BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD NORTH
ST. PAUL, MN 55155
WEDNESDAY, JUNE 23, 2021

AGENDA

9:00 AM  CALL MEETING TO ORDER

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA

MINUTES OF MARCH 24, 2021 BOARD MEETING

PUBLIC ACCESS FORUM (10-minute agenda time, two-minute limit/person)

WELCOME/INTRODUCTION OF NEW BOARD MEMBERS

INTRODUCTION OF NEW STAFF
  • Teressa Pickar, Financial Analyst

CONFLICT OF INTEREST DECLARATION

A conflict of interest, whether actual, potential, or perceived, occurs when someone in a position of trust has competing professional or personal interests, and these competing interests make it difficult to fulfill professional duties impartially. At this time, members are requested to declare conflicts of interest they may have regarding today’s business. Any member who declares an actual conflict of interest must not vote on that agenda item. All actual, potential, and perceived conflicts of interest will be announced to the board by staff before any vote.

REPORTS
  • Chair & Administrative Advisory Committee – Gerald Van Amburg
  • Audit & Oversight Committee – Joe Collins
  • Executive Director – John Jaschke
  • Dispute Resolution and Compliance Report – Travis Germundson/Rich Sve
  • Grants Program & Policy Committee – Tom Schulz
  • RIM Reserve Committee – Jayne Hager Dee
  • Water Management & Strategic Planning Committee – Andrea Date
  • Wetland Conservation Committee – Jill Crafton
  • Buffers, Soils & Drainage Committee – Kathryn Kelly
  • Drainage Work Group – Neil Peterson/Tom Gile

AGENCY REPORTS
  • Minnesota Department of Agriculture – Thom Petersen
  • Minnesota Department of Health – Steve Robertson
  • Minnesota Department of Natural Resources – Sarah Strommen
  • Minnesota Extension – Joel Larson
  • Minnesota Pollution Control Agency – Katrina Kessler
ADVISORY COMMENTS

- Association of Minnesota Counties – Brian Martinson
- Minnesota Association of Conservation District Employees – Nicole Bernd
- Minnesota Association of Soil & Water Conservation Districts – LeAnn Buck
- Minnesota Association of Townships – Karl-Christian Johannessen
- Minnesota Association of Watershed Districts – Emily Javens
- Natural Resources Conservation Service – Troy Daniell

COMMITTEE RECOMMENDATIONS

Northern Region Committee

Grants Program and Policy Region Committee
1. FY 2022 Clean Water Fund Competitive Grant Policy and the FY2022 Clean Water Fund Competitive Grants Program authorization – Shaina Keseley – DECISION ITEM

2. Fiscal Year 2022 and 2023 Natural Resources Block Grants Authorization – Kevin Bigalke and Marcey Westrick – DECISION ITEM

3. Fiscal Year 2022 and 2023 Soil and Water Conservation District Grants Authorization – Kevin Bigalke and Marcey Westrick – DECISION ITEM

4. Fiscal Year 2022 and 2023 Technical Service Area Grants Authorization – Kevin Bigalke and Marcey Westrick – DECISION ITEM

UPCOMING MEETINGS
- BWSR Board Tour and Meeting, August 25-26, 2021

ADJOURN
Feedlot upgrade aids Mississippi

MANTORVILLE TOWNSHIP — Dodge County brothers Ben and Jay Currier improved their dairy farm’s efficiency, optimized the fertilizer it produces, and played a role in protecting the Mississippi River when they installed a new manure pit last fall.

Increasing manure storage capacity to one year eliminated the need for weekly hauling and spreading on the 200-acre farm where they milk nearly 100 cows and raise replacement heifers. The $572,000 project makes it possible to avoid application in winter and early spring, when manure is most easily carried off by snowmelt and runoff.

The Currier brothers’ feedlot project was one of four funded at 90% through the $3.2 million Lower Mississippi River Feedlot Management in Minnesota Regional Conservation Partnership Program (RCP) project. The five-year, federal-state partnership

Top: By May, the manure storage facility on the Currier brothers’ Mantorville Township dairy farm held seven months’ worth of manure. It’s built for 12 months of storage, with extra capacity in case of emergency. The cow yard slopes to the pit. Jay (left) and Ben Currier previously had one week of storage. The facility was installed with assistance from the Lower Mississippi River Feedlot Management in Minnesota Regional Conservation Partnership Project, which is funded jointly by the USDA’s NRCS and by BWSR.

Bottom: A ramp allows for easy access to clean out the pit.

Photo Credits: Ann Wessel, BWSR

“...This manure we’ve got in the pit is quite attractive to crop farmers because it’s got a lot of nutrient value, plus it’s got a lot of microbials. It’s better for their soil.”

— Jay Currier, Dodge County
wraps up Aug. 31, 2021. State-only RCPP dollars funded two more feedlots at 75%.

Funding came from the USDA’s Natural Resources Conservation Service (NRCS) via Environmental Quality Incentives Program (EQIP) assistance, and from the Minnesota Board of Water and Soil Resources (BWSR), whose contribution included Clean Water Funds.

Combined, the six feedlot projects’ estimated annual pollution reductions to Mississippi River tributaries include 182 pounds of nitrogen and 47 pounds of phosphorus. One pound of phosphorus can produce 500 pounds of algae. The work also addresses E. coli.

By reducing phosphorus-loading to the Mississippi River, states’ nutrient reductions address the “dead zone” in the Gulf of Mexico. Water from the Currier brothers’ farm reaches the Gulf by way of a wetland that flows to the South Branch Middle Fork Zumbro River.

“These guys show all the symptoms of being successful dairy farmers. They have high phosphorus soils. Very productive. They’ve had a relatively small area to spread manure on for decades. They’ve been in business for a long time,” Blaine Delzer, Dodge SWCD feedlot technician, said during a late-May visit to the Curriers’ farm. “The land shows that.”

Delzer worked with the Curriers to develop a manure management plan and apply for funds.

“By allowing the Curriers to use their manure as a nutrient source instead of a waste product, there’s a lot more control going into where and when that manure is applied. That will really allow for it to be used by the plants in the field rather than having a fallow area where they spread manure for the entire summer and over-apply,” Delzer said.

Landowner participation in the RCPP was voluntary. The Curriers, whose share of project costs totaled about $67,000, look forward to eventually using the dairy’s manure on their own land again.

“Once the manure gets transferred off, then you take your soil samples and as your crop removes the nutrient value that you’ve got built up in your soil, you want it to decrease as rapidly as you can so you can get to use the benefit of your manure again. That’s the goal,” Ben Currier said.

Meanwhile, the Curriers have agreements with neighbors who will use the manure on their fields.

“This manure we’ve got in the pit is quite attractive to crop farmers because it’s got a lot of nutrient value, plus it’s got a lot of microbials. It’s better for their soil,” Jay Currier said.

Olmsted County-based NRCS District Conservationist Mike Muzzy, whose territory previously included Dodge County, expanded upon the benefits of using manure as fertilizer.

“It’s an organic form of nutrients, so it’s more of a slow release,” Muzzy said. “Having manure on the field, that does help the soil health and builds the biology in the soil and results in more productive soil. There’s a lot of micronutrients in manure that you don’t have in commercial fertilizer.”

Every three years a technical service provider will sample fields to determine soils’ nutrient content.

“In three years’ time, with no manure going on our soil, we’ll get a chance to see how that decreases,” Ben Currier said of the nutrient levels. “That’s how we track our success on our end.”

The 1.4-million-gallon pit, sloped cement cattle yard and low cement diversion wall were completed in October 2020. The berm was seeded in December. A storage tank for milkhouse wastewater, which now outlets into the pit, eliminated a potential source of groundwater

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**Left:** The fencing Ben and Jay Currier installed along the edge of the pit can be raised and lowered. Having two points to scrape manure into the pit gives them an option if buildup occurs during winter freezes. The 1.4 million-gallon design allows for increased volume due to rainfall. **Middle:** The previous storage area, left of the open barn door, held a week’s worth of manure. **Right:** Grooves in the concrete increase traction.
contamination. Gutters divert rainwater from barn roofs.

“Having manure storage allows the farmer to have a way to use it as a nutrient, and saves them money on the bottom line, plus takes care of that potential problem in the springtime when things are heating up and people are doing a daily scrape-and-haul,” said Peter Fryer, the Chatfield-based Technical Service Area (TSA) 7 lead engineer who designed the project.

“That water no longer discharges to anywhere but the manure storage facility,” Fryer said.

The project augments nutrient- and sediment-reduction benefits of a previous Dodge SWCD project on a farm immediately downstream.

“What people really have to realize is the end-users from here all the way down to the Gulf of Mexico are receiving a benefit,” Delzer said. “There is a state benefit, there is a federal benefit to these dollars being used on projects like this.”

By late May, the new pit held seven months’ worth of manure. Built-in emergency storage makes it possible to exceed the 1.4-million-gallon, 7-foot-deep mark if unexpected circumstances prevent it from being emptied within 12 months. The pit is built to hold 200,000 gallons and withstand a once-every-25-years rain.

Because it lies within southeastern Minnesota’s karst region, the pit incorporated safeguards to protect groundwater from seepage that might enter the aquifer through fractures in the limestone bedrock.

“With all manure storage ponds in the karst area, it’s a real concerted effort to make sure we build these things as liquid-tight as we can,” Fryer said. “In the design, there’s water-stops that are put into the concrete pours at every joint.”

It was one of the largest projects in Rochester-based TSA 7 engineering technician Chris Nelson’s career. He conducted the original site survey and worked onsite with landowners and contractors. Nelson said involved landowners, exceptional contractors — Hodgman Drainage of Claremont handled earthwork; Leon Nerison of Wanamingo-based B&N Construction handled concrete work — and favorable weather made this one of the easiest projects he’s worked on.

“The landowners knew exactly what they wanted. They probably could’ve managed the contractors and had everything built if they had enough time,” Nelson said.

**Editor’s note:** Blaine Delzer worked at Dodge SWCD for the past 10 years, most recently as a feedlot technician. He also farmed in Dodge County. Delzer died not long after discussing this feedlot project in an interview.

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**RCPD Details**

**FUNDING:** The original $3.2 million agreement was split between NRCS and BWSR. BWSR addressed a backlog of requests by earmarking an additional $520,000 — two years’ worth of general fund appropriations — for the TSA to handle additional work. The RCPP was available within 11 southeastern Minnesota counties.

**PROJECTS:** Ag waste systems funded at 90% were completed in Dodge, Houston, Wabasha and Winona counties. Two more, in Houston and Rice counties, were funded at 75% using only state funds. Landowners paid the 10% or 25% match. (The RCPP targeted livestock operations with 500 or fewer animal units. An animal unit is a measure of manure produced. One dairy cow equals 1.4 animal units.) The $120,000 in remaining funds will help to reduce the risk for one farmer to try rotational grazing, and for two farmers to convert row crops to perennial cover.

**ACCOMPLISHMENTS:** “We were able to leverage both state and federal dollars to really provide some vital financial assistance to some dairy operators at a time when there really wasn’t a lot of profit margin in dairies,” said Rochester-based BWSR Board Conservationist Dave Copeland, who served as the state’s administrative coordinator for the RCPP. “(The dairies) had some issues they needed to address to reduce or minimize the environmental impacts from their operation. ... We had producers that wanted to do the right thing, they just needed some help.”
Watonwan County recently became the 29th Minnesota county to bring 100% of applicable land into compliance with Minnesota’s riparian buffer law.

The law requires perennial vegetative buffers of up to 50 feet along lakes, rivers and streams, and of 16.5 feet along ditches. Riparian buffers help filter out phosphorus, nitrogen and sediment, and are an important conservation practice for helping to keep water clean. The Minnesota Board of Water and Soil Resources (BWSR) oversees compliance in partnership with local governments.

Watonwan County faced unique challenges when the Minnesota Legislature passed the law in 2015. Watonwan Soil and Water Conservation District (SWCD) staff estimated buffer compliance at 44% countywide in 2015, the 12th lowest compliance rate in the state at the time. Approximately 1,128 parcels located adjacent to public waters needed to be brought into compliance by Nov. 1, 2017; an additional 142 parcels located adjacent to public ditches needed to become...
Watonwan County hired Chad Hildebrand in February 2016 to spearhead buffer compliance efforts for the SWCD (the SWCD is part of the county’s land management office). After working as a district technician for four years with a focus on buffer compliance, he was promoted to SWCD assistant manager and county ditch inspector in 2020. Hildebrand took a job with Goodhue SWCD in April. “Putting a face to the SWCD helped me build relationships with township officials and landowners,” Hildebrand said. “It’s about listening — listening to their concerns and trying to find the best route to take to meet statute and meet their goals.”

Watonwan County chose to have BWSR handle its buffer enforcement in 2017. Hildebrand said this decision helped landowners view the SWCD as a resource for voluntary conservation rather than a regulatory entity. The distinction helped build trust between SWCD staff and landowners, Hildebrand said. “We’ve increased walk-ins to the office by about 400% (over the past few years),” Hildebrand said, referencing Watonwan SWCD. “I think having that conversation about buffers allowed our office to let the landowners get to know the SWCD. We are here, and we can help you.”

The 2012 USDA Census of Agriculture indicates that 94% of farmland land in Watonwan County is used for growing crops. Hildebrand said getting farmers to give up productive cropland to put in buffers was a tough sell — so he frequently presented landowners with alternative practice options. Alternative practices produce water quality benefits comparable to a full-width buffer, and typically take up a smaller footprint. BWSR developed a suite of common alternative practices including filter strips, grassed waterways and participation in the Minnesota Department of Agriculture’s Minnesota Agricultural Water Quality Certification Program (MAWQCP), which aims to improve water quality with a whole-farm approach. In addition to these common alternative practices, landowners can work with their SWCD office to see what options may fit their land and operation while still meeting statutory requirements.

According to BWSR buffer and soil loss specialist Kevin Roth, 78% of out-of-compliance parcels in Watonwan County were brought into compliance via alternative practices.

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According to Hildebrand, achieving compliance involved many late nights and challenging conversations. The final parcel was brought into compliance in May.

“It was a long process, but once we built trust, we were able to hit the ground running,” Hildebrand said.

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Two Chisago County lakes delisted

CHISAGO COUNTY — When the Minnesota Pollution Control Agency (MPCA) removed North Center and South Center lakes from the impaired waters list this spring, Chisago Soil & Water Conservation District (SWCD) staff celebrated a continuation — not a conclusion — of targeted watershed work.

North Center and South Center were two of nine lakes in the 20-lake chain added to the impaired waters list in 2008. Removal requires meeting water quality standards for five consecutive years.

In Chisago County, the accomplishment reflects hundreds of conservation practices implemented over 10-plus years, stretching from lakeshore lawns to farm fields. Landowners’ work with the SWCD and its partners has led to improving water quality trends throughout the Chisago Lakes Chain of Lakes.

“All the other lakes where we have water quality trend data are also improving. That’s exciting. It’s not just one or two lakes,” said Jerry Spetzman, Chisago Lakes Lake Improvement District (LID) administrator. “A lot of the projects happening on North and South Center are also happening on the entire chain of lakes.”

Clockwise from top left: Nancy Moe-Mergens and Mike Mergens restored their North Center Lake shoreline. Photo Credit: Nancy Moe-Mergens

The cover crop Byron Dahlheimer planted in his Chisago County field was greening up by mid-April. Photo Credit: Chisago SWCD

“It was a fabulous program,” Pat Eichten said of working with the SWCD and NRCS on projects including this grassed waterway. Photo Credit: Chisago SWCD

Aaron Hanson of Lindstrom had a rain garden installed. Photo Credit: Aaron Hanson
Phosphorus and chlorophyll-a levels are generally decreasing throughout the chain. Phosphorus feeds the algae that can turn lakes green. Chlorophyll-a indicates the presence of algae. Secchi disk readings, a measure of water clarity, are generally improving.

A targeted watershed demonstration grant from the Minnesota Board of Water and Soil Resources (BWSR) in 2015 brought five years of dedicated Clean Water Funds to the Chisago Lakes Chain of Lakes. Work accomplished through that grant reduced phosphorus by an estimated 690 pounds a year. One pound of phosphorus can create 500 pounds of algae.

The SWCD has leveraged more than $1.7 million in Clean Water Funds, including the targeted watershed demonstration program grant, to gain additional dollars for conservation projects affecting the chain of lakes. It secured a Mississippi River Basin Initiative (MRBI) award — dedicated funding from the USDA’s Natural Resources Conservation Service (NRCS) that provided about $125,000 in assistance. The LID has contributed $40,000 annually. The St. Croix River Association contributed $50,000 total. Water quality work gained enthusiastic support from the cities of Lindstrom and Center City.

By the time it wrapped up in 2020, the targeted watershed grant had funded projects involving 43 landowners. Leveraged local, state and federal funds can cover up to 100% of costs. In exchange, landowners agree to a 10-year contract to maintain the practice.

Conservation practices implemented throughout the chain of lakes ultimately benefit the St. Croix River downstream.

“It’s like a watershed success story. It’s great for North and South Center, but it’s also great for the entire watershed,” Spetzman said.

Chisago SWCD Administrator Craig Mell handles the contracts. SWCD water resources specialist Casey Thiel summarizes data collected though the LID’s water quality monitoring program, and works with urban and lakeshore property owners. SWCD resource conservationist Shane Hultman works with agricultural producers.

The SWCD has applied the targeted approach throughout the county.

“We use that model and it works. We prove every day that it works. From the assessments to applying for the grants to following up with monitoring to doing more assessments — that whole process,” Thiel said.

Mell said it can take years to get a commitment from an ag producer. “They need to see it working elsewhere. They need to hear from their farming peers that it works,” Mell said.

AN IMMEDIATE FIX: Pat Eichten’s first experience working with NRCS and the SWCD on a conservation project “eliminated the problem instantly,” he said, and worked so well that he pursued two more projects on rented land.

Targeted MRBI funding plus local and state dollars reimbursed 100% of the combined cost of all three, which totaled about $40,000.

The first project — a water and sediment control basin (WASCOB) and a grassed waterway— diverted runoff from the steel roofs of a dairy barn and two pole sheds, and eliminated a 7-foot gully that split his Franconia Township field. Subsequent work installed grassed waterways and culverts. All three projects slow runoff and allow sediment and the pollutants it carries to settle out.

“I don’t know if we would have pursued it without the funding,” Eichten said. “It’s a great service if you can get this done without bankrupting the farmers at the same time.”

COVER CROP TRIAL: Byron Dahlheimer is trying cover crops for the first time.

With a rented no-till drill from Chisago SWCD, last fall he seeded 40 acres of harvested soybean fields into a rye cover crop. The 200-acre corn and soybean farm he runs with his brother and two sons lies across the road from North Center Lake.

“Because of our proximity to the lakes, all the land we farm drains right into the lake system,” Dahlheimer said. “So we try to be careful what we do, or try to make it better.”

Chisago SWCD funding will reimburse part of his cover crop seed cost. He described how he would determine success: “First if it helps the soil, and then return on investment — if it’s going to pay off to do it. That may take a while to find out. That may take several years.”

If cover crops work for the operation, he plans to buy a drill.

www.bwsr.state.mn.us
LAKESHORE RESTORATION:
Nancy Moe-Mergens and Mike Mergens, who built a house on North Center Lake about 20 years ago, were among the first to sign up for a lakeshore restoration project through the SWCD.

“Both of our lakes are runoff lakes. We don’t have a spring or river that feeds (them). Whatever is on your property — it goes into the lake,” Moe-Mergens said.

Shoreline restorations started to catch on once the 600-some property owners on North Center and South Center lakes started to see the results, said Moe-Mergens, past president of the 120-member Center Lakes Association.

“It justifies all the work that the LID and the Chisago Soil and Water have done,” Moe-Mergens said of the delisting. And it might inspire more shoreline changes.

RAIN GARDEN: In one season, Aaron Hanson accomplished what likely would have taken him years to install on his own — a rain garden and pollinator habitat on a 10-by-40-foot strip of his Lindstrom yard.

Runoff from nearly three-quarters of the city block flows to a stormwater drain on that property, which is across an alley from lots on South Lindstrom Lake.

“If I was left to my own devices, I would not have been able to do the rain garden part of it. I would have slowly but surely converted the grass into pollinator habitat,” said Hanson, who became aware of pollinator-friendly habitat benefits through his work with the University of Minnesota’s Institute on the Environment.

The project was reimbursed 100% by Clean Water Funds and LID funds.

Chisago SWCD’s Expanding Role

ST. CROIX RIVER-RELATED: Since 2015, the SWCD has received $925,500 in Clean Water Fund grants related to curbing St. Croix River gully erosion via targeted, prioritized erosion control projects along the river and its tributaries.

ONE WATERSHED, ONE PLAN: SWCD staff serve as the fiscal agent for the Lower St. Croix River One Watershed, One Plan, which received $1.62 million in dedicated Clean Water Funds from BWSR. Implementation begins in 2021. Fifteen local government partners developed the plan, prioritizing conservation efforts for the next 10 years.

MAINTENANCE: Seasonal employees hired through an SWCD partnership with the LID maintain projects on public property. They weed, remove sediment and monitor publicly owned water quality projects for needed repairs. Those projects include vegetated swales, rain gardens, lakeshore buffers and stormwater pond enhancements. Urban projects are inspected every year; ag projects every two years.

NRCS Dedicated Funds

MRBI: An initiative of the USDA’s Natural Resources Conservation Service, the Mississippi River Basin Initiative centers on practices that improve water quality, restore wetlands, enhance wildlife habitat and sustain ag profitability in the Mississippi River basin. Water quality concerns prompted NRCS to make the Mississippi River a priority.

SECOND MRBI AWARD: The Chisago SWCD in 2021 received a $425,000 MRBI award, which brought dedicated funding to the Goose Creek Watershed. The watershed includes Goose Lake, Rush Lake and Rush Creek. It drains to the St. Croix River, a Mississippi River tributary.

Monitoring Details

MEETING STANDARDS: Minnesota has a two-part water-quality standard for eutrophication, which describes the effect of nutrients. Phosphorus levels must be at or below a certain level. Additionally, either Secchi disk readings, which measure clarity, or chlorophyll-a readings must meet the standard.

From 2013 through 2019, phosphorus levels and Secchi disk readings in North Center and South Center lakes consistently met water quality standards for aquatic recreation. Chlorophyll-a conditions have improved but did not meet the standard.

ACCEPTABLE LEVELS: For 889-acre South Center Lake to meet water-quality standards that support aquatic recreation, the average levels of total phosphorus must be below 40 micrograms per liter and Secchi disk readings must be at least 1.4 meters. For 754-acre North Center Lake, the average total phosphorus levels must be below 60 micrograms per liter, Secchi disk readings at least 1 meter. The standards differ because South Center Lake is classified as a deep lake, North Center Lake a shallow lake.

MPCA DELISTING: See specifics about North Center and South Center lakes in the MPCA’s response to comments on the 2020 draft impaired waters list public notice.
BWSR’s senior ecologist and vegetation specialist shares advice for getting started with native plantings

First-time native habitat gardeners sometimes worry about doing things just right, or about throwing the ecological balance out of whack. Beginning an ecological garden — a garden that rebuilds biodiversity and environmental health — can feel daunting.

Luckily, assistance for new and experienced gardeners is available. The Minnesota Board of Water and Soil Resources’ (BWSR) Lawns to Legumes pilot program offers workshops, planting guides, garden templates and many other resources to help you get started creating pollinator habitat in your yard. The program recently received the 2021 Environmental Initiative award for large-scale sustainability impacts and was featured in the June/July edition of Mother Earth News magazine.

As an ecologist, I’m here to tell you that your ecological garden doesn’t have to be perfect. The best way to begin is to start small and expand. Our natural systems are already out of balance. The sooner you start creating habitat, the sooner you can support declining populations of pollinators and make your yard resilient to climate change. The following 10 principles can help you achieve your vision of installing an ecological landscape:

**Have your utilities marked:** Before starting any project where you will be digging, it is essential to call Gopher State One Call, 651-454-0002. Marking the location of utilities such as electrical and gas lines ensures you can dig safely. It’s also important to consider the location of cable lines, outdoor lighting and other homeowner-installed lines.

**Start small:** It’s OK to start small! Even if you add a few native plants to your landscape, you will help pollinators and other wildlife. You can always add more plants each season. Native plant nurseries can help you select plants and plan small native pocket plantings to get started. Some nurseries offer starter kits.

During a hot, dry summer even tough native plants can benefit from supplemental watering to ensure that they provide high amounts of pollen and nectar for pollinators. Most plants need about an inch of water a week either through rainfall or watering.

**Identify unused areas of your yard:** You don’t necessarily need a detailed planting plan to get started. It’s OK to have small projects in different areas of your yard. A helpful first step is to define unused areas, such as slopes, corners or moist drainageways — those can be great places to establish habitat. If you have concerns about bee stings, establishing habitat in low-traffic areas is a good option.

**Use lines in your designs:** The human eye is attracted to straight lines, including landscape features such as
walls, fences, edging and sidewalks — elements that can help create a sense of order. At times, ecological gardens can look somewhat messy. Lines can enhance and organize their beauty.

**Keep it fun:** Planning a pollinator project is an opportunity to involve the whole family in creating a refuge for wildlife. You can be a designer, craftsperson, gardener and steward of the land simultaneously. Tinkering in the garden — whether that means expanding existing plantings, separating plants in the spring or pruning shrubs — is always rewarding, and a great way to stay active.

**Collaborate:** One of the most rewarding aspects of ecological gardening is the collaboration among those passionate about flowers, pollinators, birds and spending time outdoors. If you’re starting your first ecological gardening project, it’s helpful to make connections with neighbors who garden. University of Minnesota Extension Master Gardeners, Master Water Stewards and Minnesota Master Naturalist volunteers are other experts who can offer advice. We are fortunate in Minnesota to have so many great mentors.

**Make habitat connections:** Identifying areas where you can expand existing plantings is another consideration in site selection. I like to round off corners in my yard to make it easier to mow. If you can connect areas of habitat on your property, you will create benefits for a wider range of species. Connecting nesting areas with food sources can aid pollinators moving through the landscape.

Summer can be a good time to add containerized pollinator plants to gardens, but watch the forecast for periods of cooler temperatures and higher rainfall to give plants the best opportunity to thrive.

**Watch the wonder:** Because they change throughout the year, plantings attract a diverse array of bees, butterflies, beetles, dragonflies, birds and other species. Try placing at least some of your habitat next to decks, windows or other areas where you can observe the wildlife diversity you’ve helped restore.

**Keep learning:** I’ve worked in the ecology field for more than 20 years, and I still learn something new about nature every day. Our natural world is amazingly complex. As you start your project, check out the wide range of resources developed by conservation partnerships to guide ecological gardeners. Resources available on the Lawns to Legumes website include our Planting for Pollinators habitat guide, which won an award from the American Society of Landscape Architecture.

**Experiment and make mistakes:** Finally, remember that it’s OK to make mistakes. They’re often more memorable — and sometimes more entertaining — than our successes. Making mistakes is how we learn to create better plantings. The beauty of an ecological landscape is that it will evolve over time. Making small adjustments to plantings over time is a great way to get outdoors and bring biodiversity to your landscape. As you consider a habitat project, consider consulting BWSR’s Planting for Pollinators habitat guide and the technical resources on the Lawns to Legumes webpage.

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**ABOUT THE AUTHOR:** Dan Shaw started working in the ecology field about 25 years ago. Before joining BWSR, he worked with restoration companies, native plant nurseries, consulting firms and nonprofits. Over the past 15 years at BWSR, he’s coordinated conservation programs focusing on native vegetation establishment, invasive species management, pollinator habitat, habitat-friendly solar and climate resiliency. Shaw has taught ecology at the University of Minnesota for the past 19 years, and has written and illustrated several ecology-focused publications.
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<tr>
<td>Krech, Stephen</td>
<td>539-2574</td>
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<tr>
<td>Polzin, Brittany</td>
<td>539-2564</td>
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<tr>
<td>Remick, Polly</td>
<td>539-2568</td>
</tr>
<tr>
<td>Sherman, Pat</td>
<td>539-2570</td>
</tr>
<tr>
<td>Tyma, Karli</td>
<td>(651) 440-2456</td>
</tr>
</tbody>
</table>
ADDRESSES AND FAX NUMBERS

**Central Office**
520 Lafayette Road North
Saint Paul, MN 55155
Fax: (651) 297-5615

**Easement Office**
444 Pine Street, Suite 130
St. Paul, MN 55155

**Bemidji**
4 West Office Building
403 Fourth Street NW, Room 200
Bemidji, MN 56601
Fax: (218) 755-2672

**Brainerd**
1601 Minnesota Drive
Brainerd, MN 56401
Fax: (218) 828-6036
Conference Room: (218) 203-4484

**Detroit Lakes**
1732 North Tower Road
Detroit Lakes, MN 56501
Fax: (218) 846-7422
BWSR/DNR Conf. Room: (218) 846-8438

**Duluth**
394 South Lake Avenue, Room 403
Duluth, MN 55802
Fax: (218) 723-4794

**Human Resources**  (651) 282-4339

**Mankato**
11 Civic Center Plaza, Suite 300
Mankato, MN 56001
Fax: (507) 344-2828
Large Conference Room: (507) 344-2822
Small Conference Room: (507) 344-2827

**Marshall**
1400 East Lyon Street
Marshall, MN 56258
Fax: (507) 537-6368

**Rochester**
2118 Campus Drive SE, Suite 100
Rochester, MN 55904

**St. Cloud**
110 Second Street South, Suite 307
Waite Park, MN 56387-1314
Fax: (320) 202-6478
Conference Room: (320) 223-7070
<table>
<thead>
<tr>
<th>Date</th>
<th>Daily Description</th>
<th>Itinerary</th>
<th>Trip Miles</th>
<th>Total Trip &amp; Local Miles</th>
<th>Mileage Rate</th>
<th>Meals (overnight stay)</th>
<th>Total Meals (no overnight stay) taxable</th>
<th>Lodging</th>
<th>Personal Telephone</th>
<th>Parking</th>
<th>Total</th>
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**MILEAGE REIMBURSEMENT CALCULATION**

<table>
<thead>
<tr>
<th>Rate</th>
<th>Total Miles</th>
<th>Total Mileage Amt.</th>
<th>Date</th>
<th>Earn Code</th>
<th>Comments</th>
<th>Total</th>
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</table>

1. Enter rate, miles, and amount being claimed **equal to the IRS rate.**
2. Enter rate, miles, and amount being claimed **less than the IRS rate.**
3. Enter rate, miles, and amount being claimed **greater than the IRS rate.**
4. Add the total mileage amounts from lines 1 through 3.
5. Enter IRS mileage rate in place at the time of travel.
6. Subtract line 5 from line 3.
7. Enter total miles from line 3.
8. Multiply line 6 by line 7. This is **taxable** mileage.
9. Subtract line 8 from line 4. If line 8 is zero, enter mileage amount from line 4. This is **non-taxable** mileage.

**OTHER EXPENSES** – See reverse for list of Earn Codes.

- Total MVI/MVO: 0.00
- Total MEI/MEO: 0.00
- Total LGI/LGO: 0.00
- Total PHI/PHO: 0.00
- Subtotal (A): 0.00

**VEHICLE CONTROL #**

- Total Miles: 0

**MIT or MOT**

If using private vehicle for out-of-state travel: What is the lowest airfare to the destination? Total Expenses for this trip must not exceed this amount.

- Total amount to be reimbursed to the employee: 0.00
- Amount of Advance to be returned by the employee by deduction from paycheck: 0.00

**Authorized Signature and Date:**

- Supervisor Signature: ____________________________ Date ________________ Work Phone: __________________
- Approving Authority Designee (Needed for Recurring Advance and Special Expenses): ____________________________ Date ________________________

**Employee Signature and Date:**

- Employee Signature: ____________________________ Date ____________________ Work Phone: __________________

Enter the rates, miles, and total amounts for the mileage listed above. Get the IRS rates from your agency business expense contact.

- Enter rate, miles, and amount being claimed at **equal to the IRS rate.**
- Enter rate, miles, and amount being claimed at **less than the IRS rate.**
- Enter rate, miles, and amount being claimed at **greater than the IRS rate.**
- Add the total mileage amounts from lines 1 through 3.
- Enter IRS mileage rate in place at the time of travel.
- Subtract line 5 from line 3.
- Enter total miles from line 3.
- Multiply line 6 by line 7. This is **taxable** mileage.
- Subtract line 8 from line 4. If line 8 is zero, enter mileage amount from line 4. This is **non-taxable** mileage.

I declare, under penalty of perjury, that this claim is just, correct and that no part of it has been paid or reimbursed by the state of Minnesota or by another party except with respect to any advance amount paid for this trip. I AUTHORIZE PAYROLL DEDUCTION OF ANY SUCH ADVANCE. I have not accepted personal travel benefits.
EMPLOYEE EXPENSE REPORT (Instructions)

DO NOT PAY RELOCATION EXPENSES ON THIS FORM.
See form FI-00568 Relocation Expense Report. Relocation expenses must be sent to Minnesota Management & Budget, Statewide Payroll Services, for payment.

USE OF FORM: Use the form for the following purposes:
1. To reimburse employees for authorized travel expenses.
2. To request and pay all travel advances.
3. To request reimbursement for small cash purchases paid for by employees.

COMPLETION OF THE FORM: Employee: Complete, in ink, all parts of this form. If claiming reimbursement, enter actual amounts you paid, not to exceed the limits set in your bargaining agreement or compensation plan. If you do not know these limits, contact your agency’s business expense contact. Employees must submit an expense report within 60 days of incurring any expense(s) or the reimbursement comes taxable.

All of the data you provide on this form is public information, except for your home address. You are not legally required to provide your home address, but the state of Minnesota cannot process certain mileage payments without it.

Supervisor: Approve the correctness and necessity of this request in compliance with existing bargaining agreements or compensation plans and all other applicable rules and policies. Forward to the agency business expense contact person, who will then process the payments. Note: The expense report form must include original signatures.

Final Expense For This Trip?: Check this box if there will be no further expenses submitted for this trip. By doing this, any outstanding advance balance associated with this trip will be deducted from the next paycheck that is issued.

1-Way Commute Miles: Enter the number of miles from your home to your permanent workstation.

Expense Group ID: Entered by accounting or payroll office at the time of entering expenses. The Expense Group ID is a unique number that is system-assigned. It will be used to reference any advance payment or expense reimbursement associated with this trip.

Earn Code: Select an Earn Code from the list that describes the expenses for which you are requesting reimbursement. Be sure to select the code that correctly reflects whether the trip is in state or out-of-state. Note: Some expense reimbursements may be taxable.

Travel Advances, Short-Term and Recurring: An employee can only have one outstanding advance at a time. An advance must be settled before another advance can be issued.

Travel Advance Settlement: When the total expenses submitted are less than the advance amount or if the trip is cancelled, the employee will owe money to the state. Except for rare situations, personal checks will not be accepted for settlement of advances; a deduction will be taken from the employee’s paycheck.

FMS ChartStrings: Funding source(s) for advance or expense(s)

Mileage: Use the Mileage Reimbursement Calculation table to figure your mileage reimbursement. Mileage may be authorized for reimbursement to the employee at one of three rates (referred to as the equal to, less than, or greater than rate). The rates are specified in the applicable bargaining agreement/compensation plan. Note: If the mileage rate you are using is above the IRS rate at the time of travel (this is not common), part of the mileage reimbursement will be taxed.

Vehicle Control #: If your agency assigns vehicle control numbers follow your agency’s internal policy and procedure. Contact your agency’s business expense contact for more information on the vehicle control number procedure.

Personal Travel Benefits: State employees and other officials cannot accept personal benefits resulting from travel on state business as their own. These benefits include frequent flyer miles/points and other benefits (i.e. discounts issued by lodging facilities.) Employees must certify that they have not accepted personal travel benefits when they apply for travel reimbursement.

Receipts: Attach itemized receipts for all expenses except meals, taxi services, baggage handling, and parking meters, to this reimbursement claim. The Agency Designee may, at its option, require attachment of meal receipts as well. Credit card receipts, bank drafts, or cancelled checks are not allowable receipts.

Copies and Distribution: Submit the original document for payment and retain a copy for your employee records.