



Irrigation Fact Sheet #4

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Michigan Registration for New Agricultural Withdrawals

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New wells and surface water withdrawals in Michigan, installed after February, 2006, that are capable of pumping 100,000 gallon per day (70 gpm) are now required to register with Michigan Department of Agriculture prior to beginning to pump. All water withdrawals that reported prior to 2006 are considered properly registered. Forms are available directly from the MDA website at:

http://www.michigan.gov/documents/mda/MDA_NewLOW_RegistrationForm_181528_7.pdf
or from the St. Joseph County MSU Extension at <http://www.msue.msu.edu/stjoseph> then navigate to link for irrigation on the left hand side.

The latitude and longitude coordinates for the location are required for all new large scale withdrawal location. This information may be provided by handheld GPS units or the groundwater mapping website (<http://gwwmap.rsgis.msu.edu>). Many MSU Extension offices or your local Conservation District office can assist with the use of finding the latitude and longitude coordinates. Providing the latitude/longitude location of withdrawals will allow mapping and analysis of effects of withdrawals on groundwater and stream base flow in the watershed basin.

Information at the St. Joseph County MSU Extension website (<http://www.msue.msu.edu/stjoseph>) can assist in estimating water use for irrigation and other agricultural water uses. Lyndon Kelley, Irrigation Management Educator for MSU Extension can answer many of the questions related to Michigan's new water use process he can be reached by phone at 269/467-5511 or e-mail kelleyl@msu.edu.

An estimate of expected water use by the month is needed. Most irrigators will estimate their water use from experience multiplied by the number of acres irrigated. As an example: 100 acres with 1.5" of irrigation applied in June would have an estimated water use of 150 acre inches for the month. Three inches of estimated irrigation need in both July and August and 1" in September would give us an estimated annual water use of 550 acre inches for the year.

The registration process also calls for an estimate of consumptive water use. Consumptive water use is the amount of water that is lost from the area of withdrawal. Since most water pumped for crop irrigation ultimately goes into evapotranspiration, the consumptive use is estimated to be high or about 90%. Water used for harvest cooling is mostly returned back to surface or groundwater so the consumptive use is estimated to be low or about 5 to 10%.

Baseline Capacity (Rated Capacity): The registration process establishes a "Baseline Capacity" based on the available withdrawal capacity of a system". The baseline capacity of the system should be reported as pump capacity in gal/min. along with a pump and system description which is compatible with the well log. Baseline capacity applies to both wells and surface water withdrawals. Please note: You should report this baseline capacity value on the registration form on the line listed as "**Rated Capacity**".

For further information, Water Resource Specialist, Abigail Eaton of Michigan Department of Agriculture Environmental Stewardship Division heads up the registration process for large water withdrawals. She can be contacted at 517-241-3933 eatona@michigan.gov.