

# Misconsin State Assembly

P.O. BOX 8952 MADISON, WI 53708

TO: SPEAKER ROBIN VOS

FROM: Representative Todd Novak, Chair, and Representative Katrina Shankland, Vice-

Chair, Speaker's Task Force on Water Quality

RE: Report of the Speaker's Task Force on Water Quality

DATE: January 8, 2020

Throughout the spring and summer, the Speaker's Task Force on Water Quality listened to Wisconsin citizens and stakeholders in every region in the state. Although perspectives vary regarding funding priorities and solutions, the task force heard a resounding theme: water quality is crucially important to the health and vitality of our state's people, industries, and natural resources. Under the leadership of Representative Todd Novak, chair, and Representative Katrina Shankland, vice-chair, the task force is pleased to submit a bipartisan slate of recommendations to improve water quality in Wisconsin.

#### **CREATION AND CHARGE**

The creation and membership<sup>1</sup> of the task force were announced on February 11, 2019. The task force was directed to: (1) identify best practices for testing and data collection, measuring water quality in different parts of the state, and types of soil; (2) determine the sources and causes of contaminants impacting water quality; (3) consult with stakeholders to assess current practices to manage runoff as well as suggestions to improve these efforts; (4) investigate remedies that will protect a healthy and stable supply of water for residents and industry; and (5) study best practices for designing and constructing wells and septic systems to safeguard a healthy water supply.

#### HEARINGS THROUGHOUT THE STATE

The task force held 14 hearings throughout the state. The hearings were held on the following dates and in the following locations:

March 20, 2019 - Madison. The task force held an informational hearing at the State Capitol to hear invited testimony from key state agencies and experts, including representatives of the Department of Natural Resources (DNR); the Department of

<sup>&</sup>lt;sup>1</sup> See Appendix 1 for a list of task force members.

- Agriculture, Trade and Consumer Protection (DATCP); the Department of Health Services (DHS); and the Wisconsin Geological and Natural History Survey.
- April 3, 2019 Madison. The task force held an informational hearing to hear from invited stakeholders, including the Wisconsin Farm Bureau; the Wisconsin Farmers Union; Wisconsin Land and Water; Wisconsin Conservation Voters; Clean Wisconsin; the Wisconsin Corn Growers Association; and the Wisconsin Water Quality Association.
- May 8, 2019 Lancaster. The task force held a public hearing and received testimony
  from the Southwest Wisconsin Groundwater and Geology Study (SWIGG); the
  Lafayette Ag Stewardship Alliance; Wisconsin Pork Producers Association;
  University of Wisconsin (UW)-Platteville Pioneer Farms; Discovery Farms; and
  members of the public.
- May 29, 2019 Janesville. The task force held a public hearing and received testimony from Rock County; the Wisconsin Soybean Association; Wisconsin Septic Trades; Wisconsin Biomass Energy Coalition; and members of the public.
- **June 12, 2019 Mauston**. The task force held a public hearing and received testimony from Trout Unlimited; Wisconsin Association of Professional Agricultural Consultants; Juneau, Sauk, and Wood Counties; Wisconsin Cheese Makers Association; and members of the public.
- June 13, 2019 La Crosse. The task force took a tour led by the Wisconsin Wetlands Association. Following the tour, the task force held a public hearing and received testimony from the Wisconsin Rural Water Association; the State of Minnesota; Midwest Environmental Advocates; La Crosse County; Carbon Cycle Consulting LLC; and members of the public.
- July 11, 2019 Burlington and Sturtevant. The task force toured the Burlington Wastewater Treatment Facility. Following the tour, the task force held a public hearing and received testimony from UW-Milwaukee School of Freshwater Sciences; DATCP Agricultural Chemical Cleanup Program; Municipal Environmental Group and Milwaukee Metropolitan Sewerage District; the Water Council and Alliance for Water Stewardship; Racine County Initiatives; and members of the public.
- July 23, 2019 Tomahawk. The task force received a virtual tour of the Packaging Corporation of America, Tomahawk water treatment system. The task force then received testimony from Wisconsin Potato and Vegetable Growers Association; National Council for Air and Stream Improvement; Wisconsin Paper Council; Lincoln County; Short Lane Ag Supply; and members of the public.
- **July 24, 2019 Stevens Point**. The task force toured the UW-Stevens Point Water and Environmental Analysis Laboratory. Following the tour, the task force held a public hearing and received testimony from Portage County; the U.S. Department of

Agriculture (USDA); Wisconsin Water Well Association; Central Sands Water Action Coalition; Farmers of Mill Creek ProducerLed Group and Wood County Land Conservation; and members of the public.

- August 13, 2019 Milwaukee. The task force toured the UW-Milwaukee School of Freshwater Science. Following the tour, the task force held a public hearing and received testimony from representatives of DHS and DNR; the American Council of Engineers; Milwaukee City Health Department and Milwaukee Water Works; MillerCoors; Milwaukee River Keepers and Milwaukee Water Commons; and members of the public.
- August 28, 2019 Green Bay. The task force held a public hearing and received testimony from the Wisconsin Wetlands Association; Brown and Kewaunee Counties; Fox Wolf Watershed Alliance; Alliance for the Great Lakes; Wisconsin Realtors Association; and members of the public.
- August 29, 2019 Marinette. The task force held a public hearing and received testimony from the American Chemistry Council; representatives of DNR and DHS; River Alliance of Wisconsin; Marinette and Oconto Counties; Johnson Controls; S.O. H2O; and members of the public.
- September 4, 2019 Menomonie. The task force toured Alfalawn Farm. Following the
  tour, the task force held a public hearing and received testimony from the Wisconsin
  Dairy Alliance; the Dairy Business Association; Dunn County; Wisconsin Lakes
  Partnership; Wisconsin Wildlife Federation; Scott P. McGovern; and members of the
  public.
- **September 5, 2019 Superior**. The task force held a public hearing and received testimony from DNR and DHS; Wisconsin's Green Fire; Douglas and Ashland Counties; Sustain Rural Wisconsin Network; the Water Quality Coalition; and members of the public.

# RECOMMENTATIONS FOR NEW LEGISLATION IN THE CURRENT BIENNIUM

Representative Novak, chair, and Representative Shankland, vice-chair, and various members of the task force, recommend the introduction of 13 new legislative proposals to address the topics within the task force's charge.

# LRB-4931/1: New Office of Water Policy

#### Background

Under current law, several state agencies have responsibilities relating to water quality. DNR has "general supervision and control over the waters of the state" and implements numerous state and federal programs and regulations. DHS and DATCP also have key regulatory roles relating to water quality. The Wisconsin Geological and Natural History

Survey, which is part of the UW-Extension, provides scientific information regarding Wisconsin's geology and water resources.

#### Recommendation

The task force recommends LRB-4931/1, which creates the Office of Water Policy within the Wisconsin Geological and Natural History Survey. The bill draft appropriates \$150,000 and provides one full-time equivalent staff position for the office in fiscal year 2020-21. The bill draft sets forth the office's purpose as follows: "to coordinate efforts to manage, conserve, protect, and enhance the productivity of the state's water resources for domestic, municipal, commercial, agricultural, industrial, recreational, and other private and public uses."

The bill draft requires the office to do all of the following:

- Evaluate statutory requirements, state agency rules, and legislative proposals related to state water policy and make recommendations for implementing or improving them to the Governor, Legislature, and state agencies.
- Act as a liaison to the Great Lakes Commission's Blue Accounting initiative.
- Submit a report to the Legislature by January 15 of each odd-numbered year.

The bill draft authorizes the office to provide technical assistance to units of government other than the state to assist in planning and implementing water resource policies, and to charge for those services. The bill draft requires state agencies to cooperate with the office and assist the office with carrying out its duties and exercising its powers.

Under the bill draft, the office is led by a director, who is appointed by the Governor, subject to the concurrence of the Joint Committee on Legislative Organization, and serves at the Governor's pleasure. The director must have experience in managing water resources for a wide range of uses, with priority given to experience with both agricultural and industrial uses. The director must do all of the following:

- Facilitate and make recommendations for sharing information between state agencies, UW System institutions, and other stakeholders.
- Create a user-friendly dashboard for public access to certain reports and data as soon as practicable (but no later than December 31, 2021).
- Work with the Department of Workforce Development to analyze demand for waterrelated public and private sector job opportunities.
- Submit a report, including an analysis of undergraduate and graduate water programs at colleges and universities around the nation, to the UW Board of Regents as soon as practicable (but no later than December 31, 2021).
- Divide the state into areas to better understand the diverse and localized water quality issues in each area.

- Prepare a report on the unique water quality challenges in each area, the severity of those challenges, the known level of specific contaminants in those areas, and the overall success of state and federal water quality programs in each area as soon as practicable (but no later than December 31, 2021).
- Work with DNR, DATCP, and the Department of Soil Science of the College of Agricultural and Life Sciences at UW-Madison to provide recommendations on how to improve or expand the soil nutrient application planner developed by UW-Madison to better address the unique water quality challenges identified in various areas of the state.
- Assess the feasibility of establishing statewide programs for promoting water efficiency and conservation and improving water quality that are similar to the Focus on Energy program, which is the state's principal renewable energy public benefit fund.<sup>2</sup>

# LRB-3915/1: Increased Funding for County Conservation Staff

#### Background

DATCP disburses state funds to county land conservation committees to support activities that prevent soil erosion and runoff of nutrients and pollutants into waters of the state. County conservation staff activities eligible for funding include: land and water resource management plan implementation; conservation practice engineering, design, and installation; cost-share grant administration; farmland preservation program administration; and manure storage ordinance implementation. In addition to these responsibilities, county conservation staff play a key role in implementing the Conservation Reserve Enhancement Program (CREP), a federal, state, local, and private partnership program under which landowners voluntarily remove environmentally sensitive lands from cropland or marginal pastureland and plant vegetation or restore wetlands.

Grants are awarded in a tiered process, providing each county a base allocation of \$75,000. As available, remaining funding is allocated to provide for 100 percent funding of a county's first staff position, 70 percent of a second position, and 50 percent for each thereafter, with counties providing the difference. [s. 92.14 (3) (a) and (5g), Stats.]

The 2019-21 Biennial Budget Act appropriated a total of \$9,439,100 in each year in the 2019-21 biennium for the program [\$3,027,200 general program revenue (GPR), and \$6,411,900 of segregated funds, including \$475,000 of one-time funding]. According to written testimony provided by DATCP at a task force hearing in Madison, the approximately \$9 million per year allocation funds between one and two conservation staff people per county.

<sup>&</sup>lt;sup>2</sup> A public benefit fund consists of revenues collected by public utilities from their customers and used by the government or a third party to conduct activities that benefit the public.

One of the most frequently heard suggestions made at task force hearings was to increase state funding for county land and water conservation staff. Some speakers specifically recommended that county conservation staff be funded at \$12.4 million per year, to fully fund an average of three staff people per county.

#### Recommendation

The task force recommends LRB-3915/1, which increases state funding for county land and water conservation staff by \$2,960,900 in fiscal year 2020-21. Enactment of the bill draft will result in a total of \$12.4 million for county conservation staff in fiscal year 2020-21. The bill draft also specifies that, in addition to its other responsibilities, county conservation staff may promote and assist people with enrolling in CREP, described above.

# LRB-5062/1: Well Compensation Grant Program Revisions Addressing Nitrate Contamination

#### **Background**

Under current law, DNR provides grants under the well compensation grant program to landowners or lessees for replacing, reconstructing, or treating contaminated wells that serve certain private residences or are used for watering livestock. Grants may also be used to pay the costs of filling and sealing a well or connecting to a public water supply. [s. 281.75 (4) and (7) (c), Stats.]

Under current law, a well is considered contaminated if it either: (1) produces water that exceeds either a national drinking water standard established by the U.S. Environmental Protection Agency (EPA) pursuant to the Safe Drinking Water Act or a groundwater protection standard established by DNR; or (2) is the subject of a written DNR human health advisory opinion. A well contaminated by livestock fecal bacteria may be eligible for a grant under certain circumstances. [s. 281.75 (1) (b) and (2) (e), Stats.]

Also under the program, a well that is contaminated only by nitrates is eligible for a grant only if the well is used as a source of drinking water for livestock or for both livestock and a residence, is used at least three months of each year and while in use provides an estimated average of more than 100 gallons per day for consumption by livestock, and contains nitrates exceeding 40 parts per million (ppm). [s. 281.75 (9), Stats.]

To be eligible for a grant, an applicant's annual family income may not exceed \$65,000. Up to \$16,000 in eligible costs may be reimbursed through the program, but the program may not pay more than 75 percent of an applicant's eligible costs, meaning that a grant may not exceed \$12,000. If an applicant's annual family income exceeds \$45,000, the amount of a grant award is reduced by 30 percent of the amount by which the annual family income exceeds \$45,000. [s. 281.75 (4m) (a) and (7) (b), Stats.]

When issuing awards under the program, current law requires DNR to prioritize well reconstruction or replacement or connection to another water supply. An award may be issued

for water treatment only if the contamination cannot be remedied by those methods. [s. 281.75 (11) (b) 2., Stats.]

Under the 2019-21 Biennial Budget Act, the well compensation grant program is funded by a \$200,000 continuing appropriation in each year in the 2019-21 biennium.

#### Recommendation

Recognizing and partly mirroring legislative efforts made by Representative Shankland and others with respect to the well compensation grant program, the task force recommends LRB-5062/1. The bill draft makes the following changes to the well compensation grant program to address nitrate contamination in private wells throughout the state:

- Increases the appropriation to fund well compensation grants by \$1 million in fiscal year 2020-21.
- Removes the restrictions regarding compensation of a well contaminated solely by nitrates.
- Requires DNR to prioritize grants for wells contaminated by nitrates in the following order: (1) in excess of 40 ppm; (2) in excess of 30 ppm; (3) in excess of 25 ppm; and (4) between 10 and 25 ppm. For grants awarded for contamination by nitrate levels between 10 and 25 ppm, the bill requires DNR to emphasize the use of reverse osmosis or similar methods prior to well remediation methods, if DNR determines those methods are the most effective option for the claimant's health and welfare.
- Requires DNR to allocate \$200,000 through the program to wells containing nitrates at 10 to 25 ppm, unless DNR determines there are insufficient claims at that level to do so.
- Generally retains current law regarding eligible costs and priorities for awards, but specifies that DNR only issue awards for eligible costs that DNR has determined constitute the most effective remediation method for a claimant's health and welfare.
- Provides DNR with one new full-time equivalent position for the purpose of creating a well compensation grant program administrator position.

# LRB-4806/1: Public Comment Period for Establishing Groundwater Standards

# Background

Under Wisconsin's groundwater protection law, the first step in establishing groundwater protection standards is identifying substances that may affect groundwater quality. Potential substances are submitted to the DNR by state regulatory agencies, and they may also be submitted by any other person. [s. 160.05 (1) and (2), Stats.]

DNR places each substance into one of three categories: Category 1 substances are those which have been detected in groundwater in concentrations in excess of a "federal number" for that substance; Category 2 substances are those which are of public health or welfare concern and have been detected in groundwater, but not in concentrations in excess of an existing federal number; and Category 3 substances are those which are of public health or welfare concern and have a reasonable probability of being detected in groundwater. Each substance is ranked within its category, with the highest rankings given to those substances which pose the greatest risk to human health or welfare, taking into consideration certain characteristics, including carcinogenicity, teratogenicity, and mutagenicity. DNR designates which of the substances in each category are of public health concern and which are of public welfare concern. [s. 160.05 (3), (4), and (6), Stats.]

DNR and DHS share responsibility for establishing standards for substances of public health concern. For those substances, DHS recommends a standard, and DNR then promulgates that recommended standard as a rule. The agencies are required to have a memorandum of understanding regarding the procedures and responsibilities of each agency in establishing enforcement standards, including the standard DNR uses to designate substances of public health concern. [s. 160.07 (1), Stats.]

Groundwater protection standards are established on a two-tiered basis—both an "enforcement standard" and a "preventive action limit" are determined for each substance, according to a procedure and methodological requirements specified by statute.<sup>5</sup> [s. 160.07, Stats.] Within 10 days after categorizing substances, the DNR must submit the list of substances to DHS. DHS then must recommend an enforcement standard for each substance on the list. [s. 160.07 (2) and (3), Stats.] Within nine months of sending DHS the name of a substance identified and categorized as a public health concern, the DNR must propose rules establishing the DHS recommendations as the enforcement standard for that substance. [s. 160.07 (5), Stats.] However, there is no specified timeframe by which DHS must provide a requested public health standard to the DNR.

<sup>&</sup>lt;sup>3</sup> For nonoceanic substances, "federal number" means a numerical expression of the concentration of a substance in water, established by the EPA as either of the following: (1) a drinking water standard or maximum contaminant level; or (2) a suggested no-adverse-response level. [s. 160.01 (3), Stats.] At the federal level, the "suggested no-adverse-response level" terminology has been replaced by "health advisories." Like the older suggested no-adverse-response levels, health advisories provide nonregulatory, recommended contaminant limits before more formal standards are promulgated.

 $<sup>^4</sup>$  In determining whether a substance is a public health concern, the DNR must take into account the degree to which the substance may cause or contribute to short- or long-term adverse human health impacts. [s. 160.05 (6), Stats.]

<sup>&</sup>lt;sup>5</sup> An "enforcement standard" is a numerical expression of the concentration of the substance in groundwater. In general, attaining or exceeding an enforcement standard defines when a violation has occurred. A preventive action limit is a lesser concentration of the substance, as compared to the enforcement standard, and functions as a warning that a groundwater problem is occurring before an enforcement standard has been attained or exceeded (i.e., violated). [s. 160.01 (2) and (6), Stats.]

Rules promulgated to establish enforcement standards and preventive action limits under the groundwater protection law must follow the same procedural steps as other administrative rule promulgations, including the gubernatorial approval of a scope statement and legislative review.<sup>6</sup> For substances of public health concern, DHS and the DNR must jointly prepare a document describing the information and methodology used and the conclusions reached in establishing a proposed enforcement standard. The DNR must make that document available when it publishes a notice of a public hearing prior to formally promulgating a rule. [s. 160.11, Stats.] Documents listing recommended category designations or enforcement standards may also in some cases be subject to procedural requirements governing guidance documents, including a 21-day public comment period.<sup>7</sup> [s. 227.112, Stats.]

#### Recommendation

The task force recommends LRB-4806/1, which adds certain procedural steps to the process for establishing health-based groundwater standards. Specifically, the bill draft requires DNR to provide public notice (on its Internet site or elsewhere) before placing a substance into one of the three categories described above or changing the designated category for a given substance (for example, changing a contaminant from Category 1 to Category 2). The notice must include the current list of categories and substance rankings and the information and reasoning DNR used in determining each substance's category and ranking.

Following the public notice, the bill draft requires DNR to provide a public comment period of at least 21 days. The bill draft requires DNR to retain all written comments submitted during the public comment period and to consider the comments in determining whether to submit the list to DHS for recommendation of health-based standards.

The bill draft also modifies the timeline for submitting the list and rankings to DHS, from 10 days after placing a new substance within a category or changing the category for a substance under current law to 10 days after the end of the comment period under the bill draft.

After DHS develops a recommendation for a health-based enforcement standard but before submitting its recommendation to DNR, the bill draft requires DHS to similarly provide a public notice and hold a public comment period of at least 21 days. The bill draft requires DHS to retain all written comments submitted during that public comment period and to consider the comments in determining whether to modify its recommendation before submitting it.

<sup>&</sup>lt;sup>6</sup> For an overview of the rulemaking process, see Chapter 4, *Administrative Rulemaking*, in the Wisconsin Legislator Briefing Book 2019-20, available here: http://docs.legis.wisconsin.gov/misc/lc/briefing\_book/ch04\_admrules\_revised\_withchart.pdf.

<sup>&</sup>lt;sup>7</sup> However, the general 21-day public comment period for guidance documents may be shortened with the Governor's approval. [s. 227.112 (1) (c), Stats.]

# LRB-4751/1: Pilot Program to Address Nitrate Contamination

# Background

Concerns regarding nitrate contamination, particularly in private wells, were a recurring theme during task force hearings in various parts of the state. Although nitrate is a naturally occurring compound, studies have linked exposure to high levels of nitrate in drinking water to negative health effects, especially in infants. Nitrate contamination can originate from various sources, including manure, failing septic systems, and runoff from agricultural land treated with nitrogen fertilizers.

#### Recommendation

In addition to the bill draft, discussed above, that modifies the well compensation grant program to better address nitrate contamination, the task force recommends LRB-4751/1, which appropriates \$1 million in fiscal year 2020-21 for a nitrogen optimization pilot program. The bill draft requires DATCP to award grants of up to \$50,000 to agricultural producers through the program. In conjunction with a grant to an agricultural producer, the bill authorizes DATCP to award up to 20 percent of the amount of the grant awarded to an agricultural producer to "eligible university entities" – namely the College of Agricultural and Life Sciences at UW-Madison, the Center for Watershed Science and Education at UW-Stevens Point, and the UW-Extension.

Grants awarded to agricultural producers must be used to implement a project, for at least two growing seasons, that reduces nitrogen loading or uses nitrogen at an optimal rate while protecting water quality, including by reducing nitrogen application despite a decrease in crop yield, by growing a crop that requires less nitrogen or that is nitrogen fixing, or by expanding or conserving wetlands. An agricultural producer receiving a grant under the program must collaborate with the university entities mentioned below to fit the needs of the academic research conducted by those entities.

In making a grant under the program, DATCP must do all of the following:

- Collaborate with the eligible university entities mentioned above. Seek to provide grants to agricultural producers in different parts of the state and in areas with different soil types or geologic characteristics.
- Prioritize projects that are innovative and not currently funded through existing state or federal programs.
- Prioritize agricultural producers who plan to implement projects for longer periods of time.

The bill draft requires DATCP to promulgate emergency rules to implement the program within 90 days after the bill draft takes effect.

The bill draft also requires the eligible university entities mentioned above to do all of the following:

- Collaborate to conduct on-site monitoring of projects funded through the pilot program.
- Use information gathered from the projects to research nitrate loading reduction methods, with a goal toward making recommendations to agricultural producers to optimize nitrogen usage while improving water quality in the state.
- Prepare a report, based on the above research and submitted to the Legislature, that
  includes information and recommendations on improving nutrient management
  software programs used in Wisconsin, improving nutrient management plan
  adoption and implementation rates, and improving or altering the state cost-share
  system. The report must also include an assessment of the cost effectiveness of
  different nitrogen reduction methods and an estimate of the demand for a permanent
  program that is similar to the pilot program.

#### LRB-4717/1: Assistance to Farmers for Conservation

Throughout its hearings, the task force heard from farmers and other stakeholders about successes and challenges in implementing conservation practices at the local level. This section provides background and recommendations regarding one bill draft, LRB-4717/1, which includes provisions regarding managed grazing, Alliance for Water Stewardship program certification, cover crop insurance rebates, the producer-led watershed grant program, and the soil and water resource conservation grant allocation.

#### **Managed Grazing**

**Background**. Managed, or rotational, grazing involves planting forage and using grazing rotations among different fields to maximize production and reduce sediment and nutrient runoff. In a managed grazing system, livestock are moved frequently among pasture divisions or paddocks based on forage quality and livestock nutrition needs. In order to implement such a system, a landowner generally develops a management plan for grazed land.

The Grazing Lands Conservation Initiative (GLCI) is a national effort intended to increase the use of managed grazing in livestock production. Under the initiative, the Natural Resources Conservation Service (NRCS), within the USDA, provides grants to groups and agencies that provide education, research, and technical assistance on grazing. Prior to 2013, DATCP provided state-funded grants to support the GLCI.

NRCS also administers the Environmental Quality Incentives Program (EQIP), which provides financial and technical assistance to agricultural producers to implement a number of different conservation practices, including managed grazing. [7 U.S.C. s. 3839aa-1 (2) (B).] The number of NRCS staff in Wisconsin has reduced from 215 staff in 2015 to 199 staff in 2019. At

the state level, grazing education and technical assistance is provided by entities including DATCP, UW-Extension, and county land and water conservation departments.

**Recommendation**. The task force recommends LRB-4717/1, which adds one full-time equivalent position at DATCP to serve as coordinator for managed grazing initiatives in the state. The bill draft appropriates \$64,800 GPR in fiscal year 2019-20 and \$86,400 GPR in fiscal year 2020-21 to fund this position. The person in this new position is required to convene a multistakeholder working group to expand and enhance grazing activities in this state and to develop a state grazing plan. The managed grazing coordinator's additional duties are the following:

- Serve as the primary point of contact for government agencies and producers needing technical assistance on effective grazing strategies and methods;
- Identify new technologies and best practices in grazing that are best suited and most applicable for the state's landscape and producers; and
- Leverage federal funding to promote effective, economic grazing practices and assist producers in implementing these practices.

# **Grants for Alliance for Water Stewardship Program Certification**

**Background**. At its hearings in Milwaukee and Marinette, the task force heard from invited speakers regarding the benefits of, and challenges in achieving, certification from the Alliance for Water Stewardship (AWS) program.

Under the AWS program, businesses and farms voluntarily undertake a series of steps in order to receive certification that the site meets the water stewardship practices in the AWS Standard. According to the AWS, the steps participants must complete in order to meet this standard include gathering water-related data; committing to water stewardship and creating a water stewardship plan; implementing their plan; evaluating their performance; and communicating and disclosing their progress with stakeholders. Each of these steps has a series of criteria and indicators that must be met, and are designed to lead to improved water governance, sustainable water balance, good water quality, healthy status of important water-related areas, and access to water. Sites are audited and certified as meeting the standard by third-party assessors independent of AWS or the site owners. The benefits of engaging in this process and achieving certification include receiving clear guidance on meeting or exceeding regulatory standards, having a credential to use in marketing and communications, and having positive environmental consequences.

Miltrim Farms, Inc., in Marathon County, Wisconsin, recently became the first farm in the United States to achieve water stewardship certification from AWS after completing an almost two year process. **Recommendation**. The task force recommends LRB-4717/1, which creates a new program administered by DATCP, to provide grants to reimburse the costs for an agricultural producer to apply for a certification of water stewardship from the AWS. The bill draft creates a \$250,000 GPR continuing appropriation beginning in fiscal year 2020-21 to fund the program.

Under the bill draft, DATCP must award grants to the party that pays the costs to apply for AWS certification, and may make an award only upon the agricultural producer's receipt of the certification. Before awarding a grant, DATCP must enter into a memorandum of understanding with the party that pays the certification costs, which may include types of eligible costs and the length of time that the certification must be maintained. A grant may reimburse up to 50 percent of costs and may not exceed \$10,000. The bill draft directs DATCP, in prioritizing these grant awards, to be guided by an agricultural producer's overall impact to water quality.

#### **Crop Insurance**

**Background**. Throughout the committee's work, numerous stakeholders emphasized the environmental and economic advantages of utilizing cover crops and no-till practices to reduce soil runoff. Presenters indicated that some agricultural producers may hesitate to try these practices due to fear of a reduction in crop yields. In addition, federal and state programs that provide financial or technical assistance to plant cover crops have prescriptive participation and implementation requirements. To alleviate losses from variation in crop yields, some producers purchase crop insurances policies.

Among other approaches taken by other states and countries to minimize producers' risks, the task force took note of a state program in Iowa that provides a per-acre insurance premium subsidy to producers who use cover crops.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> For more detailed information regarding the Iowa program, see Iowa Department of Agriculture & Land Stewardship, Crop Insurance Discounts Available for Farmers who Plant Cover Crops (Sept. 30, 2019), available at: <a href="https://www.cleanwateriowa.org/news-latest/2019/9/30/crop-insurance-discounts-available-for-farmers-who-plant-cover-crops">https://www.cleanwateriowa.org/news-latest/2019/9/30/crop-insurance-discounts-available-for-farmers-who-plant-cover-crops</a>.

**Recommendation**. The task force recommends LRB-4717/1, which authorizes DATCP to administer a program to provide rebates of \$5 per acre for crop insurance premiums paid for acres planted with a cover crop.

In providing crop insurance premium rebates, the bill draft specifies that DATCP must cooperate with the risk management agency of the USDA, and may cooperate with any related federal agency, state agency, or agricultural organization. The bill draft specifies that a crop insurance premium rebate may not be provided for the planting of a cover crop on an acre for which funding for planting a cover crop is available from one of several state or federal programs. Under the bill draft, in order to receive a crop insurance premium rebate, a person must submit an application to DATCP after a cover crop is planted on the acres for which the person applies for a rebate.

The bill draft requires DATCP to award crop insurance premium rebates in the order that approved applications are received, and prohibits DATCP from limiting the number of acres for which a person may receive a rebate. DATCP is authorized to promulgate rules determining the cover crops for which crop insurance premium rebates are provided, and establishing procedures for verifying that a cover crop is planted on acres for which a crop insurance premium rebate is provided. Finally, DATCP is authorized to conduct inspections to verify that rebate recipients are complying with the provisions of the program.

The bill draft creates a \$200,000 GPR continuing appropriation in fiscal year 2020-21 to make payments for crop insurance premium rebates for planting cover crops.

#### **Producer-Led Watershed Protection Grants**

Background. Current law authorizes DATCP to make grants for nonpoint source pollution abatement activities undertaken by producer-led groups that include at least five agricultural producers; operate eligible farms meeting minimum farm income requirements under the farmland preservation program; operate in one watershed; and collaborate with at least one of the following: DATCP; DNR; a county land conservation committee; UW-Extension or the Discovery Farms program; or a nonprofit conservation organization. The producer-led group must contribute matching funds equal to at least 50 percent of eligible costs. Grants may be made for up to \$40,000 per recipient in any fiscal year. Allowable purposes and reimbursable expenses for the program are provided in administrative rule. In practice, reportedly, the program has been interpreted to allow projects to span watershed boundaries. [s. 93.59, Stats.; ch. ATCP 52, Wis. Adm. Code.] Funding for producer-led watershed protection grants comes from the nonpoint account of the segregated environmental fund for soil and water resource management. From this appropriation, under the 2019-21 Biennial Budget Act, DATCP must allocate funds for the producer-led watershed protection grants in an amount that does not exceed \$750,000 in each fiscal year.

**Recommendation**. The task force recommends LRB-4717/1, which specifically authorizes producer-led watershed grants to be awarded to producer-led groups that operate in adjacent watersheds. In addition, the bill draft increases the amount appropriated for producer-led watershed protection grants by \$250,000 GPR in fiscal year 2020-21, and therefore increases the total amount that DATCP may allocate for producer-led watershed protection grants in fiscal year 2020-21 from \$750,000 to \$1,000,000.

The bill draft also makes producer-led groups conducting producer-led projects eligible to receive lake protection grants, which are provided by DNR for projects that improve surface water quality. Under current law, eligible grant recipients include local governments, nonprofit conservation organizations, and qualified lake associations. [s. 281.68, Stats.]

#### Soil and Water Resources Conservation Grants Allocation Plan

**Background**. Under current law, DATCP allocates soil and water resource management grants to counties according to an allocation plan it completes on an annual basis. When preparing an annual grant allocation plan, DATCP must consider county priorities identified in the county grant application and in the county's approved land and water resource management plan, and is directed to give priority to county or noncounty projects that address statewide priorities identified by the department and DNR. In addition, DATCP is authorized in administrative code to consider other factors when determining grant allocation priorities, including a county's demonstrated commitment to implementing the approved land and water resource management plan and the strength of documentation supporting that plan. [ss. 92.10 and 92.14, Stats; ss. 50.28, 50.29, and 50.30 (3) (a), Wis. Adm. Code.]

**Recommendation**. The task force recommends LRB-4717/1, which specifies that if DATCP, in preparing its annual grant allocation plan, considers a county's demonstrated commitment to implementing its approved land and water resource management plan, DATCP must take into account any externalities, such as weather, that may have affected the county's ability to demonstrate commitment to implementing the plan.

# LRB-4716/1: Groundwater Testing, Mapping, and Educational Outreach

# Background

Multiple stakeholders informed the task force regarding the importance of adequate information and science, both with respect to individual water sources and more comprehensive hydrogeologic studies, for preventing and responding to water quality concerns. Currently, Wisconsin groundwater information is compiled by several sources. For example, the U.S. Geological Survey has compiled certain information regarding the state's hydrogeology. In addition, a statewide monitoring system tracks groundwater levels. However, funding for such efforts is limited.

At the task force's hearing in La Crosse, representatives from the Minnesota Geological Survey and the Minnesota DNR described county geologic atlases that have been developed in

Minnesota. The atlases display information regarding the distribution of rock, sediment, and groundwater in each county, and they include information regarding groundwater quality.

In Stevens Point, representatives of the Center for Watershed Science and Education, a partnership between the UW-Stevens Point College of Natural Resources and the UW-Extension, provided a tour of the Water and Environmental Analysis Lab at UW-Stevens Point and provided an overview of the center's outreach work and its project to present aggregated results of well testing through its well water viewer.

#### Recommendation

The task force recommends LRB-4716/1, which appropriates funds, creates a hydrogeologist position, and creates a grant program to support well testing and educational outreach. Specifically, the bill draft does all of the following:

- Hydrogeologist position. Requires the UW Board of Regents to create one three-year project position for a hydrogeologist within the Wisconsin Geological and Natural History Survey. The bill draft appropriates \$150,000 in fiscal year 2020-21 for the position and specifies that the position must focus on: (1) developing groundwater resource information primarily at county or local scales; and (2) assisting state and local governments, industries, and the public in interpreting and using that information.
- Center for Watershed Science and Education. Appropriates \$450,000 in each year of the current fiscal biennium to support the operations of the Center for Watershed Science and Education. The bill draft directs the UW Board of Regents to use the funds to support center operations such as: (1) expanding outreach to private well owners; (2) developing and maintaining a database on private well water quality; (3) developing data transfer protocols for the database; and (4) updating the center's online mapping tools. The bill draft sunsets the funding authorization on June 30, 2024.
- Grants to counties. The bill draft directs DNR to administer a grant program to provide two types of grants to counties: (1) grants of up to \$10,000 for countywide groundwater testing of private wells to assess groundwater quality, \$10,000 per county for the purpose of conducting countywide testing of privately owned wells to assess groundwater quality and to determine the extent and type of any contamination and studying geologic characteristics and well construction practices in the county, including depth to bedrock and well age, to determine any correlation between water quality, geology, and well construction; and (2) for counties that have already completed such a study, grants of up to \$2,500 to notify the public of the study results and notify affected well owners. DNR must seek to make a grant to every county that applies. A county may receive only one of the types of grants under the bill draft. To be eligible, a county must: (1) provide matching funds equal to the amount of the grant; and (2) submit the results of its testing to the Center for

Watershed Science and Education, without providing personally identifiable information. The bill draft appropriates \$250,000 for the grant program in fiscal year 2020-21. The bill draft authorizes DNR to promulgate rules to administer the program but prohibits DNR from imposing substantive requirements other than those specified in the bill draft.

- **Public Information**. The bill draft requires cities, villages, and towns that contain privately owned wells or water supplies to inform their residents of the importance of regular well testing.
- **Phosphorous research**. The bill draft increases the UW Board of Regents' appropriation for general operations by \$200,000 in fiscal year 2019-20 for research costs for the initial phase of a proposal developed by the UW-Extension relating to phosphorus recovery and reuse. However, the bill draft prohibits the UW Board of Regents from allocating those funds unless the UW-Extension shows, to the board's satisfaction, that it has secured at least 25 percent of the amount of allocated state funds in matching funds for the program, including in-kind contributions, from federal, private, or other non-state revenue sources.
- Collaboration. The bill draft requires the various entities receiving funds under the bill draft to work together to gather and share data to better inform the public and relevant industries about the current condition of water quality in Wisconsin.

#### LRB-5061/1: Freshwater Collaborative

# Background

The UW System has proposed the Freshwater Collaborative of Wisconsin, an integrated, multi-institutional undergraduate program designed to address water challenges in areas including agriculture, industry, engineering and water infrastructure, watershed management, tourism, and recreation. According to the proposal, the primary goals of the collaborative include attracting local, regional, and global talent to Wisconsin; building a skilled water workforce through a structured curriculum, training, and workplace experience; solving water resource problems through collaborative research across disciplines; and solidifying Wisconsin's leadership in freshwater science, technology, and economic growth.

#### Recommendation

The task force recommends LRB-5061/1, which requires the UW Board of Regents to fund a freshwater collaborative and appropriates, as a continuing appropriation, \$2 million in fiscal year 2020-21 for the collaborative. The bill draft authorizes the collaborative to expend appropriated funds only after it submits metrics, described below, to the Joint Committee on Finance (JFC), and JFC approves the metrics under a 14-day passive review process.

The bill draft specifies that the collaborative's purpose would be to study the following challenges:

- The challenge of agriculture water management, including a focus on nutrient runoff and groundwater contamination, water withdrawal for irrigation, and the impact of water management practices on farm policy, including changes to farm efficiencies, production, and profit margins.
- The challenge of water quality and safety, including a focus on emerging contaminants, effective treatment techniques, nutrient contamination, well contamination, surface water contamination, lead contamination, legacy contamination, and safe drinking water compliance.

To accomplish those purposes, the bill draft requires the collaborative to do all of the following:

- Devise new watercentric, undergraduate-focused training programs.
- Provide an opportunity for students to participate in a work-study internship program in a state office that coordinates state water policy.
- Provide scholarships and student support to retain and attract new talent.
- Amplify marketing and recruiting relating to Wisconsin's role in freshwater science.
- Enhance workforce development programming, including internships, research experiences, training institutes, and graduate research.
- Recruit new faculty and staff for training programs, research, and innovation.

The bill draft requires the UW Board of Regents to appoint a committee, consisting of certain UW System officials, board members, and board-appointed experts, to advise the board on how to allocate the funding among UW institutions.

The bill draft also requires the UW Board of Regents to establish metrics for determining the success of the collaborative and to submit a report to JFC and relevant legislative standing committees by the end of each odd-numbered year. The report must include all of the following information:

- The amount of the appropriated funding that is distributed to each UW institution, and how those amounts compare to the amounts requested by each institution.
- How the funding is expended, including the number and types of positions created.
- Demographics, including the numbers of resident, nonresident, undergraduate, and graduate students who participate in the collaborative.
- The collaborative's accomplishments, including the type and number of degrees conferred, research projects completed, and internships provided.

# LRB-4489/1: Per- and Polyfluoroalkyl Substances (PFAS)

# Background

PFAS are a group of man-made chemicals that includes perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), and many others. The set of chemicals have been manufactured and used since the 1940s and can be found in a variety of commercial and industrial products, including firefighting foam, nonstick cookware, and stain- and water-repellent fabrics. In May 2016, the EPA established health advisories for PFOA and PFOS at 70 parts per trillion. DNR and DHS have recently taken steps to regulate PFOA and PFOS under the state groundwater protection law. An EPA "action plan" indicates that federal standards may also be developed sometime in the future.

At its hearing in Marinette, the task force heard from various stakeholders regarding remediation efforts for PFAS contamination resulting from testing firefighting foams.

#### Recommendation

The task force recommends LRB-4489/1, a bill draft that expands the "clean sweep" program to include collection of certain firefighting foams. The bill draft requires DATCP, in cooperation with DNR, to administer a program to collect and store or dispose of firefighting foam that contains PFAS. The bill draft authorizes DATCP, with the advice of DNR, to contract with a third party to undertake the collection and storage or disposal of the foam. DATCP or the third party are required to give priority to collecting from the state and from cities, villages, towns, and counties. The bill draft appropriates \$250,000 GPR for the program in fiscal year 2019-20.

# LRB-4984/1: Wetlands and Floodplain Restoration

#### Background

Throughout its hearings, the task force heard from the Wisconsin Wetlands Association and other stakeholders regarding the importance of restoring wetlands and other floodplain restoration methods for preventing streambank erosion, soil runoff, and property damage in future heavy rainfall events.

<sup>&</sup>lt;sup>9</sup> In February 2019, the EPA released its Action Plan for PFAS. The action plan identifies short-term solutions and long-term strategies to help provide "the tools and technologies states, tribes, and local communities need to provide" safe drinking water to their constituents. The plan is available at: <a href="https://www.epa.gov/newsreleases/epa-acting-administrator-announces-first-ever-comprehensive-nationwide-pfas-action-plan">https://www.epa.gov/newsreleases/epa-acting-administrator-announces-first-ever-comprehensive-nationwide-pfas-action-plan</a>.

 $<sup>^{10}</sup>$  DNR's proposed rule making timeline is available here:  $\underline{\text{https://dnr.wi.gov/topic/Groundwater/NR140.html}}.$ 

<sup>&</sup>lt;sup>11</sup> The EPA's action plan is available here: <a href="https://www.epa.gov/sites/production/files/2019-02/documents/pfas-action\_plan\_021319\_508compliant\_1.pdf">https://www.epa.gov/sites/production/files/2019-02/documents/pfas\_action\_plan\_021319\_508compliant\_1.pdf</a>.

Under current law, the municipal flood control and riparian restoration program provides financial assistance for certain local stormwater and groundwater projects. Generally, DNR must promulgate rules specifying eligibility criteria for the program. In doing so, DNR must consider all of the following:

- The extent to which a project minimizes harm to existing beneficial functions of water bodies and wetlands.
- The extent to which a project maintains aquatic and riparian environments.
- The extent to which a project uses stormwater retention and detention structures and natural storage.
- The extent to which a project provides opportunity for public access to water bodies and to the floodway.

DNR has established the following eligibility criteria, which are applied "in priority order":

- Acquisition and removal of structures which, due to zoning restrictions, cannot be rebuilt or repaired.
- Acquisition and removal of structures in the 100-year floodplain.
- Acquisition and removal of repetitive loss or substantially damaged structures.
- Acquisition and removal of other flood damaged structures.
- Floodproofing and elevation of structures.
- Riparian restoration projects, including removal of dams and other artificial obstructions, restoration of fish and native plant habitat, erosion control, and streambank restoration projects.
- Acquisition of vacant land, or perpetual conservation or flowage easements to provide additional flood storage or to facilitate natural or more efficient flood flows.
- Construction of structures for the collection, detention, retention, storage, and transmission of stormwater and groundwater for flood control and riparian restoration projects.
- Preparation of flood insurance studies and other flood mapping projects.

[s. NR 199.05 (1), Wis. Adm. Code.]

#### Recommendation

In addition to supporting the enactment of already introduced bill drafts, described in the next section, the task force recommends LRB-4984/1, which relates to applications for municipal flood control grants. In addition to the considerations required under current law, the

bill draft requires DNR, when establishing eligibility criteria for the grants, to consider the cost-effectiveness of a project, including any loss to the tax base. The bill draft also directly amends DNR's current rules regarding the grant program to remove the direction to consider eligible projects in the "priority order" listed above.

#### LRB-4304/1: Wisconsin Fund for Septic Systems

#### Background

In many rural areas, where connections to municipal wastewater treatment systems or other collective wastewater treatment systems are unavailable, wastewater and sewage from each home or other facility must be treated by a private on-site wastewater treatment system (POWTS). The most common type of POWTS is a septic system, which utilizes a septic tank and soil absorption field. Another type of POWTS is a holding tank, which collects and stores all of the wastewater and sewage from a facility but, unlike a septic system, does not discharge liquid to a soil absorption field.

The Department of Safety and Professional Services (DSPS) promulgates rules governing the installation and maintenance of POWTS. DSPS also currently administers a grant program, often referred to as the "Wisconsin Fund," which provides grants for a portion of the costs to repair, rehabilitate, or replace failing a POWTS installed before July 1, 1978. To be eligible for the program, an owner of a principal residence (occupied at least 51 percent of the year by the owner) must have an annual family income that does not exceed \$45,000. An owner of a small commercial establishment meeting certain income and eligibility criteria may also receive assistance through the program. Statutory authorization for that grant program sunsets on June 30, 2021. The Wisconsin Fund program is funded by program revenue. [s. 145.245, Stats.; ch. DSPS 387, Wis. Adm. Code.]

During task force hearings, several speakers recommended revising the eligibility requirements for the Wisconsin Fund grant program, and repealing the June 30, 2021 sunset for the program. Speakers also recommended a review of DSPS's administrative rules chapter governing POWTS to incorporate setbacks and other restrictions to protect groundwater quality.

#### Recommendation

The task force recommends LRB-4304/1, which delays the sunset for the Wisconsin Fund program until June 30, 2023. In addition, the bill draft does all of the following:

- Requires DSPS to prepare literature describing the eligibility for a residence to receive
  a grant and to distribute this literature to counties. Counties are then required to
  distribute the literature to recipients of public benefits.
- Provides DSPS with two full-time equivalent project positions, funded by program revenue beginning on July 1, 2020 and ending on June 30, 2022, for the purpose of conducting sanitary permit application and plan review; evaluating variance requests; and carrying out other responsibilities under the POWTS program,

including conducting reviews and audits of local governments' POWTS programs, providing training and informational programs, and training new and existing local government POWTS staff in conducting sanitary permit and plan review.

# LRB-4360/1: Biomanipulation Projects

#### Background

At its hearing in Menomonie, the task force heard a presentation regarding biomanipulation as a technique to improve water quality. In this context, very generally, biomanipulation is the deliberate removal of certain fish species (zooplanktivorous and benthivorous fish, such as carp) from a surface water, which then reduces sediment disruption, as well as phosphate and nitrogen, which are food sources for the type of bacteria that cause algae blooms and increase invasive plant growth. Removal of zooplanktivorous and benthivorous fish may be done manually or through the introduction of other fish (piscivorous fish, such as pike) that prey on those species. The identified benefits of biomanipulation include reduced phosphorous and nitrogen, and increased growth in beneficial aquatic plants, which reduce or eliminate algae blooms and therefore improve water quality.

Under current law, DNR may award grants to entities including local governments, nonprofit conservation organizations, and qualified lake associations for up to 75 percent of the costs to implement lake restoration projects, which may include biomanipulation, as identified in an approved lake management plan. [s. NR 191.42, Wis. Adm. Code.] 2017 Act 59, the 2017-19 Biennial Budget Act, provided \$65,000 from the nonpoint account of the segregated environmental fund to DNR in 2017-18 to conduct a project using biomanipulation to improve the water quality of Tainter Lake in Dunn County.

#### Recommendation

The task force recommends LRB-4360/1, which requires DNR, in the 2019-21 fiscal biennium, to provide grants to local water improvement groups, selected through a competitive application process determined by DNR, to conduct projects using biomanipulation, which must include comprehensive fish studies, the removal of zooplanktivorous and benthivorous fish, and the introduction of piscivorous fish to improve the water quality of lakes and impoundments identified on the impaired waters list prepared by DNR, as required under the Clean Water Act. <sup>12</sup> Grants awarded under the bill draft may cover 90 percent of the costs of biomanipulation projects. The bill draft appropriates \$150,000 of GPR funds in fiscal year 2019-20 to DNR to fund these projects.

<sup>&</sup>lt;sup>12</sup> Under the Clean Water Act, states are required to submit a list of waters that do not meet water quality standards to EPA every two years. States are then required to develop total maximum daily loads (TMDL) for all impaired surface waters. [33 U.S.C. s. 1313 (d) (1).] A TMDL is generally the amount of a pollutant that a waterbody (or waterbody segment) can assimilate and not exceed water quality standards. An EPA-approved TMDL establishes "waste load allocations" for point sources and "load allocations" for nonpoint sources within the TMDL area.

#### LRB-3651/1: Prohibition on Sale or Use of Coal Tar-Based and PAH Sealant Products

# Background

Coal tar sealant or sealcoat is a commercial product generally used to maintain and protect driveway and parking lot asphalt pavement. According to publications from EPA and the U.S. Geological Survey (USGS), coal tar sealant contains high concentrations of polycyclic aromatic hydrocarbons (PAHs). As sealants containing PAHs age and break down, PAHs are released into the environment through runoff, wind, and human actions. They are persistent organic compounds, and several PAHs are known or probable human carcinogens and toxic to aquatic life.<sup>13</sup>

#### Recommendation

The task force recommends LRB-3651/1, which prohibits the sale of coal tar-based sealant products and high PAH sealant products beginning January 1, 2021, and prohibits the use of such products beginning July 1, 2021, unless DNR grants an exemption. Coal tar-based sealant products are defined to mean a surface-applied sealing product containing coal tar, coal tar pitch, coal tar pitch volatiles, or any variation assigned certain Chemical Abstracts Service numbers. High PAH sealant products are defined to mean a surface-applied sealant product that contains more than 0.1 percent polycyclic aromatic hydrocarbons by weight.

Under the bill draft, DNR may grant an exemption to the prohibitions on sale or use of coal tar-based sealant products and high PAH sealant products to any of the following upon written request: (1) a person who is researching the effects of either product on the environment; (2) a person who is developing an alternative technology if the use of either product is required for research or development.

#### SUPPORT OF CERTAIN ALREADY-INTRODUCED LEGISLATIVE PROPOSALS

Recognizing legislative efforts already underway on topics relating to the task force's charge, Representative Novak and Representative Shankland support the Legislature's consideration of the bills described below.

# 2019 Assembly Bill 113/2019 Senate Bill 91: Water Quality Credit Trading

Under **current state law** implementing the federal Clean Water Act, any discharge to a navigable water from a point source<sup>14</sup> must be authorized by a Wisconsin Pollutant Discharge Elimination System (WPDES) permit. Among other requirements, a WPDES permit specifies

<sup>&</sup>lt;sup>13</sup> See generally "Stormwater Best Management Practice: Coal-Tar Sealcoat, Polycyclic Aromatic Hydrocarbons, and Stormwater Pollution", EPA, November 2012 [https://www3.epa.gov/npdes/pubs/coaltar.pdf], and "Coal-Tar-Based Pavement Sealcoat – Potential Concerns for Human Health and Aquatic Life", USGS, April 2016, https://pubs.usgs.gov/fs/2016/3017/fs20163017.pdf.

 $<sup>^{14}</sup>$  A "point source" is any discernible, confined, and discrete conveyance from which pollutants are or may be discharged. [33 U.S.C. s. 1362 (14).]

"effluent limitations," which limit the specific pollutants that may be discharged from the point source. [s. 283.31 (3) and (4), Stats.] The Clean Water Act also requires states to address nonpoint sources of pollution.<sup>15</sup> Nonpoint source pollution is not subject to WPDES permitting requirements. Instead, the state primarily addresses nonpoint source pollution through incentive programs such as cost-sharing, adaptive management, and water pollution credit trading.

Under the current water quality credit trading program, DNR may allow a WPDES permit holder to exceed otherwise applicable effluent limitations if the person negotiates a binding, written agreement with another WPDES permit holder, DNR, a local government, or a nonpoint source. DNR may authorize a permit holder to discharge pollutants at above-permit levels only if all of the following criteria are satisfied:

- The agreement results in an improvement in water quality.
- The increase in pollutants and offsetting reduction in pollutants involve the same pollutant or water quality standard.
- The increase in pollutants and offsetting reduction in pollutants occur within the same basin or portion of a basin.<sup>16</sup>

[s. 283.84 (1m), Stats.]

As amended and passed by the Senate and as recommended for passage by the Assembly Committee on Local Government, 2019 Assembly Bill 113 and 2019 Senate Bill 91, companion bills authored by Representative Kitchens and Senator Cowles and others, create an alternative mechanism for executing water quality trades through DNR's water quality trading program. The bills do not affect options for trading under current law.

Specifically, in addition to the options to facilitate water quality trades under the current program, the bills authorize DNR to allow a WPDES permit holder to discharge pollutants above effluent limitations if the person does either of the following:

- Reaches a binding, written agreement with a clearinghouse for the purchase of credits.
- Reaches a binding, written agreement, approved by DNR, with a third party, under which the third party agrees to work with one or more persons to reduce water pollution.

<sup>&</sup>lt;sup>15</sup> A "nonpoint source" is "a land management activity which contributes to runoff, seepage or percolation which adversely affects or threatens the quality of waters of this state and which is not a point source." [s. 281.65 (2) (b), Stats.]

<sup>16 &</sup>quot;Basin" is not specifically defined for purposes of the credit trading program. Elsewhere in the same chapter of the statutes, "basin" is defined to mean the drainage area identified by an eight-digit hydrologic unit code as part of the USGS. DNR's 2013 guidance documents regarding credit trading instead specify that credit generators and users must discharge into the same waterbody and specify that locational criteria are incorporated as part of the credit-trading ratio.

The clearinghouse must be a single clearinghouse that has entered into a contract with the Department of Administration (DOA). Before entering a contract with a clearinghouse, DOA must determine that the clearinghouse satisfies certain requirements. Trades made through the clearinghouse or a third party under the bills are subject to certain additional requirements.

#### 2019 Assembly Bill 134/2019 Senate Bill 125: Water Infrastructure Projects in State Parks

The Warren Knowles-Gaylord Nelson Stewardship program is administered by DNR. The stewardship program includes land acquisition, property development and local assistance, and recreational boating aids subprograms. Under **current law**, portions of unobligated amounts for these subprograms from certain fiscal years have been obligated for specific purposes. For example, under current law, DNR is directed to obligate up to \$4.5 million of the unobligated amounts for these subprograms from fiscal year 2016-17 to fund critical health and safety-related water infrastructure projects in state parks, prioritizing projects in state parks with the highest demand.

As amended by Assembly Amendment 1 and Senate Amendment 2, **2019 Assembly Bill 134 and 2019 Senate Bill 125**, companion bills introduced by Representative Summerfield and Senator Cowles, direct DNR to obligate up to \$5.2 million in unobligated amounts under those stewardship subprograms to fund critical health and safety-related water infrastructure projects in state parks. In obligating the funds, the bills require DNR to prioritize projects in state parks with the highest demand. In addition, as amended, the bills increase the fiscal year 2019-20 appropriation for state park operations by \$300,000, with a priority on state parks with the highest demand.

#### 2019 Assembly Bill 266/2019 Senate Bill 252: Flood Risk Pilot Project

As amended by JFC, 2019 Assembly Bill 266 and 2019 Senate Bill 252, companion bills introduced by Representative Steineke and Senator Petrowski and others, direct DNR to fund a flood risk reduction pilot project in Ashland County. The bills appropriate \$150,000 for that purpose in the current fiscal biennium. Among its project requirements, the bill directs Ashland County to submit a report to DNR by June 30, 2021.

# 2019 Assembly Bill 323/2019 Senate Bill 310: PFAS Regulation

As described above, the task force received a significant amount of testimony and comments regarding PFAS contamination. In addition to LRB-4489/1, a task force bill related to PFAS that is described in the previous section, the task force chair and vice-chair recommend consideration of 2019 Assembly Bill 323 and 2019 Senate Bill 310, companion bills relating to the use of Class B firefighting foam, with the modifications proposed in Assembly Amendment 1, as amended, and Senate Amendment 1, as amended.

The bills, introduced by Representative Nygren and Senator Cowles and others, prohibit the use or discharge, including for training purposes, of a Class B firefighting foam that contains intentionally added PFAS unless an exception applies. This prohibition does not apply to use or discharge as part of an emergency firefighting or fire prevention operation, or use for testing purposes, including calibration, conformance, or fixed system testing, if the testing facility has implemented appropriate containment, treatment, and disposal measures to prevent releases of the foam to the environment, as determined by DNR rules.

A person who violates the prohibition in the bills is subject to the penalty that applies to violations of general environmental provisions under current law, which is a forfeiture of no less than \$10 or more than \$5,000 for each violation. The bills specify that they do not prohibit the manufacture, sale, or distribution of a Class B firefighting foam that contains intentionally added PFAS. The amendments specify that Class B firefighting foam may include dual action Class A and B foam; define "testing" and "training"; specify that exceptions to the prohibition require appropriate storage measures and notification; and require request and retention of safety data sheets in certain circumstances.

#### 2019 Assembly Bill 409/2019 Senate Bill 370: Tax Credit for Elimination of Lead Hazard

2019 Assembly Bill 409 and Senate Bill 370, companion bills introduced by Senator Johnson and Representative Gruszynski and others, create a tax credit for costs paid to eliminate a lead hazard<sup>17</sup> in a dwelling or residential condominium unit. Depending on the nature of the lead hazard, a person claiming a tax credit under the bills must submit either: (1) a "certificate of lead-free status" issued by DHS; or (2) a document, executed by a person with specified certification, that provides proof of successful lead abatement.

#### 2019 Assembly Bill 637/Senate Bill 575: Farmland Preservation Tax Credit

Under **current law**, state farmland preservation efforts include a number of mechanisms that encourage keeping farmland in agricultural uses. These mechanisms include certified county farmland preservation plans, county and local government farmland preservation zoning ordinances, and voluntary farmland preservation agreements between landowners and DATCP. In exchange for having agricultural land subject to a combination of these programs, and complying with agricultural performance standards, landowners are eligible to receive farmland preservation tax credits.

Farmland preservation tax credits are calculated by multiplying the claimant's qualifying acres by one of the following amounts:

- \$10, if the qualifying acres are located in a farmland preservation zoning district and are also subject to a farmland preservation agreement entered into after July 1, 2009;
- \$7.50, if the qualifying acres are located in a farmland preservation zoning district but are not subject to a farmland preservation agreement entered into after July 1, 2009; or

<sup>17</sup> The bills define "lead hazard" to mean any substance, surface, or object that contains lead and that, due to its condition, location, or nature, may contribute to the lead poisoning or lead exposure of a child under six years of age.

• \$5, if the qualifying acres are subject to a farmland preservation agreement entered into after July 1, 2009, but are not located in a farmland preservation zoning district.

[See, generally, ch. 91, Stats., and s. 71.613, Stats.]

All counties must adopt farmland preservation plans, which establish a county's policy for farmland preservation and agricultural development. These plans must be certified by DATCP. In order to obtain certification, a plan must describe and map the areas to be preserved for agricultural and agriculture-related uses, and include additional information specified in the statutes. DATCP may award a planning grant to a county to provide reimbursement for up to 50 percent of the county's cost of preparing a farmland preservation plan. [ss. 91.10 (1), (2), and (6), and 91.18, Stats.]

During task force hearings, several speakers noted that the current farmland preservation tax credit amounts are too low to offset the costs of meeting required conservation practices, and that participation in the program has declined.

2019 Assembly Bill 637 and Senate Bill 575, companion bills introduced by Representative Oldenburg and Senator Testin and others, relate to farmland preservation implementation grants and agreements, and farmland preservation tax credits. The bills change the required length of a farmland preservation agreement from 15 years to 10 years. In addition, the bills increase farmland preservation tax credits in the categories listed above from \$10 to \$12.50; \$7.50 to \$10; and \$5 to \$10; and create a new category of farmland that may claim a credit of \$10 per acre if the farmland is located in a farmland preservation area, but only to the extent the acres are covered by an agriculture conservation easement under s. 93.73, Stats., the purchase of agricultural conservation easements (PACE) program. The bills also index the farmland preservation tax credit amounts for inflation.

The bills authorize DATCP to award a grant to a local government, regional planning commission, or trial government for implementing a county's certified preservation plan. DATCP may award a grant for the costs of specified activities, as provided in a contract between DATCP and the recipient, including certifying a farmland preservation zoning ordinance for the first time, entering into farmland preservation agreements, and targeted farmland preservation program outreach. When awarding grants, DATCP may consider a list of factors and may require a grant recipient to contribute matching funds up to 50 percent of the grant amount.

In addition, the bills direct DATCP to include additional information regarding farmland preservation tax credits in its biennial report to DATCP, and to also send this report to JFC and legislative standing committees with jurisdiction over agriculture.

# 2019 Assembly Bill 700/2019 Senate Bill 632: Notifying Counties of Water Pollution

Under **current law** implementing the federal Clean Water Act, any discharge to a navigable water from a point source<sup>18</sup> must be authorized by a WPDES permit. A WPDES permit includes a compliance schedule, under which certain pollution control levels must be achieved, and effluent limitations, which limit the specific pollutants that may be discharged. [ss. 283.31 (3) and (4) and 283.55, Stats.]

Under **2019 Assembly Bill 700 and 2019 Senate Bill 632**, companion bills introduced by Representative Billings and Senator Shilling and others, if DNR finds, based on any information available to the department, that a WPDES permit holder has violated state groundwater protection standards, the DNR must notify relevant county health departments and county land and conservation departments, including in the county where the point source is located and in any adjacent county that DNR determines may be negatively affected as a result of the violation. The bills require such notifications to be provided within seven business days after a violation is confirmed. The bills authorize DNR to promulgate emergency rules to implement the bills.

#### 2019 Senate Bill 423 and 2019 Senate Bill 42419: Addressing Lead Contamination

Lead is commonly introduced to the public water supply by leaching from lead-containing pipes, solder, and plumbing fixtures. Under **current law**, the federal Safe Drinking Water Act generally prohibits the use of pipes and materials that contain more than a specified amount of lead. [42 U.S.C. s. 300f (4).] However, it generally does not require public water systems or property owners to remove previously installed lead-containing plumbing systems.

Public water systems are generally required to install and operate optimal corrosion control treatment in order to reduce lead and copper concentrations at consumers' taps and take water samples on a periodic basis. If more than 10 percent of the tap water samples collected during a particular monitoring period exceed established lead levels, then the public water system must take certain actions to reduce the lead level and to provide public education about the risks of lead. [40 C.F.R. ss. 141.80 to 141.91; subch. II, ch. NR 809, Wis. Adm. Code.] On October 10, 2019, the EPA released a proposed new "Lead and Copper Rule" (LCR), which, among other changes, strengthens procedures and requirements for lead testing, lead service line replacement, consumer awareness, and public education.<sup>20</sup>

2017 Wisconsin Act 137 created a process by which a water public utility may provide a grant, a loan, or both, to a property owner for replacing lead-containing water service lines, and

 $<sup>^{18}</sup>$  A "point source" is any discernible, confined, and discrete conveyance from which pollutants are or may be discharged. [33 U.S.C. s. 1362 (14).]

<sup>&</sup>lt;sup>19</sup> The task force also supports the enactment of the Assembly companions to those bills, 2019 Assembly Bill 475 and 2019 Assembly Bill 476, both introduced by Representative Thiesfeldt, if those bills were to be modified as proposed by the Senate substitute amendments.

<sup>&</sup>lt;sup>20</sup> A pre-publication version of the proposed rule is available here: <a href="https://www.epa.gov/sites/production/files/2019-10/documents/lcrr\_prepub\_frn\_0.pdf">https://www.epa.gov/sites/production/files/2019-10/documents/lcrr\_prepub\_frn\_0.pdf</a>.

the act authorized local units of government to provide loans or facilitate owner-arranged financing to replace lead-containing water service lines.

The Department of Children and Families (DCF)'s administrative rules require certain testing as a condition for licensure. All licensed day care centers must provide a "safe supply of drinking water." However, after looking more closely at the licensing requirements, it appears that testing for lead is only required for group day care centers (centers that care for nine or more kids) and, of those, only for centers that get water from a private well. In-home day care providers must test for bacteria (and, in some cases, nitrates), but not lead. (A more general testing requirement also applies to DCF-licensed summer camps that obtain water from private wells.) The testing must be conducted by a DATCP-certified laboratory. [See ss. DCF 250.06 (6), 251.06 (6), and 252.05 (1) (c) 8., Wis. Adm. Code.]

Under current law, public water systems serving schools and day care centers are subject to general monitoring requirements under state law and the federal Safe Drinking Water Act. For lead, a public water system must conduct "tap water monitoring." DNR's administrative rules require a public water system (a system serving at least 25 individuals) to take tap samples that are "representative of water quality throughout the distribution system" when conducting such monitoring. [ss. NR 809.541 (1) and 809.548 (1) (a), Wis. Adm. Code.]

For day care centers, DCF administrative rules require certain testing as a condition for licensure. All licensed day care centers must provide a "safe supply of drinking water." However, testing for **lead** is only required for group day care centers (centers that care for nine or more children) and, of those, only for centers that get water from a private well.<sup>21</sup> In-home day care providers must test for bacteria (and, in some cases, nitrates), but not lead. (A more general testing requirement also applies to DCF-licensed summer camps that obtain water from private wells.) The testing must be conducted by a DATCP-certified laboratory. [See ss. DCF 250.06 (6), 251.06 (6), and 252.05 (1) (c) 8., Wis. Adm. Code.]

**2019 Senate Bill 423**, relating to lead testing in schools, and **2019 Senate Bill 424**, relating to lead testing by certain child care providers and camps, were introduced by Senator Cowles and are commonly referred to as the "SCHOOL Acts."

As amended by Senate Substitute Amendment 1, 2019 Senate Bill 423 generally requires public and private schools to test drinking water sources<sup>22</sup> for lead at least once every five years and to take certain actions in response to a test result showing lead contamination in excess of federal drinking water standards. Specifically, if the drinking water standard for lead is exceeded, the school must do all of the following:

<sup>&</sup>lt;sup>21</sup> Although administrative rules require group day care centers with private well water to test for lead "annually," DCF's manual for group day care centers states that lead testing may instead be conducted every three years.

<sup>&</sup>lt;sup>22</sup> The bill defines "drinking water source" to mean a water faucet, drinking fountain, ice maker, or other water outlet that dispenses potable water that is used for drinking or food preparation.

- Disconnect the water sources and, if necessary, provide an alternative drinking water supply.
- Develop and submit a plan to the Department of Public Instruction (DPI) for remediating lead contamination in the water source.
- Post the remediation plan on the school's website or otherwise make the plan available to the public.

To facilitate remediation efforts, the bill creates an exception to general levy limits to allow a school to temporarily exceed its levy limit for costs associated with its lead remediation plan under the bill, subject to certain requirements and limitations. In addition, the bill requires DPI, in consultation with other state agencies, to seek federal funding to assist eligible schools with testing and remediation costs.

As amended by Senate Substitute Amendment 1, 2019 Senate Bill 424 generally requires certain child care providers and camps (e.g., summer camps) to test every drinking water source<sup>23</sup> for lead contamination during the six-month period prior to submitting an application for a state license. If a test demonstrates lead contamination, the bill requires an applicant for licensure to immediately disconnect, shut off, or otherwise eliminate all access to water from the contaminated drinking water source. The applicant then must also do one of the following:

- **Remediation**. An applicant may temporarily provide an adequate supply of potable water (or, before an initial license, a plan to supply such water), and then, within six months after submitting the license application, establish and begin to carry out a plan for remediating the lead contamination, by either: (1) affixing a point-of-source or point-of-entry filter onto the drinking water source; or (2) if another drinking water source in the building is not contaminated, permanently disconnecting, shutting off, or otherwise eliminating access to the contaminated drinking water source.
- Alternative Water Supply. Establish and carry out a plan for providing, on a permanent basis, an adequate supply of potable water from external sources, such as bottled water, and for ensuring that children served in the building do not consume water from contaminated drinking water sources.

The bill exempts applicants for license renewals from testing requirements if previous tests showed lead levels not higher than five parts per billion. In addition, the bill allows certain child care providers to have a plumbing assessment completed by a licensed plumber, environmental consultant, certified lead risk assessor, or certified lead hazard investigator in lieu of testing.

The bill requires DCF and DATCP, in consultation with DHS and DNR, to seek federal funding to assist with costs incurred by providers as a result of the bill.

30

<sup>&</sup>lt;sup>23</sup> As under 2019 Senate Bill 423, as amended, "drinking water source" means a water faucet, drinking fountain, ice maker, or other water outlet that dispenses potable water that is used for drinking or food preparation.

Finally, the bill authorizes the Board of Commissioners of Public Lands (BCPL) to use school trust funds to issue loans to municipalities for the purpose of remediating lead contamination in buildings subject to testing under the bill.

#### RECOMMENDATIONS FOR POTENTIAL FUTURE ACTION

In addition to the specific legislative recommendations enumerated above, on behalf of the task force, Chair Novak and Vice-Chair Shankland submit the recommendations described below for potential future action.

# **Sustainable Funding Source for Water Quality**

#### Background

Under current law, the various programs and regulatory efforts relating to water quality are funded through state GPR, state program revenue, and federal programs. At the task force hearing in La Crosse, a representative from the Minnesota DNR described Minnesota's Clean Water Land and Legacy Amendment ("Legacy Amendment"), which was created by a 2008 amendment to the Minnesota Constitution. The amendment provides for a three-eighths of one percent state sales tax over a 25-year period to fund certain types of projects in the state, including water quality projects. Some presenters and members of the public suggested that the task force should recommend the creation of a sustainable funding source for water quality initiatives, similar to Minnesota's approach.

#### Recommendations

Acknowledging that many of the task force's recommendations involve short-term appropriations, the task force recommends that the Legislature consider and prioritize finding a sustainable funding source for water quality in the future.

# Federal Agricultural Policy

#### Background

Although the task force's charge focuses primarily on state and local policy solutions, task force members and stakeholders have recognized the crucial role that federal farm policy plays on agricultural producers' challenges and incentives, and thus, indirectly, on conservation practices affecting water quality. The federal Agricultural Improvement Act of 2018 ("2018 Farm Bill"), which is in effect through federal fiscal year 2023, provides commodity programs and crop insurance to aid agricultural producers. Although the 2018 Farm Bill also includes incentives for conservation, some stakeholders testified that the continuation of farm subsidies as a major component of U.S. farm policy has in some cases disincentivized environmentally innovative production techniques, in part by artificially lowering market prices for milk and other commodities.

#### Recommendation

The task force urges members of the Wisconsin congressional delegation to examine the effects of U.S. farm policy on groundwater quality in the state.

# Leverage of Federal Funds for Lead Abatement

# Background

The federal Safe Drinking Water Act provides sources of federal funding for public water systems, including through capitalization grants and a state revolving fund. America's Water Infrastructure Act of 2018 created several new sources of federal funding relevant to the abatement of lead contamination, including new funding for drinking water infrastructure projects in disadvantaged communities and the Water Infrastructure Improvements for the Nation (WIIN) Act grant program. WIIN grants are available to certain public water systems, homeowners, schools, and child care facilities, for projects relating to lead testing and service line replacement. In some instances, local units of government may also be able to utilize community development block grants administered by the U.S. Department of Housing and Urban Development (HUD) to subsidize lead abatement projects.

Occasionally, changes to state law have increased access to federal funding in Wisconsin. For example, among other changes to prior law, 2017 Wisconsin Act 137 authorized public water utilities to use ratepayer dollars to provide financial assistance for the replacement of private (customer-side) water service lines to address lead contamination.<sup>24</sup> That legal shift created opportunities for public water utilities to access certain federal funding that had previously been unavailable because of state restrictions on the use of ratepayer dollars.

#### Recommendations

In addition to requirements under 2019 Senate Bills 423 and 424, described above, the task force supports efforts by DNR, local units of government, and other stakeholders to leverage federal funding for abatement of lead contamination. The task force likewise recommends that, where state law may provide an impediment to leveraging federal funds in the future, the Legislature should consider enacting additional legislation to remove those impediments.

<sup>&</sup>lt;sup>24</sup> Prior to the enactment of Act 137, state law had been interpreted to require public water utilities to use funding sources other than revenue generated from water utility rates to fund consumer-side service line replacement. [See *City of Madison v. PSC*, 2002 WI App 102.]

#### EXECUTIVE ACTIONS ACKNOWLEDGED BY THE TASK FORCE

In his first "state of the state" address, Governor Evers declared this year the "Year of Clean Drinking Water." The task force has taken note of the following actions taken by the Governor and state agencies relating to water quality<sup>25</sup>:

- DATCP submitted proposed rule revisions to the livestock facility siting law to the Legislative Council Rules Clearinghouse in July 2019. <sup>26</sup>
- Executive Order #36, relating to measures to abate and prevent lead exposure.
- An announcement on July 31, 2019, that the Governor has directed DNR, with DATCP's assistance, to pursue rulemaking through ch. NR 151, Wis. Adm. Code, to reduce nitrate contamination by establishing targeted nitrate performance standards for soils that are most likely to experience nitrogen contamination.
- Executive Order #40, relating to the public health risk from PFAS and the creation of the PFAS coordinating council.

<sup>&</sup>lt;sup>25</sup> In addition to executive orders, the task force notes that DNR, DHS, DATCP, and other executive branch agencies have taken various actions within their statutory authority to address water quality in the state, including the submission of recent scope statements for rule promulgations relating to groundwater and drinking water standards

<sup>&</sup>lt;sup>26</sup> The livestock facility siting law statute requires DATCP to review its relevant administrative rules every four years. [s. 93.90 (2) (c), Stats.]

#### APPENDIX 1

# MEMBERS OF THE SPEAKER'S TASK FORCE ON WATER QUALITY

REPRESENTATIVE TODD NOVAK, CHAIR

REPRESENTATIVE KATRINA SHANKLAND, VICE-CHAIR

REPRESENTATIVE JOEL KITCHENS

REPRESENTATIVE TRAVIS TRANEL

REPRESENTATIVE SCOTT KRUG

REPRESENTATIVE MARY FELZKOWSKI

REPRESENTATIVE ROB SUMMERFIELD

REPRESENTATIVE TIMOTHY S. RAMTHUN

REPRESENTATIVE TONY KURTZ

REPRESENTATIVE ROBERT BROOKS

REPRESENTATIVE SONDY POPE

SENATOR ROBERT COWLES

SENATOR ANDRE JACQUE

SENATOR PATRICK TESTIN

SENATOR MARK MILLER

# MOST FREQUENCY MENTIONED RECOMMENDATIONS<sup>27</sup> MADE TO THE SPEAKER'S TASK FORCE ON WATER QUALITY

- Adopt state standards for (or otherwise enhance state regulation of) PFAS.
- Increase funding for county conservation programs.
- Strengthen regulation or enforcement of concentrated animal feeding operations (CAFOs).
- Increase funding for groundwater research, monitoring, or studies.
- Increase funding for DNR staff to conduct science or research.
- Repeal the livestock facility siting law, or allow more stringent local regulations of livestock siting.
- Take state action regarding the Back Forty mine.
- Impose a moratorium or lower animal unit limit on new CAFOs, either generally or in hydrologically sensitive areas.
- Increase funding for cost-sharing or other incentives to comply with nutrient management plans.
- Restore the nonferrous metallic mining "moratorium."
- Expand eligibility for the well compensation grant program.
- Increase funding for the well compensation grant program.
- Adopt a region-specific approach to (or otherwise enhance) performance standards under ch. NR 151, Wis. Adm. Code.
- Increase state funding for the replacement of lead laterals.
- Restore local control over shoreland zoning.

<sup>&</sup>lt;sup>27</sup> Listed recommendations were mentioned by at least five separate individuals or stakeholder groups, either during the task force's public hearings or submitted as an online comment to the task force.

# SELECTED RESEARCH REFERENCED BY INVITED SPEAKERS BEFORE THE SPEAKER'S TASK FORCE ON WATER QUALITY

- DATCP, Wisconsin Groundwater Quality: Agricultural Chemicals in Wisconsin Groundwater (Apr. 2017), https://datcp.wi.gov/Documents/GroundwaterReport2017.pdf.
- DHS, 2016 Report on Childhood Lead Poisoning in Wisconsin (Oct. 2017), <a href="https://www.dhs.wisconsin.gov/publications/p01202-16.pdf">https://www.dhs.wisconsin.gov/publications/p01202-16.pdf</a>.
- Alexis Temkin, et al., Exposure-Based Assessment and Economic Valuation of Adverse Birth Outcomes and Cancer Risk Due to Nitrate in United States Drinking Water, Enr. Research, vol. 176 (Sept. 2019), https://www.sciencedirect.com/science/article/pii/S001393511930218X.
- Mark Borchardt, USDA. Various publications, available at <a href="https://www.ars.usda.gov/midwest-area/madison-wi/us-dairy-forage-research-center/environmentally-integrated-dairy-management-research/people/mark-borchardt/">https://www.ars.usda.gov/midwest-area/madison-wi/us-dairy-forage-research-center/environmentally-integrated-dairy-management-research/people/mark-borchardt/</a>.
- UW Discovery Farms, *Nitrogen Use Efficiency Results* (Apr. 2019), <a href="http://www.uwdiscoveryfarms.org/UWDiscoveryFarms/media/sitecontent/PublicationFiles/nitrogen/1904-NUE-results.pdf?ext=.pdf">http://www.uwdiscoveryfarms.org/UWDiscoveryFarms/media/sitecontent/PublicationFiles/nitrogen/1904-NUE-results.pdf?ext=.pdf</a>.
- UW-Extension, Sustaining Central Sands Water Resources (2014), https://cdn.shopify.com/s/files/1/0145/8808/4272/files/G4058.pdf.
- George Kraft, et al., *Irrigation Effects in the Northern Lake States: Wisconsin Central Sands Revisited*, Ground Water, v. 50, no. 2 (2012) at 308-318, <a href="https://ngwa.onlinelibrary.wiley.com/doi/abs/10.1111/j.1745-6584.2011.00836.x">https://ngwa.onlinelibrary.wiley.com/doi/abs/10.1111/j.1745-6584.2011.00836.x</a>.
- Knobeloch et al., *Private Drinking Water Quality in Rural Wisconsin*, J. of Environmental Health, 75:16-20.