Agricultural Water Law in Maryland: The Water Appropriation Application Process and Use in a Time of Drought

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To conserve and protect the State’s water resources, the State of Maryland controls the appropriation or use of its surface waters and groundwater. The State of Maryland’s water laws are critical for protecting and managing state water resources. These laws affect every water user in Maryland, including municipalities, landowners, and agriculture operators.

State law requires all agricultural operations to comply with the water appropriation permitting process, including traditional forms of agriculture, livestock and poultry operations, nursery operations and aquaculture. Agricultural water use in Maryland has expanded in recent years, making the water appropriation and use permit process a critical component of agricultural operations.

It is imperative for farmers to understand the requirements of the water appropriation permit system to ensure crop and animal sustainability in the agriculture market. Knowing the laws as they apply to a specific operation will help farmers comply and prepare for what may lie ahead if a water shortage occurs or water use requirements increase as an operation grows.

This article provides an overview of the Maryland Department of the Environment’s (MDE) agricultural water appropriation permitting process and agricultural water use in a time of drought.
Water Appropriation Permits: What You Need to Know

Any person constructing a plant, building, or structure withdrawing an annual daily average of 10,000 gallons per day (gpd) or more for agricultural activities from either surface water or groundwater is required to obtain approval for a permit. A permit is not necessary if an agricultural use requires less than an annual daily average of 10,000 gpd.

Property ownership is not a prerequisite to apply for a water appropriation permit. However, if the property is leased, written permission from the owner of the property on which the water withdrawal takes place is necessary to process a permit application.

How Do I Apply for a Permit?

An agricultural producer must submit a permit application, project map, and explanation of the proposed water use. The application requires information on property ownership, crop and acres to be irrigated, irrigation system, types and quantities of livestock, water sources proposed for use, and other information about the property. MDE will use the application information to make a final determination of the amount of water needed for the intended purpose.

Applicants requesting 10,000 gpd or more should expect to receive a detailed package of instructions within 45 to 60 days of submitting an application. However, complicating factors requiring more detailed review by MDE can substantially increase the response time.

The instruction package will contain a letter the applicant can use to make the required notification of the proposed use to all neighboring property owners and certain local elected officials. The package also includes a Public Notice Billing Approval stating MDE will advertise the project in a local newspaper on the applicant’s behalf, and he/she agrees to pay for the costs of the advertisement. The applicant will need to provide the required documentation concerning public notification. After submitting this information, an applicant should expect the project to be advertised within 60 days. If there is no request for a public hearing, a permit is usually issued within a week after the close of the public comment period.

Requests for appropriation over 10,000 gpd may require a public informational hearing, if requested by the public. If a public hearing is requested, MDE will assist the applicant by attending the hearing and testifying about the technical aspects of the permit request at no charge to the applicant. The informational hearing is generally held in a public meeting space near the location of the proposed use. It may take a month or two to resolve any comments requiring a response or modification to a permit request.

Although it is not required, MDE recommends installing a test well to provide site-specific data to justify a water appropriation request. An appropriation permit is not required for domestic or residential use of a well on a farm. Other permits which may need approval, depending on the specific situation, are for construction of a well or waterway and/or the alteration of a non-tidal wetland or waterway.

What Does MDE Consider in Issuing an Appropriation and Use Permit for Agricultural Water Use?

Before acting on any permit application, MDE weighs all respective public advantages and disadvantages
and carries out every appropriate investigation. If the evidence shows the applicant’s plans provide the greatest feasible use of State waters, adequately preserve public safety, and promote the general public welfare, MDE will grant the permit to appropriate.

3) Reasonableness of impact on other users.

MDE may issue a water appropriation and use permit but make the permit conditional to avoid impacts to neighboring property owners and/or natural resources.

In contrast, if MDE believes the proposed appropriation request is inadequate, wasteful, dangerous, impracticable, or detrimental to the public interest, it may reject the application or suggest modifications to the proposed plans to protect the public welfare and safety.

MDE considers numerous criteria when deciding whether to approve an agricultural water appropriation request. The decision making considerations can be boiled down to what is commonly referred to as the three “Rs,” which include a determination of the:

1) Reasonableness of water demand;
2) Reasonableness of impact on resource; and
3) Reasonableness of impact on other users.

MDE may issue a water appropriation and use permit but make the permit conditional to avoid impacts to neighboring property owners and/or natural resources.

When Will I Know If I Am Approved?

The applicant will receive a copy of the approved permit by mail from MDE. Applicants can contact MDE to learn about the status of their application. An applicant requesting withdrawals under 10,000 gpd should expect to receive a response to the application in 90 days. Typically requests for a new withdrawal of 10,000 gpd or increase of 10,000 gpd or more for agricultural purposes are processed within 10 months of submitting the initial application.

Are There Fees Associated With the Permit?

While there are no fees for a water permit, an applicant may have nominal expenses related to publishing the application in the newspaper, mailing notices to adjoining property owners, or renting a facility for a public informational hearing.

How Long Will the Permit Last?

A water appropriation permit is issued for a maximum of 12 years; however, it is reviewable every 3 years and is not transferable without approval from MDE. If an operation is sold or transferred, a permit holder must inform MDE of the change and submit an application to change the permittee. Producers are required to notify MDE if an operation increases acreage or water use, so that MDE can re-estimate water demand to determine if an increased allocation may be required.

Do I Need to Report My Water Use?

Permit holders must report monthly water use annually to MDE. MDE uses this data to make accurate assessments of the reasonableness of water appropriation requests and ensure compliance with the permitted conditions of use. It is vital that producers submit accurate information and seek assistance from MDE if they are unsure how to properly measure and/or record this information.

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MDE Can Restrict a Farmer’s Use of Water During a Shortage or Drought

If MDE determines there is a water supply emergency, the first priority for water usage is “domestic
and municipal uses for sanitation, drinking water and public health and safety” followed by “agricultural uses” and finally “all other uses.” “Water supply emergency” is not explicitly defined but the Maryland Code describes this period as “available water supplies . . . inadequate in an area to meet the needs of all persons who have permits. . . .” Therefore, for MDE to restrict a farmer from withdrawing permitted water, there must be a current water supply emergency and inadequate supply.

There are different determinations for each type of withdrawal during a drought. Surface water, tidal water, groundwater withdrawal from an unconfined aquifer, and groundwater from a confined aquifer each require a different standard when MDE considers if an agriculture water user must cease water appropriation. When withdrawing from surface water such as free flowing streams, a condition on the appropriation permit will state that the use must cease if a certain quantity of water cannot be maintained past a specified point of withdrawal or diversion. If applicable, this flow rate is specified in the permit and is determined by taking the lowest average flow over 7 days that has a probability of happening once every 10 years, for that specific stream or location.

Groundwater users do not have this limitation; during drought, the groundwater agriculture user may not have to cease usage while the surface water user might. Tidal stream water users do not typically have flow rate conditions. However, tidal users should be aware that possible salinity changes to their water quality during a drought may damage crops.

When considering issuing a water appropriation and use permit, MDE conducts a water needs assessment. As part of that assessment, MDE considers the likelihood of water shortage and drought. MDE, through their technical evaluation, makes every effort to issue a permit accounting for possible water shortages or drought, thus avoiding any restriction.

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1 Md. Code Ann., Env. §5-501
2 Md. Code Ann., Env. § 5-502(b)(2)
3 Md. Code Ann., Env. § 5-102
4 Md. Code Ann., Env. §5-507(a)
5 Id.
6 Id.
7 Md. Code Regs. 26.17.06.06
8 Md. Code Ann., Env. §5-502(d)
9 Id.