

Road Report

A publication of the Road Commission for Oakland County for public officials serving Oakland County www.rcocweb.org

RCOC joins with communities in the war on phragmites

Phragmites are the newest invasive species that many communities in Michigan are seeking to eradicate -- and the Road Commission for Oakland County (RCOC) is helping to tackle the issue locally.

What are phragmites? They are a type of wetland grass that towers over cattails and is typically seen in roadway ditches or along lakes and streams.

They tend to choke out native vegetation and nutrients impacting the ecological health of coastal shorelines and wetlands, and can impede proper drainage.

Phragmites can grow to 15 feet tall, and their root system is deep. That means digging them out is not advised.

Phragmites grow rapidly in road ditches causing site-distance issues for motorists and drainage problems for the roads.

Controlling phragmites is now a goal in communities throughout Michigan. Earlier this year, RCOC assisted in spearheading an effort to control this invasive species in



Phragmites like these have become all too common along RCOC roads.

Oakland County.

The RCOC Board, at the request of the

managing director, provided \$75,000 to tackle the issue along roadways in the county. Under the leadership of RCOC Environmental Coordinator Brad Knight, of the Planning and Environmental Concerns Department, RCOC joined with a group of local communities, governmental agencies and non-profits to form the Oakland County Cooperative Invasive Species Management Area (CISMA).

Members of the CISMA group include: Addison, Bloomfield, Brandon, Independence, Orion, Rose, Springfield, Waterford and West Bloomfield townships. The cities of Keego Harbor and Clarkston as well as Oakland County Parks, the Oakland Intermediate School District, Oakland County Conservation District, North Oakland Headwaters Land Conservancy and Michigan Nature Association Land Conservancy also are members of the CISMA.

This partnership is one of the largest
CONT'D ON PAGE 2 -- SEE INVASIVE

Road Commission wins first place in LTAP 2015 Great Ideas Challenge

The Road Commission for Oakland County (RCOC) Planning and Environmental Concerns (PEC) Department has won the 2015 Michigan Local Technical Assistance Program (LTAP) Great Ideas Challenge award for its creative use of technology to capture environmental data. The award was announced last month.

The competition, open to local governmental agencies across the state, is meant to help identify, share and reward the great work that gets done at local road agencies in Michigan. LTAP is a Federal Highway Administration program that provides technical assistance and training to local road agencies across the country.

The RCOC program, known as Transportation Asset Collection Using

Android Tablet and ArcGIS Collector, provided a very cost-effective way to map road-stream crossings within RCOC rights of way for storm water compliance. In 2014, RCOC hired two summer interns with environmental studies backgrounds to collect the data.

In a 10-week period, the interns visited 500 locations and collected more than 2,500 data points. The creative technology use saved RCOC approximately 80 percent of what it would have cost to hire a consultant to do the task.

The ArcGIS Collector runs on Android and Apple tablets. The software uses the tablet's built-in GPS ability to collect the data. The information collected helped identify infrastructure problems and provide geo-tagged photos that were

CONT'D ON PAGE 2 -- SEE LTAP

What's Inside

Troy invests heavily in county roads 2

Milford Road project is drone test 3

RCOC adds new equipment to its fleet 3

RCOC's connected-vehicle involvement 4

City of Troy invests nearly \$8.5 million in improvement projects on RCOC roads in the City

Over the past two years, the City of Troy has contributed more than \$8.47 million to improve many county roads within the City representing over half of the \$17 million total investment in projects on those roads.

Much of this money was invested in slab replacement work -- projects that remove and replace the worst concrete slabs on roads. These projects are a cost-effective way to repair the most roads in the city, because they are less expensive than full road reconstruction projects, but still replace the worst sections of the roads.

Among the work done this year thanks in part to the city's contributions, was completion of the slab replacement work on Big Beaver between Adams Road and I-75 in the city, which is one of the busiest county roads in Oakland County. The work was completed in late July.

The City invested \$1.5 million in the \$1.9 million project.



Concrete slab replacement work on John R Road in Troy was part of the project.

"We are extremely pleased the City of Troy is investing its own money in improving county roads," said RCOC Managing Director Dennis Kolar. "This has been a tremendous partnership, and

one that received recognition from the American Public Works Association (APWA) in 2014 for the most ambitious road improvement program ever undertaken jointly by the City and the Road Commission. The City of Troy has been and continues to be a great partner in resolving road issues on both the City and RCOC system."

RCOC contributed \$3.175 million to projects on its roads in the City during the last two years. During that time, \$1.89 million in federal aid and \$235,000 from the Oakland County Tri-Party Program have also been invested in RCOC roads in Troy.

An additional \$1.5 million was used from the state's Priority Road Improvement Program (PRIP) for Long Lake Road from Adams to Northfield Parkway in 2014. Additional funding for the projects was secured by former state Senator John Pappageorge and state Representative Martin Howrylak.

LTAP -- CONTINUED FROM FRONT submitted to the RCOC Highway Maintenance Department for further investigation.

"This was a very innovative initiative by the RCOC Planning and Environmental Concerns Department," stated RCOC Managing Director Dennis Kolar. "But it is representative of the countless new and creative efforts undertaken on a regular

basis by Michigan road agencies in their constant quest to operate more efficiently, cost effectively and in ways that are beneficial to the environment."

The award automatically enters RCOC in the Federal Highway Administration's LTAP Build a Better Mousetrap national competition. This year's winner will be announced at the LTAP National Conference in Savannah, Georgia.

INVASIVE -- CONT'D FROM FRONT organized phragmites eradication efforts in the state.

The \$75,000 that RCOC contributed to the CISMA was distributed between CISMA members. The funding will be used to address phragmites or other invasive species in road rights of way under RCOC's jurisdiction. Each CISMA member submitted an application to the executive steering committee for RCOC money, and the money was allocated based on a number of factors such as need, safety and the amount of infestation on properties adjacent to the road. CISMA partners were very creative when it came to maximizing the \$75,000, with many providing match money or in-kind services to augment the effort.

Knight explained that two herbicides, glyphosate and imazapyr, are the most effective controls for phragmites. Typically,

two applications are needed and a licensed/certified applicator is required. In most cases, a permit is needed to remove phragmites.

The State of Michigan has started a grant program that provides monetary assistance to combat phragmites. The formation of the CISMA will increase the Oakland group's likelihood of success during the next round of grant availability.

"The state wants to see collaborations at the local level to ensure a long-term plan to address this issue that is growing rapidly in our state," Knight said. He added that other Oakland County communities will likely join the CISMA later this year.

For more information on phragmites and licensed pesticide application businesses, visit: http://www.michigan.gov/deq/0,4561,7-135-3313_8314-178183--,00.html

State road-funding answer remains elusive

Despite efforts by some, the state Legislature remains unable to reach agreement on a road-funding solution. Road Commission for Oakland County (RCOC) Managing Director Dennis Kolar warns that the longer it takes to resolve the road-funding crisis, the worse the roads will be.

"Every day that passes without a road-funding solution means our roads are getting worse," Kolar said. "We know we can't keep up with the deterioration of the system at current funding levels."

Currently, 44 percent of RCOC roads are in poor condition, meaning they need to be reconstructed or resurfaced. However, computer models reveal that by 2020, at current funding levels, 66 percent of RCOC's roads will be in poor condition.

Kolar urges voters to contact their legislators to urge them to act. "Some of our legislators understand the urgency of resolving the road-funding crisis, but some still don't seem to get it," he said. "I urge everyone to let their legislators know how important this issue is to you. We've got to get this solved."

Milford Road project is drone test for RCOC

The Road Commission for Oakland County (RCOC) is trying a new type of technology in connection with its ongoing Milford Road resurfacing project in Milford Township -- it has hired a company to fly a drone over the project to record the project's status.

"We currently have a workzone camera mounted on a pole overlooking our 14 Mile/Orchard Lake Road roundabout construction project," explained RCOC Senior Manager of Communication Craig Bryson. "The camera provides a great perspective on the project, and we were wondering how we could get a similar perspective for a linear project -- one that is more than a single intersection. The idea of using a drone to fly over the project and record a video of the project made perfect sense."

The Milford Road project is 3.8 miles long, so placing a fixed camera at any point would not provide much perspective on the entire project.

RCOC hired Motown Digital, a video production company that is branching into drone video services, to provide the drone coverage of the project. The first drone



New concrete curbs installed along the Milford Road project.

video shoot took place in late August. A second shoot will take place as the project moves closer to conclusion.

"This is a really a test case," Bryson said. "We want to see how well this works -- what the video looks like and how useful it is. If we find this useful, we may

well employ the same tactic for additional projects in the future."

One of the lessons that RCOC has already learned is that drone video shoots are not as simple as hiring a guy with a drone. Legal requirements mandate that there be a Federal Aviation Administration (FAA)-registered pilot at the controls of the drone and that the crew include two other people.

"This is very exciting, and we look forward to learning more about the potential of the drones," Bryson noted. "This is yet another way that we are incorporating new technologies in our work processes."

The project involves removing the existing pavement, repairing the road base, improving drainage, resurfacing the road with three inches of new asphalt, paving the shoulders for improved safety, adding center left-turn lanes at major intersections and the replacement of the culvert at the Arthur Drain.

The project cost is approximately \$5 million. The majority of the work will be paid for with federal funds, while Milford Township and RCOC share the rest.

Some new equipment coming to RCOC: graders, trucks & swap loaders

Graders, trucks and swap loaders top the equipment buzz these days at the Road Commission for Oakland County (RCOC).

Over the past several years, RCOC has worked with less revenue. As a result, staff has continued to look for efficiencies, even with equipment purchases.

Earlier this year, Oakland County Executive L. Brooks Patterson and the County Board of Commissioners allocated \$2 million to assist RCOC with equipment purchases. RCOC is very appreciative of the money and put it immediately to good use on the purchase of much-needed equipment that will help increase the productivity and efficiency of the workforce.

Among the equipment purchased this year were three graders. These replace four aging graders that were no longer functioning.

The graders have arrived at the Road Commission's Davisburg, Milford and Lake Orion garages. The total cost for the graders is just over \$900,000. The dependable new graders will assist with maintain-

ing RCOC's 760 miles of gravel roads throughout the county.

In April, RCOC ordered 12 new 12-yard dump trucks equipped with swap loaders, a first for the agency. What is a swap loader?

A swap loader is essentially a motorized hook affixed to the back of the truck behind the cab. The swap loader allows equipment operators to easily switch different attachments onto the back of the truck through the use of levers in the vehicle's cab. For example, dump boxes can easily be switched without hassle or assistance.

Most of the new trucks also will be equipped with "V boxes" and Epoke spreaders for winter maintenance. Epokes are hi-tech boxes that combine broader salt spreading with liquid chloride spraying. V boxes are the traditional, V-shaped boxes used for spreading salt.

Some also will be equipped with additional dump bodies and brine tanks.



One of RCOC's newer trucks, at right, parked next to an older truck.

Each truck will have an underbody snow-plowing blade and frame mount on the front for the larger front plows.

Ten of the 12 will also have "wing" plows -- the side-mounted plows that fold out and allow the truck to plow more than one lane at a time.

The trucks are still in production and will replace older, broken-down equipment. The average cost for each truck is just over \$251,000.

Delivery of the new trucks will likely happen throughout the upcoming winter and spring months.

RCOC is one of few local agencies on national Connected-Vehicle Task Force

In the future, cars will talk to each other and to the roads, sharing information about traffic flow, delays, travel time, etc. Right now, many organizations across the country are helping to figure out how this "connected-vehicle" world will operate -- and the Road Commission for Oakland County (RCOC) is one of the few local road agencies in the country involved in this discussion.

One of the national groups leading this discussion is the Intelligent Transportation Society of America (ITS America) Connected-Vehicle Task Force. ITS America is the organization created by Congress to bring together the public and private sector entities involved in transportation as well as the academic world. The Task force includes nearly every auto manufacturer selling cars in the U.S., many of the top universities, the state departments of transportation from most states, numerous major transportation consulting firms and a select few local agencies.

Of the local agencies, there are no other county-level road agencies in the group besides RCOC. There are several cities and transit agencies. The cities are New York, Los Angeles and Chicago.

"We're in pretty elite company," stated RCOC Deputy Managing Director/County Highway Engineer Gary Piotrowicz, who represents RCOC on the Task Force. "But," he added, "that is because we have been a national leader in the field of transportation technology for more than 20 years."

RCOC has been involved in numerous connected-vehicle initiatives in and around Oakland County over the years. Many of those initiatives have been on the cutting edge of the technology nationally.

Piotrowicz added that the connected-vehicle concept may sound futuristic, but it is likely to have many positive benefits for Oakland County. "First, we believe this is definitely coming, so we want to make sure we have some input in how it is implemented on our roads," Piotrowicz said.

"Additionally, there are going to be some tremendous upsides for motorists, such as safer and more efficient roads. Those are two of our top goals as an agency."

"There are going to be some tremendous upsides for motorists, such as safer and more efficient roads."

- RCOC Deputy Managing Director/County Highway Engineer Gary Piotrowicz

Contacting RCOC

If your constituents need information about a road project or want to report a pothole, traffic signal problem or other road issue, they should call RCOC's **Department of Customer Services** toll free at:

(877) 858-4804

OR

Send us an e-mail via the RCOC Web site:
www.rcocweb.org

ROAD REPORT

Road Report is published quarterly by the Road Commission for Oakland County. Have a question or comment about **Road Report**? Call Senior Manager of Communications Craig Bryson at (248) 645-2000, ext. 2302 or send him an e-mail at cbryson@rcoc.org.

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