

APPLICATION INSTRUCTIONS FOR WATER PERMIT FOR IRRIGATION

If you need assistance with your application, please contact Eric Gronlund at (605) 773-3352 or stop by our office in the lower level of the Foss Building, 523 E Capitol, Pierre SD. Please don't hesitate to ask for help! Additional information is available on the Water Rights Program website at <http://denr.sd.gov/wr>.

A completed application for a water permit must include the following information.

1. A COPY OF FORM 2, Application for irrigation in South Dakota.
 2. A map, no smaller than 8"x11", showing:
 - a) The location of the diversion point (place where water is to be taken from) in relation to a government section corner or quarter corner by direction and distance.
 - b) If the diversion is from a reservoir, the location of the high water line and lands under water, with the names of the owner's (if other than the applicant) and the capacity of the reservoir at maximum pool elevation.
 - c) If the diversion is from a stream, the location and name of the stream.
 - d) Lands to be irrigated and names of the owners (if other than the applicant).
 - e) The map must be signed by one of the following: registered land surveyor, registered professional engineer, or by any government employee (Natural Resources Conservation Service, Consolidated Farms Services Agency, etc.) who normally prepares maps as part of his assigned duties.
 3. If the diversion is from a well, dugout or storage dam, one completed copy of Form 2A must be submitted with Form 2. Also, provide any supplemental plans or drawings for any storage reservoir. If the diversion is from a well, a well log or driller's test log signed by a South Dakota licensed well driller MUST accompany the application. If the well is to be completed into a formation below the Greenhorn, an estimate of the depth of the well, proposed construction of the well and formations encountered can be submitted in lieu of a test hole log. When the well is constructed, the driller's log of the completed well must be submitted to this office within 30 days of completion.
 4. According to South Dakota statutes, the following filing fees are to be submitted with each application:

*First 120 acre feet per year or for irrigating first 60 acres:	\$500.00
Second 120 acre feet or second additional 60 acres:	\$250.00
Each additional 120 acre feet or each additional 60 acres:	\$100.00

Fee for final inspection/licensing of an approved application: \$200.00
(If your application is approved, a licensing inspection will be completed following development of your water use project. Issuance of a water license is the final step in obtaining a water right in South Dakota.)
- Example: Filing fee for irrigating 160 acres would be \$850.00 plus the \$200.00 inspection/licensing fee for a total of \$1,050.00.
- *The fee to appropriate 0.10 cfs (45 gpm) or less is \$100.00 plus a \$200.00 inspection/licensing fee. If filing an application to change a diversion point location or to add a diversion point to an existing permit, please contact the Water Rights Program prior to submitting any application fee.
- The forms, signed map, fees and any other pertinent information for filing a permit application should be submitted to: PMB 2020 Department of Environment and Natural Resources, Water Rights Program, 523 East Capitol Ave, Pierre, SD 57501-3182 Phone (605) 773-3352.
5. Notice of an application must be published in one local county newspaper for two successive weeks. The publication notice will be sent to the newspaper by the Water Rights Program. **THE COST OF PUBLICATION IS THE RESPONSIBILITY OF THE APPLICANT.**

(over)

* OPTIONAL GUIDELINES -- SOIL/WATER ANALYSIS

An important consideration in developing a new irrigation project is assessing the compatibility of the soils with the quality of the water to be used for irrigation. Some soils need careful management and others may not be suitable for irrigation with water having a high sodium or salt content. Reduced crop yields and damage to the soil structure may occur without proper irrigation management. A soil/water analysis may make the difference between a successful or an unsuccessful irrigation project.

Completion of a soil/water analysis may also prevent unnecessary delays if your application is contested. If contested, the Water Management Board will conduct a contested case hearing. The suitability of the acreage for irrigation may be an issue raised at the hearing.

If you choose to obtain a soil/water analysis, the following steps are provided to assist you:

1. **WATER QUALITY:** A water sample may not be needed since the quality of some water sources is well documented. Please contact the Water Resources Institute, Brookings, SD at (605) 688-4910 if you have sampling questions. The following procedure should be used to collect a water sample:
 - a) Use a pine or quart jar which can be cleaned with a brush or dish cloth. Do not use gallon containers, metal containers, or containers with metal lids. Bottles used for bleach, fabric softener, detergents, and shampoos make very good sample bottles, but are difficult to get clean.
 - b) Wash the container with hot, soapy water and rinse in boiling water (some containers may require washing with hot vinegar to remove foreign residues).
 - c) Rinse the container vigorously three times with the water to be sampled. If the container doesn't look clean, don't use it.
 - d) Allow enough time for pumping a well to insure "fresh" ground water, instead of "drill water and mud" or stagnant water. It is common for water quality to improve with extended pumping (up to six hours of pumping a new well is recommended).
 - e) When taking surface water samples, obtain the water far enough from the shore to avoid excessive soil and algae. Samples from different depths should be combined into one sample.
 - f) Try to get the water sample to the laboratory as soon as possible. Time affects water quality.
2. **SOILS INFORMATION:** The Natural Resources Conservation Service or the local Conservation District may be contacted to obtain a soils map. The area to be irrigated should be outlined on the soils map. If the county soil survey is not completed, then the Natural Resources Conservation Service or a professional soil classifier may be able to provide the information.
3. **COMPLETION OF THE SOIL/WATER ANALYSIS:** The water sample and soils map can be sent to the "Water Quality Laboratory, Water Resources Institute, South Dakota State University, Brookings, SD 57007" for preparation of a soil/water compatibility analysis. The fee for this analysis is \$50.00. Be sure to place your name and address on **BOTH** the water sample and soils map and list the crops to be irrigated.

A soil/water analysis may also be completed by contracting with any other qualified water quality lab and having a qualified person perform the analysis.

*In most instances, completion of a soil/water analysis will be at the discretion of the applicant. However, the chief engineer may request that the applicant complete an analysis if the chief engineer believes that a soil/water compatibility problem may exist. If necessary, the issue may be brought to the Water Management Board for resolution. Completion of an analysis will be beneficial and is recommended even if not requested by the chief engineer.

Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
 On applicant's property _____ On property owned by others _____

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

3. Dugout Information

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

- b) Freeboard _____
- c) Crest Width _____
 Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
 If pipe, diameter _____
- f) Secondary Spillway Capacity _____
 Spillway Width _____
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
 Upstream _____
 Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres

