

MAINE STATE LEGISLATURE

The following document is provided by the
LAW AND LEGISLATIVE DIGITAL LIBRARY
at the Maine State Law and Legislative Reference Library
<http://legislature.maine.gov/lawlib>



Reproduced from scanned originals with text recognition applied
(searchable text may contain some errors and/or omissions)

L.U.O.

**REPORT TO THE MAINE LEGISLATURE
On the
IMPLEMENTATION OF THE NUTRIENT MANAGEMENT PROGRAM**



February 15, 2009

**S
655
.M35
2009**

Maine Department of Agriculture, Food & Rural Resources

Division of Animal Health & Industry

EXECUTIVE SUMMARY

In accordance with 7 MRSA §4213, this report is presented to the Joint Standing Committee on Agriculture, Conservation and Forestry. It describes the status of the Nutrient Management Program and the development and accomplishments of the program.

The purpose of the Nutrient Management Program is to address non-point source pollution from agriculture, as well as point sources from "concentrated animal feeding operations" (CAFOs) by promoting best management practices on Maine's farms and by ensuring their implementation through a variety of efforts. Development and implementation of Nutrient Management Plans requires specialized technical assistance and knowledge. There are 117 individuals in Maine who have been licensed as Certified Nutrient Management Planning Specialists. Not all of these individuals are available to prepare and certify Nutrient Management Plans. By the end of the year 2008, there were 730 nutrient management plans in place covering 152,142 acres and 116,437 animal units. Of these plans, about one third, (240) needed to be updated.

During 2008 and early 2009, eighteen training events were approved by the Department for a total of 49 nutrient management recertification credits. These programs were held either in conjunction with the Maine Compost Team, the University of Maine Cooperative Extension (UMCE) the Natural Resources Conservation Service (NRCS), or independently by the Department. In addition, there were monthly on-line classes through the Livestock and Poultry Environmental Stewardship Curriculum each worth one credit. (It appears that not many people are taking advantage of these on-line classes at this time.) Among the events offered was a one day Foot and Mouth Disease Field Exercise that was conducted on a working Maine dairy farm. Other notable training events included a one day training session for participants in the FMD field exercise, a certification workshop offered by UMCE and the Department and seven presentations given at the Agricultural Trades Show in Augusta on a variety of subjects.

During 2005, the legislature reinstated the Nutrient Management Coordinator position and a new coordinator was employed in October of that year. Reinstatement of this position was essential to keep important aspects of the program moving forward.

Probably one of the more significant aspects of the Nutrient Management Law is the financial burden placed on farmers with its implementation. To mitigate this impact, a Nutrient Management Grant Program was established to help farmers comply with the Nutrient Management Law. Subsequently, the 119th Legislature appropriated \$2.5 million to provide farmers with funding for manure storage and handling systems. In 2002 and again in 2003, voters approved an additional \$2.0 million and \$1.0 million, respectively, for funding additional projects. To date, 119 farms in 12 counties have been awarded grants on a cost-share basis. An additional grant program, Phase II Supplemental, was initiated in October 2006. Details of this program will follow in this report. Unfortunately, sufficient grant funds are not available to meet all needs.

The Nutrient Management Loan Program provides farmers with low-interest (2%) loans when grant funds must be supplemented to cover the cost of a project, or when a project is not eligible for a grant. The Loan Fund has been poorly utilized for reasons to be explained below, and changes to this program to allow funding for resolving a broader array of environmental issues were proposed in 2006. Revisions to Maine's tax laws allow farmers to exempt manure storage structures from property taxes, as well as to take a sales tax exemption on materials used in construction of manure storage or handling systems. These tax provisions are not well known, are underutilized and should be promoted aggressively.

NOV 14 2012

Concentrated Animal Feeding Operations (CAFOs) must comply with federal and state regulations and, if required, obtain a combined Livestock Operations Permit/Maine Pollutant Discharge Elimination System (LOP/MEPDES) Permit from the Department of Agriculture and the Department of Environmental Protection (DEP). Seven farms had originally been inspected and issued Provisional Livestock Operations Permits, however, these provisional permits now have expired. Recent estimates indicate that approximately 50 to 60 farms may require LOPs. It is likely that many of these farms will not require a MEPDES permit. A high priority has been placed on getting as many of these farms as possible into compliance in 2009. Three Maine farms underwent "CAFO" inspections in late 2005 and 2006 and three more were inspected in 2008 by the Environmental Protection Agency (EPA), the Maine Department of Environmental Protection (DEP) and the Maine Department of Agriculture. Two more CAFO inspections on Maine farms were scheduled by EPA for 2009. The 2008 farms inspected included one poultry and two large dairy operations while the 2009 farms consisted of one dairy and one poultry farm. Since Environmental Protection Agency rules regarding permitting of livestock facilities are evolving, this will require additional coordination between the Department, DEP and EPA.

Reinstatement of the Nutrient Management Coordinator position is keeping all aspects of this program moving forward. "The Nutrient Management Rules" (Ch. 565) and nutrient management-related "Rules for the Disposal of Animal Carcasses" (Ch. 211) and the "Rules Regarding the Disposal of Cull Potatoes" (Ch. 600) all require updating. The "Rules for the Agricultural Compliance Program" have been completed, and public hearings were held in January 2007. The rules were finally adopted in May, 2007. Training and certification of Nutrient Management Planning Specialists must continue. Follow-up on Phase II Supplemental of the Nutrient Management Grant Program, the Loan Program, tax exemption provisions and other aspects of this program, is essential. A new initiative, establishing and implementing a Phase IV Nutrient Management Grant Program is underway, but will continue to require a substantial investment of time and personnel resources. A request for \$3 million for agricultural water (irrigation) projects and for nutrient management grants has been included in the Governor's bond package for 2009.

Rapidly changing policy positions by EPA and USDA's Natural Resources Conservation Service (NRCS) continue to require close scrutiny by the Department. Changes in Environmental Quality Incentives Program (EQIP) rules, whereby funding of projects may be based on "Total Maximum Daily Load" (TMDL) criteria, might shift benefits to certain high-priority watersheds by adding 'points' to projects in these watersheds compared to similar projects in other watersheds that may also have urgent needs. In addition, it is still unclear what the impact of the newly adopted EPA rules regarding CAFOs and AFOs (Animal Feeding Operations) will be. The revisions to the EPA's CAFO rules have finally been adopted and the state must now evaluate the revisions to determine what the changes may mean for Maine producers. In addition, conflicts with state law and rules must be identified and addressed.

Moreover, our long-standing federal partner for providing technical support, USDA's NRCS, has moved to the privatization of technical assistance rather than providing it by their own employees. Private Technical Service Providers (TSPs) have been available for writing Comprehensive Nutrient Management Plans (CNMPs), and for other projects, with funding from USDA's Environmental Quality Incentives Program (EQIP). This approach is being re-examined by NRCS in light of budget reductions and changes may be forthcoming in the future. Recently, NRCS has stated that funding is not likely to be available for updating CNMPs when

they expire or become outdated due to changes in the farm operations. In addition, funding for many conservation programs in the 2007 federal "farm bill" has been reduced. Consequently, the decreasing availability of technical specialists for applying conservation practices to the land is a trend that must be reversed through on-going work and vigilance by this Department.

A conflict is brewing over posted road ordinances. This conflict may see legislation submitted by one or more parties in the future if it can not be resolved another way.

BACKGROUND

The Nutrient Management Law, originally passed in 1998, required the Department of Agriculture to establish rules for conducting a Nutrient Management Program and to adopt standards for Nutrient Management Plans. These actions were completed by December 15, 1998 and were ratified by the Legislature the following Spring. In addition, amendments to the Nutrient Management Law were made in 1999, 2001 and again in 2002. These were necessary as the development of the program required additions to the rules to describe specific processes or simply to correct or change the existing rules to better reflect how the program was working in reality.

These changes included giving the Commissioner the authority to revoke certifications and permits and to issue provisional permits for certain livestock operations. They also included tax exemptions for manure storages, appeals processes, and defining nutrient management plans as confidential business information. However, recently adopted Rules by EPA require that CAFO nutrient management plans be submitted to the EPA with the permit application and so be available for public review. The most recent changes were added to define the recertification process for Nutrient Management Planning Specialists.

After the rules were approved, the Department began implementation of the various elements of the program based on the timeline set in legislation. The primary areas of implementation were the training and certification program for Nutrient Management Planning Specialists, establishment of the Nutrient Management Review Board, issuance of variances, enforcement of the winter spreading ban and the establishment of a permitting program. In addition, it was necessary to develop a data management system (now in the process of being modified), to identify funding sources for manure storages, and to negotiate agreements with the Maine Department of Environmental Protection (DEP) about how the Nutrient Management Program would interface with DEP programs that had overlapping or similar jurisdictions. All these important components of the program have been successfully addressed, and ongoing efforts continue to identify areas of the program requiring modifications to meet future goals.

IMPLEMENTATION/ONGOING EFFORTS

The implementation of the Nutrient Management Program truly is being accomplished through a partnership approach. Many players have roles in making the various pieces of the program work. The Department of Agriculture has, of course, taken a leadership role in developing and coordinating the different components of the program. The University of Maine Cooperative Extension (UMCE) has had a primary role in conducting certification training workshops for consultants, farmers and agency people. They also have worked in concert with the Department to develop the outline of a nutrient management plan and guidance materials to assist planners who develop plans.

The University of Maine Cooperative Extension completed a project in 2005 that developed and adopted integrated cropping and livestock production systems on small and mid-size family farms. Environmentally sound manure management was a key component of this research and extension project. The integrated system encouraged within-farm diversification or across-farm cooperation where farmers with individual crop and livestock enterprises shared a land base, labor, equipment or other capital, and exchanged plant nutrients, primarily animal manure, for feed crops. Projects in Maine emphasized cooperation between dairy producers and potato growers, and primarily involved the adoption of more crop rotation practices. The potato farmers utilized manure from dairy operations to offset fertilizer needs and add organic matter to their cropland soils, while dairy farmers were able to rotate corn onto potato land at appropriate time intervals. The success of this experiment is providing opportunities for a substantial number of small and mid-size farms with specialized production systems that now benefit from implementing additional, financially beneficial and environmentally sound practices.

The project spanned three years and involved the collaboration of ten institutions across three states with participants from eight different disciplines. The three states (Iowa, Maine and Michigan) represented the Northeast, the Mid-West and the Great Lakes regions of the country. Knowledge gained and farmer adoption experience from this project is applicable to a significant portion of the U.S. agricultural sector.

The USDA Natural Resources Conservation Service (NRCS) continues to be a strong partner by having many of their professional staff trained and certified for preparing CNMPs. During the early development of this program, NRCS provided a liaison person to work with the Department on technical aspects of the program. NRCS also assisted the department by providing technical assistance for the very successful Nutrient Management Grant Program during Phases I, II, and III, and the ongoing Phase II Supplemental. Additionally, they have worked closely with Department staff incorporating the requirements of the State's Nutrient Management Law and Rule into the NRCS requirements for Comprehensive Nutrient Management Plans. The possibility of having state certified nutrient management planners authorized to approve or update federal CNMPs is being explored by the Department to fill the gap created by insufficient numbers of NRCS personnel. This dialog continues.

The UMCE county offices and the Soil and Water Conservation Districts (SWCDs) have hosted workshops and training sessions and have been the front line delivering information to farmers throughout the state. The Maine Department of Environmental Protection (DEP), the Finance Authority of Maine (FAME) and the Maine Municipal Bond Bank all have been partners with the Department putting together and administering the Nutrient Management Loan Program. The private sector also has taken an interest in the program. Several private firms have trained individuals to write and certify nutrient management plans to assist farm operations that need Livestock Operations Permits or guidance with the Nutrient Management Grant Program. Without the commitment and hard work by so many individuals and agencies, it would not be possible to continue implementing such a far reaching program. The main components of the program are described below, with recent achievements included for each of them.

Survey of Best Management Practices (BMP) Adoption

The Department has a commitment to study the rate of adoption of BMPs by Maine Farms. This was included as part of the statewide strategy for reducing non-point source pollution. In 2003, the Department applied for and received a grant for \$50,000 from the Coastal Zone Management Program through the State Planning Office (SPO). Field data collection for this project began in 2004. Unfortunately, the work was interrupted prior to the completion of the the data evaluation and final report. The final payment to the contractor was withheld and returned to the funding source. The Department is now trying to determine how this final phase of the project can be completed. When completed, this project will allow the Department to evaluate the extent of adoption of various BMPs on selected Maine farms, to assess the effectiveness of some of them and to focus future programs and policies on reducing non-point source pollution from agriculture.

Update of the Nutrient Management Law and Rules

In 2001, the Department proposed and adopted amendments to the Nutrient Management Law and Rules to enable the Commissioner to issue variances on the implementation dates of the Nutrient Management Law. The Nutrient Management Rules also have been amended through rulemaking to reflect changes made to the Nutrient Management Law, and include the process by which the Commissioner can issue variances on Nutrient Management Law implementation dates. Other changes included in the rules were an appeal process for variances, a process for revocation of Nutrient Management Planner Certification and revocation of full or provisional Livestock Operations Permits, and some changes on Concentrated Animal Feeding Operations (CAFO) designation. Rulemaking in 2002 added a recertification process enabling Certified Nutrient Management Planning Specialists to aquire recertification credits and keep their certification valid.

The Nutrient Management Rules again need to be updated based on legislative changes adopted in 2003, the recently adopted revisions to the federal CAFO rule and on other recently identified concerns. These updates must include changes in the status of compost and other soil amendments as they relate to the Nutrient Management Law. In addition, a number of inconsistencies between the law and rules have been identified over time and need to be corrected at the time of the next rulemaking.

Nutrient Management Planner Training and Certification

An important component of the Nutrient Management Program is the availability of Certified Nutrient Management Planning Specialists (CNMPS) who can prepare and certify Nutrient Management Plans for Maine's farming community.

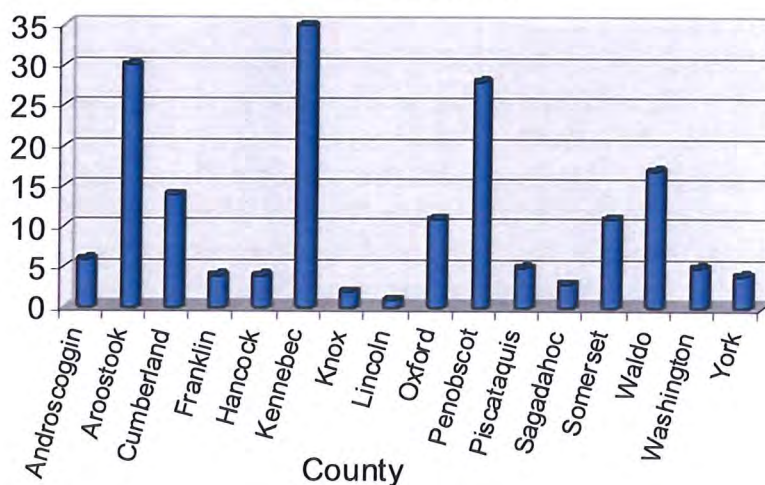
The University of Maine Cooperative Extension has made a major commitment to develop and deliver training sessions to prepare farmers, consultants and agency people for this certification. There are two categories of certification, a private one for farmers who want to prepare and certify their own plan and a commercial/public one for people who want to be able to prepare and certify plans for anyone requesting it. Certification as a Nutrient Management Planning Specialist requires that an individual pass a certification exam administered by the Department. Applicants who do not pass the exam are allowed to retake it three weeks after failing the

original exam. Once an applicant has passed the exam, he/she is issued a certificate that is valid for five years.

The number of certified people in 2007 is summarized in Figure 1. Of the 151 people who have passed the exam, 59 are farmers and the remaining 92 are either agency personnel or private consultants. There are an additional 29 people who qualify as Nutrient Management Planning Specialists because they have been certified by the American Agronomy Society as Certified Crop Advisors (CCAs) or by other organizations. This makes a total of 180 people who are qualified to write and approve nutrient management plans in this State. This number has increased in the last year with 8 new commercial/public planners and two new private planners became certified in 2008. The Department is planning to update these numbers once the database has been revised to make access to this data easier. The number of planners who are actually available to do plans for farms is considerably less than the totals would imply because many of the certified people either work for agencies such as NRCS and have other responsibilities or are retired but still have the certification. Although it is not easy to determine an exact number of certified people available for general NMP plan preparation, it appears that this number is less than two dozen.

The Department keeps a record of Certified Nutrient Management Planning Specialists per county, as detailed in Figure 1. There is a concentration of certified planners in Kennebec, Aroostook and Penobscot Counties. Each of these counties has 25 or more persons certified to prepare Nutrient Management Plans.

Figure 1: Geographic Distribution of Certified Nutrient Management Planning Specialists



Recertification Process

The recertification process is the logical continuation of the initial certification process described above. The intent is to have the planners attend events on topics relating to Nutrient Management issues, to expand their knowledge and keep them updated on new research and development. Nutrient Management Planning Specialists that are certified through the State of

Maine need to acquire 6 recertification credits per 5 years for a private license and 10 recertification credits per 5 years for a public license.

The Department has put in place a process that enables planners to receive credits for approved events, and for events to be considered for recertification credits. The process to request recertification credits and some informational flyers have been developed and now are being used. The rulemaking to formalize the process was completed, and the amended rules were formally adopted in May 2002. The database used to keep track of the credits has been developed but has been problematic and needs revisions to make it useful for keeping track of recertification credits.

In 2008 and early 2009, eighteen training sessions were held. Six were all day or multiday events. A total of 49 credits were offered and at least 63 people received credit. These numbers do not include a monthly web-based training session which is apparently not well attended since it has not been reported for credit.

One highlight was a one day Foot and Mouth Disease Field Exercise that was conducted on a working Maine dairy farm. Other notable training events included a one day training session for participants in the field exercise, a certification workshop offered by UMCE and the Department and seven presentations given at the Agricultural Trades Show in Augusta on a variety of subjects.

Winter Manure Spreading Ban and Variances

The ban on winter manure spreading is effective December 1 of a calendar year through March 15 of the following calendar year. This prevents spreading during the time of the year when the potential for nutrients to reach water bodies is at its greatest.

The Department received only 2 requests for variances for the winter of 2002-2003. Both of these requests were approved and both were for a limited time to allow the manure level in a pit to be lowered to ensure that the pit would have sufficient capacity to get through the winter. This number of variance requests was significantly fewer than the 15 approved in 2001-2002. The number of winter spreading variance requests increased dramatically in 2003-2004 to 75. This was greater than the total number of requests for the three previous years. The increase occurred as a result of the unusually wet fall, which prevented many farms from getting equipment onto fields and prevented them from lowering manure storages enough to be able to accept the amount of manure that would be generated during the winter months. Many of these farms were able to get onto their fields for the first time in months just before the ban went into effect. Most of them needed several days of additional time to lower their storages sufficiently to get through the ban period. This startling increase in the workload at a critical time of the year put a severe strain on the Department personnel reviewing and approving requests. This was exacerbated by the fact that NRCS was unable to assist in the process. The result was that the normal process for issuing variances had to be abbreviated. Had a mechanism been in place that would have allowed the Commissioner to move the spreading ban date ahead about two weeks when extreme conditions warrant it, this situation could have been handled much easier. The Nutrient Management Review Board, however, decided that the present system is working satisfactorily and, therefore, a Rule change was not needed at that time.

The 2004-2005 season enjoyed drier field conditions which resulted in 0 variances requested. In contrast, the spring and fall seasons of 2005 exhibited excessive rainfall making most field

activities, particularly the emptying of manure storage facilities, generally impossible. Consequently, during the winter of 2005-2006, 65 variances were granted that allowed spreading until December 31, 2005. Several producers were granted brief extensions for spreading into early January 2006. Two requests were denied because criteria established for granting a variance were not met in these situations. The spring, summer, fall, and early winter seasons of 2006-2007 manifested some of the heaviest rainfall on record resulting in extremely wet and soft field conditions. These ubiquitous, wet field conditions, coupled with unseasonably warm temperatures and no permanently frozen ground until mid January 2007, prohibited many farms from emptying manure storage facilities prior to the winter spreading ban period. Consequently, the largest number of requests to date, 83 spreading variances and, subsequently, 15 extensions for spreading into January 2007, and 3 extensions into February were granted. Two requests were denied because criteria established for granting a variance were not met by these farms.

Throughout 2007, the compliance officers visited as many farms as possible who had requested spreading variances. The purpose was to see how they were planning to avoid the need for variances in the future. The visits encouraged farms to focus on timely spreading and advance planning.

The summer and fall of 2007 proved to be more conducive to field work in general, which allowed most farms to empty their storages before the winter spreading ban period. As a result of the better weather conditions and the additional effort to raise awareness, only four farms sought and received variances to spread beyond the December 1 deadline. Deep snow conditions eventually ended spreading activities. Some field stacking continued as a way to divert manure from storages that still had insufficient freeboard to make it through the winter.

The number of requests for spreading variances rose again in 2008 to 43 with five seeking extensions. All the requests were granted. Most of the requests were based on problems faced with spreading on wet fields during the fall. Even with the wet fall conditions, most farms were still able to complete the fall spreading before the December 1 cut off date.

Nutrient Management Plans

The mandatory Nutrient Management Plan is a key element of the Nutrient Management Law. A Nutrient Management Plan is a management tool designed to evaluate the amount of nutrients needed compared to those available on a farm. The plan also includes setbacks from sensitive resources and existing uses, erosion control best management practices (BMPs) and provisions for manure storage for a minimum of 180 days production of manure.

A farm operation is required by legislation to develop and implement a Nutrient Management Plan if:

- the farm confines and feeds 50 animal units or more at any one time
- the farm stores or utilizes more than 100 tons of manure or compost per year, not generated on that farm
- the farm is the subject of a verified complaint of improper manure handling (i.e. checked and confirmed by the Department of Agriculture) or
- the farm stores or utilizes regulated residuals

Nutrient Management Plans for most farms had to be completed and approved by January 1, 2001. The Department issued 40 variances on the completion date of January 1, 2001, mostly

because of the high volume of plans our cooperators (SWCD, NRCS) had to complete on or around the deadline.

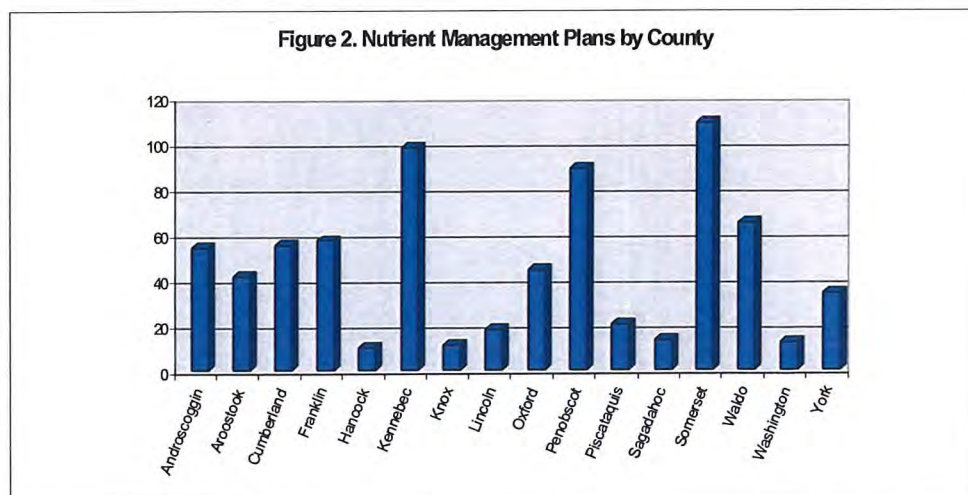
As of September 2001, three farms were known to be operating without a plan or a variance. Later that fall and into 2002, the Department and the Nutrient Management Review Board took steps that resulted in two of these farms voluntarily coming into compliance. One operation remained out of compliance until the fall of 2002, when enforcement actions were sought. The situation was resolved in court.

Farmers had until October 1, 2007 to fully implement their plans. This time span between development of a plan and full implementation allowed farmers to arrange financing, buy equipment and build or upgrade storage and handling systems that were needed to implement the plan. It was expected that those parts of the plans that did not require structural changes or major investments would be implemented as soon as the plan was approved. The time frame for full implementation of plans completed after the October 1, 2007 date has not been established either by legislation or rule. The Nutrient Management Law will need to be amended to remove the past implementation dates and to establish a time frame for implementation of new plans. One logical scheme would be to require implementation of provisions of the plan that do not require capital investment within six months while those requiring capital investment may take 12 to 18 months to fully implement.

Since many of the State's Nutrient Management Plans were developed in 2001 and are valid for five years, many plans required updating and recertification in 2006. This presented a challenge to certified planners for updating these plans in a timely manner. Consequently, 66 variances to nutrient management plan development were granted to keep the farmers in compliance with the Nutrient Management Law and to maintain their Right-to Farm protection while their plans were being updated. Many of these plan updates were completed in 2007. Between those updated and the new plans prepared, there were 114 plans certified in 2007. Those plans covered 24,288 acres of farmland and 14,385 animal units. In 2008, the number of plans completed or updated (109) was similar to the 2007 total, as was the total acreage in these new or updated plans which was 23,006. The number of animal units covered by the newly completed or updated plans was significantly higher than 2007 (35,333). This was a result of several of the largest farms in the state, including the 3 large poultry operations, all having plans completed or updated in 2008.

The development and implementation of Nutrient Management Plans is expected to result in a more effective use of nutrients, including manure, on agricultural land, and a reduction in the impact of nonpoint source pollution associated with agricultural operations on water quality.

There are currently 730 (up from 636) Nutrient Management Plans in place throughout the State, and Figure 2 shows how these plans are distributed. Of these plans, 490 (up from 408) are up to date and 278 (up from 228) need to be updated. Among



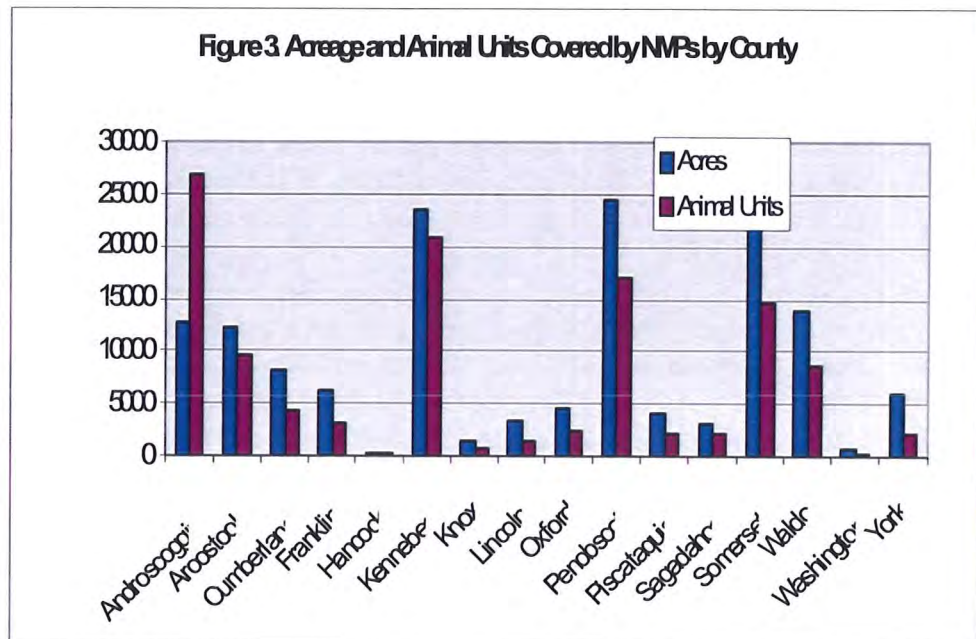
this latter group are 99 ‘farms’ with fewer

than 50 animal units. Most of these only had nutrient management plans in order to accept residuals or manure from other sources. Several other farms have gone out of business and so no longer need nutrient management plans. Letters were sent out to 84 farms that still needed plan updates to remind them to have their plans updated.

In 2008, five farms without plans were granted variances to allow them more time to develop and implement their plan. The Department anticipates that a substantially larger number will be requesting variances in 2009 as a result of the update notices that have been sent out.

Note that the number of Certified Nutrient Management Planning Specialists in Figure 1 has a similar distribution, indicating that there are more planners in the areas with the greatest need.

The 730 plans cover a total of 152,142 acres (up from 131,897) acres and 116,437 animal units (up from 99,728) animal units, where one animal unit is equal to 1,000 pounds live weight. Figure 3 shows how these totals are distributed throughout the counties.



Comparison of acreage versus animal units for the different counties reveals that there are some significant differences in the number of animal units supported per acre. An interesting point here is the number of animal units and acreage managed under Nutrient Management Plans in Androscoggin County which houses two of the three largest poultry operations in the state. Since manure production from the number of animal units in this county exceeds the land base for spreading, some of the nutrients produced have to be exported to other counties to be utilized, where there are suitable soils that need those extra nutrients. Most other counties have about 1.5 to 2 acres per animal unit except Kennebec County which has only about 1.1 acres per animal unit. This suggests that some farms in Kennebec County may not have enough spreadable land for the manure produced and so may need to export manure.

A look at the farms with expired NMPs indicates that of the 240, only 131 actually had 50 animal units or more and approximately one third of these were concentrated in two counties, Penobscot and Somerset. This analysis suggests that some additional effort may be needed in these two counties to bring more farms into compliance. (Note: Table 2. at the end of this document has a complete breakdown of up to date and expired plans by county.)

This illustrates how the information from Nutrient Management Plans may provide information needed for planning purposes. On a local scale, the farmers can make an informed decision on how and where to utilize the nutrients to minimize the impact on water quality. On a larger scale, the areas with a deficit of nutrients can be compared to those with excess nutrients to determine the potential for moving nutrients to those areas that need them.

Nutrient Management Plans for Fish Hatcheries

The Maine Department of Agriculture is charged by the legislature with implementing a law that requires fish hatcheries to have nutrient management plans for the fish 'manure' and waste feed from the hatcheries. The interest in the development of nutrient management plans for fish hatcheries once again resurfaced in 2008. Department of Agriculture staff provided training to fish hatchery operators about the need for nutrient management plans and plan content. In addition, Department staff provided technical assistance to hatcheries trying to deal with nutrient management issues. A guidance document was developed for use by fish hatcheries in preparing plans and this has been distributed to most of the fish hatcheries in the state.

One continuing need is the development of rules for nutrient management plans for fish hatcheries. The guidelines that are now in place are an interim measure that may suffice until rules can be developed. In order to develop the rules, a stakeholder process will need to be set up. This process will probably require a considerable amount of staff time.

FINANCIAL ASSISTANCE

To comply with the winter manure spreading ban described in the Nutrient Management Law, producers either need to have a manure storage facility that meets the requirements of the Department or have identified suitable stacking sites where manure can be stored until it can be spread. These requirements have placed a significant financial burden on some Maine farmers. For this reason, the Department of Agriculture helped develop a Nutrient Management Grant Program and a Nutrient Management Loan Program, intended to help farm operations comply with the Nutrient Management Law.

Nutrient Management Grant Program

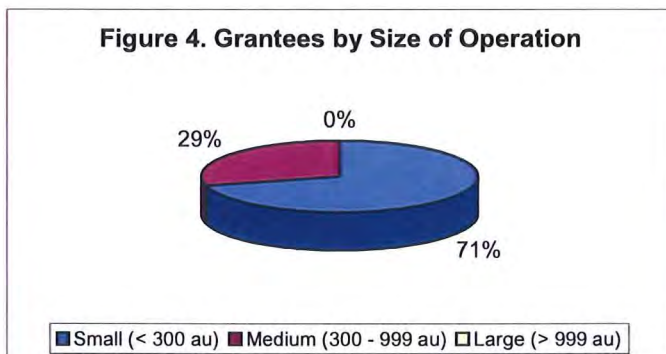
The purpose of this program is to help Maine farmers comply with the Nutrient Management Law by providing cost sharing for manure storage and handling systems. This program has been implemented in three major phases plus a supplemental phase and a fourth phase is proposed, all of which are discussed below:

Phase I - Nutrient Management Grant Program

The Nutrient Management Grant Program funds for Phase I were appropriated by the 119th Legislature. A total of \$2.5 million was allocated to facilitate the construction of new or retrofitting of existing manure storages and handling facilities on Maine's farms. The Department received a total of 145 proposed projects, with a total cost for all projects submitted of \$15.4 million ranging from \$5,500 to \$1.19 million per project. Some projects were not

eligible to receive 100% funding as they exceeded the maximum allowed reimbursement because certain equipment requested was ineligible. Low-priority projects, although potentially environmentally beneficial, could not be funded.

Of the \$7.3 million in grant requests for approvable projects, the Department was able to fund just over \$2.3 million. The amount available covered only one third of the total requested amount for that round of funding. As a result, the Department sought additional funds to expand the grant program and was successful in getting \$2.0 million approved as part of a bond package. This was used to establish the second round of grants (identified as Phase II to distinguish it from the original round of grants).



Phase II – Nutrient Management Grant Program

The Phase II process was similar to Phase I in that an RFP was issued, grant proposals were accepted and a review and ranking process was followed. The applications were reviewed, prioritized and recommended for funding by the Nutrient Management Review Board. Funding was committed to

44 projects in Phase II. Five grantees have declined the funds that were earmarked for their projects. The funds that were declined equaled \$299,745, and were reallocated to the Phase II Supplemental grant program discussed below. Since then, 32 farms have completed construction and requested their funds, one has initiated construction and received partial payments, and three have not requested any funds. (see Table 1 below). According to the contracts for the projects, all the projects had to have been completed by a certain date. Since these four projects had not been completed and no extension was requested, the contracts expired. The farms subsequently received letters indicating that the funds were no longer available for the projects. The Department contacted the next farms on the list of Phase II Supplemental applicants to determine if they still needed funds for their projects.

Figure 4 shows the distribution of projects under Phase II according to the size of operation, where one animal unit (AU) is equal to 1,000 pounds of live animal body weight. Twenty-nine of the funded projects were on smaller farms (<300 AU), while 12 projects were on medium size (300 – 999 AU) farms. There were no projects on large operations in this round of grants. This distribution is similar to that observed for Phase I, which had 26 on small farms, 12 on medium farms and two on large farms. In Phase II, almost \$1.1 million (57%) in funding went to small farms and the remaining 43% went to medium size farms. Again, no funds were awarded to large farms in this round.

Phase III Nutrient Management Grant Program

In November 2002, Maine voters approved another bond issue that contained \$1.0 million for the Nutrient Management Grant Program. These funds are being used to provide grants under Phase III of the program. Due to changes in the NRCS EQIP rules and policies, a number of changes were made to the Phase III Program to make the two programs work together efficiently. The Nutrient Management Review Board and Department staff met several times with NRCS to

discuss changes to the EQIP program in order to develop recommendations on any changes that were needed for Phase III.

Among the changes recommended were:

- *Increase the percent of cost share from 75% to 90%
- *Increase the maximum amount of Nutrient Management grant funds for any project from \$100,000 to \$125,000.
- *Give equal weight to requests for solid and liquid systems.
- *Allow innovative systems for managing manure to qualify for the program.
- *Allow construction of compost pads.
- *Restrict applicants to those who do not have a valid contract for a Nutrient Management Grant.
- *Place more emphasis on environmental benefits in the ranking system.
- *Give some credit to those who are willing to invest larger share of their own money into the project in the awarding of points in the ranking system.
- *Rearrange the application form to make it clear which costs are eligible for funding under this program and which are not.

The RFP for Phase III of the Nutrient Management Grant Program was announced in December 2003. The signup period extended from January 1 to February 13, 2004. During this time, the Department received 29 applications for Phase III grants. These applications were reviewed by a subcommittee of the Nutrient Management Board, rated according to criteria set out in the RFP and ranked in order of priority for funding. Funding was committed to 21 projects for a total planned expenditure of \$1,276,639. Twenty projects have been completed, while 1 farm has begun its project and received partial payments. One farm declined the funds that were allocated for its project, \$125,000.

Eighteen funded projects were on smaller farms (<300AU), while 3 projects were on medium size farms (300-999AU). A larger percentage (86%) of Phase III farms was in the small farm category than was the case in Phase II, which was 71%. Medium size farms comprised only 14% of the Phase III total compared with 29% for Phase II. \$1,023,815 was allocated to small farms, while \$252,824 was designated for medium size farms. Seven of the State's counties were represented in Phase III, and corresponding funds awarded are depicted in Table 1.

Grant funds awarded for Phases I, II, III and Phase II Supplemental are summarized in Table 1. It should be noted that the grand total of grant funds awarded in Table 1, \$6,110,030.00, is inconsistent with the amount of funds appropriated from the general fund and from bonding, which was \$5,500,000.00. The reason for this apparent inconsistency is that of these funds, \$610,030, were not utilized by some recipients in earlier phases and were reallocated.

Finally, the distribution of projects throughout the state for Phases I, II and III is depicted in Figure 5, while the distribution of funds is displayed in Figure 6. Note that Aroostook County had the most projects funded (12), while Waldo, Penobscot, Somerset and Franklin were close behind with 10, 10, 9 and 8 projects, respectively. The distribution of funds around the state was similar but not identical to the distribution of projects. Aroostook County was awarded 21 % of

Table 1. Grant Funds Awarded by County

County	Phase 1	Phase 2	Phase 3	Phase 2 Supplemental	Phases 1, 2 ,3 & 2 Supplemental
<i>Androscoggin</i>	\$267,993.00	\$125,760.00	\$261,500.00	\$80,000	\$735,253.00
<i>Aroostook</i>	\$160,200.00	\$406,639.00	\$275,015.00	\$74,338	\$916,192.00
<i>Cumberland</i>	\$26,920.00	\$35,000.00			\$61,920.00
<i>Franklin</i>	\$88,000.00	\$196,196.00	\$211,406.00		\$495,602.00
<i>Kennebec</i>	\$500,762.00	\$129,600.00	\$124,509.00		\$754,871.00
<i>Knox-Lincoln</i>	\$19,868.00	\$58,767.00		\$40,000	\$118,635.00
<i>Oxford</i>	\$295,238.00				\$295,238.00
<i>Penobscot</i>	\$571,257.00	\$379,362.00	\$218,535.00	\$120,561	\$1,289,715.00
<i>Piscataquis</i>	\$198,594.00			\$19,400	\$217,994.00
<i>Somerset</i>	\$188,781.00	\$265,662.00	\$168,906.00	\$11,350	\$634,699.00
<i>Waldo</i>	\$92,617.00	\$266,660.00	\$16,768.00	\$19,350	\$395,395.00
<i>York</i>	\$89,770.00	\$45,000.00		\$40,000	\$174,770.00
Totals	\$2,500,000.00	\$1,908,646.00	\$1,276,639.00	\$424,745	\$6,110,030.00

the funds, while Penobscot, Somerset, Franklin and Androscoggin received 19%, 14%, 13% and 12 %, respectively. It is interesting to note that, while Waldo County scored near the top in terms of number of projects, it garnered only 9% of the funds. This is a reflection of individual project size and, generally, indicates the magnitude of farm manure storage requirements.

Although they are not depicted in Figures 5 and 6, the awards from Phase 2 Supplemental alter the distribution of funds slightly as Penobscot, Androscoggin and Aroostook Counties received the largest shares in this round of funding.

Figure 5

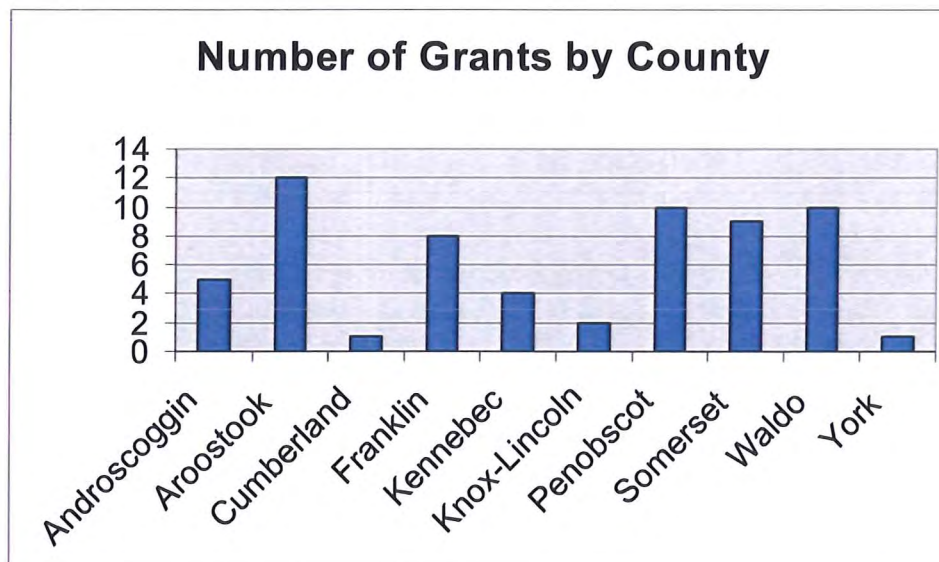
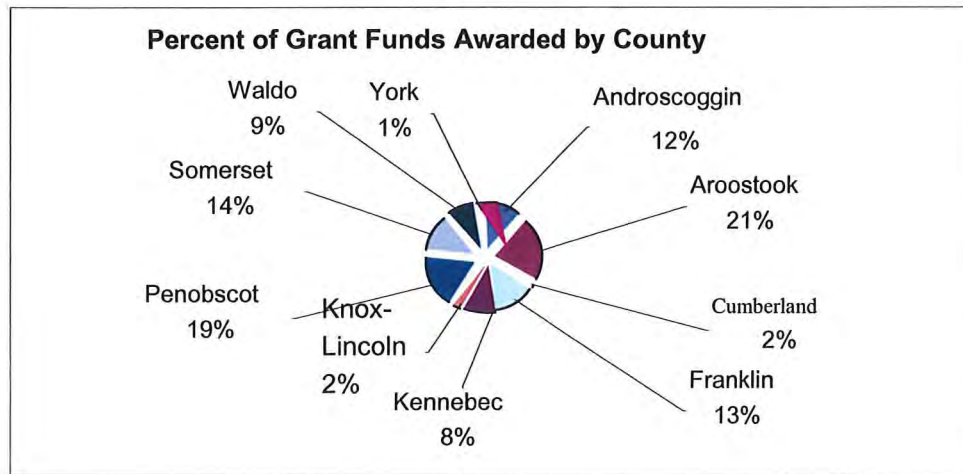


Figure 6



Phase II Supplemental Nutrient Management Grant Program

During mid 2006, it was determined that some monies in the Phase II and Phase III programs would not be utilized as planned. This was the result of the farmers' going out of business, completing their project under budget, or canceling their project. Consequently, \$424,745 became available for funding additional projects. This "new" grant program was called "Phase II Supplemental" in recognition of the fact that most of these funds originated from the earlier Phase II program. The Nutrient Management Review Board decided that projects funded under Phase II Supplemental should attempt to resolve environmental problems of either immediate or long-term concern, and that eligibility for funding be expanded to include a broader array of projects than had been the case in the past. Accordingly, a "request for proposals" was issued that included a listing of eligible projects, applicant eligibility criteria, and criteria for prioritizing funding of projects. The application period was October 1 through November 17, 2006. Fifty-seven applications were received, which far exceeded expectations, and many farmers, mindful of the small amount of funds available, decided not to apply for a grant. These 57 proposals represented \$3.4 million in total project costs. Grant funds requested equaled \$1.8 million, with only \$424,745 available for disbursement from Phase II Supplemental. A sub-committee of the Nutrient Management Review Board reviewed each proposed project, evaluated it based on previously established criteria, prioritized the projects, and selected 15 grantees. The full Nutrient Management Review Board and the Commissioner approved the sub-committee's selections for funding. These projects are located in nine Maine counties from York to northern Aroostook. The grant totals from Phase 2 Supplemental for each county are listed in Table 1. Department staff met with these farmers and NRCS personnel for reviewing construction of these projects and for contract initiation. Given the number of applicants for this small pool of funds, there appears to be an enormous need for funds to resolve nutrient management and environmental concerns.

As of February, 2009, all but one of the farms with Phase II Supplemental funds had completed their projects. The one remaining project has been given a one year extension.

Proposed Phase IV Nutrient Management Grant Program

Despite accomplishments realized from the previous Nutrient Management Grant Programs and from other projects, many farms in Maine, whether small, mid-size or large, continue to have nutrient management-related problems that must be addressed. In 2006/2007, NRCS estimated that the average cost per livestock farm in Maine for meeting its nutrient management-related needs was \$200,000 - \$250,000. NRCS also estimated that \$50,000,000 would be required to meet the total need for Maine livestock farms and, as suggested in the discussion of the Phase 2 Supplemental grant program, this is a very conservative estimate. Conservation requirements of vegetable or crop farmers was estimated to be \$5,000,000-\$10,000,000. Although these estimates are now two to three years old they still are reasonable estimates of the current conservation funding requirements for Maine farms.

Manure storage structures and milk house waste handling systems were constructed across the State by means of funds provided in Phases I, II and III of the Nutrient Management Grant Program as outlined above, and also by funding through USDA's EQIP program administered by NRCS. Although these grant programs achieved substantial progress for helping farmers comply with legal requirements in Maine's Nutrient Management Act, it is clear that much more nutrient management conservation work needs to be done.

Accordingly, in January 2006, the Nutrient Management Review Board decided that the Department should seek additional monies for a Phase IV Project through a bond issue. This proposed Phase IV Project would be similar to that of Phase III, but eligibility for funding would be expanded to include more nutrient management-related conservation practices similar to those offered in Phase II Supplemental. These projects could include: roofs for new or existing manure storage structures and livestock heavy-use areas; feed storage areas to include silage leachate, filter strips, diversions or high-flow, low-flow devices and; water control in barnyards to include roof run-off management and other pertinent practices. Compost pads, slaughterhouse waste utilization and on-farm carcass disposal, or other practices as deemed appropriate, also will be considered. Since every situation is unique, appropriate environmental remediation systems must be selected that achieve on-site specific goals.

In 2007, the Department included a request for funds for nutrient management purposes in a larger environmental bond. Because bond funding had been provided for nutrient management in the past, but not for some of the other requests, the legislature chose not to include the nutrient management request in the bond issue that went to the voters in November, 2007.

The Department submitted a request for \$5 million to the Governor to be included in a bond package to be considered by the legislature in 2009. This request has been combined with a request for water quality (irrigation) funds. This combined package will be presented to the legislature at the lower level of \$3 million for both purposes. If this is approved by the legislature, it would go to the voters in the fall of 2009 and if approved, would be available in the spring of 2010.

Nutrient Management Loan Program

The Nutrient Management Loan Program makes available to farmers a total of \$6 million for financing the construction or improvement of manure and milk room waste containment and handling facilities, and associated costs. It is often seen as a good supplement to the Nutrient

Management Grant Program when grant funds do not cover the total costs of a project, or when a project is simply not eligible for a grant.

The Department of Agriculture continues to cooperate with DEP, the Maine Municipal Bond Bank and the Finance Authority of Maine (FAME) to deliver this program to farmers. FAME administers the Loan Program using funds provided from the State Revolving Fund made available by DEP and EPA. The Program offers a low interest rate loan (2%) for a maximum loan of \$350,000. In 2002, there were fourteen (14) closed applications (up from 11 the previous year) for a total of \$1,927,797 (up from \$956,993 in 2001). There were no expenditures from the loan fund for nutrient management projects during either 2003, 2004 or 2005. However, in 2006, one loan was finalized for \$165,000. There were no requests for loan applications in 2007 and only one at the start of 2008. Currently, there are eleven active loans which represent an expenditure of \$873,709. \$665,739 is available in the loan fund. Substantial, additional monies could be appropriated to this fund if needed, although there are no pending applications at this time.

The potential benefits of this loan fund constitute a significant means of providing large amounts of relatively low-interest capital for enhancing the viability of an important segment of Maine agriculture. The result of insufficient staffing, particularly a Nutrient Management Coordinator for several years, resulted in this program not being promoted sufficiently to make its availability and potential benefits widely known or understood. Outreach to the agricultural community must be initiated and coordinated by this Department by holding local workshops, the publication of promotional factsheets or brochures, and by increased interaction with local soil and water conservation districts.

The Department has taken a leadership role coordinating discussions with DEP, FAME and others to broaden the scope of this loan program to include eligibility, not only for manure-related structures, but also for equipment or projects that directly impact agricultural non-point source pollution reduction. The Nutrient Management Review Board directed the Department to pursue expanding funding eligibility for this program similar to that proposed in the Phase IV project discussed above. In late fall 2006, the Department submitted 17 additional practices to DEP for review and approval for funding by the loan program. These practices have also been submitted to EPA for approval. The EPA met with Department staff and made farm visits in 2007 to view some of the additional practices being proposed for inclusion in the program. As of February, 2009, the EPA had not made a final decision on which practices it would approve.

Future increased awareness of the loan program, coupled with an enhanced selection of options from which to choose for conducting environmental remediation projects, may encourage more farmers to take advantage of this opportunity.

Tax Exemptions

Maine tax law contains two provisions that allow farmers to claim tax exemptions for manure storages. One provision exempts manure storages from property taxes because they are pollution control structures. To qualify, a nutrient management plan must have been written and approved for the farm. The use of this exemption has been limited, with only two requests in 2003, which is the same as in 2002. The number of requests in 2004 increased to seven. There were four requests in 2005, and no requests were received in either 2006 or 2007. Only one farm requested assistance from the Department in obtaining the property tax exemption in 2008. These have

been handled through an informal process of communication between the agencies. Unfortunately, this informal process has proven cumbersome and inefficient. Neither local town officials nor Maine Revenue Service personnel adequately understand or have sufficient procedures in place to appropriately administer this program. This exemption has worked in these limited cases only because the Department's staff were able to act as liaison between the parties on an ad hoc basis to effect a positive outcome for the farmer.

The second provision allows farmers to take a sales tax exemption on materials used to construct a manure storage or handling system. Due to lack of staff, this provision has not been promoted and so has not been widely used. In 2007 and again in 2008, the Department received only one request for the sales tax exemption each year. However, Department staff have met with personnel in the sales tax division of Maine Revenue Services to determine what is needed to formalize the process of applying for and approving this exemption. The sales tax division has taken on the task of developing a special form that farmers may complete when seeking this exemption. This process requires additional follow-up.

These two provisions in Maine tax law, enacted to help the State's farmers successfully compete in the marketplace and survive economically, clearly are underutilized. This is another arena in which the Nutrient Management Coordinator will need assistance if the Department is to promote the use of these tax exemptions and to provide education, coordination and guidance for farmers and public officials. Given time, the Coordinator may explore options such as combining these efforts with other farmland protection programs in the Department.

COORDINATION WITH DEP PROGRAMS/JOINT LOP/MEPDES PERMITS

The Maine Nutrient Management Program requires a livestock operation to obtain a Livestock Operations Permit (LOP) if it meets one of the following conditions:

- The operation is new with 300 or more animal units (AU) or is expanding to greater than 300 AU.
- The operation meets the 1998 EPA definition of a Concentrated Animal Feeding Operation (CAFO) (1000 AU), or is designated as one by the Department.
- The operation plans to expand beyond its land base for spreading or current manure storage capacity.

The permit is mandatory for a livestock operation meeting the criteria outlined above to operate in the State. Additionally, for operations meeting the EPA definition of a CAFO¹, a Maine Pollutant Discharge Elimination System (MEPDES) permit also may be required. The Maine Department of Environmental Protection has been given the authority to issue MEPDES permits by the EPA. The Departments of Agriculture and Environmental Protection cooperated to develop general language and conditions for developing a joint LOP/MEPDES procedure for those operations whereby the operator comes to the Department of Agriculture and obtains both permits with only one application process. A common application package also has been completed. These cooperative efforts will facilitate the process, both for the applicant and for the issuing authorities.

¹ An operation is considered a CAFO under the Nutrient Management Rules if:

- It confines more than 1,000 animal units
- It confines between 301 and 1,000 animal units and that may or does discharge to the waters of the United States
- It has been designated a CAFO by EPA or its delegated permitting authority.

This process appears to be working reasonably well. As of February, 2009, DEP had issued MEPDES Permits to two Maine dairy farms, one beef farm and was in the process of developing three more.

EPA revised rules that govern National Pollutant Discharge Elimination System (NPDES) permits related to CAFOs in 2003. These proposed changes were challenged immediately by both environmental and agricultural industry groups. The U.S. Court of Appeals for the Second Circuit issued rulings regarding these issues in 2005. These rules were finally adopted by the EPA in December of 2008. It remains to be seen how the administering agencies (DEP and EPA) interpret and implement the new provisions of the rule. The Department still is uncertain what impact these changes will have on Maine farmers, and we are not sure how many farm operations in Maine will be required to obtain a MEPDES permit. Once this is clarified, the Department may need to seek legislation that would address conflicts between Maine law and the new rule.

An inspection of the DeCoster Egg Farm facility by the EPA in 2002 determined that this farm would not need a NPDES permit since there were no crop fields being managed by the farm and there would be no discharges to any water bodies. It may take some time as the Department conducts its review process of the farms requiring LOPs before the Department will know how many other large farm operations also will need a MEPDES permit.

LIVESTOCK OPERATIONS PERMITS

As of December 31, 2002, seven farm operations had been identified as needing a Livestock Operations Permit. These facilities were inspected and issued provisional permits. These provisional permits allowed the farm operations the opportunity to meet the requirements for obtaining a full permit and to fulfill the requirements of the law. However, the complexity of these permits required the availability of substantial blocks of time to work on them effectively and efficiently. Consequently, at this time, some farms are operating with expired provisional permits. As a result of changes in many farming operations during the last few years, there are about 50 - 60 farms that may require an LOP. Some of these will also require a MEPDES permit. The Department has identified some of these farms so that either provisional or finalized LOPs, and MEPDES permits, if required, can be issued. During 2008, the Department had- sent letters to the largest and otherwise highest priority farms, encouraging them to start the application process. Application packets have been sent to 14 farm operations to initiate the process. As of February 2009, four had completed the process and been issued an LOP. Three were final LOPs while one new operation is operating under a provisional LOP until all conditions for the final permit are met. Two applications were under active review by Department staff. Two others had recently been submitted and were awaiting review and a third was expected to be submitted soon thereafter.

For the year 2009, the Department has set a high priority on getting as many of the remaining farms permitted as possible in the next calendar year. To this end, another set of 17 letters and applications were sent to the top priority farms on the list. Visits to these farms by the compliance officers will be scheduled soon after to follow up with the farms and to help answer any questions the farmers may have about the process. As a part of this process, the Department will be reviewing the farms to determine whether MEPDES Permits may also be required. If the farm appears to need a MEPDES Permit, the Department will provide them with the joint application material and consult with DEP on the application and permitting process.

As of February 2009, DEP had issued MEPDES permits to two dairy farms, one beef farm and was in the process of developing three more (all dairies).

The Department stands ready to advise the farms on the process and submission requirements. Nutrient management planners are also working with some of these farms to assist in data collection and submission of the applications.

History: LOP Appeal

In March of 2003, the Department issued its first full Livestock Operations Permit (LOP) to DeCoster Egg Farms. Soon after the issuance of the LOP to DeCoster Egg Farms, a group of citizens in Turner formally filed an appeal to the issuance. A hearing was scheduled before the Nutrient Management Review Board for June 2003, but was delayed at the request of the appellant. It was postponed until after September 1, 2003 and then rescheduled for March 2004. The primary issue raised was the effectiveness of odor and insect control BMPs.

The outcome of this hearing was that the Nutrient Management Review Board upheld issuance of the LOP, but with additional conditions. The appellant filed an appeal in Superior Court regarding this ruling, as well as a civil suit against DeCoster. In February 2004, the petitioners appeal was denied by Superior Court and the Board's ruling was sustained. The civil suit also has been resolved.

NUTRIENT MANAGEMENT REVIEW BOARD

The Nutrient Management Review Board is a seven-member Board, with each member representing a different aspect of the agricultural community and the public. The Nutrient Management Review Board's duties include approving rule changes, hearing appeals on permit or certification decisions made by the Commissioner and making recommendations to the Commissioner on issues pertaining to nutrient management. The Board is staffed by the Department's Nutrient Management Program Coordinator. The Board was more active in 2003 than in the previous year, but again activity had to be limited since there was no Nutrient Management Coordinator working on issues that needed Board attention. The three areas of focus for the Board in 2003 were the Nutrient Management Grant Program, enforcement of the Nutrient Management Law and addressing the appeal to the Livestock Operations Permit that was issued to DeCoster Egg Farms. The Board reviewed the changing rules and policies regarding the NRCS EQIP program and recommended several significant changes for the Nutrient Management Grant Program (See section on Phase III of the Grant Program). In 2004, the Board's activity was quite limited with most of its time devoted to the DeCoster appeal and to the Nutrient Management Grant Program.

During 2005 and early 2006, the Board's activities and concerns centered on recertification training for Nutrient Management Planners, issuance of variances to the winter spreading ban and the decline in availability of farm technical assistance from NRCS. Establishment of a Phase IV component of the Nutrient Management Grant Program was a top priority, along with expansion of eligibility of projects covered by the Nutrient Management Loan Program.

In January 2006, the Board issued a ruling regarding the use of Algefiber on farms. Algefiber,

comprised of perlite and spent seaweed, is a by-product of carrageenan production and has agricultural value as a weak liming agent and soil conditioner. Carrageenan is a food additive used in ice cream, toothpaste and hundreds of other products. The Board ruled that Algefiber is not a regulated residual as defined by the Nutrient Management Law and, therefore, a Nutrient Management Plan is not required by farms utilizing this product. However, farms operating with a Nutrient Management Plan still must consider Algefiber's nutrient contribution when the "whole-farm nutrient balance" is calculated.

Later in 2006, much of the Board's time involved planning for the Phase II Supplemental and Phase IV grant programs, revisions to the loan program, and issues related to livestock operations permits and proposed changes to EPA's CAFO rule. Interaction with DEP personnel regarding agriculture compliance issues associated with certain livestock farms, the proposed Agriculture Compliance Rule, winter spreading variances and avian influenza considerations also were important agenda items. Reinstatement of the Nutrient Management Coordinator position has effected increased activity in all of these areas.

The Nutrient Management Review Board only met twice in 2007. The primary decisions made by the Board in 2007 related to the Nutrient Management Grant Program. In late January (January 31), a sub-committee of the Board met to review and score the grant applications using pre-assigned ranges of ranking points. The full Board approved their selections on February 12, 2007. Although the Board was updated on a number of other important developments in the nutrient management arena, no other policy actions or decisions were required.

The Nutrient Management Review Board was once again called on to conduct an appeals hearing in 2008. In this instance, a small livestock owner had lodged a complaint against a neighboring horse owner. The livestock owner alleged that manure stacking by the horse owner was causing flooding on his land. The case was investigated by the Ag Compliance Officer and other Department staff and recommendations were made to the horse owner. The livestock owner was not satisfied that the changes went far enough and so appealed to the Board. Following two days of hearings, the Board ruled that the Department had acted properly but did impose some additional conditions for the horse owner.

The year 2008 saw a number of significant nutrient management issues discussed by the Board. Some of these were:

- Issues with the nutrient management database
- Issues relating to conflict between the organic certification standards for livestock and nutrient management BMPs and animal health concerns. Specifically, the requirement for year-round outdoor access for livestock may be in conflict with BMPs to protect water quality.
- Legislation affecting the regulation of agricultural composters.
- Legislation that changed the cull potato statute.
- The looming conflict between Maine law and federal rules regarding confidentiality of nutrient management plans for CAFOs.
- Farm energy audits and 'green power' initiatives.
- New informational brochures on nutrient management, carcass disposal, the agricultural compliance program and other.
- Nutrient management issues and plans for fish hatcheries.
- Development of carcass disposal plans for catastrophic losses. These are primarily focused on composting.
- Joint meeting between the NM Board and the Agricultural Water Management Board to discuss the proposed Atlantic Salmon listing.

AGRICULTURAL COMPLIANCE PROGRAM

The Nutrient Management Program works in very close collaboration with the Agricultural Compliance Program. The Agricultural Compliance Program investigates and addresses all agriculturally based complaints including odors, insects, improper manure handling, water contamination, improper disposal of farm wastes, cull potatoes and animal carcasses. The Department of Agriculture also cooperates with other agencies when complaints are associated with other regulated materials and activities on the farm.

In 2005, the Department's two Agricultural Compliance Officers, who cover the entire State, investigated and resolved a record number of formal complaints. Approximately 240 initial and repeat visits were conducted regarding specific issues involving complex agricultural or environmental situations. During 2006, the Agricultural Compliance Officers conducted approximately 180 initial and repeat visits, a smaller number than was the case in 2005. This reduction in visits was the result of vacancies in both the Compliance Officer and Compliance Supervisor positions following a retirement and a resignation. Significant amounts of time also were required for follow-up of several complex, on-going compliance issues.

In 2007, both positions were once again engaged in compliance work since one had been filled in September 06 and the second was filled in February 07. The number of initial and repeat investigations conducted jumped to over 280. Some of the increase was due to the backlog of cases from the previous year as well as the steadily growing number of new complaints (169) that came in during the year.

Complaint investigation continued at the same pace in 2008 with 170 new complaints. Of these, 35 (20.5%) were related to animal welfare, which appears to be a growing source of complaints. Ground and surface water complaints together accounted for only 19 (11.2%) of the new complaints. Very few of the complaints were from counties 'downeast'. Washington and Hancock Counties together only generated five complaints (2.9%). York, Kennebec, Androscoggin and Aroostook, on the other hand, all had over 20 complaints each. In fact, the seven counties that comprise the I95 corridor accounted for 119 (70%) of all the complaints received.

The Compliance Officers also inspect and provide technical assistance to farms seeking Livestock Operations Permits and/or MEPDES Permits, and Nutrient Management Plans. They also conduct farm visits to evaluate applications submitted requesting variances for applying manure to fields during the prohibited spreading period of December 1 through March 15.

Since 2007, the compliance officers have also been asked to assist with deer farm inspections. Additional training was needed to familiarize them with deer farm licensing requirements.

In connection with the Compliance Program, the Department of Agriculture assists new operations upon request in developing best management practices (BMPs), and works with towns and the agricultural community to address issues associated with the Right to Farm Law, new developments and municipal ordinances. As a part of the effort to provide education to the public about the compliance program, the Department has developed an agricultural compliance program brochure that explains how the program is structured and the types of activities

involved. This brochure has been distributed at the Agricultural Trade Show and at a number of other public venues.

This process is extremely efficient at correcting improper manure handling situations on farms where a problem has been reported and verified. In recent years, the Department of Agriculture has resolved many ground and surface water related complaints. This effort is ongoing and continues to be very successful, both for the farming community and for the general public.

One area of concern, however, is the rapidly increasing number of complaints about manure issues from non-commercial farm operations. More and more problems are being identified where there is only one to a half dozen animals (often horses) generating manure that is not being stored or managed properly. Many of these situations cannot be defined as a commercial farm and so did not come under the authority of the Right to Farm Law. Changes to the Manure Law, 17 MRSA §2701-B, made by the Legislature in 2003 enable the Department to address manure-related complaints on these small operations with the same enforcement capabilities it has on larger farm operations. Clearly, the Nutrient Management Program is dependent upon these Compliance Officers to act as field personnel for providing essential services to farmers and others.

During most of 2006 and early 2007, after the retirement of a veteran Agriculture Compliance Supervisor and the subsequent resignation of the Agriculture Compliance Officer to gain employment as an agricultural engineer, the Department had only one compliance person to cover the entire State. This situation came at a time when many challenges faced the Department regarding agricultural compliance issues, thereby testing the Department's ability to successfully prioritize investigations and fulfill required commitments.

COMPLIANCE AND ENFORCEMENT ACTIVITIES

Overall, 2007 was a hallmark year for resolving long standing compliance cases. Long term issues on four farms in Kennebec, Lincoln and Penobscot Counties received a lot of attention from the Department in 2007. Two of these were brought to a successful resolution, while the others had substantial progress made. One of these cases may be escalated in 2008, however, since the operation indicates the intent to appeal the Department's decision to require a livestock operations permit. The second operation appears to be well on their way towards compliance. Two other large cleanup cases were identified on farms in Oxford and Penobscot Counties that will be the focus of efforts in the near future. In addition, situations on smaller operations in Aroostook and Hancock Counties are likely to be issues that the Compliance Program may be dealing with for some time.

Perhaps the most notable case involved a central Maine dairy farm that was designated a CAFO by DEP and issued a MEPDES permit in August 2006. This farm had a history of water quality and other violations going back to at least 1998. In late fall 2006, the provisional LOP of this farm was revoked by the Department of Agriculture for failure to comply with provisions of its permit. The farm appealed the revocation to the Department and requested a hearing. The appeal of the Department's revocation of the provisional LOP was denied. The farm appealed this decision to the Nutrient Management Review Board. Upon further review of this matter, the Department determined that this farm's provisional livestock operations permit had expired prior to the revocation hearing, therefore, an appeal to the Nutrient Management Review Board of the Department's previous decision was moot.

Beginning in the fall of 2006 and into 2007, the Department, DEP, the EPA and the US Department of Justice (DOJ) cooperatively initiated enforcement actions against the farm for multiple and continuing water quality violations. After several months of unsuccessful efforts to get the farm to comply with permit conditions and orders from the EPA and the court, the farm operation was shut down by the owner. The farm's financial backer then took over the operation and initiated a clean up operation. This was completed in the summer of 2007. In 2008, the new owner of the farm came to an agreement with an existing farm operation to start up a dairy operation after correcting a number of deficiencies at the facility. The operation may be operating under the new management in 2009 if contractual agreements can be worked out.

MUNICIPAL ORDINANCES

Every municipality has a mandatory shoreland-zoning ordinance, which regulates activities within the shoreland zone (including agriculture). A code enforcement officer enforces the ordinance. Many municipalities have other ordinances, which regulate agriculture outside the shoreland zone. If a municipality proposes an ordinance that could impact agriculture by restricting the use of BMPs, it is required to send a copy of the ordinance to the Department for review. Subsequent to this review, the Department notifies the municipality with its findings regarding the potential impact of the proposed ordinance on agriculture. The Department therefore is aware that some ordinances make it very hard for farmers to have a sustainable agricultural operation if an ordinance is too stringent (e.g., number of animal units allowed), and is working with municipalities to resolve any issues. In 2008, the Department did reviews of nine town ordinances under the 'Right to Farm Law'.

A recent trend in this area is the adoption of ordinances that are more stringent than state standards regarding posted roads. Towns have proposed or adopted ordinances that extend the time period that roads are posted (some to 365 days!). Others greatly limit weights that can be carried. In many cases, these restrictions severely impact farms that must use those roads. In 2008, the Department was subpoenaed to testify in one of these cases.

The Department has argued that imposition of these restrictions is impacting farms ability to implement BMPs and may not be applicable to farm trucks under the 'Right to Farm Law'. Proponents of the stricter road postings argue that the 'Right to Farm Law' only applies to what takes place on the farm itself. This issue may appear before the Legislature if it continues to be unresolved in the future.

CONCLUSION AND FUTURE CHALLENGES

One conclusion drawn from the preparation of this report is that an impressive number of activities have been implemented and are underway right now in the Nutrient Management Program. There is a sense that the farming community, by interaction with the different players and activities of the Program, feels more comfortable with the whole concept of Nutrient Management and is getting more and more involved. Efforts in education, certification, financing, technical assistance and public relations are paying off. There is, however, still a lot of work to be done.

A second conclusion is that, despite all the positive actions that have taken place to date, staying informed and involved at many different levels to ensure that the Maine Nutrient Management

Program evolves and remains efficient continues to be a challenge. Reinstatement of the Nutrient Management Coordinator position was a significant, positive step for addressing these challenges and for delivering benefits to Maine farmers and other citizens.

Rulemaking

The Department has three sets of rules that have some impact on the Nutrient Management Program and some of these will require rulemaking in the near future. The Carcass Disposal Rules (Ch 211) were last revised in 1996, and many new BMPs have been developed that should be reflected in the rules. The initial work to prepare for revising these rules has been started, but a significant amount of work remains before they will be ready for adoption. Among other things, the Carcass Disposal Rules must be amended to include an enforcement section based on the penalty structure authorized by the legislature in 7 MRSA §1706.

The rules for the Right to Farm Law, now more appropriately entitled “Rules for the Agricultural Compliance Program(Chapter 10)”, were more than 20 years old and very obsolete. New rules that contain the processes for complaint investigation, as well as BMP development and enforcement, were drafted and were presented to the agricultural community in January 2007. The “Rules for the Agricultural Compliance Program” essentially outline procedures that have been utilized by the Department’s compliance officers for many years, but now are more clearly defined. These Rules also provide a firm, legal basis for problem solving under the laws which they are intended to support, such as the Manure Law, the Nutrient Management Law, and other laws related to water quality issues. The Rules were finalized and adopted in May, 2007.

Some important changes to the Cull Potato Law were made in 2008. These allowed the Department to hold any responsible party (not just the landowner) responsible for clean up of illegal cull potato piles. It also authorized the Department to adopt rules and BMPs for the management of cull potato piles. These changes, however, will necessitate revisions to the Cull Potato Rules (Ch 600) as well.

The Nutrient Management Rules (Ch 565) also must be revised to reflect changes made to the law in 2003 and to correct inconsistencies that have come to light as the rules are being applied.

Completion of Phase II, Phase III and Phase II Supplemental Grants

Five of the Phase II construction projects were never completed and funds for those projects were withdrawn in order to make them available for other projects. A higher proportion of Phase III projects had been completed than was the case of Phase II projects. The alacrity of Phase III project initiation likely can be attributed to a 90% cost-share rate versus a 75% cost-share rate for Phase II projects. The lower cost-share rate resulted in a substantially larger financial outlay by the farmer, most of whom have limited discretionary dollars. This likely impeded progress in some situations. The Phase II Supplemental grant application and selection process was completed in 2006 while the notifications of awards to successful applicants, the development of contracts, and follow-up continued into 2007. As of February 2009, all but one of the Phase II Supplemental projects had been completed. The one remaining project has been given a one year extension in order to give time to be completed. Staff will need to continue to monitor progress on this final project to insure its completion before the final payments are made.

Substantial progress has been made in recent years addressing non-point source pollution from agriculture. The Nutrient Management Program has been a major factor in this success. The Department is addressing the need for expansion of the Nutrient Management Grant Program into a Phase IV project to facilitate the construction of new or retrofitting of existing manure storage and handling facilities. The Phase IV project also proposes to expand eligibility of funding to include a broader array of practices for reducing non-point source pollution involving silage leachate, feed storage areas, heavy use areas and contaminated water runoff from barnyards, among others. As outlined above, the most likely funding mechanism for this endeavor would be through a bond package. If funding is successful, additional coordination with other agencies will be essential.

Follow-up on Nutrient Management Loan Program

The Nutrient Management Loan Program is the most underutilized tool available to farmers in the nutrient management arena. Yet, its potential benefit to Maine agriculture is highly significant. Extensive promotion of this fund must be done by workshops, the preparation of brochures and mailings. Additionally, the scope of this program is in the process of enhancement to include funding for additional types of pertinent equipment and projects, similar to those proposed in the Phase IV initiative, that are not allowed at this time. This is another activity that could yield substantial benefits to farmers and to Maine's environment. A Nutrient Management Coordinator now is available for coordination and for effecting these important changes.

Follow-up on Nutrient Management-Related Tax Exemptions

The two provisions in Maine tax law related to nutrient management also are underutilized. One provision exempts manure storages from property taxes because they are pollution control structures. Neither local town officials nor Maine Revenue Service personnel adequately understand or have sufficient procedures in place to appropriately administer this program. The other provision allows farmers to take a sales tax exemption on materials used to construct a manure storage or handling system. Unfortunately, both provisions are little used. This is another arena in which the Nutrient Management Coordinator will need help in providing education and coordination if these provisions are to have wider use. Sources of this assistance have not been committed as yet, but may include cooperation with the farmland protection program or organizations outside the Department such as the Farms for the Future Program.

Conflicting Priorities: Permitting vs Promoting Benefits for Farms

One of the ongoing conflicts within the Nutrient Management Program is the challenge of meeting statutory requirements such as issuing Livestock Operations Permits while trying to maintain communication with the ag community and promoting beneficial programs such as the loan and tax exemption programs. With potentially as many as 60 farms needing new LOPs and several others needing to submit applications because their original permit has expired, there is far more work than one staff person can manage. Another factor that will likely impede the process of issuing permits is the insufficient number of certified Nutrient Management Planners who are available to work on the plans that are a necessary first step in the permitting process.

Because of the higher priority being placed on completing LOPs, the Nutrient Management Coordinator will be spending a higher proportion of his time in 2009 on the LOP development process. Even if the Nutrient Management Coordinator abandons all other priorities and focuses solely on permitting, however, only about a dozen permits could be written in 2009. Assistance from the Agricultural Compliance Supervisor may increase this number slightly by reducing the amount of review time committed by the Coordinator.

One application currently being reviewed alone consists of four notebooks of material from two to five inches thick, all of which must be reviewed and evaluated for completeness and adequacy. Once that process is done then the work on the permit itself begins.

Other priorities such as the promotion of programs that would be beneficial to farms will probably continue to take a back seat to the regulatory mandates in the foreseeable future as long as staffing remains at its current level. Even some regulatory requirements such as the rules for nutrient management plans for fish hatcheries may continue to be postponed while higher priority tasks are focused upon.

Programmatic Changes in Nutrient Management Planning

Continuing changes in USDA and EPA rules and policies are creating a constantly evolving environment. Keeping up with the additional workload created by these changes is very difficult. Comprehensive Nutrient Management Plans are required for all farms that receive Environmental Quality Incentive Program (EQIP) funds, and soon will be a prerequisite for all farms receiving USDA benefits. All elements outlined in a farm's CNMP must be addressed in order for that farm to be considered in compliance with their plan and remain eligible for full USDA program benefits. While many of the provisions in the new USDA guidelines for CNMP development are similar to the State guidelines, there are a number of important differences. The Department does not plan to seek legislation or undertake additional rulemaking at this time to bring the State guidelines into line with these federal guidelines because the process for developing State NMPs generally is neither as complex nor as costly as that for developing more elaborate CNMPs. Rather, the Department prefers to encourage as many small farms as possible to develop a Nutrient Management Plan for their operations by maintaining the simpler requirements for NMPs.

The Department also is faced with adjusting to new EPA guidelines for designating CAFOs, and determining if these changes will result in issuing permits to more farms in Maine - a complex and time-consuming process for limited Department staff. It is likely that approximately 60 large farms will require LOPs, and some may require MEPDES permits. Farms are operating with expired provisional Livestock Operations Permits and require assistance from Department staff in obtaining finalized LOPs. Although several permits have been updated in 2008/2009, some others will need to be updated soon. This will mean additional staff meetings with DEP to discuss the new procedures for designation of CAFOs and perhaps the development of a new agreement between the agencies on how this is to be done. Complicating these issues is the fact that EPA's positions continue to evolve regarding its approach to regulating CAFOs and Animal Feeding Operations (AFOs). Some of EPA's rules and procedures were challenged, and the U.S. Court of Appeals for the 2nd Circuit has issued rulings affecting some of these issues.

One issue of paramount concern for many livestock farmers in Maine and across the United States is the shift by the 2nd Circuit Court and EPA to require that CAFO nutrient management

plans, now considered to be confidential documents, be open to public review as part of the MEPDES permitting process. Results of this litigation will play an important role in future EPA procedures and requirements. Consequently, EPA must rethink its approach as to what is the best way to regulate these operations and the standards to which they should be held. In the past, enforcement activities were a primary focus. Recently, however, a welcome shift toward an attitude of problem solving through allowing enhanced technical assistance seems to be receiving more emphasis. Unfortunately, the source for this additional technical assistance remains elusive.

All of these potential changes create uncertainty and confusion when Department program administrators attempt to formulate policies that are in the best interests of agricultural producers and of the State's natural resources. Adequate staffing, which currently does not exist, is essential to keep up with continuing policy changes at the federal level.

In 2007, the Department evaluated the need for a new aspect to its Nutrient Management Planning Specialist Certification Program. NRCS staff now are required to be certified by NRCS for preparing Comprehensive Nutrient Management Plans, and they also require certification for writing and approving State Nutrient Management Plans. The Department evaluated the NRCS certification process to develop a simplified procedure that would link NRCS certification with the State program. However, NRCS has concluded that state certification of their employees should follow the same procedures as those required for all other potential nutrient management planners.

Technical Assistance Specialists

Perhaps the most serious challenge facing the Department and Maine agriculture is the shrinking pool of technical specialists available to apply conservation and nutrient management practices to the land. Our partner, NRCS, on whom farmers, landowners, soil and water conservation districts and others have relied for expertise and assistance, has incurred personnel attrition through retirements and inadequate funding, which is a loss of technical expertise vital for guiding and applying conservation projects to the land. These employees are not being replaced, and their experience and knowledge cannot be replaced quickly. Many federal "farm bill" projects have taken priority over those of nutrient management. All of these situations have left NRCS with limited ability to provide technical assistance to farms that are not locked into EQIP contracts. Consequently, there has been a major shift away from providing technical assistance for applying practices to the land by federal employees, and toward an emphasis on contract administration with private technical service providers or other specialists. Concerns among NRCS staff about the cost of providing technical assistance through this avenue may result in the agency re-evaluating this policy in 2009.

The University of Maine Cooperative Extension System, another valuable partner essential for providing expertise in a myriad of disciplines to landowners, to this Department and to others, also is experiencing a fate similar to that of NRCS. The local soil and water conservation districts, from which considerable expertise is available to farmers and others, generally are dependent upon interaction with NRCS, Extension and other organizations to have viable outreach programs. Although highly motivated to provide the highest quality customer service, which they do, most soil and water conservation districts do not have adequate financing or staff to expand their programs at this time.

At a time when nutrient management programs and their implications for agricultural pollution reductions from CAFOs are the number one priority of the Environmental Protection Agency, it is incongruous that sufficient technical expertise is unavailable to meet demand. This trend of decreased expertise available to apply conservation practices to the land must be arrested and reversed to meet goals promulgated by the Maine Legislature and by federal authorities.

Consequently, it is clear that additional technical expertise must be obtained from sources other than that of our traditional partners. Fortunately, a few private-sector technical service providers (TSPs) are available to meet planning needs in some situations, but with the current extraordinary demands on the federal budget, decreased federal funding for conservation programs appears imminent. Nevertheless, the Department must continue to be proactive by providing leadership and by having the capability of meeting expanding, essential needs not being achieved by other entities. The acquisition of technical staff by the Department, particularly that for providing engineering and other technical assistance in the areas of nutrient management, water quality, agronomy and in other related disciplines must be considered by the Maine Legislature in the near future.

Work on Partnership Agreement with NRCS

During 2003, the Department discovered that some fundamental changes were happening within our long-standing conservation partner, NRCS, some of which have been described above. Those changes were impacting how the two agencies were interacting while trying to deliver conservation programs to the farm community. These changes were causing confusion about what roles and services each agency would be providing. Talks were begun between the Commissioner and the State Conservationist for NRCS and their staffs to sort out this relationship. Subsequently, in December 2004, a new written and formalized Memorandum of Understanding was established between NRCS and the Department “for their cooperation in the conservation of Maine’s natural resources”. Efforts now are underway and must continue between these agencies to map future joint activities that successfully and efficiently deliver conservation programs to the public with the limited personnel and financial resources that presently are available.

The NRCS State Conservationist for the State of Maine was promoted to another position within the agency in 2008. This left a void in the leadership position that has been filled on an interim basis until a new State Conservationist comes on board. This is expected to occur in the next few months. Once the new State ‘Con’ gets settled in, it will be time for the Department to develop a new working relationship that will include learning what priorities will be uppermost for the agency under this new leadership. This may require some revisions to the partnership agreement between the agencies.

Unforeseen/Unplanned Events

Insufficient Department staff struggle to keep up not only with the essential daily workload, but also with constantly changing policies and unexpected events. Issues such as the DeCoster Livestock Operations Permit challenge, appeals to the Nutrient Management Review Board regarding compliance/enforcement cases and other farm operations with major compliance concerns, deflect valuable staff time from other potentially productive matters. USDA, NRCS and EPA policy and programmatic changes create uncertainty and inhibit the efficient progression of establishing our own policies, procedures and accomplishments.

It will require additional program staff to relieve the backlog of tasks and to allow the Department to stay current with national policies and for the State to maintain a leadership role in agricultural conservation.

One unforeseen development has been the increase in animal welfare complaints involving farm animals. Although many of these prove to be unfounded, they often require a very quick response. This increase occupies a significant part of the staff time for the Compliance and Nutrient Management Programs from time to time. Despite the priority given to certain nutrient management program goals, these often must be set aside to deal with immediate problems.

Evolution/Future Challenges of the Nutrient Management Program

Of course, without sufficient staff, only the most basic essentials of many programs can be addressed. Despite this fact, a number of concepts or ideas should be considered for future implementation. For example, the concept of nutrient management planning has been accepted quite readily by farmers, considering that the number of plans adopted to date, 730, far exceeds expectations. Farmers realize that the Nutrient Management Rules were developed by Maine farmers and others who understand the problems faced by Maine agriculture, and that they specifically relate to Maine's landscape and climate. This program has proven to be beneficial to farmers (and to others) both economically and environmentally. Another extremely important result of Maine's proactive approach to regulating itself in the nutrient management arena has been, for the most part, the preemption of certain restrictive regulatory mandates from EPA.

The apparent acceptance of nutrient management planning by the agricultural community suggests consideration of, perhaps, reducing the Nutrient Management Plan activation thresholds to fewer than 50 animal units or of reducing the manure or compost importation levels to less than 100 tons. Perhaps all cropland or small livestock operations should be considered for mandatory nutrient management planning? As previously mentioned, small livestock operations, particularly horses, are becoming an increasingly common source of complaint and potential environmental impairment. The network of certified planning specialists for preparing these Nutrient Management Plans would have to be expanded to achieve such an ambitious goal.

The Department should conduct an overview of the sources, availability and fate of nutrients in the State. Questions to be asked and answered include: where are nutrients generated; where are the utilization locations; which residuals, e.g., sludge, wood ash, Nvirosoil, Algefiber or other soil amendments are being spread and where, and what is their source. Manure, compost and chemical fertilizers should be considered. Some sites are licensed by DEP for spreading, yet these sites may not need additional nutrients for optimal productivity. Many materials are being imported to the State, yet this activity is not adequately monitored.

At what level should regulations be applied for all of the above – 5 sheep, 2 horses, 2 acres of crops, 8 tons of manure, etc? The answer is unknown at this time. The best approach to addressing these issues would be the appointment of an industry-wide task force consisting of farmers, soil scientists, extension educators, NRCS personnel, industry representatives and others, to formulate policies that are economically and environmentally sound. The Department is charged with maintaining and improving the health of Maine's agricultural land base, yet much information for fulfilling this mandate is unavailable. Sufficient Department personnel are not available at this time to evaluate these concepts.

Nutrient Management Program Staff

The Department is facing the challenge of trying to deliver a multifaceted program that has wide-reaching impacts on the agricultural community. Reinstatement of the Nutrient Management Coordinator position was essential to keep important aspects of the program moving forward. In the foreseeable future, additional staff will be required for implementing many of the programs outlined above and for addressing new initiatives that undoubtedly will arise. A nutrient management specialist assistant, a planning and research associate, and an agricultural/environmental engineer, as well as secretarial assistance, will be required to keep this program moving in a direction essential for meeting federal and state legislative mandates, and for the protection of Maine's farmlands and other natural resources.

One proposal to meet some of the staffing needs is to obtain funds that would allow selected soil and water conservation districts to hire specialists. The primary purpose for the specialists would be to meet the outstanding needs for technical assistance to farms, but there could also be a roll assisting with other program objectives.

Legislation to increase the Department's role in regulating agricultural composters has been considered in the last three legislative sessions (2007/2008/2009). If legislation of this type is passed, additional Department staff will be needed to implement the new program.

Table 2. Nutrient Management Plans by County

County	EXPIRED PLANS				UP TO DATE PLANS				ALL PLANS			
	NUMBER	AUs	ACRES	"<50 AUs	NUMBER	AUs	ACRES	"<50 AUs	NUMBER	AUs	ACRES	"<50 AUs
ANDROSCOGGIN	20	4461	3385	7	34	22466	9378	8	54	26927	12763	15
AROOSTOOK	15	3595	4015	1	26	6024	8263	4	41	9619	12278	5
CUMBERLAND	21	1361	2963	6	34	3003	5193	14	55	4364	8156	20
FRANKLIN	14	946	1231	5	43	2272	5128	26	57	3218	6359	31
HANCOCK	4	35	115	4	6	122	59	5	10	157	174	9
KENNEBEC	21	2356	2138	4	77	18453	21330	27	98	20809	23468	31
KNOX	4	265	352	1	7	423	996	3	11	688	1348	4
LINCOLN	10	360	1429	8	8	1051	1944	2	18	1411	3373	10
OXFORD	12	620	1048	6	32	1878	3487	22	44	2498	4535	28
PENOBSCOT	32	3984	5601	13	57	13060	18865	17	89	17044	24466	30
PISCATAQUIS	9	442	1690	7	11	1673	2365	5	20	2115	4055	12
SAGadahoc	3	495	531	1	10	1576	2573	4	13	2071	3104	5
SOMERSET	33	2995	7321	10	76	11529	20168	14	109	14524	27489	24
WALDO	14	1413	2992	6	51	7317	10889	19	65	8730	13881	25
WASHINGTON	11	235	549	9	1	11	150	1	12	246	699	10
YORK	17	796	2178	11	17	1220	3816	8	34	2016	5994	19
TOTALS	240	24359	37538	99	490	92078	114604	179	730	116437	152142	278