

Lake Algae And Lou Gehrig's

By Amy Quinton - June 29, 2009

There's a kind of blue and green scum that can bloom in lakes and ponds across the nation. This scum is called cyanobacteria. For years, scientists have known that this stuff can produce dangerous toxins. Amy Quinton reports now researchers are studying whether there's a link between cyanobacteria and Lou Gehrig's disease:

Jody Conner reaches into his refrigerator in his lab. "This is the cyanobacteria that we've collected. This one comes from Harvey Lake. See how green that sample is?" He's the Director of New Hampshire's Limnology Center. Conner has been collecting samples of cyanobacteria from lakes across New Hampshire. It looks like green scummy algae on the surface of the water that can be several inches thick. But it's actually bacteria. Conner says cyanobacteria feed on nutrients like phosphorus and nitrogen that can come from runoff of lawn fertilizers or sewage. "They need sunlight, phosphorus, and they seem to like the warmer waters. So, they really grow in mass numbers when they have all three of those."

Jim Haney is a professor of biological sciences at the University of New Hampshire. He says, in high enough concentrations, some cyanobacteria blooms can produce more than 70 different kind of liver toxins called microcystins. "That scum can be toxic enough that it's been estimated that only about 17 milliliters is enough to kill a small child. 17 milliliters is just a couple of teaspoons." Cyanobacteria blooms can also produce neurotoxins. Haney, and other researchers, have embarked on research to find out if there's a connection between cyanobacteria and patient's with Lou Gehrig's disease - also known as ALS.

The research began when Doctor Elijah Stommel began mapping hundreds of ALS patients across New Hampshire. Stommel is a neurologist at Dartmouth Hitchcock Medical Center. He noticed the incidence of ALS was 2.5 times greater than the national rate around lakes known to have had significant cyanobacteria blooms. Stommel says he found a particularly high cluster of patients on one lake in the western part of the state. "We were able to establish that there appeared to be about a 25 fold increase in what one would expect to see for the ALS incidence." But he's not sure if cyanobacteria are the culprit.

A few scientific studies have shown a particular type of neurotoxin found in cyanobacteria is also found in patients with ALS. The neurotoxin is known as BMAA. But it's not known whether BMAA can trigger ALS. Jim Haney says more research is needed. "We know that, in the laboratory, a wide range of different types of cyanobacteria are able to produce BMAA. So, one of our goals this summer is to determine whether there are BMAA molecules in our lakes." So far, researchers haven't found BMAA, and there are still a lot of unknowns about how people could be exposed.

Do you have to drink it or can you breathe it in the air? How long do you need to be exposed to it before it causes damage? Again, Doctor Elijah Stommel. "If there is a link between cyanobacteria blooms and the toxins they make, and a neurodegenerative disease like ALS, then I think we should pursue that with as much vigor as we can. And I think the neurology literature would suggest there is an environmental trigger for ALS." But, scientists have not yet found that link. If they do, Stommel says that link might help find ways to prevent the dangerous toxins, or block their effects.

For The Environment Report, I'm Amy Quinton.

WATEROSITY: GO GREEN WITH A SPLASH

Arboretum Presents 'Waterosity' Summer Exhibition - June 6 through Oct. 4. at the University of Minnesota Arboretum

What's bubbling up? Fresh thinking about people, plants and water. Bringing together the voices of artists, scientists and horticulturalists, "Waterosity" will celebrate this most precious resource through thought-provoking and playful installations and exhibits. Here's a quick look at what's "on tap":

- **['Harvest Your Rain'](#)**
Rethink how to return rainwater to the earth - via a green roof, rain barrels and rain gardens.
- **['The Cutting Edge' on Lawns](#)**
See lawn grasses of the future and take home information on water-wise living and landscaping.
- **[Intriguing Art in the Garden](#)**
Ten winning artworks will be erected outdoors in Arboretum gardens and natural areas, including human-size frog puppets, dancing water fountains, a jumbo disposable water bottle (with a message) and much more.
- **['Go Green with a Splash Party' Weekend](#)**
Saturday and Sunday, July 11 & 12
This special weekend features an information fair and water-wise demonstrations, art activities, music and a Heart of the Beast Puppet Theatre performance.

The Green & Blue Express

A new kid-friendly, narrated tram tour will be offered on free Thursday evenings only during the summer. Led by Arboretum staff, the Green & Blue Express will incorporate fun and education, highlighting Waterosity features with an activity-based stop and lively narration.

In the Heart of the Beast Puppet and Mask Theatre

Throughout the summer, the renowned In the Heart of the Beast Puppet and Mask Theatre will present the following water-related shows: "Land of 10,000 Lakes" (12:30 p.m. June 13 and Aug. 8) and "Are You Thirsty?" (11 a.m. & 1 p.m. July 11 & 12). Performances will be free with Arboretum admission.

Catch the wave! Visit "Waterosity" this summer at the Minnesota Landscape Arboretum!

Identifying Native and Invasive Wildflowers

Katy Chayka was walking through Long Lake Regional Park in her hometown of New Brighton in 2004 when something unusual caught her eye. "I saw a pretty spot of color on the ground but I didn't know what kind of flower it was," Chayka said. "I took a picture and went home to try to figure out what it was, and I realized it was difficult." Chayka found there were almost no resources that described Minnesota's wildflowers, and decided to build one herself.

Two years later, Chayka launched [Minnesota Wildflowers](#), a website dedicated to cataloguing Minnesota's wildflower species. She has photographed and identified hundreds of wildflower species in the Twin Cities area since her site launched. Minnesota Wildflowers features over 260 flowers and grasses, searchable by color and name. The site also includes a glossary, a blog, and online shop where you can purchase prints and cards featuring Chayka's photography.

Yellow iris
(Iris
pseudacorus)

Minnesota Wildflowers is a resource not only for wildflower-lovers, but for those looking to protect their area from invasive species. "I've gotten several emails about controlling invasive species it's good to know that people care," Chayka said. Though Chayka spends most of her time investigating wildflower species for Ramsey County's Parks and Recreation Department, she also tracks invasive species growth. "[Yellow iris](#) is a new invasive on Ramsey County's top five list. The invasive species in the Twin Cities are quite widespread, which is sad," Chayka said. Chayka does her part to control these invaders, helping to remove garlic mustard plants at Long Lake by hand. "It's about managing invasives and protecting natives," Chayka explained.

Yellow iris is banned in some states because of its aquatic invasive potential, and is classified as an invasive plant in Minnesota. Once the yellow iris establishes itself in an aquatic setting, it crowds out native plant life and is nearly impossible to control. Many gardeners continue to grow the plant, unaware that the iris is a threat to native species and lakes. For more information and instructions on how to control yellow iris, visit the DNR's yellow iris [fact sheet](#).

If you're looking for a chance to do good and help protect Minnesota's great outdoors, take a page from Katy Chayka, a three-year DNR volunteer, and help out in one of the state's many outdoor stewardship programs.

Harkin Store – Pontoon Rides for 2010

The Harkin Store, a Minnesota Historic Site, is looking for someone to give pontoon rides on the river in the vicinity of the Harkin Store on a Sunday afternoon in late spring/early summer 2010 as part of the store's annual River Program.

The pontoon will simulate steamboat excursions which occurred on the Minnesota from the 1850s until 1890. The Harkin Store was generally considered the last major upriver landing for the steamboats. If you own a pontoon and are interested in participating, please call Ruth Grewe at (507) 354-8666 or E-mail: harkin@nchsmn.org.

A Water Fair - A conservation event for the whole family

A family friendly water conservation event designed to appeal to all ages, Saturday, July 25th, from 9 a.m. to noon at Centenary United Methodist Parking Lot, 2nd and Cherry Streets, Mankato.

Here are just few of the things you will find at the Water Fair:

- Rain Barrel-Making Demonstrations and rain barrels for purchase and help with installing them
- Flow chart showing how much water is required for specific plumbing units in your home
- Movie "Flow" for viewing from about 9-10:30 and 10:30-noon. (This is a riveting documentary about the world water crisis. You may have heard about this film. Here is your chance to see it.)
- Water activities for children
- Tours of the Wastewater Treatment Plant, transportation by van about 9:15 and 10:15 a.m. from the lot
- Water conservation information about drought-resistant plants, shower vs. bath, healthy lawns, and much, much more!
- Some give-a-ways, some prizes, lots of fun, a few surprises

Come, bring the family, bring your friends. There will be activities for the kids... You know they like to play with water. There will be helpful information and demonstrations for the adults.

THE EFFECTS OF CLIMATE CHANGE ON THE ANTARCTIC PENINSULA

Elks Nature Center, Mankato, Minnesota - Wednesday, July 15th 2009, 7:00 PM

"There is mounting evidence that the global climate has changed over the past 50 years. The west coast of the Antarctic Peninsula provides one of the most dramatic examples of climate change on Earth. All modern climate records show a rapid warming trend there over the past half century. In addition to warming, there have been large increases in ultraviolet radiation and changing precipitation patterns in this area. Dr. Christopher Ruhland's research over the past 15 years has focused on examining the response of terrestrial ecosystems on the Antarctic Peninsula to this rapidly changing environment." QUESTIONS? CALL JEFF BRAND @ (507) 934-4821 OR EMAIL JEFFBRAND@MEPARTNERSHIP.ORG

MPCA SOLICITS COMMENTS ON NEW 5-YEAR OPERATING PERMIT FOR LARGE FEEDLOTS

St. Paul, Minn. -- Public comments are now being accepted for a proposed five-year (2011-2016) general operating permit for large feedlots, or Concentrated Animal Feeding Operations (CAFOs). The Minnesota Pollution Control Agency (MPCA) will accept comments through Aug. 12, 2009.

About 1,200 large livestock facilities in Minnesota operate under a general National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) permit. The NPDES program regulates the discharge of pollutants from "point" sources to U.S. surface waters. The federal Clean Water Act defines CAFOs as point sources.

In July and August 2008, the MPCA conducted information meetings around the state about the proposed general permit. Representatives from the livestock industry and other interested groups offered comments that were helpful in the early stages of the permit development.

The draft permit would prohibit the discharge of pollutants from livestock production areas, and restrict the amount of pollutants entering waters as a result of land application of manure. It is intended to protect surface water quality around feedlot facilities and to minimize any potential impacts from pollution caused by pathogens and nutrients, primarily from manure.

The 2011-2016 draft general permit is a combination of the federal requirements for large CAFOs and Minnesota rules and statutes. While it is similar to the current 2006 general permit; some changes reflect federal court decisions affecting federal rules.

A significant change moves the issuance date up to Feb. 1, 2011 instead of May 31, 2011 to better align with the spring construction season. This also moves the application deadline ahead to Aug. 1, 2010.

Some of the other proposed changes include:

- Manure management plans are required to cover the five-year permitting period.
- There are increased restrictions for liquid manure application to frozen and snow-covered soils.
- A revised permit application is required for expansion construction, increased animal numbers, or altering manure management
- Ownership change requires permit transfer approval.
- Disposal requirements are added for construction and hazardous materials.
- Anaerobic digesters are eligible for a general permit; other alternative technologies require individual permits.

The draft 2011 general NPDES/SDS permit and fact sheet are available for review at all MPCA offices from 8:00 a.m. to 4:30 p.m., Monday through Friday. The MPCA has offices at 520 Lafayette Rd. N. in St. Paul; 7678 College Road, Suite 105, in Baxter (near Brainerd); 714 Lake Ave., Suite 220, in Detroit Lakes; 12 Civic Center Plaza, Suite 2165, in Mankato; 1420 E. College Dr., Suite 900, in Marshall; 18 Wood Lake Drive, S.E., in Rochester; and at 1601 Highway 12 E., Suite 1, in Willmar.

Copies of the draft general permit and fact sheet may be downloaded from the Web site at <http://www.pca.state.mn.us/hot/feedlot-forms.html#newnpdes>, or they can be obtained by writing to the MPCA or calling the agency at 651-296-6300 or 800-657-3864. Users of telecommunications devices for the hearing impaired should call 651-282-5332.

During the public notice period, written comments should be sent to Kim Brynildson, MPCA, 520 Lafayette Road N., Saint Paul, MN 55155-4194. For more information about the draft general permit, contact your MPCA regional feedlot staff (for that person's contact information, call 800-657-3864 or go online to <http://www.pca.state.mn.us/hot/feedlots.html#contacts>).

Senator Franken's staff will be touring the state as it works to make up for time lost to the long recount process.

Senator Franken himself will be in Washington, as the Senate is in session. Civic engagement is a fundamental piece of a healthy democracy, and constituent service is an important part of a Senate office. Those who are concerned about issues affecting greater Minnesota--whether dairy policy, the wind industry, broadband, climate policy, or other matters--should stop by the closest meeting and share their concern with Senator Franken's staff. The schedule of visits in agricultural areas of the state, in alphabetical order by city, is posted below the fold.

- **Mankato** July 22 8:00AM - 10:00AM Blue Earth River Room, Intergovernmental Center, 10 Civic Center Plaza, Mankato
- **St. Peter** July 22 3:30PM - 5:30PM Room 300, Governor's Room, St. Peter Community Center, 600 South 5th Street, St. Peter

RENVILLE COUNTY LANDFILL PERMIT RENEWAL IS OPEN FOR PUBLIC REVIEW

St. Paul, Minn. -- A public information meeting on the proposed reissuance of the Renville County landfill operating permit is scheduled for 6 p.m. Tuesday, July 28, at the Renville County Office Building in Olivia. The draft permit is open for public review and comment through Aug. 12, 2009.

The Minnesota Pollution Control (MPCA) agency originally placed the permit on public notice on Nov. 26, 2008 for a 30-day comment period. Comments were received on the draft permit. The draft permit required changes and re-notice. All previously submitted comments on the draft permit will be considered, in addition to all comments received during this public notice period.

The landfill, located seven miles south of Olivia and one mile east of Highway 71, has received waste since 1971. About 32 acres of the 94-acre site currently are designated for solid waste disposal, including demolition waste. The landfill also accepts waste tires for temporary storage before they are transported to a processing facility and appliances and scrap metal for temporary storage prior to recycling.

According to a 2008 annual report, the remaining capacity is approximately 214,000 cubic yards in the municipal solid waste area and 152,320 cubic yards in the demolition disposal area. These capacities represent approximately 13.1 years and 54.7 years of operational volume, respectively.

The MPCA will mail interested persons a copy of the draft permit or arrange a time when they can review the file. The permit file, including all comments received, will be available for inspection from 8 a.m. to 3 p.m. at the MPCA's St. Paul office located at 520 Lafayette Road N. To set up an appointment, contact Tony Bello at 651-757-2219 or anthony.bello@state.mn.us. The MPCA will make copies from the file upon request but there is a charge for copy orders of more than 20 pages. For information about charges for copies, call Dianne Mitzuk at 651-757-2573.

Comments on the Renville County landfill permit should be submitted in writing by 4:30 p.m. on Aug. 12, 2009 to Tony Bello, MPCA, 520 Lafayette Road N., Saint Paul, MN 55155-4194.

Written comments must include:

-- a statement of your interest in the draft permit;

- a statement of the action you wish the MPCA to take, including references to specific sections; and
- specific reasons supporting your position.

ECO EXPERIENCE OFFERS FUN FOR THE ENTIRE FAMILY

St. Paul, Minn. -- There will be something to do and see for all ages at the Eco Experience at the 2009 Minnesota State Fair.

Individual actions in daily activities make a difference to protect and preserve our natural resources; especially when done as a family or community. Fair-goers who stroll through this year's Eco Experience can learn how their families can reduce waste, save energy, keep our lakes clean, and much more.

What's new at this year's Eco Experience? Families can take the Eco Scale Challenge by traveling through the building, gathering stamps and learning about local foods, clean water, saving energy, reducing waste and more. They can then measure their results on the Eco Scale and see how what they do affects emissions of carbon dioxide, a greenhouse gas.

What else can families do? Explore the base of a wind turbine, race solar boats, watch cooking demonstrations featuring local foods, enjoy a performance by Tricia and the Toonies, play games, solve puzzles, learn about clean water at the fish pond, or climb through Trash Mountain and discover how trash becomes treasures.

WHAT: Fourth Annual Eco Experience at the Minnesota State Fair

WHEN: Thursday, Aug. 27 - Monday, Sept. 7; 9 a.m. to 9 p.m. daily

WHERE: The Progress Center, at the corner of Randall and Cosgrove (Look for the 123-foot-tall wind turbine blade.)

LEARN MORE: See <http://www.ecoexperience.org>

About the Eco Experience: A partnership between the Minnesota State Fair, the Minnesota Pollution Control Agency, other state agencies and dozens of organizations and businesses, the Eco Experience has become the second most popular exhibit at the fair. The Eco Experience is the largest environmental event of its kind in the country in the last two decades. Since 2006, more than one million visitors have attended the 25,000-square-foot exhibit to learn more about clean water, saving energy, climate change, local food, transportation, green building and remodeling, and other ways to lead more eco-friendly lives.

Discover easy and uniquely Minnesota ways to go green in your daily routine by exploring cutting-edge green technologies and having fun with interactive displays, kids activities, live performances and more. Look for more information and schedules in July at <http://www.ecoexperience.org>.

Events:

July 15th (Wednesday) is a presentation on the "**Effects of Climate Change on the Antarctic Peninsula**" by Dr. Christopher Rhuland at the Elks Nature Center in Mankato. The event will start at 7pm, followed by a discussion afterwards.

July 21st (Tuesday) is the **Minnesota River Watershed Alliance Quarterly Meeting** at the Hutchinson Event Center. It starts at 6 p.m. with food and a chance to network. The formal meeting begins at 7 p.m. For more information contact Scott Kudelka at scott.kudelka@mnsu.edu

July 27th (Monday) is the **Minnesota River Board Annual Meeting** at Redwood Falls Community Center. The formal business meeting starts at 9 a.m. with guest speakers in the afternoon. More information will be forth coming.

August 27th (Thursday) through September 7 (Monday) is the **4th Annual Eco Experience** at the Minnesota State Fair from 9 a.m. to 9 p.m. The Eco Experience is located at the Progress Center on the corner of Randall and Cosgrove. Look for the 123-foot high wind turbine blade. LEARN MORE: <http://www.pca.state.mn.us/ecoexperience/>

Check out additional upcoming events and workshops on the Minnesota River Calendar at: <http://mrfdc.mnsu.edu/calendar/index.html>

Water Quality Articles:

[Biomass challenge -- Balancing supply with demand](#) (Agri News). The federal government wants to increase the country's energy independence but, when it comes to converting biomass to energy, there's a problem: The balance of supply and demand.

[Minnesota greenhouse using own biomass for energy savings](#) (Minnesota Public Radio). Pork & Plants, a farm and greenhouse business in southeastern Minnesota, is using its agricultural waste to heat its facilities. The farm won an innovation award for creating renewable biomass pellets that heat the greenhouses.

[Modified fuel might be answer for UMM gasifier](#) (Morris Sun Tribune). After months of trying to figure out how to change its unique biomass gasifier to operate using corn stover as fuel, University of Minnesota, Morris officials are trying instead to change the fuel to fit the burner.

[Freeborn County wind farm facing first major regulatory vote](#) (Minneapolis Star Tribune). The \$425 million project would help Wisconsin reach its renewable energy mandates.

[Minnesota's breeding duck population takes a dive](#) (Minnesota Public Radio News). Minnesota's duck population has taken a dive. The Department of Natural Resources says the state's breeding duck population has dropped to an estimated 507,000 birds. That's down 31 percent from last year and 19 percent below the long-term average of 626,000.

[Continental waterfowl up from 2008](#) (Minnesota Outdoor News). The number of ducks on the continent's main breeding grounds increased 13 percent from last year and is 25 percent above the long-term average, according to the U.S. Fish and Wildlife Service.

[Duck numbers dip in state](#) (Minnesota Outdoor News). While the Dakotas are plumb full of ducks, and continental duck numbers also increased from last year, the same isn't true for Minnesota.

[Birders wanted for ambitious project to document Minnesota's breeding bird pairs](#) (Pioneer Press). The Minnesota Breeding Bird Atlas is a six-year effort launched last spring, the survey is designed to document all of the breeding species in the state and where they're nesting.

[State's population of breeding ducks falls sharply](#) (Minneapolis Star Tribune). Minnesota's breeding duck population declined 31 percent from last year -- falling to an estimated 507,000 birds -- and state officials aren't sure why.

[Marriage vow to honor earth](#) (Minneapolis Star Tribune). A Golden Valley couple want their green wedding to set the tone for a life of concern about the planet.

[Zebra mussels, milfoil are found in more lakes](#) (Minnesota Outdoor News). Invasive species are continuing to spread in the state. The DNR has announced in recent days finding three new zebra mussel infestations - Pike Lake near Duluth, Lake Rebecca near Hastings, and Lake Le Homme Dieu near Alexandria - and one Eurasian water milfoil infestation - Lake Florida near Spicer.

[County's land conservation program wins state award](#) (Dakota County News). Dakota County's Farmland and Natural Areas Program has been recognized for its clean requirements.

[Proposed mining at UMore park could bring funds to academics](#) (Minnesota Daily). An inconspicuous piece of park land southeast of Minneapolis – purchased by the University of Minnesota for \$1 more than 50 years ago – is home to a resource that could translate into millions of dollars for University academics in the coming years.

[Craigslist ad leads to book deal for outdoors writer Jake Kulju](#) (MinnPost). Freelance outdoors writer Jake Kulju was cruising Craigslist one day, and there it was, the job of his dreams: Avalon Travel was looking for an outdoors writer to create a Twin Cities hiking guide for its Moon line of guidebooks. He immediately put together a proposal.

[MPCA, landlord at odds](#) (Mankato Free Press). A lingering court case pitting the Minnesota Pollution Control Agency against a LeHillier landlord is scheduled to go before a judge again Monday.

[Concerns about spillage spur action](#) (Marshall Independent). Owners of septic businesses will have a less visible site in which to discharge waste from portable toilets, Marshall city officials said this week.

[St. Peter water upgrade on tap](#) (Mankato Free Press). St. Peter residents might see their water bills increase by \$120 to \$180 a year, but their water will be clean, will taste uniformly good across the city, will be softer, and there will be plenty of it.

[Pomme de Terre Watershed Project](#) (Morris Sun Tribune). I'm going to discuss what makes our streams and rivers healthy, and what the characteristics of healthy watercourses are.

[Idea challenges familiar ag production](#) (Fairmont Sentinel). A sea of corn and soy stretches across Minnesota, gradually changing to oceans of wheat to make up the bulk of grain commodities grown in the world's most fertile soil. America's farmers feed the world.

[Tom Standage: Of feast, famine and fear of the unfamiliar](#) (Minneapolis Star Tribune). The wonder crop is new and unfamiliar, lauded by scientists and politicians as having the potential to end famine and feed the poor. But the public is skeptical, regarding this new food as unnatural and dangerous.

[Ethanol plant in Welcome operating](#) (Fairmont Sentinel). The ethanol plant built east of Welcome sat idle for nearly a year as its previous owner - VeraSun Energy - faced financial crisis.

[Running diesel up the flagpole](#) (Minneapolis Star Tribune). The mad scientists and revolutionaries at Ever Cat Fuels, which opens a pilot biodiesel fuel plant in Isanti in September, launched a "Declaration of Energy Independence" on July 4.

[Disease-carrying mosquitoes turn up in Twin Cities](#) (Minneapolis Star Tribune). The Metropolitan Mosquito Control District says a new disease-carrying mosquito has arrived in the Twin Cities area. The Japanese rock pool mosquito can carry the West Nile virus and LaCrosse encephalitis.

[Outdoors report: Fishing license sales increase](#) (St. Paul Pioneer Press). Sales of Minnesota fishing licenses aren't slumping this summer.

Credit the weather or good fishing, but the Department of Natural Resources sold 873,000 fishing licenses as of last week, a 4.5 percent increase from last year.

[Secret behind a turtle's shell is finally broken](#) (Minneapolis Star Tribune). Only now do we know that in the embryo, their ribs grow outward into a fan-shaped pattern with the shoulder blades inside.

There is a spiritual side to our connection with this planet. And in this material world, that's anathema. It is somewhat worrying. What I say . . . it makes life. It gives us fulfillment. It makes us whole human beings. And without it, we make mistakes. And, boy, are the leaders of the world making mistakes at the moment. – Bob Brown

The Minnesota River Watershed Alliance (Watershed Alliance) is an organized network of citizens, public agencies, and private organizations dedicated to communicating the benefits of an ecology healthy Minnesota River Watershed to others and are actively working towards its improvement and protection. We meet four times a year and encourage landowners and recreational users of the river to be part of the effort. For more information on the Watershed Alliance: <http://www.watershedalliance.blogspot.com>

Please register at the Minnesota River Watershed Alliance's bulletin board at <http://mail.mnsu.edu/mailman/listinfo/mrwa> to receive regular updates on what is happening in the Minnesota River Watershed.

Thanks,

Scott

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