



GREEN LAKE COUNTY

Land Conservation Department

571 County Road A
PO Box 3188
Green Lake, WI 54941-3188

Phone: 920-294-4051
FAX: 920-294-4056
Email: lcd@co.green-lake.wi.us

Land Conservation Committee Meeting Notice

Date: March 8, 2018 Time: 9:00 AM
Committee Room #0903, Green Lake County Government Center
571 County Rd A, Green Lake WI

AGENDA

Committee Members

Robert Schweder
Chair
Katie Mehn
Vice-Chair
Patricia Garro
Joanne Guden
Arnold Dahlke,
FSA Member

1. Call to Order
2. Certification of Open Meeting Law
3. Pledge of Allegiance
4. Approval of Agenda
5. Approval of February 8, 2018 Minutes
6. Public Comments (3 min limit)
7. Appearances
8. Monthly Staff Report & Upcoming Projects
9. Lake and River Report
10. 2017 Annual Report
11. Farmland Preservation Program
12. DATCP/County Cost-Share Contracts
13. Green Lake County Buffer Program
14. Land and Water Resource Management Plan
15. Legislative Issues
16. Correspondence
17. Committee Discussion
 - Future Meeting Dates: April 12 at 9:00 AM
 - Future Agenda items for action & discussion
18. Adjourn

Kindly arrange to be present, if unable to do so, please notify our office.
All line items are subject to any and all action by this committee, unless noted.

Please note: Meeting area is accessible to the physically disabled. Anyone planning to attend who needs visual or audio assistance should contact the Land Conservation Office at 294-4051 not later than Noon on the day preceding the meeting.

"Our highest responsibility is to protect and enhance land and water resources that will sustain current and future generations."

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**LAND CONSERVATION COMMITTEE
February 8, 2018 - MINUTES**

The meeting of the Green Lake County Land Conservation Committee was called to order by Chairman Robert Schweder at 9:00AM on February 8, 2018 in the Committee Room #0903 of the Green Lake County Government Center in Green Lake, WI. The requirements of the open meeting law were certified as being met. The Pledge of Allegiance was recited.

Present:
Katie Mehn
Patti Garro
Robert Schweder
Arnold Dahlke, Jr., FSA Member
Joanne Guden

Excused:

Staff Present: Paul Gunderson
Heidi Weishaar

Others Present: Ann Cisar
Charlie Marks
Caleb Zahn
Jake Vandenberg

AGENDA

Motion/second (Garro/Guden) to approve the agenda as presented. Motion carried.

MINUTES

Motion/second (Guden/Garro) to approve and file the January 11, 2018 meeting minutes. Motion carried.

PUBLIC COMMENTS

APPEARANCES

FSA program update Jake Vandenberg
NRCS program update by Caleb Zahn

GOLDEN SANDS RC&D UPDATE – ANNA CISAR

Updated committee on Golden Sands activities within Green Lake County

GREEN LAKE CONSERVANCY SUPPORT REQUEST – CHARLIE MARKS

Update given on the Camp Grow Conservancy property and requested a letter of support from LCC.

MONTHLY STAFF REPORT & UPCOMING PROJECTS

Written report was reviewed

LAKE AND RIVER REPORT

Written report was reviewed

FARMLAND PRESERVATION PROGRAM

Trying something new this year with our Annual Conservation Compliance Certification. Postcards will be mailed to landowners that can either be mailed back or questions answered online through our Transcendent computer program.

DATCP/COUNTY COST-SHARE CONTRACTS

BUCHHOLZ

Motion/second (Dahlke/Guden) to approve cost-share contracts. Motion carried.

GREEN LAKE COUNTY BUFFER PROGRAM

County Board will vote on the resolution 02-20-18

LAND AND WATER RESOURCE MANAGEMENT PLAN

Gunderson updated the committee on all that got accomplished in the meeting and thanked those in LCC who attended.

LEGISLATIVE ISSUES

CORRESPONDENCE

COMMITTEE DISCUSSION

- Future Meeting Dates: March 8, 2018 at 9:00AM in the Committee Room #0903 of the Green Lake County Government Center in Green Lake.
 - WI Land + Water Annual Conference March 14-16, 2018
- Future Agenda items for action & discussion

ADJOURN

Motion/second (Guden/Mehn) to adjourn at 10:06AM. Motion carried.

Respectfully submitted,

Heidi Weishaar
Recorder

Land Conservation Committee
March 8, 2018 Monthly Staff Report

February Projects

1. Attend the Woodland Landowners Conference in Oshkosh.
2. Attend the SE Area Technical Update training in Juneau.
3. Attend the AutoCAD user group meeting here in Green Lake County.
4. Run the DNR EVAAL tool on the entire Spring Lake watershed and both Twin Lake watersheds.
5. Meet with Caleb and LCD staff to discuss 2018 projects.
6. Look into DNR permits regarding rock riprap on Lake Puckaway and answer riprap questions for landowners and excavators that will be doing riprap projects.
7. Survey another project site in the Town of Manchester and make adjustments to the existing diversion design for landowner.
8. Survey project site for an addition to an existing waterway in the Town of Mackford.
9. Walk a property owners land on Dakin Creek per the landowner's request to see if practices are needed.
10. Review Nutrient Management Plans submitted – 16 Landowners
11. Completed design for lined waterway (SWRM)
12. Start preliminary design for waste storage structure. (SWRM)
13. Completed design for grade stabilization structure. (EQIP)
14. Webinars Attended: Interseeding and Overseeding Cover Crops in Standing Crops (CCA credits) Manure Waste and Soil Health (CCA credits), Cover Crops and Soil Health (CCA credits)
15. Attended SE Area Technician Meeting - Juneau, Attended CADD Users Group – Green Lake, Held SNAP Plus Training – Green Lake
16. Discussion with Matt Ruark, UW Madison, to setup some nitrogen research plots in county.
17. Reviewed and discussed CSEC&SWM permit applications; issued and monitored permits.
18. Evaluated inquiries, complaints, land disturbance sites, land and conditional use permits, and rezone and variance approvals for CSEC&SWM permit applicability.
19. Discussed FPP: CoC's, Annual Compliance Checks, organization of records.
20. Provided land and conservation program information to interested land purchaser.
21. Conducted FPP Conservation Compliance Farm Checks.
22. Researched requirements, discussed and sought documentation to release a restriction-for-public-benefit from a plat.
23. Evaluate and select training opportunities.
24. Attended two UWEX Cover Crop & Soil Health webinars.
25. Assist multiple participants with FPP- Annual Conservation Compliance Checks and Certificate of Compliances.
26. Discussed well testing program ideas with staff.
27. Attended NRCS-SE Area Annual Technical Update in Juneau.
28. Fielded erosion concern from citizen.
29. Met with NRCS-GLC to discuss conservation practice design, implementation and cost sharing.
30. Attended WDATCP webinar on Agricultural Enterprise Areas
31. Discussed and trained in FPP records access with Transcendent Technologies software.
32. Attended “Maximizing your Growth at Each Career Stage” webinar.
33. Distribute educational information to public.

March Project Focus

1. Continue FPP inspections for group 3 spot checks in Big Green Watershed as weather permits.
2. Complete the design for a grassed waterway and underground outlet in the Town of Mackford.
3. Complete the inspection for 3 remaining animal waste storage facilities in the county as landowners permit.
4. Meet landowner to discuss changes to diversion design in the Town of Manchester and complete design changes and contract items as necessary.
5. Meet with landowner in the Town of Green Lake to discuss the finalized design for 2 grassed waterways and a grade stabilization structure and send out for bids.
6. Attend multiple NRCS sponsored training events around the southeast portion of Wisconsin and the WI Land & Water Conference in Lake Geneva.

Lake and River Report

Little Green – No Update.

Twin Lakes –Twin Lake management plan is in the final phase of completion.

Spring Lake – Spring Lake management plan is in the final phase of completion.

Lake Puckaway – Final Management Plan is Available. Dam reconstruction funds have been approved by the DNR.

Green Lake - No Update.

Grand Lake – Grand Lake management plan is in the final phase of completion.

**GREEN LAKE COUNTY
DEPARTMENT OF LAND CONSERVATION
2017 ANNUAL REPORT
TO
COUNTY BOARD OF SUPERVISORS**

Chapter 92 of the Wisconsin Statutes governs the Land Conservation Department. The Land Conservation Department provides engineering, technical design and conservation planning to landowners to help control soil erosion and protect water quality. The Land Conservation Department is under the supervision of the Land Conservation Committee. The mission statement of the Land Conservation Department is, "Our highest responsibility is to protect and enhance land and water resources that will sustain current and future generations."

Note: Where appropriate, comparison values from 2016 are indicated in (parenthesis).

Staff

Paul Gunderson, County Conservationist
Heidi Weishaar, Administrative Assistant
Thomas Jonker, Soil Conservationist I
Jordan Dornfeld, Soil Conservationist I
Derek Kavanaugh, Soil Conservationist II
Todd Morris, Soil Conservationist III

DATCP Grant Funding Received

The department received a \$134,181 (\$133,963) grant from the Department of Agriculture, Trade and Consumer Protection (DATCP) for departmental operations and program management.

Farmland Preservation Program

This program's purpose is to preserve agricultural land and open space by promoting sustainable land use planning and development. A major component of the program requires landowners to comply with soil and water conservation standards adopted by the Land Conservation Committee. The department has experienced a substantial increase in staff time directed toward the workload of the program because each participant must be tracked with a unique id number that matches each qualifying parcel. A new tracking program has been purchased to help alleviate some of the time consuming portions of the program. Participants are eligible to claim a \$7.50 per acre income tax credit. 266 (249) landowners received \$396,593 (\$377,438) in state tax credits.

Land & Water Resource Management Plan Implementation

In 2017, \$79,343 (\$70,269) in state cost sharing was paid to 21 (21) participants to implement various Best Management Practices (BMPs). Cost-share rates for this program range from 50%-70% depending on the practice. Conservation practices installed/implemented under this program in 2017 were:

Grade Stabilization Structure	3 no.
Grassed Waterway	2,318 ft.
Rock Lined Waterway	300 ft.
Nutrient Management	1,091 ac.
Roof Runoff System	1 no.
Streambank Protection	770 ft.
Water and Sediment Control Basin	1 no.
Well Decommissioning	7 no.

Construction Site Erosion Control and Storm Water Management Ordinance

In 2016, fifteen (nineteen) construction site erosion control and storm water management permits were issued, generating \$2,298 (\$2,710) of revenue.

Clean Sweep

On August 12, 2016, 287 (193) residents participated in a one-day hazardous waste chemical collection. The collection netted approximately 23,216 (14,879) total pounds of hazardous waste. Also collected were 250 (250) gallons of waste oil, 60 (500) gallons of anti-freeze, and 3,748 (2,344) fluorescent light bulbs. A list of disposal options for items not collected at the clean sweep was distributed as needed.

In our second year of Electronic Waste Collection, we filled five (three) 30 yd. dumpsters and zero (one) 20 yd. dumpster with Electronic Waste. We collected \$4,582 (\$3,840) from landowners and paid \$13,600 (\$7,333) to Veolia who we contracted with to collect and dispose of the E-Waste.

In addition, 1,015 tires were collected for a minimal fee. We collected \$2,703 from landowners and paid \$2,767 to Liberty Tire Recycling who we contracted with to pick up and recycle the tires.

\$10,000 (\$10,000) in revenue toward this event was received from Waste Management and \$12,550 (\$13,525) in revenue was received from the Wisconsin Department of Agriculture, Trade, and Consumer Protection. Total cost of the event was \$51,957 (\$38,956) with the Green Lake County cost after all revenues and expenses of \$22,067 (\$11,592).

County Lakes

Green Lake - A community wide effort to develop a comprehensive lake management plan was initiated in 2011. The plan is updated on an annual basis to reflect current conditions, and responds to the most recent scientific data. A planning team consisting of Green Lake County Land Conservation Department, DNR, Green Lake Association, Green Lake Sanitary District, City of Green Lake, City of Ripon, Fond du Lac County, and several community members worked on developing a long-term lake strategy. The goal of the plan is to set objectives, and determine pollutant source loading, so that major sources can be addressed effectively. The Green Lake watershed was selected for the National Water Quality Incentive Program through the Natural Resources Conservation Service. The program has dedicated funds for conservation practices to be installed within the watershed for the 6th consecutive year. During 2017, 18 additional conservation projects were installed to add to the previous 180 installed during the previous 5 years. A complete description of the projects and initiatives, are available on the Green Lake Sanitary District or Green Lake Association's websites.

Lake Puckaway - A new comprehensive lake management plan was completed in the fall of 2017. Several new initiatives are scheduled to be implemented, such as an adaptive water level management plan, dam reconstruction, and breakwater enhancements. To compensate for recent losses of nesting areas during the breeding season due to frequent flooding, two floating rafts were installed in 2013-2017. The nesting project was a great success in 2017, resulting in 66 fledglings, the second largest nesting population in the state, and the largest hatches on an artificial platform. Planning is currently underway to install permanent nesting islands on the lake, which will take the place of artificial platforms.

An offshore timber breakwater was installed near the center of the lake in 2012. The structure is 3 feet high, by 3 feet wide, by 300 feet long. It is intended to accumulate sediment and provide for better fish habitat. This is an experimental structure, since it is the first time it has been attempted in a northern climate. Ice may prove to be a limiting factor in its success. The breakwater fared well through the 2012-2015 winter, however as added protection, 8 ice pilings were installed in front of the barrier to provide additional protection and visibility. Additional materials were added in 2014-2017 to maintain the structure. Continued monitoring will provide information how to improve the structures. High water and ice movement during the winter of 2016/2017 resulted in significant damage to the ice deflection structures. The breakwater survived the ice shoves in 2016/2017, albeit damaged. The lifespan of this structure is becoming limited, and other alternatives should be explored.

The lake management plan continues to be implemented with the assistance of the Lake Puckaway Protection and Rehabilitation District, DNR, and Land Conservation Department efforts.

Automatic water level gauges were installed at Fish Camp (upstream of Lake Puckaway), above and below Princeton Dam. Readings occur at 30-minute intervals during ice-free periods. The gauges are removed during the winter to prevent damaged to the electronics. These water level readings help to determine the hydrology of the area, and water level response to varying weather events. As a result of the water level monitoring efforts, a computer model has been created that can accurately (within 0.1 feet) predict the lake level by reading the online water readings from the USGS station in Berlin, WI. The model can show important inflection points, such as when the dam has no impact on water levels, and when water levels can be controlled by passing water thru the lock channel. A study was completed thru the WDNR to determine the impact of the dam on the river flow and lake levels. The lake is highly controlled by precipitation, and is only impacted by dam operation during low flow periods.

Bathymetry mapping was completed in 2016, which will aid in management decisions in reference to water level fluctuations (natural or induced).

The walleye hatchery was operated by Lake District volunteers for the seventh year, with several upgrades to the hatchery to ensure a higher success rate.

Twin Lakes - Native plant populations are thriving, and suppressing AIS in some of its historical range. Many of the remaining individual invasive plants are interspersed with natives, making them more difficult to treat, however they are not causing nuisance problems at current population levels. The infestation now consists of Curly Leaf Pondweed, and is primarily restricted to Little Twin Lake; however, there is continued evidence that fragments of the plants are being carried by boat traffic through the channel connecting the lakes. Mid-summer survey showed good control of Curly Leaf Pondweed in both Big and Little Twin Lakes, however, unlike Big Twin Lake, Little Twin has experienced poor recovery of native plant populations. Big Twin Lake is experiencing some navigational issues due to excessive growth of some native plant species (i.e. Clasp Leaf Pondweed) in localized areas. This excessive plant growth is likely due to elevated nutrient levels entering the lake from tributaries. Twin Lakes was awarded a WDNR Lake Planning Grant in 2016. Lakes studies and monitoring occurred throughout the summer and fall of 2016. A comprehensive Lake Management Plan will be completed in early 2018, which will guide future management actions. Soil tests were offered to all agricultural landowners within the watershed. Ninety percent of the Twin Lake watershed landowners participated in the testing program in 2016. Soil tests results will be incorporated in the watershed model to help guide future conservation decisions.

Spring Lake (Green Lake Township) – Spring Lake was awarded a WDNR Lake Planning Grant in 2016 to develop a comprehensive lake management plan, which Field work was conducted throughout 2016. During 2017, the Land Conservation Department collaborated with the lake association and hired a lake consultant to develop the lake management plan, which will be finalized in early 2018, which will guide future management actions. Soil tests were offered to all agricultural landowners within the watershed. One hundred percent of the Spring Lake watershed landowners participated in the testing program. Soil tests results will be incorporated in the watershed model to help guide future conservation decisions.

Grand Lake – A new citizen based organization established in 2016, the Grand Lake Improvement Association was created with the assistance of County staff. A WDNR Lake Planning grant was received in 2016. Lake studies and monitoring occurred through the summer and fall of 2016. The Lake Association collaborated with the County LCD and hired consultant to create a lake management plan, which will be the basis for future improvements within the Grand Lake Watershed.

Fox River – Utilizing the results of the 2015 grant-funded river survey, several sites were identified for restoration along the river. The Land Conservation Department collaborated with the City of Princeton to install rock rip protection at the City Park to protect severely eroding banks. A handicap accessible kayak launch and landscaping trees will be installed in 2018.

Little Green Lake - A long-term comprehensive Lake Management Planning project will be completed in 2018. A Lake Planning Committee was formed in 2017 to advise the development of the plan.

The effectiveness of the lake destratification system has been under review. Mechanical harvesting and chemical control continues to be a strategy to relieve the problems caused by aquatic invasive species. In 2017, 46.3 acres were chemically treated.

Fish stocking for 2017 included 1432 Musky (DNR program), and 19,856 Walleye,

Invasive Species Control and Education

In 2017, the LCD assisted Anna Cisar, the Aquatic Invasive Species (AIS) Coordinator (Golden Sands Resource Conservation & Development Council) and collaborated on several projects. These projects ranged from providing booth space for an educational display at the Green Lake County Fair, to carp removal and aquatic plant restoration in County K Marsh.

Purple loosestrife beetles were again raised and released in Green Lake County with the help of Markesan students, volunteers and the Green Lake Sanitary District.

Outreach was done through the state's Clean Boats Clean Waters program; LTE technician Sroka completed 47 hours at boat launches in Green Lake County, contacting 226 (1,666) boaters on 134 (1,077) separate watercraft. Sroka also attended the Green Lake Angler Young Angler Tournament with an educational booth on aquatic invasive species. Other educational outreach included a couple articles, one on zebra mussels for Little Green Lake, and two that were published in The Green Laker discussing the research going into boat wash stations and the 2017 Clean Boats Clean Waters program.

2017 brought a lot of forward progress on the planning of Boat Wash Stations at our two county landings on Green Lake. Partnering with Golden Sands, the Green Lake Sanitary District and the Green Lake Association we determined the goal of these wash stations, researched various styles of boat washes and received quotes, surveyed the landings for design layout, put together a budget, and looked into State regulations for the water runoff coming from these stations. Grant funding was looked into as well but will not be applied for until we get closer to finalizing the design plan. Boat launch fees may likely help support this project. This project will continue in 2018. Moving forward we will begin discussion with other departments on the best way to move forward with design and implementation.

Wildlife Damage Program

The Wildlife Damage Abatement and Claims Program is a program where, through local county implementation, farmers receive assistance with wildlife damage prevention and compensation for crops lost. This program is fully state funded with funds coming from a \$1 surcharge on hunting licenses.

2017 crop year deer damage claims of approximately \$82,599 (\$70,558) was appraised for nine (nine) farmers. Twelve (Eight) farmers received abatement assistance. 220 (290) shooting permits, harvesting approximately 200 (220) deer were issued to farmers where over \$1,000 of deer damage occurred or was likely to occur. USDA Animal, Plant, Health, and Inspection Service – Wildlife Services (USDA-APHIS-WS) handles day to day administration and field management with the Land Conservation Department having overall administrative and financial management. All staff and Land Conservation Committee time spent on this program is reimbursed 100% from the DNR.

Green Lake County Drainage Board

District #1 – Inspection took place on October 18, 2017 by drainage board member Dick Severson. No complaints on the ditch, There were some trees in 1st part of ditch, some water was backing up and ponding was occurring. There were spoil piles located along $\frac{3}{4}$ of the ditch.

District #2 – Inspection took place on October 18, 2017 by drainage board member Roger Sell. All of district 2 is well maintained, no brush or blockages.

District #3 – Inspection took place on October 18, 2017 by drainage board member Roger Sell. No brush or blockage.

District #4 - Inspection took place on October 18, 2017 by drainage board member Dick Severson. There was some water standing in lower section of ditch.

District #5 – Inspection took place on October 13, 2017 by drainage board member Pat Krueger. Todd Morris, Green Lake County Land Conservation accompanied Mr. Krueger. No damage observed in ditch – looked good.

Seneca-Warren District – Board paid \$10,000.00 towards the loan principal. The ditch was inspected on October 13, 2017 by Pat Krueger with assistance from Todd Morris, Green Lake County Land Conservation Department. Inspected ditch by driving the corridor from Station 75+00 – 266+36, also accessed the ditch is certain places where there were not crops in the corridor. It appeared there was some vegetation build up from 75+00 – 110+00 (Hwy D Bridge). There is a sand bar at the outlet end of the Hwy D Bridge. At station 257+70 on the Dolata Family Revocable Trust land there is a side hill seep that caused the ditch bank to slough in. Currently there is an 8.4 ft. vertical slope along the east side of the field/ditch edge. Upper section at the Souder property, the landowner is digging and removing sand, which has caused ponding on both sides of the ditch. The ponding elevation appears to be lower than the ditch. The ditch is still present between the two ponds. There are still a lot of crops on the fields in the ditch corridor that made it difficult to drive along. From station 445+00 to 460+00, west of Hwy EE, looks like it could be cleaned out.

Environmental Quality Incentives Program (EQIP)

Approximately \$356,600 (\$193,951) was paid to landowners who installed/implemented practices in 2017. For Fiscal Year 2017, 8 (17) new EQIP and NWQI contracts were signed, obligating approximately \$162,300 (\$455,600). Cost sharing for this program ranges from 50%-90% depending on the practice. Conservation practices installed/implemented in 2017 were as follows:

<u>Practice</u>	<u>Total Units</u>
Brush Management	22.8 Acres
Conservation Cover	7.4 Acres
Cover Crop	603.6 Acres
Critical Area Planting	8 Acres
Diversion	64 Feet
Mulching/Erosion Blanket	185,428 Sq. Feet
Fence	12,982 Feet
Forage and Biomass Planting	96.9 Acres
Grade Stabilization Structure	3 Structures
Grass Waterway	4,384 Feet
Heavy Use Area Protection	5260 Sq. Feet
Obstruction Removal	4.2 Acres
Prescribed Grazing	13 Acres
Pumping Plant	1 Unit
No Till	149.7 Acres
Spoil Spreading	5 Acres
Stream Crossing	1 Unit
Underground Outlet	200 Feet
Waste Transfer	1 Unit
Waste Treatment	2 Units

Conservation Education Efforts

The annual Conservation and Environmental Awareness Poster Contest for county students in grades K-12 was held in January with 120 (208) poster entries received. Cash prizes were awarded to 19 students in various contest divisions. The award-winning students were recognized during the April County Board of Supervisors meeting. Award winning posters were also displayed at the Green Lake County Fair.

An Arbor Day Breakfast celebration was held April 29th, 2017 with 84 (90) participants. The event occurred at the Green Lake Conference Center with Jay Dampier, a certified arborist from the UW Extension, speaking on “How Trees Built the Midwest”.

A field day at the Dave Wilke Farm was held on August 26th, 2017. Topics included cover crops and soil health. A bus tour was also given to highlight many of the best management practices installed in the past few years. Various agencies cooperated to make the field day a great success for the 60 participants that attended.

Respectfully submitted,

Paul Gunderson