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Nonpoint Source Water Pollution Abatement and Soil Conservation Programs

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Introduction

The Wisconsin Department of Natural Resources (DNR) and the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) work jointly to control nonpoint source water pollution and soil erosion in the state. The soil and water conservation program in DATCP and the nonpoint source water pollution abatement program in DNR provide county-level coverage of the state's soil and water conservation needs. Further, the DNR nonpoint source pollution abatement financial assistance program intends to focus resources where nonpoint source-related water quality threats are the most severe and where control is most feasible. As shown in Table 1, approximately $129.9 million is available in the 2007-09 biennium for nonpoint soil and water conservation grants to landowners and municipalities. These grants are distributed through DNR and DATCP programs and through direct federal support. Funding sources for soil and water conservation programs include general purpose revenue (GPR), segregated (SEG) and federal (FED) revenue and issuance of bonds (BR).

Table 1: Total Available 2007-09 Direct Funding for Local Soil and Water Conservation

Funding Source	Biennial Amount
GPR	$11,842,600
SEG	18,288,200
BR	25,000,000
FED	74,726,800
Total	$129,857,600

Nonpoint sources of water pollution are those sources that are diffuse in nature without a single, well-defined point of origin. Nonpoint sources include land management activities that contribute to runoff, seepage or percolation, and they adversely affect the quality of waters in the state. DNR estimates that nearly one-half of the lakes and streams within assessed watersheds are degraded by nonpoint source pollution. Soil erosion and runoff are major contributors to the level of nonpoint source pollution.

Several state programs address both urban and rural sources of nonpoint pollution and soil erosion. In addition, DNR and DATCP jointly establish technical standards for land and water conservation and nonpoint source pollution abatement management practices. Several state and local agencies address nonpoint source water pollution, and they are described below.

Natural Resources

Section 281.11 of the statutes directs DNR to serve as the central unit of state government to protect, maintain and improve the quality and management of the waters of the state, ground and surface, public and private. DNR holds general supervision and control over the waters of the state and is directed to carry out planning, management and regulatory programs. Under these general powers, in addition to the specific statutory program, DNR implements nonpoint source water pollution abatement grant programs and regulates certain animal waste and nonpoint pollution discharges.

Agriculture, Trade and Consumer Protection

Chapter 92 of the statutes establishes DATCP as the central state agency responsible for developing and implementing statewide land and water con-

servation policies. DATCP administers programs that assist in the abatement of rural water pollution through the reduction of soil erosion, the management of animal wastes, improvement of agricultural nutrient management, and funding of county and state land and water conservation and nonpoint pollution abatement staff.

Commerce

The Department of Commerce is required, in consultation with DNR, to establish statewide standards for construction-site erosion control at public buildings and places of employment. Commerce is also required to establish standards for construction-site erosion control on one- and two-family dwellings. Commerce must review construction plans and inspect erosion control activities at commercial construction sites. The Department also may issue stop-work orders for noncompliance. Commerce may delegate its administrative authority to counties, cities, villages or towns.

Land and Water Conservation Board

The Wisconsin Land and Water Conservation Board (LWCB) is directed to develop recommendations and advise DATCP and DNR on matters concerning land and water conservation and nonpoint source water pollution abatement. This advisory role includes the review and recommendation of a joint annual grant allocation plan for DNR and DATCP. Further, for DATCP, the LWCB reviews land and water resource management plans, evaluation plans, erosion control plans, project aid applications and administrative rules. In addition, the Board monitors the achievement of statutorily defined soil erosion control goals.

The LWCB also has oversight of the DNR nonpoint source program. These responsibilities include: (a) reviewing and commenting on DNR administrative rules; (b) making recommendations to the governor and DNR concerning the efficiency and effectiveness of the program; (c) assisting in the resolution of program concerns; (d) reviewing and commenting on the joint DNR/DATCP funding allocation plan; and (e) reviewing and commenting on projects proposed by DNR for funding under the targeted runoff management (TRM) program.

The LWCB consists of the following members: (1) the Secretaries of the Departments of Administration, Natural Resources, and Agriculture, Trade and Consumer Protection, or their designees; (2) three county land conservation committee members, who are designated at a statewide meeting of land conservation committees and appointed for two-year terms; and (3) five members appointed by the Governor, one for a two-year term and four for staggered four-year terms, to include one farmer, one member of an environmental group, one person from a city with a population greater than 50,000 people, and one person from a governmental unit involved in river management.

In addition, advisory members to the Board include representatives from: (1) the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS); (2) the USDA Farm Service Agency (FSA); (3) the College of Agriculture and Life Sciences of the University of Wisconsin–Madison; (4) the University of Wisconsin–Extension; (5) the Wisconsin Land and Water Conservation Association; and (6) Wisconsin Association of Land Conservation Employees. DATCP provides administrative support to the Board and both DNR and DATCP staff provide technical support to the Board.

County Land Conservation Committees and Departments

County land conservation committees (LCCs) set county policy on land and water conservation issues and directly oversee the activities of county land and water conservation department staff. Each county board is statutorily directed to create an LCC. County LCCs must consist of county

board members who are also members of the county committees on agriculture and extension education, and the committee on agricultural stabilization and conservation. In addition to these members, any number of other county board members and up to two persons who are not county board members may be appointed.

County LCCs' powers and duties relating to the implementation of state land and water conservation programs include: (1) distributing federal, state and county funds for cost-share programs; (2) providing equipment, technical assistance and materials to landowners for conservation purposes; (3) developing county ordinances for the regulation of land use and land management practices; and (4) developing standards for management practices and monitoring compliance with those standards. The LCCs are required to prepare land and water resource management (LWRM) plans. In addition, LCCs are required to annually prepare a single state grant request describing staffing and funding needs for all county soil and water conservation and animal waste management programs. These programs include: (a) DATCP's annual county staffing and support grants; (b) the priority watershed program; (c) the TRM program; and (d) the urban nonpoint source and storm water grant program. DATCP and DNR then prepare a single grant allocation for each county, with each department administering its own programs.

The LCCs direct the activities of county land conservation departments (LCDs), which in some instances have merged with other county departments such as planning and zoning. County LCDs or the combined departments implement state land and water conservation programs with assistance from federal NRCS staff and DATCP staff. County conservationists are responsible for implementing other state and federal programs, including nonpoint source pollution abatement programs, the wildlife damage abatement program and tree planting programs. Conservationists also assist county zoning administrators on land and water resource issues.

Generally, a county employs a county conservationist, a clerical assistant (part- or full-time) and may also hire one or more technical assistants to the conservationist. DATCP officials estimate that there may be approximately 360 county conservation staff in the state. However, some of these positions are related to priority watersheds, all of which are expected to have projects complete by the end of 2009. The priority watershed program is discussed later in this paper.

Current Nonpoint Source Pollution Abatement Program

The 1999-01 biennial budget act (1999 Act 9) made a number of major modifications to the state's nonpoint and soil and water resource management (SWRM) programs. DATCP assumed responsibility for funding grants to Wisconsin counties for technical staff and administration. DNR retained responsibility for funding cost-share grants to landowners for installation of pollution abatement projects in priority watersheds. Both agencies now administer cost-share funding for best management practice (BMP) installation. The two agencies are required each year to develop a unified funding allocation plan that distributes available state funding for the nonpoint and SWRM programs, which includes both staffing and cost-share implementation grants. DATCP, in addition to providing staffing grants for original priority watershed projects, receives funds to provide matching grants for county staff and cost-shares to fund landowners' soil conservation and nonpoint pollution abatement practices.

1999 Act 9 also changed the way DNR funds urban storm water management projects. The act removed cost sharing for urban storm water management practices from the priority watershed program, and placed these responsibilities in a newly created urban nonpoint source and storm water management grant program (UNPS). This

program provides funding for both planning and construction activities. Also, the municipal flood control and riparian restoration program was created to address floodplain and storm water quality issues. Finally, the act also created a competitive nonpoint grant program to pay for urban and rural nonpoint source water pollution abatement projects. This program became the TRM grant program.

DNR and DATCP revised and created several administrative rules (NR 120, 151, 152, 153, 154, 155, 216, and 243, and ATCP 50) to implement the nonpoint source, storm water and SWRM programs. The revised rules mostly took effect on October 1, 2002. Rules requiring nutrient management plans in agricultural settings took effect on January 1, 2008, for all croplands on which farmers mechanically apply manure or commercial fertilizer. Nutrient management plans are only required, however, for producers who: (a) accept or are offered cost-shares for nutrient management; (b) accept or are offered cost-sharing for manure storage facilities; (c) voluntarily participate in the farmland preservation program; (d) are regulated under county manure storage or livestock siting ordinances; or (e) are regulated under a Wisconsin pollution discharge elimination system (WPDES) permit. Several standards for non-agricultural runoff from construction sites and developed urban areas had various effective dates, although nearly all are in effect. The current urban performance standard for reducing total suspended solids in runoff from existing urban areas and transportation facilities will be increased from 20% to 40% on March 10, 2013.

Unified Grant Submission

Since 2000, LCCs have been required to annually prepare a single grant request describing staffing needs and activities to be undertaken or funded by the county under Chapter 92 (Soil and Water Conservation and Animal Waste Management), s. 281.65 (Financial assistance; nonpoint source water pollution abatement) and s. 281.66 (Urban nonpoint source water pollution abatement and storm water management program). To this end, DATCP and DNR have created a single grant application process and a single set of forms for soil and water resource and nonpoint source management program grants, funding allocations, and reporting and evaluations. Each agency prepares, issues and administers its own grants to counties. The agencies are also required to jointly review the applications, determine if projects should be considered for funding through DATCP or DNR competitive funding, and submit a coordinated grant allocation plan to the LWCB for its review and recommendation to the agencies.

Under this grant process, DATCP provides funding for county staff and support and for county cost-share grants to landowners for the implementation of nonpoint source water pollution abatement practices. DNR provides cost-sharing grants to counties and municipalities. Cost-share funds support a variety of programs that implement practices to abate nonpoint source water pollution and manage animal waste. In addition, a variety of federal land conservation programs provide funding to landowners for conservation practices.

DATCP Funding to Counties

Since 1987, DATCP has disbursed state funds through its grant program to local units of government and other project cooperators for the purpose of conducting land and water conservation activities across the state. A joint final allocation plan lists the amount and program purpose for funds to be received by the county in each calendar year. DATCP has the authority to make these grants through the provisions of s. 92.14 of the statutes, and administrative rule ATCP 50.

Table 2 lists the proposed 2009 DATCP soil and water resource management (SWRM) allocations of $15.9 million. Although DATCP administrative rules specify that the plan be approved by each December 31, or the day before a plan goes into effect, the LWCB had not acted on the 2009 joint allocation plan as of January 1, 2009. DATCP and

DNR officials anticipated in December, 2008, that the plan may be subject to expenditure reductions in early 2009 as part of statewide measures to address a projected shortfall in 2008-09 state revenues. DATCP subsequently extended the deadline for plan approval to March 31, 2009.

Table 2: DATCP 2009 SWRM Grant Allocation

Program	Grants	Percent of Total
County Staffing Grants*	$9,317,000	58.6%
LWRM Plan Implementation	6,575,200	41.4
Total	$15,892,200	100.0%

* May be used for staff, staff training or support and "shared staff and support" expenses. These staff may work on nonpoint performance standard implementation, soil erosion control, priority watersheds, farmland preservation cross-compliance, LWRM plan preparation or other county priority activities.

Funds are allocated only if a county has an approved LWRM plans. LCCs are allowed to use the grants for several purposes: (1) priority watershed staff activities previously funded under NR 120; (2) activities that meet compliance with farmland preservation credit requirements; and (3) consistent with approved LWRM plans, activities related to animal waste management and ordinances, nonpoint source pollution abatement and other conservation practices determined by the county to be necessary for conservation and resource management. LCCs also may use the grant for shoreland management projects. State agencies are ineligible for SWRM grant funding. However, DNR may provide funding under the priority watershed program for state agencies, including DNR, to install management practices on lands owned or operated by the agency. Such grants to state agencies may also be made under TRM as long as the project is within the boundaries of a priority watershed. DATCP also may provide SWRM grant funding to an organization on behalf of multiple counties for regional or statewide efforts. For 2009, as it has done in past years, DATCP proposed to allocate grant funds to the Wisconsin Land and Water Conservation Association (WLWCA) for partial support of its Standards Oversight Council.

To be eligible for DATCP funding, a county board must pass a resolution pledging to match state grants with county funds. ATCP 50 determines match requirements. As of 2002, DATCP provides funding to counties as reimbursements, not advance payments.

Counties may use staffing grants to pay salaries, fringe benefits, training, and support costs for county employees and agents engaged in land and water resource management activities. Support costs, which are to be identified in the grant application, may include travel expenses, computers and software, office supplies and equipment, field equipment, information and education support costs, or any other costs approved by the Department. Staffing grants may be transferred to pay for landowner cost-sharing grants to the extent that the Department approves the total amount transferred in writing, and that these redirected funds are used the same year in which they are allocated. ATCP 50 also allows the reallocation of staffing grant funds to a local government or tribe if it is shown these funds will be used to meet a LWRM workplan priority or achieve compliance with state agriculture performance standards. The grant amounts awarded to different counties are based on the Department's assessment of funding needs and priorities.

In preparing the annual grant allocation plan, ATCP 50 specifies that DATCP shall consider the following priorities: (1) continuation of county staff and projects; (2) projects that address statewide priorities identified by DATCP and DNR; and (3) other factors. Other factors include: (a) the county's demonstrated commitment to implementation of its approved LWRM plan and to farm-conservation practices; (b) the cost-effectiveness of the grant; (c) the likelihood that the grant will resolve problems specified in the county's LWRM plan; and (d) the

county's demonstrated cooperation, commitment and ability to manage and implement the project.

Former funding mechanisms of both DATCP and DNR still influence county staffing grant allocation, although funding for staff has been consolidated entirely under DATCP. DATCP previously provided basic annual staffing grants (BASGs) to help counties meet administrative and technical operating costs in their soil and water conservation activities. These grants could contain funding for both staffing and projects, and all counties were eligible for some level of BASG funding. BASGs ended in 2003.

Prior to 1999 Act 9, DNR likewise assisted designated management agencies, which were generally counties or municipalities, with local administrative costs under the original nonpoint source grant program. This funding was known as local assistance grants (LAG). Beginning in 1998, state law required all nonpoint pollution abatement watershed or special projects designated after June 30, 1998, to include a local LAG match of at least 30%. This made the maximum state grant 70%. DNR further capped LAG spending for 1998 and 1999 at 90% of the 1997 level. This decision was based on available funds and a 1997 directive to provide nonpoint funding for staff in all counties.

County matches are still part of the DATCP/DNR funding plans. Currently, s. 92.14 (5g) of the statutes specifies that the salary and fringe benefits for the first county staff person may be fully funded by the state, with a 30% match required for the second and 50% match required for each additional staff person. The statutes do not specify the match requirement for costs other than salary and fringe benefits, and DATCP has specified that no local match is required for these training and support costs in administrative rule ATCP 50. There are further requirements for grants awarded for priority watershed staff prior to 2010. 2001 Act 16 requires a county to provide matching grants for priority watershed project staff equal to no less than 10% nor more than 30% of the staff funding that was provided to the county for 1997 for a priority watershed. The watershed must have been designated before July 1, 1998. For 2009, the final year of the priority watershed program, DATCP proposed requiring counties to provide a 10% match for priority watershed staff, not including the staff person funded at 100% as noted above. This generally equates to the amount of staffing funds counties received in previous years.

DATCP proposed to make 2009 staffing grant awards to counties in three tiers in light of this policy history. For Tier I, ATCP 50 provides that DATCP offer each eligible county base funding of the greater of: (1) $85,000; or (2) the amount awarded to the county in 2001 for DNR priority watershed staffing in 2001, minus any amount allocated in 2001 for a priority watershed that has since closed. In 2009, this amount totals $6,552,200. Sixty counties would receive the $85,000 minimum for a total grant of $5,100,000, and 12 other counties would receive a total grant of $1,452,200, or approximately $121,000 per county.

In addition, DATCP proposed to provide compensation to counties with priority watersheds for the loss of BASGs previously received by these counties. DATCP in 2003 began offering BASG make-up grants to counties with existing priority watersheds to offset the loss of former BASG funds. While not specified in ATCP 50, DATCP contends that BASG make-up funding more closely maintains prior funding levels for counties with active priority watersheds. BASG make-up funds are provided at the rate of 61.14% of a county's adjusted BASG from 2002. The 61.14% amount originally coincided with the amount of discretionary funding DATCP had remaining after making base grants in 2003. Once all priority watersheds within a county close, the county is no longer eligible for BASG make-up funds. In the proposed 2009 allocation, BASG make-up grants totaled $285,100. DATCP will not provide BASG make-up grants after 2009, the final year of the priority watershed program.

DATCP proposed 2009 funding of $20,000 to the WLWCA to support the development and maintenance of technical standards for urban and rural soil and water conservation practices in Wisconsin. DATCP did not propose grants to any other non-county entities in 2009. In the past, other organizations such as the Wisconsin Association of Land Conservation Employees and Central Wisconsin Windshed Partners received funds. Further, DATCP previously awarded staffing grants to the Oneida Tribe for the Duck, Apple and Ashwaubenon creeks priority watershed, which closed in 2008.

After making Tier 1 grants to counties and other select entities, DATCP for 2009 proposed using additional funds of $2,614,800 to make Tier 2 county staffing grants. These grants would attempt to provide funding for an average of three positions per county. Of these staff, the state attempts to fully fund the salary and fringe benefits of the first position, while each county matches at least 30% of the second position and 50% of third and subsequent positions. DATCP awards these grants based on the amount of state funding available as well as how far the Tier 1 allocation goes toward covering multiple staff positions. Based on actual position costs, DATCP proposed meeting county requests for all first and second positions at their respective 100% and 70% levels for 2009. DATCP met 14% of the 50% commitment for third positions based on available funding. Counties' third positions are thus effectively funded by the state at 7%, and fourth and subsequent positions are county funded.

DATCP proposed a third funding tier for 2009. Tier 3 incorporated a recommendation from a WLWCA-initiated committee that in 2004 recommended rewarding counties that address priorities set forth in ATCP 50. Tier 3 recipients are those counties with: (a) well-supported strategies for managing nutrient runoff, including sound distribution of cost-sharing grants to landowners, comprehensive nutrient management planning assistance for farmers and oversight mechanisms that ensure landowner compliance with nutrient management plans (NMPs); (b) strong demonstrated relationships between planning documents and implementation; and (c) a history of acting consistent with articulated plans. For 2009, DATCP proposed awarding Tier 3 grants of $10,000 to each of the 13 counties who scored highest according to the criteria above.

As shown in Table 2 and displayed by county in Appendix II, the proposed 2009 joint allocation plan apportions $9,317,000 for staffing and support. This includes $9,297,000 for county staff and support costs and $20,000 for WLWCA.

Land and Water Resource Management Plans. In order to receive grant funding from DATCP, each LCC is required to prepare a LWRM plan that at a minimum includes: (a) a county-wide assessment of soil erosion conditions and water quality, including information available from DNR; (b) water quality objectives identified for each water basin, priority watershed and priority lake; (c) key problem areas for soil erosion and water quality, including priority farms; (d) identification of the BMPs to achieve the water quality objectives and to reach current state soil erosion control goals; (e) strategies for achieving voluntary compliance with farm conservation practices; (f) a multi-year strategy for implementing LWRM plan-related activities and priorities, including those priorities identified in the plan and those activities necessary for compliance with applicable federal and state laws; (g) a system to track progress of activities identified in the plan; (h) an information and education strategy; and (i) methods for coordinating plan implementation activities with other applicable local, state or federal agencies and organizations.

County LCCs develop the plans with the assistance of DATCP. The LWCB reviews plans and recommends DATCP approval or disapproval. DNR assists counties in LWRM plan activities by providing available water quality data and information, training and support for water resource assessments and appraisals and other related pro-

gram information. As shown in Table 2 and Appendix II, the proposed 2009 allocation plan apportions $3,863,000 in bonding for LWRM plan implementation cost sharing. This bonding is used to finance cost-sharing grants to landowners that provide up to 70% of the cost of installing conservation practices. Funding up to 90% may be available in cases of economic hardship. These cost-sharing grants are intended to pay for the implementation of nonpoint source water pollution BMPs, which are discussed later in this paper.

For 2009, DATCP proposed awarding counties $20,000 in base funding for cost-share grants. All 72 counties would receive a base grant, totaling $1,440,000. For remaining funding of about $2.42 million, DATCP proposed allocating approximately $2.22 million based on counties spending previous cost-share dollars in a timely manner. For 2009, DATCP proposed additional funding to counties that left on average no more than 20% of their cost-share grants unspent over the preceding three years. The maximum award given out in this category in 2009 would be $41,394, which 46 counties would receive. Thirteen other counties would receive smaller performance-based grants, meaning that 59 counties would receive some portion of the $2.22 million in performance-based funding. Finally, the remaining $200,000 was proposed to be set aside for regulatory animal waste grants.

In addition to the bonding revenue that was awarded to counties for cost-share grants, DATCP has had a base allocation of $520,000 SEG annually since 2005-06 for nutrient management plan (NMP) development grants. 2007 Act 20 made an additional $6,000,000 nonpoint account SEG available beginning in 2008-09. This funding is provided to counties for cost-share grants to landowners for manure management grants and the implementation of NMPs. ATCP 50 requires most Wisconsin cropland to have NMPs in place as of January 1, 2008. These funds may also be used for cost-share grants for other impermanent or "soft" practices that will reduce nutrient runoff. These practices generally may not be funded through the use of state general obligation bonds. DATCP awarded these funds to areas that have experienced manure runoff incidents and sensitive areas that will benefit from preventive practices. These grants are shown by county in Appendix II.

From the $6.52 million appropriation for 2008-09, DATCP provided $2.88 million in the 2008 joint allocation plan. Awards in the proposed 2009 joint allocation plan total $2.64 million.

Finally, DATCP proposes transferring $1 million as part of an overall $3.2 million departmental lapse to the state general fund required under 2007 Acts 20 and 226. As of late 2008, DATCP planned to allocate additional unspent 2008 funding in early to mid-2009 to partly offset nutrient management grant reductions caused by the transfer to the general fund.

Regulatory Animal Waste Grants. Regulatory funding for animal waste management is statutorily available from DATCP or DNR. Counties may use DATCP grants under s. 92.14 (3) to share costs for animal waste management practices and facilities as a result of a "notice of discharge" (NOD), or notice of intent to order the abatement of nonpoint source pollution, issued by DNR under authority of Chapter 283 of the statutes and NR 243. These grants began in 2007. DATCP reserved $200,000 in both 2008 and 2009 from which grants can be awarded. To accomplish this policy change the Department has regularly waived a provision in ATCP 50 that conflicts with s. 92.14. ATCP 50, which governs DATCP's soil and water resource management responsibilities, prohibits counties from using LWRM funding from DATCP to award cost-sharing grants for practices needed to comply with DNR notices of intent and NODs. DATCP intends for the waivers to reflect the intent of the law and to provide a funding source designated specifically for notices of discharge. DATCP must commit its reserve funds to cost-share agreements by the end of the calendar year for which funds are allocated.

Only DNR's competitive TRM grant program and the priority watershed program funded NOD remediation between calendar years 2002 and 2006. The 2007-09 budget act, however, authorized DNR to address animal waste pollution outside of the competitive TRM program. DNR allocated $364,600 in 2008 ($196,000 bond revenue, $11,200 GPR, and $157,400 federal water quality funds) and $1,296,400 in 2009 ($1,000,000 bond revenue, $246,400 federal water quality funds and $50,000 GPR) for cases in which DNR has identified or may identify threats to fish and aquatic life in an NOD. Bond revenues may only be used for permanent structural improvements, while federal and GPR-funded grants may support non-structural practices. In addition, NOD-related threats to groundwater are addressed through the competitive TRM program. In 2008, DNR distributed NOD grants to counties on a first-come, first-served basis, although all projects were needed for farmers to comply with NR 243. Starting in 2009, DNR will modify the selection process based on additional water quality factors. Counties then enter into cost-share agreements with the appropriate landowners. Unlike DATCP, DNR may carry reserve funds to the subsequent year and assign them to cost-share agreements at that time.

Since 2002, cost sharing for the NR 243 program has also been provided and managed by DNR under the competitive TRM grant program. Grants may fund corrections of violations identified in an NOD, with such corrections including livestock operation runoff controls, manure storage facilities, vegetative filter strips or other agricultural BMPs. All large concentrated animal feeding operations (CAFOs) are required to obtain a WPDES permit, as are small and medium-sized livestock facilities that fail to comply with selected requirements of NODs. Entities required to hold a WPDES permit are ineligible for TRM grants.

Agricultural Shoreland Management Projects. The Wisconsin Legislature established the agricultural shoreland management program in 1992. This law allows counties, cities, towns and villages to enact agricultural shoreland management (ASM) ordinances for the purposes of maintaining and improving surface water quality. Municipalities must obtain DATCP approval before enacting an ordinance, however, and the Department has developed ASM ordinance guidelines to assist local governments. The law also provides that an ASM ordinance may not be enforced unless a county uses grant funds to correct infractions.

Beginning with the 2003 joint allocation plan, DATCP eliminated separate grant funding for agricultural shoreland management ordinances. Instead, projects may be funded from the unified LWRM grants. Through these grants, DATCP may award cost-share grants to county LCCs to implement practices required by a county, city, town or village ASM ordinance, including reimbursement for the cost of fencing that a landowner installs to comply with a DATCP-approved shoreland management ordinance or the cost of providing a well for livestock, if as a result of complying with such an ordinance, the livestock does not have adequate access to drinking water. Further, DATCP and DNR are required to work with counties to implement shoreland management provisions.

DNR Nonpoint Source Cost-Share Grants

DNR provides cost-share grants to local governments for the installation of pollution management practices on private land under the priority watershed program and under three competitive grant programs that are discussed later. Under the priority watershed program, the maximum cost-share rate is 70%, except that it may be as high as 90% in cases of economic hardship. These priority watershed grants are included in the joint allocation plan grant to counties. Counties, in turn, enter cost-share agreements with individual landowners for the installation of water pollution-abatement practices and structures. Cost-share agreements are filed with county registers of deeds. Landowners must then maintain practices and structures for the duration of an agreement,

even if land transfers ownership.

To receive cost-share funding from the nonpoint source grant, a landowner must agree to install identified cost-effective management practices. The DNR and DATCP jointly establish technical standards for management practices eligible for grant funds. Table 3 lists the recent history of DNR grant expenditures under the program. DNR administrative costs are not included in the table and are discussed in a later section.

Table 3: DNR Nonpoint Source Pollution Abatement Grant Program Expenditures by Grant Category*

Type of Grant	2006-07	2007-08
Cost-Share Grants	$7,946,900	$5,367,800
Local Assistance**	1,385,700	990,600
Easements***	153,800	124,100
Contracts****	984,000	948,400
Total	$10,470,400	$7,431,000

* Includes expenditures for priority watershed projects and for urban planning, urban construction and TRM projects.
** Local Assistance in 2006-07 & 2007-08 represents solely urban planning grant payments.
*** Includes DNR-held easements only.
**** Includes expenditures of contract funds provided by the state for USDA, UW-Extension and other organizations.

Best Management Practices. Best management practices (BMPs) are those techniques which have been determined to be the most effective and practical means of abating nonpoint source pollution to a level compatible with state water quality goals. BMPs also must not adversely impact fish and wildlife habitat. BMPs include practices other than dredging that prevent or reduce nonpoint source pollution. The 1997 biennial budget act required that DNR and DATCP identify BMPs that are "cost-effective" for water pollution abatement. Cost-effective BMPs are eligible for cost-share agreements provided that they are the lowest cost practice, or a more expensive alternative that confers additional benefits for fish, wildlife, practice longevity, ease of maintenance, or reduced risk of failure.

Cost-Share Rates. Cost-share grants generally equal 70% of the cost of implementing the BMP. However, in cases of economic hardship, as defined by rule, the state cost-share rate may be a maximum of 90%. Conversely, restrictions apply to costs shared for sites designated as critical in priority watersheds. Critical sites are entitled to the full cost-share rate unless the landowner does not sign a cost-share agreement within 36 months of the date the funding is made available. If the agreement is not signed by the deadline, the cost-share rate is reduced by 50%.

BMPs and the associated cost-share rates have been established by administrative rules NR 120 and 154 and ATCP 50, as listed in Table 4. For certain cropland practices, a county has the option to select between fixed rates per acre or rates based on costs incurred. A definition of each of the cost-shared BMPs is provided in Appendix I. The 2009 joint allocation plan allocates $2,543,800 for BMP reimbursements to grantees for cost sharing in priority watershed projects.

Easements. Funding may also be used to purchase easements in conjunction with shoreline buffers, wetland restoration, critical area stabilization and animal lot abandonment or relocation. The easements may be for a period of not less than 20 years. Local governments may use state funding to enter into easements with property owners, but only within priority watersheds.

Table 4: Best Management Practices State Cost-Share Rates

Cropland Practices

Contour farming	70% or $9 per acre for 4 years
Strip-cropping	70% or $13.50 per acre, 4 yr.
Field strip-cropping	70% or $7.50 per acre, 4 yr.
Cover and green manure cropping	70% or $25 per acre, 4 yr.
Residue management	70% or $18.50 per acre, 4 yr.
Nutrient management	70% or $7 per acre, 4 yr.[a]
Pesticide management	70% or $7 per acre, 4 yr.

Animal Waste Management Practices

Livestock fencing	70%
Barnyard runoff control systems	70%
Animal feeding operation relocation or abandonment	70%[b]
Manure storage systems	70%
Manure storage system closure	70%
Roofs	70%
Roof runoff system	70%
Access roads and cattle crossings	70%
Heavy use area protection	70%
Livestock watering facilities	70%
Prescribed grazing	70%
Waste transfer systems	70%

Cropland and Other Practices

Sediment basins	70%
Critical area stabilization	70%
Grade stabilization structures	70%
Stream bank and shoreline protection	70%
Wetland development or restoration	70%
Milking center waste control	70%
Diversions	70%
Terrace Systems	70%
Well Decommissioning	70%
Animal trails and walkways	70%
Field windbreaks	70%
Filter strips*	70%[c]
Water and sediment control basins	70%
Riparian buffers*	70%[d]
Sinkhole treatment	70%
Subsurface drains	70%
Underground outlets	70%
Wastewater treatment strips	70%
Waterway Systems	70%[e]

The listed rates may be increased up to 90% in cases of economic hardship.

* Under ATCP 50, a landowner is entitled to payments for land taken out of production if the landowner must take or keep more than 1/2 acre out of agricultural production in order to install or maintain the conservation practice. This payment is not required for land occupied as part of the practice. If the land is in a riparian area, the rate is equal to the rate received under the federal CREP program. If not, the rate is 70%. Also, under ATCP 50, maintenance payments for mowing up to twice per year are $10/acre.

[a] DATCP's rate is shown. DNR offers $6 per acre for the first year, and $4 per acre for years two through four.

[b] DATCP offers the lesser of 70% of the costs of replacement buildings and facilities or the appraised value of the buildings and associated facilities at the current site. Abandoned sites are also eligible for no more than 70% of the estimated cost of management systems or practices that will prevent water quality problems at the site. Maximum costs for livestock transport are $5,000.

[c] In addition to 70% of installation costs, DATCP offers twice annual mowing costs and 70% of the rental rate (for the length of the agreement) if the land is taken out of production for non-riparian filter strips. For riparian filter strips, DATCP offers the CREP rate if land is taken out of production. If CREP is not applicable, DATCP makes the same offer it does for non-riparian filter strips.

[d] DNR offers 70% plus $500 per acre. DATCP offers the CREP rate if the land is eligible for CREP. If not, it offers 70% of installation costs, twice annual mowing and 70% of the rental rate if the land is taken out of production (for the length of the agreement).

[e] DNR offers 70% of installation costs, plus $300 per acre.

Maintenance of Practices. Landowners and governmental units receiving grants under the priority watershed program are required to maintain all cost-shared structural practices for 10 years beginning with the date the last practice is installed. One exception is for grassed waterway systems and riparian buffers, which landowners must maintain for 15 years if the project receives support payments in addition to installation costs. Non-structural practices under the priority watershed program need only be maintained through any year in which cost-sharing is provided, and these cost-sharing agreements generally do not exceed four years. Violation of an agreement may be penalized by repayment of all or part of the cost-share funds received under the contract. The seriousness of the infraction determines the amount of the penalty.

If the property on which the practice was installed is sold before the expiration of the maintenance agreement, the new owner must continue the practice or repay the grant. DNR may release all or part of an agreement if a new landowner plans different management of the land, provided that the appropriate degree of environmental protection is maintained. However, administrative rule NR 151, which established performance and technical standards for storm water runoff, specifies that once agricultural land comes into compliance with a performance standard, it must continue to meet that standard.

The agencies are required to specify in administrative rules the types of cost-shared practices and the minimum grant amounts that, if in place when a property under a cost-share agreement changes owners, require the new owner to maintain performance standards. Cost-share agreements generally specify four-year commitments for cropping and management practices and 10-year commitments for other BMPs. Landowners can be required to maintain a BMP under NR 151 if it is found the practice brings the landowner into compliance with the performance standards.

Nonpoint Source Grant Funding

Funding for rural nonpoint source water pollution abatement grants comes from a variety of state and federal sources. DATCP is provided over $32.6 million during the biennium for rural grants, including LWRM plan implementation. DNR is provided an additional $16.9 million for rural nonpoint grants, which includes approximately $3.2 million in federal funds used for local cost-share grants. In addition, approximately $64.6 million in additional federal funding is expected to be directly available to local governments for nonpoint pollution abatement practices in the 2007-09 biennium. This brings total available funding for the biennium to approximately $111.1 million. Table 5 delineates rural nonpoint funding by year.

Table 5: Rural Nonpoint Grants

	2007-08	2008-09
GPR	$5,921,300	$5,921,300
FED	32,363,400	32,363,400
SEG	4,745,100	10,745,100
BR*	9,500,000	9,500,000
Total	$52,529,800	$58,529,800
	$111,059,600	

*$19,000,000 is available for the 2007-09 biennium. Distributions need not be the same in each year.

NOTE: The table does not include federal funding that was used for contracts with DATCP or other agencies.

Funding for cost-share and staffing grants is provided from the following sources:

General Purpose Revenues (GPR). DATCP is provided $5,081,900 in 2008-09 for SWRM program grants, including funding for priority watershed staff.

DNR is provided $839,400 in 2008-09 in a biennial appropriation. These funds are used to pay for cropping practices such as nutrient management, contour strip cropping and conservation tillage in priority watershed projects. These practices are not eligible for funding through bond issues.

Segregated (SEG) Revenues. The segregated nonpoint account of the environmental fund formerly had a $7.50 automobile title transfer fee as its sole revenue source. This funding mechanism began in 1991. This revenue source reflected the nonpoint source pollution attributable to vehicle operation and the state's transportation infrastructure. However, the 1997-99 biennial budget required that title transfer fees be deposited to the transportation fund, and that general fund revenues in an amount based on the annual title transfer fee revenues from the previous fiscal year be deposited to the segregated nonpoint account to be used for nonpoint source water pollution abatement-related activities.

The 2007-09 budget act decoupled sales of supplemental vehicle titles and GPR funding. The nonpoint account now receives a sum-certain GPR amount of $11,514,000 for 2007-08 and $13,625,000 beginning in 2008-09. In addition, 2007 Act 20 appropriated to the nonpoint account 75 cents per ton from the tipping fee for most solid waste. This fee is payable for wastes other than high-volume industrial waste taken to waste disposal facilities (landfills). This second revenue source contributed $792,600 in 2007-08 and is expected to contribute $5,500,000 in 2008-09 to the nonpoint account. Unspent segregated appropriation authority generally lapses back to the environmental fund at the end of each fiscal year. Table 6 shows an estimate of the segregated nonpoint account condition, and a description of each appropriation in the table follows below.

Table 6: Nonpoint Account Fund Condition

	Actual 2006-07	Actual 2007-08	Est. 2008-09	2008-09 Staff
Opening Balance	$6,186,700	$6,630,900	$6,518,300	
Revenue:				
GPR Transfer	$10,672,000	$11,514,000	$13,625,000	
Tipping Fee	0	792,600	5,500,000	
Investment Revenue / Misc.	502,500	333,800	250,000	
Total Revenue	$11,174,500	$12,640,400	$19,375,000	
Total Available	$17,361,200	$19,271,300	$25,893,300	
Expenditures:				
Agriculture, Trade and Consumer Protection				
Soil and water management administration	2,103,800	2,100,000	2,165,900	21.00
Soil and water management grants	3,513,600	5,616,700	9,745,100	0.00
Debt service	847,700	847,700	847,700	0.00
Natural Resources				
Integrated science services	115,600	256,400	411,800	4.50
Nonpoint source contracts	939,600	876,200	997,600	0.00
TMDL and Wisconsin Waters	357,700	826,700	914,300	5.25
Nonpoint source administration	520,400	452,300	544,600	7.00
Urban nonpoint source grants	1,385,700	993,600	1,399,000	0.00
Debt service	70,600	81,300	91,600	0.00
Administrative operations	629,600	215,100	219,300	0.00
Customer assistance and communication	214,300	185,600	187,100	1.22
Total Expenditures	$10,698,600	$12,451,600	$17,524,000	38.97
Lapse to General Fund	31,700	301,400	2,158,300	
Cash Balance	$6,630,900	$6,518,300	$6,211,000	
Encumbrances	6,887,900	6,463,900	5,463,900	
Available Balance	-$257,000	$54,400	$747,100	

In addition to providing grants to counties, including funding for priority watershed staff and grants for nutrient management planning, the nonpoint account supports a number of DATCP and DNR positions as well as their associated funding. The 2005-07 budget shifted from GPR to nonpoint account SEG: (a) 10.0 administrative positions in DATCP; (b) a portion of DATCP debt service costs on bonds issued in cost-share grants to counties for nonpoint best management projects; and (c) 4.75 administrative positions in DNR. The following paragraphs describe these and other appropriations.

Soil and Water Management Staff. DATCP is appropriated $2,165,900 and 21.0 positions in 2008-09 from the nonpoint account for soil and water management staff. This includes 10.0 positions transferred in the 2005-07 biennium. These positions are a part of DATCP's Bureau of Land and Water Resources. Soil and water resource management efforts include establishing technical standards for nonpoint pollution, assisting the development of nonpoint pollution abatement measures, and evaluating nonpoint pollution abatement efforts.

Soil and Water Management Grants. DATCP is appropriated $4,745,100 in 2007-08 and $10,745,100 in 2008-09 for soil and water management grants. This appropriation is combined with a GPR appropriation ($5,081,900 annually) and primarily used to support county staff for local implementation of land and water conservation efforts, including funding for priority watershed staffing. The increase of $6 million in funding in the 2008-09 allocation is primarily to reimburse counties for costs incurred in helping landowners develop NMPs, as discussed earlier. A total of $6,520,000 is appropriated for this purpose beginning in 2008-09. The amount shown in Table 6, however, is decreased by $1 million to reflect an expected transfer to the state general fund.

Debt Service (DATCP). Debt service costs reflect the repayment of principal and interest on bonds issued to fund cost-share grants to counties for nonpoint source water pollution abatement BMPs. This appropriation was created as part of 2005 Act 25 and transferred $847,700 annually from GPR to nonpoint account SEG.

Integrated Science Services. DNR is appropriated $411,800 and 4.5 positions annually for activities related to the research, evaluation and monitoring of nonpoint source water pollution.

Nonpoint Source Contracts. DNR is appropriated $997,600 annually to support basin education, provided by the University of Wisconsin-Extension, related to DNR's nonpoint source water pollution abatement program. Funding is also used to support: the Wisconsin Land and Water Conservation Association (WLWCA), a nonprofit organization that represents the state's 72 county land conservation committees and departments; research related to the effectiveness of buffer strips in preventing water pollution; and the Wisconsin Agricultural Stewardship Initiative (WASI), a research-oriented effort to develop environmentally compatible and economically sustainable farms.

Total Maximum Daily Load (TMDL) Development and Wisconsin Waters Initiative. DNR is appropriated $914,300 and 5.25 positions annually for nonpoint source administrative duties. This includes a shift of 4.75 positions and related funding annually from GPR to this appropriation in 2005 Act 25 as well as the reduction of 1.0 positions under 2007 Act 20. A total of 0.75 of the positions are designated for the development and implementation of Wisconsin's federally required TMDL plans. TMDL plans attempt to reduce the amount of specific pollutants reaching an impaired lake or stream so that water quality standards will be met. While funded from the nonpoint account, these positions are used by DNR for TMDL activities related to waters impaired by point source and nonpoint source pollution. The remaining 4.5 positions have various responsibilities such as wastewater engineering, coordinating nonpoint abatement grants, coordinating state implementation of agricultural performance standards, and managing federal section

319 contracts.

Also included is approximately $441,600 annually for the Wisconsin waters initiative, used to develop a computer-based system to improve access to water-related site information electronically. The goal of this initiative is to expedite water permit processing and enable state and local access to improved data such as floodplain mapping. 2007 Act 20 transferred funding for the Wisconsin waters initiative from the DNR administrative operations appropriation listed below. Both appropriations derive their funding from the nonpoint account.

Nonpoint Source Operations. In addition to the administrative duties listed above, DNR is appropriated $544,600 in 2008-09 with 7.0 positions for other nonpoint source activities. These resources are used for technical assistance and the administration of DNR's nonpoint source water pollution abatement programs.

Urban Nonpoint Source Grants. DNR is appropriated $1,399,000 annually from the nonpoint account for urban nonpoint-related grants. As discussed elsewhere in this paper, this appropriation funds grants for the urban nonpoint source and storm water management program as well as the municipal flood control and riparian restoration program. Funding from this appropriation supports local assistance grants for planning under these programs, but this funding is not used for construction or land purchases.

Debt Service (DNR). Debt service costs reflect the program's share of bonds that were issued to fund the acquisition of land and construction of DNR administrative facilities. DNR is allocated $91,600 nonpoint account SEG in 2008-09 for debt service.

Administrative Operations. DNR is appropriated $219,300 in 2008-09 from the nonpoint account for general and administrative costs. The administrative operations appropriation supports general departmental nonpoint-related support functions such as grant management, legal services, finance and auditing, administrative and field services, data processing, information technology, human resources and facility rental costs.

Customer Assistance and Communications. DNR is appropriated $187,100 and 1.22 positions in 2008-09 to support customer service, communication and education efforts that pertain to nonpoint water pollution issues.

General Obligation Bonding. General obligation bonds to provide funding for SWRM activities were first authorized in the 1997-99 biennial budget act. A total of $33,075,000 in bonds has been authorized for DATCP SWRM activities.

General obligation bonds to support DNR grants for installing cost-share practices were first authorized for the program in the 1991-93 biennial budget act. Since that time, a total of $135.2 million in bonds has been authorized for DNR nonpoint pollution abatement activities, including $94.3 million for the priority watershed program, $29.9 million for urban storm water and municipal flood control programs and $11 million specifically for the TRM program. DNR has also reallocated unspent priority watershed bonding to the TRM program in past years when available. Bonding is limited to cost-share grants for the installation of certain water pollution abatement or conservation practices and cannot be used for local program administration. In 2007-08, debt service costs on bonds issued by the two agencies totaled approximately $8.7 million, including $7,888,900 GPR and $847,700 nonpoint account SEG.

Federal Funding. DNR expects to receive rural nonpoint funding of approximately $5.0 million annually in 2007-08 and 2008-09 under the federal Clean Water Act (Section 319 grants) from the U.S. Environmental Protection Agency (EPA). This funding is associated with the Great Lakes basin projects and selected cost-share and local staffing grants and is awarded as part of the Department's priority watershed grants.

In addition to federal funding that is provided to DNR for county grants, federal funding may be received by landowners via local governments, who may receive federal funds directly for conservation practices under a variety of federal programs administered by the United States Department of Agriculture's (USDA) Natural Resource Conservation Service (NRCS). Funding under these programs is separate from DNR and DATCP grants to counties. As shown in Table 7, actual funding received directly by Wisconsin landowners and local governments for conservation practices totaled approximately $32.4 million in 2007-08. Funding by program is not yet known for 2008-09, as federal programs are currently operating under a continuing resolution. It should be noted that this amount, along with the amount shown in Table 5 for 2008-09, is the amount of funding that is expected to be made available to Wisconsin. The actual amount received by Wisconsin landowners may be less depending on the amount of local government and landowner participation.

Table 7: Federal Fiscal Year 2008 Federal Land and Water Conservation Funding Awards to Wisconsin Landowners

Program	Funding
Environmental quality incentive program	$21,211,500
Conservation security program	5,402,100
Farm and ranch lands protection program	2,490,500
Wildlife habitat incentives program	2,059,300
Wetlands reserve program	1,200,000
Total	$32,363,400 *

*Excludes conservation reserve enhancement program (CREP) funding, which is not annual and is discussed later.

One program that offers funding to local governments for grants to landowners is the U.S. Department of Agriculture's environmental quality incentive program (EQIP). EQIP offers financial and technical help to eligible participants for the installation or implementation of structural and management practices on eligible agricultural land. EQIP pays up to 75 percent of the cost of eligible conservation practices. For Wisconsin, funding for installation of conservation practices was about $21 million in 2007-08.

In addition to federal funds specifically for nonpoint source water pollution abatement, Wisconsin landowners may also receive federal funding under other programs, including: the conservation security program (CSP), the farm and ranch lands protection program (FRPP), the grassland reserve program (GRP), the wildlife habitat incentives program (WHIP), and the wetlands reserve program (WRP).

The CSP provides financial and technical assistance by awarding incentive payments to landowners for the conservation and improvement of soil, water, air, energy, plant and animal life, and other conservation purposes on private land. The majority of a property must also fall within selected watersheds. In Wisconsin for 2008, only the Milwaukee River watershed was selected for new eligibility. The watershed covers parts of Milwaukee, Waukesha, Dodge, Washington, Ozaukee, Fond du Lac and Sheboygan counties. Fifty farms covering nearly 22,500 acres in the Milwaukee River watershed joined CSP in 2008, bringing Wisconsin's totals to 700 farms and 217,600 acres that have joined CSP since it began in 2004. CSP contracts average five to 10 years, and the Milwaukee River-area contracts will be worth an average of $6,000 per contract in the first year.

Under the FRPP, the NRCS provides matching funds to help purchase development rights or conservation easements to keep productive farm and ranchland in agricultural uses. The NRCS provides up to 50% of the purchase costs of permanent easements on eligible farmland. The other 50% must come from a state, tribal or local government or a non-governmental group. From the program's beginning in 1996 through 2008, Wisconsin projects have received $14.3 million for projects covering 12,400 acres on 79 farms in 12 counties.

The GRP offers landowners an easement or rental payment for the implementation of practices to protect, restore, and enhance grasslands on their property. Federal supports depend upon the type of agreement reached with each landowner. The GRP has not accepted new participants since 2005.

WHIP provides private landowners with technical assistance and cost-sharing for the establishment and improvement of wildlife and fish habitat. Contracts generally span 5-10 years.

The WRP provides technical and financial assistance to eligible landowners to address wetland resource concerns on private lands, as well as wetland-related concerns such as wildlife habitat, soil and water. The type of agreement again determines the amount of federal support.

In addition, under the conservation reserve enhancement program (CREP), the USDA and the state of Wisconsin entered into a $240 million agreement to: (a) protect environmentally sensitive land next to rivers and streams by improving impaired water resources; and (b) enhance wildlife habitat in two designated grassland areas. CREP is a voluntary land retirement program in which landowners may enroll agricultural lands into conservation practices in order to protect environmentally sensitive land, decrease erosion, restore wildlife habitat, and safeguard ground and surface water. Eligible conservation practices under CREP include riparian buffers, filter strips, wetland restorations, and establishment of native grasslands in the grassland project area. The land may be enrolled through a 15-year agreement or a perpetual easement. Under the program, the state is required to match a federal grant of $200 million with at least $40 million of state funds. The state has authorized $40 million in general obligation bonding authority for the program.

Through October 1, 2008, more than 40,000 acres of land have been enrolled in CREP, with 33,800 acres entered in 15-year easements and 6,300 acres in perpetual easements. The FSA projects that total federal payments associated with this acreage over CREP contracts will total about $78 million. In addition, state incentive payments to enroll this land into the program and to make cost-share grants to landowners for the installation of conservation practices are approximately $11.3 million as of June 30, 2008. As a result, expenditures of approximately $89.3 million (out of the total $240 million available) are expected over the life of the CREP contracts for the lands enrolled in CREP as of October 1, 2008. This funding has been used to: (a) buffer 1,378 miles of streams, part of the state goal of 3,700 miles; (b) remove an estimated 128,500 pounds of phosphorus annually, part of the state goal of 610,000 pounds annually; (c) remove 68,000 pounds of nitrogen annually, part of a goal of 305,000 pounds annually; (d) remove an estimated 62,700 tons of sediment annually, part of a goal of 355,000 tons annually; and (e) establish 10,600 acres of the state goal of 15,000 acres of grassland habitat. Wisconsin and the USDA extended the state's participation in CREP in December 2007. Congress has authorized CREP through 2012.

Administrative Funding

As shown in Table 8, in 2008-09, the agencies are provided approximately $8.8 million in direct administrative funding for positions associated with the nonpoint and soil conservation programs. In addition to amounts identified in the table, each agency also supports a portion of overall Department overhead costs. DATCP funding is estimated at approximately $2.5 million and 25.0

Table 8: 2008-09 Administrative Funding and Associated Positions

	DATCP		DNR	
Source	Funding	Staff	Funding	Staff
GPR	$0	0.00	$985,300	11.00
FED	301,300	4.00	2,232,700	31.25
SEG	2,165,900	21.00	1,458,900	12.25
PR	0	0.00	1,701,700	18.50
Total	$2,467,200	25.00	$6,378,600	73.00

staff to administer its land and water resource management program activities. Funding is provided from the segregated nonpoint account of the environmental fund and federal revenue.

Federal and state funding has been provided for DNR planning, monitoring and administration of the nonpoint program. In 2008-09, DNR is provided $6.4 million and 73.5 staff to administer its nonpoint pollution abatement and storm water activities. Program revenues are provided from storm water fees. Segregated revenues are provided from the nonpoint account of the environmental fund.

In addition to the amounts shown in Table 8, DNR is provided $997,600 from the nonpoint account of the segregated environmental fund for nonpoint contracts in 2008-09. The statutes require that at least $500,000 of these funds be used each year for contracts with UW-Extension for educational and technical assistance.

The current DNR federal positions were authorized in 1990 and are funded under the federal Water Quality Act of 1987. The federal program requires states to submit a proposed management program for controlling pollution from nonpoint sources and improving water quality. This must include a list of BMPs, a program of implementation of those measures and a timetable. States that comply with requirements are eligible for 50% federal grants to assist nonpoint source plan implementation. These grants are known as "section 319 grants" because of the section of the federal act creating the program.

In addition to federal funding of $2,232,700 provided for 31.25 positions (as shown in Table 8), and $1,100,000 provided for section 319 watershed grants (included in the cost-share grants category in Table 3), additional federal funding received by DNR for federal fiscal year 2008 was $1,650,400. This includes $659,700 for administrative funding (not salary and fringe benefits, rather such items as supplies and travel), $588,700 for research, and $402,000 in contracts with other agencies. These contracts include $301,300 with DATCP, $76,700 with UW-Extension, and $24,000 in contracts with other UW System institutions. As a result, total federal funding received by DNR in federal fiscal year 2008 was $4,983,100.

Nonpoint Source Pollution Abatement Grant Programs

To complement annual staffing and practice grants made to counties by DATCP and the priority watershed program, DNR may provide competitive grants to governmental units for projects that control nonpoint source pollution. These grants target areas: (a) that are of highest priority, including areas with targeted water quality standards, impaired waters, outstanding and exceptional resource waters, public health threats and other issues of state and national importance; and (b) where pollution abatement cannot be achieved through implementation of county soil and water resource activities funded under DATCP cost shares. Targeted projects include projects for managing pollutants from animal feeding operations receiving a notice of discharge or notice of intent to issue a notice of discharge.

DNR administers the following three competitive grant programs under the noted administrative rules: the targeted runoff management (TRM) program (NR 153), the urban nonpoint source and storm water (UNPS) grant program (NR 155), and the municipal flood control program (NR 199). Local governments that are awarded any of these grants enter into a contractual agreement with the DNR. Grant recipients must comply with program conditions, provide the local portion of the project costs, and install and maintain for 10 years all BMPs constructed under these programs. Local governments that use these grant funds to provide assistance to private landowners must enter into a similar contractual agreement with the landowner. Project applications to construct practices in navigable streams or in wetlands require a waterway or

wetland permit prior to the submittal of the application.

Targeted Runoff Management Grant Program

Targeted runoff management grants are competitive awards to support small-scale, short-term projects that are completed by local governmental units within 24 months of the start of the grant period, with a possible 12-month extension. The statutory maximum for a project is four years. Both urban and rural nonpoint projects can be funded through a TRM grant, but revised federal standards adopted under NR 216 in 2004 have required 218 municipalities in Wisconsin, including some UW campuses, to obtain a Wisconsin pollutant discharge elimination system (WPDES) permit. This permit classifies these municipalities as point sources, and point sources are ineligible for TRM grants. Most TRM grants thus go to rural counties or smaller municipalities.

Up to 70% of a project's eligible costs can be funded through a TRM grant, to a maximum of $150,000 in state funding. Funds may be used for the construction of BMPs in a target area based on one of the following: (1) DNR standards; (2) the existence of impaired water bodies that the Department has identified to the federal EPA; (3) the existence of outstanding or exceptional resource waters as designated by statute; (4) the existence of threats to public health; (5) the existence of an animal feeding operation that has received a notice of discharge or a notice of intent to issue a notice of discharge; or (6) other water quality concerns of national or statewide importance.

Although the maximum cost-share rate under the TRM program is 70% except in cases of economic hardship, local units of government are allowed to request a lower TRM cost-share rate for their project in their project applications. Eligible BMPs under the TRM program are explained in Appendix I, and cost-share rates appear in Table 4.

TRM grant funds are not used to pay for staffing, studies, or designs, as bonding is currently the primary source of funding for TRM projects. The Wisconsin Constitution only allows issuance of public debt for support of long-term capital improvements.

For calendar year 2008, the TRM program selected 52 projects to receive funding of $4.9 million. These grants are listed in Appendix III.

Urban Nonpoint Source and Storm Water Grant Program

1999 Act 9 created an urban nonpoint source program under DNR and removed oversight and project selection powers from the LWCB for the urban nonpoint program. The primary goals of the UNPS program include implementing urban runoff performance standards of NR 151, achieving water quality standards, protecting groundwater, and helping municipalities meet municipal storm water permit conditions of NR 216.

The DNR distributes UNPS grants to local governments either with jurisdiction over a project area or with responsibility for controlling storm water discharges under s. 283.33, which pertains to WPDES storm water permitting. To be generally eligible for UNPS grants, projects must occur in an urban area, which is land with a population of at least 1,000 persons per square mile or land used industrially or commercially. A project must meet applicable non-agricultural runoff performance standards under NR 151, including both construction-site pollutant controls and post-development storm water management for newly developed or redeveloped sites of one acre or greater. A project must also align with DNR pollution abatement priorities identified on the basis of a watershed or other geographic features.

The statutes also allow governmental units or activities regulated by WPDES storm water permits to apply for UNPS grants. DNR provides cost sharing for structural practices to control runoff from existing urban developments, including municipally owned industrial properties, but does not

provide cost sharing for construction site erosion control, post-construction runoff from new development or runoff from non-municipal industrial properties. The DNR also funds planning grants for: (a) municipal storm water management activities that analyze existing development; or (b) areas that will be newly developed within 20 years. Erosion-control planning for private development is not eligible for grants. The Department also does not fund prevention planning for industrial storm water pollution.

In addition, the Board of Regents of the University of Wisconsin System may apply for urban nonpoint source cost-share grants for measures that control storm water discharges on UW campuses. A campus must be located in a municipality within a priority watershed or Great Lakes area of concern. The municipality must also be required to hold a storm water discharge permit.

The UNPS grant program contains two grant types. Local assistance grants, or planning grants, help local governments cover costs of various activities such as runoff control planning, engineering designs, feasibility studies, public information initiatives, ordinance drafting and ordinance enforcement. Municipalities seeking planning grants must be urban areas or areas projected to be urban within 20 years. Runoff management grants, or construction grants, share with jurisdictions the costs of physical improvements. Eligible physical improvements include: (a) stream bank and shoreland stabilization; (b) structural urban BMPs such as necessary land acquisition, storm sewer rerouting, and removal of structures; and (c) other activities, such as improved street sweeping, identified by DNR rule. Ineligible construction-related activities include: (a) new construction activities and new development; (b) replacement costs for BMPs meeting non-agricultural performance standards under NR 151; (c) BMPs whose installation began prior to the beginning of grants or cost-share agreements; and (d) BMPs for runoff that was adequately controlled at the time of a grant or cost-share agreement but has since undergone changes in land use.

Planning grants may not exceed 70% of total costs, while construction grants have generally had a 50% cost-share rate since 1999. Since 2003, the maximum amount that can be granted for a construction project is $150,000, and the maximum amount that can be granted for a technical assistance project is $85,000. In addition, projects that involve land acquisition or permanent easements are eligible for an additional $50,000 (at the 50% state cost-share rate). Construction grants are limited to two years per project, although DNR may approve a one-year extension. These grants are site-specific, generally smaller than a subwatershed, and focus on high-priority problems in urban project areas. A municipality is eligible for cost sharing even if it holds a WPDES storm water permit.

As shown in Table 9, a total of almost $8.8 million is available for urban nonpoint grants and municipal flood control and riparian restoration grants in 2007-09. This includes $2.8 million nonpoint account SEG and $6 million in general obligation bonding that was authorized in 2007 Act 20. State law does not specify how much of the $8.8 million be spent on either program. DNR, however, limited UNPS awards for 2009 to $399,000, instead transferring $1 million of the available SEG funding to the state general fund in a departmental lapse required under 2007 Acts 20 and 226.

Table 9: Urban Nonpoint and Municipal Flood Control Grant Appropriations

Source	2007-08	2008-09
SEG	$1,399,000	$1,399,000
BR*	3,000,000	3,000,000
Total	$4,399,000	$4,399,000

*Bonding of $6 million is available across both years of the biennium.

For 2008, the UNPS program awarded more than $4.2 million in grants. Of this amount, more than $2.9 million in bonding went to fund construction costs, with the remaining approximately $1.3

million in planning costs being funded by segregated revenue. A list of these grants can be found in Appendix IV.

Municipal Flood Control and Riparian Restoration Program

1999 Act 9 created a municipal flood control and riparian restoration program within the urban nonpoint program. The program provides grants to cities, villages, towns or metropolitan sewerage districts for the collection and transmission of storm water for flood control and riparian restoration projects. As in the UNPS program, the municipal flood control program offers two types of grants. Local assistance grants fund planning and administrative costs. Acquisition and development grants fund purchases of perpetual flowage and conservation easement rights on land within a flood way, as well as flood proofing of public or private structures remaining in a 100-year flood plain.

DNR may provide grants for up to 70% of construction and acquisition costs for an approved project. DNR may also provide local assistance grants for up to 70% of eligible costs, including planning and design costs. In any fiscal year, the Department may not award more than 20% of the program's available funding to any one applicant.

Projects affecting any number of local governmental units are eligible for municipal flood control and riparian restoration grants. For projects affecting one governmental unit, DNR may award a grant to that unit. For projects affecting two or more local government units, grants may be awarded to: an applying municipality or metropolitan sewerage district upon application by all of the municipalities or metropolitan sewerage districts affected by the project; or a municipality or metropolitan sewerage district with jurisdiction for the provision of storm water collection facilities to two or more municipalities or metropolitan sewerage districts affected by the project.

DNR must specify criteria for determining the eligibility and priority ranking of projects. The statutes, however, specify several criteria: (a) no transfer of flooding down stream; (b) no channeling of a stream or lining of a natural stream bed with concrete; (c) provide adequate opportunity for public use access for the stream and flood way; and (d) to the extent practical, cause no harm to existing beneficial functions of water bodies and wetlands; (e) maintain aquatic and riparian environments; and (f) use storm water retention and detention structures and natural storage.

NR 199 contains administrative rules for the municipal flood control program. These rules became effective October 1, 2001, and DNR has awarded 44 flood control and riparian restoration grants since March of 2002. Total grants since then have been approximately $11,628,300. A list of grants awarded for calendar year 2008 appears in Appendix V.

Project Selection Process

Eligible governmental units must apply for grants under the TRM and UNPS programs by April 15 to be considered for funding in the following calendar year. Eligible governmental units include cities, villages, counties, towns, sanitary districts, lake districts, tribal governments and others. State agencies are eligible to apply for TRM grants but not UNPS grants, although the University of Wisconsin Board of Regents is eligible to apply for both grants.

Under the TRM and UNPS grant programs, after first passing a screening process to determine basic eligibility, DNR awards grant agreements to applicants based on a scoring system devised by the Department. Statutes specify the following scoring criteria: (a) the extent to which the application proposes cost-effective and appropriate BMPs to achieve water quality goals; (b) the existence of an impaired water body in the project area, which the DNR has identified to EPA; (c) the extent to

which the project will attain established water quality objectives; (d) the local interest in, and commitment to, the projects; (e) the inclusion of a strategy to evaluate the progress toward reaching project goals; (f) the extent to which the application proposes to use available federal funding; and (g) the extent to which the project enables the City of Racine to control storm water discharges under federal and state requirements.

DNR guidelines establish minimum qualifications for eligibility. These qualifications include a fixed-dollar state cost-share maximum in addition to maximum state cost-share percentages. For TRM and UNPS construction grants, total project costs including design costs are eligible for up to $150,000. Land acquisition and permanent easements under UNPS are eligible for an additional $50,000. UNPS planning grants can be funded up to $85,000. Grant terms generally require that installation be completed within 24 months of the start of the grant period.

Applicants meeting the minimum qualifications are then scored based on fiscal accountability, water quality information, evidence of local support, and the ranking of the area on the watershed and lake list, where again they must receive minimum scores for further consideration. Finally, applicants meeting those minimum score requirements are scored based on water quality needs, the extent of pollutant control needed, the likelihood of success of the project, the leveraging of additional funding and, as a tiebreaker, whether or not the project will assist the City of Racine to control storm water discharge. The initial project score is increased by 10% if there is a comprehensive local NR 151 implementation program, and up to an additional 15% if there is a local program for enforcing some or all of the performance standards and prohibitions. Under the UNPS program, construction and planning projects are separated into two groups that compete for different pools of grant funding.

DNR determines project scores under the TRM grant program, and DNR and the Land and Water Conservation Board discuss the scores and recommended projects for TRM cost sharing. By September 1, DNR ranks projects using the scoring system and, to the extent possible, the Department evenly distributes awards in a geographic manner throughout the state. For example, the highest scoring project from each DNR region generally earns a grant regardless of the project's overall ranking. Grant agreements are then entered into by January 1 of the following year.

Clean Water Fund Loans

The clean water fund program, administered by DNR and the Department of Administration, provides low-interest loans to municipalities for nonpoint source pollution abatement and storm water management projects. The subsidized interest rate is 65% of the market rate. DNR promulgated rule changes effective March 1, 2001, to allow funding for nonpoint and urban storm water projects. To date the program has funded one urban storm water project for $793,400.

The land recycling loan program is part of the clean water fund program and provides no-interest loans to certain local governments for the investigation and remediation of certain eligible properties. Under federal clean water regulations, land recycling loans are considered to be for nonpoint source pollution abatement projects. The Legislative Fiscal Bureau Informational Paper titled "Environmental Improvement Fund," describes the clean water fund program.

Original Nonpoint Source Pollution Abatement Grant Program

Chapter 418, Laws of 1977, created the nonpoint source water pollution abatement grant program to provide state financial assistance for the installation of practices that abate nonpoint sources of pollution. The program awards grants to landowners and municipalities for projects that reduce nonpoint sources of pollution. Through

June 30, 2008, over $210 million in local assistance and cost-share grants have been spent for original priority watershed and lake projects. The program remains authorized under s. 281.65 of the statutes and administrative rule NR 120.

1997 Act 27 and 1999 Act 9 retailored the nonpoint pollution control program, including the procedures by which new nonpoint pollution abatement projects are designated and splitting the urban and rural portions of the program. The original program is being phased out as priority watershed projects end. In its place, the Legislature created the competitive TRM grant program and emphasized providing staff funding to all counties through DATCP. As previously designated nonpoint projects implemented in the original structure will continue through 2009, this section describes the process of implementing those original grants.

Original Priority Watershed Projects

Prior to 1998, the nonpoint source grant program was implemented solely through a priority watershed strategy. A watershed comprises all land that contributes runoff water to a stream or lake. In the past, DNR used area-wide water quality plans originally developed under the Federal Water Pollution Control Act to identify watersheds and lakes where the need for nonpoint source pollution abatement was most critical. Only abatement projects located within watersheds designated as a high or medium priority were eligible for funding. Specific projects within these areas were then selected, first by DNR and later by the LWCB, based on district workload and priorities, county ability to manage a project and landowner participation.

Priority Watershed Designations

The 1997-99 biennial budget act required that DNR re-rank all watersheds and lakes in the state by the level of impairment by nonpoint source pollution. In preparing the rankings, DNR considered water bodies appearing on the state-designated impaired waters list, or 303(d) list, which DNR is federally required to submit to EPA. The 1997-99 biennial budget act also required that funding be terminated for any of the 62 active priority watershed projects that were not re-identified by the LWCB. DNR subsequently sorted large-scale, small-scale and priority lakes projects watersheds into high-, medium- or low-priority watershed status. Using this list, the LWCB identified priority watersheds and lakes with DNR and DATCP recommendations, regardless of past priority watershed designations. Statutorily designated watersheds in the Milwaukee River basin and the South Fork of the Hay River were exempt from funding termination.

The LWCB ultimately re-designated all 62 active priority watershed projects. Thus, each of the 62 projects remained eligible to receive funding on an area-wide basis until their completion. No future designations of priority watershed projects could be made. Priority areas are grouped according to the following designations:

Large-Scale Priority Watersheds. For planning purposes, the state is divided into 330 large-scale watersheds. Each large-scale watershed is generally 75 to 300 square miles.

Small-Scale Priority Watersheds. Small-scale priority watersheds are sub-watersheds within a large-scale watershed. Small-scale priority watershed projects implement the same BMPs as the large-scale projects but are selected to achieve local water quality objectives, such as reducing sedimentation of a small stream. Small-scale projects are often found in medium- or low-priority watershed areas where it can be demonstrated that significant local benefits can be derived.

Priority Lakes Projects. Priority lakes projects generally include watersheds draining to a selected lake or lakes. Priority lakes are those where the need for nonpoint source water pollution abatement is most critical. The affected area of these projects has ranged from eight to 230 square miles.

Until 2003, statutes required DNR to allocate at least $300,000 of nonpoint source grant funds each year to priority lakes projects.

High-Priority Areas. High-priority areas contain a preponderance of impaired waters, threatened waters or a mix of impaired, threatened and partially impaired waters. The presence of endangered or threatened species may also prompt a high ranking.

Medium-Priority Areas. Medium-priority areas are a mixture of those fully meeting their uses and those partially meeting their uses.

Low-Priority Areas. Low-priority areas have a majority of waters fully meeting their uses.

Statutorily Designated Priority Watersheds

As part of 1983 Act 416, DNR was required to identify watershed projects in the Milwaukee River Basin, which includes portions of Milwaukee, Waukesha, Washington, Ozaukee, Fond du Lac and Sheboygan counties. In 1989 Act 366, the Kinnickinnic River was designated a part of the Milwaukee River Basin, and was, therefore, included as a part of the nonpoint project area. Six of the 66 large-scale priority watershed projects are located in the Milwaukee River Basin. In 1997 Act 209, the Root River Watershed was statutorily designated a priority watershed, reopening a watershed that previously had been completed.

The South Fork of the Hay River in Barron, Dunn, Polk and St. Croix counties was originally designated a priority in 1993 and guaranteed such a designation until June 30, 2001. This designation was subsequently extended to 2005. The South Fork watershed area was exempt from nonpoint requirements related to cost-share rates and the types of BMPs installed. Instead, Dunn County and the DNR developed guidelines that were intended to distribute shared costs on the basis of higher reductions in nonpoint source water pollution.

Project Planning and Implementation

Best Management Practices. BMPs are the primary means of abating nonpoint source water pollution. BMPs are generally identified in area-wide water quality management plans and then refined in the nonpoint source water pollution abatement plan prepared for each watershed project. Landowners receive cost-share grants to install BMPs.

In addition to landowner grants, DNR may require local governments to adopt manure storage ordinances and construction site ordinances as a grant condition under the nonpoint program. DNR has developed construction-site erosion control technical standards and a model construction site erosion control ordinance. The technical standards replace the handbook of construction-site BMPs previously developed by DNR. In addition, the Department of Commerce and the Department of Transportation (DOT) have specific authorities and duties related to one- and two-family construction sites and highway and bridge construction projects, respectively. These provisions require Commerce and DOT, in consultation with DNR, to establish standards based on BMPs.

Designated Management Agency. For the nonpoint source grant program, the term "designated management agency" is used to identify the primary local government participant or participants. Various local governmental units can participate in the nonpoint source grant program, including counties, cities, villages, towns, tribal governments, metropolitan sewerage districts, town sanitary districts, regional planning commissions, drainage districts and various lake districts. DNR designates management agencies for nonpoint source planning and implementation activities in a given watershed area. In rural watersheds, DNR generally selects counties as designated management agencies. Cities, villages and towns typically manage urban watersheds.

Local Priority Watershed Advisory Committee. DNR is directed to appoint a local committee for each priority watershed and priority lake project to provide advice on all aspects of the nonpoint source pollution abatement program. The committee consists of at least two farmers if the watershed or lake project includes agricultural land. The committee also includes at least two representatives of a public inland lake protection district, or if one does not exist, of riparian property owners, who own property abutting a lake, river or other natural body of water. If the priority area is located in the Milwaukee River basin, the committee must also include a member of the county board from each county within the Milwaukee River Basin priority watershed or priority lake area. Local priority watershed advisory committees are not required for projects selected under the competitive program.

Watershed Assessment and Planning. Projects in the original nonpoint program were based on watershed plans and assessments with continual updates. The first step in the watershed plan involves preparing an inventory of nonpoint source water pollution in the watershed. This assessment analyzes the water quality problems in the watershed's lakes, streams and groundwater, and identifies the nonpoint sources causing the problems. The priority watershed plan is also required by statute to: (a) identify critical surface water and groundwater protection management areas within the watershed, which are those portions where pollution is most significant and where BMPs will be most effective; (b) establish an integrated resource management strategy to protect or enhance fish and wildlife habitat, aesthetics and other natural resources; and (c) develop a comprehensive strategy to manage agricultural and nonagricultural nonpoint source water pollution affecting surface water or groundwater.

DNR delegates some of the planning work to the designated management agency in the priority watershed areas. DATCP, other state agencies, local governmental units and persons located in the watershed also participate in this planning process. DATCP has responsibility for preparing parts of the watershed plans relating to: (a) farm-specific implementation schedules; (b) cross-compliance activities, which are requirements that recipients of farmland preservation tax credits employ BMPs and comply with land and water conservation standards; (c) animal waste management; and (d) selection of BMPs for agricultural areas.

1991 Act 309 obligated DNR to complete the planning process for all designated priority watersheds by December 31, 2000. 1995 Act 27 extended that date to December 31, 2015. All originally designated projects have completed their plans. Further, under the current DNR financing plan, all originally designated projects are slated for project implementation to be completed in 2009. However, state law provides landowners an additional 12 months to complete projects if completion was delayed due to no fault of the landowner. As a result, DNR officials expect some county cost-share agreements with landowners under the priority watershed program to be complete in calendar year 2010.

Project Implementation Phase. Once the LWCB, counties and DNR approve the plan, the designated management agency is responsible for coordination and implementation of plan activities. This includes contacting all owners or operators identified as significant nonpoint sources in the watershed plan and securing their cooperation. As participation in the nonpoint program is voluntary except for those sites within critical watersheds, an important function of designated management agencies is securing the cooperation of land users who have the greatest impact on nonpoint source pollution. The agency enters into cost-share agreements with individual landowners, ensures the proper installation of BMPs, and provides general local program administration and coordination. In urban areas, the "landowner" is typically the municipality.

Critical Sites. 1993 Act 166 directed DNR, in

preparing priority watershed plans, to designate critical sites within the watershed as part of the planning and selection process of the priority watershed project (see later section on animal waste regulatory authority). Critical sites are those considered most important to achieving water quality goals established in the plan. The DNR, in consultation with DATCP, is required to submit a list of critical sites to the LWCB as part of the priority watershed and lake planning process. The LWCB must approve those sites before they are designated as critical. The DNR, in consultation with DATCP, may subsequently modify a critical site list, subject again to LWCB approval. DNR will not identify any additional critical sites, as this designation is only made for sites in priority watershed projects. No new priority watersheds will be identified.

Designated Watershed Projects

Under the original nonpoint program, 86 large, small and lake projects were selected for funding. Of these, 72 projects have been completed and closed as of the end of 2008. DNR formerly issued final reports for closed projects, but now updates the following information each year for all priority watershed projects: (a) cumulative pollutant load reduction; (b) cumulative landowner participation rates; (c) progress on other project goals; (d) cumulative BMPs installed and cost-share funds reimbursed; and (e) cumulative critical sites resolved. This information then appears in an annual progress report published jointly by DNR and DATCP. Additional information on expended funds, cost-share participation rates and water quality information for remaining watersheds is available from, or reported annually by, DNR and DATCP.

Table 10 lists small-scale, priority lakes and other uses of grant funds. Table 11 lists large-scale nonpoint source pollution control projects. The tables portray the grant amounts that have been expended for each project including funding for cost-share and local assistance grants. The tables also note which projects are closed or the year of completion for open projects. The amounts listed reflect final project costs only through June 30, 2008, for completed projects. The tables reflect state and federal expenditure figures.

Continuing Nonpoint Project Funding

In 1998, the LWCB approved revised nonpoint source grant totals for original nonpoint projects, decreasing most grant awards, but still fully funding all signed cost-share agreements. Since 1997, the DNR has provided counties with active priority watershed projects with an anticipated cost-share reimbursement amount (ACRA), to be used to reimburse landowners for BMPs installed during that calendar year. The ACRA should equal the state cost-share amount for practices installed in each watershed project for that calendar year. If a county exceeds its ACRA, the county is responsible for funding the amount of the overage.

Unspent ACRAs may be transferred between projects within the same county, between grantees in the same priority watershed, or between counties in different priority watersheds. In the past, DNR has chosen to reallocate unspent ACRA allowances for grants in the competitive TRM grant program.

ACRA funds provided by the DNR to counties come with two restrictions on their use. First, bond revenue may not be used to pay for cropping practices such as nutrient management and conservation tillage. Second, for the priority watershed program, cropping practices will only be reimbursed using the combination of federal 319 funds, which are restricted to certain areas of Wisconsin, and state GPR.

For 2009, DNR has allocated $2,543,800 for anticipated cost-share reimbursement amounts. This includes approximately $2.1 million in bonding for rural cost-shares and $400,000 for rural cropping practices.

Table 10: Original Nonpoint Source Pollution Abatement Grant Program Expenditure Through June 30, 2008 -- Small-Scale Priority Watersheds, Priority Lake Projects, and Other Grants♠

Year Started	Project Name (end date)	County	Watershed Size (Sq. Miles)	Local Assistance	Cost-Share
Small Scale Watershed Projects					
1986	Bass Lake*	Marinette	1	$23,026	$94,593
1990	Dunlap Creek*	Dane	14	100,742	181,907
	Lowes Creek*	Eau Claire	10	289,587	232,255
	Port Edwards Groundwater Project*	Wood	10	157,108	0
1991	Whittlesey Creek*	Bayfield	12	343,826	182,987
	Spring Creek*	Rock	6	234,741	9,999
1994	Osceola Creek*	Polk	9	198,646	158,828
	Subtotal		62	$1,347,675	$860,569
Priority Lake Projects					
1990	Minocqua Lake*	Oneida	10	$175,587	$82,001
	Lake Tomah*	Monroe	32	376,096	358,657
1991	Little / Big Muskego-Wind Lakes*	Waukesha, Racine	41	1,297,915	668,586
1992	Middle Inlet-Lake Noquebay *	Marinette	155	556,907	1,897,187
	Lake Ripley*	Jefferson	8	646,918	230,904
1993	Camp / Center Lakes*	Kenosha	8	585,045	149,913
	Hillsboro Lake*	Vernon	35	551,334	697,335
	Lake Mendota*	Dane, Columbia	230	1,740,591	570,910
1994	St. Croix Lakes Cluster*	St. Croix	3	282,465	262,961
	St. Croix Flowage & Upper St. Croix Lake*	Douglas	45	313,583	71,171
1995	Big Wood Lake (2009)	Burnett	20	280,753	65,579
	Horse Creek (2009)	Polk	15	306,247	365,693
	Rock Lake*	Jefferson	10	163,288	139,582
	Subtotal		612	$7,276,729	$5,560,479
Other Grant Recipients					
	Federal (NRCS, USGS)			$1,238,526	$0
	State Institutions (UW, UWEX)			1,524,702	0
	Regional Planning Commissions			282,188	0
	Other			103,170	0
	Subtotal			$3,148,586	$0
Total				$11,772,990	$6,421,048

* Completed Projects

♠ Amounts for FY 01 through FY 08 include Priority Watershed grants only. The most recent urban nonpoint source and storm water management grant and targeted runoff management grant awards are included in a separate table.

DATCP Participation in the Original Nonpoint Source Grant Program

Under the original nonpoint program, DATCP has authority to: (1) prepare the parts of the watershed plans relating to farm-specific implementation schedules, cross-compliance activities, animal waste management and agriculturally related BMP selection; (2) identify areas within a watershed project which are subject to activities required under the cross-compliance provisions of the farmland preservation program; (3) identify recommendations for implementation of these activities; (4) develop a grant disbursement and project management schedule for agricultural BMPs; (5) provide input on critical site selection within a watershed when pollution is animal waste related; and (6) provide engineering assistance.

Table 11: Original Nonpoint Source Pollution Abatement Grant Program Expenditures Through June 30, 2008 -- Large-Scale Priority Watershed Projects♠

Year Started	Project Name (end date)	County	Size Sq. Miles	Local Assistance**	Cost-Share
1979	Galena River*	Lafayette, Grant	241	$120,412	$2,267,305
	Elk Creek*	Trempealeau	112	78,732	1,456,717
	Root River*	Racine, Waukesha, Milwaukee	198	489,057	1,487,593
	Lower Manitowoc River*	Manitowoc, Brown	168	8,224	188,750
	Hay River*	Barron, Dunn	289	29,464	841,307
1980	Big Green Lake*	Green Lake, Fond du Lac	106	312,913	650,435
	Upper Willow River*	St. Croix, Polk	183	53,173	327,522
	Six-mile / Pheasant Branch Creek*♦	Dane	119	2,321	493,293
	Onion River*	Sheboygan, Ozaukee	97	58,324	321,193
1981	Upper W. Branch Pecatonica River*	Iowa, Lafayette	77	9,227	257,049
	Lower Black River*	La Crosse, Trempealeau	189	312,364	1,309,686
1982	Kewaunee River*	Kewaunee, Brown	142	245,452	647,267
	Turtle Creek*	Walworth, Rock	288	586,582	1,482,020
1983	Oconomowoc River*	Waukesha, Washington, Jefferson	130	594,875	283,984
	Little River*	Oconto, Marinette	210	777,206	1,472,807
	Crossman Creek / Little Baraboo River*	Sauk, Juneau, Richland	213	1,616,899	3,846,414
	Lower Eau Claire River*	Eau Claire	399	399,224	833,631
	Beaver Creek*	Trempealeau, Jackson	160	166,794	1,620,347
1984	Upper Big Eau Pleine River*	Marathon, Clark, Taylor	219	696,567	1,119,674
	Seven-mile / Silver Creek*	Manitowoc, Sheboygan	112	291,508	1,188,890
	Upper Door Peninsula*	Door	287	1,161,944	3,846,414
	East & West Branch Milwaukee River*	Fond du Lac, Washington, Sheboygan, Dodge, Ozaukee	265	1,665,851	1,625,934
	North Branch Milwaukee River*	Sheboygan, Washington, Ozaukee	149	1,369,836	1,348,996
	Cedar Creek*	Ozaukee, Washington	129	1,262,521	1,171,100
	Milwaukee River South*	Ozaukee, Milwaukee	167	3,830,134	4,692,988
	Menomonee River*	Milwaukee, Waukesha, Ozaukee, Washington	136	3,224,356	1,150,422
1985	Black Earth Creek*	Dane	105	645,841	1,600,512
	Sheboygan River*	Sheboygan, Fond du Lac, Manitowoc, Calumet	260	2,827,999	3,712,468
	Waumandee Creek*	Buffalo	221	1,409,795	3,561,279
1986	East River*	Brown, Calumet	206	3,936,671	3,458,325
	Yahara River-Lake Monona*	Dane	93	2,070,735	1,856,528
	Lower Grant River*	Grant	129	1,061,056	1,425,192
1989	Middle Trempealeau River*	Trempealeau, Buffalo	205	2,492,682	5,177,533
	Lake Winnebago / East*	Fond du Lac, Calumet	99	1,946,144	2,205,232
	Middle Kickapoo River*	Vernon, Monroe, Richland	246	2,170,618	3,436,155
	Yellow River*	Barron	239	828,868	952,367
	Upper Fox / Illinois River*	Waukesha	151	1,717,551	659,421
	Narrows Creek / Baraboo River*	Sauk	176	1,408,825	3,755,138
	L. E. Branch Pecatonica River*	Green, Lafayette	144	1,898,949	2,147,746

Table 11: Original Nonpoint Source Pollution Abatement Grant Program Expenditures Through June 30, 2008 -- Large-Scale Priority Watershed Projects (continued)

Year Started	Project Name (end date)	County	Size Sq. Miles	Local Assistance**	Cost-Share
1990	Arrowhead River / Daggets Creek*	Outagamie, Winnebago	142	$1,473,852	$1,585,313
	Kinnickinnic River*	Milwaukee	33	175,094	0
	Beaver Dam River*	Dodge, Columbia, Green Lake	290	2,104,624	2,390,764
	Duncan Creek*	Chippewa, Eau Claire	191	2,283,577	2,150,357
	Lower Big Eau Pleine River*	Marathon	138	993,368	1,687,907
	Upper Yellow River*	Wood, Clark, Marathon	212	1,320,268	2,540,116
1991	Upper Trempealeau River*	Jackson, Trempealeau	175	1,490,582	4,185,814
	Neenah Creek*	Adams, Marquette, Columbia	173	1,078,588	710,240
1992	Balsam Branch Creek*	Polk	104	896,430	1,010,789
	Red River / Little Sturgeon Bay*	Door, Kewaunee, Brown	139	1,944,648	6,995,007
1993	Branch River*	Brown, Manitowoc	108	2,056,800	4,395,610
	Soft Maple / Hay Creek*	Rusk	176	567,997	444,369
	South Fork Hay River*	St. Croix, Dunn, Polk, Barron	181	1,170,004	1,472,625
	Tomorrow / Waupaca River*	Waupaca, Portage	290	1,331,289	2,094,110
1994	Duck / Apple / Ashwaubenon Creeks (2009)	Brown, Outagamie, Oneida Nation	264	2,126,536	4,506,306
	Dell Creek (2009)	Juneau, Sauk	133	708,940	649,849
	Pensaukee River*	Oconto, Shawano	163	685,373	2,183,610
	Spring Brook*	Langlade, Marathon	69	305,913	322,583
	Sugar & Honey Creeks*	Racine, Walworth	166	749,964	854,859
1995	Fond du Lac River (2009)	Fond du Lac, Winnebago	244	616,281	2,118,357
	Kinnickinnic River (2009)	Pierce, St. Croix	206	639,213	1,422,918
	Lower Little Wolf River*	Waupaca	152	380,529	2,546,944
	Lower Rib River (2009)	Marathon	129	503,692	1,332,619
	Middle Peshtigo & Thunder Rivers (2009)	Marinette, Oconto	193	238,916	939,838
	Pigeon River (2009)	Manitowoc, Sheboygan	78	544,838	515,217
	Pine & Willow Rivers (2009)	Waushara, Winnebago	303	576,741	2,489,893
	Total		11,511	$70,743,751	$121,425,648

* Completed Projects

** Local assistance reflects grants made by DNR predominantly through 2000. Starting in 2001, funding for most local assistance grants was consolidated in DATCP (through staffing and support grants). Remaining DNR local assistance grants are primarily made to lake districts.

♦ Six-mile / Pheasant Branch is currently a part of the Lake Mendota priority lake project (1993).

♠ Amounts for FY 01 through FY 08 include Priority Watershed grants only. The most recent urban nonpoint source and storm water management grants and targeted runoff management grant awards are included in a separate table.

Animal Waste

Animal Waste Management Regulatory Authority (NR 243)

DNR administrative rule NR 243 regulates all large animal feeding operations in the state and those smaller animal feeding operations that have caused a significant discharge of pollutants into state waters. DNR regulates such operations as "point sources" of water pollution. Point sources must obtain a WPDES permit, which is the same permit system used to regulate discharges such as municipal sewage treatment plants. DNR promulgated rules that updated NR 243 in September, 2002, by adding the agricultural performance standards and prohibitions in NR 151 to the existing requirements for animal feeding operations. In 2003, DNR began the process of revising NR 243 to comply with revised federal animal feeding operation regulations and address manure runoff issues associated with land application activities. A revised NR 243 took effect July 1, 2007.

Discharge Permits. Under NR 243, all large concentrated animal feeding operations (CAFOs), which are those having 1,000 "animal units" or more, are required to obtain a WPDES permit from DNR. Animal units measure the total number of animals present in an animal feeding operation in a manner that adjusts for the potential impacts of their wastes. One animal unit is generally defined as the equivalent of one head of beef or slaughter cattle weighing 1,000 pounds. Under this measure, a dairy cow is generally estimated at 1.4 animal units and a laying chicken is estimated at 0.01 animal units. CAFOs are required to maintain acceptable management practices and facility design standards to prevent ground or surface water pollution. The construction of new or altered storage or pollutant runoff control structures may be required due to NR 243 regulations.

In addition, NR 243 regulates all other medium and small animal feeding operations, if DNR determines that the animal feeding operation has unacceptable practices. An animal feeding operation is defined as "a lot or facility, other than a pasture or grazing area, where animals have been, are or will be stabled or confined, and will be fed or maintained for a total of 45 days or more in any 12-month period." The Department has the authority to issue an NOD directing the operator to take corrective action. Any operation, regardless of the number of animal units on the property, may be designated as a point source if it makes certain discharges to navigable waters. Such operations must apply for a WPDES permit.

Enforcement of Small and Medium Livestock Operations

In the past, DNR identified potential violations based upon citizen complaints. However, as suggested in a 1994 audit by the Legislative Audit Bureau, DNR now also investigates animal waste sites on the basis of either citizen complaints or information received from state and county staff. The DNR estimates that it has received between 90 and 100 citizen complaints annually since the original adoption of NR 243 in 1984. The complaints and subsequent investigations resulted in the issuance of 602 notices of discharge to livestock operators through June 30, 2008.

Prior to 2002, grants for remediation were available from DATCP's animal waste regulatory cost-share program, and grant amounts received by livestock owners averaged around $20,000. Between 2002 and 2006, the TRM grant program in DNR was the sole source of available grant funding to assist these livestock operators in paying for facilities needed to correct the pollution discharge. County LCD staff and DATCP engineering staff could provide technical assistance for cost-shared projects. Several funding sources have since been identified for grants to manage animal waste: (a) reserves established by both DATCP and DNR; (b) the TRM program; and (c) the original priority watershed program.

DATCP allocated bonding revenues of $100,000 in 2007, and $200,000 in both 2008 and 2009 for grants to livestock owners for installation of regulatory animal waste BMPs. After receiving statutory authorization in 2007 Act 20, DNR also set aside $364,600 in 2008 ($196,000 bond revenue, $11,200 GPR and $157,400 federal water quality funds) and $1,296,400 in 2009 ($1,000,000 bonding, $246,400 FED and $50,000 GPR) for grants to landowners issued an NOD. The NOD must be issued to protect fish and wildlife. The DNR distributes these grants to counties, which enter into cost-sharing agreements with a landowner. DNR may also provide grants for animal waste management through the TRM program. In addition to the possible funding sources discussed above, if a property receiving an NOD is within an existing priority watershed project, the county may offer cost sharing to the landowner from the county's ACRA amount.

Approximately 57% (or 341) of the livestock operations receiving DNR notices of discharge have received, or are in the process of receiving, cost sharing from the state. Of these 341 operations, 326 have received grants from DATCP's animal waste regulatory cost-share program and 14 have received grants from DNR under either the priority watershed program, TRM program or NOD reserve. One operation received federal funding under EQIP. In 2006-07 and 2007-08, 70% of NODs resulted in cost-sharing to ensure corrective action.

As of June 30, 2008, 545 NOD violations have been resolved and six were planning or implementing corrections. Fifty one notices had expired, which was a provision under the former nonpoint source program that is no longer possible. DNR officials report that NODs requiring an offer of cost sharing are not issued until the required funding has been reserved for the project. NODs are thus corrected, issued WPDES permits or referred for legal action. Fewer than two percent of the operators failed to take required actions under the notice of discharge and have been issued WPDES permits or have DNR action pending.

Through June 30, 2008, 28 livestock operations had been referred to the Department of Justice for prosecution, including both WPDES-permitted and non-permitted operations. The operators were assessed a civil forfeiture and agreed, or were required, to install practices to address the discharges that lead to the referrals.

Nonpoint Source Pollution Regulatory Authority

In addition to animal waste-related point source pollution abatement, DNR may order the abatement of pollution that the agency, in consultation with DATCP, has determined to be a significant nonpoint pollution source. This includes nonpoint pollution which causes the violation of a water quality standard, significantly impairs aquatic habitat or organisms, restricts navigation, is deleterious to human health or otherwise significantly impairs water quality. This authority generally applies to agricultural and other sources, but not to pollution caused primarily by animal waste or an agricultural source that is located in a priority watershed or lake as regulated by NR 243, unless the source is designated as a critical site in a priority watershed or lake plan.

If DNR identifies a significant source of agricultural-related nonpoint pollution, it may send a notice of intent to issue an order to abate the pollution to the affected landowner and to DATCP. The notice identifies the pollution problem and establishes a date by which the pollution must be abated. The DNR must give landowners at least one year to abate the pollution unless the department determines that the pollution is causing severe water quality degradation.

If the pollution is agriculture-related, DATCP is responsible, in cooperation with the county land conservation committees, for providing the landowner with: (1) a list of potential management

practices which could abate the pollution; and (2) an explanation of the financial aids and technical assistance which may be available to abate the pollution or implement BMPs. In addition, DATCP is required to file a report with DNR describing the actions taken by the landowner and recommending whether DNR should issue an order to abate the pollution after the one-year period allowed the landowner has expired. If an order is issued, DNR may begin enforcement proceedings.

Nonpoint Source Performance Standards

The 1997 biennial budget act contained legislation to develop performance standards for both agricultural and nonagricultural facilities. These standards are established and enforced by both DNR and DATCP.

With the promulgation of the new nonpoint source water pollution abatement rules, there are enforceable state standards to control farm runoff. DNR administrative rule NR 151 defines the procedures to enforce these standards. In most cases, landowners are entitled to receive a cost-share offer before they can be required to change an existing operation to meet the new state standards. Under both DATCP and DNR's rules, counties play a lead role in securing compliance with the new standards. Under these rules, counties will use their land and water resource management (LWRM) plans to develop implementation strategies. To this end, DATCP cannot approve LWRM plans unless counties include work plans describing how the county will achieve compliance with the new standards. Counties may use voluntary and other methods to secure compliance. The standards and procedures established by the new rules are the primary approach taken by DATCP and DNR to control nonpoint source water pollution.

DNR Authority. DNR is required under Ch. 281 of the statutes to prescribe performance standards to achieve water quality standards by limiting nonagricultural, nonpoint source water pollution. The Department is also required to specify a process for the development and dissemination of technical standards to implement these performance requirements.

In addition, DNR has statutory authority relating to nonpoint sources that are agricultural. After consulting with DATCP, DNR must promulgate rules prescribing performance standards and prohibitions for agricultural facilities and agricultural practices that are nonpoint sources. At a minimum, the prohibitions must provide that livestock operations have no:

1. Overflow of manure storage structures;

2. Unconfined manure piled in a "water quality management area," defined as follows: (a) the area within 1,000 feet from the ordinary high-water mark of a lake, pond or flowage; (b) the area within 300 feet from the ordinary high-water mark of navigable waters that consist of a river or stream; and (c) sites that are susceptible to groundwater contamination or that have a potential to be a direct conduit to groundwater contamination;

3. Direct runoff from a livestock operation or stored manure into waters of the state; or

4. Unlimited access by livestock to waters of the state where high concentrations of animals prevent adequate sod cover.

NR 151. In order to administer its nonpoint and soil erosion performance standard responsibilities, DNR promulgated administrative rule NR 151, which establishes runoff management performance standards under the nonpoint source water pollution abatement program. The rule prescribes performance standards for three general areas: (1) agricultural land; (2) non-agricultural land; and (3) transportation facilities.

Agricultural Standards. Under NR 151, DNR mostly relies on county governments to implement agricultural performance standards. NR 151 specifies that all new cropland after October 1, 2002,

meet any agricultural performance standards for the given land. If cropland was in use prior to October 1, 2002, DNR may not force the farmer to modify the practices or operations that led to the violation unless cost sharing is offered to the farmer for the implementation of BMPs, which are listed in Table 4. Existing cropland as of October 1, 2002, that meets a performance standard must continue to meet the standard. NR 151 requires all crop producers who apply manure or other nutrients to their cropland to apply these nutrients in compliance with a nutrient management plan.

Regarding livestock facilities, NR 151 requires all facilities built after the creation of a performance standard to meet the given standard. NR 151 requires that a livestock facility owner must be offered cost-share funding for BMP implementation before a facility that was in existence prior to the creation of a performance standard can be required to change its practices and operations. NR 151 forbids local livestock facility ordinances from exceeding state standards unless: (a) the ordinance does not directly target livestock operations; (b) the ordinance was created before October 1, 2002, or (c) the governmental unit receives DATCP and DNR approval. In the event a livestock facility that violates performance standards holds a WPDES permit, DNR may instead follow NR 243 procedures.

NR 151 also specifies that all land where crops or feed are grown be cropped in a manner that achieves a soil erosion rate less than or equal to the "tolerable" ("T") rate established for that soil. Administrative rule ATCP 50 specifies that this "T-value," based on a group of mathematical formulas devised by scientists and soil conservationists, includes erosion caused by wind and water. For most soils, the "T-value" is between three and five tons of soil loss per acre per year.

Construction Standards. Starting on March 10, 2003, most construction sites of greater than one acre are generally required to develop a plan that utilizes BMPs with the design of reducing sediment runoff by 80% as compared to a situation with no controls. In addition, most post-construction sites are required to develop a storm water management plan that utilizes BMPs to: (a) reduce total suspended solids; (b) reduce peak discharge; (c) infiltrate runoff where environmentally practical; (d) protect areas around lakes, rivers and wetlands; and (e) control runoff from fueling and maintenance areas.

Municipal Storm Water Standards. By March 10, 2008, local governments in developed urban areas were responsible for implementing storm water management plans to include public education, yard waste management, proper nutrient application to turf areas, and detection and elimination of illicit discharges. Municipalities covered by a municipal storm water discharge permit (NR 216) are also required to reduce total suspended solids by 20% by March 10, 2008, and by 40% by March 10, 2013.

Turf Standards. Non-municipal owners of turf areas of five acres or more needed to meet nutrient management requirements by March 10, 2008.

Transportation Facilities. Under NR 151, most transportation facilities are required to be constructed according to a development plan that utilizes BMPs to meet all performance standards, including a goal of reducing runoff sediment load by 80% as compared to a situation using no sediment or erosion control. In addition, most transportation facilities are also required to have a post-construction plan to meet performance standards related to total suspended solids, peak discharge amounts and infiltration of water from runoff. Moreover, the rule includes restrictions on the creation of new impervious surfaces within protective areas adjacent to water bodies and wetlands, and that runoff from fueling and maintenance areas be controlled.

DATCP Role. DATCP is directed to establish BMPs and technical standards for nonpoint source agricultural practices and facilities. DATCP must also promulgate rules relating to conservation

practices and create a process for the development and dissemination of technical standards for nonpoint source agricultural sites. Alternative technical standards must be included when more than one implementation method exists. These practices and standards must include animal waste management, nutrients applied to the soil, and cropland sediment delivery components. Further, DATCP is required to develop statewide agricultural nutrient management strategies that include technical standards, incentives, educational and outreach provisions and compliance requirements.

ATCP 50. To administer its nonpoint and soil erosion responsibilities, DATCP promulgated administrative rule ATCP 50, which includes nonpoint source BMPs and technical standards. This rule generally took effect October 1, 2002. ATCP 50 governs DATCP's soil and water resource management (SWRM) program, including soil and water conservation on farms, county soil and water programs, grants to counties, cost-share grants to landowners and local regulation of soil and water. In August, 2007, nutrient management rules in ATCP 50 incorporated the 2005 NRCS 590 Nutrient Management Standard, which the NRCS created as a national standard for nutrient management. In addition, ATCP 50 defines standard cost-share practices, and establishes DATCP's cost-share rates for landowners who install these practices. The list and definitions of these practices can be found in Appendix I, and the respective cost-share rate of each practice can be found in Table 4.

Local Regulations. Local governmental units are allowed to promulgate rules for livestock operations that are consistent with the performance standards, prohibitions, conservation practices and technical standards established by DNR and DATCP. Furthermore, local standards for cropland may be more stringent than state standards, but local standards for livestock operations may only exceed those established by DNR or DATCP if the more stringent regulations are shown to be necessary to achieve DNR water quality standards and one of the Departments approves the standards. 1999 Act 9 requires DATCP to provide technical assistance to county land conservation committees and local units of government for the development of any local ordinance that implements agricultural performance standards. Technical assistance includes preparing model ordinances, providing data concerning these standards and reviewing draft ordinances for compliance with applicable state laws. Existing livestock operations that were a lawful use or legal nonconforming use on October 14, 1997 and that have received a notice of discharge or are required to apply for a DNR point source permit may continue to operate at that location, in conformance with the permit, regardless of any subsequent city, village, town or county general zoning ordinance.

Cost-Share Requirement. Under section 281.16(3) of the statues, cost sharing must be available to require compliance with, or enforcement of, the performance standards, prohibitions, conservation practices and technical standards for agricultural facilities and practices for the abatement of nonpoint source water pollution caused or threatened to be caused by agricultural facilities and practices existing prior to October 14, 1997. This requirement took effect October 1, 2002, for most farmland. Certain sites must comply with performance standards regardless of cost-sharing availability, including: (a) facilities permitted under DNR's animal waste regulatory program (NR 243); (b) unpermitted small and medium livestock facilities that have a point-source discharge to waters of the state; (c) persons obligated to meet standards as a condition of receiving farmland preservation tax credits; and (d) sites that are granted a local livestock siting permit.

Further, local regulations exceeding state performance standards only apply to agricultural facilities that were a lawful use or legal nonconforming use on October 14, 1997, if cost sharing is available. Local nonpoint source performance standards that require installation or implementation of a water pollution abatement practice must contain a minimum cost-share rate of 70% and up to 90% in

cases of hardship. Both DNR and DATCP revised their cost-share rates in administrative rules (NR 120, NR 154 and ATCP 50) that became effective on October 1, 2002. These rates appear in Table 4.

Erosion Control Programs

DATCP implements programs to achieve the state's statutory soil erosion control goals. To achieve these statutory goals, DATCP uses a combination of voluntary land and water conservation grant programs and regulatory actions to address problem areas. Chapter 92 of the statutes and ATCP 50 of the administrative code provide the basis for DATCP's erosion control programs. The following sections provide detail on the state's statutory goals and the attainment of these statutory goals.

Erosion Control Goals

The statutory land and water conservation goals for the state focus on achieving tolerable soil erosion rates on a statewide basis, a countywide basis and individual-field basis. The statutes define a tolerable soil erosion rate (or "T") as the maximum average annual rate of soil erosion allowable that will also sustain high crop productivity. Using the universal soil-loss equation, a separate tolerable soil erosion rate is calculated for each soil type in the state based on soil composition, depth to bedrock, rainfall, and groundwater depth. In Wisconsin, tolerable soil erosion rates generally range from three to five tons of soil loss per acre per year, depending on soil type.

The specific long-term and interim statutory goals, which are based on the tolerable soil erosion rate, include the following:

State Goal. By January 1, 2000, no individual cropland field in the state was to have had a soil erosion rate exceeding the tolerable soil erosion rate. This goal is known as "T by 2000."

County Goal. By July 1, 1990, no county was to have had an average annual cropland soil erosion rate which exceeded 1.5 times the tolerable soil erosion rate. By July 1, 1993, no county would have had an average annual cropland soil erosion rate which exceeded the tolerable soil erosion rate.

Individual-Field Goal. By July 1, 1990, no individual crop fields in the state were to have a soil erosion rate which exceeded three times the tolerable soil erosion rate. By July 1, 1995, no individual crop fields in the state were to have a soil erosion rate which exceeded two times the tolerable soil erosion rate.

State-Run Farms Goal. By July 1, 1990, no individual crop fields of a farm owned by the University of Wisconsin system, the Department of Corrections, or any other agency of state government were to have a soil erosion rate which exceeded the tolerable soil erosion rate. This requirement excluded research plots.

Attainment of Erosion Control Goals

The Department depends on counties to identify their most severe soil erosion problem areas. The state's 55 southern-most counties assessed vulnerable areas between 1984 and 1988 in county soil erosion control plans. The typical plan includes an analysis of land uses, calculations of soil erosion rates and a strategy for addressing areas with soil erosion greater than T. These plans were approved by the Land Conservation Board, predecessor of the LWCB.

When ATCP 50 was revised in December, 1996, it required that all counties have approved soil erosion control plans or have soil erosion control plan waivers in order to continue receiving LWRM plan grant funds. By January 1, 2003, all counties had earned LWCB approval for either soil erosion control plans or land and water resource management plans that encompass required soil

erosion control components.

Beginning with calendar year 1995, there was a significant change in the way data were reported to and analyzed by DATCP staff to determine progress toward meeting T-by-2000 goals. County LCD staff used to submit data indicating the number of acres of cropland in their county that fell into the various erosion categories. In many cases, counties estimated this data. In response to concerns expressed by the Legislative Audit Bureau in 1994 about unequal estimations and sometimes erroneous data supplied by counties, DATCP began relying exclusively on data entered into a unified county database to track progress toward T-by-2000 goals. However, it became difficult to maintain ever-changing data from fields not participating in state or federal programs, and by 1998 only half of Wisconsin's cropland was entered into the county database.

In response to the need for accountability and additional data on the current status of soil conservation efforts in Wisconsin, 60 counties in 1999 participated in a transect survey designed to determine erosion rates and conservation tillage residue levels. DATCP has compiled information from similar surveys performed annually by counties since then.

The most recent transect survey was completed for 2007, with 24 counties participating. The results are shown in Table 12. DATCP concluded that of the counties that participated in the survey, 78% of the cropland was below the "T" rate, including in excess of 90% of cropland in Waupaca, Washington and Wood counties.

More complete information is available from the transect survey performed by counties and compiled by DATCP in 2002. As shown in Table 13, 80% of the acres reported by counties through the survey in 2002 had a soil erosion rate of T (tolerable) or less. A rating of 2T would indicate a soil erosion rate twice the tolerable rate estimated to maintain high crop productivity.

Table 12: 2007 Transect Survey Soil Erosion Rates*

Percent of Cropland at or Below "T"	Number of Counties
No Data	48
Less than 60%	0
60% to 69%	4
70% to 79%	11
80% to 89%	6
90% to 100%	3
	72

* The transect survey included 24 of the state's 72 counties.

Table 13: 2002 Transect Survey Soil Erosion Rates*

Erosion Rate	Acres	Percentage of Reported Acres
T or Less	6,530,883	80.1%
Between T and 2T	962,292	11.8
Between 2T and 3T	312,561	3.8
Greater than 3T	351,561	4.3
Total Reported	8,157,297	100.0%

* The transect survey included 8.2 million acres, or approximately 51%, of the state's 16.2 million cropland acres.

In 2003, 32 counties performed a transect survey. For the 32 counties it was estimated that 82% of their cropland was at or below the tolerable rate of soil loss.

The 78% statewide T rate from the 2007 transect survey is a decrease from the 80% or better level reported in the 2002 and 2003 surveys. However, comparisons are complicated by the declining participation of counties. DATCP also attributes a decline in counties attaining T to an increase in row crops that may increase soil erosion.

DATCP and DNR officials indicate that future transect soil surveys will be increasingly accurate due to a new soil-loss estimation program being

used by counties. The program, WinTransect, uses regularly updated data from the USDA National Agricultural Statistics Service as well as a new soil loss calculation model to approximate countywide soil loss rates. Officials report these calculation methods will better reflect planning and management occurring in counties.

Cross-Compliance Enforcement -- Farmland Preservation and Federal Programs

DATCP officials indicate that aside from the SWRM grant program to counties, the cross-compliance aspects of the farmland preservation program and federal commodity programs have had a large impact on the state's ability to attain its soil erosion control goals.

According to the Department of Revenue (DOR) aggregate income tax data in 2008, which reflects tax year 2007 property taxes, the farmland preservation program provided approximately $11.4 million in formula-based state income tax credits to non-corporate agricultural landowners who meet specified criteria. The tax credit is based on the property taxes levied on the eligible land, the income of the farm household and whether the eligible land is subject to exclusive agricultural zoning or a preservation agreement. Based on DOR aggregate income tax data, the average credit received by the 17,998 non-corporate claimants in 2008, for tax year 2007 was $633.

Through the farmland preservation program, land and water conservation activities of participating landowners are regulated under a "cross-compliance" provision. This provision requires all claimants of farmland preservation credits to conduct farming activities in compliance with land and water conservation standards. As a requirement of the farmland preservation program, all cropland must be eroding at T or less. To assure enforcement of this provision, the LWCB has developed: (1) guidelines for land and water conservation standards; (2) procedures for the submission of these standards for review by county LCCs; (3) standardized forms; and (4) notices of noncompliance. Using these guidelines, county LCCs are required to establish applicable local standards and monitor compliance with the standards. If a farmer receiving tax credits does not meet conservation standards, the county LCC may issue a notice of noncompliance, which withholds the tax credits for an individual landowner. With the implementation of the revised nonpoint program in 2004, counties are no longer required to send a copy of a notice of noncompliance or the cancellation of the notice of noncompliance to DATCP. Counties need only notify the Department of Revenue and the local zoning authority.

The Department of Revenue reports for the 2007 tax year that approximately four million of Wisconsin's 15.2 million eligible acres are protected through the program. The DOR number does not include acreage in the program reported by corporate filers. DATCP believes that the cross-compliance provisions of the program have a significant effect on the amount of land and water conservation activities occurring on Wisconsin farms. Implementing the conservation provision of the farmland preservation program has been identified by the Department as a cost-effective method of achieving erosion control. In the 2001-03 biennium, Department staff concluded that 37 percent of Wisconsin cropland on farms of at least 35 acres has a conservation plan through landowner participation in the farmland preservation program. Through the soil erosion transect survey, DATCP estimates that about 80% of the state's cropland meets tolerable soil loss standards. The Department anticipates that most farmland preservation tax credit claimants will abide by erosion control standards rather than lose the tax credits. To achieve implementation, a substantial amount of county staff work is required to assist affected farmers in adopting appropriate practices and monitoring those practices for noncompliance.

Federal programs also have significantly contributed to the amount of land meeting the state's soil erosion goals. Federally funded USDA field

staff work closely with county LCD staff and jointly provide technical assistance to farmers through the development of conservation plans. Also, the cross-compliance requirements of the 1985 Food Security Act boosted the number of landowners requesting conservation plans in order to be eligible for USDA benefits. These conservation plans require crop rotations and other management strategies that reduce soil erosion to "T" or less.

Construction Site Erosion Control Program

The Department of Commerce (Commerce) is responsible for administration of erosion control standards at certain construction sites. Commerce administrative code Chapter Comm 60, effective April 1, 2007, establishes uniform standards for the design, installation and maintenance of erosion and sediment control at building construction sites for public buildings, buildings that are places of employment, and one- and two-family dwellings.

One- and Two-Family Dwellings. The Safety and Buildings Division in Commerce is responsible for administering the state one- and two-family uniform dwelling code, including standards for erosion control for such dwellings. A total of 1,292 municipalities have chosen to adopt the state code and administer it at the local level. In addition, nine counties (Adams, Chippewa, Eau Claire, Florence, Langlade, Marquette, Richland, Trempealeau, and Waushara) administer the program for 147 municipalities. Commerce enforces the code in other municipalities. In 2008, Commerce was contracting with 19 private inspection agencies to perform one- and two-family dwelling erosion control inspections in 74 inspection bid districts across the state. New two-year contracts were scheduled to go into effect on January 1, 2009, with 17 agencies performing inspections in 67 inspection bid districts.

Commerce audited the one- and two-family dwelling soil erosion control programs administered by two contracted inspection agencies in 2007 and two in 2008. The Department reviewed 17 municipal programs in 2007, of which two reviews were audits and the others were site visits based on receipt of specific complaints. The Department reviewed 70 municipal programs in 2008, of which 40 reviews were audits, and the remaining 30 were site visits based on receipt of complaints. The audits reviewed the soil erosion control plans submitted with building plans, the conditions of the plan review, and the plan implementation and maintenance at the site. Site reviews generally showed a need for providing control measures around the perimeter of the site to prevent the loss of soil off the site.

Commercial Buildings. The Safety and Buildings Division in Commerce is also responsible for developing and administering statewide standards for erosion control at construction sites for public buildings and buildings that are places of employment. The erosion control authority includes sites such as multi-family dwellings, commercial shopping malls, industrial buildings and schools. Commerce is required to approve erosion control plans for commercial construction sites and inspect erosion control activities and structures at such construction sites. Commerce has the authority to issue a special stop-work order for a construction site until required erosion control plan approval is obtained or until the site complies with state erosion control standards.

Commerce may delegate authority for approval of erosion control plans and inspection of erosion control at construction sites to a county, city, village or town that follows the statewide standards. A local erosion control ordinance supersedes Commerce's statewide standards if it was adopted before January 1, 1994, and if standards in the local ordinance are more stringent than the statewide standards. Commerce estimates that approximately 165 local soil erosion control ordinances were adopted prior to 1994, but it does not know whether any of the local ordinances are more restrictive than the administrative rules developed by Commerce.

Two counties (Eau Claire and Waushara) adopted a commercial construction site erosion control program as part of their administration of the Commercial Building Code in 36 municipalities. Two other counties (Rock and Waukesha) administer a commercial construction site erosion control program in 31 municipalities that is not part of a building inspection program. Commerce delegated responsibility for commercial building inspection, which includes construction site erosion activities, to 206 other municipalities (cities, villages, and towns). In addition, Commerce delegated responsibility for construction site erosion control that is not part of a building inspection program to eight municipalities.

Comm 60 establishes minimum erosion control performance standards for commercial building sites where one or more acres of land disturbance occurs. The owner of a construction project of a public building or a building that is a place of employment disturbing one or more acres of land must file a notice of intent (NOI) with Commerce for coverage under a Wisconsin Pollutant Discharge Elimination System general permit for soil erosion associated with construction activities.

Erosion control plans must be prepared and implemented for commercial construction sites. The owner is required to submit an erosion and sediment control plan summary for a commercial building site to Commerce or the delegated administering municipality with the notice of intent when land disturbing construction activity involves one or more acres. Commerce reviews most NOIs submitted to the Department with a computer software application that screens the erosion control plan for compliance with the performance standards of Comm 60. If the computer application finds that the proposed plan will not meet the performance standards of the code, the submitter of the NOI is notified and given the opportunity to revise the soil erosion control plan. During the two-year period of 2006-07 and 2007-08, the Commerce software application reviewed 1,705 NOIs.

The owner is required to submit a notice of termination when the land disturbing construction activities have ceased, all disturbed areas have been stabilized, and all temporary erosion and sediment control practices have been removed. Comm 60 establishes minimum performance standards for post construction storm water management on building sites where one or more acres of land disturbance occurs.

Commerce building inspectors may request the property owner to provide the soil erosion control plan when the inspector visits the site, the Department receives a complaint, or when a person requests expedited approval of a commercial building permit. Commerce indicates that, over the two-year period of 2006-07 and 2007-08, staff conducted 43 reviews of commercial soil erosion plan submittals. (This was in addition to 1,705 plans reviewed by the computer screening application.) Some of the plans were submitted in response to a complaint, and others were submitted voluntarily to demonstrate compliance with soil erosion control rules in response to citizen concerns. Commerce conducted 86 site visits related to the reviews during the two year period.

Commerce staff also conducted site visits to train and consult with building inspectors who inspect soil erosion and commercial construction. In 2007-08, Commerce building inspectors made 1,309 such commercial soil erosion inspections.

Commerce Funding for Construction Site Erosion Control. Commerce is allocating $462,900 PR and 4.40 PR positions in 2008-09 to administer the construction site erosion control program. This includes $300,900 and 2.86 positions for commercial building site erosion control and $162,000 and 1.54 positions for one- and two-family building site erosion control. The amount of time is provided through a small portion of the time of several commercial building inspectors and uniform dwelling code staff. The program revenue funds are derived from commercial building plan review fees, notice of intent fees under the erosion control

rules, and uniform dwelling permit fees for one- and two-family dwellings.

Commerce performs the following activities related to construction site erosion control: (a) inspect soil erosion control activities at building sites where building inspections are performed (one- and two-family and commercial buildings) or where complaints have been received; (b) provide consultation and advice to persons who may perform soil erosion control activities; (c) train contract agent inspectors and local inspectors who inspect erosion control at building sites; (d) develop a plan for the coordination between erosion and sediment control and long-term storm water management for both when the storm water management measures include plumbing systems (such as drains and pipes) to disburse storm water, and when the storm water management measures do not include plumbing systems; (e) participate in interagency coordination efforts; and (f) audit agent inspection municipalities and contracted inspection staff.

Commerce is also in the process of drafting administrative code changes that would focus more local and contracted inspection of construction site erosion control at sites where one or more acres are disturbed. Commerce anticipates sending the proposed code changes to the Legislature in the summer of 2009.

Program Evaluations

Joint Evaluation System

DNR and DATCP are required to conduct a joint evaluation system for the nonpoint source program and the land and water resource management program. In response to this requirement, the two agencies developed a joint plan establishing the criteria to be used for program evaluation. Major aspects of the plan are described below.

Annual Reports. DATCP and DNR are required to annually submit a report to the Land and Water Conservation Board on the status of all nonpoint source pollution abatement and soil and water resource management projects. DATCP annually collects data from counties and other grantees on cropland soil erosion rates published in the transect survey, local technical assistance for animal waste violations under NR 243, acres under nutrient management, conservation planning status, farmland preservation program status, overall progress toward soil erosion control goals and progress toward LWRM plan implementation. DNR annually collects data from counties with priority watershed projects on pollutant load reduction, progress toward other plan goals, acres under conservation plans, landowner contacts and participation levels, major information and education activities, overall project progress, critical sites updates and land and/or water conservation ordinances, which is optional. In November, 2008, DATCP and DNR submitted the annual report for 2007.

Comprehensive Program Evaluation Reports. In each even-numbered year, DNR and DATCP must prepare a comprehensive program evaluation report that contains project status reports, program accomplishments, expenditures, an evaluation of program policies and recommendations for future changes. Joint evaluation reports were last published in 1990, 1993 and 1994, although DATCP and DNR generally include evaluation components in their annual report. In addition, DATCP conducted an evaluation to improve county land and water resource management planning at the direction of the Land and Water Conservation Board (LWCB).

After delaying new reports until the revision of the nonpoint rules was completed in 2002, over the past several years DATCP and DNR have been developing a new evaluation system based both on local implementation of the state performance standards and on increased emphasis on county land and water resource management (LWRM)

plans. Preliminary evaluation plans include: (a) establishing baseline data for both agricultural and non-agricultural performance standards; (b) measuring compliance, tracking and evaluating for the TRM and UNPS competitive grant programs; and (c) continued evaluation of the remaining priority watershed projects. DATCP and DNR now produce one report intended to meet both the annual and biennial reporting requirements.

Monitoring of Land and Water Resources Using a Unified Data Collection System. In the past, water quality improvements resulting from the nonpoint source program have been difficult to quantify. In part, this has been due to lack of baseline information to use as evaluation criteria. Particularly during the early years of the program, little initial water quality data were collected.

Beginning in 1989, DATCP and DNR began to collect data from all funded projects, including: (a) accomplishment data, such as the number and type of conservation practices installed by project; (b) resource data, such as fish surveys, bacteria sampling and chemical monitoring to determine water quality; (c) financial data, including the number and cost of signed landowner cost-share agreements; and (d) time data, including how state-funded local government staff time has been allocated. Individual watershed project evaluations included administrative review, modeling review and water resources evaluation. The administrative review focused on the progress of the local unit of government in implementing the project. The modeling review evaluated pollutant loads before and after BMP installation. The water resource monitoring is used to evaluate how well a priority watershed project achieves the water resource objectives identified in the watershed plan. Reports were to be published for each watershed project within 18 months following the completion of the project. However, this evaluation process was never fully implemented and has largely been replaced by other monitoring strategies.

For example, DNR conducts single-source monitoring. The purpose of single-source monitoring is to isolate and measure the effectiveness of BMP implementation at a single site. The goal is to measure how each practice reduces the pollutant loading.

Whole-Stream Monitoring

As part of a joint agreement, DNR and the U.S. Geological Survey started "whole-stream monitoring" of 10 designated streams located in seven priority watershed projects. Monitoring for most of the streams began between 1990 and 1993. The purpose of the monitoring is to determine if the implementation of the recommended nonpoint source practices improves the quality of a whole stream. Nine of the streams are impacted by runoff from agricultural activities, while one stream is in an urban drainage area. The size of the drainage areas for the 10 streams varies from five to 40 square miles.

Whole-stream monitoring involves the collection of chemical, physical, and biological data before and after the implementation of nonpoint source practices. Monitoring prior to practice implementation has been completed for the following creeks: (a) Brewery (Iowa County); (b) Garfoot (Dane County); (c) Otter (Iowa and Sauk counties); (d) Joos Valley (Buffalo County); and (e) Eagle Creek (Buffalo). In addition, post-implementation monitoring began for Bower Creek in Brown County in 2006 and concludes in 2009. Draft reports are completed for Joos Valley and Eagle creeks, while final reports are completed for Brewery, Garfoot and Otter creeks. So far, whole-stream monitoring projects have found that BMPs implemented in watersheds of Spring Creek (Rock County), the Sheboygan River and Waumandee Creek (which included Joos Valley Creek and Eagle Creek in Buffalo County) significantly reduced bank erosion and improved overall habitat quality. The number of cool- and coldwater fish also showed a significant increase in Spring Creek after BMP implementation. While no significant fish community changes were observed in the Joos Val-

ley Creek, Eagle Creek has shown a significant improvement in the abundance of trout during the monitoring process. During the monitoring done on Otter Creek in the Sheboygan River watershed, where most practices were installed during 1995-1997, some fish community change was observed.

Single-Source and Multi-Stream Comparisons

Because "whole-stream monitoring" is a time-consuming process, the nonpoint source program staff sought more immediate ways of documenting the benefits of the nonpoint practices. Both single-source monitoring and multi-stream comparison monitoring are ways of measuring water quality in a more timely fashion. Single-source monitoring was started in 1994 and multi-stream comparison monitoring began in 1996.

Single-source monitoring attempts to evaluate the benefits of a single practice. A stream that is adjacent to the source of pollutants, such as a barnyard, is monitored before and after practices are installed. For example, using this data, staff found that pollutant loads were reduced as much as 90% after complete barnyard systems were installed at two dairy farms. Also, initial monitoring of a small stream in Fond du Lac County on which riprap was installed on eroded stream banks seems to indicate improvements in the stream.

DNR began multi-stream comparison monitoring by collecting information from 45 streams on differences in water quality and the level of management in each watershed. Unlike the other types of monitoring, data collection is only done once. This snapshot of water quality is intended to compare streams with high, medium and low levels of practice implementation. However, the department indicates it was unable to collect complete implementation data from counties and therefore did not produce a final report.

APPENDIX I

Definitions of Cost-Shared Best Management Practices

Access Roads and Cattle Crossings. A road or pathway which confines or directs the movement of livestock or farm equipment, and which is designed and installed to control surface water run off, to protect an installed practice, to control livestock access to a stream or waterway, to stabilize a stream crossing, or to prevent erosion.

Animal Feeding Operation Relocation or Abandonment. Relocation of an animal lot from a site such as a floodway to a suitable site to minimize the amount of pollutants from the animal lot to surface or ground waters.

Animal Trails and Walkways. A travel lane to facilitate the movement of livestock.

Barnyard Runoff Management. The use of structural measures such as gutters, downspouts and diversions to intercept and redirect surface runoff around the barnyard, feeding area or farmstead, and collect, convey and temporarily store runoff from the barnyard, feeding area or farmstead.

Contour Farming.* Plowing, preparing, planting and cultivating sloping land on the contour and along established grades of terraces or diversions.

Cover and Green Manure Cropping.* Close-growing grasses, legumes or small grain grown for seasonal protection and soil improvement.

Critical Area Stabilization. The planting of suitable trees, shrubs and other vegetation appropriate for controlling and stabilizing sloped lands which are producing nonpoint source pollutants and lands that drain into bedrock crevices, openings or sinkholes.

Diversions. Structures installed to divert water from areas where it is in excess to sites where it can be used or transported safely. Usually the system is a channel with a supporting ridge on the lower side constructed across the slope at a suitable grade.

Field Windbreaks. A strip or belt of trees, shrubs or grasses established or restored within or adjacent to a field, so as to control soil erosion by reducing wind velocities at the land surface.

Filter Strips. An area of herbaceous vegetation that separates an environmentally sensitive area from cropland, grazing land or disturbed land.

Grade Stabilization Structures. A structure used to reduce the grade in a drainage way or channel to protect the channel from erosion or to prevent formation or advance of gullies.

Heavy Use Area Protection. Installation of surface material to control runoff and erosion in areas subject to concentrated or frequent livestock activity.

Livestock Fencing. The enclosure, separation or division of one area of land from another in such a manner that it provides a permanent barrier to livestock in order to exclude livestock from land areas that should be protected from grazing or gleaning where degradation of the natural resource will likely result if livestock access is permitted.

Livestock Watering Facilities. A trough, tank, pipe, conduit, spring development, pump, well, or other device or combination of devices installed to deliver drinking water to livestock.

Manure Storage Facilities. A structure for the

storage of a volume of manure: (a) for which suitable land application sites or practices are temporarily unavailable generally due to frozen or saturated conditions; (b) from operations where the location and site characteristics of areas where manure is spread have a high potential to carry pollutants to lakes, streams and groundwater; and (c) for which the facility is necessary to properly land apply the manure according to a nutrient management plan.

Manure Storage Systems Closure. The proper abandonment of leaking or improperly sited manure storage systems.

Milking Center Waste Control. A piece of equipment, practice or combination of practices installed in a milking center for the purposes of reducing the quantity or pollution potential of wastes. For example, a waste storage system that captures milking equipment cleaning agent waste, discarded milk and other potential milking center wastes.

Nutrient Management.* The management of the application of manure, legumes and commercial fertilizers including the rate, method and timing of application to minimize the amount of nutrients entering surface or ground waters.

Pesticide Management.* The management of the handling, disposal and application of pesticides (including herbicides, insecticides and fungicides) including the rate, method and timing of application to minimize the amount of pesticides entering the air, water and nontarget organisms.

Prescribed Grazing.* A grazing system which divides pastures into multiple cells, each of which is grazed intensively for a short period and then protected from grazing until its vegetative cover is restored.

Residue Management.* The preparation or planting of land that results in a rough surface in order to maintain residue cover and avoid disturbing the entire soil surface.

Riparian Buffers. An area in which vegetation is enhanced or established to reduce or eliminate the movement of sediment, nutrients and other nonpoint source pollutants to an adjacent surface water resource.

Roofs. A roof and supporting structure constructed specifically to prevent rain and snow from contacting manure.

Roof Runoff Systems. A facility for collecting, controlling, diverting, and disposing of precipitation from roofs.

Sediment Basin. A permanent basin that reduces the transport of waterborne pollutants such as eroded soil sediment, debris and manure sediment.

Stream Bank and Shoreline Protection. The stabilization and protection of the banks of streams and lakes against erosion and the protection of fish habitat and water quality from livestock access.

Sinkhole Treatment. The modification of a sinkhole, or its surrounding area, to reduce erosion, prevent expansion of the hole, and reduce pollution of water resources.

Strip-cropping.* Growing crops in a systematic arrangement of strips or bands, usually on the contour, in alternated strips of close growing crops, such as grasses or legumes, and tilled row crops.

Subsurface Drains. A conduit installed below the surface of the ground to collect drainage water and convey it to a suitable outlet.

Terrace Systems. A system of ridges and channels constructed on the contour with a non-erosive grade at a suitable spacing.

Underground Outlets. A conduit installed below the surface of the ground to collect surface

water and convey it to a suitable outlet.

Water and Sediment Control Basin. An earthen embankment or a ridge and channel combination which is installed across a slope or minor watercourse to trap or detain runoff and sediment.

Waterway System. A natural or constructed waterway or outlet that is shaped, graded and covered with a vegetation or another suitable surface material to prevent erosion by runoff waters.

Well Decommissioning. The proper filling and sealing of a well to prevent it from acting as a channel for contaminants to reach the groundwater or as a channel for the vertical movement of surface water to groundwater.

Wetland Development or Restoration. The construction of berms or destruction of the function of tile lines and drainage ditches to create conditions suitable for wetland vegetation.

* Practices where bonding revenues may not be used for implementation. The Wisconsin Constitution generally restricts the issuance of public debt to long-term capital projects.

APPENDIX II

2009 Rural Nonpoint Source Water Pollution Abatement Grants

	Staffing and Support	Landowner Cost Sharing (Bonding)	Landowner Cost Sharing (SEG)	Total DATCP Allocation	Targeted Runoff Management (TRM) Cost Sharing	Priority Watershed Cost Sharing (ACRA)	Total DNR Allocation	2009 Allocation Total
Adams	$115,572	$61,394	$8,060	$185,026	$0	$0	$0	$185,026
Ashland	100,033	61,394	8,060	169,487	0	0	0	169,487
Barron	112,270	61,394	8,060	181,724	0	0	0	181,724
Bayfield	101,604	61,394	8,060	171,058	0	0	0	171,058
Brown	167,816	61,394	90,866	320,076	213,000	0	213,000	533,076
Buffalo	107,046	61,394	8,060	176,500	0	0	0	176,500
Burnett	94,225	28,281	31,975	154,481	0	53,283	53,283	207,764
Calumet	140,268	61,394	90,866	292,528	150,000	0	150,000	442,528
Chippewa	184,937	61,394	8,060	254,391	0	0	0	254,391
Clark	140,677	61,394	90,866	292,937	75,000*	0	75,000	367,937
Columbia	150,243	61,394	90,866	302,503	419,410	0	419,410	721,913
Crawford	104,657	40,449	8,060	153,166	0	0	0	153,166
Dane	186,569	61,394	90,866	338,829	141,288	0	141,288	480,117
Dodge	147,884	36,558	47,668	232,110	0	0	0	232,110
Door	161,283	61,394	90,866	313,543	799,007	0	799,007	1,112,550
Douglas	142,656	61,394	8,060	212,110	0	0	0	212,110
Dunn	144,206	20,000	31,975	196,181	0	0	0	196,181
Eau Claire	149,903	61,394	90,866	302,163	0	0	0	302,163
Florence	85,000	53,115	8,060	146,175	0	0	0	146,175
Fond du Lac	158,303	20,000	90,866	269,169	0	587,798	587,798	856,967
Forest	85,000	20,000	0	105,000	0	0	0	105,000
Grant	106,609	20,000	8,060	134,669	0	0	0	134,669
Green	115,581	61,394	47,668	224,643	0	0	0	224,643
Green Lake	150,943	61,394	47,668	260,005	0	0	0	260,005
Iowa	110,471	61,394	8,060	179,925	0	0	0	179,925
Iron	91,426	44,836	8,060	144,322	0	0	0	144,322
Jackson	138,099	61,394	8,060	207,553	115,290	0	115,290	322,843
Jefferson	148,545	24,139	84,000	256,684	0	0	0	256,684
Juneau	108,072	44,836	8,060	160,968	0	0	0	160,968
Kenosha	105,024	53,115	31,975	190,114	0	0	0	190,114
Kewaunee	117,791	20,000	31,975	169,766	49,453	0	49,453	219,219
La Crosse	154,578	61,394	31,975	247,947	149,800	0	149,800	397,747
Lafayette	101,403	61,394	47,668	210,465	0	0	0	210,465
Langlade	85,000	61,394	14,546	160,940	0	0	0	160,940
Lincoln	94,073	61,394	14,546	170,013	0	0	0	170,013
Manitowoc	161,738	61,394	90,866	313,998	0	124,026	124,026	438,024
Marathon	165,256	61,394	90,866	317,516	0	224,084	224,084	541,600
Marinette	149,288	61,394	14,546	225,228	707,369	48,471	755,840	981,068
Marquette	111,570	53,115	31,975	196,660	0	0	0	196,660
Menominee	85,000	20,000	0	105,000	0	0	0	105,000

APPENDIX II (continued)

2009 Rural Nonpoint Source Water Pollution Abatement Grants

	Staffing and Support	Landowner Cost Sharing (Bonding)	Landowner Cost Sharing (SEG)	Total DATCP Allocation	Targeted Runoff Management (TRM) Cost Sharing	Priority Watershed Cost Sharing (ACRA)	Total DNR Allocation	2009 Allocation Total
Milwaukee	$85,522	$20,000	$0	$105,522	$49,000	$0	$49,000	$154,522
Monroe	135,467	61,394	47,668	244,529	0	0	0	244,529
Oconto	144,236	45,192	8,060	197,488	269,000	0	269,000	466,488
Oneida	118,394	61,394	0	179,788	0	0	0	179,788
Outagamie	155,450	61,394	31,975	248,819	424,900	322,728	747,628	996,447
Ozaukee	148,953	61,394	14,546	224,893	0	0	0	224,893
Pepin	99,150	61,394	8,060	168,604	0	0	0	168,604
Pierce	126,212	61,394	8,060	195,666	0	80,129	80,129	275,795
Polk	131,958	20,000	47,668	199,626	210,220	110,574	320,794	520,420
Portage	131,405	61,394	5,479	198,278	378,750	0	378,750	577,028
Price	100,832	61,394	14,546	176,772	0	0	0	176,772
Racine	132,117	61,394	8,060	201,571	0	0	0	201,571
Richland	98,794	61,394	31,975	192,163	0	0	0	192,163
Rock	152,036	61,394	14,546	227,976	0	0	0	227,976
Rusk	107,970	20,000	14,546	142,516	0	0	0	142,516
Saint Croix	148,637	61,394	14,546	224,577	0	178,607	178,607	403,184
Sauk	184,296	61,394	90,866	336,556	147,000	163,137	310,137	646,693
Sawyer	102,893	20,000	8,060	130,953	0	0	0	130,953
Shawano	111,658	20,000	14,546	146,204	0	0	0	146,204
Sheboygan	168,062	61,394	8,060	237,516	0	95,893	95,893	333,409
Taylor	138,931	61,394	31,975	232,300	131,700*	0	131,700	364,000
Trempealeau	128,334	61,394	14,546	204,274	827,670	0	827,670	1,031,944
Vernon	111,316	61,394	31,975	204,685	0	0	0	204,685
Vilas	120,279	48,976	0	169,255	0	0	0	169,255
Walworth	168,077	53,115	8,060	229,252	0	0	0	229,252
Washburn	129,458	20,000	5,480	154,938	0	0	0	154,938
Washington	137,625	61,394	0	199,019	0	0	0	199,019
Waukesha	160,511	20,000	8,060	188,571	0	0	0	188,571
Waupaca	132,942	61,394	31,975	226,311	300,000	0	300,000	526,311
Waushara	122,340	53,115	40,000	215,455	0	367,299	367,299	582,754
Winnebago	159,667	61,394	84,000	305,061	150,000	187,785	337,785	642,846
Wood	122,815	61,394	14,546	198,755	0	0	0	198,755
Non-Counties	20,000		518,745	538,745				538,745
Reserve		200,000		200,000			500,000	700,000
Subtotals	$9,316,956	$3,862,966	$2,712,289	$15,892,211	$5,707,857	$2,543,814	$8,751,671	$24,643,882

Note: DATCP and DNR proposed these amounts as of mid-December, 2008, but the LWCB had not approved a final county-by-county allocation in time for publication.
*A TRM grant of $150,000 proposed for the Clark and Taylor LCD Consortium is shown as split evenly.

APPENDIX III

Targeted Runoff Management Project Grants for Calendar Year 2008

Project Grantee	Funding Designated
Buffalo County (8)	$247,620
Burnett County	3,290
Columbia County (2)	238,880
Dodge County (2)	108,850
Door County (6)	664,992
Kewaunee County (3)	359,430
Lincoln County (2)	300,000
Marathon County (2)	109,810
Marinette County (9)	1,323,820
New Glarus, Village	150,000
Portage County	150,000
Trempealeau County (11)	869,740
Vernon County	35,180
Washington County	94,500
Waupaca County	150,000
Yorkville, Town	150,000
Total TRM	$4,956,112

Numerals listed after the grantee denote number of separate grants to the governmental unit.

APPENDIX IV

Urban Nonpoint Source and Storm Water Project Grants for Calendar Year 2008

Project Grantee	Project Type	Funding Source	Funding Designated
Allouez, Village	Planning	SEG	$45,500
Appleton, City (3)	Construction	BOND	302,520
Ashwaubenon, Village	Planning	SEG	28,000
Bayside, Village	Planning	SEG	58,100
Belleville, Village	Planning	SEG	43,840
Bellevue, Village	Planning	SEG	22,490
Brown Deer, Village (2)	Construction	BOND	300,000
Caledonia, Village	Planning	SEG	32,900
Dane County	Planning	SEG	20,000
Dousman, Village	Planning	SEG	62,300
East Central Wisconsin Regional Planning Commission	Planning	SEG	53,000
Eau Claire County	Planning	SEG	84,700
Elm Grove, Village	Planning	SEG	55,300
Fond du Lac, City (2)	Construction	BOND	245,000
Fond du Lac, City	Planning	SEG	17,040
Fox Point, Village (2)	Planning	SEG	70,140
Franklin, City	Construction	BOND	138,620
Grafton, Town	Planning	SEG	32,900
Grafton, Village	Construction	BOND	104,900
Grand Chute, Town (3)	Construction	BOND	575,000
Greenfield, City	Planning	SEG	35,500
Greenville, Town	Planning	SEG	85,000
Kaukauna, City	Construction	BOND	150,000
Kimberly, Village	Construction	BOND	150,000
Ledgeview, Town	Construction	BOND	33,210
Little Chute, Village	Construction	BOND	200,000
Madison, City (2)	Construction	BOND	110,290
Manitowoc, City	Construction	BOND	83,600
Manitowoc, City	Planning	SEG	27,000
Milwaukee, City	Planning	SEG	68,300
Mosinee, City	Planning	SEG	48,000
Mukwonago, Village	Planning	SEG	31,810
Oconomowoc, City	Planning	SEG	85,000
Omro, Town	Construction	BOND	83,300
Onalaska, City	Planning	SEG	46,750

APPENDIX IV (continued)

Urban Nonpoint Source and Storm Water Project Grants for Calendar Year 2008

Project Grantee	Project Type	Funding Source	Funding Designated
Racine, City	Construction	BOND	$41,000
Rothschild, Village	Planning	SEG	84,760
Sun Prairie, City	Construction	BOND	70,220
Sun Prairie, City	Planning	SEG	19,250
Two Rivers, City	Planning	SEG	85,000
Vernon, Town	Planning	SEG	35,900
Waukesha, City	Construction	BOND	58,100
Wauwatosa, City (2)	Construction	BOND	279,480
Whitewater, City	Planning	SEG	10,000
Total Grant Amount			$4,213,720
Total Bonding			$2,925,240
Total Segregated			$1,288,480

Numerals listed after the grantee denote separate grant awards to governmental unit but within the same grant category.

APPENDIX V

Municipal Flood Control Grant Awards for Calendar Year 2008

Project Grantee	Grant Amount
Appleton, City	$200,000
Chaseburg, Village	200,000
Chippewa Falls, City	200,000
Fulton, Town	200,000
Gays Mills, Village	128,590
La Crosse, City	166,063
Mt. Pleasant, Village	200,000
Muscoda, Village	196,350
Oregon, Village	200,000
Oshkosh, City	200,000
Wheatland, Town	200,000
Whiting, Village	125,000
Total	$2,216,003