



## Water Conservation Tips

### N&E Metro GWMA update - Intern projects filled, but site assessments always available

2015 water conservation intern projects have been identified and we are in the process of finding the best students for those jobs. If you missed getting an intern for 2015, that doesn't mean your water projects and conservation priorities need to move to the back burner. MnTAP staff is available to conduct water conservation assessments at your site. We will provide free and confidential site assistance with detailed water process evaluations that will get your projects underway. A MnTAP scientist or engineer will walk through your facility with you to identify water use processes or procedures that could possibly be improved. Written recommendations will be followed up by phone calls to answer questions or offer additional assistance.

MnTAP has been here to help Minnesota business and industry with their environmental efficiency challenges for 30 years and we are ready to assist your business. If you are interested in a free, confidential water efficiency site assessment, contact Mick Jost, MnTAP Program Coordinator and project lead, at [jostx003@umn.edu](mailto:jostx003@umn.edu) or 612-624-4694 to make arrangements.



### Contact MnTAP for More Information



Let us know if you are interested in getting involved in this water conservation project, at no cost to your business. We welcome your questions and ideas for future newsletter topics, so please send them our way! For questions or further information, contact Mick Jost, MnTAP Program Coordinator and project lead, at [jostx003@umn.edu](mailto:jostx003@umn.edu) or 612.624.4694.

The Minnesota Technical Assistance Program acknowledges and appreciates the Metropolitan Council Environmental Services Water Supply Planning Group expertise and project management support of this Clean Water, Land, and Legacy Amendment sponsored project.

MnTAP is a non-regulatory program in the School of Public Health at the University of Minnesota and is funded by the Minnesota Pollution Control Agency.



## Did You Know...

To get the most productivity out of water it makes sense to analyze the water flow throughout your facility and see where it can be reused or serve additional purposes instead of discharging after only one use. By analyzing each water use stream individually for opportunities, you may be able to reduce water supply costs, reduce sewer costs, and save on treatment chemicals and energy.

For example, multiple uses of non-contact cooling water might be feasible under the right conditions. It's a clean water source usable for other process applications if each of the process demands meets the supply. Here are some ideas where non-contact cooling water might be reused:

- Determine the flow needed to achieve the required temperature reduction of the equipment within a performance temperature margin of safety.
- Install flow controls to set flows to optimal levels, and turn off flows when not required.
- Check the calibration of controls to make sure they stay within set parameters. A simple test to see if you are using too much cooling water is to feel the inflow pipe and then feel the outflow pipe. Without a noticeable change in temperature, you could be using too much water and should investigate further.
- Instead of discarding water used in heat transfer, store it in an insulated vessel, or pump it to be reused in another process that can take advantage of the temperature differential embedded in the water.

More details about non-contact cooling water are found in the MnTAP water webpages at <http://mntap.umn.edu/green-business/water/14.NoncontactCoolingWater.html>, including highlights from several different kinds of companies that might operate like yours. A more detailed intern project success story about water use optimization (and substantial cost savings) in an Albert Lea metal fabrication facility is found at <http://mntap.umn.edu/paint/resources/Lou-Rich.htm>.

Results included spot welder cooling water flow throttled from 10 gallons per minute (gpm) to 1 gpm and the addition of timers and solenoids to synchronize water flow with use, reducing water use by 1.1 million gallons per year (gpy), saving \$2,800.



### About MnTAP

A program of the University of Minnesota, MnTAP offers a variety of technical assistance services to help Minnesota businesses implement industry-tailored solutions that maximize resource efficiency, prevent pollution, increase energy efficiency, and reduce costs. Our information resources are available online at [mntap.umn.edu](http://mntap.umn.edu). Please call MnTAP at 612.624.1300 or 800.247.0015 for personal assistance.

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