

Chapter IV

IMPLEMENTATION STRATEGY, PROGRAMS AND PRIORITIES

TECHNICAL AND FINANCIAL ASSISTANCE ---

The Land and Water Conservation (LWC) provides high quality engineering and technical assistance to farmers, residents, and local units of government for natural resource protection and remediation. A top priority for the LWC is to ensure that, through ongoing training and professional development, LWC staff continues to provide sound, professional services based on the best available technology, information, and research.

The LWC also administers available cost share programs to farmers and other landowners who implement management practices that conserve natural resources. Cost share assistance is used to help cover out-of-pocket expenses or is provided in the form of an incentive payment to offset operational risks associated with changes to land management practices and water quality improvements. The County will continue to strive to provide adequate financial assistance, for both voluntary and regulated activities, and will try to attain sufficient funding to meet the goals of this Plan. However, as mentioned in Chapter 1, the level of implementation of state and regional programs and priorities discussed in this chapter are fully dependent on the combination of the fiscal resource provided by the state and those that align with the priorities of the County.

The State of Wisconsin has enacted and is implementing runoff management regulation for agricultural and urban land uses to help achieve state water quality goals. Counties are local delivery system in their implementation through their local land and water conservation programming. The role of the Washington County LWC is to provide technical assistance to landowners in planning, designing, installing, and approving management plans and practices to meet state water quality standards. This goal will be accomplished through utilizing existing programs and ordinances. The following summarizes various state regulation, programs, partnerships and describes past, current and future implementation efforts.

WATER QUALITY IMPLEMENTATION STRATEGY ---

The Land and Water Resource Management Plan is meant to direct the work of the Washington County Land and Water Conservation through the development of goals, objectives, and activities for a ten-year timeframe. Many organizations have plans with goals, objectives, and activities which are related to or align with those of the Washington County Land and Water Resource Management Plan. This plan recognizes many of the goals and objectives of water quality plans

and will use those plans to guide future implementation of conservation practices by the LWC. Furthermore, the LWC relies on numerous tools and resources to accomplish the goals, objectives and actions of the management plan. Focusing on building capacity within the community through education, partnerships, and inclusion is an important method for addressing resource concerns and building awareness of the importance of the soil and water resources throughout the County.

PRIORITY RANKING

A number of criteria will be used to determine priority focus areas for directing conservation activity. As mentioned in Chapter III, watersheds are often used in natural resource management and conservation priorities because land use practices impact the water quality of the stream or lake in the watershed. That said, for this plan, prioritizing and directing workload of the Land and Water Conservation will focus at the 12 Digit HUC level. Additionally, the factors listed below will be used to help guide and rank areas of greatest need, as well as, identify potential areas that will provide the greatest response to water quality initiatives and conservation improvements. Example of how this prioritization could be utilized can be found in Appendix D.

Prioritization factors:

- Phosphorus & TSS loading based on TMDLs
- Impaired waters
- Nine-Key Element Plan areas
- Water Quality Initiatives (RCPP, Adaptive Management, WQT, MDV)
- Outstanding resource waters/exceptional resource waters
- Stream Order & Natural Community Designations
- Highly erodible soils & modeling results (EVAAL, STEPL)
- Percent agriculture land cover using the Normalized Difference Tillage Index (NDTI)
- Water Quality Monitoring Data
- Number of livestock operations
- Groundwater contamination susceptibility & Depth the Bedrock
- Lake development & MS4 Urbanized Area designations
- Active partners (producer groups, lake organizations)

TOTAL MAXIMUM DAILY LOAD PLANS

Impaired waters in Wisconsin are now largely addressed through an analysis, known as a Total Maximum Daily Load (TMDL). A TMDL is the amount of a pollutant a waterbody can receive and still meet water quality standards. To define the TMDL for a water body, modeling is used to determine the current pollutant loads, their sources, and the amount of reduction needed from each source to reach the water quality goal. Water quality goals for Wisconsin surface waters are set in Wisconsin Administrative Code NR 102: Water Quality Standards for Wisconsin Surface Waters.

A TMDL considers both Waste Load Allocation (WLA, point sources) and Load Allocation (LA, nonpoint sources). The WLAs determined in the TMDL for point sources, such as wastewater treatment plants or factories, are addressed through Wisconsin Pollutant Discharge Elimination System (WPDES) permits. Nonpoint source LAs, on the other hand, are more complex and require

collaboration by many partners and stakeholders to effectively use available multi-agency programs, education, regulations, and financial and technical resources.

A TMDL for the Rock River Basin was approved in July 2011 and a TMDL for the Milwaukee River Basin was approved in March 2018. Elevated phosphorus, sediment, and bacteria levels in the Milwaukee River Basin and the Rock River Basin have led to low dissolved oxygen concentrations, degraded habitat, excessive algal growth, turbidity, and recreational impairments. These impairments adversely affect fish and other aquatic life, water quality, recreation, and navigation. The table below summarizes the various pollutant reductions needed from each pollutant source to meet water quality goals in each TMDL sub-basin.

Table 16
TMDL Phosphorus and Total Suspended Solids Reduction Goals by Sub-Basin

TMDL Sub-Basin*	TMDL Percent Phosphorus Reduction From AG	TMDL Percent Phosphorus Reduction From Non-Permitted Urban	TMDL Percent Phosphorus Reduction for MS4s	TMDL Percent TSS Reduction From AG	TMDL Percent TSS Reduction From Non-Permitted Urban	TMDL Percent TSS Reduction for MS4s
5	47%	47%	-	52%	52%	-
6	32%	32%	-	36%	36%	-
7	32%	32%	-	36%	36%	-
8	24%	24%	-	24%	24%	-
9	30%	30%	-	20%	20%	-
10	27%	27%	-	24%	24%	-
20	27%	27%	37%	23%	23%	40%
21	27%	27%	34%	19%	19%	40%
22	30%	30%	-	36%	36%	-
23	29%	29%	36%	33%	33%	47%
24	39%	39%	35%	43%	43%	47%
55	54%	54%	77%	39%	39%	66%
MI-2	49%	70%	68%	62%	68%	67%
MI-3	37%	44%	42%	70%	73%	72%
MI-4	38%	52%	50%	68%	72%	71%
MI-5	35%	47%	45%	63%	68%	67%
MI-6	62%	85%	85%	54%	68%	67%
MI-7	45%	64%	63%	68%	75%	74%
MI-10	29%	39%	-	64%	65%	-
MI-18	40%	69%	68%	63%	72%	71%
MI-19	40%	57%	56%	68%	73%	72%
MI-20	49%	76%	75%	68%	76%	76%
MI-21	51%	76%	75%	70%	76%	76%
MI-22	37%	50%	49%	68%	72%	71%

MI-23	38%	49%	47%	72%	75%	74%
MI-24	52%	78%	77%	60%	68%	67%
MN-1	46%	60%	59%	46%	59%	58%
MN-2	30%	43%	41%	45%	55%	54%
MN-3	38%	-	55%	42%	-	57%
MN-4	30%	-	45%	43%	-	55%
MN-5	58%	-	69%	51%	-	63%
MN-6	45%	-	65%	42%	-	67%
MN-9	49%	-	60%	51%	-	63%

* TMDL sub-basins with numbers are from Rock River TMDL report. Sub-basins with numbers and letters are from Milwaukee River TMDL report.

POINT SOURCE COMPLIANCE OPTIONS FOR PHOSPHORUS AND TSS

A number of the Wisconsin Pollutant Discharge Elimination System (WPDES) permitted communities in Washington County are exploring alternative phosphorous compliance options for their discharges including water quality trading and adaptive management. These options allow the point source to offset or reduce their pollution load by reducing sources of phosphorous within specified watersheds. Currently, the County has entered into a Memorandum of Understanding with the City of Oconomowoc for their Adaptive Management Program. The MOU recognizes a partnership to mutually work together towards similar goals: agriculture soil health, soil conservation, nonpoint source water pollution abatement and the installation of BMPs. LWC staff have also met with a number of local municipalities who are exploring adaptive management or water quality trading as a compliance option.

In addition, the County has also applied to participate in Wisconsin’s Multi-Discharger Variance (MDV) program for the first time starting in 2020. The MDV for phosphorus extends the timeline for point sources to comply with low-level phosphorus limits. In exchange, point sources commit to step-wise reductions of phosphorus within their effluent as well as help to reduce nonpoint sources of phosphorus from farm fields, cities or natural areas via specific projects designed to improve water quality. Over time, some of the MDV projects may be converted to Water Quality Trades.

The following WDNR webpage provides more information on the three options described above: <https://dnr.wi.gov/topic/wastewater/Phosphorus/>

NINE KEY ELEMENT PLANS – SECTION 319 FUNDING

The United States Environmental Protection Agency (EPA) has identified nine key elements that are critical for achieving improvements in water quality. The EPA requires that these nine elements be addressed in watershed plans funded with incremental Clean Water Act section 319 funds. Plans must address the nine elements (see below) if they are developed in support of a section 319-funded project.

Summary of the Nine Minimum Elements:

1. Identify the causes and sources
2. Estimate pollutant loading into the watershed and the expected load reductions
3. Describe management measures that will achieve load reductions and targeted critical areas
4. Estimate the amounts of technical and financial assistance and the relevant authorities needed to implement the plan
5. Develop an information/education component
6. Develop a project schedule
7. Develop the interim, measurable milestones
8. Identify indicators to measure progress and make adjustments
9. Develop a monitoring component

Washington County Land & Water Conservation provided assistance in the development of Nine Key Element watershed plans for multiple subwatersheds in the Milwaukee River Basin. The HUC 10-Cedar Creek Watershed Plan received DNR/EPA approval in June 2020. The HUC-12 North Branch-Milwaukee River, HUC-12 Village of Newburg-Milwaukee River and the HUC-12 Town of Fredonia-Milwaukee River (Ozaukee County) Watershed Plan is under DNR review and may be approved in Fall 2020.

REGIONAL WATER QUALITY MANAGEMENT PLAN PR-50 (SEWRPC)

A joint planning effort designated as the “Water Quality Initiative” included the cooperative development of the MMSD facilities planning program and the SEWRPC Regional Water Quality Management Plan (RWQMP) updating program by WDNR, MMSD, and SEWRPC. In 2007 (and an amendment in 2013), an update of the RWQMP was completed to integrate previous regional water quality management efforts completed by SEWRPC and MMSD’s 2020 Facilities Plan. The plan update was for the design year 2020 and represented a major amendment to the RWQMP for southeastern Wisconsin.

The goal of the RWQMP was to produce a scientifically defensible and implementable plan to improve water quality within the greater Milwaukee watersheds. The RWQMP was developed as a framework for the management of surface water for the greater Milwaukee watersheds that would abate existing water quality issues and allow for flexibility to address future concerns. The success of the RWQMP is dependent on local implementation efforts including, but not limited to: refinement and detailing of sanitary sewer service areas; the development of stormwater management plans and sewerage system facilities plans; and the integration of the plan recommendations into county land and water resource planning as a means for implementing the rural land management recommendations.

The RWQMP includes planning objectives for land use development, water quality management, outdoor recreation and open space preservation, water control facility development, plan structure and monitoring, educational and informational programming, and objectives for water use classifications and standards. Screening alternatives were developed to address upgrades to the MMSD sewerage system, and BMP implementation for nonpoint source pollution reduction. The recommended plan was comprised of elements to address plans for the following:

- Land Use – recommendations under the land use plan element of the RWQMP include the preservation of environmentally significant lands to maintain an integrated system of open space lands throughout the study area and the preservation of the area’s most productive farmland.
- Surface Water – elements of this plan include point and nonpoint source pollution reductions. Recommendations include, but are not limited to, upgrades to sanitary sewer services throughout the study area, maintenance of adequate sewage collection system capacity, and a wet weather control plan for sewer overflows. Nonpoint source control recommendations include, but are not limited to, reduction of soil erosion from cropland, manure and nutrient management, and the installation of riparian buffers.

STATE PERFORMANCE STANDARDS ---

Wisconsin Act 27 (1997-1999 Budget Bill) created significant changes to the Wisconsin Department of Natural Resources (WDNR) Nonpoint Source Water Pollution Abatement Program. It required the WDNR to develop performance standards for agricultural and nonagricultural nonpoint sources of pollution; these are codified in [Chapter NR 151](#) of the *Wisconsin Administrative Code* with a goal of reducing nonpoint sources of polluted runoff to waters of the state. The first state-wide minimum performance standards and prohibitions became effective in 2002 and were updated in 2011 and again in 2018.

Parallel to the promulgation of NR 151, the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) revised its soil and water resource management programs in [Chapter ATCP 50](#). Administrative code ATCP 50 prescribes conservation practices to address the DNR’s performance standards.

AGRICULTURAL PERFORMANCE STANDARDS ---

The agricultural standards and prohibitions were developed to control polluted runoff from all cropland and livestock operations while protecting Wisconsin’s water resources. These nonpoint standards address soil erosion and nutrient runoff from cropland as well as barnyard runoff and manure handling practices for livestock operations; details on these standards are provided below. State administrative rules also prescribe specific cost-sharing requirements that must be met before a landowner can be required to comply with the state standards. The minimum cost-share rate is generally 70%, except in cases of economic hardship, whereby 90% cost-sharing is required. The cost-sharing requirement does not apply to landowners who receive the state Farmland Preservation income tax credit.

CROPLAND STANDARDS

- Sheet, rill and wind erosion: All cropped fields shall meet the tolerable (T) soil erosion rate established for that soil.

- Tillage setback: No tillage operations may be conducted within 5 feet of the top of the channel of surface waters.
- Phosphorus index: Croplands, pastures, and winter grazing areas shall average a phosphorus index of 6 or less over the accounting period and may not exceed a phosphorus index of 12 in any individual year within the accounting period.
- Nutrient management: Agricultural operations applying nutrients to agricultural fields shall do so according to a nutrient management plan.

LIVESTOCK STANDARDS AND PROHIBITIONS

- Manure storage facilities: All new, substantially altered, or abandoned manure storage facilities shall be constructed, maintained or abandoned in accordance with accepted standards. Failing and leaking existing facilities posing an imminent threat to public health or fish and aquatic life or violate groundwater standards shall be upgraded or replaced.
- Process wastewater handling: There may be no significant discharge of process wastewater to waters of the state.
- Clean water diversions: Runoff from agricultural buildings and fields shall be diverted away from contacting feedlots, manure storage areas and barnyards located within water quality management areas (300 feet from a stream or 1,000 feet from a lake or areas susceptible to groundwater contamination).
- No overflow of manure storage facilities.
- No unconfined manure piles in a water quality management area.
- No direct runoff from feedlots or stored manure into state waters.
- No unlimited livestock access to waters of the state in locations where high concentrations of animals prevent the maintenance of adequate or self-sustaining vegetative cover.

SILURIAN BEDROCK STANDARD

All crop producers and livestock producers that mechanically apply manure directly or through contract, or other agreement, to cropland or pasture may not cause the fecal contamination of water in a well or apply to soils that have 24 inches or less of separation between the ground surface and apparent water table. Manure must be applied in conformance with a nutrient management plan that meets the requirements of NR 151.075 (4) through (16). *Figure 18* in Chapter III depicts the areas of the County where bedrock is assumed to be less than 20 feet from the surface and areas with less than two-feet.

CONSERVATION PRACTICES

Federal, State and local conservation agencies have identified four cost-effective Best Management Practices (BMPs), including conservation tillage or no-till, cover crops, nutrient management, and shoreline buffers. These practices have shown to offer the greatest benefit to water quality and soil resource protection and improvement per dollar spent. The LWC will give priority to promoting countywide the adoption of these practices and limit the promotion of other, costlier BMPs to the Priority Farm Strategy listed below. All ATCP 50 approved conservation practices are listed below:

Table 17
Conservation Practices used for Agricultural Performance Standards Compliance

ATCP 50 Code	Cost-Shared Practices
50.62	Manure Storage Systems
50.63	Manure Storage System Closure
50.64	Barnyard Runoff Control Systems
50.65	Access Road
50.66	Trails and Walkways
50.67	Contour Farming
50.68	Cover Crop
50.69	Critical Area Stabilization
50.70	Diversions
50.705	Feed Storage Runoff Control Systems
50.71	Field Windbreak
50.72	Filter Strips
50.73	Grade Stabilization Structures
50.75	Livestock Fencing
50.76	Livestock Watering Facilities
50.77	Milking Center Waste Control Systems
50.78	Nutrient Management
50.79	Pesticide Management
50.80	Prescribed Grazing
50.81	Relocating or Abandoning Animal Feeding Operations
50.82	Residue Management
50.83	Riparian Buffers
50.84	Roofs
50.85	Roof Runoff Systems
50.86	Sediment Basins
50.87	Sinkhole Treatment
50.88	Streambank or Shoreline Protection
50.885	Stream Crossing
50.89	Stripcropping
50.90	Subsurface Drains
50.91	Terrace Systems
50.92	Underground Outlets
50.93	Waste Transfer Systems
50.94	Wastewater Treatment Strips
50.95	Water and Sediment Control Basins
50.96	Waterway Systems
50.97	Well Decommissioning
50.98	Wetland Development or Restoration

Source: DATCP-Chapter ATCP 50 (January 2018)

IMPLEMENTATION OF THE AGRICULTURAL PERFORMANCE STANDARDS AND PRIORITY FARM STRATEGY

County Land and Water Resource Management Plans are the local mechanism to implement the NR151 Runoff Management standards. Farms, like all major industries, must meet environmental

standards to control runoff from fields, pastures and livestock facilities to protect water quality. However, hastily enforced performance standards could pose undue economic hardship on family farms. Washington County recognizes that the line between resource protection and a healthy farm community must be carefully drawn, and will follow prudent policies and procedures outlined in ATCP 50 to guide this process. The County's preference is that agricultural landowners and operators comply with the state and local performance standards and prohibitions voluntarily. The main tools of choice to accomplish voluntary compliance include: education; conservation practices; incentives; and targeting of resources, programs, and partnerships.

In 2006 a Memorandum of Understanding (MOU) was developed and signed between the DNR and the LWC outlining roles and responsibilities for implementing the State's Agriculture Performance Standards within Washington County. The following is a summary of the current process. Updating the MOU with the DNR will be a priority in 2020 and 2021 to align the goals and objectives with this plan, priorities of the County and conservation programs mentioned herein, and workload.

INVENTORY AND EVALUATION OF AGRICULTURAL NONPOINT SOURCES

It is important to have current and accurate information about farmstead and cropland conditions. Accurate and up-to-date information provides the county and state agencies a clearer picture of workload, priority sites and potential costs. Current LWC records are inadequate as farms expand, go out of business, modify operations, and equally notable, as the state continues to refine and add performance standards, as mentioned above. For this reason, the LWC has decided to conduct on-site inventories of each farm in the County in order to evaluate compliance with the states performance standards and prohibitions. This on-site inventory will also provide an opportunity for LWC staff to share information with farmers and landowners about new performance standards and possible impacts on their operations.

The first priority for which farms are selected for inventory and evaluation for compliance status will be with landowners that voluntarily seek program or technical assistant from the LWC. Second priority will be with farms that participated in past conservation programs like the Farmland Preservation or the Priority Watershed Program. Third in priority will be a County wide systematic selection of farms base on the following watershed order, however target areas may be re-prioritized at the discretion of the LWC:

1. Rock River
2. North Branch Milwaukee River
3. East West Branch Milwaukee River
4. Cedar Creek Milwaukee River
5. Rubicon River
6. Menomonee River
7. Oconomowoc River
8. Ashippun River
9. Bark River
10. Upper Fox River

During farm inventories the LWC will collect or update inventory data, this inventory will include evaluations of all animal feeding operations, nutrient management activities and cropland erosion rates. Once this inventory has been completed, all records will be updated in a computerized database using GIS technology. For these reasons, modernizing inventory data is identified several times in the work plan as an important action item.

DETERMINATIONS OF COMPLIANCE AND NOTIFICATION

The county will make determinations on whether a farm operation is in or out of compliance with a NR 151 Agricultural Nonpoint Performance Standards and Prohibitions. The LWC will make compliance determinations in accordance with NR 151.090 and 151.095 and will notify landowners of their status in a systematic manner as inventories are completed. Whenever possible, written notifications will be delivered in person. If a landowner does not agree with the status of compliance, appeals must be made to the Land Conservation Committee within 30 days at no cost to the landowner. DNR staff may be requested to help/assist with selected NR 151 compliance determinations.

SCHEDULE FOR IMPLEMENTING PERFORMANCE STANDARDS

The primary role of the LWC will be to gain voluntary acceptance and compliance with performance standards through education, cost sharing and technical assistance.

LWC staff will concentrate first on gaining compliance with the most critical sites and with large or expanding operations within the County based on the Priority Farm Strategy listed below. Since cost share funds are limited, landowners or managers who fall under these conditions and who have committed to cooperating voluntarily will be given first priority for the available dollars. Second priority will be given to landowners who want to cooperate on a voluntary basis regardless of location or priority rating. It is hopeful that this approach will inspire hesitant producers to cooperate voluntarily.

PRIORITY FARMS STRATEGY

The Washington County priority farms strategy is to target implementation of the performance standards and provide cost-sharing and technical assistance in areas of greatest environmental need or threat to public health. The Washington County LWC may evaluate any property within the County to determine compliance status if there is sufficient evidence that the NR 151 Agricultural Nonpoint Performance Standards and Prohibitions are not being met and there is a significant environmental impact or a threat to public health and safety. Priority farms will be identified through using the following criteria:

- 1) Reports of environmental incidents, including well-contamination, fish kills and/or manure spills/overflow events.
- 2) Public complaints.
- 3) Volunteer landowners that identify soil and water conservation issues on their farms and request LWC assistance.
- 4) Watersheds with impaired waters, approved TMDLs, nine element watershed-based plans or areas with high susceptibility for groundwater contamination.

LWC staff will use the above criteria to prioritize farms for LWC assistance and limited cost-sharing. In the event that the number of priority farms exceeds the assistance available, the highest priority farms will be those that have caused documented environmental incidents or are in sensitive environmental areas, such as those with shallow depth to groundwater, water quality management areas, or areas draining to 303(d) impaired streams. Even when cost-sharing and technical assistance limits the number of priority farms that can be served each year, the information and education program will target all identified priority farms. Farms may be re-prioritized at the discretion of the LWC staff and the LCC.



A Targeted Runoff Management Grant provided the incentive to move this heifer raising operation from this location to the home farm site and abandon the feedlot and pasture area.

A restrictive covenant is in-pace preventing future livestock operations at this site.



ENFORCEMENT

In cases where a site is considered by the LWC and DNR staff to be a high priority and cost sharing is available, yet voluntary compliance does not occur within a reasonable time frame, the LWC and DNR will issue an official Notification of Noncompliance (NON). A formal offer of cost sharing and technical assistance will also be made when the LWC has them available. The NON and formal offer will establish deadlines consistent with state administrative rules (i.e., NR 151.090 and 151.095) in which the responsible individual must comply with a performance standard or be subject to enforcement under provisions of state administrative rules. If a landowner refuses an offer of cost-sharing, the case will be referred to the appropriate nonpoint source staff member at the DNR's South Eastern Regional Office. These cases may lead to circumstances where compliance can be enforced without cost sharing and civil forfeiture penalties can be issued. All landowners and producers will be made aware of this policy and available appeals procedures through education materials, notification letters, and on-farm visits.

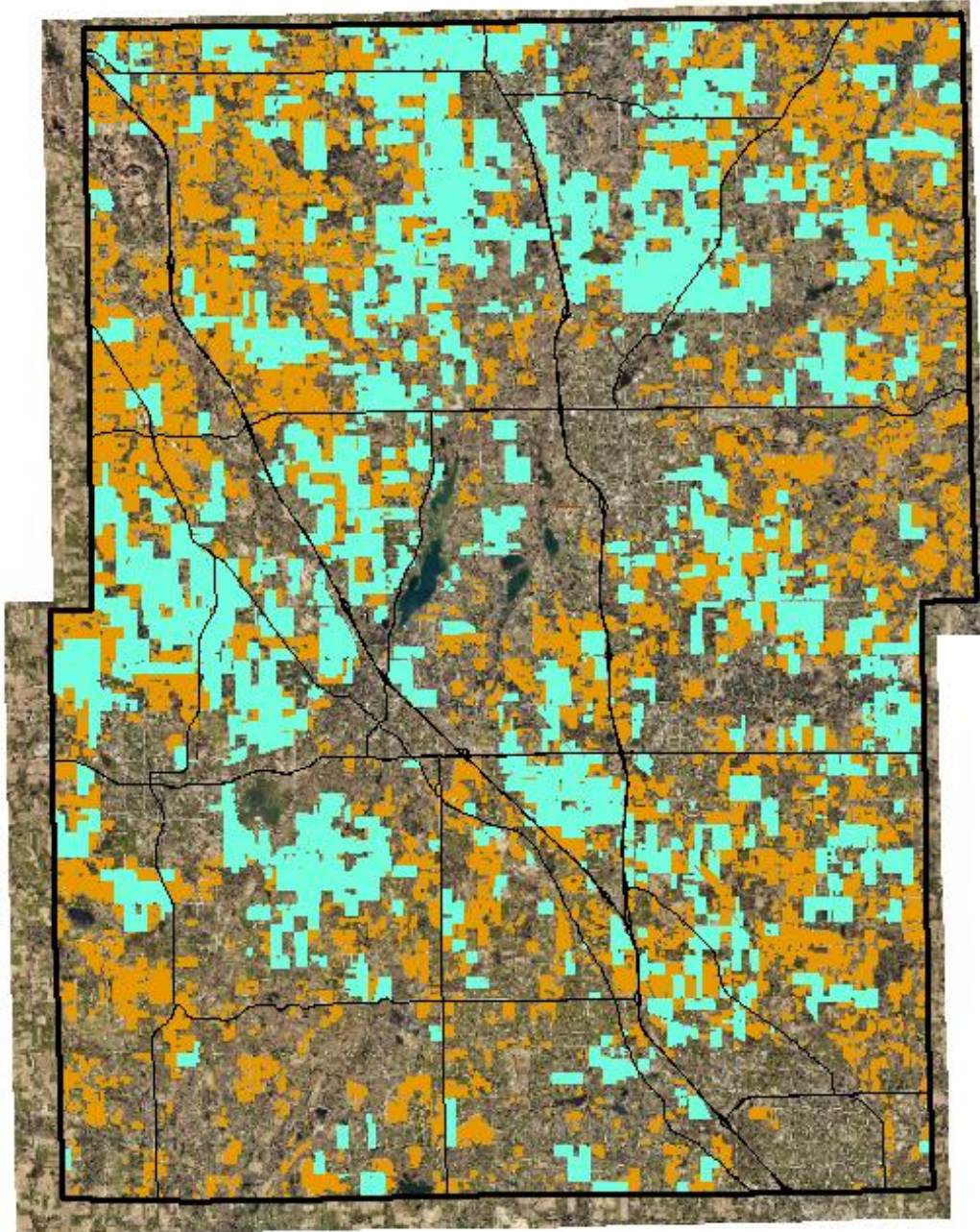
Through 2019, NR151 evaluations have been conducted on over 35% of the agricultural lands in Washington County as shown in *Figure 19*. The table below highlights the level of compliance currently being achieved; however, the level of compliance can be somewhat misleading. Compliance evaluations, conservation planning efforts and conservation practice installations have been tracked since the adoption of the Runoff Rules (NR151) in 2002. Since then, there have been changes to soil loss factors, mentioned previously, as well as the adoption of additional performance standards and significant changes to the engineering requirements for many conservation practice standards. Ownership of agricultural land and operations has also changed since 2002 within the county. LWC staff work to maintain open communication and a working relationship with farms operations to achieve and maintain compliance with the NR 151 performance standards and prohibitions irregardless of changes mentioned above.



Table 18
Agriculture Performance Level of Compliance

Ag Performance Standard	Non-Compliant Operations	Full Compliant Operations
Compliance Level	86	225
	Non-Compliant Reason	
Tolerable Soil Loss "T"	12	
Waste Storage Facility	1	
WQMA	15	
Nutrient Management	66	
Direct Discharge	25	
Pit Overflow	0	
Unconfined Piles	2	
Unlimited Access	2	

Figure 19

Agriculture Performance Standards - Compliance Determinations



-  NR 151 Compliance Determinations Conducted
-  Agricultural Lands needing NR 151 Evaluations



0 0.5 1 2 3 4 Miles

Source: *Washington County*

NON-AGRICULTURAL PERFORMANCE STANDARDS

The nonagricultural performance standards for construction, post-construction, and developed urban area runoff are contained in Subchapters III and IV, NR 151 of the *Wisconsin Administrative Code*. Subchapter III of NR 151 of the *Wisconsin Administrative Code* also contains the nonagricultural performance standards to transportation facility runoff, which include all roads and associated structures, as they apply to state, local, and private facility owners. The nonagricultural or urban performance standards encompass two major types of land management. The first type includes performance standards developed for areas of new development and redevelopment. This is further subdivided to include the construction phase and the post-construction (stormwater management) phase. The second type includes performance standards for developed urban areas. The LWC, other county and municipal departments, and private developers and businesses are responsible for implementing the non-agricultural performance standards. The LWC will provide regulatory and technical assistance as described in this section and in the related work plan goals and objectives.

CONSTRUCTION SITE EROSION CONTROL

Research shows that, on a per-acre basis, erosion and sediment delivery from construction sites is significantly higher than from cropland. The construction site erosion control standards apply to construction sites where land disturbing activities affect one or more acres of land. This threshold is consistent with the timing and applicability of Federal Phase 2 Storm Water Regulations. The standard does not apply to transportation facility sites.

The State's performance standard requires the installation of best management practices designed to limit sediments and other pollutants from runoff entering waters of the State or separate storm sewers connecting to waters of the State, including:

- Reduce the sediment load by 80 percent, as compared to no sediment controls.
- Prevent tracking of sediment from the construction site onto public or private roadways.
- Minimize the discharge of sediment as part of construction site de-watering.
- Control erosion from soil stockpiles.
- Storm sewer inlet protection.
- Ensure proper use, storage and disposal of chemicals, cement and other compounds used on the site.

The standard also provides for incorporating the findings of detailed stormwater management plans, which may indicate the need for additional levels of control.

POST CONSTRUCTION STORMWATER MANAGEMENT

Once construction is complete, controlling runoff from these developed areas remains an issue. Conventional pollutants, as well as heavy metals such as zinc, cadmium, chromium, and copper are contained in the stormwater runoff from urban areas. These pollutants are often found in combination with particulates such as sediment. Additionally, oils, grease, and other hydrocarbons are contained in stormwater from urban areas. Unlike the construction phase, the best management

practices for stormwater management are permanent measures, with some exemptions for sites with low levels of imperviousness or no exposed roads or parking areas. These proposed site standards may be set aside where regional facilities are in place to manage stormwater from a larger-area within the context of an approved subwatershed-level stormwater management plan.

The state's performance standards require that best management practices be installed or applied and maintained in accordance with a stormwater management plan to control total suspended solids (TSS) and other pollutants carried in runoff from new development and redevelopment to the maximum extent practicable, including:

- Reduce the post-construction (TSS) by 80 percent for new development and 40 percent for redevelopments.
- Maintain pre-development peak runoff rates for the one-year and two-year, 24-hour storm events for new developments.
- Infiltrate 90%, 75% or 60% of pre-development runoff volumes for new development with low, moderate or high imperviousness respectively.
- Maintain protective areas (10-75 feet) between new impervious surfaces and lakes, streams, and wetlands.
- Control petroleum runoff (visible sheen) from fueling and vehicle maintenance areas.

Washington County Erosion Control and Stormwater Management Ordinance

Since January 1, 1998 Washington County has enforced an Erosion Control and Stormwater Management Ordinance. Washington County amended its ordinance in 2008 and again in 2016 to stay consistent with state requirements and changes to NR151 Administrative Code and to comply with the Uniform Statewide Standards under s. 281.33, Stats. With each ordinance update the County pulled together representative from local municipalities and created a model ordinance for local adoption and consistency across municipal boundaries. Within the unincorporated areas of the County, through Intergovernmental Agreements (IGAs), the LWC is the Administering Authority in 8 of its 11 townships. The County's ECSM Code replaced similar provisions that existed in the County Land Division Ordinance since 1978.

The County Code ensures that new developments meet sediment reduction limits and also incorporates TMDL reductions limits for redevelopments. In some TMDL reachsheds new development may be required to reach even higher sediment reductions in order to meet targeted goals. The County maintains a database of permanent stormwater practices and conducts follow-up site inspections to address long-term maintenance needs. It is recognized that proper maintenance will help minimize structure failure and possible damages, and ensure that the facilities continue to serve their designed function. Developing a process to ensure the proper long term maintenance of stormwater management facilities will be a focus of the LWC over the next couple years. The IGAs identifies the County, as administering authority will do the following:

- Create and maintain a computerized map and database of all stormwater management facilities;
- Conduct routine on-site inspections of stormwater management facilities based on facility age and surrounding land use and produce a written report concerning the current condition of each facility inspected;

- If maintenance action is recommended, discuss needs and jointly establish deadlines with the local government for the work to be completed by the responsible party; and,
- Jointly enforce maintenance requirements outlined in the inspection report. The Town will use their special assessment authority to recover all County or Town costs incurred if necessary.

As of 2019, the stormwater management GIS database contains records for over 310 installed stormwater BMPs, as shown in *Figure 20*.

STORMWATER MANAGEMENT – DEVELOPED URBAN AREAS

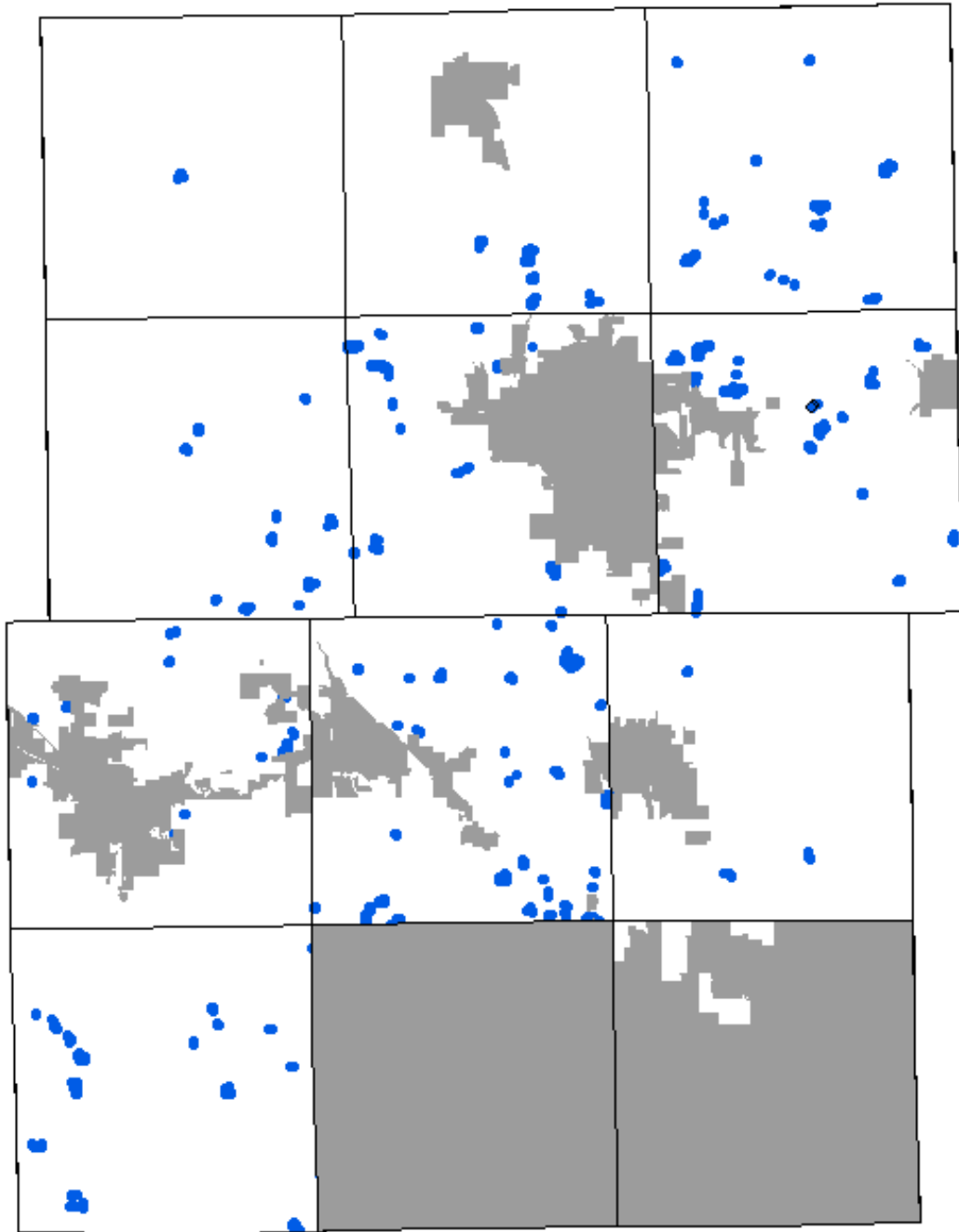
Chapter NR 216 Wisconsin Administrative Code requires discharge permits for community storm sewer systems, which collect runoff from existing urban development in the community. The DNR issues general Municipal Separate Storm Sewer System (MS4) permits and requires communities to apply for coverage. In general, these permits apply to all communities with a contiguous population density of 1000 people per square mile. In 2000, Phase I of this permit was first applied to communities with population of over 100,000, then in 2004, Phase II implementation, five communities in Washington County were required to apply for coverage – the cities of Hartford and West Bend, the Village of Germantown and Richfield and Washington County. At that time Washington County through a successful appeal was provided an exemption. Then, in 2014 Washington County and the Villages of Jackson, Kewaskum, Slinger, and Richfield along with the Townships of Hartford and West Bend received notice for permit coverage. As a result, the County along with the other communities obtained a Wisconsin Pollutant Discharge Elimination System (WPDES) permit. There are six WPDES permit requirements for an MS4 to meet;

- Public education and outreach
- Public involvement and participation
- Illicit discharge detection and elimination
- Construction site pollutant control
- Post-construction site storm water management
- Pollution Prevention/Good housekeeping

The LWC serves as the MS4 permit contact and plays the lead role in the development and implementation for Washington County.

Figure 20

Stormwater Management Practices Tracked for Long-Term Maintenance



● WashCoGIS83.GIS.ECSM_PointPractice

■ Incorporated Areas

PROGRAM INTEGRATION

The goals of this Plan can be achieved through implementation of Federal, State, and County Soil and Water Conservation Programs. The following are brief descriptions of each of the applicable programs.

FEDERAL CONSERVATION PROGRAMS

There are several federal programs available to landowners and farm operations, as well as partner agencies staff like the Natural Resource Conservation Service that help get conservation on the ground. This Plan identifies the primary programs utilized by LWC staff that help landowners address water quality and land management improvements.

Environmental Quality Incentives Program (EQIP)

Provides financial assistance to agricultural producers and agricultural landowners to address natural resource concerns and deliver environmental benefits, such as improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation, and improved or created wildlife habitat. Funding is available for Conservation Practices similar to those listed previously under ATCP 50. LWC and NRCS staff work collaboratively through an Operational Agreement to provide technical assistance based on local priority efforts explained earlier.

EQIP uses a local workgroup of Federal, State and County Employees to determine priorities in order to distribute federal funds to help cost share conservation practices. It is a voluntary program designed to meet local resource concerns. The Land and Water Conservation Department works very closely with NRCS through the EQIP. The LWC oftentimes provides technical assistance to landowners who install practices through EQIP.

Table 19
Conservation Practices Installed through EQIP from 2015 – 2019

Practice Name	Units	Year Practice was Installed				
		2015	2016	2017	2018	2019
Brush Management	ac	4.4			4.1	7.1
Composting Facility	no		1			
Conservation Cover	ac	41.5	17.6	7.4	710.5	
Cover Crop	ac	48.9		427.5		816.5
Critical Area Planting	ac	0.8				
Diversion	ft				501.0	
Fence	ft	5,035.0	2,999.0			
Filter Strip	ac		1.5		0.9	
Forage and Biomass Planting	ac	8.1	12.4	0.9		15.8
Forest Management Plan - Written	no					6
Grassed Waterway	ac			0.6	9.0	

Heavy Use Area Protection	sq ft			252.0		
High Tunnel System	sq ft			2,160.0	2,700.0	2,160.0
Livestock Pipeline	ft		4,295.0			
Mulching	ac			0.6	0.3	
Nutrient Management	ac	398.1	406.4			
Pond Sealing or Lining - Concrete	sq ft					53,789.0
Prescribed Grazing	ac	13.9	20.0	31.9	17.7	12.4
Pumping Plant	no	1		2		1
Roof Runoff Structure	no	3				
Spoil Spreading	ac	0.8				
Stream Crossing	no			1		
Structures for Wildlife	no			2		
Subsurface Drain	ft			900.0	1,401.0	
Tree & Shrub Establishment	ac	11.5	2.0			2.7
Tree & Shrub Site Preparation	ac	16.5	0.6			2.7
Underground Outlet	ft	175.0				
Waste Separation Facility	no			1		
Waste Storage Facility	no		2	2		2
Waste Transfer	no	1		1		2
Water Well	no					1
Watering Facility	no		5			
Well Decommissioning	no				2	
Wetland Restoration	ac	0.7				

Table 20
Planned Conservation Practices to be installed through EQIP from 2020 – 2023

Practice Name	Units	Year Practice is Planned			
		2020	2021	2022	2023
Clearing and Snagging	ft	1,080.0			
Conservation Cover	ac	3.9			
Cover Crop	ac	4,162.8	4,446.5	400.0	301.1
Critical Area Planting	ac	1.0			
Fence	ft	12,240.0			
Filter Strip	ac	0.8			
Forage and Biomass Planting	Ac	5.8			
Forest Management Plan - Written	no	2.0			
Grade Stabilization Structure	no	3.0			
Grassed Waterway	ac	4.8			
Heavy Use Area Protection	sq ft	3,351.0			
High Tunnel System	sq ft	2,160.0			
Lined Waterway or Outlet	ft	70.0			

Livestock Pipeline	ft	7,990.0			
Mulching	ac	3.8			
Nutrient Management	ac	3,516.3	3,516.3		
Obstruction Removal	ac	1.1			
Pond Sealing or Lining - Concrete	sq ft	27,113.0			
Prescribed Grazing	ac	16.5	30.9	30.9	14.4
Pumping Plant	no	3.0			
Residue and Tillage Management, No Till	ac	400.0	400.0	400.0	
Spoil Spreading	ac	5.7			
Stream Crossing	no	3.0			
Streambank and Shoreline Protection	ft	850.0			
Subsurface Drain	ft	1,520.0			
Underground Outlet	ft	460.0			
Waste Transfer	no	5.0			
Waste Treatment	no	1.0			
Watering Facility	no	3.0			
Wetland Restoration	ac	1.4			

REGIONAL CONSERVATION PARTNERSHIP PROGRAM (RCPP)

Promotes coordination between NRCS and its partners to deliver conservation assistance to producers and landowners. Under partnership agreements, NRCS and its partners leverage and target their respective resources to deliver conservation assistance to producers and landowners to address priority natural resource concerns. Programs primarily utilized through RCPP include Agricultural Conservation Easement Program, Environmental Quality Incentives Program and the Conservation Stewardship Program.

In 2016, a coalition between Washington County, Ozaukee County and the Milwaukee Metropolitan Sewerage District successfully applied for a RCPP Grant for the Cedar Creek Watershed (see *Figure 9* in Chapter III) and the Ulao Creek Watershed (Ozaukee County) through 2020. The [Milwaukee River Watershed Conservation Partnership](#) RCPP Grant supplied \$800,000 of funding while the MMSD match ACEP funding for a total dollar grant of \$1.5 million. The following chart summarizes the accomplishments through 2019.

Table 21
RCPP Project Goals and Accomplishments

Project Goal	*Target Quantity	Unit of Measure	Goal Progress (Cumulative Total)	% Complete
Producer Participation (i.e. Contacts, Outreach, Education)	382	no.	400	105%
RCPP-EQIP contract acreage	888	ac.	1564	176%
Hayland/ or Field Border (386)	12.5	ac.	13.9	111%

Pasture Planting	25	ac.	25.3	101%
Residue and Tillage Management - No Till/Strip Till/Direct Seed (329)	500	ac.	0	0%
Contour Buffer Strips (332)	2	ac.	0.9	45%
Cover Crop (412)	500	ac.	789	158%
"Buffer" Filter Strip (393)	25	ac.	5.9	24%
Grassed Waterway (412)	10,560	ft.	3096	29%
Nutrient Management (590)	500	ac.	435	87%
Fencing for Grazing	8,695	ft.	8695	100%
ACEP-ALE easement acquisitions	8	no.	3	38%
ACEP-ALE easement acquisitions	818	ac.	195	24%
Establish Farmer-led Watershed Council	1	no.	2	200%
Agronomist Meetings	5	no.	2	40%
Field Trips	4	no.	4	100%
Field Days	3	no.	4	133%

AGRICULTURAL CONSERVATION EASEMENT PROGRAM (ACEP)

Helps landowners, land trusts, and other entities protect, restore, and enhance wetlands, grasslands, and working farms and ranches through conservation easements that restricts the use of the land. Land Easements protect the long-term viability of the nation's food supply by preventing conversion of productive working lands to non-agricultural uses or by providing habitat for fish and wildlife, including threatened and endangered species, improve water quality by filtering sediments and chemicals, reduce flooding, recharge groundwater, protect biological diversity and provide opportunities for educational, scientific and limited recreational activities. Depending on the land use and easement type NRCS may contribute between 50 to 100 percent of the fair market value of the easement.

Conservation Reserve Program (CRP)

Protects soil, water quality, and habitat by removing highly erodible or environmentally sensitive land from agricultural production through long-term rental agreements by providing annual rental payments to landowners based on the productivity of the site's soils. The CRP was developed to assist landowners in voluntarily converting highly erodible and environmentally sensitive cropland from the production of annual crops to permanent grass, forbs, wildlife cover or trees. CRP normally has a 10 or 15-year lease payment.

CONSERVATION STEWARDSHIP PROGRAM (CSP)

Helps agricultural producers maintain and improve their existing conservation systems while adopting additional conservation activities to address priority natural resource concerns.

Participants earn CSP payments for conservation performance—the higher the performance, the higher the payment.

GREAT LAKES RESTORATION INITIATIVE (GLRI)

The Great Lakes Restoration Initiative was launched in 2010 to accelerate efforts to protect and restore the Great Lakes and preventing the introduction of new invasive species. The EPA awards GLRI grants to state and local agencies working to improve and restore the Great Lakes. To date, Washington County has not received funding directly from the GLRI, but is aware of funding that has been provided through other programs like EQIP, and the DNR's Aquatic Invasive Species Education and Prevention Program.

STATE CONSERVATION ASSISTANCE PROGRAMS ———

Following is a discussion of existing programs, regulations and proposed performance standards and how they will be used to address urban and rural resource management concerns. While the LWC remains committed to using all available federal, state, and local voluntary and incentive-based conservation programs, future efforts will also involve state and local regulations.

Although specific roles vary depending on the program, getting conservation "on the ground" has always been a cooperative effort between the LWC, NRCS and other federal, state, and local agency staff. Lead administrative responsibilities are generally assigned to the LWC for programs with state or local origins and to NRCS staff for federal programs. A cooperative agreement exists between the local NRCS office and the LWC, which helps to ensure that federal programs are used to achieve local priorities to the maximum extent possible.

The following describes each of these programs and explains how they have been and can be utilized to implement LWRM plan objectives.

TARGETED RUNOFF MANAGEMENT PROGRAM (TRM)

The Priority Watershed Program has been replaced with the Targeted Runoff Management program. Small scale TRM grants focus on small areas, perhaps even individual problem sites, are short in duration (1 to 4 years) and only provide cost sharing dollars. Large scale TRM grants focus upon watershed and are more comprehensive. The costs for administration will be covered primarily by County funds and to a lesser degree, by annual grants from the DATCP. The LWC will use TRM grants as a means of accelerating implementations of the NR 151 agricultural performance standard and prohibitions. These projects will be coordinated with regional DNR staff and whenever possible, with neighboring counties sharing the same watershed.

Washington County has averaged one TRM grant application every other year, since 2010 the program has funded five (5) water quality improvement projects totaling over \$608,0000 in grant funds. Those projects consisted of rebuilding two existing manure storage facilities that were failing and leaking to groundwater, two barnyard runoff control systems and one streambank stabilization project.

ANIMAL FEEDING OPERATIONS AND NR 243 (AFO)

Chapter NR 243, Wis. Adm. Code, is administered by DNR through authority from chs. 281 and 283, Wis. Stats. This code primarily outlines the Wisconsin Discharge Pollution Elimination System (WPDES) permitting and compliance requirements for large, over 1,000 animal units, concentrated animal feeding operations (CAFOs) as well as identifies the compliance requirements for small and medium animal feeding operations. For small and medium animal feeding operations, the DNR investigates complaints and determines if an operation is causing a “significant” water quality problem. If so, the DNR often issues a Notice of Discharge (NOD) which requires landowners to adopt animal waste management or other practices to reduce pollution of state waters. At the landowner’s request, the LWC recommends solutions to the problem and will design and supervise the installation of practices.

The Washington County LWC has utilized the notice of discharge grant program; a grant was received in 2011 to address water quality problems associated with a groundwater contamination occurrence. As of 2019 there were five permitted CAFOs operating in Washington County; three dairy operations, one heifer raising facility and a poultry operation. There are an additional three operations in the County that are considering expanding and will most likely be permitted by the year 2025.

FARMLAND PRESERVATION (FP)

In 2009 Wisconsin Act 28, often referred to as the Working Lands Initiative, repealed and recreated Wisconsin’s farmland preservation law under Chapter 91 of the Wisconsin Statutes and related tax credits under subchapter IX of Chapter 71 of the Statutes. It also created a new program, under Section 93.73 of the Statutes, for the purchase of agricultural conservation easements. The new law also required counties to update their FP Plans. In response to state law, Washington County’s Farmland Preservation Plan was updated and approved by the County Board on December 10, 2013.

The goals of the FP Program are to preserve farmland through local planning and zoning, promote soil and water conservation, and provide tax relief to participating farmers. To be eligible under the new Working Lands Initiative, all cropland and facilities associated with the farm must be in compliance with the Agricultural Performance Standards and meet certain zoning requirements.

The updated FP Plan identified specific Farmland Preservation Area (FPA) to be preserved for agricultural uses. However only three towns in the County agreed to incorporate the FPAs as an overlay map amendment to their comprehensive plans, those being the Towns of Barton, Germantown, and Hartford. None of the townships in the County pursued updates to their zoning code which would have made landowners eligible for the Farmland Preservation tax credit. As of now the only options landowners would have to participate in the program is to seek designation as an Agricultural Enterprise Area.

MANAGED FOREST LAW (MFL)

The goal of the MFL program is to encourage long-term sound forest management. MFL is a tax incentive program for industrial and non-industrial private woodland owners who manage their

woodlands for forest products while also managing for water quality protection, wildlife habitat and public recreation. In return the property owner is provided a reduction in property taxes on woodlands for following management plans. The plans are currently written by private consulting foresters and reviewed and approved by DNR foresters. DNR and private foresters provide most of the necessary informational, technical, and management services on trees and woodlands to County residents. The LWC and NRCS assist residents in signing up for federal and state programs to plant and maintain woodlands. The LWC also helps residents obtain trees to plant by administering an annual tree and shrub sale program and by distributing order forms for annual DNR trees sales.

WILDLIFE DAMAGE ABATEMENT AND CLAIMS PROGRAM (WDACP)

The WDACP provides abatement and claim assistance to landowners receiving wildlife damage. The damage must be caused by deer, bear, geese, sandhill cranes or wild turkeys to commercial seedlings, orchard trees, agricultural crops, nursery stock, apiaries, or livestock. Landowners are eligible for abatement practices such as fencing, shooting permits, scare devices, etc. Landowners may also receive reimbursement for crop losses up to a maximum cap. The USDA Animal and Plant Health Inspection Service (APHIS) administers the WDACP for Washington County.

LOCAL CONSERVATION ASSISTANCE PROGRAMS ---

PRODUCER-LED WATERSHED PROTECTION PROGRAM

The Producer-led Watershed Protection program focuses on ways to prevent and reduce runoff from farm fields and works to increase farm participation in voluntary efforts by fostering locally-led decision making by producers. Washington County's current active Producer-Led Group is the Cedar Creek Farmers, this group focuses on educating farmers within the Cedar Creek Watershed about soil health principles as well as providing funding to area farmers for experimenting with practices like No-till and cover crops. Grant funding available through DATCP along with matching dollars from organizations like the Fund for Lake Michigan help farmers address the unique soil and water quality challenges of their local landscapes with innovative and collaborative approaches.



LAKE DISTRICTS/ASSOCIATIONS

The LWC has developed close working relationships with several lake districts in the County. Conservation staff offer program planning guidance and technical assistance aimed to control aquatic invasive species and nonpoint sources of water pollution in the watersheds of those lakes. Some lake districts also budget funds to help support the County's Aquatic Invasive Species Program as well as paying for conservation practices. These close-working relationships will continue.

COUNTY TREE PROGRAM AND THE STEWARDSHIP INCENTIVE PROGRAM (SIP)

Since 1993, the LWC has sponsored an annual tree sale. The purpose of the program is to encourage area residents to plant native trees, shrubs and prairie seed by offering an inexpensive source of planting stock. The tree program is used as a vehicle to promote conservation by offering such additional items as private well and lawn testing kits, no/low phosphorus fertilizer information, bird, bat, and butterfly houses, compost bins and rain barrels. Proceeds from the annual tree sale are available for use as cost share dollars.

The purpose of the SIP is to improve land and water resources in Washington County by offering financial support to local landowners, units of government and non-profit organizations which will encourage and enable them to implement soil erosion control and runoff management practices.

PRIORITIES:

The Land and Water Conservation Department (LWC) ranks individual requests for SIP funds using the following criteria:

- First priority is given to landowners within focused watershed areas, as identified in the program guidelines approved by the Land Conservation Committee; examples include the Cedar Creek watershed RCPP area and coldwater fishery streams such as Quaas, Stony and Lehner.
- The degree to which nonpoint pollution is impacting water resources.
- The extent to which other program dollars are or are not available or adequate to enable the landowner/manager to adopt conservation measures.
- The extent to which the funds will be used for practices designated as high priority in the LWRM Plan. These include nutrient management, residue management, streambank protection (buffers, livestock fencing, etc.).

ELIGIBLE PARTIES:

SIP funds may be made available to Washington County residents, local units of government and non-profit organizations who own, operate or manage:

- Land where sediment and/or nutrient runoff is causing a significant water quality problem.
- Land or facilities that do not comply with state or local nonpoint performance standards.

ELIGIBLE PRACTICES:

SIP funds may only be used towards Best Management Practices (BMPs) for which the LCD has determined that:

- The proposed BMP is the most cost-effective means for achieving resource protection objectives.

- The proposed BMP will achieve compliance with state or local nonpoint performance standards whichever is stricter.

OTHER CONDITIONS:

The recipient of SIP funds must, at a minimum, agree to the following:

- Have LCD staff conduct a runoff pollution assessment on the entire property. The assessment would be to determine and document compliance or noncompliance with state and or local minimum performance standards.
- Implement the BMP according to technical standards adopted by Washington County.
- Maintain the BMP for as long as specified in the contract.

LAND AND WATER CONSERVATION REGULATIONS

The following ordinances are more relevant to this Land and Water Resource Management Plan and are administered by the Land and Water Conservation. County ordinances will be revised in order to keep current with technical standards and new state laws. Below is a description of current regulations involving the LWC.

ANIMAL WASTE STORAGE FACILITIES (CHAPTER 135)

This County ordinance became effective on January 1, 1991. It is designed to prevent water pollution by requiring all new or substantially altered manure storage facilities to be designed and built to technical standards and specification. A producer is required to obtain a permit for construction and allow LWC inspection. A 2006 revision of this County ordinance required permits for the proper abandonment of manure storage facilities that are no longer intended to be utilized.

EROSION CONTROL & STORMWATER MANAGEMENT (CHAPTER 238)

This code became effective January 1, 1998. It requires development activities to meet stormwater management and erosion control standards. Chapter 238 replaced similar provisions that existed in the County Land Division Ordinance since 1978. By meeting the requirements of Chapter 238 the non-agricultural performance standards would also be met.

Washington County amended its ordinance in 2008 which included higher infiltration requirement. The ordinance again in 2016 to stay consistent with state requirements and changes to NR151 Administrative Code and to comply with the Uniform Statewide Standards under s. 281.33, Stats, thus removing the increased infiltration rate language. Local municipalities were requested to amend their ordinance to match the counties model for consistent code language throughout the County.

MINING, NON-METALLIC (CHAPTER 265)

The Non-metallic Mining Reclamation Ordinance was adopted by the Washington County Board of Supervisors in June of 2001. Washington County amended its ordinance in 2007 to include removal of “startup” language, changes to the annual reporting/fee collection, and a few definition additions/modifications. The LWC is the permitting agent for the County. The ordinance requires that all nonmetallic mining operations have a permit. The permit requires submittal and approval of a reclamation plan, and also requires a financial assurance be placed for the reclamation in the event of closure.

COUNTY AND LOCAL REGULATIONS

One way the Washington County Board and local units of government establish policies is by adopting ordinances and planning documents. Ordinances are local laws prescribing rules of conduct and are enforced by County and local officials. Ordinances become a permanent part of the governmental code and may be amended from time to time. Planning documents are adopted to give guidance to County and local officials and should be referenced in deliberations on planning and zoning issues. Once policy has been approved by the County Board or local officials it is the responsibility of staff to implement those policies.

COMPREHENSIVE PLANNING AND ZONING

The comprehensive plan and zoning ordinance³³ represents one of the most important and significant tools available to local units of government in directing the proper use of lands. Local zoning regulations include general, or comprehensive, zoning regulations and special-purpose regulations governing floodplain and shoreland areas. General zoning regulations may be adopted as a single ordinance or as separate ordinances; they may or may not be contained within a single document. Any analysis of locally proposed land use must take into consideration the provision of both general and special-purpose zoning. In Washington County, general zoning is administered at the municipal level. County zoning oversight is limited to shoreland, wetland and floodplain districts. The ordinances that are administered by the local units of government in Washington County are summarized in *Table 22*, and described further below.

GENERAL ZONING

In Washington County, general zoning is in effect in the unincorporated areas of the County, which includes all of the Towns in the County. County zoning authority in these Towns is limited to shoreland-wetland overlay zoning, floodplain overlay zoning, and subdivision review. Comprehensive zoning exists in all the Cities and Villages within the County.

³³ Ordinance information are found at <http://www.co.washington.wi.us>

FLOODPLAIN ZONING

Section 87.30 of the *Wisconsin Statutes* requires that cities, villages, and counties, with respect to their unincorporated areas, adopt floodplain zoning to preserve the floodwater conveyance and storage capacity of the floodplain areas and to prevent the location of new flood damage-prone development in flood hazard areas.

The required regulations govern filling and development within the 100 floodway and flood fringe. The floodway is that portion of the floodplain required to convey the 100-year recurrence peak flood flow, whereas the flood fringe is that portion of the floodplain located outside of the floodway that would be covered by floodwater during the 100-year recurrence flood.

The County Shoreland and Floodplain Zoning Ordinance applies in all of the unincorporated areas of the Towns in Washington County. The incorporated Cities and Villages have all adopted floodplain zoning ordinances.

SHORELAND AND SHORELAND-WETLAND ZONING

Under Section 59.971 of the *Wisconsin Statutes*, counties in Wisconsin are required to adopt zoning regulations within shoreland areas (lands that are within 1,000 feet of a navigable lake, pond, or flowage, or 300 feet of a navigable stream) within their unincorporated areas. Counties must also place all wetlands five acres or larger and within the statutory shoreland zoning jurisdiction area into a wetland conservancy zoning district to ensure their preservation after completion of appropriate wetland inventories by the Wisconsin Department of Natural Resources.

In 1982, the State Legislature extended shoreland-wetland zoning requirements to cities and villages in Wisconsin. County shoreland-wetland zoning ordinances are in effect in all unincorporated areas of Washington County. For the most part, the incorporated Villages and Cities, have adopted their own shoreland-wetland zoning ordinances.

SUBDIVISION REGULATIONS

Chapter 236 of the *Wisconsin Statutes* requires the preparation of a subdivision plat whenever five or more lots of 1.5 acres or less in area are created either at one time or by successive divisions within a period of five years. The *Statutes* set forth requirements for surveying lots and streets, for plat review and approval by State and local agencies, and for recording approved plats. Each of the incorporated communities in Washington County has adopted its own subdivision control ordinance.

Table 22
Ordinance Administration in Washington County related to Natural Resource Issues

Community	Type of Ordinance					
	Zoning/ Ordinance	Floodplain Zoning	Shoreland or Shoreland/ Wetland Zoning	Subdivision Control	Construction Site Erosion Control and Stormwater	Nonmetallic Mining Reclamation
Cities						
Hartford (portion)	Own	Own	None	Own	Own	County
West Bend	Own	Own	Own	Own	Own	County
Villages						
Germantown	Own	Own	Own	Own	Own	County
Jackson	Own	Own	Own	Own	Own	County
Kewaskum	Own	Own	Own	Own	Own	County
Newburg (portion)	Own	Own	Own	Own	Own	County
Richfield	Own	Own	Own	Own	Own	County
Slinger	Own	Own	Own	Own	Own	County
Township						
Addison	Own	County	County	County	Own ¹	County
Barton	Own	County	County	County	County	Own ¹
Erin	Own	County	County	County	County	County
Farmington	Own	County	County	County	Own ¹	County
Germantown	Own	County	County	County	County	Own
Hartford	Own	County	County	County	County	Own ¹
Jackson	Own	County	County	County	Own	Own
Kewaskum	Own	County	County	County	Own	Own ¹
Polk	Own	County	County	County	Own ¹	County
Trenton	Own	County	County	County	Own ¹	County
Wayne	Own	County	County	County	Own	Own
West Bend	Own	County	County	County	Own ¹	County
Washington County	None	County	County	County	County	County

¹ Washington County administers ordinance for the Community
Source: SEWRPC and Washington County