

MASTER PROPERTY OWNERS ASSOCIATION

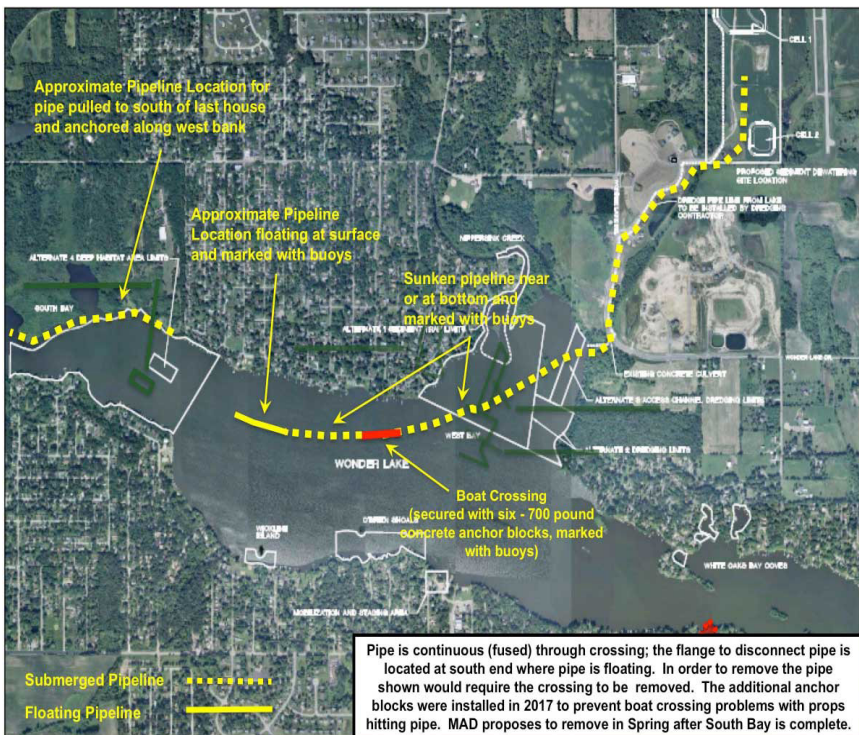
Lake Manager's Reports 2018

Randy Stowe, lakemanager@gmail.com

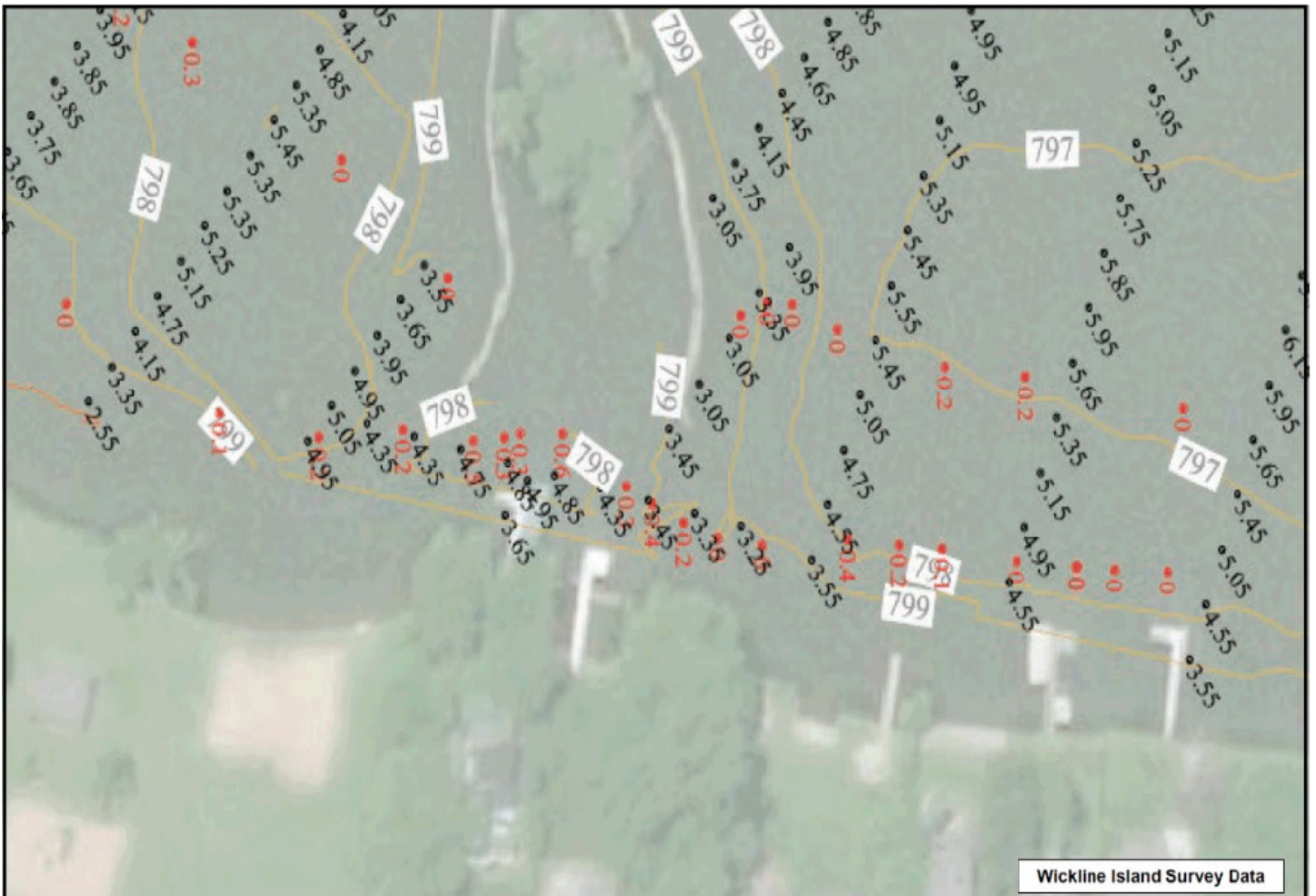
Lake Manager's Report — January 2018

Randy Stowe, lakemanager@gmail.com

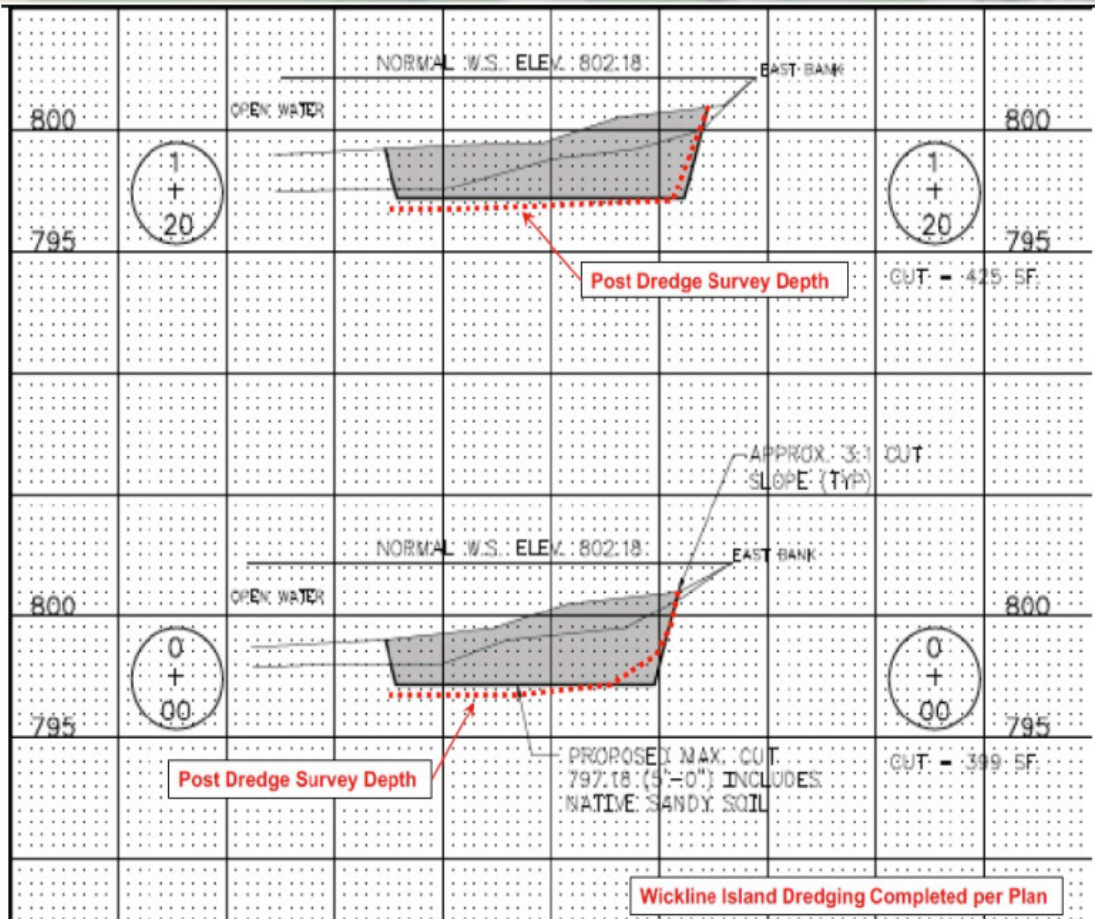
1. Any winter lake user should use extreme caution when in the vicinity of the floating pipeline (as shown below), roughly between Wickline Islands on the east and the Highland Shores beach on the west. Winter lake users are also reminded of the presence of the rip-rap “collars” around Wickline Island and O’Brien Shoals.
2. Lake users are also advised that the increase in water depths where dredging has already occurred could cause changes in how ice forms in those area, as well as ice thickness formerly encountered in those areas.
3. On the afternoon of December 13th, the MPOA was contacted by residents along the Nippersink Creek inlet who were noticing a potential spill of an unknown material, resulting in foaming and discoloration. Local authorities were notified, including the Illinois Environmental Protection Agency (IEPA). I met with IEPA the following morning to conduct an inspection, however, due to the unsafe ice conditions, none of this material could be collected for analysis. Similar material was also observed upstream of the Thompson Road bridge, suggesting that the source of the material was upstream of the bridge. The MPOA will have on-going discussions with appropriate agencies to make sure that appropriate actions occur in the event of a future spill, as well as to help prevent future spills through public education.
4. The Illinois Lakes Management Association is hosting its 33rd annual conference at the Parke Hotel and Conference Center in Bloomington, Illinois from March 22nd to March 23th (with workshops held on the 24th). Registration information is available at <https://ilma-lakes.org/conference-registration>
5. As part of the dredging contract, the dredging contractor is required to hire an independent surveyor to verify that the specified dredging depths have been achieved. The surveyor takes hundreds, if not thousands, of measurements in each dredged area, such as shown in the Wickline Island detail below. That survey information is then compared against the project plans to confirm that the design dredge depths have been achieved, or where some touch-up work might be required.



6. It is important to note that if the dredging contractor dredges deeper than the contract design depth, the MPOA does not pay for that excess volume. To date, the survey data shows that portions of South Bay were dredged up to 0.75 feet deeper than required. While that may not sound like much, it has resulted in an additional 13,669 cubic yards of sediment removed from the lake at no charge to the MPOA.



Wickline Island Survey Data



Wickline Island Dredging Completed per Plan

Lake Manager's Report – February 2018

Randy Stowe, lakemanager@gmail.com

1. Any winter lake user should use extreme caution when in the vicinity of the floating pipeline, located roughly between Wickline Islands on the east and the Highland Shores beach on the west. Winter lake users are also reminded of the presence of the rip-rap “collars” around Wickline Island and O’Brien Shoals.
2. Our variable weather this winter also means lake users must use extreme caution on the ice during warmer temperatures.
3. The Wonder Lake Sportsman’s Club (WLSC) conducted a clearing project of Fireworks Island on January 12th, as detailed in the report on the following page. Another island workday is scheduled for Saturday, February 17th at 9 am. If safe ice conditions prevent working on the island, brush clearing work will instead be performed at the Merchant Creek property owned by the Nippersink Watershed Association (NWA). Check both the WLSC and NWA Facebook sites for final information. Volunteers will (as always) be welcome.
4. On January 20th, the Nippersink Watershed Association conducted a workday, clearing invasive brush from a portion of the Merchant Creek stream corridor. This volunteer work is being done in advance of an upcoming IEPA Section 319 funded stream stabilization project to help minimize the significant amounts of sediment that this parcel has delivered to Wonder Lake over the past decades.
5. The Illinois Department of Natural Resources is planning to conduct a fish survey of Wonder Lake in the Spring of 2018. The last fish survey was conducted in 2011, and included the following summary:

Overall, there is a diverse fishery in Wonder Lake. Opportunities for memorable catches of largemouth and smallmouth bass, walleye and black crappie exist. Continued stocking and monitoring of this fishery will maintain a great place to fish for the residents of Wonder Lake.

6. The MPOA has renewed the contract with the US Geological Survey for the operation of the stream monitoring gage at Thompson Road. The cost of operating this gage is split between the MPOA and McHenry County, as it provides valuable information to both entities. Real time precipitation, stream discharge, and stream stage information can be viewed at <https://tinyurl.com/y8vezzh1>
7. The Illinois Lakes Management Association is hosting its 33rd annual conference at the Parke Hotel and Conference Center in Bloomington, Illinois from March 22nd to March 23th (with workshops held on the 24th). Registration information is available at <https://ilma-lakes.org/conference-registration>
8. On March 23rd, I will be attending the 6th Annual Fox River summit in Burlington, Wisconsin. While the focus is on the Fox River, many of the topics being discussed have direct connections to issues facing Nippersink Creek and Wonder Lake, including: • Urban Leaf Management and Phosphorus Loading in Local Waterways • Chloride Impact Study for the Southeastern Wisconsin Region • Waukesha County Aquatic Invasive Species Strategic Plan Registration information is available at: <https://www.southeastfoxriver.org/river-breakdown>

Island Restoration Committee Report for February 14, 2018 MPOA meeting

Mark Nichols – Chairman, Committee members Tony Musel, Dennis Gallo, Ken Shaleen

WEST BAY ISLAND RESTORATION

On January 13, 2018 the Island Restoration Committee started work on Fireworks Island in West Bay. Email

notification of the work day was sent to the Ski Team, Boy Scouts, Nippersink Watershed Association (NWA), Explorers and MPOA email list. The work day was listed on the WLSC and NWA Facebook pages. Nineteen (19) Sportsman Club members, including Six (6) members of the Woodstock High School Fishing Team, and Five (5) other community members worked to remove the invasive plants. Work started at 8 am and was completed about 1 pm with lunch served. Approximately 70% of the island was cleared of undesired shrubs and trees, which were burned. Hey and Associates. donated equipment and herbicide.

Committee Time 1/14/2018 John Naatz, Chris Woerner, Tony Musel, Ken Shaleen, Tom Stygar, Zac Duplain, Bryan Verdino, Brian Barnfield, Tom Provenzano, Jason Conrad, Jacob Laha, Tommy Stygar, Mathew Fallaw, Joey Fallaw, Tom Sharkey, Mike Napier, Dennis Gallo, John Tollini, & Mark Nichols

Total work hours: 1/12/18 – 96

Community members: Randy Stowe, Preston Skultety, Bob Schell, Tim Richie, Corey Bowen

Lake Manager's Report – March 2018

Randy Stowe, lakemanager@gmail.com

1. The Wonder Lake Sportsman's Club (WLSC) continued their brush clearing project of Fireworks Island on February 17th.
2. On Saturday, March 17th, the Nippersink Watershed Association will conduct another workday, clearing invasive brush from a portion of the Merchant Creek stream corridor. This volunteer work is being done in advance of an upcoming IEPA Section 319 funded stream stabilization project to help minimize the significant amounts of sediment that this parcel has delivered to Wonder Lake over the past decades. Meet at 8 am on the north side of Wooded Shores Drive at Pleasant Drive. As always, volunteers are welcome.
3. The MPOA dredging contractor has signed the change order agreeing to conduct the "extra" dredging that will now be done in 2018. This is the result of a significant private donation that will fully fund the removal of an additional 60,000 cubic yards of sediment from Wonder Lake. This is in addition to the 469,238 cubic yards of sediment already under contract to be dredged under the SSA# 9 funding.
4. The MPOA received information from a Wonder Lake resident indicating that the Wisconsin Department of Transportation was seeking fill material, and inquiring whether the Wonder Lake sediment that has already been dredged could possibly be sold to WISDOT. The following response was sent back to that party.

Thanks for your information. As you may be aware, it is the hope and intent of the MPOA to be able to market the sediment currently being dredged from Wonder Lake as a means of providing funding for future lake maintenance / dredging needs.

Our consultant has advised us that the highest potential revenue to be gained from sediment sales would be to market it as topsoil, and ideally, in the 40 pound bags you can find at Menards, Lowes, etc. as that would produce the highest revenue yield.

As such, the MPOA has already initiated discussions with topsoil vendors, but nothing will happen until the dredging is completed this year.

Given the distance involved between the Wonder Lake sediment drying facility and current on-going WISDOT projects, it seems perhaps unlikely that WISDOT would be able to offer a price that would be cost effective to them and attractive to the MPOA, but if someone from WISDOT still wished to reach out to us,

they could get in touch with me.

Thanks again for your interest and input.

This is probably a good time to remind everyone that all of the sediment being dredged from Wonder Lake belongs to the MPOA, and we hope to market it once dredging is complete.

5. The Illinois Lakes Management Association is hosting its 33rd annual conference at the Parke Hotel and Conference Center in Bloomington, Illinois from March 22nd to March 23th (with workshops held on the 24th). Registration information is available at <https://ilma-lakes.org/conference-registration>

Lake Manager's Report – April 2018

Randy Stowe, lakemanager@gmail.com

1. The MPOA dredging contractor is in the process of re-mobilizing this week, with the intent to resume dredging this coming weekend, weather permitting. Their current plan is to resume dredging in South Bay, concentrating on working the east shoreline first, to allow those lakefront landowners to install piers once dredging in that area has been completed. The intent is to have the dredging of South Bay, and any remaining dredging that can be done around O'Brien Shoals, completed as soon in the 2018 boating season as possible, after which the remaining dredging will be in West Bay. As a result, the dredging crew may be running longer shifts. As always, the MPOA will post updated information to the MPOA website www.wlmpoa.org as it becomes available.

2. On Saturday, April 21st, the Nippersink Watershed Association will conduct another workday, clearing invasive brush from a portion of the Merchant Creek stream corridor. This volunteer work is being done in advance of an upcoming IEPA Section 319 funded stream stabilization project to help minimize the significant amounts of sediment that this parcel has delivered to Wonder Lake over the past decades. Meet at 8 am on the north side of Wooded Shores Drive at Pleasant Drive. As always, volunteers are welcome.

3. There has been a lot of interest in the incredible number and variety of birds observed on the lake this early spring. The basic reason for this abundance is the Gizzard Shad, which recently has become very abundant in Wonder Lake. A number of questions have been raised about why the Shad seem to be dying off, creating a sushi bar for the birds. The most likely answer, as explained below, is quick changes in water temperature.



Mortality caused by cold stress has been identified as a factor regulating the abundance of gizzard shad populations, particularly in waters near the northern edge of the species' distribution where prolonged cold winters might almost eliminate them. Sudden cold spells causing water temperatures to drop several degrees in already cold water can cause massive kills.

In a study by Cornell University researchers, young-of-the-year gizzard shad were held in cages in Oneida Lake, New York, during the winter prior to ice-up.* Shad had low mortality in water above 46°F and mortality was high in water less than 39°F. Researchers also tested survival in cold rooms under controlled temperature treatments of 34°F, 36°F, and 39°F to simulate mid-winter conditions. First, shad were allowed to acclimate to 46°F, then the tank temperatures were reduced by about a half of a degree per day until the final test temperatures were reached.

Mortality was low during the acclimation period. A larger proportion of shad survived for longer periods in the 39°F tanks and mortality was highest in the coldest tanks.

Within each temperature treatment, small fish died faster. The researchers also observed that the average size of shad in field collections increased through winter, indicating higher cold tolerance of larger individuals. They conclude that cold stress and the inability to acclimate to decreasing temperatures, rather than starvation, are key factors in winter mortality.

These findings suggest that you can expect large shad winterkills when severe cold-fronts decrease water temperatures quickly in early winter before ice-up. Once lakes are covered in ice and buffered more from sudden changes in air temperatures, the severity of overwinter mortality should coincide with the duration of the ice-cover period.

Lake Manager's Report – May, 2018

Randy Stowe, lakemanager@gmail.com

1. The MPOA dredging contractor has re-mobilized and continues to work in South Bay. At last report, the dredging company is hoping to have the “near-shore” areas off Wonderview completed by the end of this week, so that Wonderview folks can get their piers installed. The dredge will then continue working in the South Bay until it is complete. The intent is to have the dredging of South Bay, and any remaining dredging that can be done around O'Brien Shoals, completed as soon in the 2018 boating season as possible, after which the remaining dredging will be in West Bay. As a result, the dredging crew may be running longer shifts. As always, the MPOA will post updated information to the MPOA website www.wlmpoa.org as it becomes available.
2. The efforts to discourage Cormorants from roosting on Wonder Lake Islands appear to be working. As discussed in the email that was sent out to those on the MPOA mailing list, an overabundance of Cormorants can have negative impacts on water quality, the vegetation on the islands, and the fishery. No Cormorants are harmed by these efforts.
3. The Wonder Lake Sportsmans Club conducted its annual spring Lake Cleanup on April 15th. The usual assortment of trash was collected by the 19 volunteers. As always, thanks to WLSC for their on-going efforts.
4. On Saturday, May 19th, the Nippersink Watershed Association will conduct another workday, clearing invasive brush from a portion of the Merchant Creek stream corridor. This volunteer work is being done in advance of an upcoming IEPA Section 319 funded stream stabilization project to help minimize the significant amounts of sediment that this parcel has delivered to Wonder Lake over the past decades. Meet at 8 am on the north side of Wooded Shores Drive at Pleasant Drive. As always, volunteers are welcome.
5. The Nippersink Watershed Association has recently received a new grant of up to \$32,000 from the Illinois Clean Energy Community Foundation for the on-going Merchant Creek project. Part of the grant requires that up to \$ 7,000 in cash also be generated from local donations, and a minimum of 500 hours of volunteer effort be provided. This new grant will allow the work already funded and permitted under the on-going IEPA Section 319 grant to be expanded.

Lake Manager's Report – June 2018

Randy Stowe, lakemanager@gmail.com

1. The MPOA dredging contractor continues to work in South Bay. At last report, the dredging company is hoping to have the “deep habitat” area in South Bay completed by the start of next week. They will then complete any remaining portions of South Bay that have not yet been dredged, or that require any remedial work, based upon the findings of the hydrographic surveyor.
2. Any remaining work to be done at O'Brien Shoals will only be attempted if we have enough rainfall to raise the lake level enough to provide sufficient draft for the dredge across existing lakebed shoals of un-dredgeable materials.
3. At this point, it is anticipated that prior to the June 30th fireworks display and following 4th of July holiday, the dredge, booster pump, and much of the sediment pipeline will be back in West Bay, greatly reducing lake user conflict issues. Prior to the June 30th fireworks, the MPOA will post an updated diagram of the APPROXIMATE location of the dredging equipment / pipeline on the MPOA website, and will send an email to everyone on the MPOA email list advising them that the diagram has been posted.
4. As of May 11th, 2018, approximately 80% of the 529,378 cubic yards of sediment under contract to be dredged from Wonder Lake has been completed.
5. The MPOA has received a number of comments from lake users regarding dredging issues, primarily involving instances when the sediment pipeline comes close to their shoreline area, limiting or preventing boat access. Obviously, this is a valid concern, but the only way the MPOA finds out about these issues is for folks to contact the MPOA. As soon as the MPOA receives information on pipeline issues, that information is passed onto the MPOA dredging consultant and the dredging contractor, so that the appropriate action can be taken.
6. The MPOA also continues to receive comments on the marking of the sediment pipeline, and problem's lake users have in seeing the pipeline. It is important that lake users realize that as the dredge operates, the sediment pipeline may rise or sink, or “snake” horizontally across the water surface, particularly south of the designated pipeline crossing. For these reasons, we continue to encourage lake user's to completely avoid the overall vicinity of the dredging / dredge pipeline. If you are a Highland Shores or Sunrise Ridge lake user, and must pass through this area to reach other areas of the lake, please use extreme caution.
7. On Saturday, June 16th, the Nippersink Watershed Association will conduct another workday, clearing invasive brush from a portion of the Merchant Creek stream corridor. This volunteer work is being done in advance of an upcoming IEPA Section 319 funded stream stabilization project to help minimize the significant amounts of sediment that this parcel has delivered to Wonder Lake over the past decades. Meet at 8 am on the north side of Wooded Shores Drive at Pleasant Drive. As always, volunteers are welcome.

Lake Manager's Report – July 2018

1. The MPOA dredging contractor continues to work in West Bay. At the present rate of production, the MPOA dredging contractor has estimated that the entire dredging project should be completed by late Fall of 2018.
2. All areas of South Bay under contract to be dredged have now been successfully completed. The deep water habitat area in South Bay now features water depths of 10 feet or more, so some new fishing opportunities may exist.
3. With the large rainfall events in June, the lake water level rose enough to allow the dredge temporary access to the remaining areas at O'Brien Shoals that were still under contract to be dredged, but were previously inaccessible due to rocky deposits and shallow water depths. Some additional dredging was accomplished, but it appears, at least for now, that all the dredging feasible at O'Brien Shoals has been completed.
4. The map currently found on the MPOA website (and below) still provides a good APPROXIMATE representation of where the dredge and dredge pipeline is located. Again, the entire West Bay and adjacent areas should be avoided for the rest of the 2018 boating season, as the location of the dredge and pipeline will frequently change as dredging is completed. Access to the main lake for those landowner's on the south side of West Bay and the Nippersink Creek inlet may still face temporary short-term inconvenience but the dredge crew will do all they can to facilitate safe passage.
5. As of June 15th, 2018, approximately 87% of the 529,378 cubic yards of sediment under contract to be dredged from Wonder Lake has been completed.
6. On Saturday, July 21st,(mosquitoes permitting) the Nippersink Watershed Association will conduct another workday, clearing invasive brush from a portion of the Merchant Creek stream corridor. This volunteer work is being done in advance of an upcoming IEPA Section 319 funded stream stabilization project to help minimize the significant amounts of sediment that this parcel has delivered to Wonder Lake over the past decades. Meet at 8 am on the north side of Wooded Shores Drive at Pleasant Drive. As always, volunteers are welcome.



Lake Manager's Report — August 2018

Randy Stowe, lakemanager@gmail.com

1. The MPOA dredging contractor continues to work in West Bay. At the present rate of production, the MPOA dredging contractor has estimated that the entire dredging project should be completed by late Fall of 2018. It is anticipated that the final dredging activities will occur along the south shore of West Bay, likely in late September or early October, 2018. This should allow time for those landowners to remove their piers to allow unobstructed dredging access.
2. Due to the movements in the dredging pipeline as dredging goes on, all lake user's should avoid West Bay, and adjacent areas of the main lake. Sunrise Ridge landowners wishing to access the lake should get the attention of the dredge crew, who will make any necessary movements to allow passage.
3. As of July 15th, 2018, approximately 88% of the 529,378 cubic yards of sediment under contract to be dredged from Wonder Lake has been completed.
4. The dredging contractor has begun removing excess sediment pipeline, used to reach the far end of South Bay, from the lake. There are still lengths of sediment pipeline secured to the west shore of South Bay.
5. Fourteen show ski clubs, including the Wonder Lake Water Ski Show Team, will be competing in this year's National tournament in Rockford, which will be available for viewing via a live webcast at: <http://www.facebook.com/USAWaterSki> Wonder Lake will perform approximately 9am, Sunday, August 12th.
6. Wonder Lake has thankfully had an incident-free summer so far, and hopefully that trend will continue well into the future. However, as the news article indicates, accidents can still happen on area waterways. As lake use on Wonder Lake is largely governed by Illinois Department of Natural Resources regulations, it may be useful to periodically review information related to those regulations. Information can be downloaded at: <https://www.dnr.illinois.gov/boating/Documents/BoatDigest.pdf>
7. On Saturday, August 18th, the Nippersink Watershed Association will conduct another workday, clearing invasive brush from a portion of the Merchant Creek stream corridor. This volunteer work is being done in advance of an upcoming IEPA Section 319 funded stream stabilization project to help minimize the significant amounts of sediment that this parcel has delivered to Wonder Lake over the past decades. Meet at 8 am on the north side of Wooded Shores Drive at Pleasant Drive. As always, volunteers are welcome.

Lake Manager's Report – September 2018

Randy Stowe, lakemanager@gmail.com

1. The MPOA dredging contractor continues to work in West Bay. At the present rate of production, the MPOA dredging contractor has estimated that the entire dredging project should be completed by late Fall of 2018. It is anticipated that the final dredging activities will occur along the south shore of West Bay, likely in late September or early October, 2018. This should allow time for those landowners to remove their piers to allow unobstructed dredging access.
2. Due to the movements in the dredging pipeline as dredging goes on, all lake user's should avoid West Bay, and adjacent areas of the main lake. Sunrise Ridge landowners wishing to access the lake should get the attention of the dredge crew, who will make any necessary movements to allow passage.
3. As of August 17th, 2018, approximately 89% of the 529,378 cubic yards of sediment under contract to be dredged from Wonder Lake has been completed.
4. On Saturday, September 12th, the Nippersink Watershed Association will conduct another workday, clearing invasive brush from a portion of the Merchant Creek stream corridor. This volunteer work is being done in advance of an upcoming IEPA Section 319 funded stream stabilization project to help minimize the significant amounts of sediment that this parcel has delivered to Wonder Lake over the past decades. Meet at 8 am on the north side of Wooded Shores Drive at Pleasant Drive. As always, volunteers are welcome.

Lake Manager's Report – October 2018

Randy Stowe, lakemanager@gmail.com

1. The MPOA dredging contractor continues to work in West Bay. At the present rate of production, the MPOA dredging contractor has estimated that the entire dredging project should be completed by late Fall of 2018, barring an early winter. It is anticipated that the final dredging activities will occur along the un-dredged southeast shore of West Bay, likely in mid-to-late October, 2018. This should allow time for those landowners to remove their piers to allow unobstructed dredging access.
2. Due to the movements in the dredging pipeline as dredging goes on, all remaining lake user's should avoid West Bay, and adjacent areas of the main lake. Sunrise Ridge landowners wishing to access the lake should get the attention of the dredge crew, who will make any necessary movements to allow passage.
3. As of September 25th, 2018, approximately 92% of the 529,378 cubic yards of sediment under contract to be dredged from Wonder Lake has been completed.
4. On Saturday, October 20th, the Nippersink Watershed Association will conduct another workday, clearing invasive brush from a portion of the Merchant Creek stream corridor. This volunteer work is being done in advance of an upcoming IEPA Section 319 funded stream stabilization project to help minimize the significant amounts of sediment that this parcel has delivered to Wonder Lake over the past decades. Meet at 8 am on the north side of Wooded Shores Drive at Pleasant Drive. As always, volunteers are welcome.
5. I recently received an inquiry about a snake recently observed near the lake, and concerns that it was danger-

ous / venomous. It was determined that it was likely a Northern Water Snake, a harmless and beneficial species, like all other McHenry County snakes. Generally speaking, if you leave a snake alone, it will do the same for you. The Illinois Natural History Survey maintains a database of all animal species known to occur in Illinois. Below is a link of all snake species having ever been documented in McHenry County, and links to pictures.

<https://www.inhs.illinois.edu/collections/herps/data/county/mchenry>

Simply stated, there are NO venomous snakes found in McHenry County, including Copperheads, Cottonmouths (aka Water Moccasins) or Rattlesnakes, as confirmed by the Illinois Department of Natural Resources.

Venomous snakes tend to be restricted to specific habitats. Copperheads occur in the southern one-third of Illinois, south of Route 16 and in the lower Illinois River valley. They prefer upland forests or river bluffs with limestone or sandstone outcroppings. Cottonmouths live in swamps and wet bottomlands in southern Illinois, south of Route 13. Timber rattlesnakes may be found in the southern one-fourth of the state (south of Interstate 64), in the lower Illinois River valley, in the Mississippi River valley and in a few other locations. These snakes prefer heavy timber with rock outcrops and bluffs. Massasaugas live in scattered locations within the counties of Madison, Clinton, Piatt, Knox, Warren, Will, Cook and Lake. Their habitats are prairie wetlands and river floodplains. <https://www.dnr.illinois.gov/education/Pages/WildAboutSnakes.aspx>

6. A recent article in the Chicago Tribune discussed how the warming of Lake Michigan will have an impact on game fish. It also included a discussion on how inland lakes will also be impacted by warmer water temperatures. While Lake Michigan doesn't contain "cold water" species, it does point out some of the conditions that can affect all aquatic species. That portion of the article is excerpted below:

Lake Michigan is warming. A new report says that could mean trouble for game fish.

More dire inland

The situation may be even more dire for cold water species inland, however. In addition to warmer waters, more frequent heavy precipitation could increase agricultural runoff and induce more algal blooms. When that algae dies near the lake bottom, it becomes food for bacteria, which deplete oxygen levels in deep, cold waters. This places cold water fish in a vise between warm surface water they can't tolerate and deeper cool water with little oxygen. Perhaps no other species underscores the severity of the issue than the cisco, a cold water whitefish that was once found in about 50 lakes in Indiana, but now remains in only six, Hook said.

Researchers say more algae blooms are likely for both ecosystems, although inland lakes are most at risk. There, cold water fish have to occupy a shrinking area as water warms near the surface and oxygen levels drop near the lake bottom.

"They can't really migrate much but up and down in the water column," Hook said. "I would expect to see more die-offs in those types of systems. A lot of aquatic species don't have the flexibility to migrate into new systems like terrestrial organisms do."

The lack of oxygen typically persists until fall, when warm water cools and can mix with deeper water. With springlike temperatures arriving earlier and summer temperatures lingering into fall, the Purdue report warns that warming climate could prolong the period when there is less oxygen in the deeper water.

<http://www.chicagotribune.com/news/ct-met-lake-michigan-warming-20180913...>

7. As discussed in the Tribune article, another potential impact of climate change is the prediction of more intense rainfall events. In 2018, Wonder Lake has been closed 3 times due to high water levels, compared to 1 time in 2017, 1 time in 2015, and 2 times in 2013. If this prediction is correct, lakefront landowners may need to plan for more frequent future high water levels, which can cause damage to piers, as well as increase erosion of poorly protected shoreline areas. This may include considering shoreline stabilization, or raising the height of their piers to avoid them being submerged in high water events. Lake closures typically are enacted when the lake water level rises one foot (and beyond) above normal water level, so it is recognized that pier levels be set at an elevation higher than that one-foot rise.

Lake Manager's Report – November 2018

Randy Stowe, lakemanager@gmail.com

1. The MPOA dredging project will FINALLY be fully completed by the end of this week, resulting in the removal approximately 529,738 cubic yards of nutrient-rich sediment from Wonder Lake. It is hoped that the eventual sale of the dried sediment will help fund future maintenance dredging and other lake restoration activities that will continue to enhance local property values for all properties holding deeded lake rights. The MPOA thanks everyone for their cooperation and patience.

2. The dredging contractor has completed the remaining areas of West Bay that still needed to be dredged under the original base bid. They are currently working on re-dredging some areas along the southwest shore of West Bay that had previously been successfully dredged to the required dredging contract specification, but had since experienced additional sediment deposition resulting from heavy rainfall events.

3. The dredging contractor will then demobilize and remove the dredging equipment, as well as the sediment pipeline extending from the lake to the MPOA Sediment Drying Facility (SDF). That work is expected to be complete by mid-December.

4. As part of the dredging contract, the contractor is required to provide the MPOA with surveys, generated by a hydrographic surveyor, to measure and document that the specified dredging depths have been reached, and to allow the verification of the exact quantity of sediment removed under the contract, as the contractor payout is based on a per cubic yard basis. Survey maps have already been provided to the MPOA dredging consultant for all dredged areas conducted to date, with the exception of the recent / current work in West Bay, with those surveys expected shortly.

5. The annual inspection of the Wonder Lake Dam, and the Wonder Lake SDF, was conducted by the MPOA consulting engineers on Friday, October 19th. No critical issues were raised by the MPOA or State engineers who participated. The Lake Maintenance Commission will review the report and its findings upon its receipt.

6. The U.S. Fish and Wildlife Service recently accepted the "Perricone" parcel into the Hackmatack National Wildlife Refuge. This is a 27 acre parcel of land located southwest of Route 47 and Thayer Road, which is bisected by a ½ mile long segment of Nippersink Creek. Working with Openlands and the McHenry County Conservation District (MCCD), the Nippersink Watershed Association (NWA) secured an IEPA Section 319 grant to address streambank erosion, and to create a buffer of native vegetation, activities that will directly benefit Wonder Lake, located approximately 5 miles downstream, as well as other MCCD / NWA protected lands in between. Additional Nippersink properties in the vicinity may also be acquired from willing sellers for future inclusion in the refuge. <https://www.fws.gov/refuge/hackmatack/>

7. On Saturday, November 17th, the NWA will conduct yet another workday, clearing invasive brush from a portion of the Merchant Creek stream corridor. This volunteer work is being done in advance of an upcoming IEPA Section 319 funded stream stabilization project to help minimize the significant amounts of sediment that this parcel has delivered to Wonder Lake over the past decades. Meet at 8 am on the north side of Wooded Shores Drive at Pleasant Drive. As always, volunteers are welcome, as volunteer time counts towards a ICECF grant also obtained by the NWA.

8. The 34th Annual Illinois Lakes Management Association Conference will be held at the Crystal Lake Holiday Inn in Crystal Lake, IL from March 14 – 16, 2019. Given the proximity to Wonder Lake, this would be a great opportunity for WL folks to learn more about a wide variety of lake topics. For more details: <http://www.ilm-lakes.org/conference>

Lake Manager's Report – December 2018

Randy Stowe, lakemanager@gmail.com

1. The MPOA dredging project has been completed, barring some minor restoration of areas disturbed by dredging equipment, which will take place in 2019. As is typical in this type of project, funds for that work are being withheld from the final payout to the dredging contractor until that restoration has been completed.

2. The dredging resulted in a final total of 516,265 cubic yards of sediment being removed from shallow areas of Wonder Lake, improving lake usage, fish habitat and water quality. This volume has been confirmed by the required survey of dredged areas, and subsequent review by the MPOA dredging consultant.

3. To put this volume in perspective, this is roughly the equivalent of almost 29,000 semi dump truck loads of nutrient-rich sediment no longer in the lake, and available for potential resale to help fund future lake maintenance activities.

29000 dump truck loads

4. On Saturday, December 15th, the Nippersink Watershed Association will conduct yet another workday, clearing invasive brush from a portion of the Merchant Creek stream corridor. This volunteer work is being done in advance of an upcoming IEPA Section 319 funded stream stabilization project to help minimize the significant amounts of sediment that this parcel has delivered to Wonder Lake over the past decades. Please note that a new meeting location is being used for this workday. Volunteer's will meet at 8 am at the north end (dead end) of Edgewood Drive, just north of Wooded Shores Drive. Edgewood Drive is the first side street off Wooded Shores Drive coming west from East Wonder Lake Road. As always, volunteers are welcome, as volunteer time counts towards a ICECF grant also obtained by the NWA.

5. The 34th Annual Illinois Lakes Management Association Conference will be held at the Crystal Lake Holiday Inn in Crystal Lake, IL from March 14 – 16, 2019. Given the proximity to Wonder Lake, this would be a great opportunity for WL folks to learn more about a wide variety of lake topics. For more details: <http://www.ilm-lakes.org/conference>



X 29,000