

Your Name: Paul Dearlove

Department or Organization: Clean Lakes Alliance

Phone: 608-255-1000

Email: paul@cleanlakesalliance.org

Water Related Budget Suggestion:

1. Year 2 contribution to help fund coalition planning work under the Yahara CLEAN Compact (\$25,000 - same as 2019 level)
2. Funding for 2020 Lake Explorer Camp to continue offering a 2-week summer enrichment camp to K-12 kids from the Bayview Foundation & Community Center (\$12,000 - same as 2019 level). Can also consider adding \$6,000 (\$18,000 total) to support the addition of a third week to reach more kids and communities.
3. Increased and more targeted testing of public beaches monitored by PHMDC (\$36,500 - includes one seasonal employee working 40-hr weeks at \$12/hr for 16 weeks + \$31 per E. coli sample to monitor 9 high-priority beaches 5 times/wk, 5 medium-priority beaches at 2 times/wk, and 3 low-priority beaches at 1 time/wk). This cost does not include extra sampling that may be needed following larger rain events or when high E. coli levels warrant. This cost should also be adjusted to account for additional employee costs, such as overhead, applicable fringe benefits, etc.

Estimated cost: \$73,500

Describe why is it recommended?

1. Updating and expanding upon the Yahara CLEAN Strategic Action Plan for Phosphorus Reduction (2012) is one of eight Healthy Farms Healthy Lakes Task Force recommendations that were finalized in August of 2018. Clean Lakes Alliance is taking the lead on reconvening the Yahara CLEAN partners to advance this effort. This is the seventh year of implementation under the 2012 plan, and, while great progress has been made in recent years, a refreshed action plan is needed to address more intense runoff events, increased manure generation, and expanding urbanization that hardens the landscape and limits manure-treatment options. Furthermore, we will need solutions to increase practice-adoption rates and enhance the capacity of implementation partners to expand the base of participation and get the needed projects shovel-ready.

The process is estimated to cost the signatory partners under the Yahara CLEAN Compact about \$200,000 over a two-year period for needed consultants, community outreach and listening sessions, and other out-of-pocket (non-staff) costs. The community outreach component will include six, professionally facilitated public listening sessions, plus two focus group sessions that seek participation from under-served communities. Therefore, all signatory partners are being asked to contribute \$25,000 per year over the two-year time period (2019-2020). Dane County committed to \$25,000 in 2019, and we are asking that it budget a similar amount for 2020.

2. The Lake Explorer Camp is a hands-on, outdoor recreation and lake science camp available to under-resourced communities. The two-week camp is a partnership between Clean Lakes Alliance and Madison Boats, and is currently serving K-12 students from the Bayview Foundation & Community Center. These students live in low-income housing and are represented by many immigrants and refugees. Dane County contributed \$12,000 to support the 2019 program, and we are requesting a similar amount to be budgeted to continue the program for Bayview in 2020.

3. To improve the effectiveness of beach testing to adequately protect public health, Clean Lakes Alliance is recommending a more robust and targeted sampling program based on beach type (classified as high, medium and low-risk sites) and loosely modeled after Wisconsin DNR protocols for Great Lakes beaches. Current sampling by Public Health is conducted one day per week and irrespective of rainfall that increases the risk of near-shore pollution and elevated E. coli concentrations. The recommended procedure is to classify the 17 beach sites monitored by Public Health in accordance with their susceptibility to closure due to stormwater impacts (9 high-risk sites, 5 medium risk, and 3 low risk). High-risk sites would be monitored 5 days per week and/or after 2.5" rain events, medium-risk sites would be monitored 2 days per week and/or after 2.5" rain events, and low-risk sites would be monitored 1 day per week. Based on \$31 per sample for E. coli, this would equate to \$28,768 in lab costs, plus an additional \$7,680 to pay for a seasonal employee at \$12/hr to do the collections and assist with other monitoring and communication needs.

What is the anticipated outcome?

1. A shared vision for our lakes with clear goals; an updated plan of action to achieve the stated goals; roles and timelines for completing recommended actions; a funding strategy to pay for the needed work; tracking metrics to hold ourselves accountable; and coordinated public messaging to effectively communicate progress.

2. Up to 43 K-12 kids served and 674-756 education hours delivered as part of the two-week immersion experience. The creation of student mentors who help with the teaching of their younger peers and who are encouraged to consider part-time employment at Brittingham Boats.

3. Public beaches that are monitored in a manner that is more responsive to prevailing conditions and risks, and therefore more protective of public health.

Your Name: Jean Schneider, Chairperson of the Token Creek Conservancy

Department or Organization: Token Creek Conservancy Committee, Village of Windsor

Phone: 608-513-0016

Email: nativamedica@gmail.com

Water Related Budget Suggestion:

Vegetation restoration of the wetlands and spring area on the south side of Token Creek at the headwater springs of Token Creek at the Token Creek Conservancy (entrances, Portage Rd, Egge Rd). This area was submerged for about 150 years from a millpond dam that was removed almost 20 years ago. Unfortunately the removal did not include any vegetation restoration, so the area is mostly reed canary grass. We have been working with an ecological restoration company on a plan to return this area to native vegetation. There is a small remnant area of original sedge meadow adjacent to this area.

Estimated cost: \$60,000 over 4 to 5 years. We would provide volunteers to help burn and seed.

Describe why is it recommended?

To help improve water quality in Token Creek and the downstream areas including the chain of lakes. This restoration would also be a very visible project as the trail system and property is becoming more widely known and used. The creek is used frequently by people fishing as it is a cold water trout stream.

A link to a map of the area: http://www.windsorwi.gov/vertical/sites/%7BC1679B38-6BAE-4E0D-942E-C7A84C964C87%7D/uploads/Token_Creek_Conservancy_Info_Map_FINAL.pdf

What is the anticipated outcome?

Restoration to sedge meadow plants which are excellent at cleaning water and creating habitat and food for pollinators and animals. Also, this area will look appreciably different in a variety of flowering plants.

Your Name: Gary Huth

Department or Organization: City of Middleton

Phone: 608-821-8378

Email: ghuth@ci.middleton.wi.us

Water Related Budget Suggestion:

Acquisition of farm lands in Town of Springfield for storm water management.

Estimated cost: Land Acquisition: \$600,000 - \$780,000
Construction: \$740,000

Describe why is it recommended?

Three areas in the Town were identified in previous studies as likely to be conducive to infiltration. Any impoundment on these lands would also trap sediments (TSS) and phosphorus (TP).

What is the anticipated outcome?

Preliminary analysis estimates the following potential benefits:

- TSS reduction : over 90%
- TP reduction: 33 - 91%, depending on the type of facility constructed

Some incidental reduction in peak flow (flood control) may also be realized.

Your Name: Luke Fuszard

Organization: Hidden Oaks (Middleton) Neighborhood Homeowners Association

Phone: 608-313-4641

Email: lfuszard@gmail.com

Water Related Budget Suggestion: On the Hellenbrand property in the Town of Middleton along Highway 14, a huge field has been submerged in water since August of 2018. In the mid-20th century, Dane County created a Drainage District which assessed area property owners for stormwater runoff expenses. Some of those funds were used to dig a series of ditches on the Hellenbrand property to get the stormwater to easily flow into the Black Earth Corridor. The last time the ditches on the Hellenbrand property were cleared was in the 1950s. Shortly thereafter, the Drainage District stopped assessing property owners and no longer had any funds to perform maintenance. In the late 1970s, one of the area farmers, Jim Hinrichs, built a berm and installed a pump on the Hellenbrand property as a stop-gap fix to get the water moving as the ditches were no longer being cleared. In the August 2018 flooding, the pump became submerged in water and no longer works. Therefore water is collecting with no outlet and no way to connect with the Black Earth Creek as originally intended. Because no action has been taken for approximately 40 years, the ditches are about 1-2 feet deep right now but should be 6-8 feet deep. If the ditches can be cleared, then the berm and pump can be removed.

Estimated Cost: The Dane County Drainage Board's rough estimate of cost to clear the ditches would be somewhere in the \$800,000 to \$1,000,000 range. However, we have not had a professional firm put together a firm quote.

Describe Why It Is Recommended: High surface water immediately downstream is raising the groundwater, or perched groundwater, elevations upstream (in Hidden Oaks). In the midst of the August 2018 flooding, the power went out in the Hidden Oaks (Middleton) neighborhood and surrounding areas. As a result, homeowners' sump pumps stopped working and several basements were flooded with tens of thousands of dollars of resulting property damage.

As mentioned above, surface water remains high in the neighborhood and surrounding farmland. Dozens of Hidden Oaks sump pumps are running every 45-60 seconds. If another power outage were to occur, approximately 20-30 homes will have immediately flooded basements. Additionally, there are a number of area warehouses that would similarly be flooded.

What Is the Anticipated Outcome: If the ditches are cleared the area will drain naturally and will likely last 15-20 years before needing to be cleared again.

Your Name: Luke Fuszard

Organization: Hidden Oaks (Middleton) Neighborhood Homeowners Association

Phone: 608-313-4641

Email: lfuszard@gmail.com

Water Related Budget Suggestion: On the Hellenbrand property in the Town of Middleton along Highway 14, a huge field has been submerged in water since August of 2018. In the mid-20th century, Dane County created a Drainage District which assessed area property owners for stormwater runoff expenses. Some of those funds were used to dig a series of ditches on the Hellenbrand property to get the stormwater to easily flow into the Black Earth Corridor. The last time the ditches on the Hellenbrand property were cleared was in the 1950s. Shortly thereafter, the Drainage District stopped assessing property owners and no longer had any funds to perform maintenance. In the late 1970s, one of the area farmers, Jim Hinrichs, built a berm and installed a pump on the Hellenbrand property as a stop-gap fix to get the water moving as the ditches were no longer being cleared. In the August 2018 flooding, the pump became submerged in water and no longer works. Therefore water is collecting with no outlet and no way to connect with the Black Earth Creek as originally intended. Because no action has been taken for approximately 40 years, the ditches are about 1-2 feet deep right now but should be 6-8 feet deep. Therefore our suggestion is two-fold: 1) conduct a hydrological study of the area; and 2) If recommended by the study, clear the ditches to get water naturally flowing again.

Estimated Cost: A Hidden Oaks neighbor has spoken with MARS-EOR regarding the hydrological study who estimated that it would cost between \$25,000-\$32,000 to collect all the data, analyze the data, and develop a report. Meanwhile, the Dane County Drainage Board's rough estimate of cost to clear the ditches would be somewhere in the \$800,000 to \$1,000,000 range. However, we have not had a professional firm put together a firm quote.

Describe Why It Is Recommended: According to MSA Professional Services Senior Water Resource Engineer, high surface water immediately downstream is raising the groundwater, or perched groundwater, elevations upstream causing the water table to be higher than basement slabs (in Hidden Oaks and surrounding commercial properties). In the midst of the August 2018 flooding, the power went out in the Hidden Oaks (Middleton) neighborhood and surrounding areas. As a result, homeowners' sump pumps stopped working and several basements were flooded with tens of thousands of dollars of resulting property damage. Note that the MSA Engineer shared this thought merely upon receiving verbal description of the land area. While we trust his opinion, we would like to complete the hydrological study to 100% confirm.

As mentioned above, surface water remains high in the neighborhood and surrounding farmland. A number of Hidden Oaks sump pumps are still running every 45-60 seconds. If another power outage were to occur, approximately 20-30 homes will have immediately flooded basements. Additionally, there are a number of area warehouses that would similarly be flooded.

What Is the Anticipated Outcome: There would be two beneficial outcomes to this action. The first would be a complete hydrological study of the area so we know once and for all what needs to be done. And second, if the ditches need to be cleared (as most believe) then the area will drain naturally and likely last 15-20 years before needing to be cleared again.

Your Name: Cara Coburn-Faris

Department or Organization: Village of Shorewood Hills Public Works Committee; Village of Shorewood Hills Sustainability Committee

Phone: (608) 217-5374

Email: cvcoburn@gmail.com

Water Related Budget Suggestion: Green Infrastructure throughout the Willow Creek Watershed for flood abatement and improved water quality throughout the Yahara Lakes

Estimated Cost: could be a little or a lot

Describe why it is recommended?

The August 2018 flash flooding, which wreaked havoc throughout Dane County, destroyed dozens of vehicles and homes in the Village of Shorewood Hills (VOSH) and further damaged commercial, residential, and public property, with losses in the millions. It also provided a glimpse into our future—one in which extreme weather events overpower the infrastructure designed to manage them.

The Willow Creek watershed, which has 84 percent of its 1,200 acres of surface area in the City of Madison and 16 percent in VOSH, drains to VOSH. Typically, the stormwater that is not captured where it falls enters the storm sewers. The storm sewers empty into Willow Creek, which flows to Lake Mendota. When there is overflow due to the storm sewers being full, it inundates VOSH and eventually infiltrates.

VOSH is currently exploring stormwater management improvements to address the flooding. Since planning for a major University Avenue reconstruction project is underway, much attention has been given to the benefits of a 12-foot tunnel that would run under the golf course to carry water from University Avenue directly to Lake Mendota. The current cost estimate is roughly \$20 million, with more than half of this coming from the federal government in conjunction with the University Avenue reconstruction and most of the remainder coming from the City of Madison. The VOSH Board President estimates VOSH would be asked to pay roughly \$1.5 million for the tunnel and is eager to pursue this option.

So far there is no information on the water quality implications of the 12-foot tunnel. There is concern that it could raise the quantities of sediment, phosphorus, pesticides, fossil fuel-related contaminants, chlorides, and other emerging contaminants entering Lake Mendota.

Nor has green infrastructure been considered with any seriousness, from the public information I have seen. The analysis that Advanced Engineering and Environmental Services, Inc. (AE2S) presented at a public meeting on June 12, 2019 included a “rain garden” option, but this was dismissed as an option that would only negligibly impact stormwater volume. There was no discussion of green roofs, porous pavement, rain barrels, or other types of green infrastructure particularly suited to urban areas.

Green infrastructure’s benefits are incremental and multiply over time. Small green infrastructure projects are relatively low-cost. The more green infrastructure is installed, the more rainwater is captured. The more rainwater green infrastructure in the Willow Creek Watershed captures, the less pollution enters the Yahara Lakes.

Green infrastructure offers opportunities for public-private partnerships that could strengthen the fabric of our community. It is considered an extremely cost-effective approach because not only does it prevent costly floods, but it also improves water quality, saving taxpayers the future costs of clean up.

What is the anticipated outcome?

A green infrastructure revolution in the Willow Creek Watershed could:

- provide flood abatement, protecting us from millions of dollars of damage and from more serious consequences of flooding, including loss of life;
- dramatically improve Yahara Lakes water quality, with increasing benefits decade after decade, which is critical to Dane County's short- and long-term economic, ecological, and human health;
- beautify our public and private spaces;
- Make Dane County a leader in sustainability, potentially attracting national and international recognition and funding for other local initiatives.

CRANES

Capital Region Advocacy Network for Environmental Sustainability

On behalf of its member organizations and individuals, advocating collaboratively for the environment of the South Central Wisconsin region (eight counties: Columbia, Dane, Dodge, Green, Iowa, Jefferson, Rock and Sauk) toward a high quality of life; an ecologically sustainable and just culture; and, the celebration of the beauty of this place, both natural and built.

VISION

The Capital area's environment, including water, land, and air resources, will be conserved or restored to ensure the region's quality of life and the beauty of this special place, for all who live or visit here, now and in the future.

PARTNER ORGANIZATIONS

*Earth/Art® Resources
Friends of Pheasant Branch Conservancy
League of Women Voters - Dane County
Madison Area Bus Advocates
Madison Audubon Society
Sierra Club - Four Lakes Group
Western Dane Coalition for Smart Growth
& Environment
West Waubesa Preservation Coalition*

BOARD OF DIRECTORS

*Gary Werner, President
Jon Becker, Vice-President
Caryl Terrell, Secretary-Treasurer
Constance "Connie" Threinen*

ADVISORS

Robbie Webber

C.R.A.N.E.S., INC.
POB 3413
MADISON, WI 53704

608.807.0887 tel
CRANESINC.ORG
INFO@CRANESINC.ORG

A Wisconsin Non-Profit [EIN 26-4056421]

Fiscal Agent:
Madison Area Bus Advocates
A Tax-exempt 501(c)3 Non-profit
BusAdvocates.org

PRINTED ON RECYCLED PAPER

July 1, 2019

To: Lyle Updike and Pam Porter, Dane County Lakes & Watershed Commission

From: Gary Werner, President, Capital Region Advocacy Network for Environmental Sustainability (CRANES)

Subject: Early Recommendations for Dane County Lakes & Watershed Commission Consideration of FY2020 Budget

Thank you for the opportunity to provide early recommendations for the annual process developing LWC Budget Recommendations to the County Executive.

Initiatives to Reduce Phosphorus Pollution Provide cost-share funding for urban runoff control.

CRANES supports and especially appreciates the high priority LWC has placed on the Urban Water Quality Grant program (UWQGP) including the Urban Outfalls Mitigation Program. [CRANES awaits data on the current achievements of the program in Jeremy Balousek's updated UWQGP report promised to LWC by the end of June 2019].

CRANES repeats its previous requests that County staff update the website map and chart of approved (completed and underway) UWQGP projects and provide a written annual program report, so that the public is aware of the progress achieved.

CRANES requests that LWC continue to emphasize increased funding to an annual level of \$2 million in new funding for three more years (original program was started as a ten year grant program). In the past LWC reiterated that the program should:

- (1) promote green infrastructure and improve storm drain outlets (from a developed drainage area with inadequate stormwater controls)
- (2) maintaining emphasis on the county's "top ten" problem stormwater outfalls
- (3) carry forward and award of any unspent funds from previous years
- (4) provide an annual written program report to LWC and the public

CRANES recognizes and supports this county funding program because local governments can apply for a county match of their storm drain outlet projects – a Win-Win-Win-Win for county taxpayers, municipal taxpayers, lake users and water quality. In addition, both the County and the municipalities are meeting requirements under the MAMSWaP DNR permit under the Clean Water Act. The Madison Area Stormwater Partnership (MAMSWaP) is a coalition of Dane County municipalities and organizations together to promote practices that reduce and improve stormwater runoff into Dane County lakes, rivers and streams. Website: <http://ripple-effects.com>

CRANES requests that LWC take the following positions

- (1) **Require written annual program reports to the public and LWC**
- (2) **Tighten UWQGP to exclude natural surface waters (like Starkweather Creek) from eligibility as an "urban stormwater outfall."**
- (3) **Target nitrogen reduction when phosphorus is not an adequate nutrient surrogate.**

CRANES

CRANES stands by our letters of 2014 through 2016 that raised concerns about the effectiveness and impacts on creek and lake ecology of the unsustainable, multi-year expenditures by LWRD administration of UWQGP to a funded project for the Starkweather Creek Flocculant Dispersal Facility (FDF). The grant funding was not fully spent in 2018-19. We urge LWRD to retrieve FY2019 grant funding of the FDF if possible. LWRD should use these funds in other projects that more closely achieve UWQGP criteria and goals.

CRANES supports the efforts of LWRD to fund upstream wetland restoration and purchase of conservation easements as strategies to manage stormwater.

Increase financial resources for Stormwater Information and Education by MAMSWaP and demonstration projects by LWRD

The Joint LWC and CARPC Stormwater Technical Advisory Committee (STAC) has identified the need to provide information to land managers, developers and construction professionals of the climate trend of increased frequency of severe precipitation events resulting in the increased volume of stormwater runoff and flooding of urban and rural areas in Dane County. The STAC identified a target of uniform 100% stay-on standards for rural and urban infill with 90% required volume control on-site and a Fee-in-Lieu/Bank program to provide flexibility in location of infiltration for no increase in downstream flood risk. LWRD and CARPC have compiled valuable information on a range of practices, costs and potential for stormwater infiltration and storm water reductions and/or storm management. The next step is to fully analyze and describe the Fee in Lieu/Bank program.

The STAC also identified the need for demonstration projects. CRANES urges LWRD to incent a 100% stay-on demonstration project.

CRANES supports funding three budget initiatives to implement needs identified by the STAC:

- (1) Fund expanded Dane County LWRD staff hours and supplies devoted to MAMSWaP to develop and implement I&E programs on innovative stormwater management to reduce the damage to water resources, public infrastructure and private property.
- (2) Incentivize a 100% stay-on demonstration project.
- (3) The STAC implementation team and LWRD and CARPC staff have identified the need for short term funding of a consultant to frame the questions for an RFP on the appropriate administration of the proposed stormwater credit trading program. The STAC efforts cannot proceed without an understanding of how a trading program would be administered locally.

Maintain land and water conservation funding

- (1) Two years ago LWC requested \$100,000 over 2 years to join other stakeholders in supporting UW research analysis of specific phosphorus reduction questions provided by LWC. CRANES urges LWC to again offer assistance for this UW research.
- (2) CRANES urges purchase of conservation easements and Lake Mendota sub-watershed farms that are the biggest sources of sediments and nutrients such as phosphorus and nitrogen to break the pollution cycle of the chain of lakes.
- (3) CRANES supports continuing the \$18 million FY2019 special allocation into FY2020 as part of the Conservation Fund, prioritizing projects that address flooding and nutrient goals while also achieving land protection goals and implementation of the Parks and Open Space Plan.
- (4) CRANES supports continuation of the additional funding in FY2019 directed to water quantity and quality conservation including farm conservation cost-share. These investments for farm best management practices and streambank restoration improve water quality and conserve soil.

Increase financial resources to meet carbon emissions challenges from the agricultural sector and restore soil health for agricultural productivity and carbon sequestration goals.

- (1) CRANES urges funding a soil conservation staff FTE position to identify and implement programs emphasizing soil health principles. Building soil health, fertility and resilience, esp. on intensively cultivated fields or lands in poor condition, can (a) increase water retention and supply; (b) treatment

of nutrients and polluted water runoff; (c) capture the maximum amount of solar per acre; (d) improve crop yields and their nutritional value; (e) diversify marketable crops to feed people and livestock; and (f) increase absorption of carbon in plants and soils. The important role of healthy soil in storing carbon and reducing greenhouse gas emissions was explored and endorsed by the Dane County Office of Energy and Climate Change. Implementation of the Dane County Climate Action Plan (nearing final release) places a greater call on the expertise and involvement by LWRD staff in addressing the challenges of carbon emissions from standard agricultural practices and implementing potential carbon sequestration practices.

- (2) CRANES urges LWRD to sponsor an agricultural blitz/event that focuses on finding and identifying as many possible whole-farm strategies and management practices to position small and middle-sized farm operations to be more economically sustainable and productive while also tackling climate, land protection and water quality/quantity. LWRD could partner with the Dane County Office of Energy and Climate Change, the Farm Bureau of Dane County, Wisconsin Farmers Union, Yahara Pride farmers, UW CIAS, and other stakeholders. Similar intensive explorations have occurred in Europe, some involving the Aalborg University in Denmark (sister city of the City of Racine WI) and others have been documented in publications such as Draw Down. Such an event could lay the basis for innovative demonstration projects.

Sincerely,

Gary Werner, President

Jon Becker, Vice President

Caryl Terrell, Secretary-Treasurer



*Our Mission:
To restore, protect and promote the Pheasant Branch
Conservancy and watershed for today and tomorrow*

The Friends of Pheasant Branch Conservancy · P.O. Box 628242, Middleton WI 53562-8242 · pheasantbranch.org

July 16, 2019

Ms. Pam Porter
Chair, Dane County Lakes and Watershed Commission

Dear Pam:

We have reviewed the requests for funding the Lakes and Watershed Commission will consider later this week for inclusion in the 2020 Dane County Budget. While there are many worthy proposals, we would like to offer our support for the City of Middleton's request for funding to develop infiltration basins in the Town of Springfield.

The Board of the Friends of Pheasant Branch Conservancy discussed this project at its meeting on July 15, 2019. As you know we have worked closely with the City of Middleton on restoration of the Pheasant Branch Creek Corridor since the devastating flood on August 20th of last year.

We believe it is important to increase infiltration in the upper portion of the Pheasant Branch Watershed to help reduce flood volumes. This project will also greatly reduce total suspended solids and total phosphorus entering Pheasant Branch Creek.

We support the estimate of \$600,000 to \$780,000 for land acquisition and the \$740,000 for construction of the infiltration basins. These expenditures would be a wise investment to support water quality and help manage water quantity in the Pheasant Branch Watershed. We urge you to include this request in the Lakes and Watershed list of items for the Dane County 2020 budget.

Thanks for your consideration.

Sincerely,

Lloyd Eagan and Pam Shannon
Co-Presidents, Friends of Pheasant Branch Conservancy Board