

UNIVERSITY OF IDAHO EXTENSION UPDATE

WaterWatch

University of Idaho, U.S. Department of Agriculture, and Idaho counties cooperating.

A fond farewell...

story by Ashley McFarland

I wanted to take this opportunity, to let you all know that as of October 19th, I'll officially be a resident of the state of Michigan. My husband accepted a new job that will move us to the Upper Peninsula, right on Lake Superior.

Unfortunately, that means my time with the Master Water Steward program is coming to an end. I will still serve as the program coordinator, working 'remotely' through the end of the year, but hope to have my position refilled early-2013. Thankfully, Marie Pengilly, our program assistant will still be on with the program handling business on the ground.

I am so grateful for the opportunity to have met and worked with you all. Idaho truly has some amazing people and amazing water! I am excited about the growth of the program and cannot wait to see its progress. I appreciate everyone's hard work and patience with us as we have worked through some growing pains in getting it off the ground. I have been so fortunate to be surrounded by

such wonderful volunteers and professionals. Thank you for letting me work with you.

The commitment for the program is strong throughout the state so please keep educating, monitoring and working to improve watershed health. I also hope you'll all gather for the 2nd Master Water Steward Annual Meeting to be held Wednesday, November 7th!

I will miss you all but am excited about the challenges my new watersheds will bring!

Happy Monitoring,

Ashley McFarland

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IDAHO₂O Program Coordinator

UI Area Extension Educator

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*Mark your calendars – Master Water Steward Annual Meeting is
Wednesday, November 7th!*



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Water Stewards of Tomorrow

story by Jamie Esler

These days, providing my students with field trips for their environmental science class is a pretty expensive endeavor. Between transportation, field equipment for data collection, and a substitute to cover my other classes for the day, the average cost of a field trip into the local mountains or lakes is simply too costly for the budget that I am allocated.

Fortunately, this year is a different story!

Thanks to the wonderful Kat Hall and “Project SUSTAIN”, an educational outreach program developed by The Lands Council of Spokane, science students from across the Panhandle of Idaho are enhancing their learning with hands-on, experiential activities by completing a series of field trips throughout the year into their local environment. What’s first on the list of trips for the fall? Water quality testing at Rose Lake through the IdaH2O Master Water Stewards.

As a result of generous support and equipment contributions from IdaH2O Master Water Stewards and the Idaho Department of Fish and

Game, science students from Lake City High School, Post Falls High School, and St. Maries High School will work with one another in a collaborative study of water quality at Rose Lake throughout

the 2012-2013 school year. Lead by myself, Cindy Rust, and Rusti Kreider, each class of students from the three schools is responsible for collecting water quality data from the lake at a particular time of the year: fall, winter, and spring. By sharing their data and communicating with one another through the Idaho Education Network (IEN), students will collaboratively work as citizen scientists for the next eight months to answer the question: “How do abiotic and biotic components of water quality at Rose Lake depend on seasonality?”



On September 25th, Lake City High School students embarked on the first round of data collection. Working hand in hand with Lands Council staff and representatives from the Idaho Department of Fish and Game, students used IdaH2O sampling kits to collect data for water quality on the shoreline, as well as in the center of the lake; thanks to their trusty Fish and Game boat drivers Phil Cooper and Jim Burkholder. Knowing that their data would be entered into the Master Water Stewards Online Database upon return to school, students experienced and learned first hand the true value of accurate and precise measurements and data collection techniques. From using secchi disks, to measuring dissolved oxygen, to digging in the mud for macroinvertebrates, students literally got down and dirty in their learning; taking their comprehension of water quality testing to a whole new level.

On October 12th, students from all three high schools will meet virtually through the IEN to communicate results from the fall data collection. In preparation for their presentation.

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Fall Snapshot Results

story by Ashley McFarland

Thank you to everyone that participated in the fall snapshot on October 3rd. Below are the results from 16 participating sites.

Sample ID	Waterbody	Nitrate N (mg/L)*	Total Phosphorus (mg/L)**	Total Coliform (MPN/100mL)	<i>E. coli</i> (MPN/100mL)
121012	Brickel Creek	under	0.424	106.3	43.2
121120	Westmond Creek	under	0.142	770.1	190.4
121131	Brickel Creek	under	0.492	80.1	18.9
121204	Pack River	under	0.35	770.1	31.7
151104	Shoshone Creek	under	under	37.3	2
151132	Bridge Creek	under	0.296	816.4	2
191008	Fish Creek, Twin Lakes	under	under	83.9	4.1
191112	Rathdrum Creek	under	0.296	1299.7	488.4
191208	Tributary to Twin Lakes	under	0.057	82	<1
191211	Mokin's Bay on Hayden Lake	under	under	6.3	<1
191212	Tributary to Hayden Lake	1.84	under	211	<1
191213	Bay on Hayden Lake	under	under	78	<1
991129	Moon Creek, Sacheen Lake	0.233	0.251	31.7	1
991130	Sacheen Lake	under	under	25.3	2
991206	Diamond Lake	under	0.129	31.7	1
991207	Diamond Lake	under	0.125	37.9	<1

*Nitrate N testing range 0.23—13.5 mg/L

**Total Phosphorus testing range 0.05—1.50 mg/L

Water Stewards of Tomorrow, continued from page 2...

Lake City students are also re-researching what other water quality tests have shown about the effects of seasonality on abiotic and biotic components of freshwater aquatic ecosystems. They will use the results of their background research to deliver predictions to the other schools about what could be seen in the results of the testing later on in the winter and spring.

On the bus ride back home over 4th of July Pass, I asked a student how she felt after our day of field work out on the lake.

“I’m tired, Mr. Esler. But it’s a good tired. I actually feel like I accom-

plished something today. I actually feel like learning about science meant something to me today. Yea, it was pretty cool.”

By putting our heads together and working as a larger, cohesive team, The Lands Council of Spokane, the Idaho Department of Fish and Game, IdaH2O Master Water Stewards, and Idaho science teachers are providing area youth with engaging, meaningful, outdoor, experiential, place-based educational experiences that simply cannot be repeated within the walls of the classroom. When we work together, we can show the future of the great state of Idaho why it is so important to take care and responsibility for our natural environments,

resources, and places of recreation. As a public educator, and as a local resident, I am very thankful for the hard work and generosity of all parties involved in this project. Our students are never going to forget this one.

Looking forward to the next field trip,

Jamie Esler

Esler is a Science Teacher with the IB Environmental Systems and Societies program at Lake City High School in Coeur d’Alene, Idaho.

WaterWatch

Proposed 2013 Workshop Sites:

Sandpoint

Moscow

McCall

If you are interested in hosting a workshop in your area, please contact idah2o@uidaho.edu.

*All workshops will be posted to our site:
www.uidaho.edu/cda/idah2o.*

2012 Construction General Permit for Stormwater Discharges (CGP) Workshop

Wednesday, November 28th
9 am—2 pm

University of Idaho Research Park
Conference Room
721 Lochsa Street
Post Falls, Idaho

Topics include: New GCP overview, obtaining permit coverage, terminating coverage, how to obtain compliance, best management practices, guidelines for success and more!

Limited seats available, registration questions can be directed to Tricia Lotton 208-772-0584, ext. 3013, tlotton@pacni.org

Workshop fee \$20, lunch provided

Grant opportunities to bring IDAH₂O to the classroom

- ◆ **Shell Science Lab Challenge with the National Science Teacher's Association**—Are you succeeding in science lab instruction with minimal equipment? The Shell Science Lab Challenge gives you an opportunity to share your exemplary approach for a chance to win a school science lab makeover support package valued at \$20,000! Over \$93,000 in lab makeover prizes to be awarded this year to 18 schools! Applications due November 12, 2012 at www.nsta.org/shellsciencelab/
- ◆ **NEA Foundation, Nickelodeon Big Help Grants**—Student Achievement Grants offered to K-8 public School Educators. The Big Help Grants program is dedicated to the development and implementation of ideas, techniques and approaches for addressing for key concerns—environmental awareness, health and wellness, students' right to a quality public education and active community involvement. Apply at www.neafoundation.org/pages/educators/grant-programs/nea-foundation-green-grants/.
- ◆ **Project SITE, Students Involved in Their Environment**—Environmental Education Service Learning Projects for students in grades 6-12 is looking for 3 more programs in the state of Idaho. Grants are worth between \$2,000—\$5,000. Applications are due October 29, 2012 at <http://wou.edu/tri/site/>.

Please contact us if you need any help pursuing these opportunities!