WISCONSIN GROUNDWATER COORDINATING COUNCIL

February 2024 Meeting Minutes
Hybrid Meeting held at
the DATCP Office in Madison and via Zoom
10:00 am – 12:00 noon, Feb 16, 2024

Members present: Jim Zellmer (DNR), Brad Johnson (DSPS), Robby Personette (DATCP), Sue Swanson (WGNHS), Sarah Yang for Sheryl Bedno (DHS), Alyssa Barrette for Barry Paye (DOT), Christy Remucal (UWS)

Agenda repair, Aug 2023 minutes: Chair, Jim Zellmer, called meeting to order; consideration of Nov 10, 2023 meeting minutes - motion to approve Sue S, second Christy R, approved by voice vote

FY 2025 Joint Solicitation proposal review: Jen Haxwell (UWS) reported that UW had coordinated "outside peer review" of the 15 FY 2025 Joint Solicitation groundwater research projects; this year there were 66 peer reviewers with 4 to 5 reviews per proposal; Bill Phelps (DNR) reported that the GCC Research & Monitoring Subcommittee had completed review of the FY 2025 proposals – this year there were 11 reviewers and 5 to 7 reviews per proposal; review scores and comments provided to GCC funding agencies and to the UW Groundwater Research Advisory Council (GRAC)

Discussion of Groundwater Awareness Week (March 10 -16, 2024) outreach & communication efforts – DNR providing input for Governor's GW Awareness Week proclamation, planning on news release, with private well testing recommendations highlighted, and providing social media postings, including "day in the life of a well driller" post on Linked-In; DATCP EQ Unit staff preparing content for GW Awareness Week for posting on social media sites – plan to highlight 2023 statewide Ag Chem in Groundwater Survey results; WGNHS will be highlighting recent work including SWIGG study and Bayfield Co flowing well inventory; DHS staff working on social media messaging

Water Quality Program's *Interim Strategy for Land Application of Biosolids Containing PFAS* – Fred Hegeman (DNR) provided information on WQ Program regulation of municipal and industrial biosolids and sludges, and the Program's *Interim Strategy for Land Application of Biosolids Containing PFAS*; PFAS monitoring required for biosolids beginning Jan 1st; Program looked at MI studies and data on PFAS in biosolids and identification of industrial PFAS sources; Interim Strategy focuses on PFAS source reduction and establishes PFAS thresholds for the beneficial reuse or alternative disposal of biosolids containing PFAS; strategy allows for the spreading of sludge with PFAS levels between 20 and 150 parts per billion [ppb] with different levels of restrictions/monitoring; for biosolids at or above 150 ppb, strategy calls for alternative treatment or disposal instead of land application; currently strategy does not include septage or industrial liquid waste; EPA risk assessment of management of biosolids containing PFAS expected by the end of this year

Agency Updates

DATCP: Robby P reported agency participating in State of Wisconsin Student Diversity Internship Program (SWSDIP) program - planning to hire 7 summer interns; agency collaborating with UW Madison's Aquatic Sciences Center to fund Fellowship focused on better understanding atrazine in WI groundwater; $1M allocated to Clean Sweep projects since 2009 - increase in participation in program from 2023 to 2024; staff working to finish up Statewide Survey report summarizing results for 380 private well samples collected in 2023 analyzed for nitrate and pesticides – report likely finished by March, will post on DATCP website; staff in planning for 2024 non-point groundwater and surface water sampling; Nitrogen Optimization Pilot Program (NOPP) applications closed Jan 31 - applications submitted for 21 projects, applications to be reviewed in Feb - awards anticipated to be announced in March; Agricultural Chemical Cleanup Program (ACCP) fund will likely fall below

$1.5M threshold by May 1; agency recently awarded $1M in Producer-Led Watershed Protection Grants to 47 producer-led groups, including 4 new groups - groups have until mid-Feb to submit 2023 grant activity reports; ATCP 50 revisions, including targeted Silurian bedrock performance standards forwarded to JCRAR on Jan 26 - rule anticipated to be published in spring of 2024

WGNHS: Sue S reported that the agency has hired new communication and outreach specialist; interviews now taking place for agency hydrogeologist position; working on proposals for number of projects including bedrock mapping, quaternary mapping, aquitard characterization and Outagamie Co. geologic structures; working under data preservation grant to scan field maps and preserve collection of thin sections and subset of hand samples; working with USGS on new and replacement wells for state Groundwater-Level Monitoring Network

UWS: Christy R reported that FY 2025 Joint Solicitation groundwater research project submittal has been completed and that projects for funding will be selected soon; Milwaukee Journal Sentinel featured article on Mike Cardiff's "perceptions of water" UW funded Groundwater Research project; UW working with DATCP to fund Post-Grad Fellow with agency

DHS: Sarah Y reported that agency updating Fee-exempt/"New Mother" drinking water testing program – plan to update program MOU and expand program to include additional qualified people; agency continues to work with small scale public water systems under CDC Environmental Health Hazard Grant – now have Fellow working on this, expect to have report out soon; have been working with systems on interventions to address hazards and have provided 2 grants; Sarah has been invited to present on "PFAS and communication challenges" at National Society of Toxicology Conf

DOT: Alyssa B reported that the agency is currently engaged in managing bipartisan infrastructure funds

DSPS: Brad J reported that agency POWTS Technical Advisory Committee meeting recently held, included new product review and presentation on use of "hydrographic method" for determining separation to limiting conditions – method has been problematic, especially in the Central Sands area; motion made at meeting to suspend use of method; agency looking at updating MOU with DNR on regulation of large scale (systems designed to treat > 12,000 gallons per day) on-site wastewater treatment systems; agency has added a number of new staff

DNR: Jim Z reported that agency revising NR 812 and NR 146 to make revisions to pump installation requirements and licensing/continuing education requirements; NR 140 proposed PFAS groundwater standards rule revisions stopped as final rule EIA showed costs associated with rule would exceed $10M over 2-year period, therefore per ch. 227 Stats., rulemaking stopped - legislature must pass bill to allow rulemaking to continue; WA Program monitoring for PFAS at landfill sites and implementing new NR 536 gw monitoring requirements at CCR (coal combustion residual) landfill sites; $6.5M of $10M ARPA Well Compensation Grant program now awarded – remaining funds will likely be allocated in next 2 months; agency working on plan, including communications, to handle applications that come in after funds are gone; paper on Statewide Private Well PFAS Sampling Project published in Environmental Science and Technology; in Town of Stella PFAS impacted area new, "safe", well construction techniques for granite replacement wells being tested; current paper mill sludge from Rhinelander paper mill tested for PFAS: PFOA + PFOS levels at about 2 ppb; Stella private well sampling area being expanded from 2.5 to 3 miles from Town Hall; surface water and fish tissue sampling completed in area; public water system PFAS sampling now shows 1 system with PFAS above 70 ppt (PFOA + PFOS) MCL, about 30% of public systems with PFAS detect and 91 systems with results that exceeded EPA's proposed PFAS MCLs; PFAS Technical and External Advisory Groups continuing communication/stakeholder engagement efforts

Technical Presentation: Tisha King-Heiden (UW LaCrosse Dept. of Biology) provided a presentation on her *Sublethal effects of chronic exposure to neonicotinoid pesticides on aquatic organisms* research

project; neonicotinoid insecticides, including thiamethoxam and imidacloprid, designed to target the nervous system of invertebrate pests but are not considered overtly toxic to vertebrates; have been associated with honeybee declines and impacts on other non-target terrestrial insects; neonicotinoid insecticides now major contaminants of concern in aquatic ecosystems; impacts on the aquatic community not yet fully understood; thiamethoxam and imidacloprid have been are found in groundwater and surface waters in Wisconsin, especially in the Central Sands region; of concern is the potential risk to aquatic invertebrates and fish; objectives of study to better understand the chronic toxicity of thiamethoxam and imidacloprid on aquatic species in Central Sands; study included evaluation of thiamethoxam and imidacloprid in mixtures; lab assays used to evaluate acute toxicity of both individual compounds and mixtures on aquatic invertebrates (water fleas, midges, amphipods), chronic toxicity of both individual compounds and mixtures on water fleas and amphipods, and toxicity of thiamethoxam on fathead minnow and zebrafish embryos; study toxicity endpoints measured included: survival, growth, reproduction, and ecologically relevant behaviors (avoidance and foraging efficiency for fish); study found exposure to high concentrations of neonicotinoids increased invertebrate mortality; amphipods most sensitive to thiamethoxam and water fleas most sensitive to imidacloprid; reproduction of water fleas declined with increasing concentrations; mixture tests suggest that thiamethoxam and imidacloprid act additively on invertebrates; chronic exposure to environmentally relevant concentrations of both thiamethoxam and imidacloprid caused increased mortality in fish larvae and caused alterations in behaviors of survivors that could potentially impact ability to reach adulthood; exposure to mixtures of thiamethoxam and imidacloprid did not reveal a clear relationship with respect to their potential to act in additive/synergistic manner in fish; study data indicates that long-term impacts of neonicotinoid pesticides on aquatic communities warrant additional research and suggest evaluation of potential modes of action for observed toxicity in vertebrates should be evaluated

Meeting adjourned – motion to adjourn Christy R, second Sue S, approved by voice vote