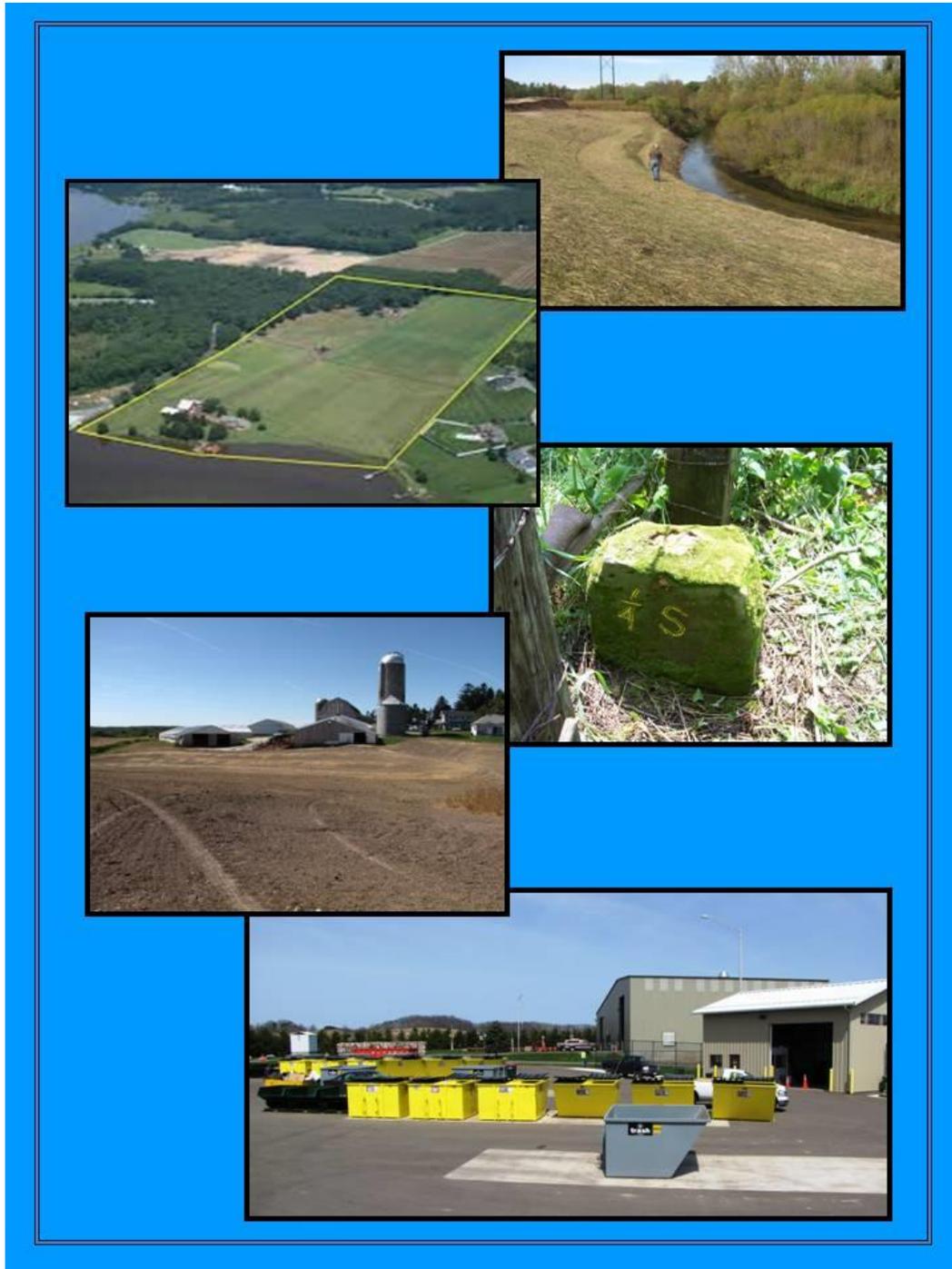


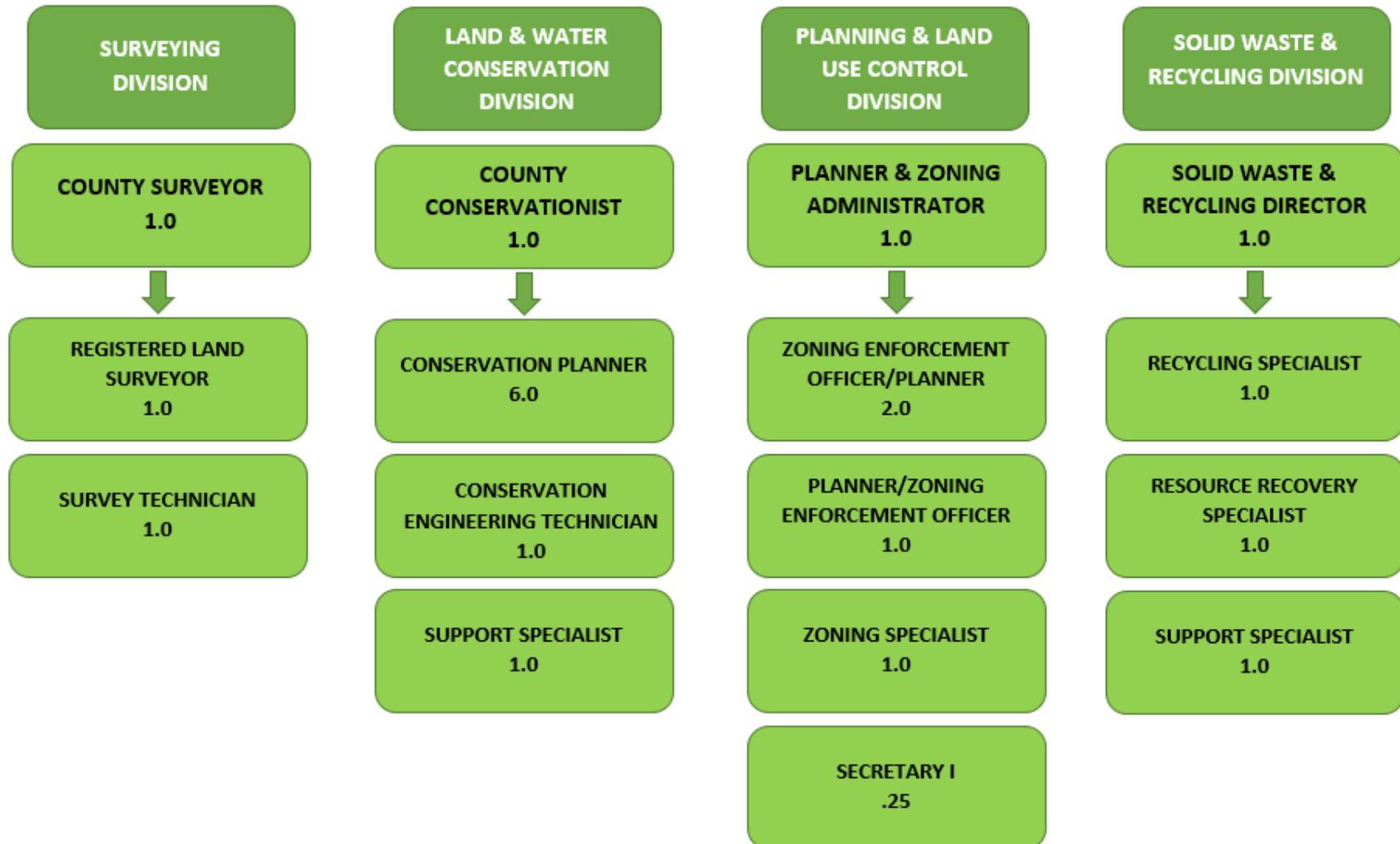
2019 ANNUAL REPORT

ENVIRONMENTAL SERVICES DEPARTMENT

DUNN COUNTY



ENVIRONMENTAL SERVICES DEPARTMENT



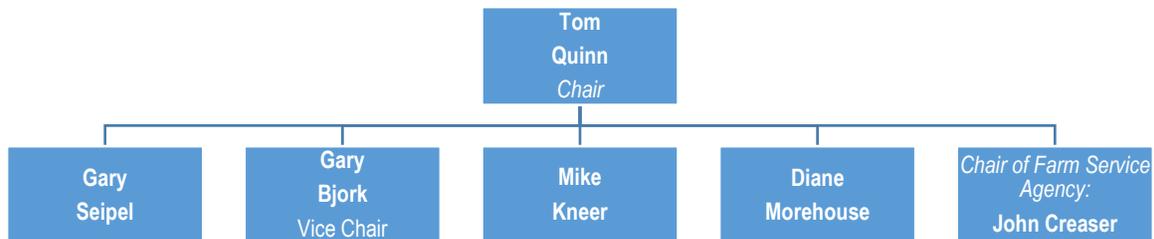
PLANNING, RESOURCES & DEVELOPMENT COMMITTEE

The Planning, Resources and Development Committee is the home Committee for the Environmental Services Department which is made up of four divisions, including Land and Water Conservation, Planning and Land Use Control, Surveying, and Solid Waste and Recycling. It is also the home Committee for the Register of Deeds. For issues within the jurisdiction of the Land Conservation Committee as described in Wis. Stat. § 92.06, the Chairperson of the Farm Service Agency is also a member.

The Committee provides direction and policy through long-range plans and ordinances that support countywide natural resource management programs. These programs promote the public health, safety, convenience, and the general welfare of the citizens while recognizing the present and future needs of agriculture, forestry, and industry. The Committee encourages planned and orderly land use and development as it works to halt and reverse the depletion of Dunn County's soil resources, pollution of its waters, and protection of its groundwater resources. They also conduct public hearings for rezone requests, changes in ordinances and other matters, and make recommendations to the full County Board for consideration of those items.

As a rule, the Committee meets twice a month on the second and fourth Tuesdays. Exact dates are subject to change depending on the needs of the public and the Committee members. Meetings are usually held in Room 54 at the Community Services Building and begin at 8:30 am.

2019 PLANNING, RESOURCES & DEVELOPMENT COMMITTEE ORGANIZATIONAL CHART



PLANNING & LAND USE CONTROL DIVISION

PLANNING & LAND USE CONTROL STAFF

BOB COLSON.....Planner & Land Use Control Administrator
JANET RIEDEL.....Zoning Specialist
VACANT..... Zoning Enforcement Officer/Planner
MICHELLE HRDLICKA..... Zoning Enforcement Officer/Planner
ADDISON VANG (MAY VACANT)..... Planner/Zoning Enforcement Officer
NANCY RADKE (NOVEMBER VACANT).....Secretary I

ZONING

January 26, 2015, the Planning and Land Use Divisions were merged. The merge affects the delivery of services, at least from an organizational viewpoint. The division's work plan is to concentrate on zoning/sanitation during the building season (April -December) and to concentrate on planning (December – April). There will be overlap between the two disciplines and date specific projects will be scheduled accordingly.

ZONING PERMITS

In 2019, 243 zoning permits were issued. These permits are issued for multiple uses including, but not limited to, new dwellings, garages, sheds, Ag use buildings and additions to existing structures.

PERMITS ISSUED BY YEAR

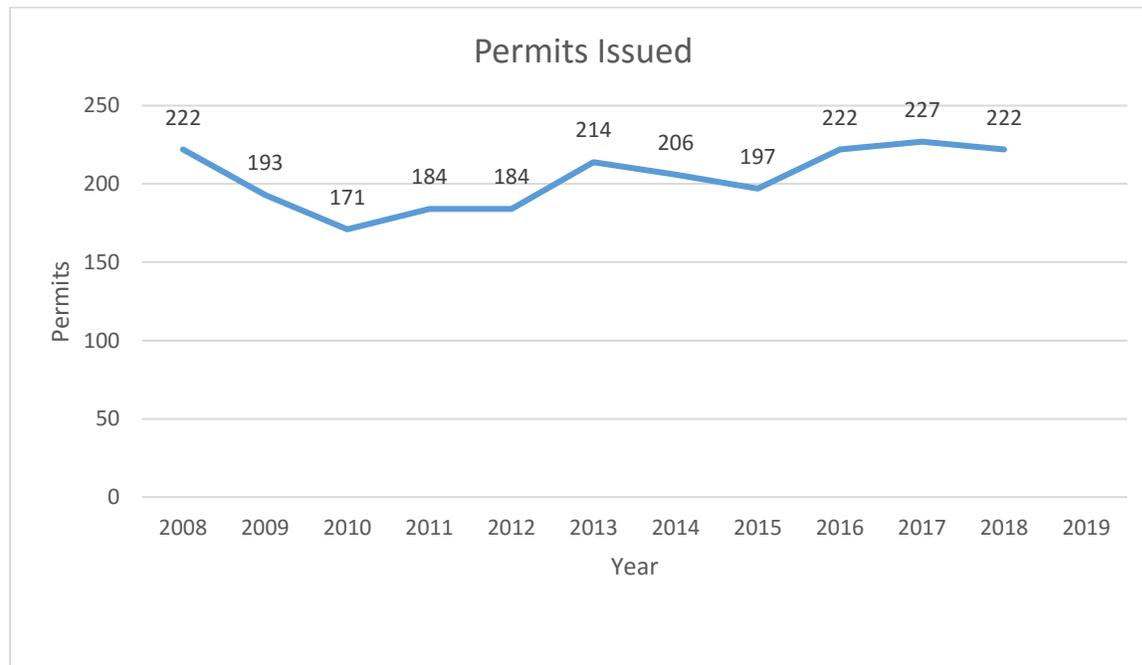


Table A shows the new housing starts in 2019 (this includes on-site constructed and manufactured homes).

2019 HOUSING STARTS Table A

TOWNSHIP	NEW HOUSE	NEW MOBILE HOME	DUPLEX	TOTAL
COLFAX	3	0	0	3
DUNN	5	0	0	5
EAU GALLE	0	0	0	0
ELK MOUND	0	0	0	0
GRANT	0	0	0	0
HAY RIVER	1	0	0	1
LUCAS	2	0	0	2
MENOMONIE	10	2	0	12
NEW HAVEN	0	0	0	0
OTTER CREEK	1	0	0	1
PERU	1	0	0	1
RED CEDAR	9	0	0	9
ROCK CREEK	0	0	0	0
SAND CREEK	0	0	0	0
SHERIDAN	0	0	0	0
SHERMAN	2	0	0	2
SPRING BROOK	1	0	0	1
STANTON	2	0	0	2
TAINTER	7	0	0	7
TIFFANY	2	0	0	2
WESTON	0	0	0	0
WILSON	1	0	0	1
TOTAL	47	2	0	49

New house defined as:

- stick built
- manufactured (modular)

New mobile home defined as:

- manufactured (single wide chassis)

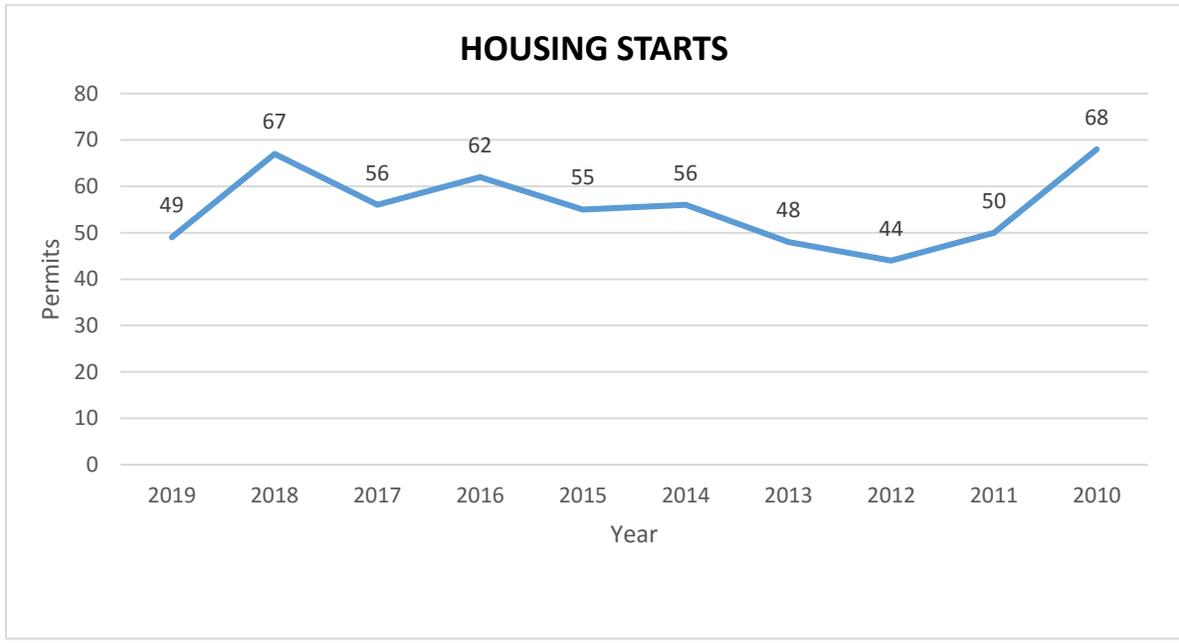
Duplex defined as:

- two units in one building

A comparison of the number of housing starts (per township) over the last ten years is shown on the following tables and charts with a chart depicting the total housing starts in Dunn County over the past ten years shown.

HOUSING STARTS

TOWNSHIP	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	TOTALS
COLFAX	3	9	5	6	3	9	5	6	4	7	57
DUNN	5	8	3	3	4	4	1	1	1	4	34
EAU GALLE	0	0	0	0	1	0	0	1	0	2	4
ELK MOUND	0	0	0	0	0	0	1	0	0	5	6
GRANT	0	2	2	3	2	3	1	0	2	1	16
HAY RIVER	1	3	3	3	2	2	3	1	4	1	23
LUCAS	2	2	3	2	0	1	1	0	3	2	16
MENOMONIE	12	9	5	8	5	5	8	7	7	7	73
NEW HAVEN	0	0	0	0	0	1	1	0	0	2	4
OTTER CREEK	1	2	4	2	3	1	2	0	2	2	19
PERU	1	1	0	0	1	1	0	0	1	1	6
RED CEDAR	9	7	8	11	7	10	7	3	8	5	75
ROCK CREEK	0	0	0	0	1	7	0	0	0	0	8
SAND CREEK	0	0	0	1	0	0	0	1	0	0	2
SHERIDAN	0	1	1	3	1	3	4	1	2	4	20
SHERMAN	2	2	5	5	6	1	1	5	2	6	35
SPRING BROOK	1	0	1	1	1	1	0	0	1	6	12
STANTON	2	6	3	4	3	1	0	0	0	1	20
TAINTER	7	7	6	2	8	4	6	13	10	6	69
TIFFANY	2	4	3	0	3	1	2	0	1	4	20
WESTON	0	1	1	4	1	0	5	4	1	0	17
WILSON	1	3	3	4	3	1	0	1	1	2	19
TOTALS	49	67	56	62	55	56	48	44	50	68	555



PRIVATE ON-SITE WASTEWATER TREATMENT SYSTEM (POWTS)

In 2019 175 POWTS were installed and inspected in Dunn County including systems installed in the City of Menomonie and villages.



Installation of an at-grade drain field system

POWTS INSTALLATION BY YEAR



POWTS BY JURISDICTION AND TYPE

	NEW SYSTEM	REPAIR RE-CONNECT REPLACME	TOTAL 2019	TOTAL 2018	TOTAL 2017	TOTAL 2016	TOTAL 2015	TOTAL 2014	TOTAL 2013	TOTAL 2012	TOTAL 2011	TOTAL 2010
COLFAX	4	4	8	11		8	6	12	6	7	6	10
DUNN	6	5	11	10		7	9	4	5	7	4	10
EAU GALLE	3	4	7	5		2	3	6	7	4	4	6
ELK MOUND	4	4	8	11		7	16	4	12	9	9	10
GRANT	1	11	12	4		6	5	3	4	0	3	2
HAY RIVER	1	4	5	7		3	2	4	4	4	4	2
LUCAS	2	1	3	5		3	3	2	3	1	3	2
MENOMONIE	9	12	21	23		12	14	16	17	13	13	11
NEW HAVEN	3	1	4	1		0	3	3	2	3	2	5
OTTER CREEK	1	2	3	5		3	3	2	6	3	3	3
PERU	1	0	1	2		1	3	3	1	2	1	1
RED CEDAR	16	6	22	14		15	15	14	18	14	16	9
ROCK CREEK	5	4	9	9		5	3	14	6	6	8	1
SAND CREEK	1	3	4	2		3	1	2	2	1	1	1
SHERIDAN	0	1	1	2		7	2	3	6	2	4	4
SHERMAN	6	1	7	4		4	4	3	6	7	5	7
SPRING BROOK	8	7	15	16		10	18	16	7	9	7	9
STANTON	1	4	5	6		5	2	2	1	1	3	2
TAINTER	8	11	19	21		11	18	12	12	25	16	11
TIFFANY	3	2	5	5		1	7	2	4	1	2	5
WESTON	0	2	2	3		3	3	3	10	6	3	0
WILSON	1	2	3	3		3	3	1	1	0	4	2
VILL OF COLFAX	0	0	0	0		0	0	0	0	1	1	0
VILL OF BOYCEVILLE	0	0	0	2		0	1	0	0	0	0	0
VILL OF ELK MOUND	1	0	1	0		0	0	0	0	0	0	0
VILL OF DOWNING	0	0	0	1		0	0	0	0	0	0	1
VILL OF RIDGELAND	0	0	0	0		0	0	0	0	0	0	0
VILL OF KNAPP	0	0	0	1		1	0	0	0	0	0	0
VILL OF WHEELER	0	0	0	0		0	0	0	1	0	0	0

CITY OF MEN.	1	1	2	9		3	5	7	6	3	2	2
TOTALS			178	182	150	123	149	138	147	129	124	116

WISCONSIN FUND

The Wisconsin Fund is a product of the 1978 State Legislation which provides financial assistance to qualified home owners experiencing a failing septic system. Dunn County has been a participant in the program since April 18, 1990. In 2019, we worked with one homeowner who received a total of \$7,000 in grant assistance.

BOARD OF ADJUSTMENT

BOA is a quasi-judicial body appointed by the County Board Chair. The 2019 appointments:

Mark Dietsche, Chair	Jill Noreen	
Lisa Bragg-Hurlburt	Crystal Halvorson	Larry Glynn, Alternate
Tim Lienau, Vice Chair		Patrick McCoy, Alternate

The primary role of the BOA is to review and decide cases where there is an alleged error in a zoning decision or where a relaxation of the ordinance is sought. Zoning board may be authorized to participate in three types of decision-making to include administrative appeal (a legally contested order or decision of the zoning official usually associated with a contested map or text interpretation); variance (a relaxation of a dimensional or use standard specified in the zoning ordinance); special exception/conditional use (a use or dimensional exception listed in the zoning ordinance that is not permitted by right but may be granted if certain conditions are met.)

The Board of Adjustment convened 15 times and rendered decisions on 15 requests.

SURVEYS

Zoning collaborates with the Survey Division on survey map review. Zoning is involved to make sure that zoning standards such as, minimum lot size and access are met. With the adoption of the new zoning ordinance we also review lots, in the General Agriculture District, for compliance with the County's density requirement. Finally, we review the Shoreland Wetland Ordinance for compliance.

REZONES

There were 04 rezone requests in 2019 with 04 recommendations of approval and 01 recommendation to deny were forwarded from the PR&D Committee for action by the County Board. The County Board sent 01 (American Patriot Mini Storage) rezone back to PR&D with instructions to approve. 04 rezone requests were approved by the County Board.

UNIFORM DWELLING CODE

The State Uniform Dwelling Code (UDC) went into effect on June 1, 1980. Each township administers the Uniform Dwelling Code (UDC) and has contracted with a UDC inspector or allows the State to provide the town with an independent inspector. The Zoning Office assists homeowners with the name, address, and telephone numbers of the inspectors.

2019 ZONING GOALS

- Maintain the Zoning Ordinance through amendments
- Assist with the rewrite and adoption of the Subdivision Ordinance
- Update/ maintain the Sanitary (POWTS) data base to include all existing systems.

PLANNING

This report briefly describes past performance and places a strong emphasis on the Planning Division's goals. The Planning Division is charged provide the planning, organizing, directing, and supervision of planning activities at three levels:

- **Internal to the Department** in that the Division shall assist the department in planning for efficient effective operations
- **Internal to the County** is a strategic coordinated planning effort between the Planning part of the Division and other Departments/Divisions and Standing Committees. This area of planning strives to move the County in a positive direction and includes activities such as; plan development, updates and amendments, facilitating meetings/events, etc.
- **External to the County** in that the Division is the responsible party for providing planning services when appropriate and/or assigned.

2019 PLANNING GOALS

Internal to the Department

- **Remain a contributing member of the Self Directed Management Team**

Internal to the County

- **Continue implementation of the Comprehensive Land Use Plan** Implementation is labor and time intensive, while it is impossible for an individual Department/Division to be responsible for implementing the plan it is possible for a single Department/Division to be responsible to coordinate and facilitate implementation efforts. The Planning Division will continue the Implementation process by following the prioritized Short and Long Term Timelines. Begin the 10 year update/amendment of the Comp Plan.
- **Maintain the Farmland Preservation Plan** which was updated and approved by DATCP in, 2016. The plan identifies land which should/could be preserved under the new farmland preservation zoning classifications (Intensive Agriculture and Primary Agriculture) thereby making those land owners eligible to receive tax credits. Currently three Townships (Grant, Lucas and Wilson) are zoned Exclusive Agriculture (IA or PA).
- **Rewrite/adopt the Sustainability Action Plan** the plan has been shelved because of Special Projects. The plan will be reviewed, amended or rewritten as necessary to make it ready for adoption/implementation.
- **Update the Outdoor Recreation Plan (ORP)** The ORP contains five, one year Improvements schedules. Improvements are either capital improvements, projects to be completed by county staff or are projects which are coordinated and implemented by a County partner. While the ORP is scheduled to be modified on a five-year cycle, modifications to the plan can be made at any time. The Dunn County Facility's Department and the Planning Division conduct an annual review of the ORP each November for the purpose of updating schedule for the following year.
- **Amend the Library Plan**
Each year the Library Plan is amended to keep it current.

External to the County

- **City/Town Joint Planning Committee**
Continue to a contributing resource to the members of the committee. The committee is comprised of those units of government which are adjacent to the City of Menomonie. The committee addresses issues common to those units of government in and around the City of Menomonie.
- **Mayor's Sustainability Group**
Continue to a contributing resource to the group. The group consists of the City, County, UW Stout, Sustainable Dunn and a variety of guest speakers that meet every other month to discuss sustainability projects, successes and plans.

PROJECTS

- **Broadband**

The Broadband Team (Dunn County Economic Development Corporation, UW-Extension & Planning Division) conducted a user survey where recipients were asked to provide their name, address, email address and indicate whether or not they have broadband service. Through this effort we identified 2,299 addresses in the Donut without broadband service. It is important to note that every address is not a household or business. For those agreed we shared their contact information and broadband status with local Internet Service Providers (ISP).

The Broadband webpage was launched around July. The webpage has links to the Broadband Study, Broadband Resources, the Broadband Team, Broadband Expansion Grants, Broadband Assistance and Contacts including local ISP's.

Broadband Forward! and Telecommute Forward are certifications offered through the Public Service Commission (PSC). The will request both certifications, the Broadband Forward! Certification may need an Ordinance revision and will require agreements from Community, Resources and Tourism, Highway and Planning, resources and Development Committees to implement Broadband Forward! standards,

- **Outdoor Recreation Plan (ORP)**

The 2016-2020 ORP was adopted on January 18, 2017. The plan has a five-year schedule of improvements/tasks, on February 2018 the Facilities committee approved updates to the schedule to reflect tasks that were completed, moved ahead one year or are scheduled for the next year (2019). The scheduled updates to the ORP was placed on an indefinite hold when the Planner took another position and the decision to not fill the vacant position was made.

- **Dunn County Recreation Park Master Plan**

Early 2018 (March) The Planning Division began working with the Facilities Committee on a Dunn County Recreation Park Master Plan. The Master Plan process includes meetings with stakeholders, spatial analysis, needs assessment, concept plans and preliminary cost estimates. The plan includes two options; stay at the existing location or sell the Recreation Park land and relocate the park outside of the City of Menomonie. The committee did not make a decision on which option to pursue in 2018 but in July of 2019 decided to keep the Recreation Park at its current location. The Master Plan was slated to be completed in 2019 but when the Planner took another position and the decision to not fill the vacant position was made the Master Plan project was placed on an indefinite hold.

- **Bicycle and Pedestrian Plan**

Two open houses were held the first in December 2017 gathered input and the second open house was held in November 2018 to review and comment on plan recommendations. In addition, two regional meetings were held to gather input and discuss integrating local plans into a regional approach. The plan was completed and on June 19, 20219 the County Board adopted the plan by Resolution .

SURVEY DIVISION

2019 SURVEY DIVISION STAFF

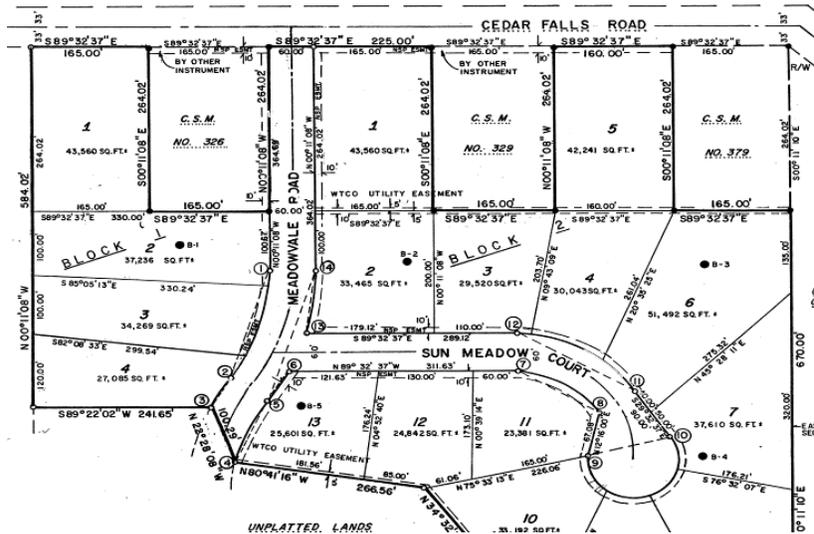
Tom CarlsonCounty Surveyor
 Gregg Batzer.....Deputy Surveyor
 Troy StowellSurvey Technician



Troy Stowell, Tom Carlson & Gregg Batzer
 (Red bricks set by Dan Waite, County Surveyor in October 1903)

Regulated land developments

The Surveyor’s Office reviews all land developments submitted to the county for compliance with applicable state statutes, administrative codes and ordinances. Examples of land developments which are reviewed by the Surveyor’s Office include State and County Subdivision Plats, Certified Survey Maps and Condominium Plats. In 2019, 73 Certified Survey Maps and 2 plats were reviewed which created 166 lots. Land development fees collected in 2019 and forwarded to the Dunn County general fund totaled \$16,720. Exhibits B and C following this report highlight statistical trends for land divisions during the past 5 years.



Dunn County Public Works Department – Highway Division projects

The Surveyor's Office completed survey work as directed by the Public Works Department–Highway Division. This resulted in a cost savings for the Public Works Department and provided a revenue source for the Surveyor's Office totaling approximately \$5,700. The Surveyor's Office assisted with the following projects in 2019:

- **C.T.H. “F”** (*Towns of Menomonie & Sherman*)
Existing right-of-way monuments set on prior surveys of record were researched, located, and measured prior to road construction.
- **C.T.H. “Q & X”** (*Town of New Haven*)
Locations of existing right-of-way monuments set on prior surveys of record were researched, located, and measured prior to road construction.

Special projects requested by other county departments or government agencies

The Surveyor's Office completed a topographic survey of a 20-acre parcel of land for the Solid Waste and Recycling Division.

Remonumentation of original government corners

There are approximately 2,800 original government corners within Dunn County with numerous additional meander and witness corners. These corners were originally established by the United States Government Surveyors in the late 1840's and 1850's. These corners are part of the Public Land Survey System (PLSS) and form the basis for most land descriptions within the county. The remonumentation work completed in 2019 resulted in visits to 209 unique PLSS corners, meander corners, witness corners, centers of section, 1/16th corners and government lot corners with 34 of the corners being requested by private land surveyors or landowners. Corners involving maintenance due to new road construction totaled 35. Of these 35 corners, 3 corners carried over from 2018 were finished. A total of 113 land corner record forms were drafted.



Old Buggy Axle-Town of Weston



Survey Stone set in 1937-Town of Dunn

Remonumentation request program

This program allows either an individual landowner or a public entity to make a formal request of the Surveyor's Office for the re-establishment of original government corners required for a particular survey. The program is divided between public and private requests. Public requests originate from other government units such as the Dunn County Public Works Department – Highway Division, Wisconsin Department of Transportation, town boards, etc. Private requests are submitted by individual landowners typically through their contracted land surveyor in conjunction with a property survey. The Surveyor's Office reviews each request and evaluates them on a priority basis. Once a request is completed, new monument record forms are prepared and filed and coordinates are provided to the requestor. In 2019 the Surveyor's Office received five private remonumentation requests. Exhibit A illustrates the projected cost savings estimated by the requesting private surveyor for each project. The total project savings now totals \$498,450 over the last 24 years, with an average project savings of approximately \$2,480.



Survey Stone set in 1880
Town of Menomonie



Survey Stone set in 1894
Town of Grant

Filing and indexing of survey records

This is a duty of the County Surveyor as provided for in Wisconsin State Statute 59.45. Within 60 days after completing any survey, a land surveyor is required to file a true and correct copy of the survey in the office of the County Surveyor. The Surveyor's Office received 79 survey maps for filing in 2019. Each map was indexed, scanned, and filed in the public record.



Survey Section Files



Monument Record Forms

Goals and objectives for 2020

The Surveyor's Office has set a goal to complete the remonumentation of all the PLSS corners in Township 28 North, Range 14 West and strive to provide support and assistance to other county departments, while providing excellent customer service to the public.

Respectfully submitted,
Tom Carlson
Dunn County Surveyor

EXHIBIT A – Private remonumentation requests

YEAR	PROJECT SAVINGS	# OF REQUESTS
1996	\$29,950	17
1997	\$29,850	17
1998	\$42,300	15
1999	\$55,450	16
2000	\$33,500	12
2001	\$64,500	27
2002	\$28,600	9
2003	\$41,700	22
2004	\$13,000	7
2005	\$12,300	7
2006	\$6,700	3
2007	\$5,000	3
2008	\$1,000	1
2009	\$11,500	6
2010	\$15,400	5
2011	\$9,500	6
2012	\$0	0
2013	\$1,000	1
2014	\$5,500	2
2015	\$4,700	3
2016	\$6,500	2
2017	\$17,000	9
2018	\$15,000	6
2019	\$48,500	5
24 Year Total	\$498,450	201

EXHIBIT B – Lots and acreage by certified survey maps and plats in the last 5 years

2019		
Township	Lots	Acres
Colfax	4	48.90
Dunn	4	11.77
Eau Galle	9	39.09
Elk Mound	21	68.35
Grant	3	10.61
Hay River	9	106.77
Lucas	2	37.70
Menomonie	13	76.72
New Haven	1	3.07
Otter Creek	6	72.37
Peru	0	0.00
Red Cedar	66	147.04
Rock Creek	0	0.00
Sand Creek	5	43.40
Sheridan	1	16.98
Sherman	4	26.52
Spring Brook	7	23.13
Stanton	0	0.00
Tainter	3	20.75
Tiffany	4	25.55
Weston	2	21.16
Wilson	2	19.74

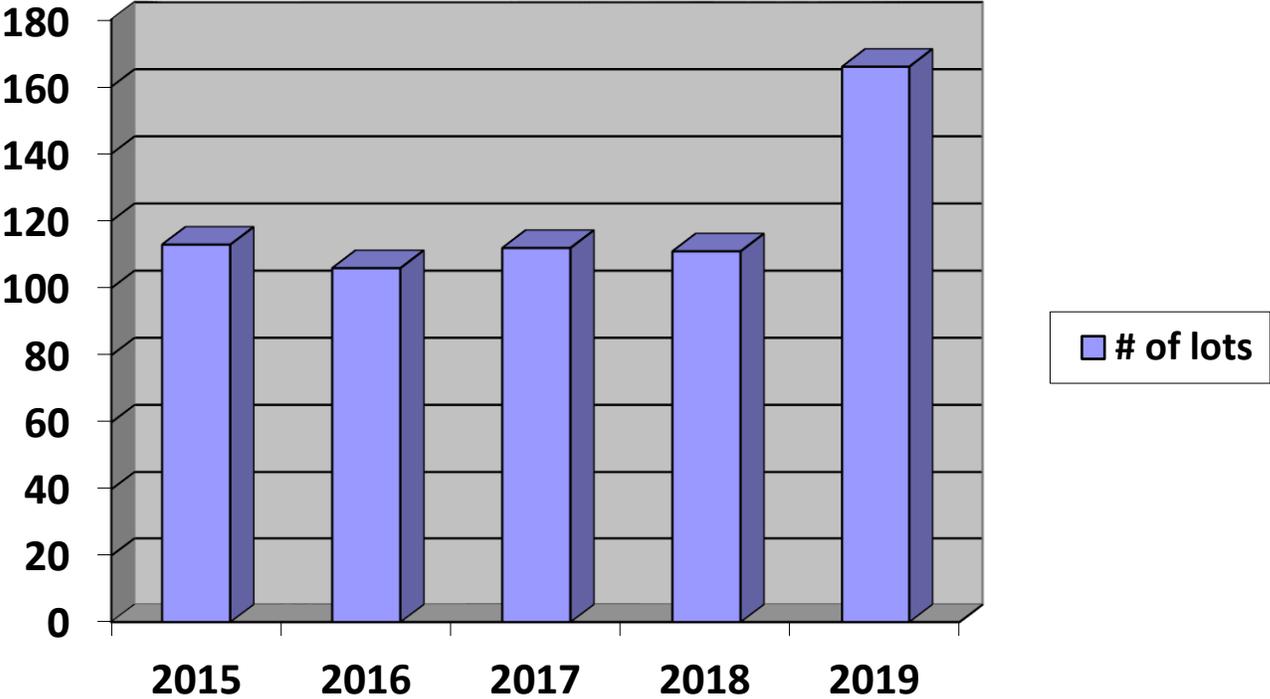
2018		
Township	Lots	Acres
Colfax	5	44.10
Dunn	7	54.22
Eau Galle	11	69.55
Elk Mound	5	33.39
Grant	5	22.68
Hay River	8	55.16
Lucas	4	15.13
Menomonie	14	82.75
New Haven	2	14.25
Otter Creek	4	67.36
Peru	3	15.88
Red Cedar	9	27.58
Rock Creek	0	0.00
Sand Creek	4	31.64
Sheridan	1	16.79
Sherman	3	30.40
Spring Brook	7	37.93
Stanton	6	60.21
Tainter	2	28.57
Tiffany	0	0.00
Weston	4	32.63
Wilson	7	31.61

2017		
Township	Lots	Acres
Colfax	1	7.25
Dunn	7	22.18
Eau Galle	2	7.53
Elk Mound	4	13.06
Grant	6	52.78
Hay River	14	125.21
Lucas	8	85.31
Menomonie	5	33.44
New Haven	1	1.00
Otter Creek	2	20.00
Peru	1	4.07
Red Cedar	10	67.95
Rock Creek	3	31.12
Sand Creek	0	0.00
Sheridan	2	12.10
Sherman	10	51.27
Spring Brook	16	87.87
Stanton	8	27.59
Tainter	5	29.37
Tiffany	1	4.02
Weston	3	17.73
Wilson	3	25.46

2016		
Township	Lots	Acres
Colfax	5	36.62
Dunn	11	172.57
Eau Galle	2	5.32
Elk Mound	3	17.50
Grant	1	18.61
Hay River	1	60.80
Lucas	4	51.08
Menomonie	16	137.63
New Haven	3	14.01
Otter Creek	4	39.75
Peru	0	0.00
Red Cedar	12	62.76
Rock Creek	2	5.14
Sand Creek	1	5.12
Sheridan	1	2.08
Sherman	9	69.58
Spring Brook	5	21.13
Stanton	5	51.89
Tainter	12	200.13
Tiffany	1	2.15
Weston	4	17.87
Wilson	3	11.01

2015		
Township	Lots	Acres
Colfax	6	33.78
Dunn	14	52.99
Eau Galle	2	2.48
Elk Mound	11	47.75
Grant	1	2.92
Hay River	5	31.90
Lucas	3	16.57
Menomonie	0	0.00
New Haven	7	39.27
Otter Creek	2	27.82
Peru	4	29.74
Red Cedar	5	24.50
Rock Creek	6	76.69
Sand Creek	3	26.63
Sheridan	1	11.39
Sherman	10	139.66
Spring Brook	13	91.82
Stanton	2	48.80
Tainter	12	34.13
Tiffany	1	1.01
Weston	1	1.03
Wilson	2	6.16

EXHIBIT C – lots created by certified survey maps and plats in the last 5 years





2019

ANNUAL REPORT

Solid Waste & Recycling Division Staff

(Left to Right) Michael Larson, Resource Recovery Specialist; Diane Duerst, Support Specialist; Morgan Gerck, Director; Megen Hines, Recycling Specialist



Dunn County Solid Waste & Recycling Management Board

The Solid Waste & Recycling Management Board was created in 1992 by the Dunn County Board of Supervisors, and consists of a diverse group of individuals with a wide array of expertise and a history of successful public service in Dunn County. The board performs a valuable, active management role for the Solid Waste and Recycling Division's activities and programs, and continues to provide effective waste management and recycling oversight in support of the residents and officials of participating municipalities, local industries and businesses, solid waste and recycling haulers, and the general public throughout Dunn County. Current members of the Solid Waste & Recycling Management Board include Gary Bjork, Board Chair/County Supervisor District 7; Tim Lienau, Board Vice Chair/County Supervisor District 28; Chuck Maves, County Supervisor District 9; Terry Stamm, Village of Elk Mound; Steve Rasmussen, Town of Hay River; Ed Hartung, Town of Menomonie; Forrest Johnson, Town of Dunn; Zenon Smolarek, U.W. Stout; and Ryland Erdman, City of Menomonie.

Dunn County Solid Waste and Recycling Site Attendants

The Solid Waste & Recycling Division utilizes contracted labor for all staffing needs at the Boyceville, Colfax, Connorsville, Downsville, Elk Mound, Ridgeland, Rock Creek, and Sand Creek Collection Sites, and the Dunn County Transfer Station and Public Drop-Off. These attendants work tirelessly to provide courteous and service-oriented assistance to all customers using these facilities. An attendant's job is filled with daily challenges in keeping these sites successfully managed for safety and overall operational efficiency, while ensuring that all materials are recycled or disposed of responsibly in accordance with local and state regulations. These attendants serve as the backbone of the county's solid waste and recycling services, and their hard work and dedication to their roles is greatly admired and appreciated by all.



New Recycling Specialist – Megen Hines

In February 2019, the division hired new Recycling Specialist Megen Hines to oversee its recycling programs, services, and educational outreach in Dunn County. Megen's exceptional work ethic, enthusiasm, and attention to detail would provide the County with a wealth of experience and resources aimed at increasing recycling awareness and compliance for all residents, businesses, industries, and farms. Previously, Megen served as the Recycling Specialist in St. Croix County for over four years, and was a Dunn County Solid Waste & Recycling Division intern in the summer of 2012. Megen has bachelor's degrees in Environmental Science from UW-Stout, and in Meteorology from St. Cloud State University.



A Year of Regional, National, and Global Recycling Crises

2019 was an extremely challenging year of recycling operations for the Solid Waste & Recycling Division. Global recycling market crashes as a result of ongoing trade disputes with China continued to spiral into historic lows, creating commodity market uncertainties unlike anything the recycling industry has seen throughout the last 50 years. Previously known as the world's largest processor of recyclables, China would continue to ratchet down its recycling commodity import standards in 2019, effectively bringing the recycling markets and related transportation industries in the United States to a standstill. In Dunn County, there continued to be some opportunities for movements of processed recyclable materials to local and regional vendors, but with commodity pricing at historic lows, revenues generated through the sale of these materials failed to make up for the operational costs of their production. By year's end, severely reduced revenues from the sales of recyclables in Dunn County contributed to a 2019 budget deficit of \$290,062. The principal reasons for why the import bans from China have impacted the recycling industries in the United States so severely over the last several years can be hinged on a single primary factor; the United States, along with most industrialized countries in the world, have not historically invested in the necessary recycling infrastructure required to process the huge volumes of recyclable materials that they generate. The standstill that resulted from the ongoing import bans has created massive stockpiles of recyclables in the United State with nowhere to go, contributing to the dismal market values we continue to see



today. Other factors for the 2019 budget deficit included accelerating maintenance and operational costs at the Dunn County Transfer Station due to its rapidly deteriorating infrastructure, now 29 years in operation, and the rising costs of contracted labor, hauling, and landfill services. In response to these rising costs, the division proposed a new operating model with reduced days and/or hours of operations at all solid waste and recycling facilities. The new model was approved in December 2019 and would become effective January 1, 2020. If there is a silver lining to the ongoing recycling crisis and its global disruption, it is the opportunity to domestically develop the infrastructures and technologies needed to process our own materials in the United States, and possibly those of other countries, to fill the void that exists today. The fruition of that opportunity lies in the political will of the nation and the financial ability of American industries to invest in the global recycling economy.

Record Clean Sweep Event

The 2019 Clean Sweep Event was a massive success, crushing all previous attendance numbers, while also crushing all previous expenditures for hazardous waste disposal and overall event costs. The two-day event was held in Colfax, WI on September 18, and at the Dunn County Transfer Station on September 19, and resulted in a total of 401 participants, including 373 households, 18 businesses, and 10 farms. The total weight of hazardous materials collected at the 2019 event was 268% higher than the amount collected in 2018, likely due to the 91% increase in participation over the previous year. Traffic volumes at the Transfer Station during the event extended as far as 1.9 miles east along Highway 29 and created severe backups requiring the assistance of the Dunn County Sheriff's Department.



The total cost of the 2019 Clean Sweep Event was \$62,016; an increase of 188% over the previous year, and by far the most expensive event in the history of the program. As a minor offset to the overall event costs, the division receives an annual grant of \$15,500 from the Department of Agriculture, Trade and Consumer Protection. The Clean Sweep remains one of the most popular and appreciated programs in Dunn County, and provides an excellent resource for the safe and responsible disposal of hazardous materials.



**DUNN COUNTY SOLID WASTE & RECYCLING
HAZARDOUS WASTE
CLEAN SWEEP EVENT**

SEPTEMBER 18 SEPTEMBER 19

COLFAX FAIRGROUNDS DUNN COUNTY TRANSFER STATION & RECYCLING CENTER
831 E RAILROAD AVENUE, COLFAX, WI E3900 HIGHWAY 29, MENOMONIE, WI
4-6PM: VSQG BUSINESSES, FARMS, & HOUSEHOLDS 2-3PM: VSQG BUSINESSES | 3-4PM FARMS | 4-7PM HOUSEHOLDS



VSQG BUSINESSES

- ▶ By appointment only
- ▶ Qualified VSQGs generate no more than 220lbs of hazardous waste per month, and accumulate less than 2,205lbs in storage
- ▶ Must pre-register online by September 13
- ▶ Discounted business fees applied!

HOUSEHOLDS

- ▶ By appointment only
- ▶ Must pre-register online by September 13
- ▶ Fees apply for Latex Paint

FARMS

- ▶ By appointment only
- ▶ Must pre-register online by September 13
- ▶ Fees apply for Latex Paint

INFORMATION

To pre-register for this event, or for additional information, please visit www.co.dunn.wi.us/hazardouswaste, or contact the Dunn County Solid Waste & Recycling office at 715-232-4017

MATERIALS ACCEPTED

- ▶ AEROSOL CANS
- ▶ AIR FRESHENERS
- ▶ ANTIFREEZE
- ▶ ADHESIVES & GLUES
- ▶ AMMUNITION
- ▶ ASPHALT SEALANTS
- ▶ BATTERIES
- ▶ BULBS, BALLASTS, & LAMPS
- ▶ CLEANERS & SPOT REMOVERS
- ▶ COMPRESSED GAS CYLINDERS
- ▶ PRESSURIZED TANKS
- ▶ CORROSIVES & LYE
- ▶ DRAIN & TOILET BOWL CLEANERS
- ▶ FERTILIZERS
- ▶ LATEX PAINTS
- ▶ MERCURY THERMOMETERS
- ▶ MERCURY THERMOSTATS
- ▶ OIL & LEAD-BASED PAINTS
- ▶ STAINS & VARNISHES
- ▶ FUELS & FUEL ADDITIVES
- ▶ SOLVENTS & STRIPPERS
- ▶ PESTICIDES
- ▶ HERBICIDES
- ▶ INSECTICIDES
- ▶ POLISHES AND WAXES
- ▶ ROOFING TARS
- ▶ NEEDLES & SHARPS
- ▶ SMOKE DETECTORS
- ▶ CARBON MONOXIDE DETECTORS
- ▶ USED OIL & FILTERS



MATERIALS NOT ACCEPTED

- ▶ ASBESTOS
- ▶ BIOLOGICAL WASTES
- ▶ MEDICAL & INFECTIOUS WASTES
- ▶ EXPLOSIVES
- ▶ PICRIC ACID
- ▶ POLYFOAM SPRAY TANKS
- ▶ RADIOACTIVE MATERIALS
- ▶ BAD ATTITUDES



*****ECRWSSEDDM*****
Residential Customer

LATEX PAINT FEES

- ▶ PINTS \$1
- ▶ QUARTS \$2
- ▶ GALLONS \$5
- ▶ 5 GALLON PAILS \$20

Fees based on the size of the container, not the volume of paint inside, so consolidate to save money!

CASH OR CHECK ONLY



715-232-4017
co.dunn.wi.us/swr
dunncountyrecycling

Changes to Recycling Opportunities and Services

Due in part to ongoing global recycling market crashes, the Solid Waste & Recycling Management Board motioned to discontinue collection and processing opportunities for several commodities in 2019. The division had been utilizing established market outlets for a variety of non-mandated recyclable materials, including woven polypropylene grain, feed, and super sacks, carrier stock, and vinyl siding. While these items helped to expand the stewardship and diversity of Dunn County's recycling portfolio, the division would benefit from reducing its overall production capacity to only those items with the strongest market opportunities. Mixed Rigid Plastic recycling, arguably one of the most beneficial recycling programs in Dunn



County in terms of resource conservation, was modified to accept these materials at the Dunn County Transfer Station only, with all other collection site locations landfilling this material due to the high costs of transporting them to the Transfer Station for processing. Mixed Rigid Plastics make up a very large portion of the waste plastics generated in our everyday lives. By recycling these common items, which include plastic buckets, drums, shelving, laundry baskets, totes, children's toys, yard furniture, flower pots, etc., we increase sustainability and environmental stewardship in Dunn County and throughout the State of Wisconsin, while significantly reducing landfill wastes and preserving natural resources.

Agricultural Plastic Film Capture and Recycling

In late 2016, the Dunn County Solid Waste & Recycling Division partnered with Revolution Plastics of Little Rock, AR to begin capturing and recycling the massive volumes of used agricultural film materials that are prevalent on Wisconsin farms. Commonly used for silage bags and other agricultural uses, these films are constructed of readily recyclable #4 LDPE plastic, and through a proprietary wash and manufacturing process, Revolution Plastics is able to recycle these materials into clean, post-consumer resins for new products. By mid-summer 2018, the collection program in Wisconsin and Minnesota had captured over 50,000,000 pounds of agricultural films for recycling! A total of 50,580 pounds of agricultural films were collected at the Boyceville and Colfax Collection Sites, and the Dunn County Transfer Station in 2019.



Ongoing Efforts to Promote Stewardship and Maintain Compliance

A major challenge in the solid waste industry involves effective communications to residents, businesses, industries, and farms in encouraging them to abide by solid waste and recycling laws and regulations in their daily lives. This requires a collective mentality and commitment to proper disposal methods for a variety of materials, and the implementation of effective training and education programs. In 2019, the Transfer Station, Public Drop-Off, and Collection Sites continued their efforts to capture non-landfill wastes, hazardous materials, and recyclable items from municipal and commercial trash sources. Non-landfill items such as electronics, batteries, lamps and ballasts, tires, pressurized tanks and cylinders, live ammunition, needles, unused chemicals, etc. are routinely discovered mixed with trash, either mistakenly or intentionally, and must be removed for proper disposal or recycling; a practice known as “Diversion”. Active diversion efforts reduce the amount of prohibited materials that are sent to landfills, and ensures that they are disposed of responsibly. If not removed from trash prior to landfilling, they can become serious safety hazards to processors and haulers, and contribute to fires, surface and groundwater contamination, and other regulatory compliance issues. Transfer Station and collection site staff continued to practice exceptional diversion management of these non-landfill sources in 2019.



Deer Carcass Collection and Disposal Program Continues

Each year in Dunn County, the Solid Waste & Recycling Division provides a safe and efficient disposal service for deer carcasses harvested during the fall and winter hunting seasons. In late 2018, the Wisconsin Department of Natural Resources began to implement restrictions on the transportation of deer carcasses across county lines in Wisconsin in an effort to control the spread of CWD (Chronic Wasting Disease). Due to these restrictions, and a concern for current scientific studies that showed the capacity of the CWD protein to remain viable after aggressive leachate and wastewater treatment processes, local landfills stopped accepting deer remains for fear of spreading this contagion. To address this disruption, the Dunn County Solid Waste & Recycling Division and the Barron County Waste to Energy and Recycling Facility partnered in 2018 to establish an approved plan for the incineration of all deer carcasses captured through the Dunn County collection program. This program continued in 2019, resulting in 34,000 pounds of deer carcasses collected during the fall/winter hunting season. The ongoing Dunn County/Barron County partnership is highly regarded as a creative and viable solution to the ongoing CWD problem in Wisconsin by providing controlled collection and the complete destruction of deer carcasses and any potential CWD proteins associated with these materials.

New Partnerships in Yard Waste Composting

The Boyceville, Colfax, and Elk Mound collection sites in Dunn County continued to provide free yard waste services to all residents of municipalities that participated in the division's Solid Waste and/or Recycling Programs in 2019. Active composting of yard waste has been practiced at these sites since the composting program and mandatory state licensure was implemented in 2018. Due to the high volumes of yard wastes that are received annually at these locations, along with the increasing associated costs of the composting process, changes were made in 2019 to partner with several local farms that were in need of raw yard waste materials for blending with their commercial manure composting operations. By mid-year, most incoming raw yard wastes were collected and hauled directly to these farms, eliminating the expense of composting them at the collection sites. Mulch, firewood, and finished compost generated at the Boyceville, Colfax, and Elk Mound facilities is free to take for any resident of a municipality that participates in the division's programs.



Necessity for Investments in Infrastructure and Operations

The Dunn County Solid Waste & Recycling Division facilitates one of the most comprehensive waste and recycling programs in the State of Wisconsin. The Dunn County Transfer Station, and most of the 8 county collection sites have operated as well established fixtures in the community for the past 29 years. Much of this infrastructure is in dire need of replacement and expansion. In 2019, the Solid Waste & Recycling Division accelerated discussions and planning for the development of a new Transfer Station to replace the current facility on Highway 29. A Production Assessment Study was completed by FOTH Infrastructure and Environment, LLC, to determine the effectiveness of the current solid waste and recycling processing capabilities in place at the Transfer Station, and to review its overall operational efficiencies. This study determined that the Transfer Station has outlived its intended useful lifespan and design capacity, and was in need of major repairs and production infrastructure critical to improving production capacity, efficiency, and safety. The prospect of a new transfer facility would require a Preliminary Engineering and Feasibility Study to determine proper scaling, engineering, throughput, and a multitude of other operational considerations. In December 2019, discussions ensued to plan for this study to be completed in 2020, requesting contingency funding from the county's general fund in the amount of \$32,500 to cover the anticipated cost.



2019 SOLID WASTE AND COMMODITY REPORT

COMMODITY	AMOUNT SHIPPED
Transfer Station Solid Waste	22,847 Tons 45,694,000 Pounds
Collection Site Compactor Solid Waste	2,006 Tons 4,012,000 Pounds
Collection Site Demolition Waste	390 Tons 780,000 Pounds
Transfer Station Leachate	28,523 Gallons
Cardboard	923 Tons 1,846,000 Pounds
Paper	406 Tons 812,000 Pounds
#1 Plastics	91 Tons 182,000 Pounds
#2 Plastics	69 Tons 138,000 Pounds
#3 Plastics	21 Tons 42,000 Pounds
#4 Plastics	17 Tons 34,000 Pounds
#5 Plastics	41 Tons 82,000 Pounds
Mixed Rigid Plastics	50 Tons 100,000 Pounds
Agricultural Plastic Film	25 Tons 50,000 Pounds
Glass	437 Tons 874,000 Pounds
Aluminum Cans	41 Tons 82,000 Pounds
Steel Cans	64 Tons 128,000 Pounds
Unprepared Scrap Steel	469 Tons 938,000 Pounds
Non-Ferrous Scrap Metals	26 Tons 52,000 Pounds
Lead-Acid Batteries	8 Tons 16,000 Pounds
Electronics	76 Tons 152,000 Pounds
Used Tires	203 Tons 406,000 Pounds
Lamps & Bulbs	18,898 Units
Clean Sweep Hazardous Waste	32 Tons 64,000 Pounds
Used Oil	11,940 Gallons
Used Oil Filters	28 Drums
Used Antifreeze	790 Gallons
Deer Carcasses	17 Tons 34,000 Pounds
Yard Waste	2,190 Cubic Yards

RECYCLING COMMODITY LIST

Plastics

#1 PETE Bottles & Jars
#1 Clear PETE Thermoforms
(Discontinued 2018)
#2 HDPE Pigmented
#2 HDPE Natural
#2 HDPE Z-Bale
#2 HMW Drums
#2 HMW Jugs
#3 PVC Siding
(Discontinued 2019)
#4 LDPE Film & Bags
#4 LDPE Lids
#5 PP Containers & Tubs
#5 PP Woven Sacks
(Discontinued 2019)
#5 PP Lumber Wrap
(Discontinued 2019)
#5 PP Super Sacks
(Discontinued 2019)
Mixed Rigid Plastics

Metals

Unprepared Steel Shred
Aluminum Breakage
Sheet Aluminum
Extruded Aluminum
Cast Aluminum
Cast Aluminum Rims
UBC Aluminum Cans
Aluminum Foil/Aerosols
Zinc Diecast
MLC Heavy Aluminum
Steel Cans
#2 Copper Pipe, Sheet, Wire
#1 Insulated Copper Wire
#2 Insulated Copper Wire
Holiday Lights
Aluminum ACSR Wire
Clean Mixed Brass
Brass Shells
Brass Breakage
Non-Magnetic Stainless Steel
Molybdenum Stove Elements
Ni-Chrome Wire Elements
Lead-Acid Batteries
Lead Weights and Bar
Magnesium Frames

Non-PCB Ballasts
Compressed Gas Cylinders
Pressurized Tanks
Copper Electric Motors
Copper Electric Transformers
Aluminum Electric
Transformers
Aluminum Radiators
Brass Radiators

Electronics

CRT TV's & Monitors
LCD TV's & Monitors
Computer Towers
Laptops
Cell Phones
Tablets
Digital Cameras
Miscellaneous Electronics
Smoke/CO Detectors
Low Grade Circuitry
High Grade Circuitry
High Grade Motherboards
Gold Memory
Silver Memory
Fiber Processors
Ceramic Processors
Slot Processors
Ribbon Cables
Ink Jet Cartridges
Toner Cartridges
Aluminum Heat Sinks
Aluminum-Copper Heat Sinks
Hard Drives
CD/DVD/Disk Drives
Power Supply with Wire
Keyboard Silver Mylars
Silver IC Chips
High Grade Slot Cards
Computer Fans
LED Lamps
PCB Ballasts
Solar Panels

Batteries

Alkaline Batteries
Nickel-Cadmium Tool
Batteries

Nickel-Cadmium
Miscellaneous
Lithium-Ion Tool Batteries
Lithium-Ion Laptop Batteries
Lithium-Ion Cell Phone
Batteries
Lithium-Ion Miscellaneous
Lithium-Ion Medical Batteries
Lithium Coin Cell Batteries
Nickel-Metal Hydride Tool
Batteries
Nickel-Metal Hydride
Miscellaneous
Carbon-Zinc Batteries
Zinc-Air Button Batteries

Lamps & Tubes

CFL's
High Pressure Sodium
Mercury Vapor
Metal Halide
Fluorescent Lamps
UV Lamps
Incandescent & Halogen
Neon Tubes
Neon Signs

Fiber

Cardboard
Paper
Carrier Stock
Fiber Cores

Fluids

Used Oil
Used Antifreeze
Used Oil Filters
Leachate/Septage
Mercury Thermostats,
Thermometers, Pressure
Switches

Yard Waste

Wood, Leaves, Clippings,
Mulch, Compost

Hazardous Waste

Clean Sweep
Diversion
Sharps

DUNN COUNTY LAND AND WATER CONSERVATION DIVISION



THE MISSION OF THE LAND AND WATER CONSERVATION DIVISION IS TO PROTECT, PRESERVE, AND ENHANCE THE NATURAL RESOURCES OF DUNN COUNTY

Wisconsin Governor Tony Evers declared 2019 “The Year of Clean Drinking Water”. Supervisor Tom Quinn clearly linked the need for safe drinking water to the health and general welfare of the citizens of Dunn County at the Special Legislative Session of the Dunn County Board of Supervisors in February. The Speaker’s Task Force on Water Quality conducted fourteen public hearings across the State of Wisconsin. Listening to hundreds of people across the state, including Supervisor Mike Kneer, KT Gallagher, our Public Health Director, and myself, at the hearing held at UW-Stout on September 4th, the task force heard a resounding theme: “Water quality is crucially important to the health and vitality of our State’s people, industries, and natural resources”. At the same time, Dunn County created an Ad-Hoc Groundwater Committee led by Supervisors Tom Quinn and Mike Kneer that met for seven months and created a list of recommendations that are guiding protection of our groundwater resources.

The Land and Water Conservation Division (LWCD) and our partner agency the Natural Resources Conservation Service (NRCS) have identified “Healthy Soil” as the way to improve and protect the quality of our surface and ground water. 2019 marked the fifth year of implementing conservation practices on the Red Cedar Demonstration Farm.

We now have demonstration farms owned by the Jeff Lake Family in the Hay River Farmer-Led Watershed and the Bill Beryer Family in the Red Cedar Conservation Farmers, Farmer-Led Watershed. These demonstration farms, and the farmer-led watersheds, continue to provide leadership and community in soil health and water quality. At the same time, we continue to help farmers in the rest of the county install conservation practices with our cost-share funds and with funding from the NRCS Environmental Quality Incentives Program (EQIP). These projects, and many more, are a success because of the farmers and landowners involved and because of the dedicated staff in the Land and Water Conservation Division.

I have asked each staff member to write an article on a significant project that they were a part of in 2019. This will give you, the reader, an indication of the variety of resources and issues that we address and an opportunity for you to become familiar with the staff of the Land and Water Conservation Division. If you have specific questions on any of our programs or natural resources in general, please contact us at (715)232-1496 or use the link to our Division on Dunn County’s website at <http://co.dunn.wi.us> . I would like to close by sincerely thanking the Dunn County Board of Supervisors for your continued support for conservation.

Respectfully submitted, Dan Prestebak, County Conservationist

2019 LAND CONSERVATION COMMITTEE

THOMAS QUINN.....Chair
GARY BJORK..... Vice Chair
GARY SEIPEL..... County Board Member
MIKE KNEER..... County Board Member
DIANE MOREHOUSE..... County Board Member
JOHN CREASER..... FSA Representative

2019 LAND AND WATER CONSERVATION DIVISION STAFF

DAN PRESTEBAK.....County Conservationist
JANELL NEWCOMB..... Support Specialist
TINA BARONE..... Conservation Planner
TRAVIS DRIER..... Conservation Planner
AMANDA HANSON..... Conservation Planner
Vacant..... Conservation Planner
ROBERT KANER..... Conservation Engineering Technician
JESSICA SCHOEN..... Water Quality Specialist
STEVEN OLSON..... Soil Health Specialist

Tina Barone, Conservation Planner



Protecting Groundwater Quality

Have you seen a sign like this at a local park? It is all over the news in Wisconsin – DRINKING WATER WELLS CONTAMINATED (over the Maximum Contaminant Level (MCL)). The MCL was established by the Environmental Protection Agency (EPA) to identify a health risk.

In Dunn County, the most common issue well owners face is high nitrate levels. Water found to have more than 10 milligrams per liter can lead to increased chances of blue baby syndrome (also known as methemoglobinemia). High nitrate levels can affect the oxygen-carrying capacity of the blood in small children causing shortness of breath and bluish skin. According to the EPA, sources of nitrate contamination in drinking water are runoff from fertilizer use, leaking from septic tanks, sewage, and erosion of natural deposits. What is being done to reduce the chance of nitrate contamination? The Dunn County Land and Water Conservation Division (LWCD) works with the public on nutrient management plans, waste facility closures, and decommissioning of wells. All of these things help reduce the potential for nitrate contamination.

Nutrient management plans (NMPs) develop a nutrient budget based on crops grown, nutrients applied, and soil type, etc. A NMP optimizes on-farm nutrients, prevents excessive nutrient build-up, reduces fertilizer costs, establishes a conservation crop rotation, and reduces environmental risks. A NMP helps farms increase profitability by applying nutrients on an as-needed basis, which in turn protects our groundwater. Landowners or operators can take a class at the Chippewa Valley Technical College (CVTC) to learn how to write their own NMP or they can hire a Certified Crop Advisor to write a plan for them. To learn more, contact the Dunn County LWCD Nutrient Management Specialist, Travis Drier, at (715)231-6542.

Manure facility closures are a priority for the LWCD. Most of the pits in Dunn County are earthen in-ground pits that were constructed by excavating a large hole (sometimes lined with clay) for waste to be stored in. Pits like these can increase the risk of nutrients reaching groundwater because, over time, manure can soak into the ground and contaminate drinking water wells.



Abandoned Manure Pit

According to the Dunn County Manure Storage Ordinance (Ordinance No. 33, 23.10.2), a manure storage structure not actively receiving manure for a period of one year is considered abandoned and must be closed within one year. The first step in closing a manure pit is removal of waste (manure). Once the waste is removed, it is surface applied following manure application guidelines. Darker stained soil that smells of manure (contaminated soil), is often found underneath the manure. This soil must be excavated out of the pit and surface applied following manure application guidelines. Once all the waste and contaminated soil have been removed, the pit is backfilled and compacted. The final grade must be sloped to prevent water from ponding on the surface. Closed manure pit sites are repurposed to cropland or lawn.



Windmill with Well Underneath

Old wells and cisterns can be a direct conduit for contaminants to reach groundwater. The LWCD assists landowners with closing these wells. According to the DNR publication, *Answers to Your Questions on Well Filling and Sealing*, “If not properly filled with impermeable material, unused wells can directly channel contaminated surface or soil water into groundwater. Water that gets into unused wells bypasses the purifying action that normally takes place in the upper layer of the



Hand Pump on Top of an Old Well

soil. Because groundwater flows in soil and bedrock formations (aquifers), contamination that enters old wells can move to nearby drinking water wells.”

The DNR estimates thousands of improperly filled and sealed wells threaten groundwater in Wisconsin. Old wells can easily be spotted by old windmills or hand pumps located on top of a well.

Do your part to protect the groundwater in Dunn County. If you have a manure pit or well that is no longer in use, contact Tina Barone at (715)231-6533 to start the closure process. If you do not own or operate farmland, there are still many things you can do to protect the groundwater in Dunn County.

1. **Go Native** – Use native plants in your landscape. They look great and don't need much water or fertilizer. Also, choose grass varieties for your lawn that are adapted for your region's climate, reducing the need for extensive water or chemical applications.
2. **Reduce Chemical Use** – Use fewer chemicals around your home and yard, and make sure to dispose of them properly – don't dump them on the ground!
3. **Manage Waste** – Properly dispose of garbage and potentially toxic substances like unused chemicals, pharmaceuticals, paint, motor oil, electronics, tires, and other substances. Many communities hold household hazardous waste collections or sites – contact Dunn County Solid Waste and Recycling (715-232-4017) or Public Health (715-232-2388).
4. **Reduce, Reuse, and Recycle** – Reduce the amount of “stuff” you use and reuse what you can. Recycle paper, plastic, cardboard, glass, aluminum and other materials.
5. **Natural Alternatives** – Use all natural/nontoxic household cleaners whenever possible. Materials such as lemon juice, baking soda, and vinegar make great cleaning products, are inexpensive, and they're environmentally-friendly.
6. **Learn and Do More!** – Get involved in water education! Learn more about groundwater and share your knowledge with others.

Adapted from Source:groundwater.org/action/home/top10.html

Travis Drier, Nutrient Management Specialist

Using a Groundwater Model to Raise Water Quality Awareness

What exactly is a groundwater model? A groundwater model is a representation of a hypothetical aquifer used to simulate the flow of groundwater. Demonstrating the underground movement of water is a great benefit when discussing water quality because it helps the audience to visualize what is going on beneath their feet.

The groundwater model uses varying layers of sand, gravel, and clay to represent natural features found within an aquifer. These features include a confining layer, an artesian aquifer, a coarse wedge, and a lake or river. The model also has several man made features such as piezometers, a leaky landfill, injection wells, and a pumping well.

When food coloring is added to the groundwater model, the audience can see how these various features affect the flow of water within the aquifer. The food coloring can also be added to specific areas within the groundwater model to demonstrate how contaminants can enter groundwater and move to other areas.

The artesian well shows how water is forced to the surface when it becomes pressurized within a confining layer such as clay. When this happens, the water becomes pressurized and is forced to the surface where it enters the model's lake or river. This demonstrates how water from deep underground can have an effect on other areas.



Groundwater Model with Food Coloring

The lake or river feature is used to demonstrate how water and contaminants can enter or leave surface water. When combined with the piezometers, the river or lake feature can also be used to show how humans can affect the water level by removing groundwater for various uses.

The leaky landfill shows how contaminants can enter

the groundwater and move to other areas such as a local well or nearby waterbody. The leaky landfill also demonstrates how a septic system retains solids and discharges liquids into the ground.

One of the most popular features of the groundwater model is the pumping well because it provides an excellent visual representation of what happens when groundwater is removed from an aquifer by humans. First, when water is pumped from a well a cone of depression forms. After a cone of depression forms, it will start to lower the elevation of the water table or even change the flow of groundwater. The model visually demonstrates how drawing too much water from wells can effect an aquifer.

Presentations with the groundwater model are easily customizable to the needs and knowledge level of the audience. The model can be used to show basic things such as how water enters the ground or for complex scenarios that show how contaminants enter and spread throughout an aquifer. The size of the groundwater model and ease of setup allows it to be used in a variety of locations both indoors and out.

For questions or to request a demonstration contact the Dunn County Land and Water Conservation Division at (715)232-1496.

Amanda Hanson, Conservation Planner

2019 Dunn County Chapter 20 Non-Metallic Mining Reclamation Ordinance Summary

Total Permitted Sites: 22

A permitted site is a non-metallic mining site that has obtained a Chapter 20 Non-Metallic Mining Reclamation Permit. Permitted sites have a reclamation plan and financial assurance (unless exempt) on file with Dunn County. An annual fee is required based on the amount of acreage of their site.

Total Active Permits: 18

Operators with active permits submit fees and a report annually. They report how many acres are un-reclaimed and how many additional acres they plan to mine for the year.

Inactive Permits: 4

Operators with inactive permits have a site with un-reclaimed acres, but they don't have plans to open up additional acreage for the year. They also do not plan to use their current un-reclaimed acres for mining activities this year. Instead, the operator has decided not to use the site and is choosing not to reclaim the site yet. In future years, they can choose to permit the site as active or reclaim the site.

Reclaimed Sites: 2

A reclaimed site is an existing permitted non-metallic mine site where the operator has chosen to no longer mine the site and instead close the site by reclaiming it. The reclamation plan is used to guide this process to achieve the post-mining land use. Once the entire site is completely reclaimed and closed according to Chapter 20, the Certificate of Completion is issued and financial assurance on file is released to the operator.

New Permitted Sites: 0

This category includes sites that previously have not been mined (or were exempt from permitting) that now plan to mine and are required to obtain a permit. The process begins with submittal of forms including the reclamation plan, a cost estimate for reclamation, concurrence with the reclamation plan from the landowners and operators, along with annual fees and plan review fees. A public notice will be published stating an opportunity for a public hearing. A permit is issued after the reclamation plan is reviewed and complete in which the operator and landowners are in agreement with, the notice has been published, a possible public hearing has been noticed and held, and all fees and financial assurance has been received and approved.

Bob Kaner, Conservation Engineering Technician

Developing a Residential Subdivision in Dunn County

In 2019, I was involved in the review, approval, and construction of a large residential subdivision. The subdivision involved 80 acres with 54 building lots. The parcel is located within ¼ mile of the city limits on the east side of Menomonie with city sewer and water to that point. Lot sizes ranged from 1 acre to 3.5 acres with wetland complexes as part of 14 different lots.

The 80-acre parcel includes a home and farm buildings, a large wetland complex with a stream, and uplands with slopes over 20 percent. Recent cropping history was grazing of beef cattle and occasional row crops. Drainage area runoff and the stream flows toward the Menomonie Industrial Park area and then to Lake Menomin.



The process actually began in June of 2018 with a rezone request presented to the County Board to rezone the 80-acre parcel of farmland from “General Agriculture” (GA) to “Residential District” (R2). The Dunn County Environmental Services Department-Planning and Zoning and Survey Divisions were also involved in this process. A preview meeting of the concept map was held in October of 2018 with 14 staff members from ten government entities present. Multiple meetings with the developer and agency staff were held during the next year.



Existing Farmstead & Steep Road to Lower Lots

A DNR stormwater discharge permit was issued in April of 2019 approving final plans. The final plat was approved by the Planning, Resources and Development Committee (PR&D) in May of 2019. The construction of roads, utilities and storm-water components for the subdivision began in June and are still ongoing in 2020.

Some of the questions and considerations during the development review process were:

Is the stream navigable? This determination affects setbacks and public access requirements with the Wisconsin Department of Natural Resources (DNR) and Dunn County shoreland zoning laws. The application was submitted during the winter so the DNR could not make a determination until spring. With site information gathered by Land and Water Conservation Division (LWCD) in April 2019, the DNR determined the stream was “not navigable”.

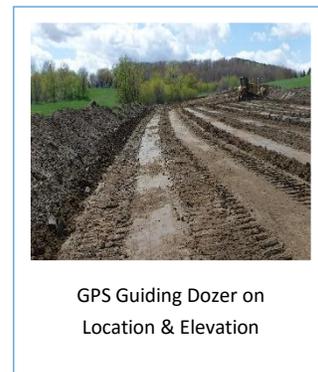
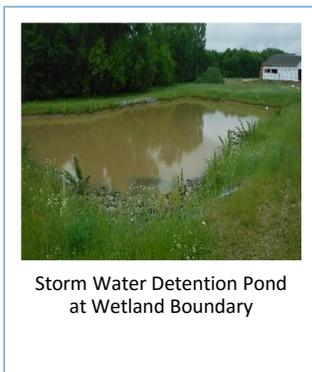
Septic Systems, Wells and Surface Water Protection

Questions Asked by Staff:

1. Was consideration given to creating a “community septic system” instead of 54 individual septic systems? They were concerned with the potential of groundwater contamination from nitrates and other household contaminants that are not removed by standard septic systems. The developer determined it would **not** be financially feasible to do this and future management would be complicated.

2. Can City sewer and water could be extended into this proposed subdivision? After discussions with the City, the developer determined this was not an option.
3. Are all lots large enough to site a home, septic, well and outbuilding given the amount of area in the wetland or the slopes that are greater than 20%? “Yes” - The developer added scale-size icons to each lot depicting possible layouts on lots. Staff learned that septic mounds can be placed on slopes up to 25% (upslope from existing wells and adjacent to wetlands).
4. Are there drainage easements for concentrated runoff coming from the hill? The developer added 10’ drainage easements between all lot boundaries to assist owners in managing storm water flows.

Wetland Delineation: The developer had an official wetland delineation completed for this site and the boundary is shown on the plat map. Staff requested that the boundary be staked on each lot for future homeowners to prevent them from being in violation of DNR or County setback rules. There was also discussion about if there was setting marker elevation with lowest building opening (LBO) for each lot adjacent to the wetland. This is a requirement by some of our neighboring counties to protect building lot owners from having groundwater seepage issues in their homes. This is not required in Dunn County.



DNR Construction Site Storm Water Discharge Permit: The DNR has the regulatory authority over subdivisions in Dunn County concerning storm water management. Dunn County has no authority. LWCD worked with DNR in evaluating the sediment control and storm water design plans for this subdivision.

The installation of roads, road ditches and retention ponds involves exposing very large areas of subsoil to the effects of storm-water runoff. This site consisted of nearly two miles of road ditches and three permanent runoff retention ponds. The designed ponds that were constructed capture the majority of runoff water from roads and some building sites. These are crucial in keeping sediment from entering the wetland complex especially during the road construction phase of the development.

Once the topsoil is stripped and saved, and the area is shaped to a final grade, it is critical that the topsoil be replaced and the area seeded as soon as possible. Due to inclement weather, the completed ditches, swale, and ponds were not seeded in a timely manner. The developer had to wait several weeks for the utility company to bury their lines. He did not want the contracted

restoration company on-site to seed and emat the ditches and other areas until the lines were buried. This caused the entire project to sit idle for 6 weeks.

I worked with the DNR in completing construction site inspections and the follow up on issues that were encountered. The building process usually spans a minimum of 2 years and erosion control practices need to be maintained during that time. Issues included with this project were improper style and use of silt fence. The erosion control company hired was from Minnesota and the silt fence type allowed in that state does not meet Wisconsin specs. The remedy was a second row of fence installed in some of the more critical areas that had a high accumulation of sediment. It was definitely needed on this site.

Sediment Ponds

The three sediment ponds are serving their purpose and capturing most of the sediment. Part of this collection system is that the ponds will need to be cleaned out and restored to their original design dimensions after this site is stabilized. The interesting part is that these ponds and the channels flowing to them are under the ownership of whomever buys the building lots where they are located. That person will be responsible for maintaining the ponds in the future.



East Pond (June, 2019)



West Pond (June, 2020)

In Summary

The DNR is continuing to provide enforcement with the developer to redo incorrectly installed overflow weirs on the ponds and install proper rock ditch checks instead of the failed silt fence. Follow up on stabilizing the road ditches, pond cleanout, and future maintenance will be ongoing for the DNR until they determine the site as stable and release the developer from the DNR permit.

The construction of this subdivision has gone better compared to those constructed ten years ago. The earth moving company did an efficient job in opening and establishing the final grades on such a large area. The farm buildings were removed, the shingles were taken to the landfill, and all of the concrete was hauled to a concrete plant for recycling into base course.

Many homes are currently being built with some efforts being made for erosion control. The construction process of each home has the potential to fill in the road ditches and culverts with sediment. Private home construction erosion control regulations are enforced by the township through their UDC Building Code Inspector and not Dunn County.

Janell Newcomb, Support Specialist

The ENS-Land and Water Conservation Division administers grants each year to assist the citizens of Dunn County with conservation projects. As a Support Specialist for the Division, I assist LWCD staff with applications, administration, coordination, and reimbursement of numerous grants, projects, programs, and budgets. These tasks are very time consuming and can be quite laborious. The majority of the grants we administer are received from the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) and the Wisconsin Department of Natural Resources (DNR). Following are highlights of a few of the 2019 projects.

Soil & Water Resource Management Grant:



Installation of a Grade Stabilization Structure

This is an annual grant from Wisconsin DATCP, providing funding for LWCD staff and cost sharing for implementing our Land and Water Resource Management Plan (LWRM). The staffing grant of \$162,747 supports staff who perform soil and water conservation activities. We worked with seven landowners on projects and practices such as grade stabilization structures, waterways, closure of manure storage structures, and well decommissioning. Practices were cost-shared at a rate of 70% for a total cost of \$23,745. Two additional landowners/operators worked with staff on nutrient management planning for a total cost-shared amount of \$14,030. Due to extenuating circumstances and unfavorable weather conditions, one nutrient management plan contract (\$10,096) and seven conservation practice contracts (\$44,354) that were slated to be completed in 2019 will be completed in 2020 in addition to the practices that are already planned for 2020.

Wisconsin Lake Protection Grant (Red Cedar Soil Health Education): Dunn County was awarded a Lake Protection Grant (LPG) in the amount of \$200,000 covering the period of time from 4/15/2018-6/30/2021. The funding for the grant comes from a portion of the state tax on gasoline consumed by motor boats. Grant awards from the DNR cover a large portion of the total project cost and applicants must contribute at least 25 percent of project costs through in-kind matching (equipment, labor, mileage, etc.) and qualifying project-related expenses. The scope of the project involves a Soil Health Specialist working with farmers in the Red Cedar Watershed to promote soil health by establishing demonstration farms, holding soil health educational events and working with individual producers.

In August of 2019, the Land and Water Conservation Division, along with many other partners, held a very successful summer field day at the Jeff Lake Family Farm near Boyceville. This is one of the demonstration farms that



Summer Field Day at Jeff Lake Family Farm: Rainfall simulator demonstration of benefits of reduced tillage and cover crops

was established with funding from the Lake Protection Grant. The Lake Family has been recognized as a steward of the land and as a community leader receiving awards such as the Precision Ag Farmer of the Year and the Leopold Conservation Award. The field day was open to all interested community members and included speakers presenting on a wide range of topics including cover crops, water quality, soil health and more.

Producer-Led Watershed Protection Grants: In 2019, Dunn County applied for and was awarded two Producer-Led Watershed Protection Grants from DATCP. The general purpose of this program is to fund projects that will improve water quality through farmer-led nonpoint source pollution abatement activities in Wisconsin on a watershed scale.

The Hay River Farmer-Led Watershed Council was awarded \$13,125 with a goal of keeping soil and nutrients on the land through increased adoption of management practices such as grassed waterways, no-till, minimum-till, perennials and cover crops. The Council held meetings, field days, farm tours, and established five practices on four demo plots. Participants received incentive payments for practices including soil testing, waterways, and cover crops. In-kind donations of \$3,750 included staff hours and mileage as well as \$9,375 from the McKnight Foundation for incentive practices including grassed waterways, cover crops, education, and outreach.



No-Till Corn

The Red Cedar Conservation Farmers were awarded \$40,000. The mission of the producers of the Red Cedar Conservation Farmers Group (RCCF) is to collaborate to reduce phosphorous-containing runoff from nonpoint sources and improve soil health. The RCCF held field days and a winter workshop as well as participated in groundwater and surface water testing. Four demo plots on 256 acres were established with practices such as strip-till, stalk nitrate testing, and variable rate fertilizer applications. They received incentive payments for cover crops, low disturbance manure injection, no-till, and soil testing. Matching/In-Kind contributions were provided by the farmers with practices such as low disturbance manure injection, no-till planting, soil testing, attendance at meetings, and waterway construction.

Snowmobile Trail Aids Program: The money awarded in grants to Wisconsin counties comes from snowmobile registrations, trail pass revenue, and gas tax from some of the gas used in snowmobiles. The grants are used to reimburse snowmobile clubs in Wisconsin for some of their expenses involved in tasks such as brushing and clearing trails, signing trails, grooming, and trail maintenance. Clubs work with the county trail coordinator to administer the grant.



Gilbert Creek Snowmobile Bridge

For the 2018-2019 snowmobile season, the Dunn County Snowmobile Association (DCSA) and the 14 clubs worked to maintain 290 miles of snowmobile trails in Dunn County. All entries for grooming and maintenance of trails are entered in a snowmobile electronic reporting system called SNARS. The Dunn County LWCD Support Specialist reviews each entry for eligibility and to make sure all costs are supported by documentation. There are normally around 700 entries to review, process, and make payment to the DCSA prior to the deadline when SNARS closes out for the season. For the 2018-19 season, claims totaled \$73,499 and were reimbursed by the Wisconsin DNR after preparation and submittal of the reimbursement request.

In 2019, a grant was applied for and received to replace an existing snowmobile bridge across Gilbert Creek that was considered unsafe and was approximately 20 years old. Working with the snowmobile club, Tina Barone, Conservation Planner, gathered information and prepared the grant application by obtaining the required landowner “land use agreement”, preparing location maps, providing photos, obtaining bids, and completing paperwork for any necessary permits for construction of a 60’ x 12’ clear span bridge. The cost of the project was \$38,000 and it was reimbursed 100% by the grant received from the DNR.

County Conservation Aids Program: Through the WDNR, conservation grants provide financial assistance to enhance county fish & wildlife programs. Funds are allocated to each county in proportion to the ratio of the size of each county and the total area of the state. The State’s share may not exceed 50% of the actual cost of the project. The revenue to operate the program comes from the sale of hunting and fishing licenses and state sales tax on hunting and fishing equipment.

The 2019 project involved over 1000 feet of in-stream habitat improvements to Tiffany Creek as it flows through land owned by the Boyceville School District. Streambanks along Tiffany Creek were sloped back and rock was installed to stabilize the banks. Some trees were removed during construction and fish habitat structures, such as root wads, bank-placed boulders, and random boulders, were installed. The DNR provided \$2,302 for this project with matching funds of \$2,302 provided by Dunn County. Other agencies and funding were involved in this project.

Wildlife Damage Abatement and Claims Program (WDACP): This program is funded 100% by the DNR. The WDACP provides prevention assistance and partial compensation to farmers when wild deer, elk, bear, geese, and turkey damage their agricultural crops. The USDA-APHIS-Wildlife Services administers the program for Dunn County.

In the 2019 abatement program nine shooting permits were issued for damage to corn, soybeans, kidney beans, Christmas trees, pumpkins, and a CSA garden by deer and geese and temporary electric fence was installed at 5 locations for damage caused to an apiary by bear and a CSA garden by deer. Six crop damage claims were processed for a total amount of \$20,361.



Wildlife Damage to Corn

In 2019, through the Deer Donation Program, Dunn County hunters donated 24 deer (for a total of 1,371 pounds of ground venison) at three participating processors. The ground venison was distributed through local food pantries.

Steve Olson, Soil Health Specialist

Red Cedar Conservation Farmers is a farmer-led watershed group that works to improve water quality and soil health within our community. The Red Cedar Conservation Farmers group currently consists of about thirty farming community members that meet to discuss conservation, water quality, and the community.

The Red Cedar Conservation Farmers had an outstanding first year. The group was successful in receiving a \$40,000.00 grant from the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). Conservation practices such as soil sampling, cover crops, water sampling, no-till planting and grassed waterway establishment are funded by this grant. The grant also funded several field days and supported the 2019 Chippewa Valley Farm-City Day event that was held at Denmark Dairy near Colfax.



Spring Field Day Discussing Cover Crops

In total, six informational meetings were held where agricultural topics were openly discussed. Conversations ranged from why cover crops are beneficial to how local partners at UW-Stout are researching the watershed to identify areas for installation of conservation practices. The members of the group also hosted three field days to discuss and show spring seeded cover crops, termination timing of cover crops, and planting green into cover crops. These field days allow farmers to welcome their peers onto their farm to evaluate the effectiveness of conservation practices on their land.



Winter Workshop led by Aaron Dietsche, Farmer, and Dr. Mark Mark Borchardt

In addition to the field days, the Red Cedar Conservation Farmers hosted their first ever winter workshop at the White Birch Inn near Bloomer. Herbicide resistant water hemp was one topic that was covered at the workshop. Dr. Mark Borchardt, USDA-Agricultural Research Service, presented on ground water quality across Wisconsin.

The Red Cedar Conservation Farmers Group was successful in securing another grant for 2020. If you have any questions about the group or would like to get involved, please contact me at (715)232-1496.

Natural Resources Conservation Service

Our partnership with the Natural Resources Conservation Service (NRCS) is a valuable component of the Land and Water Conservation program in Dunn County. John Sippl (District Conservationist), KaYing Vang (Soil Conservationist), Austin Littmann (Soil Conservation Technician), and Kelsey Kuehnhold (Office Automation Clerk) work every day on the design and installation of conservation practices that increase our ability to implement the goals and action items in our Land and Water Resource Management Plan.

The Environmental Quality Incentives Program (EQIP) provides financial assistance to landowners installing conservation practices to implement conservation plans. There are 90 active EQIP contracts with a total of over \$2.1 million dollars in Dunn County. In 2019, forty-eight new EQIP cost-sharing contracts (totaling \$682,788) were signed funding grazing systems, farmstead improvements, grassed waterways, cover crops and other water and soil conserving practices

The Conservation Stewardship Program (CSP) began in 2010. Currently, Dunn County has 153 active contracts totaling over \$3.5 million in obligation over a period of the five-year contract. In 2019, there were 21 new CSP contracts signed. This program encourages producers to address resource concerns in a comprehensive manner by undertaking additional conservation practices and improving, maintaining, and managing existing conservation practices.