerns are beyond the scope of these water quality permits.

**Permittee Reporting**

**Commenters:** I-27-1

**Summarized Comments:**

- At this time has the Department of Ecology requested private industry farmers to conduct their own investigations of CAFO's and to report their findings accordingly?

**Ecology's Response:**

The permits require CAFOs to report on several management practices and the condition of the CAFO infrastructure. Please see Table 1 for a summary of reports required under the permits and special conditions S7 for details of those requirements.

**Requirements that protect waterways during storm events**

**Commenters:** I-25

**Summarized Comments:**

- Too often heavy snowfall and rainfall have created unusual run-off that deposits this manure in our streams and rivers. How will Ecology make sure that in extreme events this does not happen? Climate change is here and is impacting our state in many ways. Why are these changes not disclosed and addressed? We've seen and heard about manure storage facilities and lagoons leaking.

**Ecology's Response:**

Restrictions in special condition S4.K Land Application are designed to reduce the impact of surface runoff events by prohibiting land application during risky times – such as when rain is forecast or during the non-growing season. S4.B Waste Storage Structures establishes performance requirements for storage structures and S7.C Waste Storage Assessments requires the CAFO to report on the condition of the structures.

**Excessive nitrates in drinking water are harmful**

**Commenters:** O-8

**Summarized Comments:**

- There are people who will say there are no documented deaths attributed to nitrate in Washington drinking water. Therefore, they argue, nitrate contamination is not a priority concern. We disagree. Living or dying should not be the only measures of public health.
- In 2008 the Washington State Department of Health published a study entitled "Nitrate Exposure and Methemoglobin Levels among Infants in Washington State". This study found that methemoglobin levels in infants increase proportionally with higher nitrate levels in drinking water.
- The library of research on health impacts from nitrates and nitrites is large and growing. A pollutant does not have to be the sole cause of a disease to be a focus of concern. If a pollutant in drinking water increases the likelihood of disease, then it should be addressed, and Ecology has an obligation to do so.

- And yet, despite overwhelming evidence of groundwater pollution from dairies in the Lower Yakima Valley, the draft NPDES permit for CAFOs only requires groundwater monitoring in extreme situations, after contamination has already occurred. Plus, there is no routine monitoring for bacterial contamination. This is not protective of public health.

**Ecology's Response:**

Thank you for your comments. Ecology agrees that nitrate concentrations above safe drinking water thresholds in drinking water wells is a public health concern. We believe CAFO management in compliance with these permits will prevent further degradation of groundwater resources.

In response to public comment, Ecology revised the groundwater monitoring requirements. Please see the response in Part II, S5.D Groundwater Monitoring.

**Implementable Permits**

**Commenters:** 129-3

**Summarized Comments:**

- I would like to encourage the Department of Ecology to continue to strive to create a usable permit that protects the environment but also encourages the use of animal nutrients, the primary source of nutrients for cultivated agriculture for thousands of years. As study after study shows the use of animal nutrients, in a responsible manner, increases the value of agricultural soil.
- This permit does indeed protect the waters of the state, let us also use it to encourage all farmers to utilize this valuable resource in a way that can benefit all of us.

**Ecology's Response:**

Thank you for your comments.

**Recovery and resilience of salmon and shellfish populations**

**Commenters:** I-224, O-10

**Summarized Comments:**

- More needs to be done towards recovery and resilience of salmon and shellfish populations which in turn will help alleviate some of the environmental stressors currently impacting Southern Resident killer whales.
- Government agencies have a moral obligation to protect the earth's fragile ecosystems, even if doing so requires some economic growth to be sacrificed. A comprehensive dynamic regulatory framework for CAFO waste management is a necessary investment for Washington State's future.

**Ecology's Response:**

Thank you for your comments. Ecology believes CAFO management in compliance with these permits reduces the risk of pollutants reaching surface waters and contributing to the environmental stressors currently impacting salmon, shellfish, and Southern Resident killer whales.

## Part II – Comments By Permit Section

### S1.A. Facilities Required to Seek Coverage under This General Permit

All CAFOs should be required to apply for a permit

**Commenters:** I-13, I-14, I-15, I-17, I-18, I-19, I-20, I-237, I-273, I-349, I-358, O-10, O-29

**Summarized Comments:**

- The permit doesn't require all CAFOs to apply for permit coverage, leaving many unregulated.
- Water quality standards should apply to everyone.
- Because of the large amounts of manure that CAFOs store on site in unlined lagoons and apply to an insufficient amount of acreage, all CAFOs are discharging or have the potential to discharge into waters of the state.

**Ecology's Response:**

Thank you for your comment. Ecology's water quality general permits do not require a facility without a discharge to obtain permit coverage.

Federal law is clear that any discharge of pollutants to surface waters of the United States requires an NPDES permit. Federal regulations [40 CFR § 122.21(a)] also impose on any facility that "discharges or proposes to discharge" a clear "duty to apply" for an NPDES permit. EPA has issued guidance interpreting these regulations to impose a further duty to apply on certain facilities (such as concentrated animal feeding operations) that have a "potential to discharge." However, facilities that do not discharge, do not propose to discharge, and do not have the potential to discharge have no obligation to apply for or to obtain NPDES permits.

EPA has developed categorical effluent limitation guidelines for several industries. Some facilities subject to effluent limitation guidelines may (because of topography, process, etc.) have no potential to discharge pollutants to waters of the United States. For these facilities, Ecology has decided to follow the process demonstrated in practice by EPA Region 10. No permits will be issued solely because the facility falls within a zero-discharge subcategory. If the determination is made that a facility has a potential to discharge to surface waters, Ecology may require a CAFO to apply for the Combined NPDES and SWD permit. If the determination is made that a CAFO's activities are impacting groundwater quality, Ecology may require a CAFO

to apply for the State Only permit. These determinations must be made for each individual facility and are specific to that facility's coverage.

The Department of Ecology also uses tools other than the water quality permitting process to address risks to water quality. Ecology's Nonpoint Source Program uses a combination of public education, technical assistance, financial assistance, and regulatory tools to help residents understand and comply with state and federal water quality laws and regulations that protect water quality. For more information on Ecology's Nonpoint Source Program see [Washington's Water Quality Management Plan to Control Nonpoint Source of Pollution](#).<sup>21</sup>

### **Small farms should not be required to apply for a CAFO permit**

**Commenters:** A-2, B-1, B-5, B-6, I-100, I-101, I-102, I-104, I-105, I-106, I-107, I-108, I-109, I-110, I-111, I-112, I-114, I-115, I-118, I-119, I-120, I-121, I-122, I-123, I-124, I-125, I-127, I-128, I-130, I-131, I-133, I-134, I-135, I-136, I-137, I-139, I-140, I-141, I-142, I-143, I-144, I-145, I-147, I-148, I-149, I-151, I-152, I-153, I-154, I-155, I-156, I-157, I-158, I-159, I-160, I-161, I-162, I-163, I-164, I-165, I-166, I-167, I-168, I-169, I-170, I-171, I-173, I-174, I-176, I-177, I-178, I-179, I-181, I-182, I-185, I-186, I-187, I-188, I-189, I-190, I-191, I-192, I-194, I-195, I-196, I-197, I-198, I-199, I-200, I-201, I-202, I-203, I-206, I-207, I-208, I-209, I-210, I-211, I-212, I-213, I-214, I-215, I-216, I-218, I-219, I-221, I-222, I-223, I-224-, I-225, I-226, I-227, I-228, I-229, I-230, I-231, I-234, I-235, I-236, I-238, I-239, I-240, I-241, I-242, I-243, I-244, I-245, I-247, I-248, I-249, I-250, I-251, I-252, I-254, I-256, I-258, I-259, I-260, I-261, I-262, I-263, I-264, I-265, I-266, I-267, I-268, I-269, I-270, I-271, I-274, I-275, I-276, I-277, I-278, I-279, I-280, I-282, I-283, I-284, I-285, I-286, I-287, I-288, I-290, I-291, I-293, I-294, I-297, I-298, I-299, I-301, I-302, I-303, I-305, I-306, I-307, I-308, I-309, I-311, I-312, I-313, I-315, I-316, I-317, I-320, I-321, I-322, I-323, I-324, I-326, I-327, I-328, I-329, I-330, I-331, I-332, I-333, I-336, I-340, I-341, I-342, I-343, I-344, I-346, I-347, I-348, I-350, I-352, I-353, I-354, I-355, I-356, I-361, I-362, I-40, I-43, I-47, I-48, I-49, I-50, I-54, I-56, I-57, I-58, I-59, I-60, I-61, I-62, I-63, I-64, I-65, I-66, I-67, I-69, I-70, I-71, I-72, I-73, I-74, I-75, I-76, I-77, I-78, I-79, I-80, I-81, I-82, I-84, I-85, I-86, I-87, I-89, I-92, I-93, I-94, I-95, I-96, I-99, O-19, O-19, O-9, OTH-2, OTH-4, B-3, I-314

### **Summarized Comments:**

- The permit is vague on who needs to apply for coverage under these permits. Ecology should establish minimum numbers of animals, by type and/or operation, which meet the definition of "Small CAFO"
- Applying CAFO standards to small operations will hurt local food production, 4-H activities, and Future Farmers of America (FFA) work.
- Instead of regulating small operations, Ecology should encourage participation in Voluntary Stewardship Programs.

<sup>21</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/1510015.html>

- Small farms in the state often rely on the larger farms and their CAFO as a key market for their livestock, so additional restrictions that may lead to reductions in capacity for a few, can negatively impact the entire food chain.

**Ecology's Response:**

Ecology supports organizations that provide educational opportunities for youth to learn animal husbandry and manure management. Further, Ecology's climate goals include supporting the building of a resilient food system.

We appreciate the commenters pointing out that the permit's relevance to small farms was unclear in the draft permits. In response, Ecology revised special condition S1.A on permit applicability and the significant contributor of pollutants analysis.

If a small animal feeding operation discharges pollutants to surface or groundwaters, we start with technical assistance and referrals to local Conservation Districts. Ecology's Nonpoint Source Program uses a combination of public education, technical assistance, financial assistance, and regulatory tools to help residents understand and comply with state and federal water quality laws and regulations that protect water quality.

If discharges from small operations cannot be resolved with these tools, Ecology may elect to follow the significant contributor process guided by the criteria and steps laid out by EPA at 40 CFR 122.23(c). Ecology will conduct a site visit, make a determination, and inform the operator in writing. The operator receiving a determination may appeal the Agency's decision.

**All CAFOs eligible for coverage under the permits should be identified**

**Commenters:** O-23, O-30

**Summarized Comments:**

- Ecology must identify each facility currently eligible for coverage under this permit
- Ecology must identify every small CAFO that may be required to obtain coverage under the permit.
- Ecology must determine the areas in the state where CAFOs may be sited in the future

**Ecology's Response:**

In general permits, Ecology does not identify individual facilities, but instead identifies the categories of facilities proposed to be covered under the general permit. In the draft CAFO permits, Ecology provides the characteristics necessary to determine if an operation is required to obtain permit coverage under the CAFO permits in Special Condition S1.A *Facilities Required to Seek Coverage under This General Permit*.

Ecology revised special condition S1.A based on feedback received on small operations and the significant contributor of pollutants analysis. See response to *Small farms should not be required to apply for a CAFO permit*.

Ecology does not have authority to determine the areas in the state where CAFOs may be sited in the future. This is typically under the jurisdiction of local governments.

### **Facilities with unlined manure lagoons must apply for a CAFO general permit**

Comment: O-23, O-10

#### **Summarized Comments:**

- All unlined manure lagoons discharge to waters of the state.
- Ecology must require all facilities with unlined manure lagoons to obtain coverage under a combined state and federal NPDES permit.
- A facility that believes its groundwater discharges are isolated from surface water may seek an exception to this rule only if it proves the hydrologic isolation using the state's legal recognition of hydrologic connectivity

#### **Ecology's Response:**

Waste storage ponds, also called manure lagoons, are a common and important part of CAFO manure management systems. They are used for storing liquid animal waste and contaminated stormwater until a time when the nutrients in the liquid can be used as crop fertilizer. Waste storage ponds have the potential to impact groundwater if the structure is not properly designed or maintained.

In developing the previous permit, Ecology established three cases where waste storage ponds are not considered discharges to groundwater requiring a permit. An owner or operator of a CAFO is not required to apply for coverage under these permits if the waste storage pond is:

1. Not discharging to groundwater, or
2. Constructed with a double-layer synthetic liner with a leak detection and capture system between the liner layers, or
3. An above-ground structure constructed of concrete or steel.

In developing the previous permit, Ecology made the determination that earthen or clay-lined waste storage ponds seep based on evidence in scientific literature and technical specification materials available from the Natural Resource Conservation Service (NRCS). We have aimed to carefully differentiate between pond seepage and a discharge to groundwater resulting from seepage. It is possible that in certain circumstances, a waste storage pond may have seepage, but that seepage does not impact groundwater. In such a circumstance, a permit would not be required for a discharge to groundwater from the waste storage pond. Ecology has included provisions for a nitrate loading analysis (Condition S4.L) and groundwater monitoring requirements in Nitrate Priority Areas (Condition S5.D) to properly address impacts to groundwater.



## Ensure dischargers seek permit coverage

**Commenters:** A-4

**Summarized Comments:**

- EPA acknowledges that, at this time, only a small percentage of the CAFOs in Washington have sought coverage under the NPDES CAFO General Permit. Regardless of the provisions in the draft permit, Washington's surface and groundwater resources will realize little benefit unless dischargers seek permit coverage and comply with its terms. EPA offers to coordinate with the state to identify unpermitted discharges from CAFOs, encourage permit coverage, and provide assistance in implementing the permit when it is final.

**Ecology's Response:**

Thank you. Ecology appreciates the offer of assistance. We agree it is important to water quality that all discharging CAFOs seek permit coverage.

## Permit Applicability

**Commenters:** O-22, O-8

**Summarized Comments:**

- Do the permits apply to calf feeding operations with thousands of calves in hutches?
- What happens with existing farmers who have been in agriculture for years prior to the new legislative proposals? We would ask for an exemption for poultry operations that already have been operating in the state of Washington, avoiding undue financial burdens that could make poultry growing financially unsustainable.
- Do expanding existing operations require CAFO? If a farmer is going to expand their agricultural operations, will new permitting be required on existing lands? What about on new properties not adjacent to existing operations?
- As dry litter operations have "no potential to discharge," they should not require a permit. If all manure is exported offsite and there is no liquid/solid waste discharged to land or water, do these CAFOs need to apply for coverage? Does the Manure Pollution Prevention Plan (MPPP) apply to dry-litter operations?

**Ecology's Response:**

The permits apply to facilities where all of the following conditions are met:

- The facility has a discharge to surface water, or to surface and groundwater.
- Animals are or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period.

- Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility where the animals are confined.
- The facility is either a medium or large CAFO as defined in Table 2 of the permits, or Ecology has designated the facility a significant contributor of pollutants to waters of the state in accordance with the procedures in S1.A.1.

Ecology notes that the Permits themselves are not regulations, but rather are regulating documents that are developed according to state and federal law and regulation. Existing operations do not have a different set of performance standards in the permits.

Expansions of permitted CAFOs, either within the current site or at a non-adjacent site, may be included under the same permit coverage if the operation meets the conditions in S1.A.2 Multiple facilities with common ownership. Permittees must follow procedures in S4.A.5.a when proposing changes to the facility size.

### **Clarify the permit applicability and include regulatory citations**

**Commenters:** OTH-1, OTH-3

#### **Summarized Comments:**

- We are concerned that the draft General Permit is too vague. It potentially implicates animal owners who are not operating a commercial or industrial animal feeding operation. There is a major difference between a commercial animal feeding operation and a personal scale farm or homestead. It is critical to clarify who is responsible to comply with this permit in order to prevent subjective enforcement actions.
- We understand that you have drafted this permit language to be responsive to the federal NPDES requirements; however, the permit language is vague and unclear for landowners. Please persist in providing easily searchable, clear explanations of who is required to meet the permit requirements.
- Citation to specific federal and state statutes would help provide clarity and certainty. Our constituents like to do their own research to better advocate for themselves against potential subjective agency action. Understanding that these requirements come from the Clean Water Act, or the state Water Pollution Control Act will help them understand Ecology's authority to regulate discharges into surface waters of the state.
- Wherever possible, citation to specific statutes in the permit and explanation of how those statutes relate to the scope of permit coverage would be helpful because it will inform the public and assuage concerns that Ecology may be attempting to regulate beyond what has been authorized legislatively.

**Ecology's Response:**

Thank you for your comments. In response, Ecology has revised special condition S1.A and Table 2 in the permits to clarify the permit applicability. We included regulatory citations in the footnotes of Table 2 and the body of the text in S1.A.1 *How Ecology Determines Significant Contributors of Pollutants*.

Ecology prepared a discussion of relevant regulations and case law in the Fact Sheet at pages 13-15.

**Determining a Significant Contributor of Pollutants**

**Commenters:** O-11, O-19, O-21

**Summarized Comments:**

- Ecology states, "a small CAFO must apply for coverage under this permit if Ecology has designated the CAFO to be a significant contributor of pollutants to surface water". GGI request that Ecology specifically defines what constitutes a "significant contributor".

**Ecology's Response:**

Ecology has revised special condition S1.A Facilities Required to Seek Coverage Under the Permit in response to public comments. We included a section in S1.A.1 to explain how Ecology Determines Significant Contributors of Pollutants. Ecology uses the procedures defined in 40 CFR 122.23(c) to designate an operation a small CAFO.

**S1.B Activities Covered Under This Permit****Animal Confinement Areas and increasing use of pastures**

**Commenters:** I-2, I-345

**Summarized Comments:**

- I prefer to see the animals, like cattle not stuck in nothing but dirt rounded up in fencing along the highway, this is sad, though I do not know for the length of time they are, but it appears this is the norm, they should be grazing on the land and then there would be less effects on the water.
- As a small farmer, I responsibly confine my livestock to a heavy use area during the rainy months of the year in order to protect water quality.
- Statewide programs, such as the Voluntary Stewardship Program and technical assistance of Conservation Districts and NRCS, are already in place to support livestock owners in safely and responsibly keeping livestock in a manner that is best for their health and for the natural resource concerns of their specific area.

**Ecology's Response:**

Ecology agrees with the commenters that confining animals in heavy use areas and pasturing are practices that can protect water quality. Our technical service providers at the Conservation District and NRCS are valuable resources for determining when, where, and how these practices will support a healthy agricultural operation and protect water quality.

**Underground Injection Wells on CAFOs**

**Commenters:** O-4

**Summarized Comments:**

- Investigate and stop all CAFO injection wells. Ecology themselves published a paper on this serious problem.

**Ecology's Response:**

Thank you for your comment. It is illegal to dispose of industrial waste into an underground injection well unless it is specifically authorized under a state waste discharge permit. The CAFO general permits do not authorize discharges through underground injection wells. CAFOs with underground injection control wells must seek coverage under an individual state discharge permit, not the CAFO general permit. For more information visit the [Underground Injection Control Program website](https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Underground-injection-control-program).<sup>22</sup>

**S1.C Geographic Area Covered****Create an "extremely dry climate" category**

**Commenters:** I-332

**Summarized Comments:**

- In addition, you include definitions of "wetter" and "drier" climates, but you don't include "extremely dry" climates of 10 or 12 inches or less annually. Much of Eastern Washington has an "extremely dry" climate with no surface or ground near enough to be of pollution concern.

**Ecology's Response:**

Thank you for your comment. We have determined that it is not necessary to add a 3<sup>rd</sup> category of climates to the permit, as it would not change how and when permittees collect soil samples.

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<sup>22</sup> <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Underground-injection-control-program>

## CAFO Location Should Determine Need for Permit

**Commenters:** I-86

**Summarized Comments:**

- A CAFOs location should also be taken into consideration. Rural CAFOs in large, unused aquifers shouldn't even need to register.

**Ecology's Response:**

Thank you for your comment. All facilities, regardless of size or location within Washington State, may not discharge pollutants without a water quality permit (RCW 90.48.160).

## Annual Average Rainfall Information

**Commenters:** O-22

**Summarized Comments:**

- Which source of information should be used to determine meteorological data? How many years should be analyzed to determine precipitation data?

**Ecology's Response:**

Ecology recommends using the nearest National Weather Service Cooperative Climate Station with 30 or more years of data to determine average annual precipitation.

## S2.A. How to Apply for Permit Coverage

### Provide Public Participation in Permit Coverage Process

**Commenters:** I-337, I-349, O-10, O-15

**Summarized Comments:**

- Provide public participation in the development of site-specific nutrient management plans
- According to the fact sheet, only new operations are required to notify the public when applying for their CAFO permit

**Ecology's Response:**

The permits at S2.A *How to Apply for Permit Coverage* provides the public opportunity to comment on a CAFO's application for permit coverage and their Manure Pollution Prevention Plan. The public is also given the opportunity to review substantial changes to MPPP of CAFOs that already have permit coverage in S4.A.5 *Updates to the MPPP*.

In response to comments, the Final CAFO permits clarify additional occasions for public notice and comment. Specifically, S4.A.5.b *When Ecology, WSDA, or Permittee assessments require MPPP update* and S4.A.5.c *When the Permittee proposes alternatives*. Ecology clarified when the permittee proposes significant changes to the facility (such as increasing herd size or constructing new waste storage areas) the public must be provided an opportunity to review and comment on the updated MPPP. When a permittee proposes an alternative to the field discharge management practices or to the TSUM200 restriction, the public must also have an opportunity to review the proposal in the updated MPPP before the alternative is implemented.

All applications for the Combined permit allow for a public comment period, regardless of when the facility was constructed. Only new constructed facilities are required to publicly notice their application if they are applying for the State-Only permit.

**Waive public hearings for expansions of existing operations**

**Commenters:** O-22

**Summarized Comments:**

- If a poultry grower has already gone through the public hearing process and met all of the CAFO and environmental requirements for their initial build and investment, we ask that the public hearings be waived for expansions of existing poultry and agricultural operations.

**Ecology's Response:**

Federal rules at 40 CFR 122.42(e)(6) require a public notice and comment period when a permitted facility proposes substantial changes to the permit coverage such as facility expansions.

**Typographical errors**

**Commenters:** O-11

**Summarized Comments:**

- S2.A. 1. — Submit an Application — The following sentence requires an appropriate period. "A Responsible Person, in accordance with General Condition G14 (Signatory Requirements), must sign the signature page of the NOI and submit it to Ecology."

- S2.A. 2. Revise Application If Needed — This paragraph states that Ecology will review the NOI and NMP for completeness... The term NMP is not used in the DRAFT permit and MMMP should be substituted for NMP to remain consistent.
- S2.D. 1. c. — Eligibility for Terminating Permit Coverage— The link given in the first sentence is corrupted, therefore GGI requests its replacement.
- S2.D. 1. d. — Eligibility for Terminating Permit Coverage— Same comment as above.
- S2.D. 2. — Facility Cleaning Requirements— Same comment as above.

**Ecology's Response:**

Thank you for alerting Ecology to these typographical errors. We have resolved them in the revised permits.

**Revise procedures in applying for permit coverage**

**Commenters:** O-23

**Summarized Comments:**

- Ecology should update Section S2.A.3. to identify the steps it will take to inform the public of every new application for coverage under the Permits. These steps should include, but are not limited to, maintaining a list of interested parties, posting the application material on Ecology's public notice websites, and actively soliciting comments from the community directly impacted by a potential permittee, such as close neighbors, those with drinking water supplies located near the facility, and those who live near surface waters downstream of the facility.
- Ecology must make clear that it will take the following steps when reviewing applications for permit coverage. First, Ecology must review NOI and NMP for completeness.
- Once Ecology determines the NOI is complete, the NOI, NMP, and draft terms of the NMP to be incorporated into the permit must be made available for a thirty days public review and comment period. Ecology must establish the specific process for submitting comments. Ecology must then review and respond to comments received, and, if necessary, require the CAFO owner or operator to revise the NMP before obtaining permit coverage. Finally, once the NMP meets the permit's requirements and ensures compliance with the terms of the permit and the law, Ecology will notify the CAFO and the public in writing of its decision to grant permit coverage.

**Ecology's Response:**

In response to comments, Ecology added the phrase "When Ecology determines that the NOI and MPPP are complete, the applicant must..." to S2.A.3 *Publish Public Notice*. Additionally, procedures in S4.A.5 *Updates to the MPPP* were revised to clarify the circumstances when the public has an opportunity to review substantial changes to MPPP of permitted CAFOs.

WAC 173-226-130 requires that applicants to general permit publish public notice in a newspaper of general circulation within the county in which the CAFO is located. The public notice template that Ecology requires permittees to use includes instructions for the public to mail comments to Ecology. Documents are made available to the public through Ecology's permit database PARIS.

## S2.B When Permit Coverage is Effective

### Remove automatic timelines for coverage effectiveness

**Commenters:** O-23

**Summarized Comments:**

- Ecology must revise section [S2.B]. to track the specific steps Ecology must take before issuing permit coverage. First, each permit application must include a proposed NMP that Ecology must release for public review and comment. As a result, there is no situation where permit coverage could begin automatically after the receipt of an application. Therefore, Ecology should delete S2.B.1.
- Ecology must make an affirmative determination, after considering and responding to all public comments, that the Nutrient Management Plan is sufficient to ensure compliance with the terms of the permit. As a result, Ecology must delete S2.B.2.
- To obtain permit coverage, each CAFO must submit an NOI and a complete NMP, which must go through Ecology review, public notice and comment, and any necessary revisions before permit coverage attaches. Thus, Ecology must delete S2.B.3.

**Ecology's Response:**

In response to comments, Ecology removed S2.B.1-3 from the Combined Permit. They remain in the State-only permit. Combined permit coverage is effective after the public has an opportunity to review and comment on the application and only when Ecology makes a determination.



## S2.D How to Terminate Permit Coverage

### Revise requirements for permit termination

**Commenters:** O-23

**Summarized Comments:**

- Ecology must revise Section S2.D.3 to ensure the provision is consistent with the requirements and process of 40 C.F.R. § 122.64 and that a permit may only be terminated at the behest of the permittee, if: a) Ecology determines in writing that the facility has ceased all operations, that all wastewater or manure storage structures have been closed correctly following Natural Resource Conservation Service (NRCS) Conservation Practice Standard No. 360, Closure of Waste Impoundments, and that all other remaining stockpiles of manure, litter, or process wastewater not contained in a wastewater or manure storage structure are disposed of properly; b) The facility is no longer a CAFO that discharges manure, litter, or process wastewater to waters of the United States; or c) The entire discharge is permanently terminated by elimination of the flow or by connection to a publicly owned treatment works (POTW).

**Ecology's Response:**

Thank you for your comment. The eligibility and facility cleaning requirements in special condition S2.D are consistent with 40 CFR 122.64 and the conditions suggested by the commenter.

When facilities decommission waste storage structures, Ecology refers them to NRCS Practice Standard 360 for applicable procedures.

## S3 Discharge Limits

### Include table or reference water quality standards in the permit

**Commenters:** O-11

**Summarized Comments:**

- Due to the importance of water quality standards on this permit, GGI requests that Ecology incorporate a table or references the specific water quality standards to be enforced to be fully transparent.

**Ecology's Response:**

Ecology appreciates the commenter's attention to the importance of water quality standards. References to the standards in Washington Administrative Code are included under the definition of water quality standards in Appendix A of the permits.

## Narrative Water Quality Condition in S3 is Insufficient

**Commenters:** I-23, I-24, I-26, I-28, I-29, I-30, I-304, I-31, I-32, I-337, I-338, I-34, I-35, I-37, I-41, O-10, O-15, O-23, O-30, O-7

**Summarized Comments:**

- Ecology's use of a narrative limit that merely cites the water quality standards in Condition S3 fails to regulate discharges from CAFOs
- Ecology must require applicants to demonstrate how they will comply with water quality standards prior to issuing a permit. No such demonstration is required in the draft permits.

**Ecology's Response:**

Ecology requires the development of a manure pollution prevention plan to describe how the permittee will comply with special conditions S4.A through S4.Q. The manure pollution prevention plan developed and implemented under these special conditions becomes an enforceable effluent limitation that demonstrates how that permitted CAFO will maintain compliance with its permit, and will not cause or contribute to violation of water quality standards, including groundwater standards. The special conditions also ensure that permittees comply with federal requirements in 40 CFR 122.24(e).

## S3.A Discharge Limits - Total Maximum Daily Loads (TMDL)

### Waste Load Allocations for CAFOs

**Commenters:** A-1, O-14, O-23

**Summarized Comments:**

- It is unclear, in S3.A, what is meant by "established waste load for CAFOs" In S3 A: how are "discharges not consistent with an approved TMDL" determined?
- How will this narrative requirement be transformed into effective and enforceable effluent limits? Ecology must explain in the permit itself the steps it will take to review each application and every applicable TMDL, and how it will develop effluent limits that meet the assumptions and requirements of the TMDLs for each permittee prior to issuing them a permit.
- The first paragraph under S3 and the parts of S3 (S3.A and S3.B) are essentially outside of any reasonable methods that designers, operators, and maintenance parties can feasibly work to hold down discharges that may or may not be authorized by any permit.

**Ecology's Response:**

TMDLs set wasteload allocations (WLAs) for the discharge of specific pollutants for categories of point source dischargers such as CAFOs, and load allocations for non-point source discharges of pollutants. The WLAs identify how much of each specific applicable pollutant can be discharged from point sources and have the water body still meet water quality standards.

Depending on the watershed and TMDL, CAFOs may or may not be assigned a WLA. Where EPA-approved final TMDLs assign WLAs to CAFO permittees, Ecology's permit coverage decisions will require implementation actions that are consistent with the WLA in order to address the CAFO's contribution to the impairment. The CAFO permit administrator relies on actions described in the TMDL documents to identify TMDL-related actions to include in the CAFO Permittee's Coverage Letter. The TMDL-related actions may target specific BMPs or require additional monitoring.

The TMDL process includes getting feedback from watershed residents, local governments, and other stakeholder groups. These documents are made available for public review. To find out more about the process or to find TMDLs in your area, visit Ecology's webpage on the [Total Maximum Daily Load process](#).<sup>23</sup>

**Discharges to Granger Drain**

**Commenters:** O-4

**Summarized Comments:**

- Ecology will stop allowing Dairy CAFOS to discharge into the Yakima River at the Granger Drain site and all other tributaries to the Yakima River. Ecology's Granger Drain Study clearly stated the over 200 tons a day of manure was being discharged from 5 dairies is a danger to the Yakima River and nearby residents.

**Ecology's Response:**

Thank you for your comment. When Ecology or WSDA documents a discharge from a CAFO, we may require the operator to apply for coverage under the appropriate CAFO permit.

Specific to the Granger Drain TMDL, a [detailed implementation plan](#)<sup>24</sup> was developed that required CAFOs to comply with the requirements of their permits.

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<sup>23</sup> <https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Total-Maximum-Daily-Load-process>

<sup>24</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/0310004.html>

## S3.B Discharge Limits – Impaired Waterbodies

### Discharge Limit for Impaired Waters Is Not Protective

**Commenters:** O-8, O-23

**Summarized Comments:**

- A waterbody may be listed as impaired for several reasons, including when it fails to support a designated use. As a result, often, a waterbody will not be listed because of a specific pollutant or pollutants, or at least the impairing pollutant will not be expressly identified on the state's 303(d) list.
- Where a waterbody is listed on the 303(d) because it violates one of the narrative criteria, the specific pollutant(s) causing the impairment may not be identified or even immediately apparent.
- The permit must ensure that any discharge will not violate water quality standards downstream of the facility.
- This provision fails to protect waterbodies that are impaired but not currently listed on the state's EPA-approved 303(d) list.
- There is no section in the permitting or reporting that requires CAFO owners to identify nearby impaired waters or demonstrate that no discharges to those waters take place. Washington's TMDL's are out of date. How can CAFO owners in the Nooksack Watershed, or the Lower Yakima Valley demonstrate that they are not contributing to bacterial contamination of water in these areas? In fact, the permits require no regular monitoring for discharge of bacteria at all

**Ecology's Response:**

Waters on the EPA-approved 303(d) list have been identified as impaired for a water quality parameter. Ecology identifies a designated use of an assessment unit (AU) as impaired when the applicable water quality standards for a given AU are not persistently attained. For each water quality parameter, Ecology analyzes the magnitude, frequency, and duration of observed numeric or narrative criteria exceedances. See [Chapter 1: Assessment of Water Quality for the Clean Water Act Sections 303\(d\) and 305\(b\) Integrated Report](#)<sup>25</sup> for an explanation on how water body segments are assessed to determine if they meet surface water quality standards (WAC 173-201A) and sediment management standards (WAC 173-204).

Existing operations are assumed to be contributing to the loading that causes a waterbody to be impaired if that operation discharges the pollutant for which the waterbody is listed as impaired. Therefore, existing operations may not increase the loading they are contributing to the waterbody. New operations are not already contributing to the loading so they are prevented from discharging the pollutant for which the waterbody is listed as impaired. Once a

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<sup>25</sup> <https://fortress.wa.gov/ecy/publications/SummaryPages/1810035.html>

TMDL is completed, the existing and new operations must comply with the waste load allocations set by the TMDL.

A permitted CAFO may eliminate discharges of the pollutant for which the waterbody is listed as impaired by controlling all discharges from the production area, even when the exemptions for large storm events in S3.C are met.

## S3.C Discharge Limits - Production Areas

### Discharge Limits for Production Areas are Not Protective

**Commenters:** O-23

**Summarized Comments:**

- Effluent limits for CAFO production areas fail to meet the minimum standards under federal rule, do not meet AKART, and are not proved to ensure compliance with water quality standards.
- Ecology must specify that the types of discharge that are prohibited include but are not limited to: a) contaminated runoff from confinement or waste accumulation areas; b) overflow or discharges from waste storage facilities; c) discharges due to equipment failure; d) pollutants blown from confinement areas by building fans; or e) leakage or seepage from facilities in the Production area.

**Ecology's Response:**

Thank you for your comments. The modified permits meet AKART. Ecology requires adequate storage space during the storage period (S4.C), visual inspections (S5.A), waste storage structure depth markers (S4.C), noncompliance procedures (S7.E), mortality management (S4.H), clean water diversion procedures (S4.E), and chemical handling procedures (S4.G). Animals are prohibited from direct access to Waters of the State under S4.F.

Special condition S3.C prohibits discharges of pollutants from the production area in the circumstances that the commenter lists. The only exception is due to a 25-year, 24-hour storm when the facility is operated and maintained according to their manure pollution prevention plan.

## S3.D Discharge Limits – Land Application Fields

### Discharge Limits for Land Application Fields are Not Protective

**Commenters:** I-224, I-349, O-23

**Summarized Comments:**

- Ecology failed to establish the required and appropriate limits controlling activities on the operation's land application areas.

- Ecology must eliminate the exception for agricultural stormwater, establish effluent limits for field applications, require adequate nutrient management plans.
- Currently, stormwater does not trigger a requirement to apply for CAFO coverage under the proposed draft and this must be addressed.

**Ecology's Response:**

Thank you for your comments. Ecology requires field-specific nutrient budgets (S4.K.1), field discharge management practices (S4.N), manure and soil testing (S4.I, J and S5.B, C), application equipment calibration (S4.K.2), and restrictions on when applications are made (S4.K.3). The permits require development of adequate and complete manure pollution prevention plans prior to permit coverage.

Agricultural stormwater is an exemption found in federal law and regulation. Please see the discussion in the Fact Sheet at page 28.

**Ecology Must Eliminate the Exception for Agricultural Stormwater**

**Commenters:** O-23

**Summarized Comments:**

- Ecology must eliminate its exception for agricultural stormwater from the Combined Permit. In order to be considered an agricultural stormwater discharge, the discharge must be precipitation-related from a land area under the control of a CAFO, and the manure, litter, or process wastewater must have "been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater, as specified in § 122.42(e)(1)(vi)-(ix)." 40 C.F.R. § 122.23(e).
- If Ecology insists on applying this exception, it must use the correct definition and limitations.

**Ecology's Response:**

The exemption for agricultural stormwater in the Combined Permit is explicitly authorized in federal NPDES rules for CAFOs. Regarding the definition of "agricultural stormwater" in the permits, Ecology disagrees that the definition in Appendix A is different from that in 40 CFR § 412.31(a)(1) for permitted CAFOs. Compliance with the CAFO permits requires following the site-specific manure pollution prevention plan or nutrient management plan.

## S4.A Manure Pollution Prevention

### Conduct a whole farm nutrient mass balance

**Commenters:** I-224

**Summarized Comments:**

- To logically address and verify adequate manure disposal resources a material/nutrient mass balance document needs to be created for each CAFO. A whole farm nutrient mass balance is the difference in nitrogen (N), phosphorus (P), and potassium (K) imported onto the farm in the form of feed, fertilizer, animals, and bedding, and nutrient exported off the farm in milk, crops, animals, and manure. Using whole-farm mass balance assessment operators be better able to identify farm-specific opportunities to reduce nutrient loadings and regulators will obtain confidence in operational regulatory compliance. Using a whole farm nutrient mass balance for a farm can help managers identify opportunities for improvements that impact farm profitability and the environment, namely manure applications resulting in improved water quality.

**Ecology's Response:**

Ecology agrees that a whole farm nutrient balance evaluation can help CAFO operators evaluate the performance of their operation. We encourage permittees to consider using this approach in developing their Manure Pollution Prevention Plan, but we do not require that they use this particular approach. No change was made as a result of this comment.

### Federal minimum elements of a nutrient management plan

**Commenters:** A-1, A-4

**Summarized Comments:**

- In its previous NPDES CAFO general permit, Ecology incorporated the nine minimum elements of a nutrient management plan or the Manure Pollution Prevention Plan (MPPP) plan into the permit. The updated draft permit proposes to require a CAFO owner/operator to include a MPPP with their application for a permit and make it available to the public for review and comment before Ecology issues permit coverage. This change ensues from the July 2021 decision from the Washington State Court of Appeals. EPA also supports this approach, as it is more consistent with federal law (40 CFR §§ 122.23(h), 122.42(e)(1) and provides added transparency.
- Regarding S4.A.1, 40 CFR 122.42e, there are six subsections. As currently specified: 40 CFR 122.42e (1) refers only to the first of these six sections.

**Ecology's Response:**

Thank you for your comments and support.

There six subsections under 40 CFR 122.42(e). The other five subsections are incorporated as terms in the general permits at S6. Record Keeping (40 CFR 122.42(e)(2) and (3)), S7 Reports and Submittals (40 CFR 122.42(e)(4)), S4.K Land Application (40 CFR 122.42(e)(5)), and S4.A.5 Updates to MPPP (40 CFR 122.42(e)(6)).

**Restore 6-month deadline for developing pollution prevention plan**

**Commenters:** O-19, O-22, OTH-3

**Summarized Comments:**

- In S7.B, restore the six-month grace period for obtaining a Manure Pollution Prevention Plan (MPPP), especially for small farm operations who may need to apply for a permit and develop the plan at the same time. This allows small businesses time to address concerns and inadvertently discriminates against new and beginning farmers who are working to expand their operation or production capacity to grow a sustainable operation for their family.
- We have also heard concern that the Manure Management Plan must be included with the permit instead of 6 months afterwards as the current permit requires.
- How does the MPPP change with the new CAFO permitting? To what extent does this affect existing operations?

**Ecology's Response:**

Ecology is requiring that applicants develop their site-specific Manure Pollution Prevention Plans before applying for permit coverage in response to the Court of Appeals Decision on the previous CAFO general permits.

**S4.B Production Area Run-off Controls****Mud from CAFOs should also be required to be removed from roadways**

**Commenters:** I-224

**Summarized Comments:**

- The permit also requires manure and other similar materials to be removed from public roadway if deposited. Mud from fields should also be required to be removed as this is caused by the operator and should not be a public responsibility to clean up after them.



**Ecology's Response:**

Mud on roadways could be a source of sediment. The permit condition requiring other sources of pollutants tracked out on roadways to be cleaned up would apply to mud.

**Removal of manure from roadways is not enforced**

**Commenters:** O-8

**Summarized Comments:**

- Because investigations of citizen complaints about manure tracking on public roads are conducted by the WSDA Dairy Nutrient Management Program, the investigations almost always find that CAFO dairies have complied with their Nutrient Management Plans (NMPs) and therefore did nothing wrong. This section of the permit may sound reassuring to city dwellers who do not tolerate manure in their streets and want to believe that agencies are responsive. For rural citizens who sometimes walk around manure to reach their mailboxes this section weakens confidence in permit effectiveness because it will likely not be enforced.

**Ecology's Response:**

Ecology disagrees that this requirement will not be enforced. When Ecology or WSDA receives a report of track out, we follow up with the potentially responsible party and require them to clean the track out promptly.

**Standing water in the production area**

**Commenters:** A-1

**Summarized Comments:**

- In S4.C, the need to design, operate, and maintain production facilities that will capture, channel, and properly store all contaminated water for later proper utilization or disposal is clear except for: 1) how long may standing contaminated water remain prior to being forced into qualified waste storage facilities (it is common to observe local ponding of manure water in multiple locations within a production area), and 2) will corral muck areas (where saturated manure+soil persists) be considered sources of manure water that needs to be drained and transferred into waste storage facilities?

### Ecology's Response

Ecology understands that puddles or areas of standing water may occur in low spots within the production area. The length of time that standing water may remain on the surface of the production area before it's transferred into a liquid waste storage facility or vegetated treatment area is site-specific and depends on factors such as ground surface type.

Corrals are considered a part of the production area and must be designed to prevent discharges to surface water in accordance with S4.B *Production Area Run-off Controls*. CAFO management differs between facilities, but to prevent surface water discharges, a permittee may consider sloping the corral surface to direct or drain contaminated runoff to liquid waste storage facilities or vegetated treatment areas.

## S4.C Storage of Manure, Litter, Process Wastewater, Other Organic By-Product, and Feed

### Waste storage pond requirements are not protective

**Commenters:** I-23, I-24, I-25, I-26, I-28, I-29, I-30, I-304, I-31, I-32, I-33, I-338, I-34, I-35, I-37, I-41, O-10, O-23, O-28, O-4, O-7

#### Summarized Comments:

- Require that applicants implement modern technologies to prevent leakage from waste storage facilities and lagoons. Add severe penalties for those who fail to comply within a two-year time period.
- The permits do not require implementation of "all known, available, and reasonable methods of prevention, control, and treatment" (AKART) for existing manure lagoons and compost areas.
- Ecology must impose water quality-based effluent limitations to ensure "the majority of the dischargers intended to be covered under the general permit" will not cause or contribute to a violation of water quality standards, including groundwater standards.
- Ecology must require CAFOs to design storage to handle a volume equal to the sum of a) double the estimated volume of manure, litter process, wastewater and other wastes accumulated during the storage period; b) the normal precipitation less evaporation during the storage period for the location of the facility; c) the normal runoff during the storage period into the storage structure for the location of the facility; d) direct precipitation from the 100-year 24-hour precipitation event for the location of the facility; e) runoff from the 100-year 24-hour precipitation event from the production area into the storage structure for the location of the facility; f) residual solids after liquids are removed; g) necessary freeboard to maintain structural integrity. After settlement, the top of the embankment shall be at least 1 foot above the surrounding grade, or greater than the minimum determined by the current NRCS Conservation

Practice Standard Code 313, whichever is greater; and h) a minimum treatment volume, in the case of treatment lagoons.

- Ecology must specify that all open surface liquid impoundments have a depth marker that clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of a large storm event, the design storage volume, and the depth of the manure and process wastewater. The marker shall be visible from the top of the levee.

**Ecology's Response:**

Ecology is requiring waste storage pond seepage to not exceed  $1 \times 10^{-6} \text{cm}^3/\text{cm}^2/\text{s}$  without consideration for manure sealing and a minimum of two feet of vertical separation between the bottom of the waste storage pond (inside the pond above the liner) and the seasonal high water table.

All pond liners have a seepage rate. Seepage that reaches groundwater is considered a discharge that requires a permit. Due to the economic constraints, Ecology is not mandating a particular waste storage pond construction design. The goal with specifying a seepage rate is to minimize the risk that the seepage impacts groundwater.

Ecology requires the permittee to have adequate liquid storage space to handle the volume of manure, litter process, wastewater and other wastes accumulated during the storage period, contaminated runoff and direct precipitation generated during the storage period from a normal year, and the runoff and precipitation from the 25-year, 24-hour storm. This design volume must be maintained through periodic solids removal as necessary. Special condition S4.C.1 requires the permittee to install and maintain a depth gauge in each liquid storage structure.

**Remove and treat contaminated soils below waste storage ponds**

**Commenters:** I-6, O-8

**Summarized Comments:**

- Please add a requirement to test soils below and to the sides of decommissioned wastewater storage ponds until samples test  $< 45$  ppm for nitrogen. Contaminated soils should be removed and properly treated. The evidence is clear that large amounts of nitrate, ammonia, and other pollutants leach into the soils from old manure lagoons. If contaminated soils are not removed, the pollutants will continue to leach to underlying aquifers.

**Ecology's Response:**

Thank you for your comment. Ecology has not modified the decommissioning procedures in the permits.

We are aware of the results of soil samples collected on the recently decommissioned lagoon in Yakima County and elsewhere. There are technical challenges to remediating soil at depth and we do not know the effectiveness of the remediation technologies. General procedures and policies that would guide permit requirements are not yet defined.

**Clarify performance requirements for solid waste storage infrastructure**

**Commenters:** B-4, O-14, O-19, O-23, O-6

**Summarized Comments:**

- This requirement is somewhat vague and not well defined. The producer needs to be aware of what the criteria will be before assessment so that they have a target or level to achieve, especially if they want to avoid sampling compost areas.
- Solid materials storage over concrete surfaces ought to specify that the concrete structures are cleaned of stored manure, organic materials, and manure water at some frequency to then identify failures (cracks and larger voids) to adequately seal them prior to subsequent loading with manure and/or organic solids (and yes, this is elaborated in S4.C.3 to some degree).
- As for soil pads, NRCS does not advocate the practice of waste storage over soil pads in Washington State. The exception being waste storage ponds with low permeability and maintenance means to maintain the specific discharge criterium you now include in this draft permit. Soil pads for manure stacking essentially turn into muck-fest-city when it comes time to remove the solids even during the driest month of each year. In general, this is the case even on the Eastern side of the state where drier conditions exist, and any liner effect that may have been designed into such dry stack earthen structures/locations are destroyed beyond simple repairs by the tires or tracks of the tractors/loaders used to scoop up the stacked solids over soil pads.
- It is unclear how to identify deficiencies in soil pads, through a qualified expert or by completing the double-ring infiltrometer test. Both lend themselves to variable results and wide interpretation unless multiple double-ring infiltrometer tests are performed and additional tests are applied that give reason to qualify the results of these infiltration rate tests. A separate test that NRCS commonly uses to examine the viability of WSP liners is to acquire multiple samples via the proper use of Shelby tubes to acquire undisturbed core samples in conjunction with using flexible-wall permeability tests (ASTM D5084-16a).

- Department of Ecology has not demonstrated the need for the requirement that solid materials be stored on low permeability soil pads. This requirement should be entirely removed from the general permits, until such time as Ecology presents data indicating a reasonable potential for solids storage areas to have an adverse impact on groundwater quality. Should some form of the requirement for solid storage areas be retained, Ecology should make the following changes:
  - Solids Storage Area requirements should only apply in wetter areas. Ecology has drawn a distinction in the between the wetter and dryer areas of Washington. To the extent there is a potential for leaching of nutrients from stored solid materials, it is not likely to pose an issue in the dryer areas of the state (those averaging less than 25 inches of rainfall annually).
  - Feed storage areas should be excluded. We are not aware of any evidence that rainfall causes a material amount of nutrients to leach from hay, silage and other feed components.
- The proposed permits fail to establish appropriate effluent limits to control the discharge of pollutants from composting areas.

**Ecology's Response:**

Ecology partly based this special condition on NRCS's Conservation Practice Standards 317 (Composting Facilities) and 313 (Waste Storage Facilities). These practices point to guidance in NRCS 210-NEH, Part 651, Chapter 10, Appendix 10D, "Design and Construction Guidelines for Impoundments Lined with Clay or Amendment-treated Soil" for restricting seepage through foundation and subgrade materials. These documents outline procedures for constructing storage facilities with impermeable surfaces and soil pads.

Even in drier climates, compost and solid waste may generate seepage as the organic matter breaks down. For this reason, Ecology applied this permit coverage to all permitted CAFOs in Washington.

**Typographical Error**

**Commenters:** O-11

**Summarized Comments:**

- S4. C. 1. — Liquid Waste Storage Structures — Grammatical error, please correct; "Permittee must have a depth gauge in each liquid..."

**Ecology's Response:**

Thank you for alerting Ecology to these typographical errors. We have resolved them in the revised permits.

## Updating CAFO infrastructure to meet permit requirements

**Commenters:** O-22

**Summarized Comments:**

- Do existing poultry operations have to invest in new buildings to store litter? Building a dry litter storage barn can cost the farmer from \$500,000 to 800,000. This is a sizable investment for growers that are already struggling with labor and fuel costs. The concern of the NWCC is that this will either force growers out of agriculture or increase prices of poultry at the marketplace, pricing poultry out from lower- and middle-income families as a source of lean and healthy protein, both of which will be a detriment to the Washington economy.

**Ecology's Response:**

Ecology is not requiring the construction of new storage structures. It is the responsibility of the Permittee to assess the CAFO's conditions and determine if there is adequate storage. If storage is insufficient, the Permittee must determine how it will handle the excess manure, litter, process wastewater, or other organic by-products that are generated.

## S4.H Livestock Mortality Management

### Revise mortality management requirements

**Commenters:** O-22, O-23

**Summarized Comments:**

- Size and scope of animal mortality controls?
- How specific are the mortality controls on agricultural sites concerning feathers, droppings, and etc.? While moving out litter for application, is the farmer going to be held in violation of CAFO permitting if litter or other biomaterial is found on the ground during or after removal?
- We ask for clarity surrounding the requirements of animal mortality controls, with the possibility of industry input around the removal and movement of poultry mortality and litter.
- Ecology must require that the permittees handle and dispose of dead animals in a manner that prevents any contact between dead animals and waters of the state.

**Ecology's Response:**

The mortality management requirements in the permit are requirements established elsewhere in state laws and rules. See the Fact Sheet, pages 52-53 for details.

Consider consulting Ecology's technical guidance "[On-Farm Composting of Livestock Mortalities](#)"<sup>26</sup> for more information. Please note that the citations to state law and regulation found in this document have been superseded and should not be relied on. The technical guidance remains valid.

**Exclude mortalities from liquid waste storage facilities**

**Commenters:** O-4

**Summarized Comments:**

- Dead CAFO cows will not be allowed to be put into manure and called "Organic." Violators will be prosecuted by Ecology.

**Ecology's Response:**

The permit prohibits the permittee from disposing of livestock mortality in liquid waste storage structures.

## **S4.J Soil Sampling and Nutrient Analysis**

**October 1 soil sampling date is impractical**

**Commenters:** B-4, B-7, I-129, I-281, I-296, I-359, I-49, O-11, O-13, O-17, O-19, O-27, OTH-4

**Summarized Comments:**

- Setting a date of October 1st and after harvest for the fall post-harvest nitrate test simply isn't compatible with farming practices. In most years harvest of crops isn't completed until after October. Please adjust this to October 31st.
- There are not heavy rains in October in the drier areas of the state, but there is potentially some level of irrigation if silage harvest is completed before the water is turned off, which is not always the case. On double cropped fields, I would estimate that 85% or more of the silage corn acres have not been harvested by October 1st. This has to do with the day length of the corn varieties used and our weather.
- Soil samples required after harvest and before nutrient application or significant applications of water are plausible. Blanket sampling requirements before October 1 serves little purpose.
- We take issue with the unscientific requirement for more and time specific soil testing. These are all unnecessary costs and timelines. Please eliminate these criteria.

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<sup>26</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/0507034.html>

**Ecology's Response:**

In response to public comments, Ecology made changes to the permits in S4.J.3 Late Summer-Early Fall Soil Sampling and Analysis to specify that the end of season soil sampling should occur after annual crop harvest and before 3 inches of rainfall accumulates. September 1 is to be used as the start date for tallying the accumulated rainfall.

Ecology received comments that in many cases fall crops have not been harvested by October 1 and soil sampling before a crop is removed is logistically difficult and may be an inaccurate measure of soil nitrate content. Additionally, as precipitation patterns change in time and vary across the state, the calendar date requirement did not always meet Ecology's original intention. In defining the date by when samples were to be collected, Ecology used University Extension guidance intended for Western Washington ("Postharvest Soil Nitrate Testing for Manured Grass and Silage Corn West of the Cascades," Sullivan et al, 2003). Updates to the guidance in February 2021 recommend sampling soil before heavy rains begin. The authors recommend the following guidelines for the timing of soil sample collection:

- For loam, clay loam and clay soils, collect samples before 5 inches of rainfall accumulate.
- For sand, loamy sand or sandy loam soils that have a lower water-holding capacity, sample before 3 inches of rainfall accumulate.

Of the two options above, Ecology has chosen the more conservative approach -- 3 inches, for all soil types. Additionally, special condition S4.M Irrigation Water Management requires that permittees prevent nitrate from moving out of the root zone by managing irrigation water applications. For drier climates where irrigation continues past September 1, Ecology expects that nitrate will not migrate beyond the root zone and soil tests of the first two feet will be representative of soil nitrate conditions post-harvest.



## **Clarify how soil testing applies to double cropped, winter cover crops, and perennial crops**

**Commenters:** B-4

### **Summarized Comments:**

- Section S4.J.2. "Samples must be collected and analyzed before land application begins." When double cropping is used, I think there needs to be clarification on the timing of application in regards to what crop and budget the application belongs to. For example, a fall soil sample is collected and a budget is made for fall triticale and summer silage corn. The recommendation provides for application to the triticale, but the grower cannot or does not want to apply all of the recommendation in the fall and leaves some for the spring. Once T-SUM 200 is achieved in the spring, the grower applies the balance of the recommendation to the triticale. It appears the language suggests that no application can be made in the spring until a sample has been taken, even though the grower has a valid recommendation based on data collected specifically for that crop. I would suggest making it more clear that under double cropping or perennial cropping that spring applications can be made if there is an outstanding balance that has yet to be applied.

### **Ecology's Response:**

Ecology agrees with the commenter that the requirement in S4.J.2 is ambiguous. As a result, we made changes to this special condition to reflect that Permittees should follow the nutrient budgets developed for double cropped, winter cover crop, or perennial crop systems. Permittees are not required to collect spring soil samples before making applications. If the crop is harvested or a new crop is planned, the permittee must collect soil samples and use them to develop nutrient budgets for the next crop.

## **Remove requirement for deeper soil samples in drier climates**

**Commenters:** O-11

### **Summarized Comments:**

- S4. J. 1. — Soil Sampling Depth — This paragraph states "drier climates must collect separate composite soil samples for the 0-12 inch depth and the 12-24 inch depth." to Sullivan et al states the 0-12 inch depth is the most valuable sampling depth, therefore GGI requests that the soil sampling for drier climates be changed to the same regulation as the wetter climates.

### **Ecology's Response:**

Due to low precipitation rates in drier climates, residual nitrogen can remain at depth. The additional sampling depth in drier climates supports the requirement to monitor and account for soil nitrate in future nutrient budgets.

## S4.K Land Application

### Define the term “nutrients”

**Commenters:** I-281, O-17, O-27, O-8

**Summarized Comments:**

- Draft permits use the word “nutrient” too loosely. We ask Ecology to clarify, better define and improve consistency in language in the permit around what “nutrients” you all are referring to.
- Balancing for every nutrient on every crop, every year, for expected yield is impossible.
- Although there is a requirement to test soil for phosphorous, we do not find any restrictions on application of manure as fertilizer when phosphorous levels are elevated.

**Ecology’s Response:**

Ecology agrees with the commenters that the term “nutrients” is unclear. In response, we changed the term “nutrients” in the text of special condition S4.K to “nitrogen and phosphorus.” We expect permittees to balance the crop’s nitrogen and phosphorus needs with the nitrogen and phosphorus in the soil and applied manure, litter, and wastewater. Further, if phosphorus levels in the soil are greater than what a crop requires, permittees may not add additional phosphorus from manure.

### Application Restrictions – Use TSUM100 in Drier Climates

**Commenters:** B-7, I-359, O-13, O-16, O-17, O-27

**Summarized Comments:**

- We are suggesting a specific change to use T-sum 100 on the eastern side of the state.

**Ecology’s Response:**

Ecology made changes to the permits in S4.K.3 Application Restrictions to accept proposals for alternative application start dates. Ecology included TSUM 200 in the 2017 general permits to provide a clear measure for when common crops begin growing and consequently, utilizing nutrients. We understand permittees desire greater flexibility in identifying when the growing season begins and that other measures exist, such as soil temperature and crop-specific consumptive water use guides.

Ecology’s broad intention to restrict land application to the growing season comes from significant evidence that “[a]pplying waste water to crops and soil systems for the purpose of land treatment of nutrients in waste water during the non-growing season does not reliably protect groundwater quality” ([ECY, 2004](https://apps.ecology.wa.gov/publications/SummaryPages/0410081.html)<sup>27</sup>). Further, Washington State University’s review of

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<sup>27</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/0410081.html>

relevant scientific literature found that wastes applied substantially before or after maximum crop demand may result in nitrate leaching. Ecology has reviewed the data submitted by commenters and does not believe this constitutes reason to change the original TSUM200 restriction for all drier climates. We do, however, see that the time at which a crop begins growing may be before TSUM200 is reached.

We expect proposals for alternative starting application dates to be site-specific and crop specific. Ecology encourages applicants to submit accompanying information such as University Extension plant guides.

To submit an alternative proposal, current permittees must submit the proposal as a modification to facility's MPPP according to provision in S4.A.5. For combined permit holders, the MPPP modification must be publicly noticed. New permit applicants may submit the proposal as a part of the initial MPPP that accompanies the Notice of Intent (NOI).

### **Prevent overapplication and accidental spillage of manure nutrients**

**Commenters:** I-10, I-193, I-23, I-24, I-26, I-28, I-29, I-30, I-304, I-31, I-32, I-338, I-34, I-35, I-37, I-41, O-7

#### **Summarized Comments:**

- Safeguard against the overapplication of manure to land.
- Include science based BMPs that will aid in preventing accidental spillage or overapplication from harming aquatic systems.
- This permit allows factory farms to dump toxic cow poop on land in vast excess of what plants actually need, which introduces untreated waste into our rivers and groundwater.

#### **Ecology's Response:**

Thank you for sharing your concerns that manure may end up in aquatic systems. We developed this permit with requirements that reduce the risk of accidental spillage. The permits also prohibit the application of nutrients beyond what a crop can utilize.

We require permittees limit the risk of accidental spillage and overapplication on cropped fields through several permit conditions such as equipment calibration (S4.K.2), weather-based application restrictions (S4.K.3), nutrient budgeting (S4.K.1), setbacks and buffers around sensitive water features (S4.N), adaptive management based on soil test results (S4.L), and employee training (S4.Q).

## Nutrient budget requirements

**Commenters:** I-129, B-4

**Summarized Comments:**

- S4.K.1. g. Estimated plant date. Weather can easily change this and the growing season seems to be shifting. To what end is this required? Same with estimated harvest date. To what end is this required or necessary?
- Estimate volume of N & P from multiple sources including precipitation make this requirement incredibly difficult to comply with. This type of reporting does little to aid the environment. A couple of pounds of N or P will not make a major difference to pollution and will be captured in the soil samples. Making this permit difficult to comply with will prevent some farms from even considering this permit and that is not a desired effect.
- I am not aware of tools or procedures available to growers to define levels of atmospheric deposition of N and P and therefore, I would propose striking "atmospheric deposition".

**Ecology's Response:**

Planting and harvest dates in yearly nutrient budgets are used to assess compliance with restrictions in S4.K.3 Application Restrictions and to assist in interpreting the results of fall soil nutrient analyses.

Ecology recommends using maps of total (wet and dry) nitrogen deposition from the [National Atmospheric Deposition Program's Total Deposition Science Committee](#)<sup>28</sup>. See [EPA's website](#)<sup>29</sup> for more information about how atmospheric deposition is estimated.

Nutrient budgets must consider all potential sources of nitrogen and phosphorus. Ecology understands from the commenters that guidance on estimating these sources is needed.

## Application methods and equipment

**Commenters:** I-224

**Summarized Comments:**

- Application methods and calibration should be discussed including injections as the preferred method outside the flooding season on flood plains.

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<sup>28</sup> <https://nadp.slh.wisc.edu/committees/tdep/>

<sup>29</sup> <https://www.epa.gov/cmaq/estimating-atmospheric-deposition-cmaq>

**Ecology's Response:**

Thank you for your comment. Special condition S4.K.2 requires permittees to calibrate equipment used for land application.

**Applications after October 1 and before TSUM200**

**Commenters:** B-4, O-11

**Summarized Comments:**

- Having the combination of October 1 and T-SUM 200 will lengthen the time required to store manure well beyond what was required in their DNMP's, which is 120 days. This potentially longer storage requirement creates a much greater risk for the potential discharge of pollutants than applying in October or before T-SUM 200, especially if all other restrictions are followed (S4.K.3.a-e,g). As has already been presented, the weather supports being able to apply in October.
- Implementing an application timeframe using T-SUM 200 greatly reduces the ability of the dairy farmer to plan ahead. using T- SUM as a tool is not an exact science and there is a lot of variability (weather patterns, time of harvest, wet/dry climates, etc.) There are also many areas in Washington that see crop growth, uptake, and maintenance during the winter months (October-March). Therefore, GGI requests that manure application be at the discretion of the dairy/farmer as long as nutrient application criteria (590) are being adhered to.

**Ecology's Response:**

Permittees may apply nutrients after October 1 if there is a demonstrated crop need for additional nutrients. These applications must be made in accordance with special condition S4.K.4 Double Cropping, Winter Cover Crops, Perennial Crops.

Ecology updated the permits in S4.K.3 Application Restrictions to accept proposals for alternative application start dates. Ecology included TSUM 200 in the 2017 general permits to provide a clear measure for when common crops begin growing and consequently, utilizing nutrients. We understand permittees desire greater flexibility in identifying when the growing season begins and that other measures exist, such as soil temperature and crop-specific consumptive water use guides. Please see the response in *Application Restrictions – Use TSUM100 in Drier Climates* above for more information.

## Forecasting when soils will saturate

**Commenters:** B-4

**Summarized Comments:**

- "To fields with soils that are or will become saturated with forecasted precipitation prior to infiltration or incorporation." I do not like the "will become saturated" portion of this statement. How is a producer to know whether his soil in a particular field will become saturated based on a forecast? Fields are different and on the east side enter into winter with varying amounts of moisture deficit. I would propose either going back to a defined precipitation amount or include "likely to become saturated" or something similar.

**Ecology's Response:**

Thank you for your comment. Ecology believes the phrase "will become saturated" is a better option for determining compliance. It indicates a higher level of confidence that soil will become saturated than "likely to become saturated."

## Application restrictions are inadequate

**Commenters:** I-224

**Summarized Comments:**

- The draft permit in section S4.K.3 Application Restrictions are silent on floodplain manure pollution. In 3.a, the crust requirement should be removed, if there is a 2" frozen crust, the soil is already below 32F. At 3.b, the permit needs to be changed to "Snow covered or traces of snow". If the snow is present, soil must be at 32F or near freezing in some locations where patches exist, and the other soil is likely frozen as well or near the freezing point where crop benefits are negligible. The questionable application on snow covered frozen ground had marginal positive effects on the cropping while having significant effects on water quality when the location was flooded and contained water for several weeks with the high groundwater table from the flooding.
- Requirement 3.d needs to be changed to contain a descriptive acceptable method(s) or recommendations of determining water table from the surface in application areas, such as seasonal surface ponds and monitoring pits / trenches and located on maps. If manure is applied, the conditions of these ponds and pits need to be documented as permanent records by pictures from cell phones or pocket cameras with a date and time stamp from the camera. Another solution would be an array of piezometers, preferably wireless to track and log groundwater height as the preferred method. The inspector could then match levels to applications to assure compliance.

- As read, 3.f indicates manure must not be spread after October 1st except as noted in 3.g and S.K.4. This allows CAFOs manure application convenience at the expense of the environment, particularly in flood plains. When TSUM200 is reached the following year, manure may be applied, regardless of location, including a flood plain during the active flooding season.
- The hard and fast date of October 1st has been selected to cease manure applications by ECY and WSDA. Likewise, a specific date must be selected for the Spring as a time when applications are allowed again. The T-SUM200 method proposed falls short and is of no use ensuring safe application of manure during the winter in flood plains due to consistent flooding well past the average T-SUM200 date.
- Provisions for Double Cropping, Winter Crops, Perennial Crops is unsatisfactory in flood plains during the winter season for the same reasons listed above and needs to be specifically excluded in flood plains.

**Ecology's Response:**

Thank you for your comments. Ecology is maintaining the restrictions in S4.K.3 including the Oct 1 to TSUM200 restriction. In early parts of the year, the TSUM200 restriction works in concert with the other restrictions. For example, saturated field or one that will become saturated with forecasted precipitation cannot be applied to regardless of whether TSUM200 has been reached or not.

## S4.M Irrigation Water Management

### Clarify irrigation water management requirements

**Commenters:** B-4

**Summarized Comments:**

- S4.M. "The Permittee must prevent the downward movement of nitrate by managing their irrigation water so that the amount applied from precipitation and irrigation does not exceed the water holding capacity of the soil beyond the crop rooting depth." I know this was in the previous permit as well, but it should be looked at as to how this is stated in that it presumes that all fields are monitored and checked in a manner where the producer would be able to actually make this evaluation, but this is far from reality. I would suggest changing the statement to "The permittee must reasonably prevent"..."and does not measurably exceed the water..." This should not be a definitive statement.

**Ecology's Response:**

Thank you for your comment. Ecology believes the suggested language is less clear about Ecology's expectations for this permit requirement.

## S4.N Field Discharge Management Practices

### Require Option 3.a. Riparian Management Zones

**Commenters:** I-13, I-14, I-15, I-18, I-20, O-10, O-15, T-1

**Summarized Comments:**

- Requiring riparian buffers in the permits will benefit salmon and reduce nitrate concentration.

**Ecology's Response:**

Ecology agrees that healthy riparian buffers benefit salmon and reduce the risk that pollutants carried by stormwater will enter surface waters. Buffers, however, are not the only option available for controlling the risk of pollutants from land application fields.

These permits are for the management of pollutants. Ecology's approach in this permit is to provide the performance requirements for facilities. This is best seen in the field discharge prevention special conditions in S4.N of the State-only permit. Federal regulations require the Combined permit to include technology-based limits such as setbacks and vegetated buffers. However, if the technology-based limits are insufficient to meet applicable water quality standards on a particular site, the CAFO facility must consider additional measures. A facility may choose to implement management changes in-field to reduce pollutants sources (such as reduced tillage) or change nutrient application practices (like opting for manure injection over broadcast application). Identifying more stringent edge-of-field technologies is not the preferred approach to pollution prevention. Pollution prevention should always consider source control and treatment options along the pollutant transport continuum.

Riparian management zones as designed in the water quality funding guidelines and forthcoming VCWG illustrate a practice that provides full protection of water quality in the absence of assurance that source control measures are in place. The permit requires source control and treatment practices such as nutrient budgeting, application restrictions, and adaptive management that reduce pollutants in stormwater that are a result of manure management.

Inclusion in the permit will prohibit permittees from accessing funding resources for creating riparian buffers. Ecology's permit team made a mistake in understanding the funding eligibility requirements. Requiring buffers in this permit or even outlining it as an option may make inadvertently discourage operators from choosing this level of water quality and habitat protection.

For these reasons, Ecology removed the riparian management zone option from the Combined permit. We also removed the definition of a riparian management zone from the Appendix that supported the permit condition. The definition was removed from both the Combined and State-only permits. It was mistakenly included in the draft State-only permit.



## **Remove Option 3.a. Riparian Management Zones**

**Commenters:** I-281, O-17, O-19, O-27, OTH-4

**Summarized Comments:**

- The guidelines are policy documents, not science.
- Voluntary implementation of riparian buffers and waterway exclusion is already covered in state and national conservation programs through, the Voluntary Stewardship Program, District Soil Conservation projects, and NRCS programs.

**Ecology's Response:**

Ecology agrees that programs through the Voluntary Stewardship Program, NRCS, and Conservation Districts are important for facilitating the adoption of these important water quality and wildlife habitat protection practices.

Documents providing best practices for habitat project design and applicable science include the Washington Department of Fish and Wildlife's publications Riparian Ecosystems, Volume 1: Science Synthesis and Management Implications (2018) and Riparian Ecosystems, Volume 2: Management Recommendations<sup>22</sup> (2018).

See discussion in "Require Option 3.a Riparian Management Zones" above.

## **Fund riparian buffers large enough to protect surface water**

**Commenters:** I-6

**Summarized Comments:**

- Suggest riparian buffers be large enough to protect surface waters
- The legislature should be encouraged to provide funding to farmers

**Ecology's Response:**

Ecology is in the process of developing technical guidance on riparian management for agricultural producers. An advisory committee is working on the technical resource and is using the WDFW science and guidance, including site-potential tree height. When the guidance is finished, it will be used in our grant and loan funding decisions, technical assistance, and water cleanup plans.

## **Include the draft guidelines on riparian buffers for salmon protection**

**Commenters:** I-17, I-19, I-25, I-273, I-337, T-1

**Summarized Comments:**

- Ecology's riparian management zone guidance should be included in the permits.
- The permits should include best management practices that are based on science.

- By allowing the 35-foot buffer option in section 4N, CAFO permittees will infrequently—perhaps never—choose options for riparian buffer management that are appropriately protective of surface water, as defined by the State of Washington’s own guidance. We request that this option be removed in favor of buffer options that align with the state’s own best available science-based guidance, and which will support water quality for fish, wildlife, recreation, a healthy populace, and a healthy watershed.

**Ecology’s Response:**

See discussion in “Require Option 3.a Riparian Management Zones” above.

Ecology is in the process of developing a 13-chapter guidance that will be a technical resource for agricultural producers. It describes our recommended best management practices (BMPs) to protect water quality. We are gradually building the guidance, releasing a few chapters at a time for feedback. At the time of both the draft and final permits, the chapter on riparian management has not been finalized. We therefore will not include it as a requirement in the CAFO general permits. Additionally, this guidance is not developed as a rule or a requirement. It’s a science-based technical guidance that will be used in our grant and loan funding decisions, technical assistance, and water cleanup plans.

**Comments in support of Option 3.a Riparian Management Zone****Commenters: A-4, O-8****Summarized Comments:**

- EPA also supports the approach proposed for Field Discharge Management practices (S4.N). Using best management practices (BMPs) to control and limit runoff from land application areas is essential to protect surface water from the potential impacts of the land application of manure, litter, or process wastewater.
- We note that the draft permit proposes to include an additional element that would allow for alternative management of riparian management zones.
- The Friends of Toppenish Creek (FOTC) begin our comments with strong support for healthy riparian buffers as described in Section S4.N. We do this because, in the opinion of many, saving salmon is the number one environmental priority in Washington State. Salmon are the heart of all that we hold dear – the forests, the streams, the birds, the wildlife, and yes, the people. The 2018 State of the Salmon in Watersheds Report states: Washington State’s network of organizations are committed to recovering salmon. Today, collaboration and partnerships are necessities. The challenge of recovering salmon spans jurisdictional boundaries and will take all of us working together to face the big challenges of the future. FOTC considers the report’s conclusion that we all must do our part to save salmon a fact that is beyond dispute. Doing our part means protecting rivers, streams, and spawning grounds from agricultural runoff. A strong and enforced NPDES permit for CAFOs is vital for restoring salmon runs.

**Ecology's Response:**

We thank you for the support.

**Clarify what activities can take place with a field discharge management practice area**

**Commenters:** O-8

**Summarized Comments:**

- S4.N (2) Field Discharge Management Practices - States: Field discharge management practices are not considered part of the Permittee's land application area for calculating yearly field nutrient budgets and may not have manure, litter, process wastewater, or other organic by-products applied to them. Livestock must be excluded from these areas. Please re-write this section for clarity. To our reading this section equates a management practice with an application area, and this does not make sense.

**Ecology's Response:**

Thank you for your comment. The permit condition prohibits land application of animal nutrients within the vegetative filter strip, the 100-foot setback, berm, or any other approved practice. Animals must be excluded from these areas as well.

**100-foot setback from surface water is impractical**

**Commenters:** I-49, I-113

**Summarized Comments:**

- The requirement of 100-ft setbacks from surface water, and the definition of surface waters, as measured when and where are unpredictable. For example, heavy rains may produce higher than normal surface water. The burden to have nutrient filter strips and having to try to maintain those strips is unrealistic for a small farmer.
- For 100 foot setbacks and 35 foot vegetative filter strips real on-ground field testing of individual farms needs to be done to find whether there is a problem and what is causing it first. Skagit County testing has shown that avian and human septic problems are the main problems of pollution. Skunks, beavers and elk are also large contributors. If field testing shows a problem, then the real source needs to be determined before putting a farmer out of business for something he has no control on.

**Ecology's Response:**

The permit incorporates the default setbacks and vegetative filter strips required by 40 CFR 412.4(c)(5) and includes berms as an alternative option.

## Groundwater protections in State-only permit

**Commenters:** A-3

**Summarized Comments:**

- Specific to land application, there appears to be a disparity in drinking water protections between the combined and state-only permits. The combined permit states that permittees must use field discharge management practices to limit the discharge of pollutants to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural or drinking water well heads, or other conduits to surface or groundwater. Language in the state-only permit is significantly different and focuses on surface water. We support incorporating consistent public drinking wellhead protection language into both permits.

**Ecology's Response:**

Thank you. Ecology inadvertently omitted the additional locations where discharge may enter surface or groundwater. In response to comments, we updated special condition S4.N in the state only permit so that both permits address discharges of pollutants to any down-gradient surface water, open tile line intake structures, sinkholes, agricultural or drinking water well heads, or other conduits to surface or groundwater from each land application field.

Ecology also updated the resources permittees under the State-only permit may consult in designing practices that meet the requirements in S4.N. Ecology's Clean Water Guidance for Agriculture do not have finalized chapters for applicable practices at the time this CAFO general permit is issued. Any practice a CAFO implements for field discharge prevention should be designed to meet applicable practices in NRCS's conservation practice standards or Ecology's Stormwater Management Manuals.

## S4.0 Manure Export

### Reduce sampling requirements for digestate

**Commenters:** B-4

**Summarized Comments:**

- The requirement to sample every 5,000 cubic yards of digestate is too small of a volume requirement for larger dairies. I work for a dairy that effectively exported over 40,000,000 gallons last year and if this was to be followed, they would have had to take nearly 40 samples over the season.
- Most dairies are very consistent with how they generate, handle, and store manure and therefore, there are not any significant changes in manure from month to month. The only significant change is typically in the spring after long-term storage and winter precipitation influences.

**Ecology's Response:**

Ecology based this requirement on Solid Waste Handling regulations. Washington law provides an exemption from solid waste permitting for anaerobic digesters that meet certain conditions, one of which requires digester operators to sample and test digestate solids every 5,000 cubic yards or once per year, whichever is more frequent. The Solid Waste Permit exemption conditions are detailed in Table 250-A (3) of WAC 173-350-250. No change was made to the permits.

For more information on anaerobic digester permitting requirements, please visit our [website for organic waste management](#)<sup>30</sup>.

**Continuing Responsibility for Exported Manure**

**Commenters:** I-224

**Summarized Comments:**

- A RCRA-style cradle to grave responsibility for manure needs to be created for CAFO manure disposal creating responsibility for any form of pollution caused by the CAFO from generation to application or other licensed disposal. The current regulations do not satisfactorily protect the environment after the export has taken place.
- This weak regulatory link and transfer of responsibility needs to be eliminated for manure as it was for hazardous waste with RCRA.

**Ecology's Response:**

Ecology does not have authority to require "cradle to grave" responsibility on the part of the Permittee for manure, litter, or process wastewater exported from the facility. We also do not have authority to include as permit conditions requirements on the receiving party.

## S5.A Operations and Maintenance

**Include visual inspections and soil sampling to ensure compliance**

**Commenters:** I-337, O-10, O-15, O-23

**Summarized Comments:**

- Implement monitoring practices (visual inspections and soil sampling) sufficient to ensure compliance

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<sup>30</sup> <https://ecology.wa.gov/Waste-Toxics/Reducing-recycling-waste/Waste-reduction-programs/Organic-materials/Anaerobic-digesters>

- Ecology must specify the required minimum visual inspection schedule, including but not limited to: a) Weekly visual inspections of all stormwater diversion devices, runoff diversion structures, and devices channeling contaminated stormwater to the wastewater or manure storage structures; b) Daily visual inspections of all water lines, including drinking water and cooling water lines; c) Weekly inspections of the manure, litter, and process wastewater impoundments, storage, and containment structures. d) Daily inspection of the depth marker and recoding of the level in liquid impoundments as indicated by the depth marker.

**Ecology's Response:**

Permittees are required to conduct regular visual inspections of their facility infrastructure and best management practices used on land application fields in special condition S5.A Operations and Maintenance. Soil sampling is required twice annually in special condition S5.C Soil Monitoring. These conditions are included in both the Combined and State-Only permits.

**Reduce visual monitoring requirements**

**Commenters:** O-6

**Summarized Comments:**

- This special condition would require weekly monitoring of liquid waste storage ponds and solids storage areas. This is too frequent, particularly for solids storage areas. It is unlikely that conditions will materially change in a week. Monitoring frequency should be reduced to once a month.

**Ecology's Response:**

Weekly visual inspections of facility infrastructure such as storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage and containment structure is required of all permitted large CAFOs in 40 CFR 412.37(a)(1). Ecology applied this requirement to medium and small CAFOs and included the requirement in both the State-only and Combined permit because the basic requirement increases the chance of identifying problems with waste handling infrastructure before a prohibited discharge occurs.

## **S5.B. Manure, Litter, and Process Wastewater Monitoring & S5.C Soil Monitoring**

### **Remove requirement for Total Kjeldahl Nitrogen (TKN)**

**Commenters:** B-4, I-296, O-13, O-17, O-27, O-11

**Summarized Comments:**

- Soil and manure testing should be left as it was in the last permit (testing for organic matter, ammonia/ ammonium) rather than requiring Total Kjeldahl Nitrogen (TKN) which is not a useful test for farmers
- TKN includes ammonium and organic nitrogen. Ammonium is already required to be analyzed and the organic nitrogen level does not tell you anything about what N level will be available to a crop.
- TKN is not valuable at all in measuring nitrogen.
- Organic matter is already required to be tested once every 3rd year and is used within the budget process as a component in determining agronomic rate. This is sufficient.

**Ecology's Response:**

In response to comments received on manure and soil testing, Ecology is eliminating the proposed requirement for testing for TKN. We heard from permittees and technical service providers that there are significant barriers and little information for interpreting these results. We encourage technical service providers to continue to seek out better information on estimating nitrogen availability from the fraction of organic nitrogen in soil and manure.

Ecology also changed the procedures for alternative analytical methods. Instead of submitting a request for approval of an alternative method to those in Table 7, Ecology directs the permittee to report the test method, detection level, and quantification level. This procedure now matches the one used in S5.D Groundwater Monitoring.

### **Phosphorus Soil Analysis**

**Commenters:** I-6

**Summarized Comments:**

- Because of the effect of high phosphorous in waterways, shouldn't soil be monitored for phosphorous as well as nitrates. Elevation of either should restrict inorganic fertilizer or manure applications on crop land.

**Ecology's Response:**

Fall soil samples must be analyzed for phosphorus at least every three years as specified in Table 9. The results of the soil analyses are used when permittees develop their yearly field-specific nutrient budgets. See special condition S.4.K for more information.

## **S5.D Groundwater Monitoring**

### **All CAFOs should monitor groundwater**

**Commenters:** I-23, I-24, I-26, I-28, I-29, I-30, I-304, I-32, I-338, I-34, I-35, I-37, I-41, I-6, I-86, O-23, O-3, O-7, O-8

**Summarized Comments:**

- Groundwater monitoring of wells at least twice a year need to be required down current of any CAFO that has over 500 head. How else will the public know that the manure management that the Department of Ecology, Department of Agriculture and the dairy owners are claiming that they practice are actually working. Remember that the Cow Palace case that went to federal court and the measurements done after the court case showed that 60% of wells one mile down current of these dairies had elevated nitrates.
- Without groundwater monitoring there's no way to ensure the zero-discharge standard in the permits is met.
- Down gradient monitoring of lagoons for nitrates and pathogens should be required if synthetic liners are not required.
- Tackle suspected wastewater sites by simply testing nearby. Ground water should be tested in subject areas and proven to be affected by local CAFOs first, with the test data accessible in public domain. Once groundwater is shown to be affected by two independent analysts over a conservative duration, the local CAFOs shall come together and utilize county funds to improve their wastewater systems.



**Ecology's Response:**

In response to comments, Ecology made changes to the groundwater monitoring requirements at S5.D.1 and S4.A.4 to incorporate a facility's size and location. The final permits require medium and large CAFOs located within a moderate, moderately high, high, or very high Nitrate Priority Area to install groundwater monitoring networks. The monitoring network must cover all production areas and all land application fields at locations that are substantially identical.

To mitigate the economic burden on small business, Ecology chose to exclude small CAFOs from this requirement. Small CAFOs may be required to monitor groundwater if they meet conditions in S5.D.2.

Ecology identified Nitrate Priority Areas by methods described in the [Washington Nitrate Prioritization Project](#)<sup>31</sup>. These are areas where high nitrates in groundwater occur with potential impacts to people and resources. These areas are based on the recommendations in the Washington State Nitrate Prioritization Project Report. This report looks at existing groundwater quality information, topography, nitrate risk studies, recharge, land use, geology, soil properties, and travel time through the soil profile. Ecology chose to require CAFOs located in moderate, moderately high, high, and very high priority areas because these areas have both vulnerable conditions and wells sampled for nitrate exceed or approach the drinking water maximum contaminant limit of 10 mg/L.

We are requiring monitoring of land application fields but offer the opportunity to group fields that are substantially similar in management practices and hydrogeologic conditions (e.g., soil type). All facilities in all locations, must continue to monitor soil as this is the best early warning system for producers to respond to and revise their nutrient management practices.

Monitoring results will provide Ecology information to evaluate whether best management practices are performing as expected and protective of the environment. Results will inform future permit conditions and can lead to provisions for reduced monitoring in certain situations.

Ecology is aware that some facilities currently have monitoring wells. Permittees may use existing wells in their monitoring network, provided they are properly constructed and designed to sample the uppermost aquifer zone potentially affected by the CAFO. Monitoring well construction is discussed in the [Implementation Guidance for the Ground Water Quality Standards \(2005\)](#)<sup>32</sup>.

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<sup>31</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/1610011.html>

<sup>32</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/9602.html>

## Protect underground sources of drinking water with additional measures

**Commenters:** A-3, A-4

**Summarized Comments:**

- EPA appreciates that the draft permit includes specific elements related to groundwater monitoring, including requirements to conduct deep soil monitoring to assess whether groundwater impact is occurring and the inclusion of procedures to design and install groundwater monitoring wells. From our work in the Yakima Valley, as well as in other communities in Region 10, we have identified strategies to better protect community drinking water through that work. These include the location, design, and assessment of manure storage lagoons; the application of manure by third-party recipients at agronomic rates; and groundwater monitoring requirements. EPA encourages both Ecology and the Washington State Department of Agriculture to use its authorities to the fullest extent to protect underground sources of drinking water through additional measures such as:
  1. More stringent groundwater monitoring requirements with clear applicability triggers;
  2. Manure storage lagoon requirements that ensure large facilities located in moderately high, high, or very high, proposed nitrate priority areas with multiple lagoons, and line those lagoons to prevent leakage to underground drinking water sources; and
  3. Requirements that ensure that manure application fields, regardless of ownership, are not a source of nitrate contamination.
- As lagoons were constructed under different versions of the USDA/NRCS standards, we support groundwater monitoring of lagoons and composting areas when the reasonable potential impacts assessment demonstrates risks to groundwater. We would like to partner with Ecology to understand the reasonable potential impact assessments and subsequent risk to groundwater.

**Ecology's Response:**

Thank you for your comments. In response to comments, Ecology has revised requirements for groundwater monitoring. See the response in this section, above. Waste storage ponds located in moderately high, high, or very high nitrate priority areas will have groundwater monitoring, regardless of the type of liner used.

Small CAFOs and CAFOs located outside of a Nitrate Priority Area may be required to monitor groundwater if the results of the nitrate loading analysis (special condition S4.L) or the results of waste storage structure assessment (special condition S7.C) indicate that an adverse impact to groundwater may be occurring.

Ensuring that manure is applied at appropriate times and at agronomic rates by permittees is addressed in S4.K. As discussed in our response in S4.O, we do not have authority to include as permit conditions requirements on the receiving party in the event of a manure transfer.

## Groundwater monitoring parameters and methods

**Commenters:** O-8

### Summarized Comments:

- The permits should require testing for cryptosporidium in soils and groundwater on these sites. Cryptosporidium cause “scours” a disease that is prevalent in young calves and kills many. Cryptosporidium spreads to groundwaters and surface waters and can live in the soil for months.
- FOTC requests sampling of groundwater to include testing for Nitrate – N using EPA method 300.0; for Nitrite – N using EPA method 300.0; and for chloride using EPA method 300.0. Here is why: Chloride is often detected in groundwater before nitrate. Testing for chloride would provide an early signal of groundwater pollution. The safe drinking water standard for Nitrite-N is 1 mg/L. If testing is only done for nitrate and nitrite combined and the standard is 10 mg/L, there is a risk of classifying groundwater as safe for drinking when the groundwater contains unsafe levels of Nitrite – N. This has occurred in the Buena/Sawyer area in Yakima County where Nitrite – N levels sometimes exceeded Nitrate – N levels in 2010.
- The draft permits do not specify a laboratory method for testing for total N in Table 11 – Surface Water Monitoring.

### Ecology’s Response:

Ecology modified the permits to require recommended groundwater parameters for animal feeding operations from the [Implementation Guidance for the Ground Water Quality Standards \(2005\)](https://apps.ecology.wa.gov/publications/SummaryPages/9602.html)<sup>33</sup>. Ecology also modified the permits to replace ammonia with total kjeldahl nitrogen (TKN) in surface water monitoring. Analyzing samples for TKN allows Ecology and the permittee to calculate the total N discharged to surface or groundwater. Total N is a calculated value derived from the sum of nitrate, nitrite, and total kjeldahl nitrogen.

The groundwater monitoring data collected under these permits should not be interpreted to mean that groundwater is suitable for drinking water purposes. Compliance monitoring determines whether best management practices are performing as expected and protective of the environment.

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<sup>33</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/9602.html>

## Groundwater monitoring is ineffective

**Commenters:** I-359

**Summarized Comments:**

- From what we've seen in Whatcom County-- in these shallow aquifers with a patchwork of fields under different ownership, inputs from all sorts of other sources (such as household septic and small town's sewage systems), and fluctuating direction of groundwater-- I don't see how groundwater monitoring around CAFOs is applicable. I think the permit requirement is heavy-handed.

**Ecology's Response:**

Developing a groundwater monitoring network that captures the impact of a CAFO on groundwater quality is a site-specific process. Workplan developed and submitted to Ecology will be reviewed by regional hydrogeologists familiar with these challenges and experienced in developing groundwater monitoring for individual permittees.

## S5.E Surface Water Monitoring

### Proposed surface water monitoring requirements are inadequate

**Commenters:** I-193, I-25, I-31, I-33, I-6, O-23, O-8

**Summarized Comments:**

- The proposed permits fail to include the monitoring requirements necessary to ensure compliance with the terms and conditions of the permits.
- The monitoring requirements do not ensure that permittees comply with the water quality based effluent limits.
- There are no monitoring requirements that will reveal unpermitted discharges.
- The permits must include instream monitoring.
- Tile drains can contribute significant amounts of nitrogen and phosphates to waterways. Shouldn't the discharge site be monitored occasionally?

**Ecology's Response:**

The surface water monitoring requirements in S5.E are designed to characterize the quality of effluent when discharges occur. Ecology uses visual surveys conducted in accordance with S5.A as a type of monitoring that ensures source control best management practices are in working order and discharges are prevented.

In-stream monitoring by the permittee around the CAFO is not practical and in some cases, may be impossible for a permittee due to restrictions on neighboring private property. Therefore, Ecology does not rely on in-stream monitoring for compliance.

Examples of surface water discharges that permittees must collect from:

1. Any discharge of pollutants from the production area.
2. Discharges from overflowing waste storage structures.
3. Discharges resulting from land application that occur during dry weather, including those from tile drains.
4. Stormwater discharges that do not meet the definition of agricultural stormwater.

### **Monitor for surface water connection to groundwater**

**Commenters:** O-23

**Summarized Comments:**

- There are no monitoring requirements to ensure discharges to groundwater are not causing or contributing to a violation of surface water quality standards. Ecology has a legal responsibility to "consider the interrelationship of the groundwater with the surface waters . . ." See generally *Postema v. Pollution Control Hearings Bd.*, 142 Wn.2d 68, 80 (2000).
- In Washington, there is strong scientific evidence that supports the connectivity of groundwater to surface water. Ecology must require all facilities with unlined manure lagoons to obtain coverage under a combined state and federal NPDES permit.

**Ecology's Response:**

Demonstrations of hydrologic connections require an individualized analysis that is beyond the requirements of a general permit. Ecology is not requiring permittees to demonstrate or disprove hydrologic connections between surface and groundwater.

Ecology may require a Combined NPDES and State Waste Discharge permit application if an existing hydrogeologic assessment finds a clear connection between groundwater and surface waters and pollutants from the point source reach surface water. Only when there is evidence that pollutants from the point source reach surface water through a connection to groundwater will Ecology require an application for the Combined permit.

## **S7.C Waste Storage Structure Assessment**

### **Remove NRCS Technical Note 23**

**Commenters:** O-1, O-14, O-2, O-8

**Summarized Comments:**

- The Tech Note 23 assessment is for assessing site and structure risk. It is not the means of regulating leakage from the pond. We ask the WA State Dept. of Ecology (Ecology) to reconsider your choice of NRCS Tech Note 23 as the means of regulating leakage from Waste Storage Ponds in Section S7.C.2.

- Please require that these lagoons be tested to ensure that no leaks are occurring.
- As stated in paragraph 2 of the Engineering Technical Note 23 Washington State NRCS Assessment Procedure for Existing Waste Storage Ponds (WSP), "The NRCS assessment should not be construed to provide ANY regulatory certainty from State regulatory agencies. State of Washington laws and rules prohibit pollution of waters of the state, including ground water. The state requires a permit for discharge of wastewater to waters of the state. This document does not supersede these requirements." Furthermore, the Engineering Technical Note 23 Washington State NRCS Assessment Procedure for Existing Waste Storage Ponds (WSP) does not pertain to S4.C of the draft permit (e.g. the technical note does not examine the maximum allowable specific discharge of any existing WSP). Note, in addition, that the Engineering Technical Note 23 states under the topic of 'Procedure' that "Through this procedure, NRCS personnel will establish an overall assessment category of a WSP." Again, it is critical to highlight that we cannot be responsible for the regulatory aspects of permits since our agency assists landowners who voluntarily seek to carry out conservation practices. In summary, we recommend that the Washington Department of Ecology not rely on the Engineering Technical Note 23 for any part of the NPDES permit(s) for concentrated animal feeding operations. Instead, your offices may opt to develop pertinent assessment tools for the requirements of S7.C.

**Ecology's Response:**

Thank you for your comments. The assessment procedure in NRCS Technical Note 23 is intended to identify waste storage ponds that need repairs due to site or structure risks. Additionally, it identifies ponds that do not meet the two feet of separation requirement in S4.C.1. We understand from NRCS engineers that procedures to test the seepage rate are not robust for existing ponds. Ecology and WSDA will continue to work with NRCS to identify appropriate measurement protocols.

In response to public comment, Ecology revised the permits to require additional groundwater monitoring. See the response in S5.D Groundwater Monitoring. Monitoring can detect if leakage from a waste storage pond is impacting groundwater quality.

## Timing of the waste storage structure assessments

**Commenters:** O-6, O-8

**Summarized Comments:**

- The draft permits require an assessment of waste storage ponds (labeled 'lagoons' under the current permit) by a qualified expert using NRCS procedures within two years of permit coverage. This assessment requirement was added to the CAFO permit in 2017 and facilities that were under that permit already have completed these assessments. A provision should be added to the permit providing that this is a one-time requirement and that facilities that previously completed assessments are not to do so again.
- These assessments should be completed prior to approving permit applications. It is much more difficult for citizens to contest an approved permit than it is to contest a permit application. We believe the laws require applicants to provide sufficient information to citizens so the public can evaluate environmental impacts in a timely manner.

**Ecology's Response:**

Thank you for your comment. Waste storage ponds are important to CAFO management and protection of the environment. Ecology requires that the ponds be assessed by a qualified expert once every permit cycle to ensure they remain in good condition and necessary repairs are identified.

Ecology believes that the best way to implement this permit condition is to require the assessment of a permitted facility. Ecology has included procedures should the waste storage structure need repairs. Requiring the assessment prior to coverage would likely cause delay in the implementation of other important permit requirements.

## S7.D Annual Report

### Annual Report Deadline

**Commenters:** O-22

**Summarized Comments:**

- Why is the Annual Report date on December 31 when the reporting period is January 1 through December 31?

**Ecology's Response:**

In response to comments, Ecology made changes to the deadline to submit CAFO annual reports. Annual reports are now due February 1. This gives permittees additional time to accurately report the waste generated and exported at a CAFO during the reporting year January 1-December 31. Ecology made changes to the permits at Table 1 Summary of Permit Submittals and S7.D Annual Report.

**Reporting discharges and other results**

**Commenters:** O-8

**Summarized Comments:**

- Annual reports should include estimated discharge from tile drains, annual soil phosphorous test results when soil phosphorous levels are high, estimated discharge to groundwater from waste storage ponds, and estimated amount of nitrogen lost to volatilization
- Volatilization of nitrogenous compounds is important because it leads to atmospheric deposition that impacts soils and waterways and contributes to climate change.

**Ecology's Response:**

Discharges to surface waters are reported to Ecology in a separate submittal. In response to comments, Ecology has updated Table 1 *Summary of Permit Reports and Submittals*.

Soil test results are reported in the Annual Report. An estimate of ammonia volatilization is reported in the nutrient budgets submitted with the annual report.

In response to comments, Ecology made changes to the permit to require routine groundwater monitoring of the production area which includes waste storage ponds. Facilities meeting certain conditions are now required to conduct groundwater monitoring in S5.D.

**Reporting period for land applications**

**Commenters:** B-4

**Summarized Comments:**

- The reporting period is the calendar year (January 1 to December 31). I know this is what is also stated in the past permit, but this does not work for applications. Applications are made to crops that often overlap calendar years, therefore, I have always provided application data based on crop year and as much as possible calendar year for everything else. This is the only way to present applications if there is to be any sort of evaluation of recommendation as compared to applications.



**Ecology's Response:**

Thank you for your comment. We understand that winter crops span the calendar year and take that into account when we review the annual reports for compliance.

## **G11 (Combined) and G8 (State-only) Payment of Fees**

### **Fees for large dairies are less than fees for large non-dairies**

**Commenters:** O-8

**Summarized Comments:**

- Reduced permit fees give large CAFO dairies an unfair advantage in the marketplace. A non-dairy CAFO with 800 animal units will pay \$3,094.00 for a permit while a dairy with 800 animal units will pay \$400.00. A dairy with 20,000 animal units will pay \$2,076.00 and so will a dairy with 4,152 animal units. This is wrong.

**Ecology's Response:**

Water Quality Program CAFO Fees are governed under RCW 90.48.465 and Chapter 173-224 WAC. The Water Quality Permit Fee Schedule (WAC 173-224) will hold a Public Hearing and Public Comment period during Spring of 2023 about fee setting for fiscal years 2024 and 2025. Staff is working on analysis of the rule language and fees now. The proposed changes will be announced in Spring of 2023. More information can be found on our [permit fees rulemaking website](https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-224).<sup>34</sup>

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<sup>34</sup> <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-224>

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B-3	Sharalyn Peterson	Foggy 48 Farms, LLC
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I-102	Karla Wade	
I-103	Lynda Trumpour	
I-104	Daren Hopkins	
I-105	Haynes Mary	
I-106	Paul Chenvert	
I-107	Albert E Robbins	
I-108	Kaley Deffinbaugh	
I-109	Bethany Berndt	
I-110	Robert Mensonides	
I-111	Hannah Deck	
I-112	Cortney Morton	
I-113	Randy & Aileen Good	
I-114	Seve Kelty	
I-115	Steven Frost	
I-116	Logsdon Robyn	
I-117	W Thomas Soeldner	
I-118	Stuart Scott	
I-119	Scott Mangum	
I-120	Patrick A Fleege	
I-121	William Vogel	
I-122	Steven Thonney	
I-123	Marisa Terrazas	
I-124	L Deck	
I-125	Cindy Mclemore	
I-126	Sandy Braden	
I-127	Amber Bowden	

Submission Code	Commenter Name	Organization, Government, or Agency Name
I-128	Josephine Gwilliam	
I-129	Dan DeGroot	
I-130	Beverley Hallett	
I-131	Thomas Wall	
I-132	Claudia Henricks	
I-133	Gabe Diede	
I-134	Jon McAninch	
I-135	Robert Margulies	
I-136	James Benson	
I-137	Paulette Alaena	
I-138	Joseph Granger	
I-139	Brandon DeHart	
I-140	Brian Preza	
I-141	Olivia Raine	
I-142	Derek Nelson	
I-143	Jason Locke	
I-144	Jay Johnson	
I-145	Bob Lee	
I-146	Clay Whipple	
I-147	Jordan O	
I-148	S O'Hara	
I-149	Jack and Wendy Schoepfer	
I-150	Angela Gilman	
I-151	Jeff Merryman	
I-152	Erika and Charles Grace	
I-153	Audra Distifeno	
I-154	Jenna Aiello	
I-155	Corrine Marson	
I-156	Sarah Cordova	
I-157	Erika Nelson	
I-158	Katie	
I-159	Leiloni Schulz	
I-160	Elizabeth Turnbow	
I-161	Eva Lester	
I-162	Patrick McCarty	
I-163	Anonymous	

Submission Code	Commenter Name	Organization, Government, or Agency Name
I-164	Catherine Alexandria	
I-165	Anonymous	
I-166	Mary Cooke	
I-167	Terry Long	
I-168	Lindsay Hubby	
I-169	Sharon Moysiuk	
I-170	Susan Rakes	
I-171	Gabriel Sims	
I-172	Vicki Marks	
I-173	Linda Powell	
I-174	Sara Foster	
I-175	Anonymous	
I-176	Katie Medel	
I-177	Shirley Owens	
I-178	Hannah Parypa	
I-179	Jerry Fitzgerald	
I-180	Dan Meifert	
I-181	Beth Simmons	
I-182	Susan Baron	
I-183	Carolynn Bradley	
I-184	Brett Hopkins	
I-185	Dwayne Boggs	
I-186	Tanja Baucken	
I-187	JoAnne Handlan	
I-188	Marilyn Dickenson	
I-189	Robert W Teeter	
I-190	Kurt Snyder	
I-191	Robert Dickenson	
I-192	Sylvia Morales	
I-193	Richard Voget	
I-194	Arturo Alonso	
I-195	Woodrow Wiedrich	
I-196	Joan Fleming	
I-197	D. Bruce Morgan	
I-198	James Tipton	
I-199	Jacquelyn Dent	
I-200	Anonymous	
I-201	Cynthia Whaley	

Submission Code	Commenter Name	Organization, Government, or Agency Name
I-202	Elizabeth Vanek	
I-203	John Arrabito	
I-204	Leilani Macmillan	
I-205	Anonymous	
I-206	Theresa Cooper	
I-207	James Brigham	
I-208	Erica Fehr	
I-209	Ronald Overlie	
I-210	Kathy McGehee-Hansen	
I-211	Ron Hansen	
I-212	Stacy Klemann	
I-213	Sheila Riffe	
I-214	Janette Wilson	
I-215	Jacob Wilson	
I-216	Kristen Henderson	
I-217	Jane Agren	
I-218	Thomas MANI	
I-219	Carol Shimono	
I-220	Cornelia O'Leary	
I-221	Rebecca Davidson	
I-222	Nancy Popielarczyk	
I-223	Eileen Monroe	
I-224	John Q Citizen	
I-225	Kristina Hafey	
I-226	Nancy Wiest	
I-227	Jennifer Davis	
I-228	Melissa Graham	
I-229	Michelle Brigham	
I-230	Susan Elwanger	
I-231	Stacy Thompson	
I-232	Anonymous	
I-233	Anonymous	
I-234	Glenadine O'Harra	
I-235	Tom Foley	
I-236	Sandra Christie	
I-237	Rachel Bjork	
I-238	Brad Wiley	
I-239	Scott Christie	



Submission Code	Commenter Name	Organization, Government, or Agency Name
I-240	Jennifer	
I-241	Jeremy Aldous	
I-242	Jacqueline Smith	
I-243	Theodore Mindt	
I-244	Tara Cutler	
I-245	Katie Bennett	
I-246	Anonymous	
I-247	Jamie M	
I-248	Randy Smith	
I-249	Stacy Rutherford	
I-250	Arlan Hackett	
I-251	Vivian Chambers	
I-252	Sheriah Hannemann	
I-253	Joanna Lettau	
I-254	Bojana Foster	
I-255	Nada Barnes	
I-256	Kenneth Lattin	
I-257	Anonymous	
I-258	Michelle Torstvet	
I-259	Eric Marvel	
I-260	Prateek Agarwal	
I-261	Maureen Allum	
I-262	Anonymous	
I-263	Nancy Breidenthal	
I-264	Lynette Borcharding	
I-265	Richard Ranum	
I-266	Crystal Borgeson	
I-267	Joelle Ellis	
I-268	Ana Seidel	
I-269	Mardi Perry	
I-270	Sherrie Zollinger	
I-271	Amy Malik	
I-272	Larry Campbell	
I-273	Phyllis Farrell	
I-274	Chuck Hopkins	
I-275	Anonymous	
I-276	Denise Bryant	
I-277	Johnny Huston	

Submission Code	Commenter Name	Organization, Government, or Agency Name
I-278	Rose Shepherd	
I-279	Valerie Serra	
I-280	Elio Serra	
I-281	Troy Lenssen	
I-282	Vivienne Kelland	
I-283	Gary Kocha	
I-284	Patrick Leblanc	
I-285	Evelyn Pratt	
I-286	Anonymous	
I-287	Angele St Hilaire	
I-288	Michele Marie	
I-289	Rob Inlow	
I-290	Anonymous	
I-291	Nicole Miller	
I-292	Heidi Howard	
I-293	Cindy Wills	
I-294	Jon Borcharding	
I-295	Stefanie Fuller	
I-296	Guimar Azevedo	
I-297	Anonymous	
I-298	Steven Pratt	
I-299	JoyAnna Pratt	
I-300	Anonymous	
I-301	Vernanne Matson	
I-302	Mark Gregory	
I-303	Anonymous	
I-304	Alex Williams	
I-305	R. Wall	
I-306	Roberta Brittingham	
I-307	Rhonda Raney	
I-308	Rachel Grayless	
I-309	Anonymous	
I-310	Ted Mahr	
I-311	Russ Mills	
I-312	Steve Klein	
I-313	Priscilla Hoback	
I-314	Tracy Anderson	
I-315	Ed/Susan Cogan	

Submission Code	Commenter Name	Organization, Government, or Agency Name
I-316	Cory Woodiwiss	
I-317	Nadja Galadram	
I-318	Bruce GORSKY	
I-319	Monica Baxter	
I-320	Gretchen Fulton	
I-321	Barbara Tietjen	
I-322	Jesse Moore	
I-323	Anonymous	
I-324	Anonymous	
I-325	melinda kerlee	
I-326	Kevin Scott	
I-327	Ronda W	
I-328	K. Gervais	
I-329	Paul Thomsen	
I-330	Emily French	
I-331	Chris McNerney	
I-332	James Creer	
I-333	Teri Blankinship	
I-334	Donna Smith	
I-335	Jean Mendoza	
I-336	Sandra Burnett	
I-337	Tamara Kelley	
I-338	Anonymous	
I-339	Dan Bartelheimer	
I-340	Xenia Midence	
I-341	Raul de Leon	
I-342	Alisa Deleon	
I-343	Vienna Christ	
I-344	Josef Christ	
I-345	Anonymous	
I-346	Sandra Hintz	
I-347	Susan Kyle	
I-348	Tracy Mclean	
I-349	Ryan Riches	
I-350	Laurine Syverson	
I-351	June Robinson	
I-352	Eran Ben-Sira	
I-353	Kelly Meyer	
I-354	Jim Giannunzio	

Submission Code	Commenter Name	Organization, Government, or Agency Name
I-355	Doug Vliet	
I-356	Robert J. & Alice M. Swidecki	
I-357	Magali Cota	
I-358	Ryan Riches	
I-359	David Haggith	
I-360	Magali Cota	
I-361	Alic Swidecki	
I-362	Scott and Lori Halstead	
O-1	Jean Mendoza	Friends of Toppenish Creek
O-2	Jean Mendoza	Friends of Toppenish Creek
O-3	Lee First	Twin Harbors Waterkeeper
O-4	JANICE WHITEFOOT	Concerned Citizens of the Yakama Reservation
O-5	Gordon Wheat	Olympia Physicians Climate Task Force
O-6	Jack Field	Washington Cattle Feeders Association
O-7	Joey Lee	Center for Food Safety
O-8	Jean Mendoza	Friends of Toppenish Creek
O-9	Jean Mendoza	Friends of Toppenish Creek
O-10	Shari Tarantino	Orca Conservancy
O-11	Samantha Carver	Glorieta Geoscience, Inc. on behalf of Dairy Producers of New Mexico
O-12	Sandy Braden	Friends of Toppenish Creek
O-13	Fred Likkel	
O-14	Don Hanson	Natural Resources Conservation Service - WA Office State Engineering
O-15	Steven Christianson	Orca Conservancy

<b>Submission Code</b>	<b>Commenter Name</b>	<b>Organization, Government, or Agency Name</b>
<b>O-16</b>	Jay Gordon	Washington State Dairy Federation
<b>O-17</b>	Jay Gordon	Washington State Dairy Federation
<b>O-18</b>	Jay Gordon	Washington State Dairy Federation
<b>O-19</b>	Rosella Mosby	Washington Farm Bureau
<b>O-20</b>	Michael Tobin	North Yakima Conservation District
<b>O-21</b>	Pete Serrano	Silent Majority Foundation
<b>O-22</b>	Timothy Christopher	Northwest Chicken Council
<b>O-23</b>	Andrew Hawley	Western Environmental Law Center
<b>O-24</b>	Jennifer Calkins	Friends of Toppenish Creek, Center for Food Safety, Western Environmental Law Center
<b>O-26</b>	Jennifer Calkins	Western Environmental Law Center
<b>O-27</b>	Jay Gordon	Washington State Dairy Federation
<b>O-28</b>	Jean Mendoza	Friends of Toppenish Creek
<b>O-29</b>	Hannah Thompson Gardner	Northwest Animal Rights Network
<b>O-30</b>	Andrew Hawley	Western Environmental Law Center
<b>OTH-1</b>	Andrew Barkis	Washington State Legislator
<b>OTH-2</b>	Mark Herke	Collection of County Farm Bureaus
<b>OTH-3</b>	Senator Judy Warnick	Washington State Senators
<b>OTH-4</b>	Wes McCart	Stevens County
<b>T-1</b>	Kelsey Payne	Snoqualmie Indian Tribe