
Livestock Nutrient Management Program

**Report of Program Activities
January 1 - December 31, 2006**



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July 2007

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PUB 430-196 (N/8/07)

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Acronyms used in this report:

AFO	Animal Feeding Operation
CAFO	Concentrated Animal Feeding Operation
EPA	Environmental Protection Agency
LDOC	Livestock Development and Oversight Committee
LNMP	Livestock Nutrient Management Program
MOU	Memorandum of Understanding
NMP	Nutrient Management Plans
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service (a branch of the US Department of Agriculture)
PCHB	Pollution Control Hearings Board
RCW	Revised Code of Washington
WSDA	Washington State Department of Agriculture
WSU	Washington State University

Executive Summary

WSDA's Livestock Nutrient Management program carries out the state's dairy nutrient management program and coordinates with the Department of Ecology on the regulation of those dairies and other Concentrated Animal Feeding Operations (CAFOs) that hold a National Pollutant Discharge Elimination System (NPDES) permit.

This report summarizes the inspection and enforcement activities of the Livestock Nutrient Management program in 2006. It also summarizes the significant activities and issues the program was involved with in 2006 and provides an update on the state's CAFO permit program.

There were 547 dairies listed with the Livestock Nutrient Management Program at the end of 2006, a net decline of nine dairies from the start of the year. WSDA inspectors conducted 310 routine dairy inspections during 2006 and were able to meet the program goal of inspecting dairies at an interval of two years or less.

WSDA inspectors conducted an additional 237 inspections to follow-up on compliance issues, investigate complaints, provide technical assistance, assess lagoon condition or carry out other site-related activities.

Over the last three years, compliance by dairies inspected by WSDA has improved. In 2006, inspectors found 93% of the dairies they inspected to be in full compliance with their nutrient management plans, compared to 86% in 2005 and 67% in 2004. There were three documented discharges during the year, one of which resulted in the one penalty issued for a water quality violation in 2006.

Ecology remains the agency responsible for administering the Concentrated Animal Feeding Operation (CAFO) permit. Ecology issued a revised General CAFO permit in June 2006 and WSDA coordinated with Ecology staff to ensure appropriate facilities were operating under the new permit. Due to changes in CAFO requirements, the number of dairies and feedlots covered by general or individual permits declined from 110 at the start of 2006 to only 35 at the end of the year. Coordination between the two agencies on CAFOs and other livestock and water quality issues continues to be guided by a memorandum of understanding.

WSDA and Ecology decided they would not request legislation in 2007 that would allow WSDA to pursue delegation from the Environmental Protection Agency (EPA) for the CAFO program. After a series of meetings, the Livestock Development and Oversight Committee (LDOC) and other stakeholders advised the agencies to put legislative efforts on hold and to focus on implementing a long-term split program. The agencies will update the memorandum of understanding in 2007 to reflect this change.

The 2003 legislation that created the LDOC expired in July. WSDA will continue to communicate with members from the committee as well as other stakeholders about program issues and activities.

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Other program activities in 2006 included developing a draft rule that establishes numeric ranges for the disclosure of certain information local and state agencies may hold about livestock operations. Public review of the proposed rule is anticipated for the spring of 2007.

While pursuit of federal delegation has been dropped, LNMP staff continued to stay in touch with other states regarding implementation of the federal CAFO permit and program. Ecology and WSDA will be hosting the annual CAFO Roundtable meeting in the fall of 2007.

The WSDA Livestock Nutrient Management program has a biennial budget for 2005-07 of \$1,188,000. The two funding sources are the Water Quality Account and the Water Quality Permit Account. As a result of changes in the CAFO program, the number of permitted facilities and amount of permit fees collected have dropped. The program budget proposal for 2007-2009 carries forward existing funding levels but requests that more funding come from the Water Quality Account to reflect the lower permit fee revenues.

Livestock Nutrient Management Program Strategy

Updated 2006

The mission of the Livestock Nutrient Management Program is to protect water quality from livestock nutrient discharges and to help maintain a healthy agricultural business climate. This is to be achieved through clear guidance, education, technical assistance, equitable enforcement of state and federal water quality laws and good communication with industry, related agencies and other stakeholders.

Following are the key program strategies:

- ◆ Focus on carrying out the existing regulatory and inspection program for dairies and permitted CAFOs.
 - Inspect every dairy at least every two years and inspect non-dairy CAFOs in coordination with Ecology.
 - Ensure that inspectors have adequate technical expertise.
 - Provide effective guidance to producers to achieve compliance.
 - Carry out needed enforcement actions effectively and in a timely manner.
- ◆ Coordinate with Ecology, other stakeholders and the facilities required to hold a CAFO permit on implementing the general permit and any individual permits.
 - Work closely with Ecology on administration and implementation of permits.
 - Focus on permitted facilities, then on larger facilities that may pose a risk.
 - Work with other agencies and technical experts to help educate and provide assistance to Animal Feeding Operations (AFOs) to avoid discharging and becoming permitted CAFOs.
- ◆ Cooperate with technical and educational agencies to assist producers in better protecting the state's water quality.
 - Identify needs for technical assistance and coordinate on providing that assistance.
 - Coordinate with NRCS, the Conservation Commission and WSU Extension to identify needs for and avenues to provide appropriate technical training for regulatory staff and people providing technical assistance to producers.
 - Identify and cooperate on technical issues that will benefit from new information, practices or improved guidance for more effective implementation.
 - Work with NRCS and other stakeholders on NRCS state practice standards that are required of AFO/CAFO operations.
- ◆ Help maintain good communication and cooperation among producers, agencies and other stakeholders.
 - Identify and address issues that may affect program elements or implementation.
 - Support education, technical assistance, and cost-share opportunities for producers.
 - Work with dairy and non-dairy industry groups to identify and educate potential CAFO producers regarding their responsibilities.

Livestock Nutrient Management Program Update

Washington State Department of Agriculture (WSDA) established the Livestock Nutrient Management Program in 2003 to carry out the Dairy Nutrient Management Act, Chapter 90.64 RCW, and to assist the Department of Ecology (Ecology) in the regulation of those dairies and other concentrated animal feeding operations (CAFOs) that hold a National Pollutant Discharge Elimination System (NPDES) permit. The program staff works closely with other regulatory entities and technical resource agencies in enforcing standards and in providing technical assistance for producers regarding their water quality protection responsibilities. WSDA and Ecology operate under a Memorandum of Understanding in executing the CAFO permit regulatory program.

Dairy Nutrient Management

The Dairy Nutrient Management Act, enacted in 1998, requires all licensed dairy farms to develop and implement nutrient management plans to prevent the discharge of livestock nutrients to surface and ground water. WSDA inspects each of these dairies at least once every two years. Inspectors evaluate the facilities and nutrient management practices for any risk from livestock nutrients (manure and associated wastes) to impact water quality.

A dairy farm may be required to obtain a permit from the Department of Ecology if it is a Large or Medium CAFO that has a discharge or if it is a smaller AFO that has a discharge that is determined to be a significant contributor of pollution to surface or ground water. For those dairies that are required to have a CAFO permit, WSDA inspectors evaluate compliance with permit conditions and coordinate with Ecology on permit administration.

When the program was transferred from Ecology to WSDA in 2003, there were 580 licensed dairies and 246,297 milking and dry cows. As of December 31, 2006, there are 547 dairies listed with the Livestock Nutrient Management Program (LNMP) with approximately 240,000 milking and dry cows. This compares to 556 dairies at the end of 2005. Of the 44 new dairies receiving licenses in 2006, most are existing facilities that have changed hands. Some of the new licensees are small-scale dairies that are new to nutrient management requirements.

Required Implementation of Dairy Nutrient Management Plans

The Dairy Nutrient Management Act requires that all dairies develop and implement a nutrient management plan (NMP) within a specified time period. Dairies in existence in 1998 had until December 31, 2003 to develop and implement plans. Newly licensed dairies have six months to develop and another 18 months to implement their NMP. Local Conservation Districts must approve each plan as meeting plan requirements. The District and the producer must both certify the plan when it is fully implemented.

As of December 31, 2006, 473 (or 86%) of the licensed dairies have certified plans. There are 57 newer dairies (10% of licensed dairies) that are still in their two-year window to develop and implement plans. The remaining 17 facilities (3% of licensed dairies) have not met the deadlines

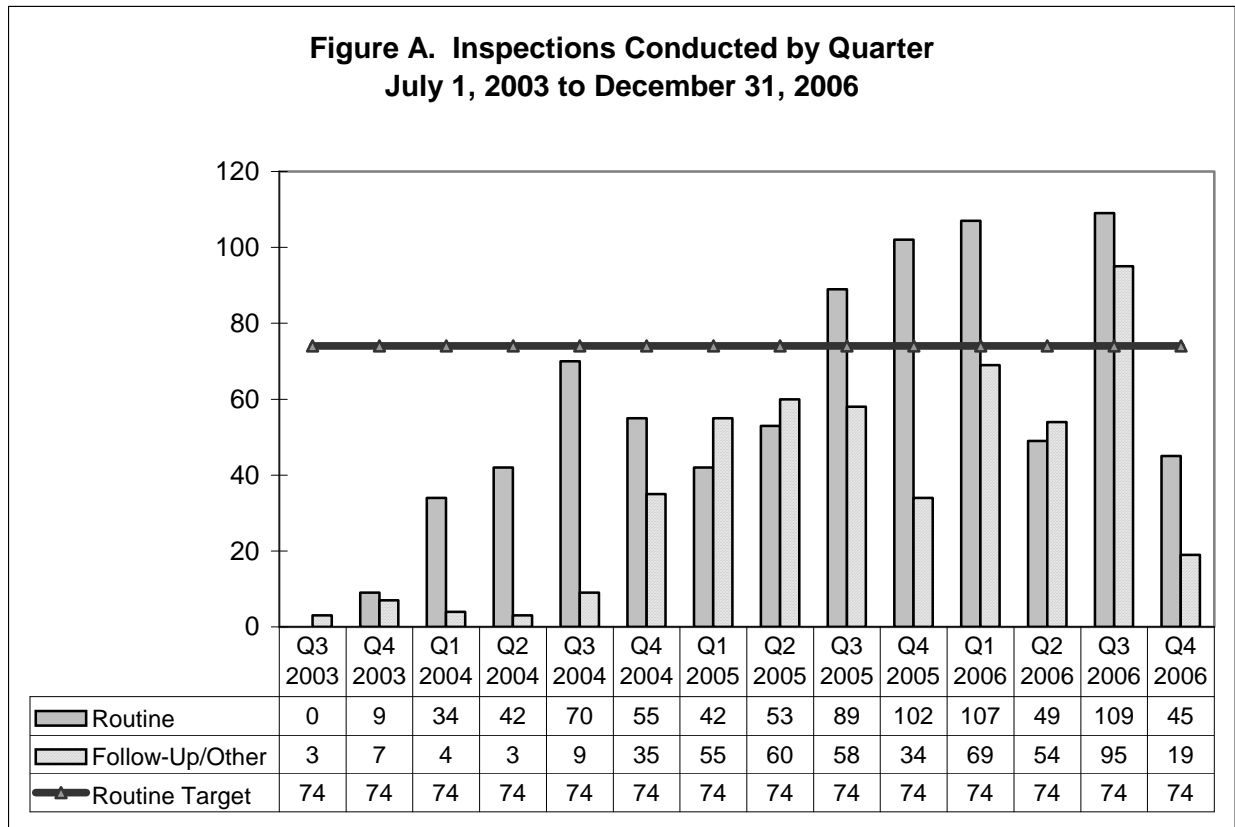
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for having approved and certified plans. This is an improvement over the 33 facilities that were out of compliance in 2005. Penalties of \$100 per month are levied against those not in compliance with the plan requirement.

Dairy Inspections

WSDA inspectors conducted 310 routine dairy inspections during 2006. This is an increase over the 286 routine inspections conducted in 2005 and the 201 routine inspections in 2004. Inspectors conducted another 237 inspections during the year, including 91 follow-up inspections, mostly related to oversight of three facilities under compliance action. The other inspections were in response to 28 dairy-related complaints and 20 requests for technical assistance as well as 128 other site visits including 95 fall lagoon assessments.

Since the third quarter of 2005, the program has conducted a sufficient number of inspections to meet the goal of conducting routine inspections on a 24-month interval. Figure A shows the number of inspections conducted on a quarterly basis since the program was transferred to WSDA. The program has used a quarterly inspection target as a guide for reaching the 24-month interval routine inspection goal. The program’s goal for 2007 is to inspect facilities on a 22-month interval. WSDA believes the shorter interval is more effective because, over time, it allows WSDA to inspect each facility in different seasons of the year.

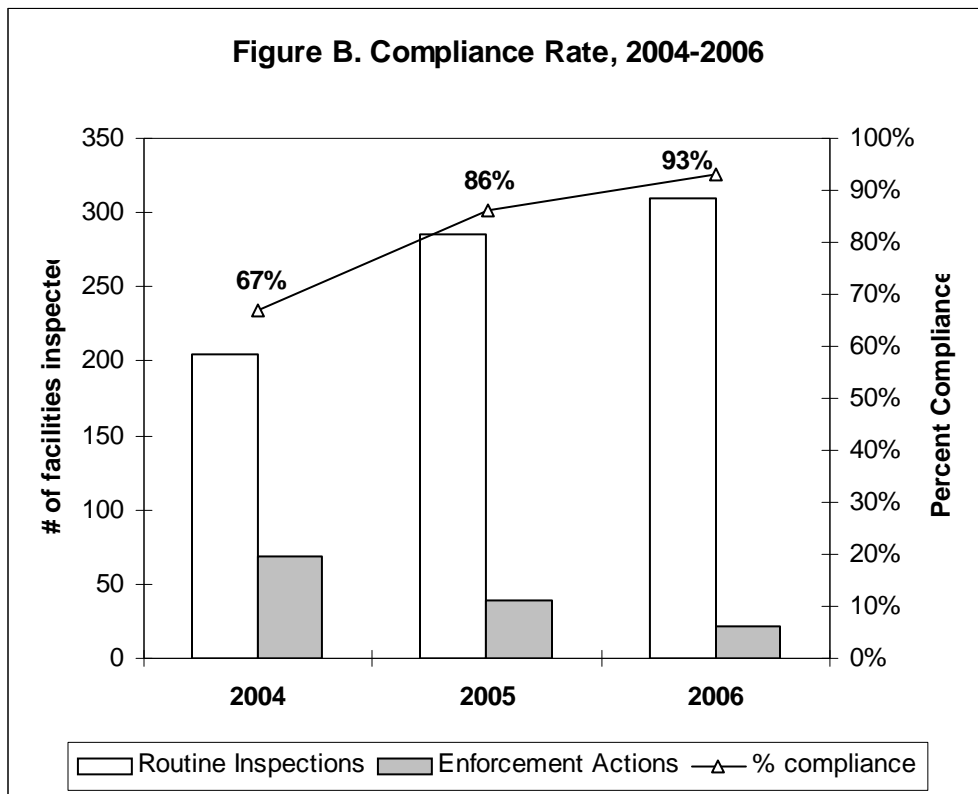


Evaluating implementation of a dairy's nutrient management plan is an important part of every inspection. By keeping the plan current with their facility size and operations and by properly following the practices, operations should not pose a risk to water quality. Record keeping and proper soil and manure testing are important components of long-term effective management. Inspectors spend at least half of their inspection time reviewing records with operators and discussing their meaning and use. Certified facilities continue to make progress in keeping better records and using the information to guide their manure applications and cropping decisions.

Where discharges or conditions that pose a high potential to pollute are documented, enforcement actions are taken. In addition, inspectors usually refer the operator to the local Conservation District for technical assistance. To ensure follow through, inspectors make follow-up inspections or may require specific reporting from the facility by a specified date.

Inspection Findings

Over the last three years, compliance by dairies inspected by WSDA has improved. Prior to the dairy program transfer to WSDA, inspections focused on getting the needed infrastructure developed for each dairy as well as site management. Facility conditions continue to be an important part of WSDA inspections. However, more emphasis is given to ongoing lagoon and site management. This includes record keeping, soil and manure testing and manure applications consistent with the nutrient management plan and maintaining the applicable practice standards for their site. In 2006, inspectors found 93% of the dairies they inspected to be in full compliance with their nutrient management plans, compared to 86% in 2005 and 67% in 2004.



Common Problems

The following items are areas of facility management and nutrient management that inspectors have spent the most time addressing with producers. The items are listed in descending order of frequency.

Requirement: NMPs require soil and manure testing and record keeping for proper field applications.

Common Problems:

1. Regular testing and record keeping is not always done.
2. Information is not always used properly from one year to the next to adjust field applications to control or reduce nitrogen or phosphorus levels in the soil.

WSDA Action: Inspectors spend at least half of their inspection time with producers going over this information and its use. All operators with these issues are referred to their Conservation District or their consultant for technical assistance.

Requirement: NMPs must be current with the number of animals and acreage available for applications or amount of manure exported.

Common Problem: Some facilities have changed over time and plans are out of balance. There are more nutrients than acres to apply to and arrangements to export nutrients off site may be inadequate or uncertain.

WSDA Action: Inspectors require the operators of these facilities to get their NMP updated and to better document both their export arrangements and the transfers that take place.

Requirement: Field applications need to be made at agronomic rates (the rate at which nutrients will not leach below the root zone of the crop and will be fully taken up by the plants) and need to comply with timing restrictions or buffer requirements for each field.

Common Problem: Applications have been made at the wrong time or on inappropriate fields. Some buffers have been reduced or ignored.

WSDA Action: Inspectors discuss the importance of the timing of applications, conditions of fields and buffers for water quality protection with the operators. Operators are referred to their Conservation District or their consultant for technical assistance.

Requirement: Proper lagoon management requires maintaining the integrity of the lagoon dike and retaining full lagoon capacity. Capacity is maintained through proper solids management and properly emptying the lagoon during the application season.

Common Problems:

1. A variety of lagoon management issues are evident.
2. Over-full lagoons are of particular concern due to the risk of discharge.

WSDA Action: Inspectors stress the importance of good year-round lagoon and solids management during inspections. Operators are referred to their Conservation District or their consultant for assistance.

Requirement: Facility infrastructure, such as gutters, curbs, pumps and pipes, need to be managed and regularly maintained to protect water quality.

Common Problem: Some operators have created, or increased, the risk of having a discharge through management decisions or lack of proper maintenance.

WSDA Action: Problem areas are identified for repair or improvements. If needed, the operator is referred to the Conservation District or their consultant for assistance.

Observed Improvements

Producers are making improvements in their use of data from required soil and manure samples for more effective field applications. During inspections WSDA inspectors emphasize accurate record keeping and use of soil test data. This emphasis is beginning to show results. Some producers have found that they can reduce their purchase of commercial fertilizers due to better record keeping and efficient nutrient applications. Record keeping and tools for better applications are also the subject of ongoing technical discussions with staff from Conservation Districts, WSU Extension, Ecology and the Natural Resources Conservation Service in order to provide consistent and effective assistance to producers.

Observed Obstacles

The majority of dairy operators rely on Conservation Districts to provide the basic nutrient management planning expertise and service to operators. Because NRCS standards are the technical standards for the plans, local NRCS staff have been involved in plan development either directly or in a review capacity. This has been particularly important for dairy operators in areas where a district was too small to have its own staff planner. Over the last several years, the availability of NRCS staff to participate in the NMP process has significantly decreased. This has reduced the ability of some districts to complete needed NMP revisions, to develop new plans in a timely fashion, to approve or certify plans, or to provide needed on-site assistance.

Recent Conservation District funding has increased resources to assist non-dairy agriculture. While this work is also important, it has reduced the staff time and expertise available to help dairies in some areas. Nevertheless, dairy producers continue to be responsible for taking any necessary actions to protect water quality. There continues to be a need for dairy planning and technical assistance.

CAFOs and Nutrient Management

The federal CAFO rule is still under revision. Draft changes issued during the summer of 2006 are still under consideration and may have significant impact on administration of the CAFO permit program. However, it is now clear that, while there will be additional permit administrative and process requirements, there will be far fewer facilities operating under permit.

The state's CAFO program is administered by Ecology with field and technical assistance from WSDA. Ecology issued the state's general CAFO permit in July 2006. Although appealed to the Pollution Control Hearings Board, the permit remains in effect.

WSDA inspectors worked with Ecology permit staff during the fall to review the status of previously permitted facilities to determine which ones should continue to be covered by the state's new CAFO permit. For dairy operations, this involved reviewing the compliance files and, in some cases, WSDA made site visits to verify necessary information. For non-dairy CAFO facilities, Ecology asked WSDA to inspect two feedlots to determine whether they needed to stay under permit. After the inspections and review, both had their permits cancelled. As of December 31, 2006, there were 30 dairies and 5 feedlots covered under a CAFO permit.

WSDA coordinates closely with Ecology when taking enforcement actions on permitted dairies or when a dairy may become subject to the permit. During 2006, WSDA and Ecology took action against one dairy that had serious discharges. WSDA took the enforcement actions, Ecology required the facility to apply for the CAFO permit, and staff from both agencies did a joint follow-up inspection. That facility is currently in the process of applying for coverage under the CAFO permit.

Complaint Response and Investigation

WSDA inspectors respond to livestock-related water quality complaints that appear to involve Animal Feeding Operations (AFOs) whether they involve dairies or not. Most complaints come from the general public and others are from local health departments or other local agencies. The complaints are received directly by WSDA staff or are referred from Ecology to WSDA in Olympia through Ecology's complaint response system.

WSDA staff investigates complaints by on-site inspections or by contacting the local Conservation District. When problems are documented and follow-up is needed, the inspectors require specific reporting by the facility or conduct follow-up inspections. The operator is also referred to the local Conservation District, if appropriate, for technical assistance. Complaints that relate to air quality, odor or flies are referred to the local air authority or health department and the facility is referred to the local Conservation District for assistance.

If the complaint investigation finds that the problem is from a non-point source, such as pastured animals or manure applications by parties other than the facility where the manure came from, WSDA refers the complaint to Ecology for follow-up. Depending on local ordinances, some non-dairy, non-CAFO complaints are better handled locally. Inspectors coordinate with the local agencies to ensure that they refer these complaints to the local authority for follow-up.

In 2006, WSDA responded to 28 complaints about dairies. This compares to 37 complaints in 2005. The complaints in 2006 led to the identification of two serious discharges. The most common water quality-related complaints come from manure applications to fields, storage of manure, or animals with access to surface water. Manure on roads from either leaking trucks or tracking was also reported.

WSDA inspectors also responded to 27 complaints for non-dairy AFOs with six requiring follow-up investigation.

Compliance Activity

When violations are discovered and investigated, the inspectors make a recommendation for enforcement and send their report and documentation to the Olympia office for final decisions and administrative enforcement actions. WSDA complies with Chapter 43.05 RCW, Technical Assistance Programs, to encourage voluntary compliance and to insure proper process is followed when taking enforcement actions.

There are four primary enforcement tools used by the program.

- **Warning Letter**
A warning letter is a letter issued by an inspector to inform a facility that it poses a risk to water quality. Problems that may prompt a letter include: needing an updated plan to better address current activities or not following certain elements of the Nutrient Management Plan, such as those related to soil testing, proper records, or using buffers. Warning letters can also be used for administrative purposes when operators miss the deadlines for getting plans approved or certified or submitting their biennial registration.

- **Notice of Violation**
A Notice of Violation (NOV) may be issued when a minor discharge occurs, when permit conditions are violated, or when circumstances pose a serious potential to discharge to waters of the state. A Notice of Violation may also be issued when operators have not responded to a warning letter regarding their plan approval, plan certification or registration.

The NOV identifies the compliance problem, requests information from the producer on how the violation occurred, what was done to fix it, and how it will be prevented in the future. WSDA uses the information as part of its decision on whether to take additional action or not.

- **Administrative Order**
An Administrative Order can be issued after an NOV to ensure that necessary compliance action is taken. It is used when issues identified by a previous NOV are not addressed or are repeated. The Administrative Order requires specific actions in specified timelines by the producer to regain compliance, stop a discharge or prevent future discharges. A variety of requirements, depending on circumstances, may be included. An Immediate Action Order may be issued in emergency circumstances without prior issuance of an NOV. Orders can be appealed to the Pollution Control Hearings Board (PCHB).

- **Civil Penalties**
Civil penalties can be issued for violations of chapter 90.48 RCW, Water Pollution Control, and for administrative violations of chapter 90.64 RCW, the Dairy Nutrient Management Act.

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The amount of the penalty for violations of chapter 90.48 RCW is based on the severity of impacts, the cause, action taken by the operator and history of the facility. The statute allows for a penalty of up to \$10,000 a day. The penalty may be waived for first-time dairy violators. These penalties can be appealed to the PCHB. The producer may also request relief of the penalty amount from the department prior to appealing to the PCHB. WSDA has issued civil penalties under this statute when a facility discharges pollutants into the waters of the state.

Civil penalties can be issued under chapter 90.64 RCW when operators fail to register or miss the deadlines for getting plans approved or certified. The statute sets a maximum penalty of \$100 for failure to register and a maximum of \$100 per month (with a cumulative maximum penalty of \$5,000) for failure to meet certification deadlines.

Enforcement actions taken

During 2006, 28 compliance actions were taken against 22 dairies, or 7% of the 310 facilities inspected. Most of the actions were in the warning letters. Only one civil penalty was issued for a water quality violation after a broken irrigation riser discharged manure to a ditch and then into waters of the state. One court order to comply was issued to a long-term violator. The court order was successful in getting improved site conditions prior to the start of the fall rainy season.

Enforcement Actions Taken, 2006

Enforcement Action	Number Issued
Warning Letter	20
Notice of Violation	2
Administrative Order	4
Civil Penalties*	1
Court Order to Comply	1

* Does not include civil penalties for failure to register or meet plan deadlines.

Civil penalties for lack of certified plans were issued to 17 facilities during 2006. All of these facilities were out of compliance for the entire year, resulting in penalties of \$1,200 for each facility, or a total of \$20,400 in penalties, for the year. Thirteen of the facilities have not had site or management compliance issues. Four of the 17 have had site problems requiring compliance actions and are inspected more frequently.

Significant Compliance Events

There were three manure spills early in 2006, all in Whatcom County. Causes were an older underground pipe that was found to be perforated rather than solid, a broken irrigation riser and manure application to a saturated field. The local WSDA inspector responded to each incident and worked with the operator to stop the discharge and to carry out needed work to clean up and prevent the problem in the future. Local Ecology staff assisted with one discharge that was initially difficult to identify and the two agencies continue to cooperate in monitoring compliance. One facility had two of the spills and was required by Ecology to apply for coverage under the general CAFO permit.

Other Program Highlights

Personnel Changes and Training

Prior to August 2005, the program had 2.5 positions assigned to field inspections. The other half of one position served as the lead inspector, providing support and guidance to the other inspectors and technical expertise for the program. Funding for a third full-time inspector was provided by the 2005 Legislature and the position was filled in August 2005. This third full-time inspector has enabled the program to meet its goal of inspecting all dairies and permitted facilities on a 24-month cycle since the position was added.

The program maintained its inspection frequency requirements with a few exceptions despite a number of personnel changes that occurred between January and October of 2006. First the lead inspector was promoted to a Program Manager position in another part of the agency. Later the Whatcom County-based inspector was promoted into another WSDA program. The LNMP program moved quickly to promote a trained inspector into the Lead Inspector position and hired two new field inspectors, one in April and one in October. The new staff members are now fully trained and operating independently in the field.

When the program first transferred to WSDA, field training was provided by Ecology and EPA staff. Field inspector training is now accomplished primarily by WSDA. The inspectors have all attended the state investigators training to insure they properly handle their investigations and enforcement actions. WSDA inspectors periodically team up to inspect a number of facilities in one area. This provides opportunities for the inspectors to compare inspection methods, discuss common issues, and promote consistency in inspections. This also increases visibility of the inspection program with our stakeholders. Occasionally, EPA staff have accompanied WSDA staff on inspections. This has been helpful to ensure consistency with the federal program requirements and to build a constructive working relationship with EPA regarding field activities.

This year WSDA staff participated in two national and five regional workshops related to the CAFO program or soil and nutrient management.

Lagoon Evaluations

In the fall of both 2005 and 2006, WSDA took action to evaluate lagoons prior to the rainy fall and winter seasons. The purpose of the evaluations was to raise the awareness of operators of the importance of having their lagoons in good condition for the winter. The program notified all of the operators through the Washington Dairy Federation. The notification provided a general time frame and the individual facilities were not contacted. These 'sweeps' assessed the condition of the lagoon dikes, lagoon levels and the amount of solids in the lagoons. The assessments were done early in the fall so that there was time for operators to address any identified problems. These emphasis evaluations were conducted in addition to the regularly scheduled inspections.

In 2005, the evaluations targeted facilities in Whatcom County. The program felt the evaluations were effective that year in that none of the visited facilities experienced a discharge during the

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winter and spring. In 2006, the evaluations targeted some facilities in Whatcom but also expanded to facilities in Skagit, Snohomish, King and Lewis counties. A total of 73 facilities and 114 lagoons were examined. The inspection staff also evaluated 13 facilities and 21 lagoons in Adams, Franklin, Grant and Yakima counties. WSDA will continue this emphasis program in 2007 and plans to refine the strategy to reach more sites on the east side.

Technical Assistance and Education

WSDA staff took the lead in organizing and facilitating the Interagency Livestock Technical Advisory Team. This interagency group is made up of staff from Ecology, Conservation Districts, NRCS and WSU and meets to clarify the nutrient planning requirements under the state CAFO permit. The group also works on providing consistent guidance for the producers as well as developing tools for producers and planners to use for planning and reporting. There were five meetings of this group in 2006.

WSDA staff made presentations to local dairy and cattle organizations as well as local shellfish or watershed groups in 2006.

Grant Program

Civil penalties from violations of Chapter 90.64 RCW are used to provide grants for research or education activities that assist livestock operations to achieve compliance with state and federal water quality laws.

In 2006, three grant proposals were approved by WSDA but only one \$8,000 grant was awarded. All three grant proposals were submitted by Washington State University (WSU). Two grant proposals submitted early in the year were requests for matching funds to be used in applying for grants from NRCS. WSDA approved the grants, however, neither proposal was funded by NRCS. Later in the year, one of the proposals was revised and submitted to Ecology for funding under its grant program. This proposal was approved by Ecology. The \$8,000 awarded by WSDA as matching funds will support a demonstration project on composting livestock to include workshops to share information with producers and planners.

In November, WSU submitted a third grant proposal requesting funds to continue an existing nutrient management project. The project, being done jointly with Ecology, is studying the effects of nutrient management on soil and ground water at a dairy facility in Whatcom County. The project has been in place for two years and another two-year cycle is desired by both Ecology and WSU. If WSDA approves the grant proposal, all three agencies will contribute to the costs.

The balance in the grant program's account as of December 31, 2006 is \$80,283, which includes the \$8,000 earmarked for the grant awarded in 2006. WSDA expects to more fully develop the application process to make this a semi-annual competitive grant program in 2007.

Ecology Program and Permit Administration Activities

Ecology remains the state's delegated agency responsible for administering the CAFO permit program. This includes developing and issuing permits, retaining original files for permitted

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facilities, and setting and collecting permit fees. In accordance with the MOU between the two agencies, WSDA staff provides field and technical assistance to Ecology. While WSDA is fully responsible for the state dairy program, staff coordinates with Ecology regarding additional permit requirements for any dairies that may also be covered under the CAFO permit.

Ecology issued a final General CAFO permit on June 21, 2006. Ecology considered the comments received and additional discussions with both industry and environmental parties during the public comment period that ended in December 2005. Based on the permit and new federal rule revisions issued in the spring and summer of 2006, producers are required to have their nutrient management plans reviewed by Ecology and fully implemented by July 31, 2007.

Ecology continues to work with producers to receive completed applications, review nutrient management plans and issue permits. At the end of 2006, there are 35 dairy and feedlot operations covered by permit or in the process of permit approval, compared to 110 at the beginning of the year. A dairy and one poultry operation are in the permit application process.

Program Funding

The WSDA Livestock Nutrient Management program has a biennial budget for 2005-07 of \$1,188,000. The program has two primary funding sources:

1. \$905,000 from the Water Quality Account for the primary inspection program; and
2. \$224,000 from the Water Quality Permit Account for costs related to NPDES permitting.

The program also has authority to expend \$59,000 this biennium from the Livestock Nutrient Management Account to provide grants for research or education activities that assist livestock operations to achieve compliance with state and federal water quality laws. Moneys in the account are from penalties levied under the Dairy Nutrient Management Act.

The program has six staff: a program manager, one support staff and four field inspectors. One of the inspectors is a lead inspector and provides support and guidance to the other field staff to ensure consistency and to address field and technical issues that arise.

A portion of the agency's appropriation from the Water Quality Permit Account is made available to the Department of Ecology to cover some of its costs associated with continued administration of the combined CAFO and state waste discharge permit. This is addressed in the agencies' MOU.

Looking ahead to the 2007-09 biennium, WSDA worked with Ecology this year to develop a proposal to adjust the program funding to better reflect expected revenues and expenditures.

Under the revised federal CAFO rule, fewer dairies and other CAFOs are required to be under permit. This, in turn, means a reduction in the CAFO permit fees. The change in the CAFO rule, however, does not result in a change in workload for WSDA's Livestock Nutrient Management program as most of the facilities that no longer are required to get a permit are dairies, which WSDA continues to inspect and regulate under the state Dairy Nutrient Management Act.

In response to this change in permit fee revenues, WSDA worked with Ecology to prepare a proposal that shifts the majority of the program funding to the Water Quality Account. The proposal also reduces the program's overall funding by \$50,000 to reflect moneys from the Water Quality Permit Account that are to be expended directly by the Department of Ecology rather than through an interagency agreement with WSDA.

This proposal is included in the Governor's recommended 07-09 biennial budget.

Significant Activities and Issues in 2006

Move to Shift Federal Delegation to WSDA Put On Hold

Since administration of the Dairy Nutrient Management Act was transferred to WSDA, the departments of Agriculture and Ecology have worked to fulfill the legislative intent stated in 2003 and again in 2005 of also moving to WSDA the administration of a broader livestock nutrient management program, that includes other animal feeding operations. To accomplish this intent, WSDA would need to successfully apply to the Environmental Protection Agency for delegated authority to administer the CAFO portion of the National Pollutant Discharge Elimination System permit program under the federal clean water act.

In the fall of 2005, the two agencies prepared possible legislation that would establish the statutory authority needed by WSDA to obtain federal delegation for the CAFO program. That legislative effort was halted after LDOC members expressed disagreement and uncertainty on some issues. In an effort to resolve the issues and develop legislation for the 2007 session, WSDA and Ecology scheduled a series of meetings of the LDOC to systematically address the issues.

As the meetings progressed, stakeholders raised questions regarding the cost-effectiveness of WSDA administering a separate permit program for a much reduced number of facilities as well as the merits of devoting extensive time and effort to the delegation application and approval process.

After further discussion, the group determined that the benefits of developing legislation to work towards delegation were not sufficient to justify further effort on the needed legislation. Instead, the committee and other participating stakeholders recommended that WSDA and Ecology focus its efforts on implementing a long-term program that kept the permit administration at Ecology and the inspection program at WSDA. The group emphasized that the option be reserved to revisit this split-program recommendation in the future, if warranted.

Following extensive discussions between the two agencies and with individual stakeholders, WSDA and Ecology concurred with the LDOC's recommendation. Discussions between WSDA and Ecology on how to proceed with a split program are in progress and are expected to result in a revised MOU. The two agencies plan to stay in contact with stakeholders for their views on implementation of the split program.

WSDA will continue to work closely with EPA staff on the dairy and CAFO inspection program and to follow the continuing changes to the federal CAFO rules. EPA Region 10 recently made staffing changes in its CAFO permitting and inspection program. The CAFO expert that had worked in the Idaho EPA office has moved out of the region. Other regional staff members who previously had some involvement are now assuming a more active role in the program.

Finally, WSDA is monitoring the delegation application review process underway in Ohio. The state of Ohio recently submitted its completed application package to EPA to shift delegation from its environmental agency to its Department of Agriculture. Oregon continues to develop its application package for shifting delegation to its Department of Agriculture. Information gained from Ohio's and Oregon's experiences will be helpful in the future if Washington decides to proceed in the same direction.

Rule on Disclosure of Nutrient Management Information Being Developed

During the 2005 session, legislation passed that included a provision that allows certain information in plans, records, and reports obtained from dairies and other animal feeding operations that are not required to apply for a permit to be disclosable only in ranges. The legislation directed WSDA to adopt rules to implement the provision. The disclosure in ranges is intended to provide meaningful information to the public while ensuring confidentiality of business information regarding: (1) number of animals; (2) volume of livestock nutrients generated; (3) number of acres covered by the plan or used for land application of livestock nutrients; (4) livestock nutrients transferred to other persons; and (5) crop yields.

Work on the rules was complicated by legislation passed in 2006. SSB 6617 exempts certain farm plans developed by Conservation Districts from public disclosure. Plans for facilities that are under the CAFO permit are not covered by this new exemption and continue to be subject to full disclosure as required by federal law. However, the bill language has caused some uncertainty and disagreement on how the exemption applies to other plans, particularly dairy nutrient management plans.

WSDA began developing the rule in the spring of 2006. Staff met with stakeholders over information and approaches to use in order to meet the intent for confidentiality and meaningful information. Consideration also had to be given to how the rule would be implemented when a public disclosure request was made. In November, a final approach was determined and a draft rule was sent out to stakeholders for review and comment. Revisions based on the comments and subsequent discussions will be written in January. The formal rule making process with public review is anticipated to occur later in 2007.

Dead Animal Disposal Law Updated; Rules Being Drafted

Under the revised federal CAFO rule, producers must include a plan for proper disposal of dead animals in their nutrient management plan. The dead animal disposal plan must be consistent with state and local requirements.

This new requirement was one of a number of reasons animal disposal issues came into the spotlight in Washington in 2003 and 2004. A review of Washington's statutes and rules at the time revealed that they were inconsistent, out of date and did not include common, appropriate options for routine dead livestock disposal.

Work on this issue involved coordination among the departments of Agriculture, Ecology, and Health as well as the State Board of Health and involvement of the state legislature. In 2005, legislation passed that resulted in specific guidelines for composting dead cattle and horses. In

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spring 2005, the State Board of Health initiated the process to update its rule that includes dead animal disposal. That rulemaking was delayed to allow the Legislature to consider legislation developed by WSDA's Animal Health program to amend current law, dating from 1949, that generally limited dead animal disposal options to immediate burial or rendering.

In 2006, WSDA's agency request legislation passed unanimously. SB 6371 expands the legal options for disposal of livestock that have died from disease or unknown causes by providing WSDA with rulemaking authority to prescribe the timeframe and methods of disposal. Disposal methods listed in the law include burial, composting, incinerating, landfilling, natural decomposition or rendering.

WSDA has coordinated the development of its disposal rules with other agencies and the livestock industry. WSDA's rules are expected to be finalized in the spring of 2007. The State Board of Health expects to complete its rulemaking following WSDA's rule adoption.

Livestock Development and Oversight Committee (LDOC)

The Livestock Development and Oversight Committee (LDOC) was mandated by legislation in 2003 to assist the agency in developing legislation that would enable WSDA to apply for the federal AFO permit portion of the state's NPDES permit. The committee, made up of a cross section of Washington's livestock industries, has been an important forum for discussion about the WSDA dairy program and AFO issues. Recommendations from the LDOC weighed heavily in the decision by WSDA and Ecology to not pursue legislation during the 2007 session.

According to the 2003 legislation, the LDOC was to sunset on June 30, 2006. However, due to scheduling issues, the committee's last formal meeting was held on July 22, 2006. The LDOC members continue to provide advice and assistance as WSDA and Ecology coordinate on dairy and AFO/CAFO program questions and issues.

Meetings and Main Discussion Topics, 2006

April - Ellensburg

- Reviewed state and federal regulations for clean water, including permits.
- Discussed objectives for legislation along with limitations on what it addressed.
- Agreed that legislation should be pursued in 2007 legislative session.
- Created a subcommittee to confer with WSDA on draft language.

May - Mt. Vernon

- Reviewed delegation process and projected timing along with changing roles of Ecology and WSDA.
- Reviewed draft of legislation and made recommendations on some key issues.
- Discussed pros and cons of proceeding with delegation given the small number of facilities that will likely be covered by permit.

July - Olympia

- Agreed that WSDA should not pursue delegation for the near term.
- Suggested MOU between Ecology and WSDA be revised to clarify roles in a long-term split program for AFOs and CAFOs, and assess whether WSDA has appropriate authority and tools to deal with non-dairy facilities.
- Suggested that the current Compliance Agreement among the Conservation Commission, Districts and Ecology be expanded to include WSDA. The agreement addresses the interaction between Districts and Ecology in providing technical assistance to operators in response to agency referrals.
- Discussed need for continued discussions between agencies and stakeholder groups regarding existing program implementation and future of livestock programs.

Livestock Development and Oversight Committee Members, 2006

<i>Dairy Producers:</i>	Chuck Hayes Dan DeGroot Dick Bengen
<i>Beef Producers:</i>	Karl Amidon Ed Knutzen Chad Henneman
<i>Commercial Feedlots:</i>	David Secrist, Agri Beef
<i>Poultry Industry:</i>	Chris Cheney, Washington Fryer Commission
<i>Food Industry:</i>	Dr. Duane Olsen, DVM, Briarwood Farms
<i>Shellfish Industry:</i>	Steve Bloomfield, South Sound Aquaculture
<i>Environmental Interests:</i>	Lynn Bahrych, Washington Environmental Council
<i>WA Assn of Conservation Districts:</i>	Lynn Brown
<i>Department of Ecology:</i>	Melodie Selby
<i>Washington State University:</i>	Dr. Joseph H. Harrison
<i>Environmental Protection Agency:</i>	Tom Eaton, Director of Washington Operations
<i>Tribal Governments:</i>	Jim Peters, Squaxin Tribe
<i>Legislators:</i>	Senators Marilyn Rasmussen and Bob Morton Representatives Eric Pettigrew and Joel Kretz
<i>Department of Agriculture:</i>	Jerry Buendel, Chair

Compliance with the Federal CAFO Rule

The CAFO rule issued by EPA in 2002 was revised in the spring of 2006 in order to extend the implementation date from April 2006 to July 2007. The extension was needed to allow time for operators to respond to changing requirements caused by a February 2005 federal court ruling on the original rule changes. A draft of additional rule revisions developed by EPA to address the court decision was issued in July of 2006. A final rule is not yet available.

The core requirements of the federal CAFO rule are still in place. However, there continues to be issues relating to the treatment of pathogens and storm water handling on un-permitted facilities. Resolution of the issues will eventually affect the CAFO program.

Ecology developed a draft state CAFO General Permit in late 2004 and early 2005 to replace the Dairy General Permit and to include non-dairy CAFOs. Ecology later revised the draft to comply with the 2005 federal court ruling, made it available for public review during the winter and issued the final general permit in June 2006. As required, Ecology extended coverage of facilities under the 2000 Dairy General Permit until the new permit went into effect.

Since issuing the new permit, Ecology has worked with producers and WSDA to identify which of the previously permitted facilities needed coverage under the new permit and which facilities may no longer need to be permitted. Ecology sent information to the facilities to help them determine their status and to determine if they needed to update their plans and develop on-site record keeping and reporting procedures consistent with the CAFO permit requirements.

Prior to making a determination on the status of many of the facilities, Ecology requested that WSDA inspect the operation and recommend a status for the facility. Eight of the previously permitted facilities that did not apply for the new permit or that requested to have their coverage canceled were required to stay under the permit.

Finally, WSDA and Ecology will be hosting the annual CAFO Roundtable in the fall of 2007. This 2½-day conference brings together officials from state CAFO programs along with EPA to discuss implementation and technical issues and new CAFO program developments.

Definitions of Key Terms

Source: Concentrated Animal Feeding Operation (CAFO) National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit, effective 7/21/06, issued by the Department of Ecology.

"Animal feeding operation" or "AFO" means a lot or facility that meets both of the following conditions:

(a) It has animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of forty-five days or more in any twelve-month period; and

(b) 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 animals are confined.

"Designate as a CAFO" means the appropriate authority has determined that an AFO is a significant contributor of pollutants to waters of the state and issued a formal designation.

"Large concentrated animal feeding operation" or "large CAFO" means an AFO that stables or confines as many as or more than the numbers of animals specified in any of the following categories:

(a) 700 mature dairy cows, whether milked or dry;

(b) 1,000 veal calves;

(c) 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls, and cow/calf pairs;

(d) 2,500 swine each weighing 55 pounds or more;

(e) 10,000 swine each weighing less than 55 pounds;

(f) 500 horses;

(g) 10,000 sheep or lambs;

(h) 55,000 turkeys;

(i) 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;

(j) 125,000 chickens, other than laying hens, if the AFO uses other than a liquid manure handling system;

(k) 82,000 laying hens, if the AFO uses other than a liquid manure handling system;

(l) 30,000 ducks, if the AFO uses other than a liquid manure handling system; or

(m) 5,000 ducks, if the AFO uses a liquid manure handling system.

"Manure" is defined to include manure, bedding, compost, and raw materials, or other materials commingled with manure or set aside for disposal or process wastewater.

"Medium concentrated animal feeding operation" or "medium CAFO" means an AFO that stables or confines the numbers of animals specified in any of the following categories:

(a) 200 to 699 mature dairy cows, whether milked or dry;

(b) 300 to 999 veal calves;

(c) 300 to 999 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls, and cow/calf pairs;

(d) 750 to 2,499 swine each weighing 55 pounds or more;

(e) 3,000 to 9,999 swine each weighing less than 55 pounds;

(f) 150 to 499 horses;

(g) 3,000 to 9,999 sheep or lambs;

(h) 16,500 to 54,999 turkeys;

(i) 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;

(j) 37,500 to 124,999 chickens, other than laying hens, if the AFO uses other than a liquid manure handling system;

(k) 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;

(l) 10,000 to 29,999 ducks, if the AFO uses other than a liquid manure handling system; or

(m) 1,500 to 4,999 ducks, if the AFO uses a liquid manure handling system; and

(1) Pollutants are discharged into waters of the state through a man-made ditch, flushing system, or other similar man-made device; or

(2) Pollutants are discharged directly into waters of the state which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

"Process Waste Water " means water directly or indirectly used in the operation of the CAFO for any or all of the following: Spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other CAFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs, or bedding.