

2004 Annual Report

AGRICHEMICAL MANAGEMENT

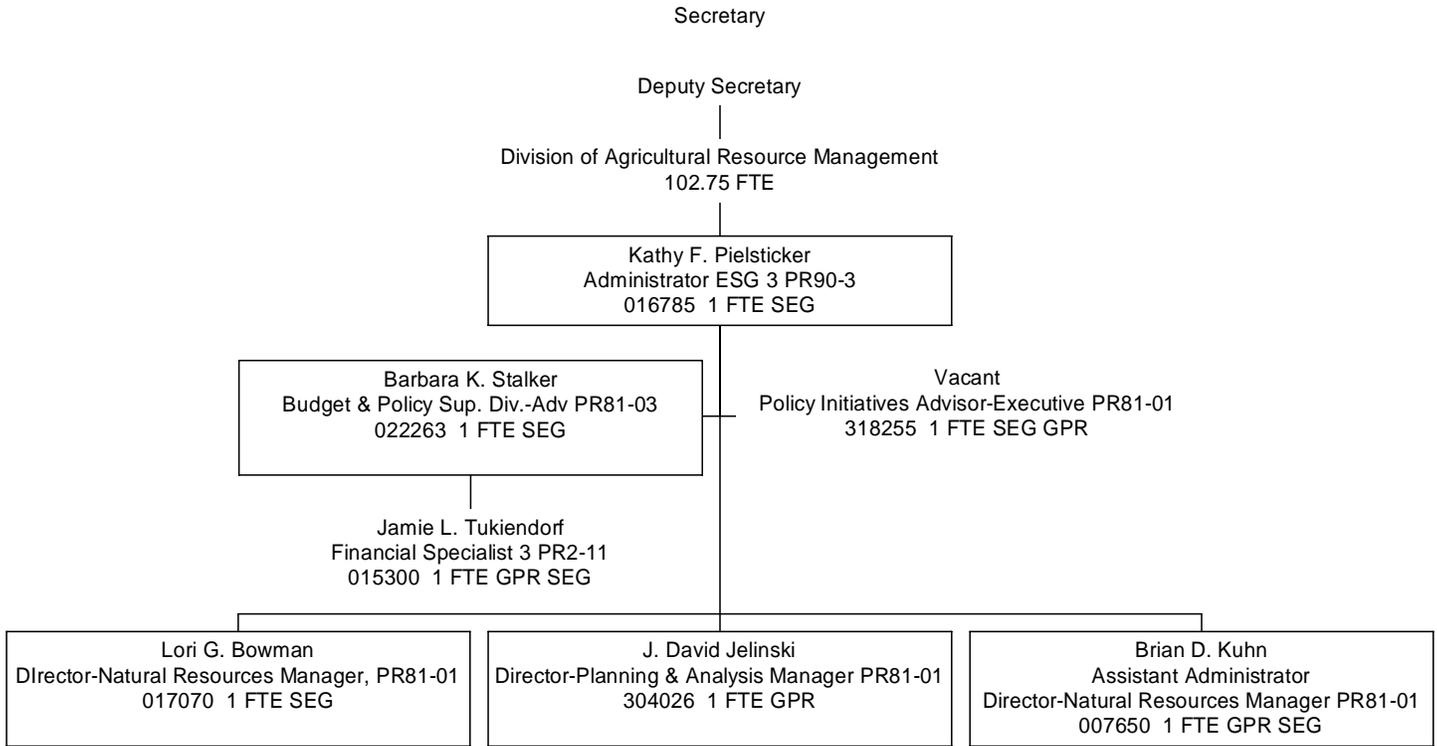


BUREAU

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**Wisconsin Department of Agriculture, Trade and Consumer Protection
Agricultural Resource Management Organizational Chart**



Note: Organizational chart effective August, 2005.

Each year, the Agricultural Resource Management Division within the Wisconsin Department of Agriculture, Trade and Consumer Protection produced a report to review the accomplishments, revenues and emerging issues for each program within the division. Because of changes in staff and workloads, only the Aghem Management Bureau produced a report for their 2004 activities. The bureau intends to continue producing an annual report, at least for the near future.

One final note: the organizational chart presented on page 5 shows the Agchem Management bureau in November 2005. During 2005, the Water Quality section was moved from within the Agchem Bureau into the Land and Water Resources Bureau. The water quality annual report for 2004 is included in this document.

Agchem Management Bureau Highlights:

The **Agricultural Chemical Cleanup Program** continued management of 304 remediation cases at agrichemical facilities, and closed 33 cases. Staff responded to 46 spills. Nearly \$2.9 million in eligible clean-up costs were reimbursed to responsible parties.

The **Agrichemical Containment Program's** continued to focus on in-season inspections at facilities. Many of the 72 containment system sumps tested were found to be leaking. Development of revisions to the containment regulations and construction standards continued forward. A restructuring of the "Environmental Partners" program was initiated in cooperation with the industry. Industry "Ambassadors" will be trained by the department and will attempt to meet with facility managers to foster voluntary participation in this program with the objective of implementing practices which reduce the amount of agrichemicals that escape into the environment

The **Water Quality Section** reviewed surface water quality programs in several states and received a \$25,000 grant to work with other State agencies and to determine the best approach for determining pesticide impacts on surface waters of Wisconsin. The section tested the new "SNAP plus" software which incorporates the Phosphorus index into this nutrient management planning tool. The section

began to develop proposed changes to the nutrient management portion of ATCP 50 to incorporate a phosphorus based standard. Surface-water monitoring efforts were expanded at the UW-Platteville's Pioneer Farm.

Analysis of the **Pesticide, Feed and Fertilizer Programs (PFFP) Section's** licensing and tonnage activities indicated a small increase in the number of pesticide products distributed, and little changes in feed and fertilizer license numbers and tonnage distributed. The number of Special Local Need (FIFRA 24C) and Emergency Exemption (FIFRA Section 18) pesticide product "registrations" were lower than in past years. The number of certified private applicators of restricted-use pesticides continued to decrease, while the number of persons certified to commercially apply pesticides increased.

The **Endangered Species Program** conducted surface water monitoring in the St. Croix watershed, a native mussel stronghold, and found only insignificant amounts of a few pesticides. A similar number of people signed up for the **Landscape Registry** to receive advance notice of pesticide applications to lawns.

Inspections and sampling under the **Feed Program** found that nearly 1/3 of the 125 feed mills inspected were mislabeling medicated feeds, while laboratory analysis found a similar violation rate compared to past years.

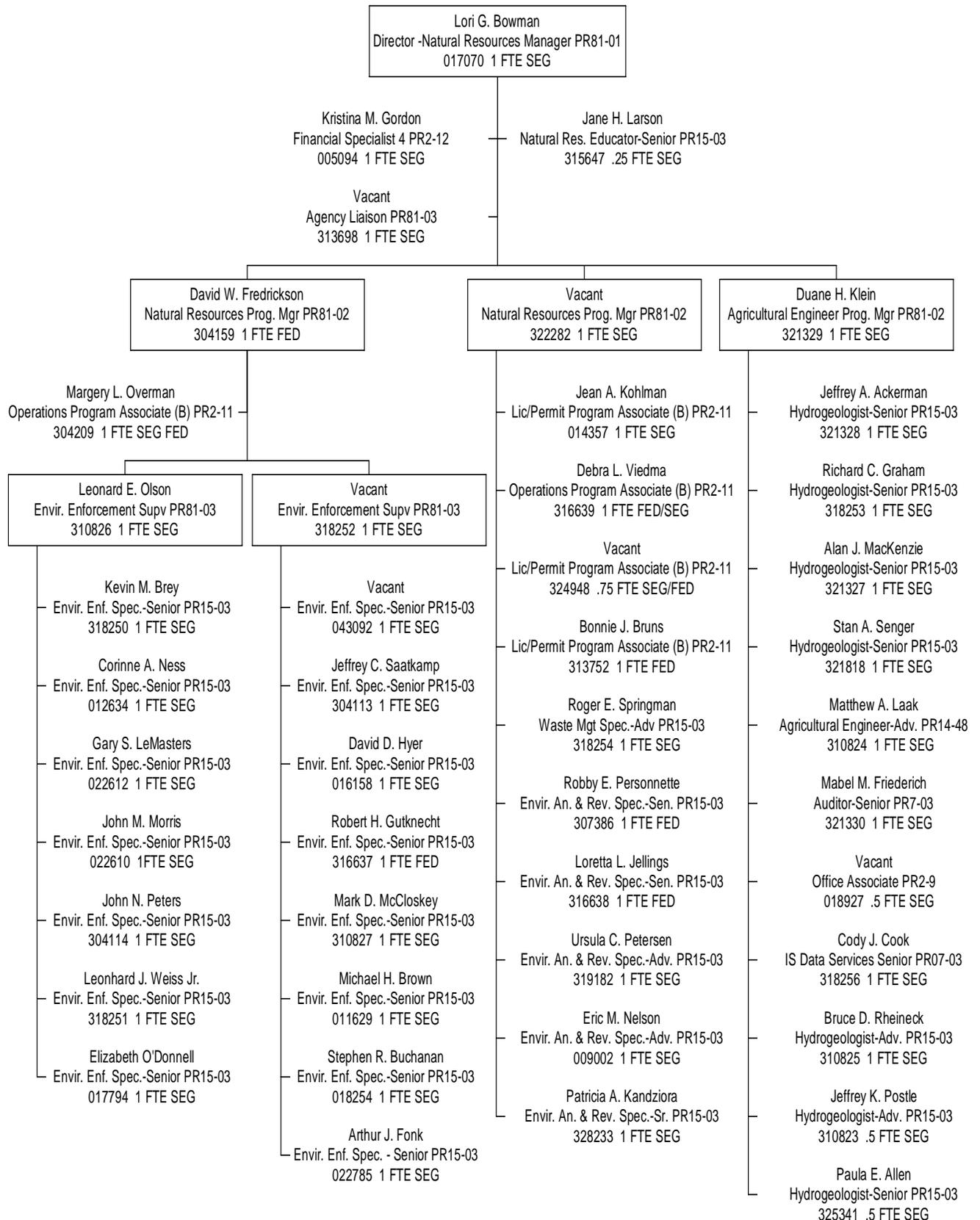
Inspections indicated the potential for misuse of steamed bone meal in feed rations, a prohibited animal protein material. This led to inspections at over 150 locations. Five firms were found to be in violation of federal restrictions. Nearly 250 fertilizer samples were collected under the **Fertilizer Program** showing a similar overall compliance rate to past years.

The Agricultural Clean Sweep program underwent a major change in 2004 as it merged with the Department of Natural Resources Household Hazardous Waste grants program. The new program is now **Wisconsin Clean**

Sweep. This merger required an overhaul of the previous clean sweep program including a revision of ATCP 34, the Clean Sweep rule.

In 2004 the **Compliance and Investigation Section** investigated 172 complaints. Pesticide complaints were by far the largest area of activity. Of the total complaints, 106 cases involved potential violations of *ch. ATCP 29, Wis. Adm. Code*, Wisconsin's pesticide use and control rule. There were two investigations of pesticides exceeding health standards in groundwater and 25 new site-remediation cases.

**Wisconsin Department of Agriculture, Trade and Consumer Protection
Bureau of Agrichemical Management
Organizational Chart (as of Nov. 2005) - 43.5 FTE**



Agrichemical Management Bureau

What is the Agrichemical Management Bureau

The Agrichemical Management Bureau, located within the Agricultural Resource Management Division of the Wisconsin Department of Agriculture, Trade and Consumer Protection, contains the state's regulatory and enforcement programs associated with animal feeds, fertilizers, pesticides and other plant production and pest control materials used in agricultural, urban and industrial settings. The Bureau is responsible for consumer protection, environmental protection and protection of human and animal health. Additional detail on each program follows this summary of Agrichemical Management funding.

The Agrichemical Management Bureau is structured as one integrated program with multiple program components. Programs are centrally coordinated through individual program specialists located in the Programs, Containment and Remediation, and Water Quality Sections. Agrichemical and environmental enforcement specialists throughout the state handle field implementation of these programs. These field personnel and associated supervisory and management staff comprise the Compliance and Investigation Section, which also coordinates most formal enforcement actions for the Bureau. These four sections strive to coordinate daily program activities to provide uniform regulation and enforcement, while assuring appropriate specialized knowledge in each program area.

Revenue Sources

Because of the closely related regulation and enforcement activities of the bureau, funds for the programs are largely combined. Four sources fund the Agrichemical Management Bureau:

- Agrichemical Management Fund (ACM Fund)
- Agricultural Chemical Cleanup Program Fund (ACCP Fund)

- Federal Grants (FED)
- Gifts, Grants and Special Projects

The ACM Fund and the ACCP Fund are composed of many industry fees, as detailed later in this report. Both funds are considered segregated revenues (SEG) which means that these revenues are maintained separately from other state revenues and are to be used for specified purposes. Federal funding covers portions of several federal programs that the Bureau implements and the Bureau can also receive direct contributions for special projects. Each of these funding sources identifies how the funds can be used and the following sections of this report will provide more information on each revenue.

Fiscal Years and Fee Periods Covered in this Report

This section covers the state fiscal year 04 (FY 03/04), which ran from July 1, 2003 through June 30, 2004. Federal grants run on different cycles than the state fiscal year. This report covers those portions of the federal grants that occurred during the state fiscal year.

Agrichemical Management Fund (ACM Fund)

The Agrichemical Management Fund (ACM Fund) is the primary source of funding for the regulatory, investigative and enforcement aspects of the Agrichemical Management Bureau. The ACM Fund is comprised of fees collected from most of the agricultural, commercial and industrial segments regulated by the bureau. This includes revenues from licenses, permits, registrations and tonnage fees under the feed, fertilizer, lime, pesticide and soil and plant additive programs. The ACM Fund formerly covered the cost of agricultural clean sweep grants to counties, but beginning with this reporting period, both agricultural and urban clean sweep grants are derived from the Recycling Fund.

Under the ACM Fund, individual revenues are not directed to individual programs. Fertilizer

fees, for example are not exclusively used for fertilizer program costs. Instead, all these revenues are jointly deposited into the ACM Fund and cover the combined costs of these closely related programs.

A portion of the fees collected by the Agrichemical Management Bureau are deposited in the ACM Fund. Other portions of fees and surcharges are deposited to the ACCP

Fund and still others forwarded to other agencies. Tables 1 through 3 detail the various industry fee rates and the total revenues collected by the Bureau.

Although the agrichemical fees were last adjusted at the start of 2003, the product sources upon which these fees are based have remained reasonably stable in recent years.

**Table 1
FY 03/04 AGRICHEMICAL MANAGEMENT FUND**

SOURCE	FEE	FY 03-04 REVENUE
Opening Balance		\$ 873,833
Feed License	\$25	\$ 32,483
Feed Tonnage	\$0.23/ton	\$ 667,501
Fertilizer License	\$30	\$ 20,015
Fertilizer Permits	\$25 one time	\$ 6,400
Fertilizer Tonnage	\$0.30/ton	\$ 435,668
Lime License	\$10	\$ 904
Pesticide Application Business	\$70	\$ 117,829
Pesticide Dealer-Restricted Use	\$60	\$ 24,735
Pesticide Individual Applicator	\$40	\$ 243,147
Pesticide Reciprocal Certification	\$75	\$ 14,520
Pesticide Registration * Household sales \$0-25,000	\$141	\$ 691,731
Pesticide Registration* Household sales \$25,000-75,000	\$626	\$ 191,566
Pesticide Registration * Household sales >\$75,000	\$1,376	\$ 385,280
Pesticide Registration * Industrial sales \$0-25,000	\$221	\$ 203,154
Pesticide Registration* Industrial sale \$25,000-75,000	\$766	\$ 61,280
Pesticide Registration * Industrial sales >\$75,000	\$2,966	\$ 240,246
Pesticide Registration * Nonhousehold \$0-25,000	\$226	\$ 889,596
Pesticide Registration * Nonhousehold \$25,000-75,000	\$796	\$ 218,104
Pesticide Registration * Nonhousehold >\$75,000	\$2966 + 0.2%	\$1,271,991
Soil & Plant Additive License & Permits	\$25 annual lic. \$25/one-time permit	\$ 11,695
Soil & Plant Additive Tonnage	\$0.25/ton	\$ 4,811

SOURCE	FEE	FY 03-04 REVENUE
Veterinary Clinic Permit	\$25/2 yr	\$ 7,175
Interest on ACM Fund		\$ 17,768
Miscellaneous Revenues		\$ 2,444
Total Revenue		\$ 5,760,042
Program Expenditures (see individual programs)		\$(5,298,961)
Lapse		\$(116,185)
Ag in Classroom Grant		\$(100,000)
Producer Security Loan Repayment		\$ 600,000
FY 03/04 Ending Balance		\$ 1,718,830

* Pesticide registrations are deposited by statute to each fund, but the breakdown between fee levels is not recorded in the financial system. The breakdown shown here is based on apportioning the actual payments, including penalty fees, based on the estimated sales levels reported at the time of product registration.

Agricultural Chemical Cleanup Program Fund (ACCP Fund)

The Agricultural Chemical Cleanup Program Fund (ACCP Fund) includes industry fees or surcharges to pay reimbursements for agricultural chemical spill cleanups under s. 94.73, *Stats.* These surcharges are set by rule

with maximum levels dictated by statute. Because of anticipated shortfalls in the fund, a rulemaking was implemented to adjust the fertilizer tonnage surcharge to \$0.86/ton. This change will first affect revenues in August of 2005 (FY05/06).

Table 2
FY 03/04 AGRICULTURAL CHEMICAL CLEANUP FUND

SOURCE	SURCHARGE	FY 03-04 REVENUE
Opening Balance		\$ 199,740
Fertilizer License	\$20 if no pesticide license	\$ 6,090
Fertilizer Tonnage	\$0.38/ton (\$0.86 effective 04/05)	\$537,105
Pesticide Application Business	\$55	\$89,535
Pesticide Dealer-Restricted Use	\$40	\$15,560
Pesticide Individual Applicator	\$20	\$119,020
Pesticide Registration* Nonhousehold \$0-25,000	\$5	\$18,530
Pesticide Registration* Nonhousehold \$25,000-75,000	\$170	\$ 46,580
Pesticide Registration* Nonhousehold >\$75,000	1.1% of sales	\$2,130,672
Interest on ACCP revenues		\$ 20,829
Miscellaneous**		\$ 510
Total Revenues		\$2,984,430
Expenditures (ACCP Reimbursements)		\$(2,600,121)
FY 03/04 Ending Balance		\$ 584,049

*Pesticide registrations are deposited by statute to each fund, but the breakdown between fee levels is not recorded in the financial system. The breakdown shown here is based on apportioning the actual payments based on the estimated sales levels reported at the time of product registration.

**Uncashed checks from prior year.

Other Industry Fees

In addition to the fees paid to the ACM Fund and ACCP Fund, the Agrichemical Management Bureau collects fees from the agrichemical industry that are directed to other state agencies or programs.

FY 03/04 fees collected for other agencies are shown in Table 3. Actual transfers may differ based on collection dates and transfers in prior or subsequent fiscal years.

**Table 3
FY 03/04 OTHER AGRICHEMICAL REVENUES AND USES**

SOURCE	FEE AND AGENCY	FY 03-04 REVENUE
Fertilizer Tonnage	\$0.10 DNR 0.10 UW Res. 0.10 UW Ext. 0.02 Wgt & Measure	\$ 141,613 136,601 141,613 28,376
Feed Tonnage	\$0.02 Wgt & Measure	57,634
Lime Tonnage	\$0.0125 UW Res.	\$ 13,957
Pesticide Registration* Household sales \$0-25,000	\$124 DNR	\$ 623,407
Pesticide Registration* Household sales \$25,000-75,000	\$124 DNR	\$ 37,944
Pesticide Registration* Household sales >\$75,000	\$124 DNR	\$ 34,720
Pesticide Registration * Industrial sales \$0-25,000	\$94 DNR+\$5 for some wood preservatives	\$ 82,354
Pesticide Registration* Industrial sale \$25,000-75,000	\$94 DNR+\$170 for some wood preserves	\$ 7,520
Pesticide Registration * Industrial sales >\$75,000	\$94 DNR+1.1% for some wood preserves	\$ 21,889
Pesticide Registration* Nonhousehold \$0-25,000	\$94 DNR	\$ 352,124
Pesticide Registration* Nonhousehold \$25,000-75,000	\$94 DNR	\$ 25,756
Pesticide Registration* Nonhousehold >\$75,000	\$94 DNR	\$ 28,012
Pesticide Well Compensation	\$150 DNR	\$ 18,900
Soil & Plant Additive Tonnage	\$0.10 DNR 0.10 UW Res.	\$ 1,516 \$ 1,516
TOTALS		\$1,375,755 DNR \$ 293,687 UW \$ 86,010 Weights & Meas.

* Pesticide registrations are deposited by statute to each fund, but the breakdown between fee levels is not recorded. The breakdown shown here is based on registration records for each fee level.

When and How Paid

Industry fees for ACM, ACCP and the other agencies are all assessed as one fee and apportioned to the various funds by program staff as defined by statute. For example, when the fertilizer tonnage was collected in August, 2003, the industry was assessed \$1.00 per ton. This fee was then split between the UW, DNR, DATCP's Weights and Measures program and both the ACM and ACCP Funds, as shown in Tables 1 through 3.

The various programs pay fees at different times of the year. Fertilizer tonnage and license fees are due in August of each year, while pesticide

licenses and registrations are due in December and feed fees are due in February. Table 4 shows the payment dates for all fees and the period for which this fee is paid. Generally, permits, licenses and registrations are paid in advance, while tonnage is paid after the year is completed. Pesticide registrations represent a cross between these, since the license (registration) fee is paid in advance of the year for which registration is sought. The fee amount is determined by estimating the next year sales amounts with a recalculation of the previous year's fee amounts.

Table 4
AGRICHEMICAL FEE PAYMENT DATES

SOURCE	DUE DATE	FOR PERIOD
Feed License	2/28/04	3/1/04-2/28/05
Feed Tonnage	2/28/04	Calendar 2003
Fertilizer License	8/14/03	8/15/03-8/14/04
Fertilizer Permits	Prior to distribution	Until product or label changes
Fertilizer Tonnage	8/14/03	7/1/02-6/30/03
Lime License	12/31/03	Calendar 2004
Lime Tonnage	2/1/04	Calendar 2003
Pesticide Application Business	12/31/03	Calendar 2004
Pesticide Dealer-Restricted Use	12/31/03	Calendar 2004
Pesticide Individual Applicator	12/31/03	Calendar 2004
Pesticide Reciprocal Certification	Prior to work in Wisconsin	End of same calendar year
Pesticide Manufacturer (Product Registration)	12/31/03 estimate 12/31/04 final	Calendar 2004*
Pesticide Well Compensation	12/31/03	Calendar 2004
Soil & Plant Additive License	3/31/04	4/1/04-3/31/05
Soil & Plant Additive Permit	Prior to distribution	Until product or label changes
Soil & Plant Additive Tonnage	3/31/04	Calendar 2003
Veterinary Clinic Permit	12/31/03	Calendar 2004 and 2005

* The basis for a pesticide manufacturer license fee (more commonly known as product registration), changed effective in 2004 to an estimated fee paid at the start of the year and a final reconciliation paid at the end that year.

Federal Grant Funds

The bureau receives grants from five federal agencies:

- US Environmental Protection Agency (EPA)
- US Department of Agriculture (USDA)
- US Food and Drug Administration (FDA)
- US Fish and Wildlife Service (FWS)
- US Department of the Interior, National Park Service (NPS)

The EPA grant is the most significant of these grants. The Department, through the

Agrichemical Management Bureau acts as EPA’s agent for implementing, investigating and enforcing federal pesticide laws and regulations. The EPA grant includes several components, some of which are awarded based on an allocation formula (base), while other parts are awarded on a competitive basis (discretionary). The USDA grant provides funding for inspection of restricted-use pesticide records on farms. The FDA grant provides funds for inspection of certain medicated feed producing establishments.

**Table 5
FEDERAL GRANT FUNDING DURING STATE FY 03/04**

GRANTING AGENCY	PURPOSE	STATE FY 03/04 TOTAL
US Environmental Protection Agency	Pesticide regulation and enforcement, applicator certification and special projects	\$498,102
US Food and Drug Administration	Medicated feed mill inspections	\$35,153
US Department of Agriculture	Restricted-use pesticide recordkeeping	\$17,603

Gifts, Grants and Special Projects

By statute, the Department may collect fees from the public or industry for laboratory tests completed by the Department for programs under *s. 93.06(1p), Stats.* The Department may also cooperate with other state agencies and compensate or be compensated by these agencies for services performed, as is done with

the federal grants under *s. 93.06(11), Stats.* Section *20.115(8)(g), Stats.*, allows the Department to accept gifts and grants to carry out the program activities or special projects for which the grants are made. The following gifts and grants were received in Fiscal 03/04.

**Table 6
GIFTS, GRANTS AND SPECIAL PROJECTS FY 03/04**

Source	Purpose	Amount
Fish & Wildlife Service	Eastern Prairie Fringed Orchid study	\$ 3,724
National Park Service	Water sampling in mussel habitat	\$18,000
Prairie Biotic Research	Eastern Prairie Fringed Orchid study	\$ 1,000
Department of Health & Family Services (provider for EPA)	Environmental Public Health Tracking grant	\$28,007

Fiscal Year 03/04 Expenditures by Program

Program expenditures and use of staff time are listed under each program area. While the Agrichemical Management Bureau tracks the total expenditures from each fund in detail, costs for individual programs within the Agrichemical Management Bureau are tracked based on staff time for each program area and a pro-ration of supply and service expenses. Most staff function in multiple programs on any given day. During one site visit, for example, an enforcement specialist may conduct a containment inspection, sample a fertilizer product, discuss an ongoing spill cleanup and review pesticide records. In the office, one staff person may go from feed label review to a call on worker protection issues then on to providing

health and safety training for pesticide staff or a staff meeting to develop a bureau workplan.

The program costs reported for each program are based on time reports kept by staff, multiplied by their respective salary/fringe costs and combined with each program's laboratory expenses. Supply and service costs that are not uniquely related to a single agrichemical program (such as lab expenses) are pro-rated across all these programs based on agrichemical staff hours spent in each individual program. For example, if 10% of agrichemical staff hours are spent on feed program activities, 10% of building rent, office supplies, phone charges, computer expenses, etc., would be attributed to the total cost of the feed program shown in this report.

The Agricultural Chemical Cleanup Program (ACCP) directs the cleanup of pesticide and fertilizer spills to minimize contamination of surface water, groundwater and the surrounding environment. The program also provides reimbursement for a portion of eligible cleanup costs incurred by the responsible persons. This program helps assure that spill cleanups are effectively conducted in a timely manner.

The program addresses both one-time spills, resulting from fires, traffic accidents, etc., and long-term spills resulting from daily handling practices of facility operations. The Legislature authorized the ACCP program in 1993, and it began operating in 1994.

Staff and Funding

ACCP staff include both hydrogeologists and engineers that manage technical aspects of the cases, environmental enforcement specialists that respond to spills, investigate contamination complaints and provide oversight on field activities, an auditor that reviews reimbursement applications and a program assistant that provides administrative support. During 2004 the program required 10.6 FTE staff and cost \$1,134,000 for salary, supplies and laboratory costs. These costs were all derived from the Agrichemical Management Fund.

ACCP reimbursements were financed by the Agricultural Chemical Cleanup Fund. Details on the balance of the fund can be found in the funding description for the Agrichemical Management Bureau.

Program Activities for 2004

Remediation: In 2004, we initiated 21 new cases and closed 33 cases bringing the total number of active cleanup cases to 304. In

addition, we responded to 46 spills in 2004, closed 30 of them, and closed 18 spill cases from previous years. Remaining open spill cases will be closed following completion of investigative and remedial actions and landspreading of contaminated soil.

Reimbursement: During calendar year 2004, we received 91 claims for reimbursement totaling \$3,664,676. The number of claims submitted the last couple of years has been slightly higher than in the past. We expect to see the annual number of claims submitted to remain at this higher level because of the new three-year deadline that went into place in 2000. This deadline required that costs older than three years be submitted or they would not be eligible for reimbursement.

We met with the Agricultural Chemical Cleanup Council four times during the year to review reimbursement applications and recommend reimbursement payments. We paid out a total of \$2,874,438 in reimbursement payments in 2004.

Emerging issues

We are continuing with the lead arsenate program that addresses contamination resulting from past applications of lead arsenate pesticides that were applied to orchards.

We are also overseeing the investigations occurring beneath the many mixing and loading pads sumps that were found to be leaking. The preliminary results from these investigations have shown significant levels of contamination exist beneath these sumps with groundwater oftentimes being impacted.

ACCP Remediation and Reimbursement Activities

Activity	Pre-1996	1996	1997	1998	1999	2000	2001	2002	2003	2004
Long-term cases generated	224	36	54	41	40	28	18	37	27	9
Total active long-term cases	112	125	153	177	198	220	234	268	295	304
Long-term cases closed	112	23	26	17	19	6	4	3	23	33
Total closed long-term cases	112	135	161	178	197	203	207	210	233	266
Spill cases generated	173	90	84	61	70	55	37	49	37	46
Spill cases closed same year as spill	-	50	58	38	53	38	32	36	21	30
Total spill cases closed each year	134	69	94	78	82	53	48	44	29	48
Running total closed spill cases	134	203	297	375	457	510	558	602	639	685
Spill cases transferred to long-term	36	5	6	2	5	3	0	0	0	0
Claims received	47	35	46	46	54	80	79	69	85	91
Amount paid out (dollars)	944,143	1,167,434	1,388,933	1,840,766	3,016,506	2,194,338	4,141,187	4,210,592	3,200,159	2,874,438

The Agrichemical Containment program prevents spills of bulk pesticides and fertilizers from contaminating soil and groundwater. This is done primarily through the use of containment structures. If a spill of a bulk pesticide or fertilizer were to occur, a containment structure (generally constructed of reinforced concrete) would catch the release so that it could be easily recovered.

The program includes bulk storage regulations and loading area containment requirements for non-bulk pesticide handling. Statutory authority is in *ss. 94.645 and 94.67-71, Wis. Stats.* Administrative rules for this program include *Chs. ATCP 32 and 33, Wis. Admin. Code,* and *ss. ATCP 29.45-48, Wis. Admin. Code.* These rules were first promulgated in 1988 and revised in 1993 and 1998.

The containment program relies on inspections, warnings, complaints and orders to assure compliance with the statutes and rules. Compliance with major rule provisions is relatively high, in recognition of the importance of these systems to prevent the need for costly cleanups.

Staff and Funding

The Agrichemical Containment program is funded by the Agrichemical Management Fund and the EPA grant. During FY 2001, inspection of containment facilities and enforcement of containment regulations required 3.6 FTE staff time and cost \$295,166 in staff and supplies.

New Program Activities

The table below summarizes inspections, warnings, complaints and orders over the past five years. Short bulk inspections were not used until 1995, and sump test inspections were a new inspection starting in 2003. The most significant problem found at facilities was the lack of liquid-tight mixing and loading sumps. This also explains the increase in written warnings issued by the department in 2003 and 2004.

Emerging Issues

The findings of the sump tests showed the sumps and mix/load pads were not adequately designed to meet the performance standards of the bulk rules. We started revising the rules in 2003 and continued the process through 2004, with the primary component of the rule revisions being minimum design standards for concrete mix/load pads and secondary containment structures. The proposed revision will strengthen the rules specific to discharges of agricultural chemicals to the environment. Many facilities that have undergone clean-up projects are becoming re-contaminated with fertilizer and pesticide compounds.

In 2004, we began a restructuring process for the Environmental Partners program. The goal of the program is to reduce the amount of agrichemicals that escape into the environment through a voluntary effort. The restructuring resulted from the limited number of voluntary participants in the program in the last couple years. The industry has taken on the role of recruiting and promoting the program in an effort to increase future participation.

**Containment Activities
1994-2002**

Activity	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Full bulk inspections	34	32	40	27	37	30	21	25	20	15	23
Short bulk inspections	NA	100	40	39	45	49	69	100	103	82	78
Mix/load inspections	9	30	9	8	10	15	8	11	14	6	8
Sump test inspections	NA	69	72								
Special orders	0	0	1	0	0	0	0	2	4	1	0
Complaints	3	0	0	1	0	0	1	2	4	0	0
Written warnings	10	47	16	60	23	10	22	8	18	27	29

Wisconsin Clean Sweep is the name of the program that resulted from the merger of the Department's very successful Agricultural Clean Sweep Program with the Department of Natural Resource's household hazardous waste (HHW) grants program. This merger became official in December 2004 with the publishing of the updated "Clean Sweep" rule, ATCP 34.

The program offers grants to municipalities for the collection and disposal of agricultural and household hazardous wastes. Counties and county-affiliated units such as regional planning commissions are eligible for both grants while cities, villages, towns, and all other entities are eligible for HHW grants. Grants are made available for temporary collections (one-day) or continuous collections (permanent facilities). Available grant amounts vary between \$12,000 and \$20,000 depending upon the grant request.

Wisconsin Clean Sweep improves environmental and human health protection by collecting unwanted pesticides, agrichemicals, and household chemicals for safe, legal disposal before they cause problems. Farms (both active and abandoned), households, and certain businesses, called Very Small Quantity Generators (VSQGs) are eligible to use program services. Only a small range of chemicals cannot be accepted by program waste haulers.

Grant funds are primarily used to collect, package, transport, and dispose hazardous waste at licensed, high temperature incinerators or at fuels blending operations across America. The resulting ash or residue is stored at Subtitle C, hazardous waste landfills. Onyx Environmental Services is the State of Wisconsin's hazardous waste hauler for temporary collections. Municipalities with permanent facilities are allowed to select their own vendor.

Funding and Staff

In 2003, funding for clean sweep grants in Wisconsin was transferred to the Recycling Fund. Prior to this time, the Department funded

Agricultural Clean Sweeps through its Agrichemical Management Fund and the DNR funded its HHW grants program through an interagency funds transfer from DATCP. As a result of this 2003 fund change, the sum total of the two previous grant authorizations, \$710,400, was shifted to the Recycling Fund.

In 2004, DATCP spent \$829,800 for direct grant aids to Wisconsin municipalities. Of this total, \$400,198 was spent on Ag grants and \$429,602 for HHW grants. The Ag grant total includes \$14,923 in assistance to businesses for the collection of unwanted agricultural pesticides. In receiving the above grant aids, Wisconsin municipalities provided \$516,069 in matching monies or assistance.

Through a long term arrangement with the DNR, DATCP has been providing local assistance monies to Great Lakes Counties with Ag grants. In 2004, the Department provided an additional \$1,000 in assistance to 18 counties for a total of \$18,000.

The program used 1.6 FTE staff in the Agricultural Chemical Management Bureau, with staff and supply costs totaling \$130,883 and derived from the ACM Fund. A Soil and Water Resource Management section staff member helps to coordinate clean sweep activities with the state's Priority Watershed Program.

Program Activities for 2004

2004 was an incredibly active year for the program both operationally and administratively. In addition to taking care of normal grant management activities for 2004, it was necessary to undertake a host of activities associated with the merging of Ag Clean Sweep with the DNR's HHW program. One of the first decisions made in the spring of 2004 was to re-name the Department's clean sweep effort as "Wisconsin Clean Sweep."

Foremost among 2004 merger activities was the updating of the Clean Sweep rule, ATCP 34, which provides guidance for all operational and fiscal management activities of the program. This rule work began in November 2003 with the creation of an 18-member rule Advisory Committee. This committee assisted in the drafting of a proposed rule which went to hearing in May 2004 and was ultimately adopted by the DATCP Board in October 2004.

In the midst of rule merger, a number of important decisions were made. First, DATCP took over the fiscal and administrative management of all 2004 HHW grant awards of the DNR. With greater budget flexibility, DATCP was able to extend 2004 HHW grant awards by an additional 12 applicants. Through June 30, 2004, DATCP was responsible for the management of 23 HHW grants which were initially submitted to the DNR for funding.

Second, to provide “catch up” opportunities between the two programs and improve grant coordination, DATCP decided to offer a supplemental grant round in fall 2004. Nearly \$130,000 was reserved for this grant round and DATCP awarded 9 additional HHW grants to Wisconsin municipalities.

Finally, in spring 2004, plans had to be made for the 2005 Request for Proposals (RFPs). However, because it was not certain that the new rule would be approved in time for 2005 awards, a number of awkward contingencies had to be built into the process. Rule adoption in October 2004 eliminated these concerns.

In addition to 32 HHW grant awards, the Department also managed 28 Ag Clean Sweep awards during 2004. Fifteen counties received both HHW and Ag grant awards during 2004. Five non-county entities were awarded HHW grants in 2004. Tables 1 and 2 provide a complete breakdown of grant activities by grant type and municipality.

2004 was a normal year for agricultural chemical collection. The Program collected a total of 289,231 pounds of chemical from 1,124 participants, both farmers and businesses. These numbers are generally consistent with activity from the previous three years, although the number of participants increased by about 200 from 2003 levels. However, it is worth noting that this was the highest annual weight collection sum in the Ag Clean Sweep Program’s history. In 2004, 32 businesses used the program while 36 used the 2003 program. Average weights per participant remained nearly identical between 2003 and 2004: 257 pounds per participant in 2004 vs. 263 pounds per participant in 2003.

The Department has no standards to rate or evaluate 2004 HHW activity. However, it appears that our results are generally consistent with the profile of HHW collections in Wisconsin. The Department served 11,916 residents who dropped off 656,724 pounds of unwanted chemicals. This averages 55 pounds of chemicals per participant. Going into 2004, it was expected that HHW collections would far surpass Ag collections in terms of activity, but that residents would bring in far less per person. On average, HHW collections are deemed successful if 2 to 4 percent of area residents use program services.

DATCP continued to work in cooperative and successful ways with the Wisconsin Fertilizer and Chemical Association (WFCA) in 2004. These efforts included providing oversight to their annual chipping and recycling program for 2-½ gallon pesticide containers. WFCA collected pesticide jugs for recycling at 60 dealer sites in 2004 which resulted in the chipping of 147,000 pounds pesticide plastic. They did not conduct a mini-bulk collection program in 2004, but do have plans to do one in 2005.

Changes

Clean sweep has undergone significant change over the past two years. Wisconsin has gone from two programs operated by different agencies to a single program which manages two grants in full coordination. These changes have been positively received by the entire clean sweep community. Wisconsin municipalities and hazardous waste organizations all believe the resulting merger has improved the efficiency of the clean sweep grant process while making it easier to protect Wisconsin's environment and citizens. While some small administrative changes may be needed over the next two years, there is concurrence that the initial merger has gone very well indeed.

One change worthy of comment is the increased money going to HHW collections in Wisconsin. Prior to 2004, the DNR only committed \$150,000 in funding to HHW collections except for those years where Menard's penalty money

was used to supplement the \$150,000. In the first year of the combined program, DATCP was able to provide an additional \$280,000 in funds to HHW grants, and it is expected that this trend will continue into the future. This increased support of HHW funding is coming just as municipalities face significant local budget problems. The merger will likely make it possible for an additional 20 or more municipalities to conduct clean sweep grants every year over the old program.

Finally, one of the other major changes is the increased recognition of the need to provide collection services for businesses. Prior to 2004, HHW grantees did not have to consider the needs of Wisconsin businesses. DATCP now requires all sites to either provide direct services or information on where such services can be provided.

2004 Wisconsin Clean Sweep Program - Ag Data Summary

County	Sweep Date	Farmers Served	Businesses Served	Pounds-Business	Pounds-Farmers	Total Lb. Collected	County Cost	Farm Cost	Business Cost	DATCP Cost
Adams*	6/19	32	0	0	7,587	7,587	\$4,067	\$12,203	0	\$12,203
Buffalo	5/12	16	1	4,536	2,857	7,393	\$1,210	\$3,832	\$1,565	\$5,397
Calumet*	5/15 – 16	32	1	14	5,929	5,943	\$1,500	\$8,518	\$18	\$8,536
Columbia*	6/25	25	2	262	5,377	5,639	\$2,105	\$11,052	\$328	\$11,380
Crawford	8/21	26	1	31	9,701	9,732	\$750	\$13,158	\$75	\$13,233
Dane #	May- Oct.	20	10	7,317	3,364	10,681	\$3,015	\$8,017	\$6,751	\$14,768
Dodge	9/17 – 9/18	37	0	0	4,644	4,644	\$1,739	\$9,135	0	\$9,135
Door*	5/21	48	2	203	14,882	15,085	\$5,062	\$15,997	\$253	\$16,250
Dunn #	5/13; 9/16	38	0	0	10,141	10,141	\$3,042	\$18,422	0	\$18,422
Green	5/21 -5/22	82	0	0	9,067	9,067	\$6,360	\$12,913	0	\$12,913
Green Lake*	8/19 – 8/20	89	1	539	27,675	28,214	\$12,300	\$23,010	\$420	\$23,430
Jefferson #	March-Oct.; 7 dates	67	3	194	33,620	33,814	\$13,912	\$31,057	\$193	\$31,250
Juneau	9/23	27	0	0	3,098	3,098	\$1,368	\$7,180	0	\$7,180
LaCrosse #	May-Dec.	29	3	537	3,908	4,445	\$3,619	\$10,165	\$833	\$10,998
Manitowoc	5/14 - 5/15	15	1	172	6,645	6,817	\$2,249	\$8,450	\$215	\$8,665
Marathon* #	Jan.-Dec.	11	0	0	6,045	6,045	\$11,739	\$10,216	0	\$10,216
Monroe	9/23	26	0	0	14,696	14,696	\$750	\$17,919	0	\$17,919
NWRPC * # +	Jan.-Dec	54	1	66	17,289	17,355	\$4,115	\$32,755	\$69	\$32,824
Oneida* # ++	Jan.-Dec.	53	0	0	7,956	7,956	\$3,024	\$18,338	0	\$18,338
Pierce**	4/16-17;	122	0	0	11,228	11,228	\$2,693	\$21,981	0	\$21,981
Pepin	9/18	12	0	0	1,469	1,469				
Polk #	6/7; 9/25	72	0	0	20,162	20,162	\$3,634	\$21,123	0	\$21,123
Richland	9/22	20	0	0	2,629	2,629	\$261	\$4,960	0	\$4,960
St. Croix #	5/15; 9/18	17	1	1,303	5,010	6,313	\$3,033	\$19,529	\$1,101	\$20,630
Vernon	9/24	56	0	0	7,519	7,519	\$737	\$14,013	0	\$14,013
Waukesha* #	May – Oct.	4	0	0	2,799	2,799	\$5,100	\$6,840	0	\$6,840
Waupaca*	9/15	14	0	0	1,785	1,785	\$1,403	\$4,444	0	\$4,444
Winnebago*	4/29	14	4	8,748	3,207	11,955	\$2,276	\$7,209	\$2,632	\$9,841
Wood #	5/15; 9/11	34	1	2,277	12,743	15,020	\$7,435	\$12,839	\$470	\$13,309
TOTALS		1,092	32	26,185	263,032	289,231	\$108,498	\$386,275	\$14,923	\$400,198

*Great Lakes counties - each received extra \$1,000 from DNR Great Lakes Fund dollars. #Permanent facilities or season-long collections. +The Northwest Regional Planning Commission served Ashland, Bayfield, Burnett, Douglas, Iron, Price, Rusk, Sawyer, Taylor, & Washburn Counties. ++Oneida served Florence, Forest, Lincoln & Vilas Counties.

2004 Wisconsin Clean Sweep*: HHW Municipal Data Summary

Municipality	Sweep Date	Residents Served	Pounds Collected	Municipality Cost	DATCP Cost
Barron County	10/22 – 10/23/04	230	12,660	\$4,173	\$12,521
Burnett County-NWRPC	6/15/04 & 8/14/04	150	8,580	\$13,530	\$15,000
Caledonia, Village of	6/19/04	174	12,229	\$9,142	\$15,000
Dodge County	9/17 – 9/18/04	408	20,264	\$15,429	\$15,000
Door County	5/22/04	520	30,224	\$20,426	\$25,657
Douglas County-NWPRC	6/9/04 & 6/12/04	247	13,991	\$13,730	\$15,000
Dunn County	5/13/04	205	14,506	\$5,437	\$15,000
Eau Claire County	9/11, 10/9, & 11/ 13/04	470	28,032	\$3,812	\$15,000
Green Lake County	8/19 – 8/21/04	592	54,546	\$29,909	\$24,000
Jefferson County	March – Oct., 2004	319	22,002	\$26,773	\$15,000
LaCrosse County **	11/03 – 12/03	902	54,805	\$36,249	\$30,000
Lodi, City of	6/26/04	121	5,214	\$2,805	\$11,222
Manitowoc County	5/14 – 5/15/04	744	45,806	\$28,154	\$15,000
Marquette County	6/12/04	152	13,853	\$9,760	\$15,000
Milwaukee Metro Sewage District	4/23 & 4/24/04	1,905	136,504	\$67,327	\$15,000
Milton, City of	5/8/04	91	3,391	\$3,231	\$12,625
Oneida County	April – June, 2004	205	14,305	\$5,579	\$15,000
Outagamie County	9/18 - 10/16/04	230	12,826	\$3,720	\$10,680
Pepin County	4/16 - 4/17/04	49	4,102	\$1,390	\$4,976
Pierce County	9/18/04	219	14,189	\$9,731	\$7,620
Portage County	10/22/04	155	9,147	\$13,188	\$17,600
St. Croix County	5/14 - 5/15/04	254	13,731	\$5,589	\$15,000
Sturtevant, Village of	6/19/04	120	6,284	\$2,120	\$7,923
Walworth County	6/4 – 6/5/04	518	35,151	\$38,131	\$15,000
Washburn County-NWRPC	6/15/04 & 9/11/04	172	11,246	\$14,008	\$15,000
Waterford, Town of	10/11/03	73	4,228	\$2,228	\$6,594
Waukesha County	6/5 & 6/19/04	510	19,035	\$11,546	\$15,000
Waukesha, City of **	Sept. 03 – Dec. 2004	1,825	19,302	\$3,776	\$12,040
Winnebago County	4/16/04	245	9,834	\$3,127	\$9,063
Wood County	9/11/04	111	6,737	\$3,551	\$12,081
TOTALS		11, 916	656,724	\$407,571	\$429,602

*Data is from two grant solicitation periods. The Department offered an annual grant request and then held an additional one for Fall 2004 to help equalize payments between the newly merged household and agricultural clean sweep programs. ** Municipalities who received funds in both grant periods.

Compliance and Investigation

Wisconsin citizens have the right to expect that pesticides will be used properly, that animal feed products are safe and wholesome and that the seed and fertilizer they purchase will be suitable for use. When problems are suspected, citizens can be assured that their concerns will be properly investigated and addressed. The Agrichemical Management Bureau investigates a wide variety of complaints related to feed, fertilizer, soil and plant additives, seed, lime and pesticides each year. Pesticide complaints are related to distribution, use, disposal and environmental contamination.

Program Activities for 2004

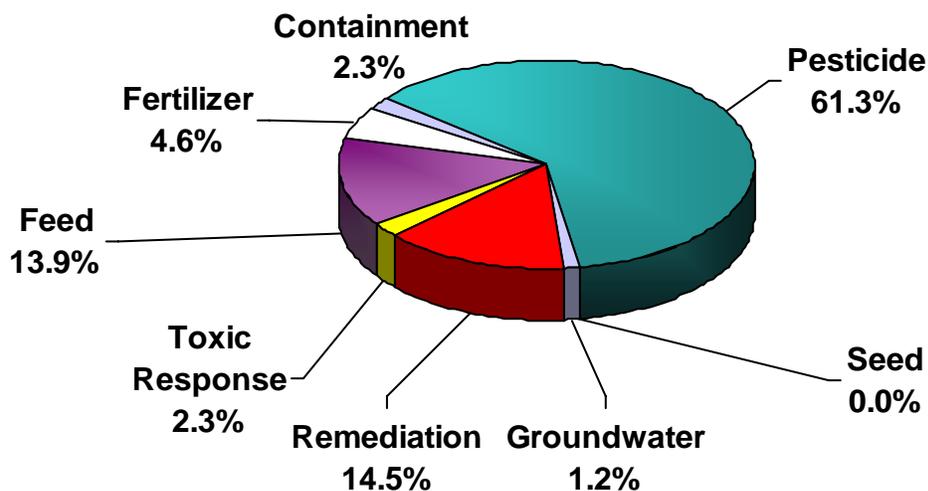
In 2004 the Bureau investigated 172 complaints. Pesticide complaints were by far the largest area of activity. Of the total complaints, 106 cases involved potential violations of *ch. ATCP 29, Wis. Adm. Code*, Wisconsin's pesticide use and control rule. During 2004, there were two investigations of pesticides exceeding health standards in groundwater and 25 new site-remediation cases.

Staff and Funding

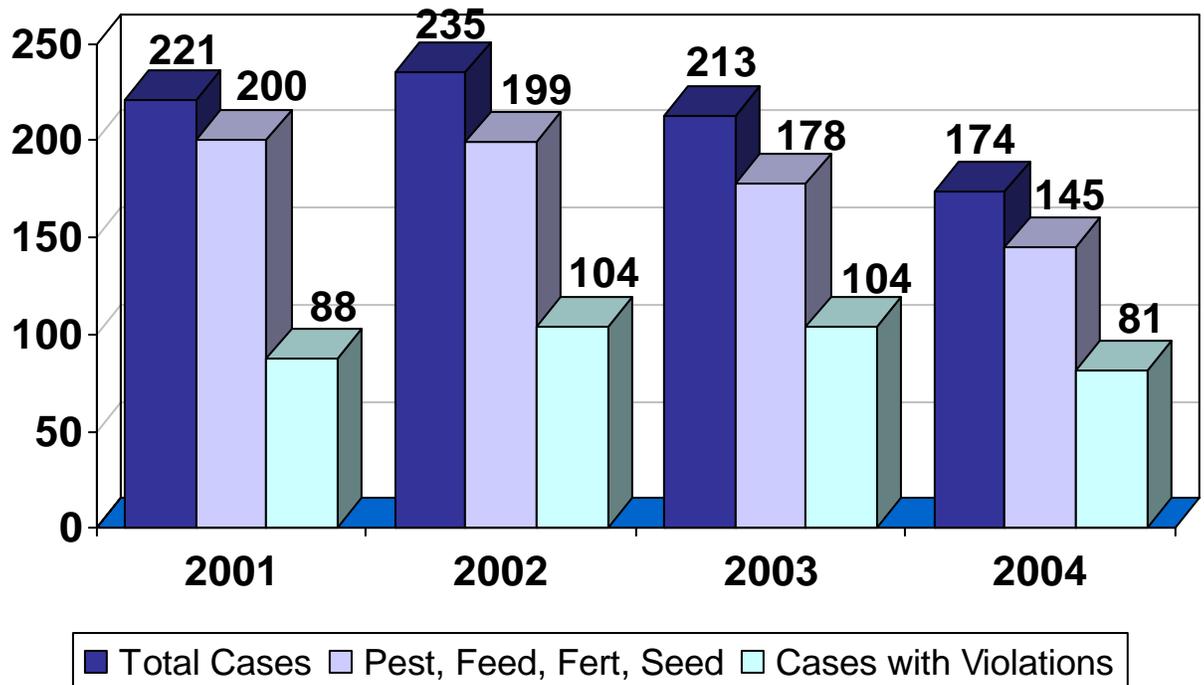
The Compliance and Investigation section had 15 field staff who conduct inspections and investigations for the Agrichemical Management Bureau. Formal enforcement actions are prepared by staff of this section. While the section includes 19 staff, the FTE time and program costs are included within the totals for each Agrichemical Management Bureau program, based on the time spent conducting these inspections, investigations and compliance activities.

Complaints of pesticide misuse were 30 percent lower than in 2003. The graph on the following page provides a historical summary of cases and violations. The accompanying map on page 25 shows the geographic distribution of complaints in Wisconsin for 2004 and the last five years. If groundwater and remediation cases are excluded from the total, there were 145 pesticide, feed, fertilizer and seed cases in 2004, 33 fewer than in 2003.

2004 Program Activities



Violation Rates 2001 - 2004



Violations were documented in 81 or 56 percent of the cases investigated in 2004. This compares to the violation rate of 58 percent in 2003.

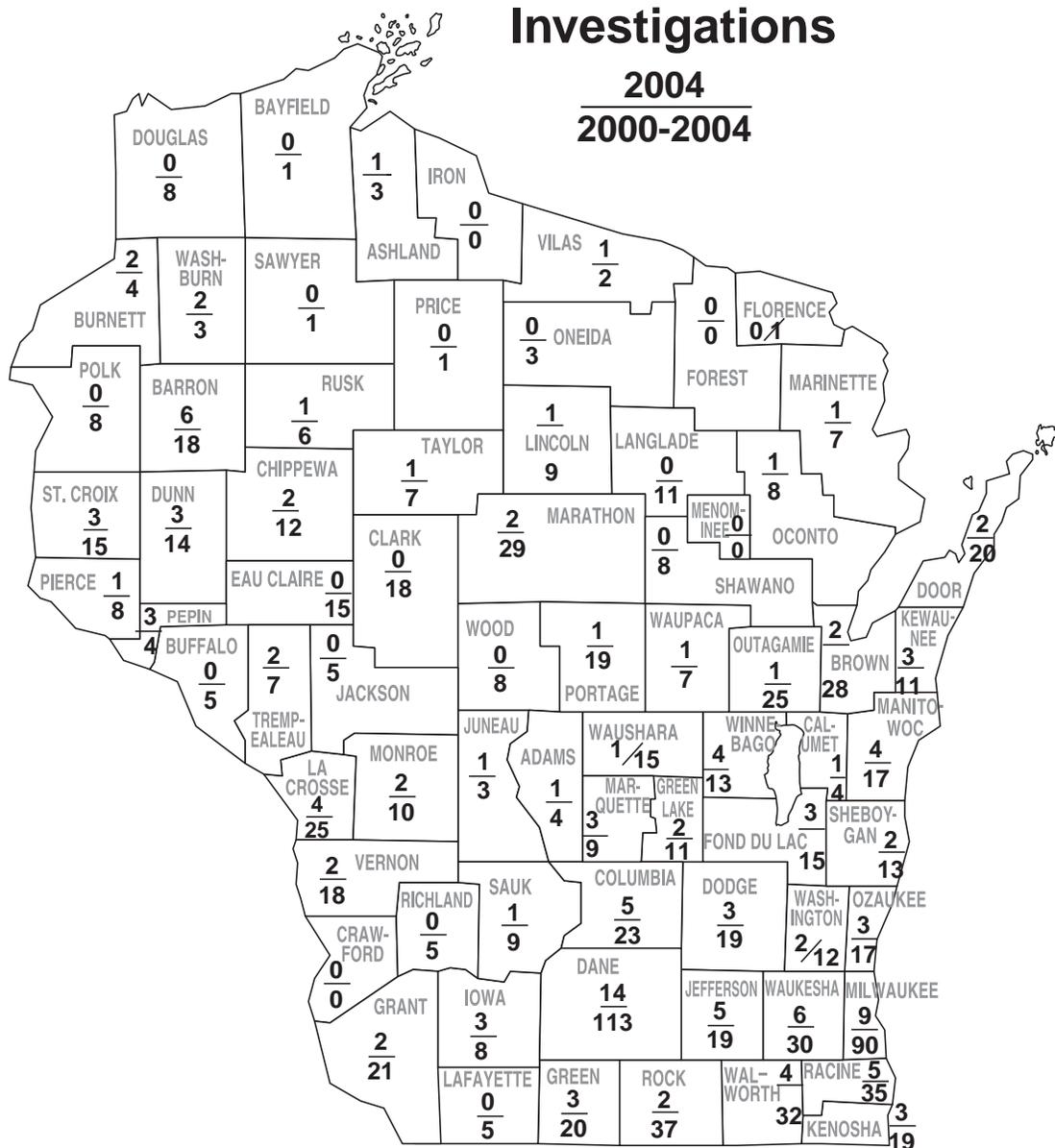
Violations may result in actions ranging from verbal warnings issued in the field to court action invoking civil or criminal penalties. Pesticide violations involving federal requirements also can be referred to the US EPA for further action. The Division assigns the highest response priority for investigating complaints involving human exposure to pesticides. In 2004 we investigated four cases involving potential human exposure. We found

violations in two of these cases resulting in two civil forfeiture actions.

Out of the 34 complaints of alleged pesticide drift, 13 investigations documented violations involving drift of pesticides in 2004. In 2003 there were 47 cases of alleged drift, with 29 violations found. Drift allegations are down by 28 percent, and drift violations are down 56 percent for 2004. Drift is the movement of pesticides away from target areas caused by wind, volatilization, or other factors. This is the third straight year where we have seen a significant reduction in drift complaints and violations.

Investigations

2004
2000-2004



Aerial applications are highly visible, leading to more frequent complaints than ground applications. During 2004, we responded to three complaints involving the aerial application of pesticides. We determined that violations occurred in one of these cases. One civil forfeiture action is pending for this case.

The division serves as DATCP's coordinator for toxic response investigations. These cases involve illness or death of food producing animals from unknown causes. In 2004, we

responded to four toxic response cases of unexplained animal deaths. In one case possible poisoning of horses was ruled out, and the horses involved were found to have had incomplete vaccinations for Equine Encephalitis. One case involved accidental exposure to the pesticide Sodium Chlorate, one involved urea poisoning from abandoned fertilizer and the final case was prompted by an incorrect lab result for metabolites suspected to be from creosote. On visiting the site in

question it was found that no animals had died or were compromised.

The table below summarizes case investigations and violation rates for the major categories of

pesticide use. The table was expanded in detail in 1999, providing more information on the categories of pesticide cases we investigated.

Pesticide Violations 2000-2004

Type of Case	Number of cases (percent with violations)				
	2000	2001	2002	2003	2004
Aerial – Airplane	9	9	7	1	1
	56%	44%	29%	0%	100%
Aerial - Helicopter	1	1	1	0	3
	100%	Pending	0%	0%	0%
Greenhouse - Nursery	1	2	1	1	1
	0%	100%	100%	0%	100%
Ground Application-Ag	66	55	37	37	26
	35%	47%	43%	57%	54%
Improper Disposal	12	5	8	8	6
	50%	60%	70%	87%	100%
Other Non-ag	9	6	18	19	12
	44%	33%	78%	47%	50%
Poor Operating Practices	3	3	7	9	4
	100%	100%	71%	67%	50%
Right of Way	2	2	0	3	3
	50%	0%	0%	67%	0%
Structural	17	13	17	7	12
	35%	38%	65%	100%	92%
Turf and Ornamental	66	69	48	51	35
	50%	46%	56%	61%	66%
Vandalism	11	0	0	5	1
	64%	0%	0%	60%	0%

Actions Taken in 2004

Action Taken	Number of Actions
Informational letters	6
Letter of Concern	6
Criminal Action	9
Warning Notice – Investigator	36
Warning Notice – Office	1
Administrative Order	8
Civil Forfeiture Action	27
Referred to US EPA	2
Administrative Conference	37

2004 in Review

The spring of 2004 was much wetter and cooler than normal. The end of April was mild and warm, and fieldwork began on schedule. But weather conditions in May and into June were very poor for planting activities. By the end of July producers were concerned over the late developing corn and soybeans, but a much warmer than usual September and October extended the growing season so that normal or near normal yields were achieved. Pesticide misuse cases were lower than projected, and the decline in cases may be due to a significant reduction in agricultural drift cases. Either the weather kept people indoors, or we are experiencing a decline in actual drift incidents. Many fields were ultimately left unplanted, and many fields that were planted did not receive typical post emergent pesticide applications.

Feed cases saw a significant increase over projected levels leading to an increase in

resources committed to the feed program in our mid-year workplan corrections. During January of 2004 we became aware of the misuse of steamed bone meal in feed rations, a prohibited animal protein material. This led the department to obtain distribution records from the two suppliers of steamed bone meal and lead to inspections at over 150 locations. Five firms were found to be failing to follow the federal restrictions on the use of prohibited protein materials, and have been the subject of misdemeanor criminal charges. Three have been completed and the final two are pending action in court. Fortunately the problems identified related to failing to have written procedures in affect to require sequencing of feeds, and no cattle were found to have received compromised feed products.

The section began and ended 2004 with no vacancies.

The Program

DATCP's Endangered Species Habitat Program developed from EPA's need to protect endangered and threatened (= listed) species under the Federal Insecticide, Fungicide and Rodenticide Act and the federal Endangered Species Act.

As the lead pesticide agency in Wisconsin, DATCP conducts a voluntary interim state program for protecting listed species and their habitats while EPA is developing its national enforceable program of label changes and county bulletins.

DATCP's protection activities include the following: provide information about species and habitats to landowners, neighbors, managers, industry, agencies and others; negotiate and follow up on pesticide protection plans; assist with other pesticide related protection actions; and monitor species and habitats. We plan to continue our state program, though possibly with some hybridization of EPA's program.

Program help comes from landowners and other volunteer individuals as well as various agencies, non-profits and other groups. U.S. EPA sponsored a summer assistant and related expenses again in 2004. U.S. Fish and Wildlife Service funded volunteer expenses and field supplies/equipment for the past five seasons. The National Park Service paid for analyses of water and sediment samples taken in freshwater mussel habitats in 2003 and 2004. Prairie Biotic Research Inc. donated funds for a special project in eastern prairie fringed orchid habitat in 2004.

Program Highlights

Native freshwater mussels: Twenty species are listed in Wisconsin and water quality is one concern. We sampled waters in the St. Croix watershed, a native mussel stronghold, for pesticide residues and invertebrate life in 2003 and 2004. Residues were few and in low

amounts. Invertebrate life yields information about water quality, which varied from fair to good. We began promoting the idea of volunteer monitoring of these streams in schools and communities.

Eastern prairie fringed orchid: This was our 8th year of coordinating the monitoring of this species found in wet-mesic prairies and other habitats. These sites are, in many cases, surrounded by drainage and spray activities as well as traffic. They may receive excessive runoff during rain events.

We published a booklet of our efforts on behalf of this species written by owners, volunteers and others. The booklet also includes our analyses of the species' status and recommendations and was distributed to workers and interested parties. We also distributed more caging materials to reduce deer predation of this species and presented a paper at the North American Prairie conference.

Prairie bush clover: This is an agriculture-impacted species found in pastures and sites pastured in the past. We installed our first fencer to exclude cattle from the portion of the pasture where this species had last been observed. Since there are only a handful of reasonably good sites in Wisconsin, we hoped to prevent young bush clovers from being grazed and enabled to produce seed. We monitored the site regularly but no bush clovers were found inside the fenced site this first year. With landowners' blessings we will continue this project one or two more seasons.

Group education: We presented a second workshop about Wisconsin species and habitats to rights-of-way managers in Dunn and surrounding counties. Seventeen professionals and various other interested parties participated. We are planning the next workshop for aerial applicators.

Feed

The Feed program's purpose is to assure the public and manufacturers that animal feed (including feed ingredients) is unadulterated, meets label guarantees, and is safe and effective. This is accomplished by feed mill inspections and surveillance sampling conducted by our field investigators, under authority of the Wisconsin Feed Law (*s. 94.72, Wis. Stats.*) and *ch. ATCP 42, Wis. Adm. Code.*

Staff and Funding

The feed program requires 6.0 FTE staff time. Their work includes sampling, performing field investigations, issuing licenses, collecting and auditing tonnage fees, and conducting education and information outreach activities with the industry. The program spent \$780,400 in staff, supplies and laboratory costs from the ACM Fund and the US Food and Drug Administration (FDA) inspection contract.

Feed Program Revenue 2001 - 2004

	2001	2002	2003	2004
License fee	\$25	\$25	\$25	\$25
Total licenses	1,286	1480	1260	1,300
Total license fees	\$32,150	\$37,128	\$31,570	\$32,483
Tonnage fee	\$0.15	\$0.15	\$0.25*	\$0.25
Total tonnage fees	\$364,391	\$362,213	\$648,785	\$667,501
Total revenue	\$396,541	\$399,341	\$680,355	\$669,984

*Fee holiday ended for feeds sold after December 2002

Program Activities for 2004

The feed industry's size has been fairly stable, showing little change in the numbers of licensed manufacturers and distributors or tonnage distributed. During 2004, 1,300 firms were issued commercial feed licenses. These firms distributed a collective, 3.0 million tons of commercial feed and feed products.

We continue to monitor compliance through Good Manufacturing Practices (GMP) inspections supported by product sampling. The GMP inspections are a detailed review of systems and practices that are essential to maintain safety of medicated feeds and medicated feed ingredients. The inspection process evaluates a firm's facilities and equipment, and the receipt, use and distribution of medicated feeds and feed ingredients.

During GMP inspections, samples of feeds and components may be collected for analysis. These samples are examined for drug potency, and contaminants.

Compliance activities and special projects:

In 2004, we completed GMP inspections at 125 Wisconsin medicated feed producers. Of these, 45 firms were identified as being in violation of the Wisconsin Feed Law, (*Wis. Stats. § 94.72*), Chapter ATCP 42, *Wis. Adm. Code*, or FDA's medicated feed regulations. The noted violations were evenly split between operating outside of the GMPs and improperly labeling medicated feeds. Eight of these documented firms were identified as distributors of feeds that were defined as adulterated. These adulterated feeds were either, mislabeled by not including adequate directions for use, precautionary

statements and other medicated feed information or the products contained an unapproved drug or another potentially harmful substance. This type of inspection will continue to be a priority for 2005. In support of the GMP inspection program, we collected and analyzed 206 feed samples. These samples assist in the assessment of a facilities ability to produce feeds that are not misbranded or adulterated.

FDA Inspection Contract: Firms that use certain types of medications and antibiotics in feed products are required to hold a medicated feed license with the US Food and Drug Administration (FDA). The DATCP has a contract with FDA to inspect these mills and is reimbursed by FDA. Eight firms were inspected under the 2004 FDA medicated feed mill contract and we found no significant violations. In addition to the inspection of medicated feed manufacturers, the department has contracted with FDA to inspect 180 feed manufacturers for compliance with 21 CFR 589.2000, Animal Proteins Prohibited from Use in Ruminant Feeds. This federal regulation is commonly known as the BSE Feed Ban. In 2004, we exceeded the contract numbers by 28 inspections. These inspections also serve as outreach and education activities. Wisconsin firms continue to demonstrate an excellent working knowledge of the regulation. After the recognition of BSE in North America during 2003/2004, these inspections served as

verification that prohibited animal proteins are not being used to feed ruminant animals including deer and elk.

Emerging Issues

With the confirmation of Bovine Spongiform Encephalopathy (BSE) in Canada and the United States, it will continue to be an issue for the livestock and feed industries. The identification of BSE and CWD, another form of transmittable form of spongiform encephalopathy effecting cervid, draws attention to the impact that can be made from a foreign disease of this nature. The feed program will continue to monitor for compliance of 21 CFR 589.2000, securing the ban of mammalian proteins from ruminant animal feeds. In addition, feed program staff will expand the scope of inspection for compliance with the feed ban to include feeders of ruminant animals, dairy farms and deer farms in particular. Feed program staff will continue to work with other department personnel to develop, test and implement response plans to protect the state's animal industries from potential bio-terrorist attacks and foreign animal disease outbreaks. Concerns with antibiotic resistance in treatment of livestock and human health, is also propelling our continuing investigations into the illegal use of medicated feeds.

Fertilizer/Soil or Plant Additives/Lime

The DATCP is responsible for enforcing the Wisconsin Fertilizer and Soil and Plant Additive Laws and rules (Wis. Stat §§ 94.64 and 94.65, and Wis. Adm. Code ch. ATCP 40), and the Liming Materials Law and rule (Wis. Stat. § 94.66, and Wis. Adm. Code ch. ATCP 41). This program regulates agricultural, household, commercial lawncare, and athletic turf fertilizer and soil or plant additives. The primary goal of the program is to prevent false or misleading claims and guarantees in the distribution of these products. Manufacturers, labelers and distributors of these products are required to be licensed and product labeling must be approved and/or permitted before distributed into the state. The label review and permitting process ensures that products sold in this state are efficacious, useful and do not mislead the consumer. Fertilizer products are also randomly sampled and analyzed to ensure that the products meet their label guarantees, and blending facilities are inspected in order to achieve compliance with the regulations.

Staff and Funding

The fertilizer, soil-or-plant additive and lime programs collect revenues as described in the Agrichemical Management Bureau summary. The numbers of licenses, permit applications and tons of products distributed in past years are reported in the following tables. In 2004, these programs required 2.9 FTE staff with total staff,

supply and lab costs of about \$314,622. The program was funded from the Agrichemical Management Fund.

Program Activities for 2004

License numbers have remained relatively stable in recent years. We continue to see ownership changes through purchases and mergers. The Department is seeing an increase in the number of microbial, non-nutrient and low analysis products.

Fertilizer and soil or plant additive permit applications increased by nearly 50 percent since 2001. Fertilizers that were approved included homeowner lawn & garden fertilizers, golf course/athletic field fertilizers, and potting soils with fertilizers. Permitted soil or plant additive products primarily include wetting agents and surfactants designed to alleviate local dry spot problems found on high-maintenance turfgrass settings such as golf courses and athletic fields.

Wisconsin fertilizer manufacturers reported distribution around 1.33 million tons of fertilizer. This is a slight increase from the previous four years. The fertilizer grade of 9-23-30 remains the most common mixed fertilizer distributed in Wisconsin. This grade is typically used as a starter fertilizer on corn, but can be used for other crops.

Fertilizer Program 1993-2004

Year	Number of Licenses	Permit Applications	Tons Sold
1996	577	126	1,278,977
1997	577	131	1,363,870
1998	523	107	1,330,810
1999	577	134	1,431,090
2000	581	105	1,282,136
2001	549	156	1,228,132
2002	524	188	1,284,386
2003		285	1,225,888
2004	540	253	1,338,695

Soil and Plant Additive Program 1993-2004

Year	Number of Licenses	Permit Applications	Tons Sold
1993	16	62	671
1994	39	33	100
1995	48	13	2,652
1996	42	34	6,365
1997	36	29	2,384
1998	39	8	4,413
1999	44	18	3,922
2000	43	42	3,598
2001	50	25	8,040
2002	44	57	6,292
2003		91	
2004	63	99	

Lime Program 1993-2004

Year	Number of Licenses	Tons Sold
1993	111	1,152,374
1994	119	1,390,739
1995	115	1,160,664
1996	107	1,187,300
1997	107	1,380,466
1998	96	1,475,032
1999	106	1,411,663
2000	93	1,132,020
2001	91	1,071,647
2002	101	1,139,251
2003	92	1,147,250

In 2004, department's laboratory staff analyzed 242 fertilizer samples (28 liquid fertilizer samples, 48 bagged fertilizer samples and 166 bulk fertilizer samples). Laboratory results indicated that 16 percent of these samples did not meet their label guarantees.

Laboratory analysis indicated that 19 percent of the bagged samples did not meet their label guarantees. Of the liquid samples, 7 percent did

not meet their label guarantees. 17 percent of dry bulk fertilizer samples did not meet label guarantees. The grades of 9-23-30, 19-19-19, and 5-24-42 were the majority of the mixed grades sampled.

Compliance Actions

In 2004, two fertilizer blending facilities entered into Compliance Assurance Agreements with the department in an effort to identify and

correct their below compliance standard of mixed fertilizer. The firms identified potential problems, and are in the process of repairing or replacing blending equipment and also implementing a quality assurance program for 2005. These corrective steps are intended to result in significant improvements in meeting label guarantees and to ensure that department will not need to take further enforcement actions against the blenders.

Emerging Issues

DATCP has completed the revision *Ch. ATCP 40 – Fertilizers and Related Products* in 2004 and will continue the rule making process in 2005. The rulemaking will completely repeal and replace the current rule. Most of the existing content remains, but standards and procedures are clarified. Additional content will be pulled from statute and some areas that are only briefly mentioned will be expanded. ATCP 40 is proposed to exempt federally approved organic products labeled solely for organic production from the permitting

requirements. It will also exempt non-packaged manipulated manure from license and tonnage requirements provided it is distributed to land that is under a nutrient management plan. The revision also includes heavy metal standards that limit the amount of heavy metals in fertilizers and soil-and-plant additives.

In 2003, a working group was established to develop a new pro-active compliance strategy. The group reviewed strategies for a quality assurance program where blenders would take steps prior to the start of the season to ensure that they are capable of producing high-quality mixed fertilizers. The results of this working group were reviewed in 2004 and a document that could be used by industry as well as the department in reviewing blending practices at a facility was finalized and used at a few sites that were inspected. It is the goal of the program to implement a self-sampling and quality assurance program at all facilities.

Pesticide Applicator Certification/Licensing

The DATCP is responsible for administration of the state's pesticide applicator certification and licensing program. The related licenses and permits include:

- Business location license - required for any business making for-hire pesticide applications.
- Individual commercial applicator license - required for persons applying any pesticide on a for-hire basis, excluding janitorial use of sanitizers, disinfectants and germicides, and any person using a restricted-use pesticide as a commercial applicator.
- Veterinary clinic permits - required if a clinic uses pesticides in animal treatment.
- Restricted-use pesticide dealer license - required for pesticide dealers selling restricted-use pesticides.
- Commercial certification - required for anyone who: directs the use of a pesticide application and mix/load operations; uses pesticides or performs mix/load operations on a for-hire-basis. In addition, commercial certification is required for anyone who directs the use of a restricted-use pesticide application and restricted-use pesticide mix/load operations; uses restricted-use pesticides or performs restricted-use pesticide mix/load operations, on a not-for-hire basis.
- Private certification - required for anyone who uses or directs the use of any restricted-use pesticide for the purpose of producing an agricultural commodity on property owned or rented by the person or the person's employer.

Staff and Funding

Funding is received through the Agrichemical Management Fund and the cooperative agreement with the US EPA. During 2004, the Certification and Licensing Program required 3.6 FTE staff, many of which were limited-term employees who worked during critical time periods for re-licensing and certification. Staff

and supplies costs for this program totaled \$218,890 and were derived from the ACM Fund and the US EPA grant.

Program Activities for 2004

Commercial for-hire pesticide applicators and handlers must be both licensed and certified, whether they are using restricted-use or general use pesticides. In 2004 there were 5,173 commercial applicators-for-hire licensed with DATCP. The licenses must be renewed each year, but the certification exam per category, is taken every five years. Commercial applicators can be certified in 20 different application categories, such as field and vegetable crops, forestry, or aerial applications. Commercial not-for-hire applicators (such as grounds crews and golf course superintendents) and private applicators (farmers) must be certified and licensed only if applying or handling restricted-use pesticides.

There were 1,173 fee-exempt, governmental or educational institution employees licensed and certified, and 426 certified commercial applicators operating not-for-hire. (See table next page.)

Changes

Pesticide manuals and examinations were revised in 2004 for the following categories: Aquatic & Mosquito Control, Seed Treatment and Anti-fouling Paint. The program migrated the individual commercial applicator licensing program to a new database in 2004.

Emerging Issues

While the individual commercial applicator licensing was migrated to a new database system, the certification database still exists in a separate, outdated program. The program will work to merge these two databases together to improve tracking and review of the information.

Licenses and Permits 2000-2004					
Type of license/permit	2000	2001	2002	2003	2004
Business location license	1,298	1,205	1,322	1,376	1,362
Individual Commercial Applicator license	6,316	6,533	6,529	6,482	6,772
Restricted-Use Dealer license	404	348	417	380	344
Veterinary Clinic permit	301	299	298	299	305

Certification 2000-2004					
	2000	2001	2002	2003	2004
Certified Pesticide Applicators					
Private Certified	2,610	4,771	2,714	4,095	2,210
Private Exams Given	2,678	4,961	2,803	4,187	2,239
Commercial Certified	2,458	2,282	2,650	2,430	2,622
Commercial Exams Given	3,506	3,617	3,926	3,277	3,425
Applicators Holding Valid Certifications					
Private	21,318	19,008	18,087	16,865	16,298
Commercial	11,580	11,508	11,908	12,241	12,025
Total	32,898	30,516	29,995	29,106	28,323
Certification training sessions					
Private	146	110	100	200	150
Commercial	14	13	16	14	16
Total	165	123	116	214	166

Pesticide Programs and Product Licensing

The DATCP is responsible for enforcing Wisconsin’s Pesticide Laws, *ss. 94.67 – 94.715, Wis. Stats. Ch. ATCP 29, Wis. Adm. Code* is Wisconsin’s primary rule for pesticide use and control. This rule regulates the sale, use and disposal of pesticides to ensure that Wisconsin’s citizens have access to effective and legal products and use them responsibly to minimize exposure to people, wildlife and the environment. These regulations apply to agriculture, as well as to some less commonly recognized businesses, such as lawncare industries, greenhouses, structural pest control companies, and schools. *Ch. ATCP 30, Wis. Adm. Code* contains restrictions for specific pesticide products that may pose a risk to handlers, applicators or the environment. DATCP also enforces the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), in accordance with the US Environmental Protection Agency’s (EPA) grant guidelines.

Staff and Funding

Staff for the Pesticide Program includes several people who specialize on certain sections of these rules, plus the field and office compliance staff that implement these rules. During FY ‘01, these pesticide efforts required 14.3 FTE staff, with a combined staff, supplies and laboratory cost of \$1,437,590. Funding for the Pesticide Program comes from the ACM Fund, and grants from EPA and USDA.

Product Licensing

Prior to distribution of pesticides in Wisconsin, pesticide manufacturers and labelers must be licensed and register their products in the state. This licensing procedure ensures that products offered for sale in the state are properly registered by EPA, and creates a level-playing-field for the pesticide industry. License fees are based on the type of product and the amount of product sold. These fees are part of the Agchem Management fund that supports the work of all of our pesticide-related programs.

Program Activities for 2004: Staff renewed or issued pesticides licenses to 1,214 manufacturers and labelers in 2004, registering 10,906 pesticide products. Annual license fees are determined according to the amount of sales for each pesticide in the state. Pesticides are classified as household, industrial, wood preservatives, or non-household products. The table shows the number of products registered in 2004 per classification based on gross sales.

The number of registered products increased by 158 in the past year, from 10,748 to 10,906. Also, the number of licensees increased slightly, from 1,149 in 2003 to 1,214 in 2004. The table on the following page summarizes the past three years.

Number of Products Registered Based on Annual Gross Sales				
Gross Sales	Household	Industrial	Wood Preservative	Non-household
\$0-\$24,999	4,839	908	2	3,836
\$25,000-\$74,999	306	78	0	274
\$75,000	281	77	4	300

Licensees and Registered Products 2002 - 2004					
	2000	2001	2002	2003	2004
Licensees	1,123	1,109	1,139	1,149	1,214
Registered Products	10,364	10,446	10,472	10,748	10,906

The program hired one limited term employee (LTE) in 2004 to inspect retail pesticide outlets and determine if products were being distributed without the required licensing. In 2004, the program began implementing a change related to how fees are calculated and reported. In 2003, the law was changed, which required licensees to calculate product registration fees based on estimated sales for the current licensing year. At the end of the licensing year, the licensee will reconcile the fees based on the actual sales for the year. This change in fee calculations has resulted in the program converting to a new licensing database system.

Emerging Issues: The department will continue to modify the licensing database system in 2005 to streamline the process for program staff and industry. In addition, the program is evaluating the issues related to electronic labels and the potential to migrate to electronic label submittals instead of paper copies.

Special Registrations

The special registrations program allows pesticide manufacturers to register or test pesticides to meet pest emergencies and to gain experimental information on the effectiveness of new pesticides under Wisconsin conditions. Most of these special registrations occur on minor food crops where effective pesticide registrations are lacking to control existing or new pests. Environmental assessments are conducted for:

- 1) Pesticide experimental use permits (EUPs): permits pesticide testing prior to federal registration;
- 2) FIFRA Section 18 emergency exemptions: EPA establishes temporary food tolerances

- 3) Special local needs (SLN) registrations: allows use of pesticides to meet a routine, non-emergency need when other pesticides are not registered or may not be effective.

Federal regulations require manufacturers to obtain an EUP if experiments are to be conducted on over 10 acres nationwide. Manufacturers are required to indicate those states where the product may be used. If experimental pesticides are applied to less than 10 acres nationwide, a federal EUP is not required. In these cases Wisconsin requires a state-issued EUP if the test site is at least 0.5 acres in size or test sites encompass more than five acres total.

Program Activities in 2004: Staff prepared environmental assessments for and issued special registrations for five Special Local Needs, was granted six EPA emergency exemption Section 18s and received notification of two Federal Experimental Use Permits. The program also developed procedures with the University and within DATCP to streamline data-gathering and communication about the registrations to make them more efficient from time of submittal to issuance.

Emerging Issues: Special registrations continue to be important to specialty crop growers especially to combat diseases transmitted by insects pests new to Wisconsin, pesticide-resistant weeds and insects and seeking safer alternatives to older chemistries. In addition, the discovering of soybean rust in the United

States in 2004 has emphasized the need for access to products through this program in 2005 for a major commodity crop. The program is working with other states to ensure access to products in 2005 to combat this disease of concern. Endangered species considerations emerged in 2004, as a new focus area for both programs to work together to meet these needs.

Pesticide Use

Chapter ATCP 29, Wis. Adm. Code, also requires strict compliance with the US EPA approved pesticide label in the storage, handling and use of any pesticide. *Ch. ATCP 30* includes restrictions for specific pesticides including atrazine, aldicarb, metam-sodium and others. Much of the field activities of the **Compliance and Investigation Section** are inspections of these practices and their associated records, as well as investigations of potential violations of the general label provisions or specific prohibitions contained in *ch. ATCP 29, Wis. Adm. Code*. In 2003, Chapter ATCP 29, Wis. Adm. Code was opened for revision. Due to other work priorities, this rule revision has not progressed in 2004, but will likely be reviewed again in 2005. In addition, Chapter ATCP 30, Wis. Adm. Code was opened for revision related to use restrictions on products containing the active ingredients of chloropicrin and metam-sodium (common soil fumigants). Revision of *ch. ATCP 30, Wis. Adm. Code* will continue and likely be completed in 2005.

Worker Protection

The Department enforces regulations issued by the EPA and adopted into *ch. ATCP 29, Wis. Administrative Code*, to protect employees on farms, forests, nurseries, and greenhouses at greatest risk from occupational exposures to agricultural pesticides. The federal Worker Protection Standard (WPS), issued in 1992 covers workers in areas treated with pesticides and those who apply pesticides. WPS regulations require notices of pesticide applications, personal protective equipment, and entry restrictions for treated areas. In addition, employers are required to provide workers with

pesticide safety training, decontamination equipment, and emergency medical information.

WPS provides protections for migrant labor and seasonal workers in Wisconsin, many of whom are citizens of the state. It also assists employers by assuring high on-site pesticide application and communication standards, thereby reducing liability concerns. The Bureau's Compliance Investigation Section both conducts WPS inspections and enforces the Standard under a contract agreement with the EPA.

Program Activities in 2004:

- Conduct compliance inspections at 45 facilities in 2004. Of these, nearly half were nurseries or greenhouses with the remaining number primarily consisting of fresh market operations, sod farms, and Christmas tree producers. Enforcement actions, including penalties, were taken against five operations in 2004.
- Update core program documents to improve enforcement consistency and compliance levels. Two, one-page handouts were produced and distributed to field staff.
- Work with the Plant Industry Bureau, to develop a process to identify tree and nursery operations that could benefit by a compliance inspection in 2005. If successful, the process will be utilized in the Bureau's annual work planning process.

Emerging Issues: The EPA remains concerned about the lower-than-desired number of Tier I inspections in Wisconsin and other states. Tier I inspections are those inspections made within 30 days after pesticide application. Compliance Investigation Section field staff have found it difficult to maintain high levels of Tier I inspections because of field season work loads and the hit/miss nature of knowing when facilities are applying pesticides.

Annually inspecting a representative range of WPS facilities would assure that all commercial growers and associations stay alert to compliance needs. Unfortunately keeping this

annual balance has proved challenging because of the problems cited above. It is hoped that closer analysis of inspection results combined with monitoring commodity sector activity will produce a better balance.

Empowering commodity groups to provide informational regulatory assistance (and reminders) to their memberships could greatly aid enforcement efforts in Wisconsin. With this in mind, it is hoped that efforts can be made to build relationships with commodity groups so that DATCP can appear on programs, provide articles for newsletters, and place selected materials on websites.

Landscape Registry

Since January 1993, *ch. ATCP 29, Wis. Adm. Code*, has required posting of landscapes treated with pesticides and advance notification of pesticide applications to neighboring residents who have requested this information. These provide the public with a mechanism to be aware of pesticide applications so they may take steps to avoid possible exposure from pesticides to themselves, their children, or their pets. The names and phone numbers of persons wishing to be notified of neighboring landscape applications are maintained by the program on an annual registry. This registry is provided to all licensed landscape businesses, which are required to provide the notice. No fee is required to be on the registry. Persons may list any property for which they want advanced notification on their block of residence or any immediately adjoining blocks.

Program Activities for 2004: In 2004 more than 1,100 people applied to be on the registry. They listed about 15,000 addresses for which they requested advanced notification of pesticide applications in their neighborhoods. A total of 27 complaints related to the notification registry were received in 2004, compared to 28 in 2001. In general the landscape companies continue to be very cooperative in working with the department to make this program successful.

Emerging Issues: The pesticide registry and landscape pesticide notification program continues to be popular with the public. Continued budget constraints or loss of positions may make it difficult for the department to continue this service in the future.

School Integrated Pest Management

The School IPM program provides support to Wisconsin's K-12 schools that want to develop customized IPM plans to meet the individual pest management needs and goals of each school district. The program makes available to schools the regulatory, technical and administrative information necessary to manage pests and use pesticides safely. The program provides IPM training, pest and pesticide consultation, staff workshops, and assistance to parents and guardians interested in their district's pest management practices and is networked with support staff from other agencies.

Program Activities for 2004: The department, with consulting services from the University of Wisconsin entomology and horticulture departments (UW), has reached more than 86 percent of the state's school districts in regional sessions.

The 2004 IPM Program Review revised the focus to site-specific training, on request for school staff at all levels, including administrative, facilities, food service, and faculty.

The City of Madison Health Department requested DATCP IPM program input to help develop their model for city operations.

The Wisconsin Association of School Business Officials (WASBO) incorporated the DATCP/UW training into their credential for continuing education of school facilities managers. The WASBO training, to begin in 2005, will be conducted annually and maintained in the WASBO training library.

The IPM program expanded in 2004, to provide assistance to agriculture producers and

municipalities with pest bird problems. The program also administers an EPA grant involving four school districts carrying out an IPM project to identify and measure the true costs for IPM methods applied to designated turf areas. The project, designed by the UW Extension Horticulture Department, runs through 2006. Reports are published periodically for EPA review.

Emerging Issues: The Farm Bill's School Environment Protection Act (SEPA) failed to

pass in Congress; but, EPA Region V personnel and various local and national groups continue to be interested in school pest management rules for state and federal adoption. We are tracking that information and informing those interested in Wisconsin.

Schools are interested in a revision to the state pesticide regulations, ATCP 29 Wis. Adm. Code, to include a school pesticide use category geared to operations on school grounds.

Water Quality Protection through Nutrient and Pesticide Management

The Water Quality section implements both nutrient and pesticide management programs to protect water quality from non-point sources of contamination. The section is responsible for the administration of the groundwater protection rules contained in ATCP 30, Pesticide Use Restrictions, and the nutrient management program contained in ATCP 50, Soil and Water Resource Management.

To protect groundwater quality from pesticide contamination, staff identify and analyze problem areas within the state. They investigate wells that exceed groundwater standards to identify potential sources of contamination. Statewide sampling surveys are conducted to characterize groundwater contamination and to evaluate the effectiveness of our water quality activities. Our groundwater monitoring program collects and uses sample data to determine which pesticides are contaminating groundwater. As information from these sources becomes available, regulations are developed to prevent contamination above appropriate groundwater standards. The Water Quality section also provides information to the public and to other state and federal agencies involved in water resource protection issues. The section has the statewide responsibility to implement a nutrient management program through regulatory, incentive-based, and outreach approaches.

Water Quality Staff and Funding

The Agrichemical Management Fund and the federal EPA grant, fund the water quality program. In 2004, the DATCP required 8.2 FTE staff for water quality program activities, with staff, lab and other supply and service costs totaling \$1,025,477.

Funding for research and monitoring:

Wisconsin state agencies direct substantial resources to research groundwater contamination issues through the Joint Solicitation process which ranks groundwater

research proposals for funding. Historically, three major funding sources for research on pesticides in groundwater include the Groundwater Account of the Environmental Fund, the UW System groundwater research dollars, and the DATCP's Pesticide Research Fund. None of these three sources mandates an amount that must go toward research or monitoring of pesticides in groundwater. Also, in the last several years, DATCP has eliminated its funding of groundwater research due to budget reductions.

Pesticide manufacturers also contribute funding for special groundwater projects. For example, in 1998, Novartis Crop Protection provided funding for monitoring well installation and sample analysis to research the effects of atrazine reuse in prohibition areas. This 7-year study will continue through the first quarter of 2005 at 17 sites across Wisconsin.

The section has been effective in recent years as recipients of EPA Office of Pesticide Programs discretionary grants to fund both groundwater and surface water monitoring activities.

The Fertilizer Research Council funds fertilizer research which includes environmental research at approximately \$100,000 annually. Staff within the section provide administrative support to the Council and works with the research community to pursue projects of interest to the agency.

Pesticide Management Program Activities for 2004

Atrazine rule development: The Water Quality Section devoted time to the modification of the Atrazine Rule (to be effective for the 2005 growing season). Well sampling revealed atrazine contamination at one well site that exceeds the 3 part per billion health standard. The investigation concluded that conventional use of atrazine contributed to the contamination and an atrazine use prohibition area was proposed surrounding the well site. The prohibition area is an expansion of one of the 102 existing atrazine prohibition areas.

Modifying the Atrazine Rule required the section to collect and analyze groundwater data, investigate contaminated well sites and present the findings to the DATCP Board. The final 2005 rule will include a set of 102 maps of prohibition areas covering 1.2 million acres along with other restrictions on use outside of prohibition areas to minimize groundwater contamination.

Monitoring the Reintroduction of Atrazine in Prohibition Areas: The Water Quality section

continued collecting groundwater samples to determine the impact of renewed atrazine use in prohibition areas. A total of 17 sites, covering a range of soil types, crop rotations, tillage and irrigation, are in this study. The results from this study will determine whether atrazine can be safely used under current application rates and methods. In 2004, 106 samples were collected in this program. Four years of results show an increasing trend of atrazine contamination of groundwater at coarse-textured soil sites after renewed application of atrazine in May of 1998. However, medium-textured soil sites do not show a statistically significant increase in atrazine contamination at this time.

Monitoring well program: In 2004, the Water Quality section collected 17 groundwater samples from monitoring wells near 16 agricultural fields and analyzed them for pesticides of interest. Samples were collected from the shallowest well of three in each sites well nest that contained water. The table below summarizes the number of field, wells and samples collected for this program from 1993 to 2004.

Monitoring Wells 1993-2004			
Year	Fields	Wells	Samples
1993	30	100	300
1994	30	99	265
1995	30	99	132
1996	30	99	50
1997	30	99	50
1998	26	83	79
1999	25	80	31
2000	22	33	37
2001	25	29	29
2002	16	20	20
2003	16	19	19
2004	16	17	17

Compounds Detected at Monitoring Well Sites in 2004		
Compound	Detection (%)	Over Standard (%)
Nitrate	94	69
Alachlor ESA***	69	6
Atrazine (TCR)	31	6
Metribuzin	12	0
Metolachlor	6	0
Cyanazine Amide	12	No Standard
Metolachlor ESA	88	No Standard
Metolachlor OA	56	No Standard
Alachlor OA	69	No Standard

*** Based on a Proposed Enforcement Standard

In 2004, nine compounds were detected in groundwater. Three of these compounds (nitrate, Alachlor ESA, and atrazine and metabolites) were found at levels above an existing or proposed enforcement standard. The table above lists the compounds most commonly detected in 2004 and the frequency of detection at monitoring program sites.

Database maintenance: In 2004, the Water Quality section added about 38 new atrazine groundwater results to the database, which now contains 240,000 sample records and results for nitrates and pesticides. The database allows the use of geographic information system (GIS) tools to create maps of the location of impacted wells used for public hearings and other presentations.

Groundwater investigations: In 2004, the Water Quality section was involved in one new investigation at a farm with a well containing pesticides over enforcement standards. Section staff worked with field investigators to conduct the investigations to identify potential point and nonpoint source contributions to contamination in these wells.

Research and monitoring: Due to continuing budgetary constraints no new or continuing pesticide research projects were funded in FY06. Water Quality section staff continue to participate in the GCC Joint Solicitation process, helping to review and rank groundwater related research.

Monitoring of private wells that have exceeded standards: In 2004, the Water Quality section collected and analyzed groundwater samples from 32 private wells that have historically exceeded pesticide standards. Most of these wells are within atrazine prohibition areas and many show declines in atrazine concentration.

Public education: Water Quality section staff gave presentations about the proposed amendments to the Atrazine Rule and Atrazine reintroduction. The Nutrient Management rules were a major topic at the Fertilizer, Agricultural Lime and Pest Management conference and several ATCP Board meetings.

Nutrient Management Program Activities for 2004

Nutrient Management Organizational Changes

In 2001, DATCP combined the agency's Nutrient Management and Pesticide Management programs within the Water Quality Section. This merger combined staff and funding resources to provide an integrated approach to water resource protection through agrichemical management in Wisconsin. Research and development of best management practices, implementation, and evaluation of environmental impacts can be managed together since many of the practices, implementation techniques, and environmental assessment approaches are similar for nutrients and pesticides.

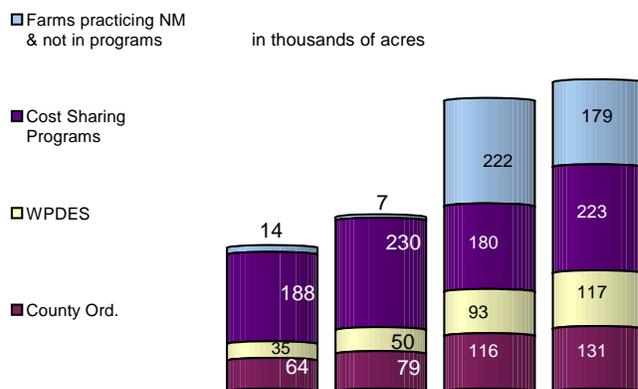
In 2002, the department entered into projects with the University to develop a phosphorus management tool for use in nutrient management planning. The Phosphorus Index (PI) helps farmers identify fields at risk of losing phosphorus to surface water and

promotes adoption of sound nutrient management practices. In 2004, a test version of the PI was incorporated into the Soil Nutrient Application Program (SNAP). This computer program allows the development of a nutrient management plan along with an erosion assessment so that an estimate of the risk of phosphorus delivery can be produced.

The state's Quality Assurance Team, a multi-disciplinary review group randomly reviews nutrient management plans for consistency with established standards. In 2004, the group found that plans showed overall improvement from 2003 but that 40 percent of plans did not include specific soil type information which leads to faulty recommendations and inability to calculate soil erosion estimates, and 33% did not properly identify manure spreading restriction areas. On a more positive note, 87% of plans adequately accounted for manure sources and their ability to apply the manure according to recommendations.

Nutrient Management Planning Progress

2001-2004 Nutrient Management Program Acres



Year	2001	2002	2003	2004
Total Reported Acres	302,070	366,581	611,405	650,963

About 257 NM plans (covering 134,360 acres) reported in 2004 were written to the phosphorus based nutrient management 590 standard (2002). This is a substantial increase from the 38 NM plans (25,260 acres) written to this standard in 2003.

Emerging Issues

Surface Water Monitoring: The Water Quality Section reviewed surface water quality programs in several states and will be meeting with state agencies to determine the best approach for determining pesticide impacts on surface waters in Wisconsin. DATCP received a \$25,000 grant for 2005 to begin design of the program.

New Nutrient Management Standard: ATCP 50 was adopted in 2002 with a nitrogen-based nutrient management standard. In 2004 a new draft nutrient management standard was developed which includes phosphorus

management as well as nitrogen. Incorporation of the Phosphorus Index model into the nutrient management software (SNAP) allows the simultaneous development of a nutrient management plan and a soil erosion assessment. The risk of phosphorus delivery to surface waters from farm fields is also predicted. Adoption of this new standard will result in significant reductions of nutrients to both surface water and groundwater. Water quality improvement should follow adoption of the standard and monitoring efforts will need to document these changes.



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