

## **The Beginners Guide to Augmentation Plans For Wells**

If you are considering using wells to provide water for a lawn and garden, domestic animals, a subdivision, or some other project, you should be aware that in some areas of Colorado you may be unable to get a [well permit](#) without an Augmentation Plan. An [Augmentation Plan](#) is a court-approved document which is designed to protect existing water rights by replacing water depleted in a new project. Augmentation Plans are usually required in areas where there is a shortage of water during part or all of the year. Augmentation Plans are not used for wells within the [Designated Basins](#). To determine whether or not you need an Augmentation Plan, you should consult with the [Colorado Division of Water Resources Office](#) responsible for administering water in the area in which your project will be located.

The following basics of Water Administration will help in explaining what an Augmentation Plan is and what it does. As someone contemplating providing water for a new project, you are a new water user. Your water right will be "junior" (or have less priority) to certain other water rights, which have priority over your use (see [Prior Appropriation System](#)). The priority protects these water rights, which are therefore "senior" (or earlier in time) to your water right. When a shortage occurs, senior water rights may place a [call](#) for water, which may result in junior water rights being ordered to stop some or all water use so the seniors can receive their water. Simply put, augmentation is a method to allow you to use your well (the junior water right), when a call has been placed, without reducing water available to senior water rights.

You may be wondering how it is possible for wells to affect other water rights. To answer this question, we need to look at how ground water and surface water interact. Water experts have known for some time that ground water and surface water are usually hydrologically connected. The connection is through small openings between grains of sand, gravel, and even in some rocks, that allow water to move through the ground to and from streams. This is most evident in springs where water can be seen seeping or flowing from the sides of hills or roadcuts. The result of this connection is that pumping a well will eventually cause some reduction in the amount of water in nearby streams. This reduction in streamflow can affect the amount of water available to water rights on that stream and the remainder of the stream system.

For an example of an Augmentation Plan, let's assume that you want wells in a proposed subdivision where there are senior water rights on a nearby stream. An Augmentation Plan must be designed to put water in the stream to prevent reductions in streamflow caused by pumping your well from affecting senior water rights. This allows the junior water right to keep pumping water if a "call" is placed by a senior water right.

To obtain approval of an Augmentation Plan you must make an application (which is often prepared by an attorney) to the water court. The application must explain exactly where the water will be obtained, where water is to be used, what it will be used for, how much water will be used, what the source of augmentation water is, when and where augmentation water will be required, how much augmentation water is required, and how the Augmentation Plan will be operated. The application should be supported by an engineering analysis, usually prepared by a water resources engineer, which shows how the water needs of the project were determined and how the new water use can occur without affecting senior water rights.

You may contact the [Water Courts](#) in their respective Divisions to obtain information regarding the filing of applications with the court. Water attorneys may be found in the yellow pages under "Attorneys - Water". Water resource engineers may be found under Engineers' Water Supply. Unfortunately, there is no comprehensive information available concerning sources or cost of augmentation water. Water attorneys, engineers and division personnel may be able to provide some suggestions. Due to legal constraints, personnel from this office cannot act as your engineer or attorney. For further information concerning well permitting and permit applications, see [Ground Water Well Permitting](#) on our website, complete an online [AskDWR information request form](#) with Subject: *Augmentation Plans* or call Ground Water Information at (303) 866-3587.