

The Network News

A Newsletter for SE MN Domestic Well Network Volunteers

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PROGRESS AND CHALLENGES

Linda Dahl, SEMWRB Director

Recently I was speaking with Jim Lundy, MDH Hydrologist and an important partner in the Domestic Well Network. He started to say “this project is really....” and he paused. After delays and frustrations with the changes we’re implementing, I expected him to say ‘frustrating’ or ‘problematic’, so when he said “great”, I was pleasantly surprised.

To give a little background, our monitoring network is in the process of being ‘overhauled’ in an attempt to use it to more of its full potential. The changes, while good and worthwhile, have been frustrating for all involved, and in some ways an experiment in itself in determining the best process for conducting the sampling. We learned some lessons along the way, but some samples had to be re-taken, and the lab analysis and data entry took longer than any of us would have liked.

The good news is that the results from our fall monitoring were ready for Jim to categorize and prioritize wells for monitoring this spring, which will be underway soon. These results from fall will be ready to send to you, the volunteers, by the end of March (thank you for your patience!).

Now to get back to what Jim was saying was so great about this network and the changes underway. He says that:

“The results of the last round have helped fine-tune ideas about the vulnerability of wells in different hydrogeologic settings to receiving contamination from human activities at the ground surface. We can sort wells into groups based on well construction, geology and now chemistry: “red” (or vulnerable), “green” (non-vulnerable), and “yellow” (transitional). We even have a “purple” group consisting of wells with conflicting information, where what we know just doesn’t add up. The four groups are helpful in “smart” targeting of future sampling efforts, which means using everything we know to tailor further laboratory analyses so that we can learn as much as possible.

In the next sampling round, scheduled for March-April 2014, professionally-trained samplers will collect water from wells in each group to be analyzed for a special list of analytes, chosen from: major cations like calcium, magnesium, sodium, and potassium; major anions like chloride, sulfate, alkalinity, and nitrate; field measurements like dissolved oxygen, pH, oxidation-reduction potential, temperature and specific conductance; gross alpha radiation, which occurs naturally in some bedrock aquifers; and tritium, which gives us

information on groundwater age. In all, the project will sample over 150 wells this spring.

Assessing this next round of data will be a step forward in developing useful tools for protecting domestic and public drinking water supplies from human-caused and natural contaminants.

We are planning additional sampling rounds where we expect to learn even more. In the longer view, we hope the network can be sustained as valuable infrastructure that remains available for future drinking water protection studies that we cannot yet anticipate.”

Meet the New Monitoring Coordinators

Volunteers whose wells will be tested during this spring round may see the faces of one of our new Monitoring Coordinators. Olmsted County Environmental Resources will contact you to set up a time for the monitoring coordinators to come out and collect the samples. All wells, whether monitored this spring or not, will still be part of the network and included in future nitrate monitoring efforts.

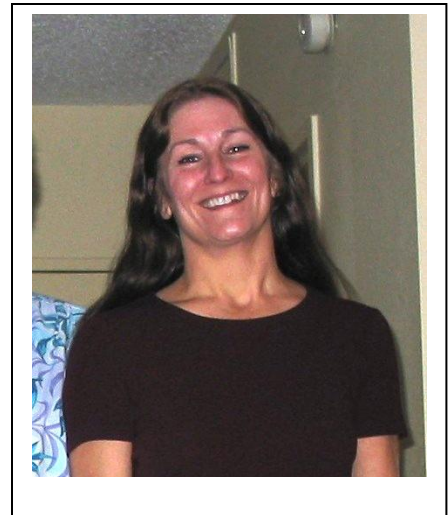
Don Darcy is a student at Rochester Community and Technical College and will graduate this May with an A.S. degree in Biology in Environmental Science. Don has interned with Olmsted County Environmental Resources since April 2013, assigned



to private well testing for homeowners as well as stream water sampling as part of the Watershed Pollutant Load Monitoring Network. Through his work Don has been taking samples from rivers in an attempt to characterize water quality variations during high and low flows. In regards to his internship, Don says, “My internship experience so far has taught me many things about the community and county work that goes on every day.”

Erin Kolb

Erin is an Environmental Lab Technician with Olmsted County’s SE MN Water Analysis Lab. She attended Albert Lea Technical College in the Environmental



Technician program and interned with Olmsted County in 1989. She came back to work fulltime for Olmsted County in 1990 and has been here ever since! She says she lives on an acreage in Steele County with her husband and a whole bunch of animals!