

PIPELINE

MICHIGAN ASSOCIATION OF COUNTY DRAIN COMMISSIONERS
MANAGING MICHIGAN'S WATER RESOURCES SINCE 1899



**SUCCESS STORY:
CITY OF HUDSON
PILOT DRINKING WATER GRANT**

**SAW GRANT FUNDS HELP
STREAMLINE DRAIN OFFICE TASKS**

**IN MACOMB:
BUTTERFLIES WELCOME**



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PIPELINE is published four times a year. It is funded by the Michigan Association of County Drain Commissioners, and with advertising revenues. The Michigan Association of County Drain Commissioners is a nonprofit, statewide association.

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Cover Photo: Sterling Relief Drain in Sterling Heights

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PRESIDENT'S MESSAGE

JOE BUSH

Ottawa County Water Resources Commissioner



Summer is quickly coming to a close, and I hope everyone's summer went well. Thank you to each and every one of you for your hard work and dedication for making the MACDC the best Association out there. I loved the opportunity to speak with many of you at summer conference and I walked away with hearing many conversations that the MACDC family is second to none. I want to make sure as President, that this sense of family and togetherness continues as we finish out the year and look forward to 2020.

I wanted to highlight something that we all use every day. Throughout each of our days, we communicate in a thousand different ways to the people we come into contact with. A quick conversation with the coffee barista at the local coffee shop, to the person in Lansing that has to organize a list of things for the upcoming meeting. We have multiple conversations either on the phone or in person with our children, parents, friends, and coworkers. For those of us who are reading this article, we have conversations, too numerous to count, with our office staff, township officials, and suppliers. We may host conversations out in the field with engineers, property owners, contractors, and farmers. Our days are filled with different types of conversations with many different kinds of people.

Within these conversations, somebody needs to take the lead in that discussion. However small these conversations may be, you are some type of leader when you initiate a conversation; yes, even when you are ordering that morning cup of joe. I know that our jobs demand a lot from us, but I wanted to point out a few items to consider and remember as we look at these conversations.

First, in these conversations with others, assume positive intentions. Yes, these individuals that you are about to speak to, may be heated and upset, but look at it from their perspective and realize the reason behind them being upset and assume positive intentions. Show grace and realize that we have no idea what may be going on in their lives

and this situation that they are speaking to you about, just put them over the edge.

Give clear directions when starting this conversation and know your audience. Say what you mean, however, realize that you may be more knowledgeable in the content when starting this conversation, compared to the person you are speaking with. For example, when a commissioner meets with a homeowner who is experiencing a flooding problem, they may throw around several words and vocabulary that the homeowner has no clue what is being said. A soil erosion inspector may talk about water quality and swirl around many words that the person has very little schema on. Just remember to know the audience and be clear using concise words that are on the level to the person you are speaking with.

Within these conversations, share your opinions where needed, but also, it is important to keep an open mind and be receptive to the opinions of others. This is important whether we are suppliers with an order, those of us who seek legal advice, or even a simple conversation between chief deputy and commissioner. Be open and be a good listener.

Finally, it is also desirable to finish up the conversation or situation with a follow-up. It may take a little bit of extra time, but that phone call to a home owner to check on how their project is holding up, the supplier checking to see if the buyer is happy with their purchase, or the phone call to the staff member thanking them for a job well done, it all goes so far in building those relationships and keeping those lines of communication open.

Again, just as I started, all of you reading this are part of our MACDC family and again, thank you for all you do – it doesn't go unnoticed.

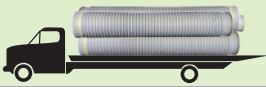
Keep the waters and conversations flowing,

Joe Bush

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OF TRUCKS* 49

- RCP uses more trucks
- Machinery required to unload

* Based on 5,000 feet of 30" diameter pipe.

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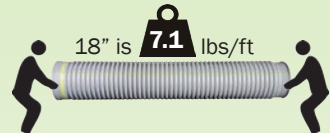


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- RCP stacks two high

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of 88 ft per day***



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CLARK HILL

SUCCESS STORY: CITY OF HUDSON PILOT DRINKING WATER GRANT

With many of the State's communities sharing in a similar struggle, the Michigan Department of Environment, Great Lakes and Energy (EGLE) created a Pilot Drinking Water Grant Program for the identification and replacement of lead water service lines in Michigan communities. EGLE provided \$9.5 million in grants to 18 communities for the pilot program. The pilot projects will provide lessons learned for full lead service line replacement and asset management.



Supply System which serves approximately 2,300 people. Approximately, 46 percent of the water mains in the City were constructed before 1960. There are approximately 870 residential service connections and 110 non-residential service connections. With the assistance of

The City of Hudson (Lenawee County) was one of the communities invited to apply for a grant. The City owns and operates a Community Water

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Contractor reinstating a service line connection

Jones & Henry Engineers, the City submitted a grant proposal and was awarded a \$368,000 grant.

Steve Hartsel, Hudson City Manager, emphasized “the City’s appreciation for the way the grant was structured to allow rapid action to investigate and replace, since grant-funded projects normally have a long administrative lead-time.”

Hudson’s grant proposal addressed each of the three eligible grant activities:

1. Update distribution system material inventory
2. Update/improve asset management program
3. Lead service line replacement

The grant has resulted in the following positive outcomes:

Greater understanding of the magnitude of the lead service line “problem”

The City worked with Jones & Henry Engineers and a local contractor to “pothole” service lines throughout Hudson to see if the lines were made from lead or galvanized pipe. Potholing involved digging a small hole over the service line at the curb stop using a hydro-vactor. The effort focused on areas known to be constructed before the 1960’s. The results were carefully mapped and included in an updated asset management plan for the City’s water system. This process has allowed the City to better understand the scale of the replacement needs.

Model for proceeding with future lead service line replacement

The Grant included updating the “distribution system material inventory.” Service lines, including curb stop locations, were incorporated

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into the City's Geographic Information System (GIS), along with valve and hydrant information. The GIS was used to generate maps of the system which show age of pipe, curb stop locations, and parcel information. Maps were posted on the City's website for public information. The GIS serves as a tool for future lead service line replacement and capital improvement planning.

Demonstrating to the public that the City has a plan and is committed to addressing the "problem"

This project included clear communication (including a letter mailed to all residents, as well as informational material posted on the City's website) that the City monitors for lead and other contaminants in the drinking water on an on-going basis, and has not detected the presence of lead at or above the action level. The letter and website material explain that the City is replacing existing lead service lines, and galvanized service lines which are or may have been connected to lead piping, as "a proactive step to avoid future problems." This sends a positive message to the community that the City is working ahead of the curve to prevent a problem. With more and more public awareness of water concerns, there is greater appreciation for a proactive approach.

Mr. Hartsel stated that "one of the most interesting aspects of participating in this pilot grant is the opportunity to conduct the grant in the manner best suited to our specific City-Engineer-Contractor team, and then for EGLE to be able to study each municipality's project, identify the best practices, and then hopefully, develop a set of uniform procedures that can be used statewide in future water grants."

Addressing the lead service line problem may be challenging for communities, but a well-planned program provides environmental, social, and financial benefits – an overwhelmingly positive triple bottom line. A well-planned program reduces public health risks associated with lead water services. A well-planned program provides momentum for redevelopment activities in older areas of our communities. A well-planned program helps further the goals of asset management by coordinating service line replacement with underground utility and street restoration activities in a cost-effective manner.



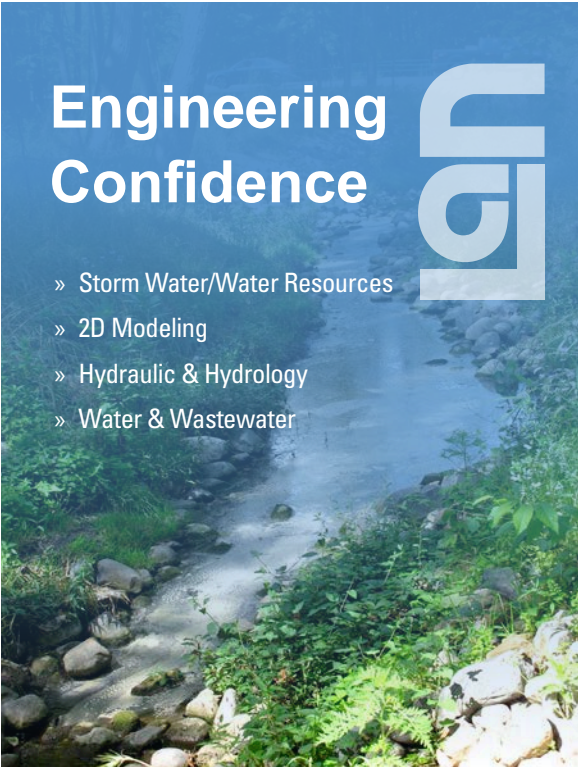
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The Pilot Drinking Water Grant Program is a tremendous “win” for EGLE and for the communities of the State of Michigan. The Pilot Program was well-conceived by addressing both the public and private portions of lead service lines. The grants have provided an incentive for communities to address the lead service line issue in a comprehensive and proactive manner. Participation in the Pilot Program has resulted in positive environmental, social, and financial outcomes for the City of Hudson and other Michigan communities. Hopefully, the State legislature will continue this success story by continuing to fund the program.

The City of Hudson team wishes to thank Jonathan Berman, EGLE’s Project Manager, and other EGLE representatives for their assistance during the project.

For more information about the EGLE’s funding assistance, visit EGLE at: <https://www.michigan.gov/egle>

Michigan’s geographical identity as a “Great Lakes” state affords its residents with an abundant and high-quality water resource from which to draw its drinking water. Unlike many states, Michigan water supplies are plentiful, and periods of restricted use are few in most communities. The great challenge for water suppliers lies in protecting the high quality of the resource, as well as ensuring that adequate volume and pressure exist to deliver potable water to the customer.

*Michigan’s Drinking Water Revolving Fund (DWRf) establishes a funding source designed to protect and preserve public health within the state’s boundaries. Since 1998, Michigan has awarded over \$1 billion in financial assistance to over 295 borrowers. In fiscal year (FY) 2020, the DWRf Project Priority List (PPL) contains \$253 million worth of projects.**



For assistance in addressing your water infrastructure needs or for questions about the pilot lead service line work in Hudson and EGLE’s funding programs, contact Jones & Henry Engineers at: Connect@JHEng.com

Jones & Henry Engineers has provided Water Resource Engineering and Infrastructure Services throughout Ohio, Michigan, and Indiana for over 90 years. We specialize in Water, Wastewater, Storm Water, and related Support Services including evaluation studies, engineering designs, project funding assistance, and rate studies. Our success is demonstrated by our longstanding relationships, some of which extend over 93 years. Jones & Henry is dedicated to providing quality engineering services. We are committed to meeting project requirements with exceptional service; to developing long-term relationships with our clients; and to providing continuing opportunities for our colleagues.

* https://www.michigan.gov/documents/egle/egle-fd-mfs-DWRF-draft-DWiuppl2020_661272_7.pdf



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SAW GRANT FUNDS HELP STREAMLINE DRAIN OFFICE TASKS

In 2015, the Van Buren County Drain Commissioner was awarded a \$431,000 grant through Michigan's Stormwater, Asset Management, and Wastewater (SAW) program which enabled them to upgrade the efficiency of record retrieval, drain inspection reporting, soil erosion permit inspecting, and APA soil erosion plans and inspections.

Like many drain commissioners across Michigan, Van Buren County had outdated information regarding the location, legal status, and condition of their drains. On top of these challenges, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) audited the Van Buren County Drain Office for compliance with Part 91 of the Natural Resources and Environmental Protection Act (NREPA) resulting in a violation notice.

The Van Buren County Drain Commissioner, Joe Parman, has a staff of three people, one of which is dedicated to carrying out the duties of the County Enforcing Agency as well as performing inspections on drain projects that are permitted by the Drain Office via its Authorized Public Agency (APA) status.

“In 2018, the Van Buren County Drain Office was up for an EGLE Audit on both the CEA and APA soil erosion and sedimentation programs,” Parman said. “I was confident that our programs were being run correctly. Unfortunately, like most counties in southwest Michigan, we received a notice of violation. With limited staff and outdated procedures, we needed to find ways to streamline and improve the programs by using today's technology to our advantage.”

During the period of the audit, the Drain Office was working with Max Clever, P.E., of Spicer Group on a project focused on upgrading the

Drain Office's geographic information system (GIS) toolset. Funded by the SAW Grant, Spicer Group created a framework of online services of drain centerlines and districts, high-resolution aerial photography and LiDAR-based elevation data. Two work-flow changes were made upon this framework; web apps and mobile apps are now used to map, inspect, and administer

soil erosion permits; and APA maintenance plans are designed using online services of best management practices. Clever recommended that the Drain Office use their new mobile GIS capabilities to help catch up on the inspection tasks required by the audit.

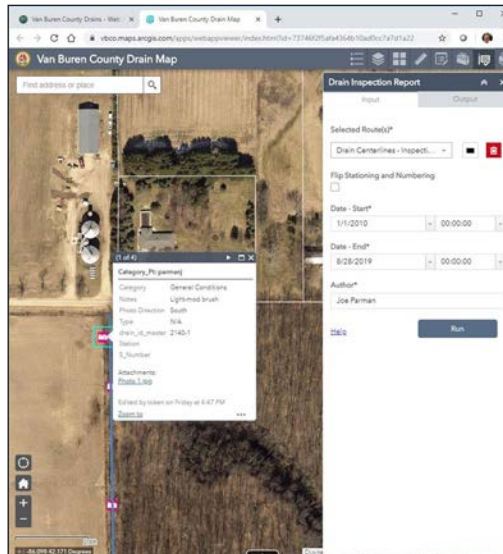
It was clear that additional technology could be implemented to improve and streamline the Drain Office's day-to-day operations. The Drain Office focused on upgrading the efficiency of record retrieval, drain inspection reporting, soil

erosion permit inspecting, and APA soil erosion plans and inspections.

RECORD RETRIEVAL

In 2016, before the SAW grant upgrades, the Drain Office undertook digitization of all office records. The packets and files for all drains were scanned and delivered to the Drain Office on a hard drive. This system had limited ability as it required that the person know the name or number of the drain for which they were looking. In this system, it was difficult to identify which drains were tributary to a given drain or if the drain may have had other names throughout its history.

This type of information is relevant when researching a proposed drain maintenance or improvement project and when landowners call the Drain Office with questions. The various drain records reside in a variety of separate places throughout the Drain Office. To obtain

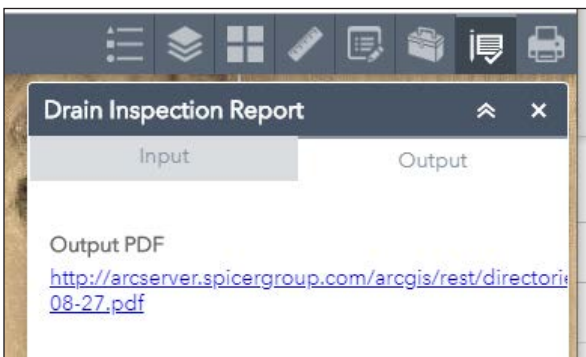


Inspection points collected in the field are easily reviewed and summarized through a web app.

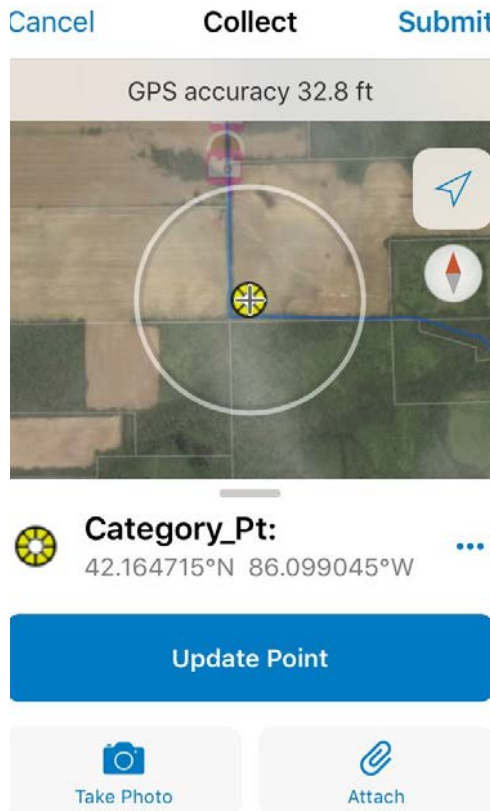
all available records for a particular drain, it required a thorough understanding of the history of the Drain Office and institutional knowledge of the location of various files. Unless each location is searched, a review of files could often be incomplete.

Now, there are still some difficulties with retrieval of records since drains have changed names and these files date back to the mid-1800s. However, file retrieval has been greatly improved by utilization of cloud storage. The scans done in 2016 were moved to the county's cloud storage platform Microsoft SharePoint, significantly increasing ease of access inside and outside of the office. Now, the full suite of mobile Microsoft applications is able to access these records.

“The SAW grant allowed the Drain Office to scan all drain files, books and plans. As a result, we were able to have digital copies of all county drain files dating back to the 1800’s,” Parman said. “This allowed us to upload the files to the county’s SharePoint account on the cloud. We are now able to access all drain files from our iPads while out in the field, during meetings, basically anywhere. Having digital copies of the drain files was on my bucket list but mobile access to them was an unexpected bonus.”



Report automated and available as PDF to download.



The image above shows a screenshot from a cellphone when using collector for drain inspections

DRAIN INSPECTION REPORTING

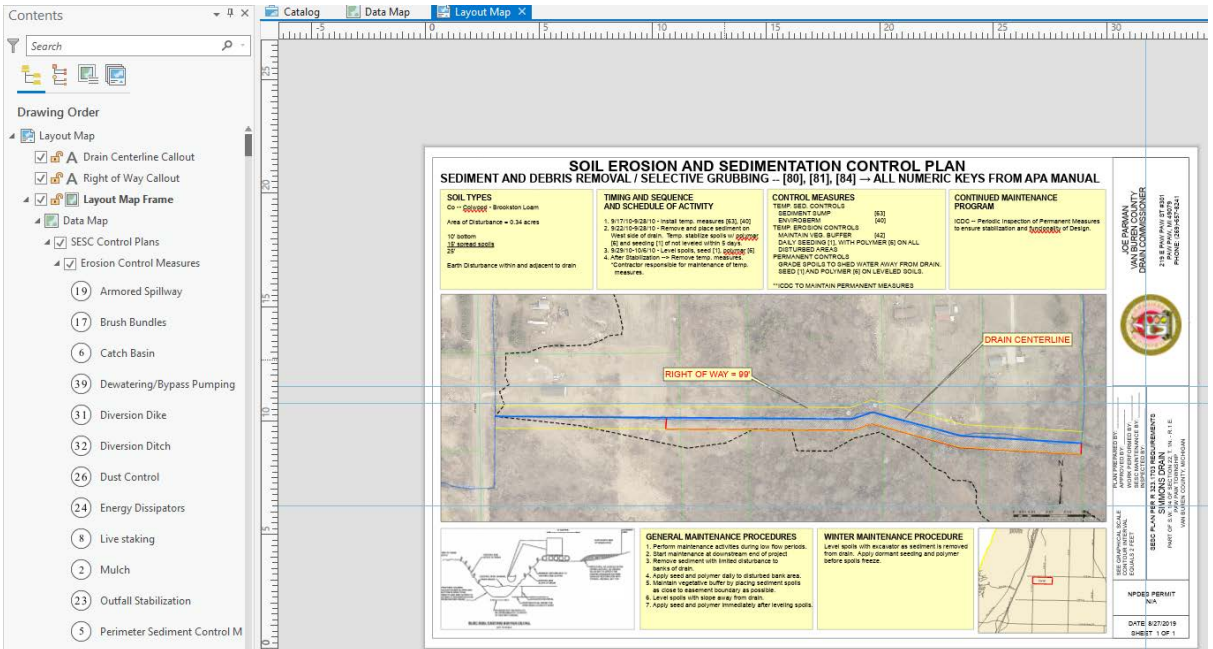
Before the upgrade, typical field inspections required preparation in the office. The Drain Office had stand-alone ArcGIS desktop software that was used to create maps illustrating drain centerlines, drainage districts, contours, high-resolution aerial imagery, and other GIS data that was stored on the local network file server. Office staff had previously used GIS to collect some spatial information about their drains, such as the drainage district boundary and the drain centerline location. However, the spatial information was being compiled on an as-needed basis and, therefore, only included drains that had received petitions in the past 10 years. Furthermore, this GIS information was not integrated with existing scanned information. This

made tracking down information a headache in the office and often impossible in the field.

The Drain Office’s task of performing drain inspections has been updated so that photos and locations are no longer manually produced from separate files. This was accomplished by assigning route identification numbers to all the county drain GIS features and publishing a new set of GIS layers to record locations and photos of obstructions, debris, and erosion. The inspection layers are collected using iPads in the field with ArcGIS Collector. After the inspection points and photos are collected, the drain inspection’s points can be summarized in a drain inspection pdf using an ArcGIS Online Web App specifically set up to report on drains. This report includes a map portion illustrating the photo locations and a corresponding photo report sorted by station.

SOIL EROSION PERMIT INSPECTIONS

The Drain Office’s responsibility as the County Enforcing Agency (CEA) for the Part 91 Soil Erosion and Sedimentation Control (SESC) program was targeted for improvement, as the program had a direct impact on the sediment-



ArcGIS Pro Template for SESC APA Plan Assembly

related water quality concerns in county drains. It required a substantial amount of time from office staff to comply. Prior to the SAW Grant, SESC inspections were completed on paper forms or in Microsoft Word and photographs were attached to the reports. These reports were then saved to local network drives, making retrieval difficult.

“The SAW Grant offered an opportunity for office staff to begin using tablets in the field with fillable forms to easily attach photos and automatically digitize the reports,” Clever said. “This allowed for reports to be generated in the field quickly and easily, and more importantly, organized and saved in the Drain Office quickly and easily as well.”

It also provides inspectors with historical reports while in the field. Coupled with ongoing GIS work, the SESC inspection software allows staff to manage inspections spatially, view past inspections, identify nearby watercourses impacted by a given site, and optimize travel to ongoing construction sites following rain events. As a result, the Drain Office is able to perform many inspections in one day, marking a significant increase in efficiency.

The Drain Office previously put together drain maintenance plans and their corresponding SESC plans internally using AutoCAD. The Drain Office had no established plan standard and

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some of the APA plans audited by the DEQ were flagged as not meeting all the requirements in Rule 1703 for soil erosion plan compliance.

SOIL EROSION APA PLANS AND INSPECTIONS

The Drain Office developed a plan sheet template that logs all best management practices to be installed and planned maintenance on ArcGIS Online. This template allows the Drain Office to have compliant SESC plans in large-format pdfs (24"x36") and record the resulting plans best management practices on ArcGIS online at the same time for historical record keeping and inspection review in the field using iPad apps such as ArcGIS collector.

While absolutely necessary for public good, unfunded mandates like those found in NREPA strain the limits of small entities that are doing the best they can to keep our water clean and homes from flooding. Spicer Group and Van Buren County used this SAW grant as an opportunity to stretch dollars and improve drain file access, drain inspections, soil erosion permit program and compliance. This program showed that by asking the right questions and solving the right problems, drain management can be efficient no matter the size of the staff.



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IN MACOMB: BUTTERFLIES WELCOME

In Macomb County, a major drain project is expected to bring thousands of new, “royal” residents to Michigan’s fourth largest city.

A two-plus mile stretch of the Sterling Relief Drain in Sterling Heights will be planted with milkweeds and other pollinators to create a “butterfly flyway” that is expected to be very popular with Monarch butterflies.

The work is part of a \$1.82 million grant-funded transformation of the drain by the Macomb County Public Works Office. The project is utilizing green infrastructure to better serve the community. While the project is focused on water quality and improving the operation of the drain, it will include the creation of the butterfly flyway as a side benefit.

“This will not only enhance the operation of the drain by better allowing Mother Nature to act as a natural sponge for storm water, reducing flood risk and improving water quality, but will also create a beautiful new green zone in central Sterling Heights,” said Macomb County Public Works Commissioner Candice S. Miller. “This will enhance the quality of life for residents along the drain.”

Work on the project began in late summer 2019 and is expected to be substantially complete by



Work is underway on the Sterling Relief Drain in Sterling Heights, Mich. The drain serves roughly the middle third of the city, providing drainage to more than 20,000 residents and hundreds of businesses, including several auto plants and major defense contractors. The underdrain is being daylighted to transform this rather industrial looking drain in something that will be much more esthetically pleasing while continuing to be an effective drain for the community. Major construction will wrap up in late fall, with planting of plants and trees happening by the end of the year or in spring, as weather dictates.

the end of the year, with some minor restoration work possible in 2020. The drain runs east-west through the entire width of the city, about 5 miles. The initial work is on the eastern half of the drain.

The project will include “day-lighting” portions of the drain’s central channel - making that area appear like an intermittent stream that will often be dry - and planting more than 5,000 trees and bushes in the drain property.

The U.S. Environmental Protection Agency is providing a \$1.25 million grant to support the work. An additional grant of \$600,000 is being provided by the National Fish & Wildlife Foundation.

“This project will greatly improve the quality of life for the residents in the central portion of our city, by creating a beautiful new view, filled with trees and the birds and other wildlife they will attract,” Miller said.

The project is expected to help filter out 3,400 pounds of nitrogen, 616 pounds of phosphorous and 233 pounds of sediment that would have otherwise entered the Red Run Drain and traveled out to Lake St. Clair.

The Sterling Relief Drain was constructed in the 1960s to provide storm water run-off for roughly the middle third of Sterling Heights. Storm water collected in the drain travels east to the Red Run Drain, then to the Clinton River and on out to Lake St. Clair.

Plans for the Sterling Relief transformation began coming into focus during an examination of all the assets under the control of the Macomb County Public Works Office after Miller became commissioner in January 2017. In the case of the Sterling Relief Drain, project managers noted that the MCPWO was spending thousands of dollars per year mowing the lawn in the drain and began examining if there was a better way to manage the property while still providing for the storm water needs of the area. While the grass will



Macomb County Public Works Commissioner Candice S. Miller is seen with an informational sign that highlights the transformational change that is taking place on the Sterling Relief Drain in Sterling Heights. "There is no reason why this drain can not serve to remove storm water from the community and also be a visually pleasing community asset at the same time," Miller said. Among the changes to the drain will be the planting of thousands of milkweed plants to create a Monarch butterfly "fly-way" through the center of one of Michigan's most populous cities.


continued to be mowed in the drain property, the new plan - the first upgrades to the Sterling Relief in decades - is expected to "soften" the view of the drain for neighboring residents.

"This is a critical piece of infrastructure, but planting trees that absorb water in the drain, utilizing plants that will attract a butterfly flyway, these are all things we are able to do to enhance quality of life while still ensuring the drain operates properly," Miller said.

The drain serves a large swath of residential areas in the city and also provides storm water removal for major industrial sites, such as Fiat Chrysler's plants along Van Dyke in the city, and numerous small businesses in the city.

According to the Michigan Dept. of Natural Resources, the population of Eastern Monarchs, the type of the butterfly commonly found in Michigan, has declined by 90 percent in recent decades, due to the use of pesticides and the loss of milkweed plants. The butterfly helps to pollinate flowers and other plants that support additional species of birds and butterflies.

"Although our principle focus is on water quality and improving our drains, we need to always be aware of the impact we have on our environment," Miller said.



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2020 MACDC INNOVATION & EXCELLENCE AWARDS

PROJECT SUBMITTALS NOW OPEN!

Pre-application Entry Form must be received by **5:00 PM, November 1, 2019**

Complete applications are due by **5:00 PM, December 2, 2019**

Application is available at <https://macdc.us/>

Awards Program | Rules and Procedures

Purpose and Goals

This Awards Program aims to:

- ☑ Recognize creative and innovative accomplishments of all scopes, sizes, and budgets, of Members and Associate Members of the Michigan Association of County Drain Commissioners (MACDC).
- ☑ Promote public awareness of the activities and contributions of MACDC, its Members and Associate Members.

Eligibility

Any MACDC Member or Associate Member may enter this Awards Program. Drain Commissioner(s) and/or Associate Member(s) may submit projects jointly or separately. Associate Members submitting separately must obtain the signature of the Drain Commissioner of record on their Entry Form.

Award Categories

MACDC's panel of judges will review submittals. Two projects will receive an *Innovation and Excellence* award. MACDC will provide one award for each winning project; recipients may purchase additional copies of the award. MACDC may also award Honorable Mention certificates to a maximum of two projects.

Schedule

- Pre-application Form Due: 5:00 PM on November 1, 2019
- Complete Application Due: 5:00 PM on December 2, 2019
- Notification of Winners: on or before January 3, 2020
- Awards Presentation: Thursday, February 13, 2020

General Criteria

1. All entries must be submitted in accordance with the rules outlined in this document.
2. The project must have been conducted under the direct authority of the Drain Commissioner or through a Board of which the Drain Commissioner is a member.
3. A Member or Associate Member may enter as many qualified projects as they wish.

4. Projects that have received awards from other organizations may be entered.
5. Projects must have been completed and in use between April 1, 2017 and December 31, 2019.
6. Entries must comply with Submission Guidelines section of this document. Failure to comply may disqualify an entry. Please read the Guidelines thoroughly.
7. MACDC Awards Committee reserves the right to determine entry eligibility.
8. MACDC Awards Committee determines the Award Category based on submitted information.

Judges and Judging Criteria

The MACDC Awards Committee will evaluate entries based on the work completed by the entering organization(s). Finalists and winners are selected based on overall project excellence. Judges will evaluate and compare projects based on the following.

Judging Criteria (*in no particular order*):

1. Public involvement and education
2. Environmental and water quality benefits
3. Use of new materials
(including improving/finding new uses of existing materials)
4. Use of new technologies
(product/method/tool to solve problem)
5. Innovation
6. Complexity
7. Cost effectiveness

Note: Projects need not contain all seven of the above criteria. However, the more criteria that a project effectively encompasses, the greater consideration it will be given.

Submission Guidelines

Each entry must include:

1. Completed Official Entry Form; **forms must be signed by the Drain Commissioner** with jurisdiction over the project. **Due November 1.**
2. A non-refundable \$50 Entry Fee is required for each submission. (Checks payable to Michigan Association of County Drain Commissioners). Submit with official entry form; **due November 1.**

Rules and Procedures *cont.*

3. A brief narrative describing the project as it relates to the Judging Criteria previously listed. The narrative should not exceed five (5) pages (10pt font size or greater). Submit at least three (3) photographs; additional photographs and other relevant material may also be submitted. The complete application packet must not exceed ten (10) pages not including cover and/or blank rear cover if utilized.
4. Application packets should be bound or stapled; Electronic submissions are preferred. **No 3-ring binders. Due December 2.**

Entry Form Due:

5:00 p.m., November 1, 2019

Final Application Due:

5:00 p.m., December 2, 2019

*****Electronic submissions are preferred*****

Email Entry Form and Final Application packet to: admin@macdc.us

Mail Entry Form and Final Application packet to: **MACDC Awards Committee**
120 N. Washington Sq., Suite 110A
Lansing, MI 48933

Public Relations

Winning Projects are honored at MACDC's Winter Conference, and are featured in Pipeline Magazine. The Awards Committee will issue a press release to publicize the Awards Program and award-winning projects. Project descriptions will be posted on the MACDC Website (macdc.us).

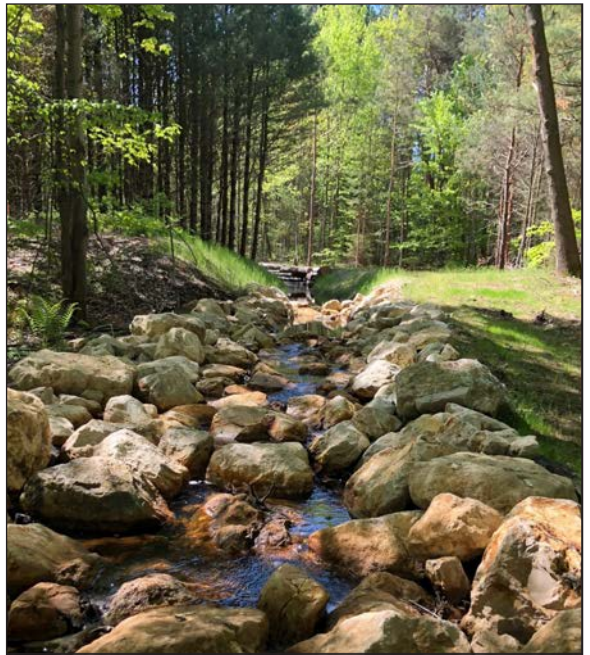
Special Requirements

All entries will be recognized at the 2020 Winter Conference. MACDC will host a display area. All applicants, regardless of whether they receive an award, may present graphic panels for their projects. Applicants provide a 32" x 40" graphic panel mounted on foam core. The panel should include text such as the Project Title, Drain Commissioner's Name, and a brief list of project highlights. Type size no smaller than 18 point is recommended. Photos, other graphics, and captions that illustrate project features should also be incorporated. The finished graphic panel should "tell a story" about the project. MACDC's Awards Committee recommends simple, inexpensive production for these panels.

Award Winners will be invited to make brief slide presentations highlighting their projects at a conference session on Thursday, February 13, 2020. Further information will be provided with the notification of award (on or before January 3rd). Due to time constraints, slide presentations cannot be made for projects receiving Honorable Mention.

Questions?

Contact Joseph Rivet, Awards Program Chair at **989-895-4290** or rivetj@baycounty.net



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ASSOCIATE MEMBER NEWS

FLEIS & VANDENBRINK (F&V) ADDS 12 STAFF, EXPANDS ENVIRONMENTAL GROUP

Trevor Woollatt, senior project manager, Jonathan Sowder, environmental specialist, and Kate Strohauer, geologist, are among the newest Environmental Group hires. Sowder and Woollatt work at the F&V headquarters in Grand Rapids while Strohauer is in the Kalamazoo office.

F&V new hires also include: in Grand Rapids, Mike Vander Ploeg, process group engineer, Andrea Belanger, process group EIT, Shane Peterson, water resource EIT, Leach Bectel, municipal EIT, Ashley Bostic, process group administrative assistant; in Midland, Louis Taylor, senior project manager, and Zack Purtil, an engineer-in-training (EIT); and in Farmington Hills, Adam Congdon, CAD operator, and Mohammed Aguib, traffic engineer.

“We are extremely excited about the new talent in several areas of expertise,” said Paul R. Galdes, Principal and F&V’s president. “These new additions will help us better serve our clients particularly in the areas of environmental

investigations, due diligence, brownfields, water and wastewater treatment, traffic studies and MDOT projects.”

Woollatt brings two decades of hands-on experience in structuring local, state and federal incentives for redevelopment and decades of practical environmental due diligence experience. His primary duties will be handling due diligence and demolition management.



Woollatt

Sowder has more than a decade of experience in the environmental consulting industry. He’ll provide project assistance for PFAS, stormwater and environmental investigations. His attention to detail and strong background with data collection and analysis will benefit F&V’s clients.



Sowder

Strohauer has environmental consulting experience. She will support the rapidly-growing environmental team working on projects related to due diligence, groundwater protection, water supply and environmental remediation.



Strohauer

Vander Ploeg brings nearly a decade of consulting experience, working on municipal water and wastewater treatment projects. He’ll help the process team, specializing in planning, design and construction of water treatment and distribution systems, and wastewater collection and treatment systems.



Vander Ploeg




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Belanger has worked on a variety of civil engineering projects, specifically wastewater treatment plant design. The recent Michigan Technological University grad will provide a wide range of water and wastewater design services, including work on physical, biological and chemical treatment systems.



Belanger

Peterson brings conservation technical assistance engineering experience including a variety of hydraulics, site design and field work experience to the water resources team. His duties include flow monitoring projects.



Peterson

Bectel is a recent Michigan Technological University environmental and municipal engineering graduate and former intern with past experience working with municipalities. She will be working on sidewalk design, utility upgrades and capital improvement projects as well completing SAW projects and addressing water system AMPs.



Bectel

Bostic's previous experience as an administrative assistant for a consulting engineering services group will benefit the process team. She will assist in meetings, proposals, service agreements, technical reports, correspondence, construction administration, project financial reporting and invoicing.



Bostic

Taylor brings nearly three decades of civil engineering experience, including design and construction engineering with the Michigan Department of Transportation. He will assist



Taylor

the East Michigan municipal team and be responsible for client management, business development, managing municipal projects and QA/QC.

Purtill is a recent Michigan State University grad who interned at F&V last summer. He will be assisting East Michigan staff with construction observation, manhole assessments and smoke testing.



Purtill

Congdon is the lead CAD designer in Farmington Hills. His previous work experience will aid him in design and drafting for municipal projects as well as private development projects in southeast Michigan.



Congdon

Aguib has seven years of experience as a project engineer for transportation and traffic projects. He will perform traffic impact analysis studies for municipal and private clients statewide.



Aguib

SPICER GROUP, INC. ANNOUNCES 2019 PROMOTIONS

Spicer Group is proud to announce the recent promotion of Richard V. Graham III, P.E. as a new Associate.

Rich earned his bachelor's degree in Civil Engineering in 2009 and his master's degree in Civil Engineering in 2012, both from Lawrence Technological University. He joined Spicer's Water Resources Group in 2013 as a Design Engineer in our Saginaw office. In 2014, he moved to help open our Southeast Michigan Office in Dundee, where he is now serving as a Project Manager. He became a licensed professional engineer in Michigan in 2015. He is also a



Graham

member of the American Society of Civil Engineers.

Spicer Group is proud to announce the recent promotion of Lucas C. Hanson, P.S., as a new Associate.

Lucas earned his bachelor's degree in Surveying Engineering and a certificate in Small Business Management from Ferris State University in 2012. He first joined Spicer's Survey Group in our Saginaw office in 2013 as a Survey Technician and is now a Staff Surveyor. In 2017, he became a professional licensed surveyor in the State of Michigan. He is a member of the Michigan Society of Professional Surveyors, and the National Society of Professional Surveyors.




Hanson

Spicer Group is proud to announce the recent promotion of Christopher B. Mattson, P.E., as a new Associate.


Christopher earned his bachelor's degree in Civil Engineering in 2010 and his master's degree in Civil Engineering in 2018, both from Lawrence Technological University. He was first hired at Spicer as a Construction Services Intern in 2008 at our Saginaw office. He is now a Project Manager for the Water Resources Group in our St. Johns office. In 2015, he became a licensed professional engineer in the State of Michigan.






Mattson



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MACDC EVENT CALENDAR

OCTOBER 11, 2019

Northeast Fall District Meeting
Tuscola County

OCTOBER 17, 2019

Southeast Fall District Meeting

OCTOBER 18, 2019

Southwest Fall District Meeting

OCTOBER 24, 2019

Northwest Fall District Meeting

FEBRUARY 12 – 14, 2020

MACDC Annual Winter Conference
Radisson Plaza Hotel, Kalamazoo

APRIL 27 – 30, 2020

MTA Conference & Expo
Grand Traverse Resort, Acme
Township

AUGUST 19 – 21, 2020

MACDC Annual Summer
Conference
Mission Point Resort, Mackinac
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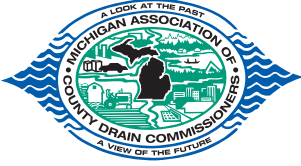
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