



*In order for the preservation and conservation of our natural resources and waterways, youth need to learn the importance of being stewards of their own environment in which they live. Big Sandy Water Institute is a program that focuses on those needs and the impact it has on our environment by spending time helping them become more mindful of the earth and in touch with nature by blending recreational and environmental activities together. Our goal is to teach youth the importance of their surroundings to ensure future sustainability and enjoyment of our natural resources.*



**A special  
have made**

**thanks to the following sponsors who  
Big Sandy Water Institute possible:**

*Thank  
You!*

McGregor Community Education  
Northland Foundation  
Army Corps of Engineers Federal Dam  
Rice Lake National Wildlife Refuge  
BSALWMP  
Savanna Portage State Park

Minnewawa Sportsmens Club  
Big Sandy Lake Association  
Big Sandy Lake Foundation  
McGregor Lions Club  
Aitkin County Water Planning Task Force  
Shamrock Township  
McGregor Fire Department Relief Association



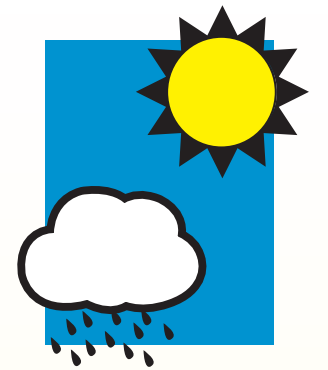
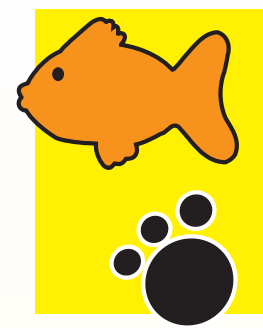
Non Profit Org.  
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55760

**BIG SANDY  
WATER INSTITUTE**  
McGregor Community Education  
ISD #4, PO Box 160  
McGregor, MN 55760

**Post Office or  
Rural Route Box Holder**



**Dated Material -  
Please Deliver Promptly**



# **BIG SANDY WATER INSTITUTE**



## **Splash 2008 Summer Schedule**

*That in the end we will only conserve what we love; we will love only what we understand; and we will understand only what we are taught. baba diom*

# SUMMER SCHEDULE 2008



## What to bring daily!!

- |   |                                     |
|---|-------------------------------------|
| <input type="checkbox"/> towel                | <input type="checkbox"/> sunglasses |
| <input type="checkbox"/> swim wear            | <input type="checkbox"/> sunscreen  |
| <input type="checkbox"/> change of clothes    | <input type="checkbox"/> hat        |
| <input type="checkbox"/> appropriate footwear | <input type="checkbox"/> raingear   |
| <input type="checkbox"/> water bottle         | <input type="checkbox"/> lunch      |



Severe weather. Classes will be cancelled.

Please call 218-768-2111 x233 for weather and class cancellation update.

### #EE001 - WILD ENCOUNTERS FAMILY FUN DAY (Rice Lake National Wildlife Refuge)

Friday, June 6, 2008 from 9am - 3pm

This day will provide many unique opportunities for families to enjoy together.

9:00am - 10:30am - Birding 101 - Learn how to use binoculars and the beginning bird watching hobby. Binoculars and bird guides will be provided or you may bring your own.

9:00am - noon - Fishing at the south water control structure on the Rice River; fishing poles and bait provided, as is the assistance from experienced anglers.

10:30am - noon - Beginning Digital Photography 101 - This class will instruct the photographer the basics of setting up their camera including close-up photography of butterflies, dragonflies, flowers, other vegetation and wildlife.

11:00am - 11:50am - The Frog Chorus/Fabulous Frogs, presented by David Stokes, Naturalist, Humorist, Educator. Through the use of live frogs, toys and songs, we will have a comical "hands-on look" at common frogs.

Noon - 1:00pm - FREE Picnic lunch at Mandy Lake; followed by an orientation to the Big Sandy Water Institute.

1:00pm - 1:50pm - Terrific Turtles/You Can't Make a Turtle Come Out, presented by David Stokes, Naturalist, Humorist, Educator. Through the use of live turtles, turtle shells, toys and songs we will take a humorous look at the wonder of turtles.

2:00pm - 2:50pm - Snazzy Snakes/Their Not For Breakfast Anymore, presented by David Stokes. Through the use of live snakes, snake toys and artifacts we will examine up close and personal snakes in our lives.

Transportation will be provided. Must pre-register for transportation on registration form. Pickup and dropoff at school only at 8:45am and 3:15pm.



### #EE002 - THREE BEAR LODGE WATER PARK AND MINNAQUA PROGRAM AT LUM PARK (Brainerd, MN)

Monday, June 9, 2008 • Age: 7 and up

Take a float down the lazy river, slip slide your way down one of many water slides or just swim in the pool. Followed by a morning of enjoyment at the water park pizza and beverage will be available for all. From there we will travel to Lum Park and enjoy the afternoon with Minnaqua as students will learn how to tie an improved cinch knot, make a fishing rig from a pop can and demonstrate how to accurately cast a line. They will relate fishing techniques to fish habit and habitats while having fun catching fish!

Bus will leave McGregor School at 8:30am and return at 4pm



# REGISTRATION INFORMATION

Student's Name \_\_\_\_\_ Age \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Emergency Phone \_\_\_\_\_

Email \_\_\_\_\_

List any activity restrictions, health problems and/or medications relating to your child.

### CONTRACT

I understand that every effort will be made to protect and safeguard all students. I agree not to hold Big Sandy Water Institute/ ISD #4 liable for any illness or mishap from any cause whatsoever. I also give the instructors/supervisors full authority in dealing with the problems of discipline. I understand that any student disregarding rules is subject to being sent home. I understand that any student who willfully destroys property will be held responsible and charged accordingly. I give ISD #4 permission to use comments, photos and video of the student named above in its promotional materials.

Parent/Guardian Signature \_\_\_\_\_

## REGISTER MY CHILD FOR

- |                                |   |
|--------------------------------|---|
| <input type="checkbox"/> EE001 | <input type="checkbox"/> Yes, we need transportation from school. How many? _____             |
| <input type="checkbox"/> EE002 | Bus will leave school at 8:30am and return at 4:00pm.   |
| <input type="checkbox"/> EE003 | Bus will leave school at 9:05am and return at 3:20pm  |
| <input type="checkbox"/> EE004 | Pickup _____ Dropoff _____  |
| <input type="checkbox"/> EE005 | Pickup _____ Dropoff _____  |
|                                | <input type="checkbox"/> Beginning Kayaking <input type="checkbox"/> Intermediate Kayaking    |
| <input type="checkbox"/> EE006 | No transportation provided  |
| <input type="checkbox"/> EE007 | Bus will leave school at 8:45am and return at 3:00pm  |
| <input type="checkbox"/> EE008 | Bus will leave school at 9:30am and return at 3:00pm  |
| <input type="checkbox"/> EE009 | Bus will leave school at 8:30am and return at 4:15pm  |
| <input type="checkbox"/> EE010 | Pickup _____ Dropoff _____  |
| <input type="checkbox"/> EE011 | Pickup _____ Dropoff _____  |
|                                | <input type="checkbox"/> Beginning Kayaking <input type="checkbox"/> Intermediate Kayaking    |
| <input type="checkbox"/> EE012 | Pickup _____ Dropoff _____  |
| <input type="checkbox"/> EE013 | Pickup _____ Dropoff _____  |
| <input type="checkbox"/> EE014 | Pickup _____ Dropoff _____  |
| <input type="checkbox"/> EE015 | Pickup _____ Dropoff _____  |
| <input type="checkbox"/> EE016 | Bus will leave school at 8:30am and return at 4:00pm  |
| <input type="checkbox"/> EE017 | No transportation provided. Parents must pick their child up at Libby Dam at 11am on 7/17/08. |
|                                | <input type="checkbox"/> I cannot bring a tent  |
| <input type="checkbox"/> EE018 | Pickup _____ Dropoff _____  |
|                                | <input type="checkbox"/> Beginning Kayaking <input type="checkbox"/> Intermediate Kayaking    |
| <input type="checkbox"/> EE019 | Pickup _____ Dropoff _____  |
| <input type="checkbox"/> EE020 | Register my child for Level _____   |
|                                | No transportation provided to swimming lessons  |



## Transportation

(YOU MUST PRE-REGISTER FOR TRANSPORTATION)

FYI: For all classes located at Army Corp of Engineers, Savanna Portage State Park or Minnewawa.

School...	9:05am (Pickup)	3:25pm (Dropoff)
Willey's...	9:15am (Pickup)	3:15pm (Dropoff)
Sathers...	9:20am (Pickup)	3:10pm (Dropoff)

FYI: For classes held at Rice Lake Wildlife Refuge

School...	9:20am (Pickup)	3:10pm (Dropoff)
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Children will not be left at dropoff sites if parents are not there. You will be required to pick your child up at the school North Entrance.

### REGISTER BY:

Mailing form to McGregor  
Community Education, PO Box 160,  
McGregor, MN 55760

Drop off registration form at the  
Community Education office or drop  
box outside of office.

ALSO... register by emailing to  
llkruse@mcgregor.k12.mn.us

### #EE017 - OVERNIGHT CAMPING ADVENTURE (Army Corps of Engineers Libby Dam)

Wednesday and Thursday, July 16 & 17, 2008 from 9:30am (16th) to 11am (17th)

Age: 5th grade and up



WOW...adventures and fun while learning how to be stewards of our own environment. If you have never had the opportunity to camp this is your chance to experience the "great outdoors". Youth will be guided through the entire camping adventure. Activities will include paddling the waters of Big Sandy Lake in kayaks, learning the proper mechanics of archery, hiking the forests around Libby Dam, swimming, fishing, cooking around an open fire, smore's by the bonfire and of course learn how to set up and take down camp.

#### What to bring camping!

- sleeping bag/pillow
- layered clothing (fleece shirt or wind breaker)
- rain gear
- bug repellent
- tent
- flashlight
- swim wear
- towel
- hat
- change of clothes
- appropriate footwear

### #EE018 - KAYAKING AND SMALL WATERCRAFT CERTIFICATION COURSE (Army Corps of Engineers/Libby Dam)

Monday, July 21, 2008 from 9:30am-3pm

Age: Beginners 8-9 yrs old and Intermediate 10 and up (specify on registration form)



Spend time in kayaks on the water with trained kayak instructors Brenda Hadrich and Paula Garrett. Beginning kayak students will learn basic skills and safety for beginning kayaking. Intermediate kayak students will build off beginning kayak skills and safety previously learned. A scavenger hunt on the water and more fun and games will take place while kayaking and learning. Corps park rangers will teach the students about the importance of water safety and what the affects of hypothermia and impaired vision has on the body and ones judgment. Students will have the opportunity to operate electric watercraft on the lake as well as learn about the proper use of Personal Floation Devices (PFDs). They will also experience how hypothermia affects their body movements.

Certified lifeguard on duty at all times

### #EE019 - FISHING THE RICE RIVER AND ALL BUGS AND BOGS (Rice Lake National Wildlife Refuge)

Tuesday, July 22, 2008 from 9:30am-3pm • Age: 8 and up

Participants will be sure to get wet and have a fun time learning what a bog is and what kinds of bugs call bogs their home. Is there a difference between a bog and a swamp? Students will discover the secrets of a bog; how a bog is formed, what critters call a bog home, why bogs are important, and some special adaptations of plants that allow them to grow there. Students will have the opportunity to identify plants and bugs of the bog. Bug nets and collection jars will be provided so that everyone gets an opportunity to assist in the collection effort of bugs above and below the water's surface. More fun will be had when everyone is given the opportunity to catch fish in the Rice River with the assistance of experienced anglers. Fishing rods, bait, and tackle will be provided for the participants to use.

### #EE020 - AMERICAN RED CROSS SWIMMING LESSONS (Round Lake)

Monday - Thursday, July 28 - Aug 7, 2008 • Public Beach (Cty Rd 6)

Fee: \$50/person no more than \$110/family

American Red Cross Swimming Instructor: Mychal Hadrich Lifeguard: Anna Carlson

9:00am - Level 6: Swimming and skill proficiency; refines the strokes so students swim them with ease, efficiency, power and smoothness over greater distances.

10:00am - Level 5: Stroke Refinement: provides further coordination and refinement of strokes.

11:00am - Level 4: Stroke Improvement: develops confidence in thee strokes learned and to improve other aquatic levels.

12:00pm - Level 3: Stroke development; builds on the skills in Level 2 by providing additional guided practice.

1:00pm - Lunch

2:00 - Level 2: Fundamental Aquatic Skills; gives students success with fundamental skills.

3:00 - Level 1: Students must be 6 years old by 8/31/08. Introduction to Water Skills; helps students feel comfortable in the water and to enjoy the water safely.

Transportation is not provided for this activity.



### #EE003 - LAKE BOTTOM ORGANISMS, DISSOLVED OXYGEN, QUICK FROZEN CRITTERS, WEASEL WATCH AND SCOOPON A POOP PROGRAMS (Long Lake Conservation Center)

Tuesday, June 10, 2008 from 9:30am - 3pm • Age: 7 and up



Students venture to the lake to collect hundreds of astonishing critters. They learn about aquatic habitats and use microscopes and hand lenses to discover the complex world of lake bottom organisms. With our test tubes, water samples, and testing equipment, the dissolved oxygen activity is an excellent introduction to water chemistry. The testing procedure helps students understand the basics of scientific method. The test results contribute to a discussion of aquatic biology, food chains, photosynthesis, and water quality. Students in the quick frozen critters activity learn about population dynamics, relationships between prey species and their predators, and how animals are specially adapted for the best chance to eat but not be eaten. Among the most interesting and mysterious of our navite neighbors, weasels have an array of adaptations that students enjoy learning about. Students

plunge into an outdoor game simulating the challenges weasels face as they feed their extraordinary metabolisms and avoid predators themselves. And what...poop? Yes, poop. We have a mystery to solve, and a pile of poop is one of our best clues. Examining "scat" can uncover indicators not only of an animal's species, but also its basic eating habits, health, population numbers, and much more. This topic may sound gross, but students leave talking about all they have learned, and they don't soon forget.

### #EE004 - FISHING BIG SANDY AND PORTABLE SAWMILL/BIRDHOUSE CONSTRUCTION (Army Corp of Engineers/Libby Dam)

Wednesday, June 11, 2008 from 9:30 - 3pm • Age: 8 and up

Students will be fishing with local anglers on Big Sandy Lake in the morning and will spend the afternoon learning all about a portable sawmill. They will see logs being cut to lumber for birdhouses. Following the cutting students will construct birdhouses. Parents are welcome to join in on the afternoon activities.

Snacks provided daily

### #EE005 - KAYAKING AND PLANTS, ANIMALS AND INSECTS (Army Corp of Engineers/Libby Dam)

Thursday, June 12, 2008 from 9:30am-3pm

Age: Beginners 8-9 yrs old and Intermediate 10 and up (specify on registration form)

Spend time in kayaks on the water with trained kayak instructors Brenda Hadrich and Paula Garrett. Beginning kayak students will learn basic skills and safety for beginning kayaking. Intermediate kayak students will build off beginning kayak skills and safety previously learned. A scavenger hunt on the water and more fun and games will take place while kayaking and learning.

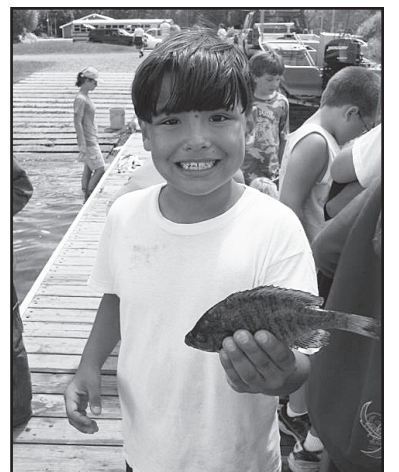
Students will spend part of the day with Corps Park Rangers exploring, collecting and observing the plants, animals and insects that call their home in and around the lake. The students will use nets and seines to collect their creatures and then later use microscopes to help identify the specimens and learn what role they play in the environment. Boots will be provided for those collecting the samples in the water.

### #EE006 - RIVERS AND LAKES FAIR, (Aitkin High School)

Saturday, June 14, 2008

The Rivers and Lakes Fair is a fun filled event where all ages can learn about our natural resources. Educational programs will be featured as well as many enjoyable activities for youth and families.

Transportation is not provided for this event



## #EE007 - FIELD TRIP TO THE FOREST HISTORY CENTER (Grand Rapids, MN)

Monday, June 23, 2008 • Age: 8 and up

Students will tour the Forest History Center exhibits and take a tour of a logging camp and the river Wanigan. From there the field trip will take students to the 100' fire tower (climbing is an option) and patrolman's cabin. By now students will be hungry so plan for a picnic lunch! The afternoon will be filled with more exciting adventures like GEO TRAC: forestry discovery/lumberjack math course. Participants will use pre-programmed GPS units to guide them to geocache sites strategically located along our trails. When they arrive at the sites they will be challenged to do a "forestry task" such as determine the height of a tree, measure the diameter, scale a log pile, determine the age of a tree etc. This day will be a great introduction to Tuesday as students spend the day in a forest with the Forestry Department.

Bus will leave McGregor school at 8:45am and return at 3pm



## #EE008 - FIND YOUR WAY IN THE FOREST (Long Lake Conservation Center)

Tuesday, June 24, 2008 • Age: 10 and up

Thirsty kids...  
provide water  
bottle for your  
child

Did you know that a forest is more than just trees! Let's spend the day with Aitkin County Forestry Department discovering woods and wildlife and their different habitats. Students will find their way in the forest. They will learn if cutting trees is good or bad for the environment. This hands-on day will take students to places that will put them in touch with nature while learning how to protect our environment and the animal habitats. Dress for the woods...long pants, shirt, shoes and bug repellent.

Bus will leave McGregor school (north entrance) at 9:30am and return at 3pm

## #EE009 - EXPLORE THE DULUTH AQUARIUM AND BRIGHTON BEACH (Duluth, MN)

Wednesday, June 25, 2008 • Age: 8 and up



Get ready to be wowed at the Duluth Aquarium! The Aquarium has packed six billion years of geologic, natural and human history into their facility ...not to mention living habitats representing the thousands of miles of Lake Superior shoreline! Students will use all their senses experiencing the wonders of freshwater. In fact, everywhere they turn, they will be encouraged to touch and make all sorts of discoveries on their own. Lake Superior has a dramatic geologic history filled with fire, ice and 3 quadrillion gallons of water. We will explore this incredible story in the ancient stones found on Duluth's rocky Brighton Beach through a short hike, hands-on activities and games. As part of this two-hour adventure you will reenact the formation of the lake in our Geo-theatre, learn how to identify common North Shore rocks, and search for evidence of the mile high glaciers that passed through town. By the end of the day you will be an expert rock hound and may even leave the beach with your own official Minnesota gemstone, the Lake Superior Agate.

Bus will leave McGregor school at 8:30am and return approximately 4:15pm

## #EE010 - FISHING THE RICE RIVER AND NATURE'S RECYCLING PROGRAM (Rice Lake National Wildlife Refuge)

Thursday, June 26, 2008 from 9:30am - 3pm • Age: 8 and up

Students will gain an understanding of how nature recycles nutrients, both plant and animal, by way of fire, decomposition, or consumption. They will learn what forces are at work to turn a large dead tree into nutrient rich soil; why all dirt is not created equal, why dirt comes in different colors, and why different kinds of dirt means different kinds of plants growing there. They will also learn how long man made materials remain in the environment when not properly disposed of and end up as litter. Fishing in the Rice River will complete the day's program. Assistance will be provided by experienced anglers. Fishing rods, bait, and tackle will also be provided for the participants.



Unable to attend. Please notify in advance so another student on the waiting list may participate.

## #EE011 - KAYAKING AND THE WONDERS OF WATER (Army Corps of Engineers/Libby Dam)

Monday, July 7, 2008 from 9:30am-3pm

Age: Kayak: Beginner 8-9 yrs old and Intermediate 10 and up (specify on registration form)

Spend time in kayaks on the water with trained kayak instructors Brenda Hadrich & Paula Garrett. Beginning kayak students will learn basic skills and safety for beginning kayaking. Intermediate kayak students will build off beginning kayak skills and safety previously learned. A scavenger hunt on the water and more fun and games will take place while kayaking and learning.

The Wonder of Water: We'll try our hand at some simple experiments that help us learn about the wonderful properties of water. Buoyancy, surface tension, capillary action, and more will be explored. We'll also try out some of the equipment used by the Aitkin County Soil and Water Conservation District to test lakes and streams. Is Big Sandy Lake healthy? Or in need of help? Let's look at the data and you can decide!



## #EE012 - DNR WATERCRAFT CERTIFICATION COURSE (Army Corps of Engineers/Libby Dam)

Tuesday, July 8, 2008 from 9:30am - 3pm • Age: Must be 12 years and up



Youth will receive instruction by Minnesota DNR for safe use of motorized personal watercraft, jet ski and tiller/console operated boats. Classroom instruction will be held in the morning and the afternoon will be spent on the water. Participants passing the test on this date will receive their certification. A packet must be completed prior to taking the course. Packets will be mailed or can be picked up in the CE office once registered.

## #EE013 - THE LIFE OF A SNAPPING TURTLE (Army Corp of Engineers/Libby Dam)

Wednesday, July 9, 2008 from 9:30am - 3pm • Age: 7 and up

Students will gain knowledge of snapping turtle ecology and reproduction physiology via slide show, local field trip and incubation of turtle eggs. Scientific data will be collected by the students to include day/date/time/location of nest; nest site soil temperature and weather conditions, egg viability, mass and diameter; and incubation temperature of eggs. Students will go home with a turtle egg for incubation.

## #EE014 - SNORKELING AND POND STUDY & BEAVER ECOLOGY (Savanna Portage State Park)

Thursday, July 10, 2008 from 9:30am - 3pm • Age: 7 and up

Beavers...where do they live and where have they been? Students will learn beaver ecology and be able to identify a beaver dam as well as track where they have been. Critters live in Lake Shumway. Students will have time to wade in the lake and catch those likely critters for a pond study. Staff will give students an opportunity to look under small microscopes at creatures and returning to their watery home when finished. The afternoon will be spent at Loon Lake where students will spend time in the water snorkeling...peeking at lake creatures that share the waters when swimming. A hike around the lake wandering through the forest habitat identifying forest, prairies and wetlands is a must!

## #EE015 - FISHING MINNEWAWA AND DNR FISHERIES PROGRAM (Lake Minnewawa)

Monday, July 14, 2008 from 9:30am - 3pm • Age: 7 and up

Are you interested in fishing for one of Minnesota's many game fish on Lake Minnewawa? Explore the underwater habitat, learn about water stewardship, increase your fishing skills while learning how to cast a line, bait a hook and identify various species of fish. Students will observe dissection of fish and identify fish internal organs as they spend time with MN DNR Fisheries and Minnaqua program as well as local anglers.

## #EE016 - FLY FISHING (Aitkin, MN)

Tuesday, July 15, 2008 • Age: 11 and up

Spend the day with Minnaqua and DNR staff learning how to tie the three knots used for fly fishing, tie two different types of flies and demonstrate how to accurately assemble and cast a fly rod. Time will be spent on a lake actually testing their "fly fishing" abilities. Limit: 12 students only

Bus will leave McGregor school at 8:30am and return at 4:00pm

