



To: Cass Clay Food Commission
From: Cass Clay Food Partners
Fargo-Moorhead Metropolitan Council of Governments (Metro COG)
Date: January 6, 2020
RE: Cass Clay Food Commission Agenda and Correspondence

28th Meeting of the Cass Clay Food Commission

January 8, 2020 10:30 am – 12:00 pm
Location: Fargo City Commission Chambers

- | | |
|----------|---|
| 10:30 am | 1. Welcome <ul style="list-style-type: none">a. Approve Order & Contents of the Overall Agendab. Review & Action on Minutes from November 13, 2019 (Attachment 1) |
| 10:35 am | 2. Commission Check-In – Chair Mongeau |
| 10:40 am | 3. Certificates of Appreciation for Nancy Carriveau & Bukola Bakare – Kim Lipetzky |
| 10:45 am | 4. Approve Appointment of At-Large Member – Janice Tweet (Attachment 2) – Adam Altenburg |
| 10:50 am | 5. Jurisdiction Spotlight: City of Moorhead – Sara Watson Curry |
| 11:00 am | 6. Weed Biology & Ecology: Non-chemical Weed Control in Weed Management Systems – Dr. Greta Gramig, Weed Biology/Ecology Specialist, NDSU |
| 11:20 am | 7. Moorhead Parks Maintenance – Mike Schroeder, Parks Maintenance Manager |
| 11:35 am | 8. Pesticide Use on Public Land Issue Brief & Snapshot – Whitney Oxendahl (Attachment 3a & 3b) |
| 11:40 am | 9. Public Comment Opportunity – Chair Mongeau |
| 11:50 am | 10. Commission & Steering Committee Roundtable – Chair Mongeau |
| 11:55 am | 11. Commission Action Steps <ul style="list-style-type: none">a. Next First Fridays at Theatre B – February 7, 2020b. Next Commission Meeting – March 11, 2020 |
| 12:00 pm | 12. Adjournment |

Cass Clay Food Commission meetings are taped and rebroadcast on cable channel TV Fargo 56 each Friday at 11:00 am. People with disabilities who plan to attend this meeting and need special accommodations should contact Savanna Leach at Metro COG at 701.532.5100. Please contact us at least 48 hours before the meeting to give our staff adequate time to make arrangements. Meeting minutes are available on the Cass Clay Food Partners website at www.cassclayfoodpartners.org and Metro COG's website at www.fmmetrocog.org.

Attachment 1

**27th Meeting of the
Cass Clay Food Commission
November 13th, 2019
Fargo Commission Chambers**

Members Present:

Mike Thorstad, West Fargo City Commission, Chair
Jenny Mongeau, Clay County Commission
Jim Aasness, Dilworth City Council
John Strand, Fargo City Commission
Sara Watson Curry, Moorhead City Council
Chelsey Johnson, Horace City Council
Kayla Pridmore, At-Large Member
Jeremiah Utecht, At-Large Member

Members Absent:

Bukola Bakare, At-Large Member
Mindy Grant, At-Large Member

Others Present:

Kim Lipetzky, Fargo Cass Public Health
Kayla Carlson, NDSU Extension
Abby Gold, NDSU Department of Public Health
Timothy Hiller, Concordia College – Community Engagement
Verna Kragnes, Executive Director, Northern Plains Sustainable Agriculture Society
Adam Altenburg, Fargo-Moorhead Metropolitan Council of Governments

Chair Thorstad called the meeting to order at 10:30 AM.

1a. Note on the Passing of Commissioner Vern Bennett

Chair Thorstad informed the Commission that Dr. Bennett passed away on September 29. He praised Dr. Bennett for his commitment and dedication to the community and to the Cass Clay Food Commission.

1b. Approve Order and Contents of the Overall Agenda

A motion to approve the order and contents of the overall agenda was made by Ms. Watson Curry and seconded by Ms. Mongeau. The motion was voted on and unanimously approved.

1c. Review and Action on Minutes from May 8 and September 11, 2019

A motion to approve the minutes for May and September was made by Ms. Mongeau and seconded by Mr. Aasness. The motion was voted on and unanimously approved.

2. Commission Check-In

Chair Thorstad stated that Commission members and the steering committee had an opportunity to provide updates on news or events happening in the community.

Ms. Watson Curry informed the Commission that the City of Moorhead would be holding community discussions on a wild turkey management plan to, including soliciting information on what community stakeholders would like to see considered as management options.

Ms. Pridmore stated that Sandra Steingraber would be discussing health, agriculture, and the environment at the Community Health Summit in Perham, MN on November 16 from 1:00 to 4:00 PM.

3. Single Use Packaging Materials Snapshot

Ms. Lipetzky provided an update regarding an addition to the single use packaging materials snapshot. She stated that information regarding Flannel Fizz, a zero-waste business, had been added to the document as an additional example.

A motion to approve the single use materials community snapshot was made by Ms. Mongeau and seconded by Mr. Aasness. The motion was voted on and unanimously approved.

4. Metro Food Plan – Input on Objectives and Action Steps

Ms. Lipetzky and Ms. Gold discussed the objectives and action steps developed as part of the draft Metro Food Plan. They asked Commission members for their input on additional recommendations or modifications to those being developed for the draft plan.

5. Jurisdiction Spotlight: City of Horace – Chelsey Johnson

Ms. Johnson provided the Commission information on food-system related events in the City of Horace, including details about the city's first farmers market held on October 11.

6. Cass Clay Hunger Coalition Update

Ms. Lipetzky presented an update on the Cass Clay Hunger Coalition, a network of over 35 local organizations working to improve the health, wellness, and livelihoods of people living in Cass and Clay counties. She provided the Commission information on how the network's framework as well as guiding principles and strategies to address food insecurity, food access, hunger and health, and awareness and engagement.

7. Northern Plains Sustainable Agriculture Society and the New Roots Farm Incubator

Verna Kragnes, Executive Director of the Northern Plain Sustainable Agriculture Society, provided the Commission information on the New Roots Farm Incubator Co-op. She stated that the objective of the co-op is to increase the number and sustainability of emerging farm enterprises by offering incubating farm opportunities to individuals who want to farm or who have had difficulty accessing land. She provided additional details including how the co-op supports members as well as the co-op's partnerships with Partnership4Health, West Central Initiative, Legacy Gardens, and individual donors.

8. Public Comment Opportunity

Chair Thorstad informed the Commission that time would be allotted for public comments.

9. Commission and Steering Committee Roundtable

Chair Thorstad asked for the Commission and the steering committee to share any additional updates.

10. Commission Action Steps

Chair Thorstad stated that the next Commission meeting would be held on January 8. He also mentioned that the next First Fridays event would be held on December 6, 8:00 AM at Theatre B in Moorhead.

Chair Thorstad adjourned the meeting at 11:46 AM.

Attachment 2

To: Cass Clay Food Commission
From: Adam Altenburg, Metro COG
Date: January 2, 2020
Re: *Approve Appointment of New At-Large Commission Member*

In addition to members from each of the seven jurisdictions in the Fargo-Moorhead metropolitan area, there is provision for an additional five at-large members to serve on the Food Commission. It is the intent that at-large members will bring additional and varied expertise to the Commission as it may relate to food systems issues. At-large members are initially vetted by the Steering Committee before being brought to a vote by the Commission. Each at-large member serves a two-year term.

With Nancy Carriveau and Bukola Bakare concluding their terms, the Steering Committee sought applicants for two new at-large members in late November and early December. With the completion of this process, the Steering Committee recommends the appointment of Janice Tweet as a new at-large member to the Food Commission.

The Steering Committee is still searching for one additional at-large member and will continue to review applicants for appointment to the Commission.

Requested Action:

Approve the appointment of Janice Tweet to the Cass Clay Food Commission

APPLICANT INFORMATION

Name: Janice Tweet

Phone: (701) 739-2352

Email: janicetweet@gmail.com

Preferred mailing address: 1402 Belsly Blvd, #205

City: Moorhead

State: MN

ZIP Code: 56560

EMPLOYMENT INFORMATION

Current employer: Great Plains Food Bank

Employer address: 1720 3rd Avenue North

Phone: (701) 476-9137

E-mail: jtweet@greatplainsfoodbank.org

Fax: (701) 232-3871

City: Fargo

State: ND

Zip: 58102

Position: Community Initiatives Coordinator

WHAT SKILLS, TRAINING, OR EXPERIENCE DO YOU HAVE RELATED TO THE WORK OF THE COMMISSION?

I hold a Master of Public Policy degree from the University of Minnesota and a Bachelor of Arts in Political Science from the University of North Dakota. I have spent my career working in public service, starting with my first position as a legislative correspondent for former Senator Byron Dorgan. I also previously worked as a legislative assistant for former Minnesota State Assistant Majority Leader Katie Sieben. In these positions, I worked on various policy issues, collaborating with stakeholders including elected officials, lobbyists, and government agencies, to find policy solutions to public problems. I have transitioned my career into the nonprofit sector, currently working as a community initiatives coordinator with the Great Plains Food Bank and as the gleaning coordinator for GleaNND. Central to both of these roles is the effort to address food insecurity in North Dakota and Clay County, Minnesota.

REASON FOR YOUR INTEREST TO SERVE ON THIS COMMISSION:

In 2017, I was hired to be a gleaning coordinator, working to implement the Cass Clay Food Commission's gleaning blueprint and have now overseen two gleaning seasons with GleaNND. Through that role, I have become engaged in the local food community and am continuously impressed by the passion and wide breadth of projects that exist in this arena. Earlier this year, I joined the Great Plains Food Bank as a community initiatives coordinator and am grateful to be expanding my experience working in food insecurity as part of the Ending Hunger 2.0 department, which seeks to address the root causes of hunger. I have great respect for the Cass Clay Food Commission and would appreciate the opportunity to further my involvement within the food system to ensure that everyone in our community has access to fresh, healthy food.

PLEASE PROVIDE A BRIEF BIO (200 WORDS OR LESS): NOTE: THIS MAY BE USED FOR PUBLICATION TO DESCRIBE THE COMMISSION.

Janice Tweet is a community initiatives coordinator with the Great Plains Food Bank. She holds a Master of Public Policy degree from the University of Minnesota, as well as a Bachelor of Arts degree from the University of North Dakota. She has a legislative background and has been committed to helping provide a voice to those in need throughout her career. In addition to her role with Great Plains Food Bank, Janice also serves as gleaning coordinator for GleaNND. Janice resides in Moorhead.

Signature: Janice Tweet

Date: 12/6/2019

Please return this form to Kim Lipetzky – KLipetzky@FargoND.gov

Or mail to:

Fargo Cass Public Health

Attn: Kim Lipetzky

1240 25th Street South

Fargo, ND 58103-2367

Janice L. Tweet

1402 Belsly Boulevard, #205, Moorhead, MN 56560
701.739.2352 | janicetweet@gmail.com
www.linkedin.com/in/janicetweet

Skills Profile

Research: Extensive professional legislative research background working on a variety of public policy issues; as well as graduate training and experience in areas including qualitative and quantitative analysis.

Communications: Strong written and verbal abilities; presentation and public speaking skills; professional experience maintaining organization websites and social media pages including Facebook and Twitter; experience working with the media and drafting press releases.

Work Style: Work well individually and collaboratively; ability to multi-task and take initiative on projects; experience working in fast-paced environment with public officials; organizational skills; analytical thinker; detail oriented.

Technical: Microsoft Office Suite proficiency; experience working with Salesforce, Intranet Quorum, SPSS, Stata and GIS; as well as multiple specialized, internal databases.

Education

Humphrey School of Public Affairs, University of Minnesota, Minneapolis, MN

Master of Public Policy, May 2011

Concentration: *Public and Nonprofit Leadership and Management*

- Relevant coursework: nonprofit leadership, strategic planning, program evaluation, financial management, policy analysis, economics, empirical analysis and nonprofit-government relationships capstone.

University of North Dakota, Grand Forks, ND

Bachelor of Arts, May 2007

Major: *Political Science*

Minor: *Music*

Work Experience

Great Plains Food Bank, Fargo, ND

Community Initiatives Coordinator, August 2019-Present

- Manage project to create and implement shared client database across full service area.
- Assist with initiatives to find new solutions to combat hunger and its root causes.

GleaND, Fargo, ND/Moorhead, MN

Gleaning Coordinator, January 2018-Present

- Lead task force to develop, implement, and evaluate a food recovery program annually in the Fargo-Moorhead area.

Epilepsy Foundation of Minnesota, Moorhead, MN/St. Paul, MN

Regional Coordinator, June 2016-December 2019

- Educated in schools, assisted living facilities, community organizations and more about seizure recognition and response.
- Coordinated annual Rise Above Seizures Walk in Fargo, raising \$21,000 in 2018.
- Facilitated support groups to offer connection to adults with epilepsy and parents whose children have epilepsy.
- Built relationships with organizations and people impacted by epilepsy.

Work Experience, continued

Office of Senator Katie Sieben, Saint Paul, MN

Legislative Assistant, January 2013-June 2016

- Provided day to day assistance to Senator Sieben, including managing her schedule and serving as the face of the office in person and on the phone.
- Drafted correspondence on behalf of Sen. Sieben to constituents, elected officials, state agencies, and local units of government.
- Assisted Senator Sieben in promoting her legislative agenda by conducting legislative research, as well as identifying and fostering relationships with stakeholders.
- Helped constituents work through casework issues with state government agencies.
- Hired and coordinated interns during the legislative session.
- Assisted in drafting and distributing media publications and district newsletters.

Ramsey County Elections, Saint Paul, MN

Elections Assistant, June 2010-January 2013

- Assisted in recruiting and training election judges for primary and general election service.
- Administered absentee voting practices.
- Helped coordinate and prepare Election Day materials for Ramsey County precincts.
- Assisted in implementing precinct changes due to redistricting.

Senator Byron Dorgan, Washington, DC

Legislative Correspondent, November 2007-July 2009

- Researched and drafted correspondence to an average of 40-100 constituent inquiries per week.
- Worked on a variety of policy issues including: energy, environment, agriculture, interior, transportation, commerce, communications, housing, and trade.
- Attended legislative briefings.

Honors

35 Under 35 Women's Leadership Program, Fargo, ND

Class of 2017

Volunteer Experience

A Place for Hope, Moorhead, MN

Board Member, June 20018-Present

Minnesota State Council - Humane Society of the United States, Minneapolis, MN

State Council Member, July 2015-Present

Moorhead Area Public Schools, Moorhead, MN

Multidistrict Collaborative Member, January 2019-May 2019

Pesticide Use on Public Land

More than a billion pounds of **pesticides** are applied annually in the United States to places like gardens and farm lands to parks and lawns. Until the 20th century, plant extracts or mineral-based materials were used as pesticides, and preventative techniques were common to reduce pests. With the rise of synthetic pesticides in the 1930s and the boom of making chemicals during World War II, the use of these pesticides skyrocketed.

The EPA (Environmental Protection Agency) works hard to approve and regulate these chemicals as they come into the marketplace, but there are more than 16,000 pesticide products to monitor, so it is challenging to measure their impacts on all types of wildlife, and it is difficult to understand the cumulative effects of chemicals and pesticides on the human body. To the credit of pesticides, using them has had vast benefits including increasing crop yields, controlling vector-borne diseases, controlling **noxious weeds**, and making the turf on sports grounds viable. With these benefits and more, many communities across the United States are making decisions on what type of pest control will cause the least amount of harm to their local environments.

Some of the issues with pesticides:

- Pesticides can impact pollinators.
 - **Herbicides** can kill milkweed and nectar plants which are essential for monarch butterflies.
 - Neonicotinoids, an **insecticide** used as a seed treatment, is a neurotoxin for honey bees, impacting their navigation system and foraging abilities. Furthermore, the toxic effects on insects may be correlated to declines in some insect-eating bird populations.
- There are concerns about the world's most widely used herbicide called glyphosate (the main ingredient in the product Roundup), such as:
 - It appears to disrupt microbes in honey bees' digestive tract, which may make them vulnerable to infections and pathogens. This is especially concerning due to the rapid decline of honey bee colonies in the United States.
 - The World Health Organization's (WHO) cancer agency has evaluated glyphosate and found it to be "probably carcinogenic to humans."
 - The use of glyphosate on crops has rapidly increased in the past 25 years. Its use on crops has increased from 13.9 million pounds in 1992 to 287 million pounds in 2016.
- Workers producing synthetic ingredients, such as chemists and manufacturing workers, and those spraying pesticides, such as farm workers and local applicators, are at the highest risk of acute toxic exposure from these chemicals.
- Pesticides can contaminate surface water and groundwater systems when there is water runoff on treated areas.
- Organophosphate pesticides, commonly used in **vector** control, are neurotoxic to humans at certain exposure levels and have been linked to higher rates of childhood ADHD. Long term exposure can cause neurological symptoms like disorientation, depression, and loss of memory.
- The herbicide atrazine, which is banned in the EU, has been linked to cancer, infertility, and birth defects. It has been found in over 90% of the water supply in the U.S.
- During the application of pesticides, they can drift to other areas. Scientists have found that most of the sprayed pesticides (95-98%) do not hit their intended mark. Pesticide drift can be present for days and weeks and even months after application.
- Children are more easily harmed by pesticides than adults, because their bodies and brains are growing and cells are dividing at a more rapid rate than adults.

Tackling the issue:

- Cities across the United States, such as Seattle-Tacoma, are implementing **Integrated Pest Management (IPM)** plans to reduce the use of pesticides in their area.
- Cities are creating no-spray buffer zones around playgrounds in parks and at schools
- Some cities, such as Chicago, are banning glyphosate for use on public lands, while other cities like Vancouver are banning the use of glyphosate publicly and privately, except for controlling for certain noxious weeds.
- Forty-three states, including North Dakota and Minnesota, have preemption laws for pesticides, which limit the ability of city and county governments to ban or restrict these products. Canadian cities do not have these laws, and more than 170 have banned cosmetic lawn care pesticides. In 2013, Tacoma, Maryland's city council restricted the use of cosmetic lawn care pesticides, becoming the first to do so in the United States.
- Minnesota cities, like Stillwater and Shorewood, have adopted rules to restrict pesticide use to protect local pollinators.
- In 2019, the City Council of Portland, Maine passed a ban on both public and private use of synthetic pesticides, pairing it with a fine of \$100-\$500, which is the strongest pesticide reduction policy this country has seen yet. A key aspect of the new ordinance is the creation of an advisory committee to educate the community on non-chemical methods to maintain lawns and gardens.
- Minneapolis Parks Department has adopted an IPM strategy to manage its more than 6,800 acres.
- In 2005, Lawrence, KS piloted a program for a pesticide-free area in a local park, and in 2008 an IPM was created for the department.

Key Definitions

Pesticide: a substance that kills plants, animals, or other organisms to reduce the economic threshold of the pest

Herbicide: a plant-killing substance

Insecticide: an insect-killing substance

Integrated Pest Management (IPM): an ecosystem-based approach to managing pests, whether the pest is a weed, insect, fungus, or other unwanted organisms. This type of management focuses on prevention and monitoring instead of a reactive approach and uses many types of methods to suppress pests. Whenever possible, the least-toxic methods are engaged before the more toxic ones.

Noxious weeds: plants that can damage crops, injure livestock or poultry, or negatively affect irrigation, navigation, natural resources, public health, or the environment. Simply put, they are extremely pesky plants.

Vector: an organism that transmits a disease, usually it refers to a bloodsucking insect. Regarding pesticides, mosquitoes are the most common vector to control as they can transmit West Nile virus to humans

Aktar W, Sengupta D, and Chowdhury A. NCBI. Impact of pesticides use in agriculture: their benefits and hazards. (online). Published 2009 March. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2984095/>

Balter M. Yale Environment 360. Bee Alert: Is a Controversial Herbicide Harming Honeybees? (online). Published 2019 May 7. <https://e360.yale.edu/features/bee-alert-is-a-controversial-herbicide-harming-honeybees>

Pesticide Action Network North America (PANNA). Pesticide Drift: In the air & in our communities (online). Accessed 4 January 2020. https://www.panna.org/sites/default/files/Drift_Issue%20brief_FINAL_2.pdf

Porter M. A Beyond Pesticides Factsheet. State Preemption Law: The battle for local control of democracy. (online). Accessed 2019 January 1. <https://www.beyondpesticides.org/assets/media/documents/lawn/activist/documents/StatePreemption.pdf>

Walljasper C & Ferrando R. Harvest Public Media. Use of Controversial Weed Killer Glyphosate Skyrockets on Midwest Fields. (online). Published 2019 May 27. <https://www.harvestpublicmedia.org/post/use-controversial-weed-killer-glyphosate-skyrockets-midwest-fields>

Pesticide Use on Public Land

Cass-Clay Community Snapshot
January 2020

Introduction

In the summer of 2017, a coalition of local food organizations was searching for land for a community garden and incubator farm. The non-profit organizations Growing Together and FARRMS worked with the City of Fargo to select flood buy-out land in South Fargo. When they reached the point of holding a public hearing to use this land for their programs, Cass County Weed Control reached out with the news that the land had been sprayed with an herbicide which remains in the soil a few months to a few years. They were not able to use this land for farming activities and had to find a new location.

This local narrative highlights how synthetic pesticides for weed and insect control can affect the local food system. It can be challenging to track down who is spraying what and where, and how long those chemicals remain in the soil. The information below can be used as a guide for citizens and public officials to understand which department in each jurisdiction makes decisions about these chemicals and the jurisdictions' processes in controlling for pests on public land.

The term *public land* is broad in nature, but for this community snapshot, it will include parks land, flood buy-out land, road ditches, and the city and county right-of-way (ROW) systems, which is primarily boulevard areas next to parks, ponds, or other city- or county-owned properties. The main type of public land absent from this snapshot is the school system, which will be featured in a separate document so it can be fully addressed.

Also included below is how local nonprofits are helping reduce pesticide use by planting prairie grasses, trees, and pollinator habitats, and a section of possible community actions related to pesticides. The resource section provides some helpful websites, and an appendix contains tables listing the local jurisdictions' pesticide products.

Cass-Clay Pesticide Use

Cass County Vector Control

As a unit of Cass County Government, Vector Control aims to control the mosquito population to reduce the potential for transmission of diseases like the West Nile Virus as well as decrease the number of nuisance mosquitoes which have the potential to chase residents indoors on hot summer nights. Vector Control uses Integrated Pest Management (IPM) to reduce pests while causing minimal effects to the public and the environment. A three-member board appointed by the County Commission governs Vector Control and the day-to-day operations are carried out by the Vector Director.

Larval control in standing water is the most effective way to reduce mosquito populations, and it also reduces the need for aerial or truck-mounted spraying. Vector Control spends about 80% of its resources on treating breeding sites for mosquito larvae and pupae.

Vector Control uses data from 40 different trap sites in Cass and Clay Counties to determine if there is a need to spray for adult mosquitoes. When the threshold is hit, they utilize truck-mounted spraying and, if

weather conditions are appropriate, they can use aerial spraying as well. The spray droplets are extremely small (micron-size) and must make contact with a mosquito in flight to be effective. The active ingredient in this sprayed chemical (Permethrin) is derived from the chrysanthemum plant.

In recent years, Cass County Vector Control has actively worked toward better practices, such as:

1. Changing to chemicals with lower toxicity.
2. Spraying for adult mosquitoes fewer times per season. Twenty years ago, the department would spray 15-16 times per season and now they usually spray 3-4 times per season.
3. Having a pollinator protection plan, which provides buffer areas for commercial beekeeping zones.
4. Educating the public on how to help reduce mosquito populations, such as getting rid of standing water on their property and keeping the grass mowed.

Residents can receive notifications on spraying schedules by signing up on their website or by checking Vector Control's social media accounts (Facebook and Twitter).

Contact: Ben Prather, Vector Director, PratherB@casscountynd.gov
www.casscountynd.gov/our-county/vector-control

Cass County Weed Control

Cass County Weed Control is overseen by a five-member board which is appointed by the County Commission, and the Weed Control Officer is in charge of day-to-day operations. The main areas they control for noxious weeds are rural road ditches and flood buy-out land. The road ditch land is fixed while the flood buy-out properties may change annually based on a list provided by the County Commission. Other local agencies can also submit work orders to Weed Control for their services.

The Weed Control Officer checks the weed control areas in the spring and once in the summer and sprays as needed. Many of the weeds are perennial, so he only needs to spray them once per year. The Officer contracts out for the road ditch system and these renew every two years in the winter. For the flood-buyout land, the Officer himself monitors the land since only small equipment is needed.

Interesting to note: residents adjacent to a flood buy-out property can release the County for care of the land and take responsibility for mowing and weed control, although the Officer will still monitor to make sure that neighbor is taking care of the property.

Cass County Weed Control strives to minimize its impact on wildlife and neighboring residents using procedures such as:

1. Always following the chemical label when they spray, such as not spraying on standing water in a ditch,
2. Spraying selectively only when noxious weeds are present, and
3. Starting this year to flag flood buy-out land that has been sprayed to notify the public.

The other ways they notify the public of spraying is by putting it in the paper and communicating with other local media.

Contact: Stan Wolf, Weed Control Officer, WolfS@casscountynd.gov
www.casscountynd.gov/our-county/weed-control

City of Fargo

The Public Works Department contracts out most of its weed control (currently to Valley Green), but the department does a little spraying internally as well. Their flood buy-out land is on a three-year contract, and the contractor only sprays up to the toe of the levee (where the levee meets the natural ground) and leaves the levee to the river as natural grasses. They do not typically notify the public when they spray.

They have worked with Audubon Dakota in the past to convert some land to native grasses, such as near Lions Conservancy Park.

Contact: Matt Andvik, Fargo Public Works Services Manager, mandvik@fargond.gov
fargond.gov/city-government/departments/public-works

Fargo Parks District

With over 2,100 acres of land, the Fargo Parks District has a vast amount of land to manage. How they control weeds can resonate throughout the natural spaces in the area. They are overseen by a five-member committee of elected citizens, and the day-to-day operations are managed by the Executive Director.

Trained and certified Parks staff spray in the spring and fall on a set schedule, once weeds are actively growing and weather permits. They put a notice in the paper when they will be spraying. Applications may occur outside of this schedule based on monitoring each site. After they spray, the areas are marked with signage that tells individuals to stay off the area until the turf is dry along with the application date. To limit the effects on residents, they do not spray when people are in the area and they adhere to the conditions of the product label.

They try their best to keep the turf healthy so it can outcompete the weeds, which reduces the need to spray. If there is an area where weed seeds tend to blow in, they attempt to mow that area to keep weeds at bay or work with nearby neighbors to try to reduce the seeds blowing onto Parks' maintained areas. Their partnership with Audubon Dakota to convert areas of Parks land into prairie grasslands and riparian wooded areas has reduced the need for spraying and mowing and has saved Parks an estimated \$150 to \$200 per acre each year.

Contact: Dave Bietz, Operations Director, DBietz@fargoparks.com
www.fargoparks.com

West Fargo Parks Department

A five-member elected Parks Board oversees the West Fargo Parks District while the Executive Director manages the day-to-day operations overseeing its 30 parks, bike paths, and facilities.

For weed control, they have a seasonal schedule with local weed control contractors to spray on groomed grass areas, which are locations where grass is kept mowed to around 3 inches. Their contracts are annual and are reevaluated each year. There are some small areas that internal staff sprays for weeds as well.

When spraying has occurred, they post signs around the property to notify residents. They do not make an application if people are in the park area. As far as reducing the need for herbicides, they have not worked with Audubon to convert prairie grasses, but they do make it their practice to keep their grass cut higher to help keep weeds from becoming established.

Contact: Josh Mathern, Parks Operations Manager, josh@wfparks.org
www.wfparks.org

Clay County Soil & Water Conservation District

The Soil & Water Conservation District (SWCD) runs the County Ag Inspector Program, which manages the insect and weed control in Clay County. For weed control, the County Ag Inspector, Highway Department, and the spray contractor (currently L&M Road Services out of Ulin, MN) meet each year to contract and plan for spraying. They have a network of 150 miles of county roads to spot spray annually for noxious weeds. They start in the spring and spray throughout the summer as needed. They spray again in the fall, but wait until crops are harvested to minimize the impacts on nearby land. The Highway Department mows twice per year - once around August 1st and again in late fall.

- Not all of Clay County's flood buy-out land is sprayed every year, only if they have noxious weed issues. Most of the time, the reason they spray is due to a complaint from a neighboring landowner, so they have increased their monitoring in the past few years to stay on top of the noxious weeds and avoid complaints. For this spraying, they hire the same spray contractor who does the highway system.
- In 2019, SWCD worked with Pheasants Forever and Clay County to make a pollinator habitat out of eight acres of flood buy-out land (Crestwood Addition), and they are interested in creating more pollinator habitats on flood buy-out land in the future.
- The department does not have a notification system for residents, as the time they spray varies from year to year.
- There is a leafy spurge biological control program in Minnesota using leafy spurge beetles, but it has to be a couple of acres or larger to be effective; therefore, it does not work for most of the road system.
- There is no mosquito control in rural Clay County.

Contact: Gabe Foltz, District Technician / County Ag Inspector, gabriel.foltz@clay.mnswcd.org
claycountymn.gov/272/Soil-Water-Conservation-District

City of Moorhead

The City of Moorhead Public Works Department maintains over 1,000 acres of parks and right-of-way (ROW) property within the City limits and long the river corridor. For ROW property, the City does the spraying internally twice per year. They have been working with Audubon Dakota since 2015 to restore prairie in the ROW system so it is more low maintenance which equals fewer herbicide treatments and a

better habitat for pollinators. They do not post spraying schedules on the website, but mark the area being sprayed with signs to notify nearby residents.

- Moorhead is different than Fargo and West Fargo in that Parks is a Department of the City, so the weed control function is performed by the Public Works Department.
- The Public Works Department has partnered with Audubon Dakota to establish nine sites of about 175 acres of restored natural landscape where they no longer have to mow or apply herbicides. It saves money and is better for the environment.
- The herbicides Public Works uses are the same types used by commercial lawn companies and homeowners.
- Cass County Vector Control performs the aerial spraying for mosquito control in Moorhead.

Contact: Steve Moore, Public Works Director, steve.moore@ci.moorhead.mn.us
www.cityofmoorhead.com/departments/public-works

City of Dilworth

The City of Dilworth does not contract out for pest or weed control - everything is done internally. They do not have a determined schedule for weed control; instead, it is based on regular monitoring. They spray for mosquitoes regularly when they become a nuisance. For weed control, they do not notify residents, but for mosquito spraying, they use social media, their website, and contact the media.

Contact: Peyton Mastera, City Administrator, peyton.mastera@ci.dilworth.mn.us
www.cityofdilworth.com

Non-profit Involvement

Audubon Dakota

Audubon Dakota is a local non-profit striving to conserve and restore natural ecosystems, especially focused on birds and their habitats. In 2015, they partnered with Fargo Parks Districts, Buffalo - Red River Watershed District, and the cities of Fargo and Moorhead to create the *Urban Woods and Prairies Initiative*. The project began with the goal of restoring grassland and woodland areas in the Fargo-Moorhead area, but now has extended across North Dakota with 2,000 acres to be enrolled in this year. It takes about 3-5 years to establish the prairies with minimal spot spraying for weeds, but after this period, there is virtually no need to spray because the weeds cannot beat out the prairie grasses.

The benefits of this project are numerous. They help residents connect with nature, enhance woodlands, restore wetlands, and create animal habitats, especially for the declining populations of grassland birds and pollinators. These areas reestablish water filtration, help prevent floods, and cut down mowing expenses and herbicide applications for the jurisdictions. In its short lifespan, the project has done incredible work to revitalize the prairies in the Fargo-Moorhead community and now the state of North Dakota.

Contact: Mike Bush, Outreach Coordinator, mbush@audubon.org
dakota.audubon.org/conservation/urban-woods-and-prairies-initiative

Longspur Prairie Fund

Education is crucial for a community to make changes regarding its weed control methods. Enter Longspur Prairie Fund. This local non-profit works to restore local prairies and wetlands, educate residents about the area's ecology and wildlife, and assist local businesses and organizations in creating habitat adoption strategies. Established prairies need fewer herbicide treatments and provide critical habitats for local wildlife and pollinators.

Contact: Peter Schultz, Executive Director, schultz@longspurprairie.org
www.longspurprairie.org

Pheasants Forever

Pheasants Forever is dedicated to the conservation of pheasants, quail, and other wildlife through habitat improvements, public awareness, education and land management policies and programs. A local chapter partnered with Clay County to create pollinator habitat on flood buy-out land.

www.pheasantsforever.org

River Keepers

Established in 1990, River Keepers hosts river- and water-related activities so Fargo-Moorhead area residents understand the value and importance of the Red River, properly maintain it, and safely enjoy it. Their event called *Reforest the Red* works in conjunction with the cities of Fargo and Moorhead and the local Parks Districts to bring volunteers together to plant trees and shrubs near the river. The event builds up the riparian area on public land near the Red River, which is then no longer mowed or maintained.

Contact: Christine Holland, Executive Director, christine@riverkeepers.org
www.riverkeepers.org

Community Actions

Local governments can:

- Assure inter-agency communication remains high to reduce the risk of future farmland being sprayed with chemical with a long soil residuals.
- Assure government pesticide applicators and contractors are wearing the appropriate safety gear when applying pesticides to reduce their exposure.
- Educate residents on how to reduce weeds in a safe and environmentally-friendly way and continue to provide education on how to reduce exposure to mosquito-borne diseases.
- Continue working with local non-profits to transition more public land to native prairie grasses, woodlands, and pollinator habitats.
- Map out future flood buy-out land that might be used for farming and gardening to assure it is not sprayed with products with long-lasting soil residuals.
- Move toward Integrated Pest Management in managing public land. For herbicides, options to reduce chemical treatments are practices like burning, steaming, hot foam, and hand-weeding.

- Recruit teams of volunteers to hand-weed areas of noxious weeds to reduce herbicide treatments.
- Work with local Parks Departments to create a no-spray buffer zone around playground areas, since children are most vulnerable to toxic effects of pesticides.

What can I do?

- Connect with Longspur Prairie Fund (longspurprairie.org) to convert some of your land - home, business, or rural - into native prairie grasses
- Ask to take over neighboring flood-buyout land from the County and maintain it with alternatives to chemical pesticides
- Work to make your yard, neighborhood, or our community a Honey Bee Haven (honeybeehaven.org)
- Connect with your local public officials if you have questions regarding weed or pest control strategies

Resources

Beyond Pesticides

<https://www.beyondpesticides.org/>

King County, Washington - Integrated Pest Management (IPM)

<https://www.hazwastehelp.org/ChemToxPesticides/ipm.aspx>

IPM (Integrated Pest Management) Institute of North America

ipminstitute.org

Map of U.S. Pesticide Reform Policies - Beyond Pesticides

<https://www.google.com/maps/d/u/0/viewer?mid=1VLpVWvifO2JOrgxf1-d1DLyDruE&ll=47.00415731754826%2C-107.75836282084146&z=4>

NDSU Weed Control Guides

www.ag.ndsu.edu/weeds/weed-control-guides

Pesticide Action Network (PAN)

<http://www.panna.org/>

Xerces Society for Invertebrate Conservation

xerces.org/pesticides

For more information, please contact Kim Lipetzky with the Fargo Cass Public Health Office at 701-241-8195 or klipetzky@fargond.gov

Appendix A: Pesticides Used in Cass-Clay

Table 1: Products used by Cass County Vector Control in 2019

Pesticide	Residual	Background
Bti granules	Does not exceed 7 days	Bti is a microorganism that produces chemicals toxic to insects only when ingested by insects with an alkaline digestive tract. Per the EPA, when used according to the label, it is essentially nontoxic to humans. Most common pesticide used by Cass County Vector Control.
Vectolex FG	Up to 28 days	The active ingredient is a bacteria, and has a very similar mode of action as Bti. It is used by applicators to control larval populations in sites that hold water for extended periods of time.
Metalarv SPT	Up to 42 days	This product releases S-Methoprene insect growth regulator to control larvae populations.
Altosid Pellets	Up to 30 days	This insect growth regulator is applied to areas of standing water to control larval populations.
Altosid XR 150 day Briquettes	Up to 150 days	An insect growth regulator that is used to control larvae populations. The long residual allows some sites to be treated once per season. These are ideal for sites with heavy water flow and those difficult to access on foot.
Agnique MMF and G	Up to 22 days	These are monomolecular surface films intended to control larvae and pupae populations in standing water. The oil expands to cover the water surface area so the larvae and pupae cannot breathe at the surface. Agnique MMF is made up of a chemical called Poly (oxy-1,2-ethanediyl), alpha-isooctadecyl-hydroxyl, and Agnique G is a granular form.

Table 2: Cass County Weed Control products used in 2019

Herbicide	Target Weed	Location
Freelexx	Canada thistle Leafy spurge Absinth wormwood	State, county, township road right-of-way
Makaze (glyphosate)	all weeds	Spot spray for control of grass and broadleaves
Mec-Amine-D	Lawn weeds Dandelion	Flood lots near residential properties Cass County Jail
Method	Canada thistle Leafy spurge	State, county, township road right-of-way Water Resource properties

	Absinth wormwood	
Milestone	Canada thistle Absinth wormwood	State, county, township road right-of-way Water Resource properties Cass County Park, Brewer Lake
Platoon 2,4-D	Canada thistle Dandelion	Flood lots near residential properties
Tordon	Canada thistle Leafy spurge Absinth wormwood	State, county, township road right-of-way Water Resource properties
Vastlan & Element 4	Purple loosestrife	Cattail areas

Table 3: Weed and pest control products used by Cass-Clay jurisdictions in 2019

Jurisdiction	Product
City of Fargo	Escalade II Lesco 3
Fargo Parks	Millennium Ultra 2 Milestone Quali Pro
City of West Fargo	Roundup (Buccaneer) 2, 4-D (Amine)
West Fargo Parks	T33 Tri-Kill Plus
Clay County Soil & Water Conservation District	Graslan Vastlan Milestone
City of Moorhead	T-Zone SE
City of Dilworth	MEC Amine-D Cornerstone Rodeo Plus Milestone Pramitol 25E Permanone (insecticide) Tempo SC Ultra (insecticide) Aquabac (insecticide)