

THANK YOU

The Bay Area Historical Society would like to thank Richard Earle Smach for his generous gift to our organization.

THANK YOU

When words fail, the strength of God's love carries us through and heals our aching hearts. Please accept our heartfelt thanks to all for your expressions of love, friendship, and sympathy at the death of our Dad, Grandpa, Great-Grandpa and loving companion, Don Stadler.

The Don Stadler Family and Donna

THANK YOU

To the friends and family of Janice Clarke, thank you! It was with much comfort to know that after far too many months of illness she was not forgotten.

Thank you, Curt Clarke

THANK YOU

The City of Silver Bay would like to thank the following for their financial donation to this year's firework display: Beaver Bay Township, City of Beaver Bay, Cove Point Lodge, D&D Services, Four Seasons Supper Club, Jackson, Inc., Janet Grahek, Mary Hoffman, Kurt & Bobbi Johnson, North Shore FCU, North Shore Mining, Parks State Bank, Rodney Ludolph, Thomas Ludolph, and Steve & Shelly VanHouse.

Two Harbors Heritage Days Street Closures. The following Streets/Avenues will be closed during Heritage Days in Two Harbors July 8th - 11th. Thursday, July 8: 5:30 pm - 6:30 pm: 600 block of 1st Ave. & 100 block of 6th Street.

Pie Social with the Wooden Bat Tournament. Saturday, July 17th 10 a.m. - 3 p.m. Claire Nelson Center, Finland. Join us for homemade pie and ice cream!!

Two Harbors Approves Stormwater Management Plan

By Kitty Mayo

At the regular Two Harbors city council meeting last week the council approved a Stormwater Management Plan, with the purpose of protecting and improving the waters entering into Agate and Burlington Bays where many enjoy swimming, fishing, and boating.

Derrick Passe, a Two Harbors city councilor, as well as an engineer for the Lake County Soil and Water District, says he is very excited about "all the great things that are happening in Two Harbors to clean up the stormwater runoff to Lake Superior."

"Today we heard from the MPCA that \$734,000 was approved by the Great Lakes Restoration Initiative, it's only appropriate we light fireworks over Agate Bay this weekend," said Passe.

In 2010 it was found that Skunk Creek was contributing sediment (soil runoff) into Lake Superior at a higher level than what is deemed acceptable in the state. Around that same time it was determined that E. Coli (an indication of fecal matter in the water) was present above safe levels at Skunk Creek, Burlington Bay, and Agate Bay.

Lake SWCD worked closely with partners at UMD, MPCA, and the City of Two Harbors to identify the source of these contami-

nants, and by identifying DNA in water samples the source of the E. coli coming downstream from "Battaglia Pond" was found to be primarily from geese. However, human fecal waste is the main source of E. coli in Agate Bay.

According to Passe, outdated and aging infrastructure is the most likely reason for the human-sourced E. coli. Original sewer design combined sanitary (sewer) and storm pipes, allowing sewer overflow to make it into the Lake during heavier rainfalls.

While the process to identify where leaks from old infrastructure are coming from is a slow one and costly to fix, Passe says there is an interim solution that is fairly cutting edge for use on this scale. Biochar filters are proposed for use at outlets to the Lake, integrating a technique similar to the use of charcoal water filters, but on a grand scale.

Street repair, and upgrading of the sewer and water systems under the city's roads, are already part of the Capital Improvement Plan, and work underway has led to identifying what are likely to be some of the most problematic sewer leak and overflow areas.

"It is a brick at a time with aging infrastructure, and until we can get all this fixed we are going to go right at the outlets and put in biochar filters," said Passe.

Passe says that while biochar filters on this scale are not commonplace, research by UMD has shown them to be effective for trapping bacteria like E. coli, along with heavy metals reduction. Biochar is biological matter, such as yard, food and forestry waste, that is burned in a low oxygen environment that gets rid of impurities and keeps the carbon.

There are several outlets into Agate Bay and they are aging and in various stages of deterioration. These outlets will be combined, bringing the total outlets into the bay down to just two.

In the proposed plan one of the filtering ponds at the top of the hill near the breakwall will have the cattails removed and replaced with biochar media.

In 2020, Lake SWCD, TSA 3, Two Harbors and Bolton and Menk worked together to create the stormwater management plan. The city contributed \$10,000 toward the \$54,000 plan. Grants and in-kind labor made up the

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NORTH SHORE JOURNAL'S HIDDEN PHRASE PUZZLE

To get your name on the Northshore Journal's Puzzle page, send your name, hometown and puzzle answer to: 27 Evans Circle, Silver Bay, MN 55614 • Call: 226-3335 • Email: northshorejournal@gmail.com

JIM ANDERSON, TWO HARBORS PEARL MUUS, GRAND MARAIS WAYNE ELLINGSEN, FAIRBANKS DIANE NOWERS, GRAND MARAIS BJ MUUS, GRAND MARAIS LINDA HARSDFORF, GRAND MARAIS LINDA BRANDT, TWO HARBORS MARK & LAURA LAKY, GRAND MARAIS PATRICIA OLSON, TWO HARBORS MARIANN MANCUSO SANDY WIRT, GRAND MARAIS DARLENE STEVENS, TWO HARBORS PAT TORGERSEN, TWO HARBORS BETTY KING, TOFFE NANCY BRAMSTEDT, GRAND MARAIS GAIL SAFSTROM, KNIFE RIVER SUSAN SCHLIEP, GRAND MARAIS LAURIE SPRY, GRAND MARAIS FLORA DICKENSON, SILVER BAY LIL HANSON, TWO HARBORS VERA MIDBROD, SILVER BAY DARLENE GADACZ, TWO HARBORS MARY KAY & RUDY CARLSON, GM PHILIS ANDERSON, GRAND MARAIS MARY LOU MARSHALL MARY ANN SMITH, FARM LAKE DARLA PARENT LES KENT, MT. PROSPECT, IL DANIELLE ERJAVEC, DULUTH SUE RILEY, GRAND MARAIS LAURIE JUENEMANN, TWO HARBORS JENNIFER NIEMI, TWO HARBORS LISA HORNER, KNIFE RIVER ALYSSA SINES, TWO HARBORS MAGS FAY CARLSON, HOVLAND DIANE RADLE, SILVER BAY ELEANORE WAHA, GRAND MARAIS

Last week's answer: No other date on the calendar more potently symbolizes all that our nation stands for than the Fourth of July. ~Mac Thornberry

- BANE BERRIES BIL BOYSEN BLUE CHECKER BOYSEN CHECKER CRAN DEW HUCKLE JUNE LOGAN MUL SERVICE SHAD SPICE STRAW TEA WHORTLE

After you find all the words, solve the quote below from the remaining letters!

How many berries do you know?

S O W E B K G R E S W T E O S G E T H E R C E L I E K E T N O P A D O U B A T L R R S O N S A E I C H E R L R E W V R A G U S B Y C E S E B E M A I I N I W G P A R E L T N E D R C D B U R E H H T Y E K T A E T E E N U N I A S O A O N C I L S S W N B W P A R S T R C L U M O I I Y I T O I E O N P T T K H W G O N L O L C U D A H S C O L V E A L Y G B B L E N U J E R R R E I N E S X O B R E K C E H C M A O L D E D O O N N O N E S T E M W N I L L I B A M S H A K E S P E A R E