



## MONTANA SALINITY CONTROL ASSOCIATION

April 2013

*Though winter lingers, spring has sprung... sunlight has pushed back the darkness to longer days, and warmer temperatures threaten the cold that still has some of its icy grip on the land. The anticipation of planting is fresh in the air, and the hope of green grass and abundant crops flood our imaginations.*

### WELL MONITORING

It's time for spring well measurements. As a reminder, we ask that you measure the cased wells on a regular basis each spring and fall (examples: May and November) and July (if possible) and send the readings to MSCA. If you prefer, you may phone the readings to us at 1-800-537-6717, or email them to [msca@3rivers.net](mailto:msca@3rivers.net).

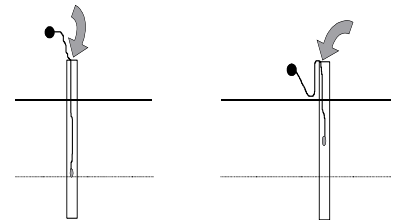
NE Montana has had two or more above average precipitation years recently. We are seeing this reflected in rising ground water levels in the monitoring wells but a reduced response where perennial forage is in the recharge areas. Other areas of MT have had dry or drought conditions with a downward trend.

We appreciate the well measurements we have already received this spring. If you have already sent your well measurements, you do not need to measure again until fall.

THANK YOU FOR MEASURING!!!

#### Well Measurement Technique

1. Lower ball to water and listen for splash.
2. Hold tape at the top of the casing (see first drawing).
3. Pull tape from top of casing down the outside of the well to the ground surface.
4. Read tape at the top of the casing (see second drawing).



### MUDDY CREEK

The Sun River Watershed (SRW) secured grant funding to improve surface and ground water quality in the Muddy Creek watershed near Power in Teton County. Alan Rollo/SRW Coordinator was instrumental in this effort. An informational meeting was held in March to introduce the project idea to local landowners. Fieldwork will begin in May to determine recharge areas for specific saline seeps. This area has some of the most severe salinity problems MSCA has encountered, so reclamation will improve productivity and decrease the saline run-off and ground water discharge into Muddy Creek. This project will encourage more perennial forage in the watershed, including help producers re-enroll expiring CRP land and/or enroll new land where needed. People will be eligible to use the Continuous CRP Sign-up and the special saline seep practice known as CP-18.



### AG IN MONTANA SCHOOLS

March 22<sup>nd</sup> marked MSCA's 22<sup>nd</sup> year of participation in Ag in Montana Schools, providing an educational and fun program for 4<sup>th</sup> grade students at Prairie View Elementary School in Conrad. A Power-Point presentation by Tera Ryan/MSCA Reclamation Specialist explains salinity formation and reclamation. A soil painting exercise provides a visual profile of the salinity formation and reclamation process, and a water game conducted by Scott Brown provides students with a fun way to learn how water moves at different rates through gravel, sand and clay. Jane Holzer brings it close to home by explaining the before and after photos of a local saline seep that can be seen from I-15. Dianna Huber provides the students with an edible soil profile as a departing treat to each student. MSCA could provide you with the tools to inform your local students.

## BASELINE WATER MONITORING.

MSCA staff participated in a pilot project in Fergus and Petroleum counties to sample domestic and livestock wells for baseline ground water monitoring. People need to have baseline data to document water quality before any changes occur that might be attributes of oil/gas/coal development. MSCA can make field measurements of depth-to-water, well pressure, temperature, pH, and salt hazard. We can also take water samples to be sent for laboratory analyses, which is highly recommended. The sampling process is very specific and best completed by a third party, someone other than you for quality control. There will be opportunities to do more of this with new funding approved by the 2013 Legislature. Call us if you are interested.

### Cover Crop - Soil Health Update by Jane Holzer



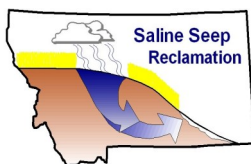
More people are willing to try cover crop cocktails to improve soil health on 10-20 acres on up to 160 acres. MSCA is cooperating with NRCS, Conservation Districts and MSU in numerous counties to help producers design their cocktail mixtures (species and seeding rates and dates). It seems everyone has an area with low fertility, compaction layers, and/or weed/disease/pest problems that would benefit from diversification and crop rotation. As the soil health improves – and this takes a series of years with cocktails in rotation in the same field(s) – better yields with less inputs are achieved. There are some ground rules and patience needed. One-time rotation to a species mixture is a start but producers need to understand that this is a process with the need for a cocktail in the same field repeatedly. One producer tried a cocktail in 2010, in 2011 he had a 3-5 bushel/ac sp wheat yield increase over fallow in the same field. Land was fallowed in 2012, now in 2013 there is a huge nitrogen availability over adjacent fields, so you see the benefits are delayed. He will be planting a cocktail mix back in another field that had a mix in 2011. This has been great to watch. I will talk to you about cocktails if you are willing to climb on the Soil Health Train moving through Montana. Be on the watch for soil health workshops and tours.

### CAUTION TO PRODUCERS WITH EXPIRING CRP CONTRACTS

If any producers have expiring CRP contracts associated with saline seep that have been reclaimed partially or significantly, MSCA cautions you to think long and hard before you remove the perennial forage on the saline ground. You will be surprised how fast saline seeps can reappear. Leaving the vegetative cover will reduce surface evaporation that will occur with a return to annual or crop/fallow. MSCA may be able to help you retain those portions in the Continuous CRP program using CP-18 while you crop the better soil. Even if you don't use CRP, the formerly saline land is most often better off left in grass. Use the well data and reclamation plan to your benefit long-term. ...Food for thought.

### UPCOMING TRIP TO NORTHEASTERN MONTANA

MSCA staff will be traveling to Northeastern MT in early May to look at new and potential projects. We are always looking for successful projects we can document with photos and by talking with you. If you would like MSCA to check out the progress of your site or if you are having problems, please contact us and we can include a field visit to your site.



Montana Salinity Control Association

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PO Box 909 Conrad, MT 59425

Phone/Fax: (406) 278-3071 Email: [msca@3rivers.net](mailto:msca@3rivers.net)

Website: [www.montanasalinity.com](http://www.montanasalinity.com)

Director: Jane Holzer Ass't Director: Scott Brown

Reclamation Specialist: Tera Ryan

Bookkeeper: Yvonne Paulsen Secretary: Dianna Huber