Wisconsin Farm Conservation Standards

Prepared by James Matson

Wisconsin has adopted minimum conservation standards, including *nutrient management standards*, for farms.[1] These are mandatory standards, not just voluntary guidelines; but compliance obligations are contingent on cost-sharing (see below). The standards have been in effect for about 15 years, and apply to all farms. Counties are primarily responsible for implementing the standards.[2]

Full compliance with the current standards would help to reduce farm runoff and improve water quality, but there are significant compliance gaps at this time. As of 2016, for example, just 32% of Wisconsin cropland was covered by a verifiable nutrient management plan (37% in Dane County).[3] Compliance depends, in part, on the availability of cost-share funding. But it also depends on public, elected official, farm community and agribusiness support.

Conservation Practices Required

Current state standards require farmland owners to do all of the following, subject to applicable cost-share requirements:

- Have and follow an annual *nutrient management plan* (see below).
- Maintain a tillage setback from surface waters, to ensure stream-bank integrity and prevent soil movement to surface water (5-20 feet, as necessary).
- Meet tolerable soil loss ("T") standards on all fields and pastures.
- Prevent direct runoff from feedlots or stored manure to surface water, wetlands or groundwater.
- Control livestock access to surface water and wetlands, in order to maintain vegetative cover and prevent erosion.
- Avoid discharging wastewater to surface water, wetlands or groundwater.
- Avoid stacking unconfined manure within 300 feet of a stream, within 1,000 feet of a lake, or in an area that is susceptible to groundwater contamination.
- Divert clean water (such as water from rain gutters) away from feedlots, manure storage areas, or barnyards that are located within 300 feet of a stream, within 1,000 feet of a lake, or in an area that is susceptible to groundwater contamination.
- Ensure that manure storage facilities, *if any*, are:
  - Constructed to specified standards (nutrient management plans determine manure storage needs, based on herd size and other factors).
  - Maintained to prevent overflow and provide a storage capacity safety margin.
  - Repaired and maintained to prevent leaks and failures.
  - Closed according to specified standards, when retired from use.

  Note: *Most counties, including Dane County, have manure storage construction ordinances that are consistent with state standards. These county ordinances do not mandate manure storage, but are designed to ensure that manure storage facilities (if any) are constructed according to applicable standards. A livestock operator's nutrient management plan may or may not call for manure storage, depending on the nature and size of the livestock operation. Manure storage facilities are expensive: an "average-sized" facility may cost roughly $350,000.*

Nutrient Management Plans

It is hard to manage a business without a systematic accounting system. It is likewise hard to manage nutrient balances on a modern farm, in a serious and responsible way, without a *nutrient management (NM) plan.*

A *NM plan* provides a basic accounting and management system for "good" farm nutrients, such as nitrogen (N) and phosphorus (P), which can easily become "bad" water pollutants. A NM plan does not, by itself, guaranty a reduction in P loading to surface water. But it is an important place to start.

To meet state standards, a NM plan must:

- Be prepared or approved by a qualified NM planner (a farmer may qualify).
- Be based on soil tests conducted at a certified soil-testing laboratory.
- Consider cropping plans, crop nutrient needs, and existing soil nutrient concentrations.
- Count nutrient contributions from all relevant sources, including fertilizer and manure applications.
- Use a P-Index to evaluate and manage P runoff risks.

  Note: *The "P-Index" considers a variety of P runoff risk factors, including soil P levels, P inputs, and field susceptibility to runoff. The lower the P Index value, the lower the P runoff risk. Landowners can reduce P-Index values by managing P applications and implementing runoff control practices such as conservation tillage, cover crops and buffer strips. Free software (SnapPlus) helps farmers and nutrient management planners to calculate P-Index values.*

- Avoid nutrient applications that exceed rates recommended by the University of Wisconsin (UW).

  Note: *UW recommendations are agronomic recommendations, not water quality recommendations. However, compliance with UW recommendations can help to prevent clearly excessive N and P applications.*

- Avoid manure and nutrient application practices that violate federal guidelines (NRCS 590). State NM standards incorporate these federal guidelines by reference.

Management Flexibility

If there are different ways for a landowner to comply with a state conservation standard (usually there are), the landowner may choose the approach that he or she prefers. But if a landowner receives public cost-share dollars to install a particular conservation practice, that practice must be installed and maintained according to prescribed minimum standards.

Compliance Responsibility

Responsibility for complying with Wisconsin's farm conservation standards lies with the *farmland owner*. But roughly a third of all Wisconsin farmland is now rented from absentee owners. That can lead to a loss of accountability, unless the farm rental agreement clearly spells out conservation responsibilities. Many farmers also delegate key farm management

tasks to 3rd parties such as crop consultants, manure haulers and fertilizer suppliers. That, too, can complicate compliance accountability.

Cost-Share Requirements

If a conservation standard requires a landowner to change a facility or practice that pre-dates the standard, the landowner's compliance obligation is normally contingent on an *offer* of cost-sharing (there are some important exceptions).

- A cost-share offer, *if required*, must normally cover at least 70% of the landowner's "out of pocket" compliance costs. Costs may vary, depending on the practices needed to comply with the standard. There are standard *per acre* cost-share amounts for some practices, such as NM plans.
- Counties enter into *cost-share contracts* with landowners who receive cost-share payments. For example, a NM cost-share contract might pay a landowner to do NM plans for 4 years, at the standard rate of $7 per acre ($28 per acre over the 4-year term of the contract).
- A landowner may not avoid compliance obligations by refusing a legally adequate cost-share offer. But enforcement actions against noncomplying landowners are rare, unless there is a grossly negligent pollution discharge. Counties rely heavily on voluntary compliance, and value cooperative working relationships with landowners.
- Counties *may* cost-share farm conservation projects, even when cost-sharing is *not* required. Cost-share grants may also exceed required minimum amounts, and may pay for performance that goes *beyond* minimum state standards.

  Note: *For example, a county might pay a landowner to do a NM plan (as required by state standards), but might also pay the landowner to achieve a "P-Index" value that is well below the maximum allowed by state NM standards.*
- Once a landowner achieves compliance with a farm conservation standard, the landowner is theoretically obligated to maintain compliance *without* further cost-sharing. But in practice, many cost-shared practices are abandoned when cost-share contracts end, or when farm ownership or operations change.

Cost-Share Exceptions

Cost-sharing is *not required* (but may be offered) for any of the following:

- Changes needed to bring facilities or practices into compliance with a conservation standard that was *already in effect* when those facilities or practices were installed.
- Conservation practices that can be implemented without a significant change to existing facilities or practices.
- Conservation practices needed to restore, to compliance, land that has gone out of compliance.
- Conservation practices that a landowner has already installed.
- Ongoing maintenance of a permanent improvement (such as a manure storage facility) whose installation was cost-shared.
- An annual practice, such as an annual NM plan, that has already been cost-shared for at least 4 years.

- Facilities or practices needed to qualify for any of the following permits:
  - *A CAFO permit.* A "concentrated animal feeding operation" (CAFO) with 1,000 or more "animal units" (about 700 dairy cows) must obtain a pollution control permit from DNR. Operators must meet permit criteria, including NM and manure storage standards, regardless of cost-sharing.
  - *A livestock facility siting permit.* A county or local government may, by ordinance, require siting permits for livestock facilities with 500 or more "animal units" (about 350 dairy cows). Twenty-six counties and many towns have adopted such livestock siting ordinances (Dane County has not done so). In jurisdictions that have adopted livestock siting ordinances, livestock operators must meet uniform statewide permit criteria (including NM and manure storage standards) regardless of cost-sharing.
  - *A manure storage construction permit*. In most counties (including Dane County), a livestock operator must get a permit to construct a manure storage facility. But if an operator simply adds livestock *without* constructing a manure storage facility, no permit is required. An applicant for a construction permit must meet permit criteria, regardless of cost-sharing.

Enforcement

A county may take formal enforcement action against a landowner who refuses to comply with a state conservation standard,[4] but enforcement actions are rare. Voluntary compliance is naturally preferred, and can often be achieved without formal enforcement.

A cost-share offer, even if normally required, is *not* a prerequisite to the following actions:

- Action taken against a criminal or grossly negligent pollution discharge.
- Emergency action to stop a pollution discharge that threatens imminent harm.

Cost-Share Funding

State cost-share grant funding is extremely limited, relative to conservation compliance needs:

- For 2017, the State of Wisconsin provided *$1.7 million* in cost-share funding to counties, to cost-share NM plans and annual practices such as conservation tillage and cover crops.[5] That amounts to just $24,000 per county per year, on average.
- For 2017, the State of Wisconsin provided $7.2 million in bond revenue funding to counties, to cost-share long-term "capital" projects such as manure storage facilities and riparian conservation easements. That is an average of just $100,000 per county per year – far less than the amount needed to cost-share just one average-sized manure storage facility.
- State cost-share funding is supplemented by federal, county and local funding (federal funding typically exceeds state funding). Still, the total amount of cost-share funding from all sources falls far short of what is needed to achieve state water quality goals (including TMDL goals for P).

- Partnerships with "point source" P dischargers are a potential new source of farm cost-share funding in some P-impaired watersheds (Yahara WINS is a good example). But these arrangements are still in their early stages.

Cost-sharing can be effective, where funding is adequate and where cost-share grants are used as part of a planned, multi-faceted conservation strategy focused on high priority areas. But even when funding is available, some landowners choose not to participate voluntarily. So there can be a tendency to award cost-share grants on a somewhat random basis, to willing volunteers, rather than as part of a focused compliance strategy that addresses key priorities. Some landowners may also abandon cost-shared practices when cost-share grant contracts end, or when there is a change in farm ownership or operations. That can undermine conservation gains and public support.

In some watersheds (including, in all likelihood, the Yahara watershed), compliance with current state farm conservation standards will not be enough to achieve state water quality (TMDL) goals. In those watersheds, additional conservation practices may be needed. Supplementary practices might include things like conservation easements, manure storage and treatment, more stringent seasonal controls on manure spreading, or more stringent NM standards (e.g., to keep "P Index" values *below* the current statewide average of 2-3, and *well below* the maximum allowed value of 6). Landowners may be willing to cooperate, but may require financial assistance. Additional public funding will be needed, in most cases.

Farmland Preservation Program

Wisconsin's Farmland Preservation (FP) Program provides important incentives for NM and other conservation practices on farms.[6] The FP program has a 3-fold purpose: (1) to encourage sound land use planning and zoning; (2) to keep farmland in agricultural use, where possible; and (3) to reward compliance with farm conservation standards, including NM standards.

Under the FP program, landowners may claim annual FP income tax credits ($7 to $10 per acre, in most cases) if their land is covered by FP zoning and is also farmed in compliance with state conservation standards (counties must periodically certify compliance).[7] Statewide FP tax credits now total about $20 million per year.

Annual FP tax credits have some important advantages over one-time cost-share grants, because they are relatively easy to administer and provide a stronger incentive for *continuing* conservation compliance. Landowners claiming FP tax credits must comply with NM and other state conservation standards, *regardless of other cost-sharing*.

However, only one-third of Wisconsin farmland is eligible for FP tax credits. In other areas, where there is no FP zoning, FP tax credits are not available. FP tax credits play an important role in Dane County, because the county has rather extensive FP zoning. But the county is also facing intense urban development pressure, could erode FP zoning coverage.

Livestock Facility Siting

In Wisconsin, as elsewhere, there is a strong trend toward fewer but larger livestock operations. CAFOs with 1,000 or more "animal units" (about 700 cows) comprise only 3% of Wisconsin dairy

farms, but now produce up to 40% of Wisconsin's milk and manure. A 1,000 cow dairy herd produces about as much fecal waste (feces and urine, as excreted) as Sun Prairie or Fitchburg.

Livestock operations are also becoming more geographically concentrated. In Dane County, dairy growth is increasingly concentrated in the Upper Yahara watershed – a primary area of concern for P runoff. In areas with heavy livestock concentrations, manure management can be a significant challenge.

CAFOs with 1,000 or more "animal units" must obtain a pollution control permit from DNR, and must comply with permit standards. But other livestock operations can expand right up to the CAFO size threshold *without* a DNR permit. Some of these operations may be expanding without adequate NM planning or manure management infrastructure. Herds may be expanded without any notice to the county.

Wisconsin enacted a Livestock Facility Siting Law in 2003,[8] with the support of Wisconsin farm groups, the Wisconsin Counties Association, and the Wisconsin Towns Association. Under that law, a county or local government *may*, by ordinance, require siting permits for new or expanding livestock facilities that will have 500 or more "animal units" (about 350 dairy cows). About 26 counties and a number of towns have adopted such ordinances to date (Dane County has not done so).

To qualify for a county or local siting permit, a livestock facility must document compliance with specific state livestock facility siting standards. The facility must have an annual NM plan, and must meet state standards for manure storage, runoff control, odor and setbacks. All lands receiving manure from the livestock facility must be covered by a NM plan, and manure applications must comply with that plan.

A permit application must specify the maximum number of "animal units" proposed, and must document that the facility is designed to handle that number of "animal units." A standard application form and worksheets allow livestock operators to determine compliance needs *before* applying for a permit, and to plan with confidence.[9] A facility that existed prior to the effective date of a livestock facility siting ordinance is "grandfathered," provided that it does not grow by more than 20%.

A county or local government may deny, suspend or revoke a permit if the livestock facility fails to meet applicable state standards, or if the permit holder fails to maintain compliance (no state action is required). The permit holder may not exceed the authorized number of "animal units" without further authorization.

Summary prepared by James Matson, retired chief legal counsel, WI Dept. of Agriculture, Trade and Consumer Protection (September 25, 2017).

Notes

[1] See Wis. Stats. s. 281.16; Wis. Adm. Code chs. ATCP 50 and NR 151. Wisconsin's farm conservation standards (also known as "agricultural performance standards") were adopted at the direction of the state legislature, with extensive legislative oversight, and with extensive input from the farm community and the public.

[2] See Wis. Stats. ch. 92.

[3] See Wisconsin Department of Agriculture, Trade and Consumer Protection (2016 NM Status Report) at https://datcp.wi.gov/Documents/NMUpdate2016.pdf.

[4] A county may do any of the following, if a landowner refuses to comply with a state farm conservation standard:

- Suspend the violator's eligibility for farmland preservation tax credits (*see* Wis. Stats. ch. 91 and s. 71.613).
- Seek a court-ordered civil forfeiture (up to $5,000 per violation) or a court injunction. *See* Wis. Stats. s. 281.98). In an informal written opinion, the Wisconsin Department of Justice has stated that counties may enforce s. 281.98 against violators of farm conservation standards.
- Seek enforcement by the Wisconsin DNR or Department of Justice if there is a serious pollution discharge, or a violation of DNR permit requirements.
- Suspend an applicable county permit (such as a livestock facility siting permit or manure storage facility permit), if permit conditions are violated.
- Take other actions, if any, authorized by county ordinance.

[5] Based on the State of Wisconsin's 2017 Land and Water Resource Management Plan.

[6] See Wis. Stats. ch. 71 (subch. IX) and Wis. Stats. ch. 91.

[7] Landowners in state-designated "agricultural enterprise areas" may also qualify FP tax credits if they enter into individual farmland preservation agreements that keep land in agricultural use for 15 years, regardless of whether that land is covered by county or local FP zoning. Where AEAs overlap with FP zoning, participating landowners can qualify for higher FP tax credits. To date, however, there has been only modest participation in the AEA program (only 11% of eligible farm acreage in AEAs is covered by FP agreements). Most landowners who qualify for FP tax credits do so because of FP zoning.

[8] See Wis. Stats. s. 93.90; Wis. Adm. Code ch. ATCP 51.

[9] See Wis. Adm. Code ch. ATCP 51, *Appendix A.*

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