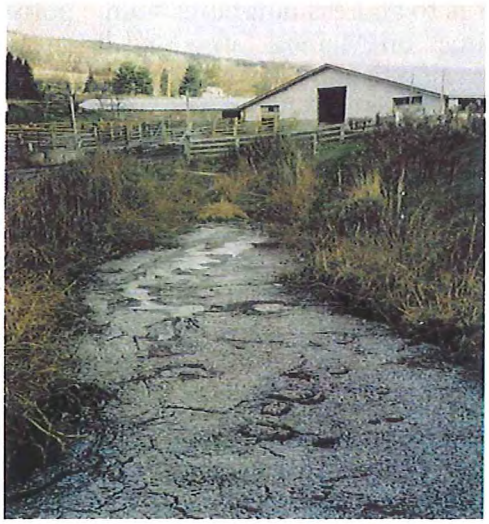
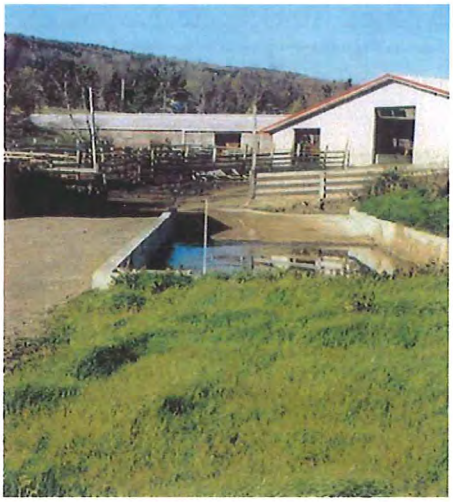
REPORT TO THE MAINE LEGISLATURE
On the
IMPLEMENTATION OF THE NUTRIENT MANAGEMENT PROGRAM





February 15, 2006

Maine Department of Agriculture, Food & Rural Resources

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 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 171 Certified Nutrient Management Planning Specialists in Maine to prepare and certify Nutrient Management Plans, of which 575 are in place covering 137,177 acres. In 2004, 7 planner recertification workshops were held around the state that were approved by the Department for Nutrient Management recertification credits. During 2005 and early 2006, ten workshops were held either in conjunction with University of Maine Cooperative Extension (UMCE) or independently by the Department. One was held on a nearby farm, another in a local, rural community, and eight were held at the Agricultural Trades Show in Augusta.

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, 105 farms in 12 counties have been awarded grants on a cost-share basis. 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. 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 must be promoted aggressively.

Concentrated Animal Feeding Operations (CAFOs) need to comply with federal 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 have been inspected and issued Provisional Livestock Operations Permits. Since Environmental Protection Agency (EPA) rules regarding permitting of livestock facilities are evolving, this will require additional coordination between the Department, DEP and EPA. It is unknown at this time how many farms require LOP/MEPDES permits.

Reinstatement of the Nutrient Management Coordinator position is keeping all aspects of this program moving forward. Nutrient Management-related "Rules for the Disposal of Animal Carcasses" require updating, and "Rules for the Agricultural Compliance Program" are close to

completion, with public hearings planned during Spring 2006. Training and certification of Nutrient Management Planning Specialists must continue. Follow-up on Phases 2 & 3 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, will require a substantial investment of time and personnel resources.

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 target benefits to certain high-priority watersheds thereby excluding others that also have urgent needs. In addition, it is unknown whether EPA's evolving rules regarding CAFOs and AFOs (Animal Feeding Operations) will lean toward more enforcement activities or toward a more enlightened approach of providing enhanced technical assistance. Moreover, our long-standing federal partner for providing technical support, USDA's NRCS, is placing more emphasis on 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 Project (EQIP). However, at the present time, monies for hiring TSPs to prepare CNMPs have been exhausted, and budget analysts are predicting reduced funding for many conservation programs in the proposed 2007 federal "farm bill". 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.

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, appeal processes, and defining nutrient management plans as confidential business information. 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 thus far, and an effort is ongoing to identify new areas of the program needed 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 new 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 liason 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 phase 1, phase 2 and the ongoing phase 3. 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. This dialog continues as time permits.

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 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.

Grant Received to Conduct a 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 and is in progress. Data evaluation and a progress report will be completed as soon as possible. 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. This includes changes in the status of compost as it relates 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

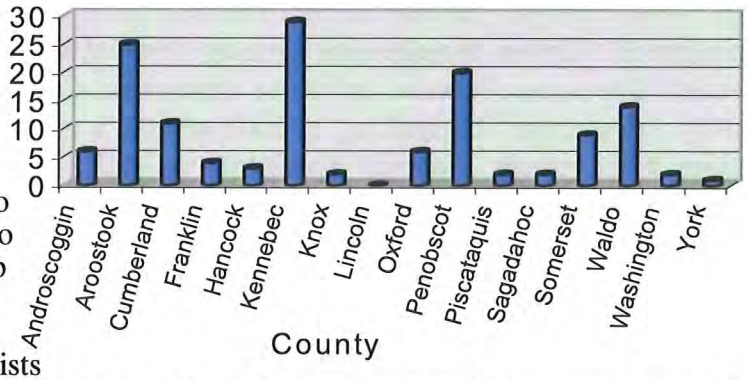
An important component of the Nutrient Management Program is the availability of Certified Nutrient Management Planning Specialists (CNMPS) who can prepare and certify Nutrient Management Plans for Maine's farming community.

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 good for five years.

The number of certified people is summarized in Figure 1. Of the 142 people who have passed the exam, 59 are farmers and the remaining 83 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). This makes a total of 171 people who are qualified to write and approve nutrient management plans in this State. This number will be increasing as new employees of NRCS are trained and pass the certification exam. We may also see an increase in the number of private certifications from farmers who had their initial plans prepared by a commercial planner, but want to get certified to update and recertify their plan themselves.

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 20 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 forms to request recertification credits, some informational flyers and the database used to keep track of the credits, 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.

Winter Manure Spreading Ban and Variances

The ban on winter manure spreading is effective December 1 of a calendar year to 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 less 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, recently decided that the present system is working satisfactorily and, therefore, a Rule change is not needed at this 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.

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 utilizes more than 100 tons of manure or compost per year, not generated on that farm

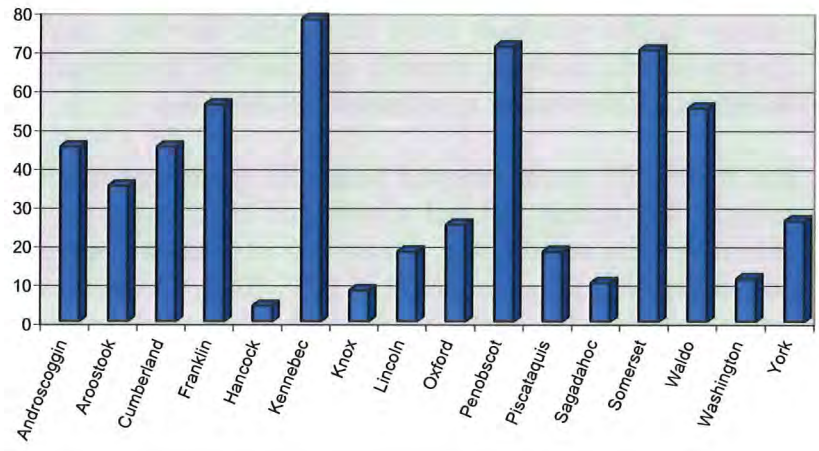
- the farm is the subject of a verified complaint of improper manure handling (i.e. checked and confirmed by the Department of Agriculture) or
- the farm stores or utilizes regulated residuals

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 have until October 1, 2007 to fully implement their plan. This time span between development of a plan and full implementation allows farmers to arrange financing, buy equipment and build or upgrade storage and handling systems that may be needed to implement the plan. It is expected that those parts of the plans that do not require structural changes or major investments will be implemented as soon as the plan is approved.

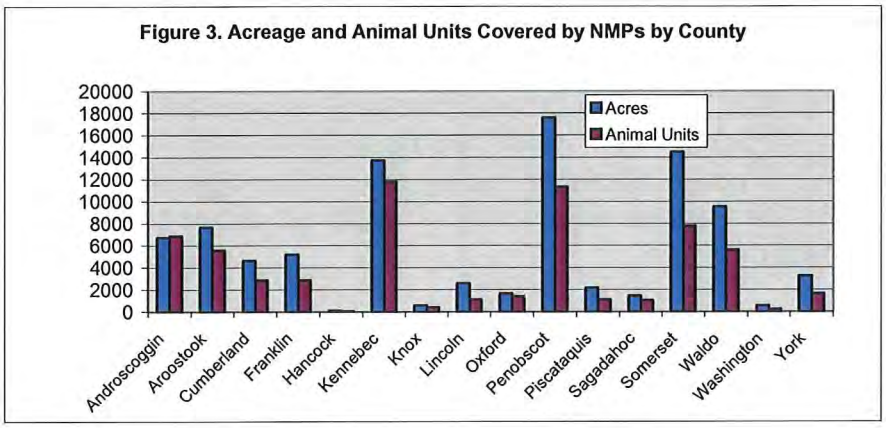
Figure 2. Nutrient Management Plans by County



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 575 Nutrient Management Plans in place throughout the State. Figure 2 shows how these plans are distributed throughout the State. 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 575 plans cover a total of 137,177 acres (up from 81,579 acres in 2001) and 82,102 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. An interesting point here is the number of animal units and acreage managed under a Nutrient Management Plan in Androscoggin County. 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. 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.

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 phases, and a fourth phase is proposed, all of which are discussed below:

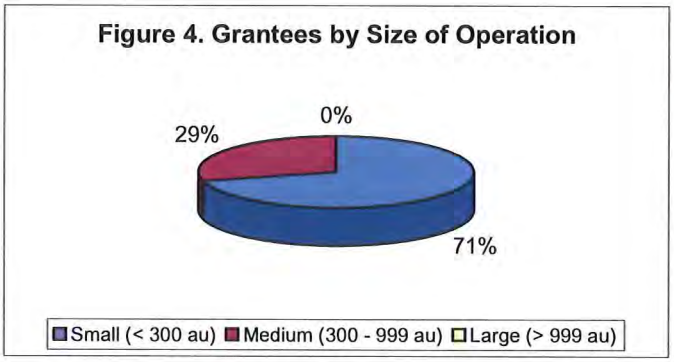
Phase 1 - Nutrient Management Grant Program

The Nutrient Management Grant Program funds for Phase 1 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 2 to distinguish it from the original round of grants).

Figure 4. Grantees by Size of Operation



Phase 2 – Nutrient Management Grant Program

The Phase 2 process was similar to Phase 1 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 2. Since then, 27 farms have completed construction and requested their funds, 5 have initiated construction and received partial payments, and 9 have not requested any funds. Three grantees have declined the funds that were earmarked for their projects. This leaves 41 projects with a total grant amount of $1,908,646 in Phase 2 (see Table 1 below). Figure 4 shows the distribution of projects under phase 2 according to the size of operation, where 1 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 1, which had 26 on small farms, 12 on medium farms and 2 on large farms. In Phase 2, 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 3 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 3 of the program. Due to changes in the NRCS EQIP rules and policies, a number of changes were made to the Phase 3 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 3.

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 3 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 3 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. Sixteen projects have been completed , while 2 farms have begun their projects and received partial payments. Three grantees have not requested any of their allotted funds.

Eighteen funded projects were on smaller farms (<300AU), while 3 projects were on medium size farms (300-999AU). A larger percentage (86%) of Phase 3 farms was in the small farm category than was the case in Phase 2, which was 71%. Medium size farms comprised only 14% of the Phase 3 total compared with 29% for Phase 2. $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 3, and corresponding funds awarded are depicted in Table 1. Grant funds awarded for Phases 1, 2 and 3 are summarized in Table 1. It should be noted that the grand total of grant funds awarded in Table 1, $5,685,285.00, 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 these funds, $185,285, were not utilized by some recipients in earlier phases and were reallocated.

Table 1. Grant Funds Awarded by County

County	Phase 1	Phase 2	Phase 3	Phases 1, 2 & 3
Androscoggin	$267,993.00	$125,760.00	$261,500.00	$655,253.00
Aroostook	$160,200.00	$406,639.00	$275,015.00	$841,854.00
Cumberland	$26,920.00	$35,000.00		$61,920.00
Franklin	$88,000.00	$196,196.00	$211,406.00	$495,602.00
Kennebec	$500,762.00	$129,600.00	$124,509.00	$754,871.00
Knox-Lincoln	$19,868.00	$58,767.00		$78,635.00
Oxford	$295,238.00			$295,238.00
Penobscot	$571,257.00	$379,362.00	$218,535.00	$1,169,154.00
Piscataquis	$198,594.00			$198,594.00
Somerset	$188,781.00	$265,662.00	$168,906.00	$623,349.00
Waldo	$92,617.00	$266,660.00	$16,768.00	$376,045.00
York	$89,770.00	$45,000.00		$134,770.00
Totals	$2,500,000.00	$1,908,646.00	$1,276,639.00	$5,685,285.00

Finally, the distribution of projects throughout the state for Phases 1, 2 and 3 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 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.

Figure 5

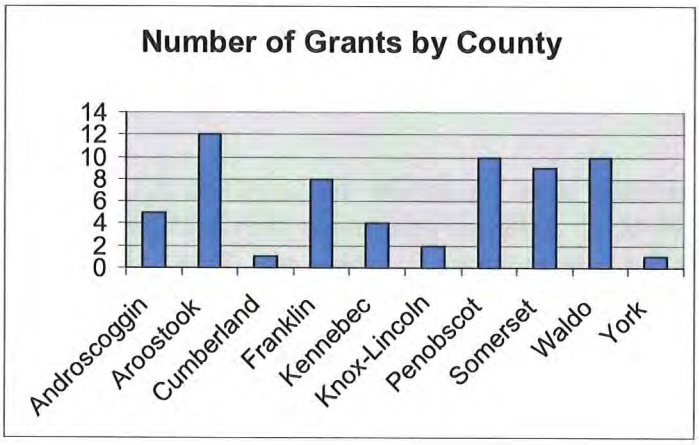
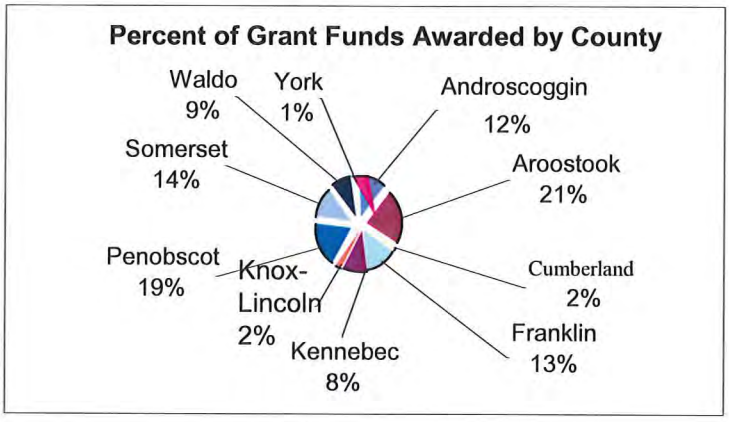


Figure 6



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. At this time, NRCS is estimating

the average cost per livestock farm in Maine for meeting its nutrient management-related needs is $200,000 - $250,000. NRCS also is estimating that $50,000,000 is required to meet the total need for Maine livestock farms. Conservation requirements of vegetable or crop farmers is estimated to be $5,000,000-$10,000,000.

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, the amount of which is undetermined at this time. 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. These projects might 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.

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 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. 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). Currently, there are twelve active loans. There were no expenditures from the loan fund for nutrient management projects during either 2003, 2004 or 2005. $830,739 is available in the loan fund at this time. 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 during the past 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. In addition, the Department must take 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 which directly impact agricultural non-point source pollution reduction. The Nutrient Management Review Board recently directed the Department to pursue expanding funding eligibility for this program similar to that proposed in the Phase IV project discussed above. 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. 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. 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. 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 new Nutrient Management Coordinator will provide education, coordination and guidance for farmers and public officials.

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 defined as one by the Department.
- The operation plans to expand beyond its land base for spreading or current manure storage capacity.

This permit is mandatory for a livestock operation to operate in the State. Additionally, for operations meeting the EPA definition of a CAFO[1], 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 through the same 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.

The EPA rules that govern the National Pollutant Discharge Elimination System (NPDES) recently have been changed, yet still face legal challenges in the 2nd U.S. Court of Appeals for the Second Circuit. Consequently, the Department still is not sure how many, if any, farm operations in Maine will be required to obtain a MEPDES permit. An inspection of the DeCoster Egg Farm facility by the EPA in 2002 indicated that it 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 before the Departments will know how many other large farm operations with finalized or provisional LOPs also will need a MEPDES permit.

LIVESTOCK OPERATIONS PERMITS ISSUED AND APPEAL

As of December 31, 2002, seven farm operations had been identified as needing a Livestock Operations Permit. These facilities have been inspected and issued a provisional permit. These provisional permits allow the farm operation the opportunity to meet the requirements for obtaining a full permit and to fulfill the requirements of the law. Most farms with provisional permits have met the conditions established in those permits and so are eligible to receive their full permits which will be good for five years. The complexity of these permits requires the availability of substantial blocks of time to work on them effectively and efficiently. Unfortunately, despite the fact these agreements between the Department and DEP have been finalized, the issuance of full permits has been delayed because of lack of staff to work on them. Consequently, four farms still are operating under provisional permits. As a result of changes in many farming operations during the last few years, it is likely more farms exist that require an LOP.

However, 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

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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.

appeal was denied by Superior Court and the Board's ruling was sustained. The civil suit remains unresolved at this time.

NUTRIENT MANAGEMENT REVIEW BOARD

The Nutrient Management Review Board is a 7-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 3 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 4 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 Janurary 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. Reinstatement of the Nutrient Management Coordinator position will effect increased activity in all of these areas.

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. 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.

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.

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-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 as larger farm operations.

Clearly, the Nutrient Management Program is dependent upon these Compliance Officers to act as field personnel for providing these essential services to farmers and others.

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 decision 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.

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, although limited, 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 is a significant, positive step for addressing these challenges and for delivering benefits to Maine farmers and other citizens, for example:

Rulemaking

The Department has three sets of rules that have some impact on the Nutrient Management Program and all of these will require rulemaking in 2006. 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. In addition, 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 are more than 20 years old and are very obsolete. New rules that contain the processes for complaint investigation, as well as BMP development and enforcement, have been drafted, but need to be presented to the agricultural community and then taken through the formal rulemaking process. The Department will move ahead with this process in Spring 2006. These same rules also will apply to complaints investigated under the Manure Law. The Nutrient Management Rules 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.

Follow-up on Phase 2 and Phase 3 Grants

Even though the Department continues in Phase 3 of the grant program, 11 of the Phase 2 construction projects still are not complete. A higher proportion of Phase 3 projects have been started or completed than is the case of Phase 2 projects. The alacrity of Phase 3 project initiation likely can be attributed to a 90% cost-share rate versus a 75% cost-share rate for Phase 2 projects. The lower cost-share rate resulted in a substantially larger financial outlay by the farmer, most of whom have limited discretionary dollars, which likely impeded progress in some situations. The Department must continue to monitor progress on these projects to ensure that they have reached certain milestones before releasing payments.

Substantial progress has been made in recent years addressing non-point source pollution from agriculture. Availability to Maine farms of 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 4 project to facilitate the construction of new or for retrofitting of existing manure storage and handling facilities. The Phase 4 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.

The Department must address the need for nutrient management plans for fish hatcheries, as mandated by the legislature. This will require the formation of an industry task force that will be

staffed by the Department for the preparation of guidelines and the development and adoption of rules.

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 should be enhanced to include funding for additional types of pertinent equipment and projects, similar to those proposed in the Phase 4 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 underutilized. This is another arena in which the Nutrient Management Coordinator will provide education and coordination.

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. However, 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. Rather, the Department prefers to encourage as many small farms as possible to develop a Nutrient Management Plan for their operations; the process for developing State NMPs generally is neither as complex nor as costly as that for developing more elaborate CNMPs.

Other changes in EQIP program rules in which projects based on TMDL criteria could target benefits to certain high-priority watersheds, thereby excluding others that also may have urgent needs, must be monitored carefully by the Department.

The Department also is faced with adjusting to new EPA guidelines for designating CAFOs, and determining if these changes will result in issuing more or fewer permits to farms in Maine. At least three large farms may require MEPDES permits. Four farms are operating with provisional Livestock Operations Permits that must be finalized. 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 currently are being challenged in the U.S. Court of Appeals for the 2nd Circuit. 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 project 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.

The Department must establish 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. This new certification process needs to be evaluated. A procedure must be developed to see how NRCS certification can tie in with the State program to simplify the State certification process for NRCS personnel and others. This will require a considerable amount of staff background work in order to prepare a proposal for the Nutrient Management Review Board.

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 is a major shift away from providing technical assistance for applying practices to the land.

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, 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 non-point source pollution reduction are the number one priority of the Environmental Protection Agency, and considering the burgeoning demand for technical services for land application of appropriate conservation practices, 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, private-sector technical service providers (TSPs) have become available to meet planning needs in some situations, although, at the present time, NRCS funding for hiring TSPs to write CNMPs is depleted, and 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 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 new State Conservationist for NRCS and their staffs to sort out this new 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 must continue between these agencies to map future joint activities, which successfully and efficiently deliver conservation programs to the public with the limited personnel and financial resources that presently are available.

Unforeseen/Unplanned Events

Insufficient Department staff struggle to keep up not only with the essential daily workload, but also with constantly changing policies or unexpected events. Issues such as the DeCoster Livestock Operations Permit challenge 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. Additional personnel must be obtained to address these and other needs.

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 still can 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, 575, far exceeds expectations. Farmers realize that these Nutrient Management Rules were written and 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. Perhaps this is an approach that other Maine state agencies or even other states could emulate.

The apparent acceptance of nutrient management planning by the agricultural community suggests consideration of, perhaps, reducing the Nutrient Management Plan activation thresholds to less 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. A network of planning specialists, which should be expanded, exists for preparing these Nutrient Management Plans.

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, what 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, 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.