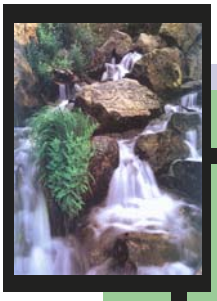

STATE OF COLORADO
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER RESOURCES

# GUIDE TO COLORADO WELL PERMITS, WATER RIGHTS, AND WATER ADMINISTRATION

January 2008

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***Also known as the State Engineer's Office***, the Colorado Division of Water Resources issues water well permits, administers water rights, monitors stream flow and water use, inspects dams for safety, maintains databases of Colorado water information, and represents Colorado in interstate water compact proceedings. The Division of Water Resources strives to be a leader in the water community of Colorado and the western United States. This is accomplished by focusing on the following areas: *people, water and stewardship*. ***People***, because we recognize that the business of water involves our employees and the public. ***Water***, because the administration, safety and use of Colorado's water resources is something to which we are committed and about which we care deeply. ***Stewardship***, because we understand and accept our obligation to the taxpayers and ourselves, in using and protecting the resources in the most effective manner possible.

Lake Hope in the San Miguel River Basin

## What does the Division of Water Resources do?

For over 125 years, Colorado has used a system of water allocation known as the prior appropriation doctrine. Under this doctrine, the first appropriator of water has a senior right to that water, and that right must be satisfied before any subsequent rights junior to that right can receive water. The Division of Water Resources is empowered to administer all surface and ground water rights throughout the state and ensure that this doctrine is enforced.

Obviously, the State Engineer does not carry out the day-to-day administration of all of these water rights. Most of that work is accomplished through the field offices, known as the Division Engineer's Offices. The seven division offices are located throughout the state in each major river basin. The division offices, in turn, employ water commissioners who are actually out in the field allocating water, issuing shut-down orders, collecting water use and/or diversion data, and enforcing the decrees and water laws of the State of Colorado.

While water administration and enforcement is a major duty of the State Engineer, a host of other duties are under his responsibility. Ground water well permitting is one of those duties.

By law, every new well in the state that diverts ground water must have a well permit. In order to obtain a permit, a

COLORADO DIVISION OF WATER RESOURCES
DEPARTMENT OF NATURAL RESOURCES


Dick Wolfe, Director , State Engineer
Harris D. Sherman, Executive Director, DNR
Bill Ritter Jr., Governor

## What does the Division of Water Resources do? (cont.)

person must file an application for approval of a permit with the State Engineer. Over 10,000 applications are submitted for review annually, and the staff determines the amount of water available and analyzes the potential for injury to other existing water rights under strict statutory guidelines.

In addition to well permitting, the State Engineer's Office employs professional engineers and geologists who collect and analyze data on water supply to forecast streamflows, determine diversion requirements, investigate stream transit losses, determine evaporation losses, and calculate historic use and current conditions. A statewide satellite-linked monitoring system that records streamflows on a real-time basis is also maintained by this office, and has become crucial in the state's flood monitoring efforts. Additionally, the staff acts in an advisory capacity to county commissioners, provides advice to other state agencies, and plans for future use and development of the waters of the state in conjunction with other agencies.

The State Engineer also provides staff to assist in technical support to the Colorado Ground Water Commission in the exercise of its duties in the Designated Basins generally located on the eastern plains of Colorado. Well permits for wells located in these basins are evaluated by the staff and submitted to the Commission for approval. Further, the State Engineer provides staff assistance for the Board of Examiners of Water Well Construction and Pump Installation Contractors. This Board oversees the safe and proper installation of well pump equipment and regulates the proper, safe construction of wells throughout the state.

The Division of Water Resources, in cooperation with various local ground water management districts, operates a statewide network for monitoring ground water levels. Over 1,500 wells are measured to assist in projecting ground water levels and to aid in the administration of ground water.

## What Type of Well Permit Can I Get?

The following discussion applies to those areas of the state outside the designated ground water basins. Please refer to the section of this guide titled, *"How Do I Obtain a Water Well Permit Within a Designated Basin?"*, for a discussion on obtaining well permits within the designated ground water basins, and for information as to where the designated basins are located.

There are two different classes of wells: those that are exempt from water rights administration and are not administered under the priority system, and those that are non-exempt and are governed by the priority system. This section will explore the different ground water well permits that are available.

**Exempt Wells**

There are several types of exempt well permits whose uses vary depending upon the situation. Uses are limited specifically by the conditions of approval stated on the permit when it is issued. In most cases, exempt well permits limit the pumping rate to no more than fifteen gallons per minute. Generally, wastewater disposal systems are required to be of the non-evaporative type, such as standard septic tank and leach field systems, where the return flow from the use of the well is returned to the same stream drainage system in which the well is located.

Except in limited cases, an exempt well permit will not be issued where either a municipality or a water district can provide water to the property. In most cases, no more than one exempt well permit will be issued for a single lot.

*Household Use Only Wells* - These types of well permits are issued for ordinary household uses in one single-family dwelling and do not allow for outside water or livestock watering. Generally, individuals may obtain this type of permit if they own a lot in a subdivision that was created prior to June 1, 1972, or the parcel was created by an exemption to the subdivision laws by the local county planning authority. Use Form GWS-44 in applying for this type of permit.

**Standard domestic water well in Weld County**

*Domestic and Livestock Wells* – These types of well permits are issued on tracts of land of 35 acres or more where the proposed well will be the only well on the tract, or on tracts of land of less than 35 acres in limited areas of the state where the surface drainage system is not over-appropriated (see glossary term, *over-appropriated*), or where the well will produce from a deeper source, thus having minimal impact on surface water rights. Depending on under what provisions the well permit is issued, the well may be able to serve up to three

## What Type of Well Permit Can I Get? (cont.)

single-family dwellings, irrigate one acre or less of lawn and garden, and provide water for the individual's domestic animals and livestock. Use Form GWS-44 in applying for this type of permit.

Neither of the two types of wells described above can provide water for commercial uses.

*Commercial Exempt Wells* - These types of well permits are available for small businesses located on lots that were created prior to June 1, 1972, or by an exemption to the subdivision laws. The use of the well is limited to a commercial business, like a convenience store, and is limited to the pumping of one-third acre-foot (108,600 gallons) of water per year. The uses of water are restricted to drinking and sanitation facilities inside a single business. Outside water uses are not allowed. Well metering devices are required. Examples of commercial uses that would not qualify under this provision are motels, commercial kennels, horse-boarding operations, and any commercial business with outside uses. These uses are non-exempt and a well permit would not be available in over-appropriated areas of the state without augmentation. Use both Forms GWS-45 and GWS-57 in applying for this type of permit.

*Unregistered Existing Wells* – The above types of well permits are available for any existing unregistered well that was put to beneficial use prior to May 8, 1972, serving up to three homes, irrigating home gardens and lawns, and watering the user's own domestic animals and livestock. The well can be registered for the historic uses if those uses are no greater than those allowed for a domestic and livestock well permit. Personnel of the Division of Water Resources will conduct a field investigation to verify the well's existence, and the historic uses being claimed on the permit application. The investigations are routinely conducted by the local water commissioners who work under the direction of the division engineer of the water division in which the well is located. Currently, there is no fee charged for the investigation. Owners may also register wells used for commercial purposes if the well was put to beneficial use prior to May 8, 1972, and the amount of ground water diverted does not exceed one acre-foot per year (325,850 gallons) for drinking and sanitary purposes inside the home only.

A question frequently asked is, *"Does the state require landowners to register wells that were put to beneficial use prior to May 8, 1972 for exempt purposes?"* The state cannot require people to register these wells until the well needs to be redrilled. However, there are benefits to registering these wells. The benefits include making it faster to obtain approval if the well needed to be redrilled, or the owner intended to sell the land. Most potential buyers and lending institutions want assurance that the well on the property is usable and registered with the state. Use Form GWS-12 in applying to register an existing well.

*Monitoring and Observation Wells* – These types of well permits are for the construction of a well to be used for the purpose of locating water, pump or aquifer testing, monitoring ground water, or collection of water quality samples. A monitoring and observation well may be converted from an existing monitoring and observation hole and permitted for the uses as stated above, or as a recovery well or a dewatering system (see discussion on *Monitoring and Observation Hole, Recovery Well, and Dewatering System*). A well constructed under a monitoring and observation well permit may be converted by permit to other uses. Use Form GWS-46 in applying for this type of permit.

*Replacement Wells* - These types of well permits are for the purpose of replacing or deepening an existing well. The uses allowed under the original well transfer over to the new well. In some areas of the state, replacing the new well or deepening the existing well to a different water source (or aquifer), could affect the uses allowed on the new well, or the ability to get a new permit for production from a different water source. Use Forms GWS-44 or 45, depending on the use of the original well, in applying for this type of permit.

*Geoexchange Systems* - These types of permits are for the construction and installation of loop fields in geoexchange systems. A geoexchange system is defined as a heat pump or heat exchange system having a horizontal or vertical closed-loop portion consisting of pipe buried in trenches, boreholes, or wells (ground-source), or submerged in a body of water (water-source), in which a heat exchange medium (fluid or vapor) is circulated and fully contained within the pipe or tubing. The purpose of the closed loop is to provide for the transfer of heat between the circulating fluid or vapor and the ground or water. Although these systems do not appropriate subsurface fluids, they do utilize the earth's geothermal properties, therefore, requiring a permit. Prior to issuance of a permit, the applicant must become certified. For more information regarding the certification and permitting process, refer to the Geothermal Rules. A copy of the rules can be obtained for a nominal fee from the Division of Water Resources, or accessed through the website *http://water.state.co.us*, click on Rules and Regulations. Use Form GTC in applying for certification and Form GWS-72 for a permit to construct geoexchange system loop fields.

**Non-Exempt Wells**

Any type of use other than those described above are usually for non-exempt purposes. In over-appropriated areas of the state, new non-exempt wells must replace any out-of-priority stream depletions in time, place, amount, and

## What Type of Well Permit Can I Get? (cont.)

quality by having augmentation water available. A plan for augmentation must be approved by the water court to prevent injury to senior water right holders by replacing the amount of water consumed by the non-exempt uses. Development of plans for augmentation usually require the services of a water resource consulting engineer and water attorney (see section of this guide titled, *"What is an Augmentation Plan?"*). Non-exempt well permits typically allow pumping rates and annual withdrawals of ground water in excess of those allowed by exempt well permits. New non-exempt wells must be located more than 600 feet from any other production well not owned by the applicant unless the State Engineer, after a hearing, finds that circumstances in a particular instance warrant issuing the permit, or after proper notice has been given to other well owners as outlined in the Colorado State Statutes (see section of this guide titled, *"If My Proposed Non-Exempt Ground Water Well is Within 600 Feet of an Existing Well, What Happens?"*).

*Irrigation, Commercial, Municipal, & Industrial* – Although not intended to be a complete listing, these types of well permits include the more common non-exempt type uses. Typical examples of these four use categories include center-pivot crop irrigation systems, commercial business operations with inside and outside uses, central water distribution systems providing drinking water to residential subdivisions and municipalities, and water used in the manufacturing of a product. Use Form GWS-45 in applying for this type of permit.

*Subdivision Wells with Augmentation Plans* – If a lot was part of a subdivision created after June 1, 1972, for most areas of the state, the well uses will be governed by a plan for augmentation and whatever uses the plan specifies. Any uses beyond those allowed by the plan for augmentation would have to be added to the existing plan, if possible, through a water court process, or alternatively, a new plan approved by the court. Use Form GWS-44 in applying for this type of permit.

**Center Pivot Irrigation in Paradox**

*Replacement Wells* - These types of well permits are for the purpose of replacing or deepening an existing well. The uses allowed under the original well transfer over to the new well. In some areas of the state, replacing the original well with a new well or deepening the existing well to a different water source (or aquifer) than the original well, could affect the uses allowed on the new well, or the ability to get a new permit for production from a difference water source. Use Forms GWS-45 and 44, depending on the use of the original well, in applying for this type of permit.

*Gravel Pit Wells* – These types of well permits are issued for gravel pit operations where ground water is exposed. The passage of Senate Bill 89-120 by the Colorado Legislature provided that any gravel pit in operation after December 31, 1980, that exposed ground water to the atmosphere, must replace all out-of-priority depletions of ground water. It also required that a well permit be obtained from the State Engineer for use of the ground water. Existing gravel pits that exposed ground water to the atmosphere, but ceased activity prior to January 1, 1981 are not required to be permitted or replace depletions from evaporation (refer to Sections 37-90-137(11)(a), 37-90-107, 37-80-120(5), and 37-92-305 (12)(a), CRS, for specific requirements regarding gravel pit wells). Colorado state statutes can be accessed from the state of Colorado website *http://colorado.gov*. Use Form GWS-27 in applying for this type of permit.

*Pond Wells* – These types of permits are for the construction of new ponds, or the permitting of existing ponds, that expose ground water. For new proposed ponds that will expose ground water, a non-exempt well permit must be obtained from the State Engineer prior to construction since the pond would be considered a well by statutory definition. All of the laws governing the construction and use of wells apply. In over-appropriated areas of the state, a plan for augmentation would have to be obtained to replace any out-of-priority depletions caused by the pond, or the pond must be lined to prevent the interception of ground water (see section of this guide titled, *"Can I Build a Fishpond?"* for further discussion). Use Form GWS-45 in applying for this type of permit.

*Recovery Wells* – These types of well permits are issued for wells to be used for the purpose of removing contaminants from, or otherwise remediating, ground water. In over-appropriated areas of the state, a plan for augmentation would be required if the consumptive use of ground water for the entire recovery project exceeds 1/30 of an acre-foot (10,862 gallons) per year (see Policy Memorandum 94-5 for more detailed information). Use Form GWS-45 in applying for this type of permit.

*Geothermal Wells* – These types of well permits are issued for wells to be used for the purpose of exploring for, monitoring of, or using geothermal resources, or re-injecting geothermal fluids. For more information regarding the permitting and use of this type of

## What Type of Well Permit Can I Get? (cont.)

well, refer to the Geothermal Rules. A copy of the rules can be obtained for a nominal fee from the Division of Water Resources, or accessed through the website *http://www.water.state.co.us*, click on Rules and Regulations. Use Form GWS-45 in applying for this type of permit and include supplemental documentation as required by the rules.

*Dewatering Systems* – These types of well permits are for a permanent well, drain, sump or other excavation constructed for the purpose of keeping the water table below a desired level. A dewatering system may be converted by permit from a monitoring and observation hole, dewatering well, or recovery well. Use Form GWS-45 in applying for this type of permit.

**Other Structures**

The types of borehole structures discussed below can be constructed upon filing of a proper Notice of Intent to Construct with the State Engineer's Office. Notices must be submitted at least three days prior to construction. Faxed notices are acceptable. The borehole structures must be constructed within ninety days of the date of notice. A separate notice must be provided for each 40-acre quarter/quarter section in which a borehole structure will be constructed. More than one borehole structure can be constructed on the same quarter/quarter section, provided the number of boreholes are indicated on the notice.

*Monitoring and Observation Holes* – These are temporary holes constructed after proper notice and in accordance with the Water Well Construction Rules. A Well Construction and Test Report (Form GWS-31), referencing the acknowledged notice number, must be submitted within sixty days after constructing the hole. A monitoring and observation hole must either be abandoned in accordance with the rules within one year of construction or converted by permit to a monitoring and observation well, recovery well, or dewatering system. If abandoned, a Well Abandonment Report (Form GWS-9) must be submitted within sixty days after abandoning the hole. A monitoring and observation hole cannot be converted to a production well other than a recovery well or a dewatering system. Use Form GWS-51 when providing Notice of Intent to Construct this type of structure.

*Test Holes (that penetrate through a confining layer)* – These holes are any excavation or other ground penetration for the purpose of geotechnical, geophysical or geologic investigation, or collecting soil or rock samples. A test hole that penetrates through a confining layer must submit proper notice before construction. A test hole shall not remain open longer than twenty days, and must be abandoned in accordance with the rules. An Abandonment Report (Form GWS-9) must be submitted within sixty days after abandoning any test hole that penetrates through a confining layer. Use Form GWS-51 when providing Notice of Intent to Construct this type of structure.

*Dewatering Wells* – These wells are any excavation or other ground penetration for temporary dewatering purposes exclusively related to construction projects. A dewatering well may be constructed only after proper Notice, and must be plugged and abandoned within one year of being constructed. Upon written request for variance, and as warranted by project considerations, the one-year abandonment requirement may be extended. For non-construction projects or when long-term dewatering is required, application can be made for a dewatering system using Form GWS-45. Use Form GWS-62 when providing Notice of Intent to Construct this type of structure.

For more detailed information regarding any of the above well uses, contact the Denver office, Ground Water Information at 303-866-3587, or one of the seven Water Division offices (see *Contact Information* on the back of this guide). Permit application forms are available from the Denver office and Division offices, or from the Division of Water Resources' website at *http://www.water.state.co.us.*

## How do I Obtain a Water Well Permit Within a Designated Basin?

You might be wondering what designated basins are and where they are located. The Designated Ground Water Basins (or Designated Basins) are those areas of the state established by the Colorado Ground Water Commission in accordance with Section 37-90-106, CRS. The Designated Basins are located in the Front Range and in Eastern Colorado (see Figure 1). Ground water within the Designated Basins is referred to as designated ground water. Designated ground water is ground water which, in its natural course, is not available to or required for the fulfillment of decreed surface rights, or ground water in areas not adjacent to a continuously flowing natural stream; wherein ground water withdrawals have constituted the principal water usage for at least 15 years preceding the date of the first hearing on the proposed designation of the basin, and which is within the geographic boundaries of a designated ground water basin.

***Background***

The Colorado Ground Water Commission (Commission) is a regulatory and an adjudicatory body authorized by the

## How do I Obtain a Water Well Permit Within a Designated Basin? (cont.)

General Assembly to manage and control designated ground water resources within the state of Colorado. The General Assembly has granted the Commission this authority under Title 37, Article 90 of the Colorado Revised Statutes (Ground Water Management Act). This Act further describes the Commission's formation, organization, and duties.

The Commission consists of twelve members, nine of whom are appointed by the governor and three others who consist of the Executive Director of the Department of Natural Resources (DNR), the Director of the Colorado Water Conservation Board (CWCB), and the State Engineer, Director of the Division of Water Resources (DWR). The Commission meets on a quarterly basis every year, in February, May, August and November. The State Engineer is the Executive Director of the Commission who carries out and enforces all decisions, orders and policies of the Commission. Currently, the Commission has established eight designated basins and 13 ground water management districts within such basins. A listing of these basins and districts are contained in Table 1 and diagrammed in Figure 1.

***Well Permitting Within the Designated Basins***

In the administration of designated ground water, the Commission has the sole authority to grant any new water rights or changes in water rights involving designated ground water. The water courts do not have any approval authority concerning designated ground water. Furthermore, designated ground water management districts do not have any permitting authority within Designated Basins. The districts can only provide recommendations to the Commission on any given application. For the small capacity wells, the districts may adopt rules, in accordance with Section 37-90-105(7), CRS, that may affect the issuance of permits for such wells. Additionally, after the issuance of well permits, the districts have their own authority to administer ground water within their boundaries.

***Ground Water Commission***

The permitting activity of the Commission can be broken down into six categories. Each of the following activities is performed by the State Engineer through authority granted him by the Commission:

1. Determinations of ground water in the Denver Basin bedrock aquifers, Section 37-90-107(7), CRS.
2. New well permits, Section 37-90-107, CRS.
3. Replacement well permits, Section 37-90-111(1)(c), CRS.
4. Final permits, Section 37-90-108, CRS.
5. Changes to water rights, Section 37-90-111(1)(g), CRS.
6. Replacement plans, Section 37-90-107.5, CRS.

For each of the aforementioned activities, the applicant must make application to the Commission on a form prescribed by the Commission. A filing fee, as listed on the fee schedule on our web page, must accompany each water right sought. For example, each determination of water right application or each well permit within a change of water right application must have the appropriate filing fee.

With new appropriations, the Commission must first determine if the application can be given favorable consideration. This means that water is available for appropriation, the withdrawal will not cause unreasonable impairment to other vested water rights, and the withdrawal is not unreasonably wasteful. The Commission also considers whether the application would be speculative. Once favorable consideration is established, the Commission will publish the application in the county where the water right is being sought. Any objections to applications for new water rights are processed in accordance with Section 37-90-113, CRS, and the "Rules of Hearings for All Adjudicatory Hearings Before the Ground Water Commission," 2 CCR 402-3. For new water rights that are approved by the Commission or have successfully completed the hearing process, the Commission prepares a Commission Findings and Order. The Findings and Order would include, among other items, the average annual amount of water that can be appropri-

**Table 1**
**Designated Ground Water Basins and Ground Water Management Districts**

| Designated Ground Water Basin | Ground Water Management Districts |
|---|---|
| Kiowa-Bijou | North Kiowa-Bijou |
| Southern High Plains | Southern High Plains |
| Upper Black Squirrel Creek | Upper Black Squirrel Creek |
| Lost Creek | Lost Creek |
| Camp Creek | |
| Upper Big Sandy | Upper Big Sandy |
| Upper Crow Creek | |
| Northern High Plains | Plains |
| | Sand Hills |
| | Arikaree |
| | Frenchman |
| | Central Yuma County |
| | W-Y |
| | East Cheyenne |
| | Marks Butte |

## How do I Obtain a Water Well Permit Within a Designated Basin? (cont.)

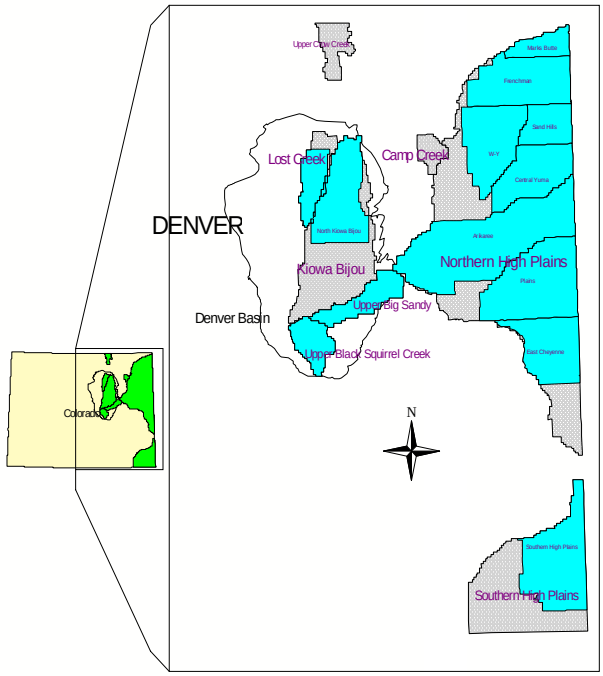



Figure 1.
Designated Ground Water Basins and Ground Water Management Districts

ated, the location of use, the proposed beneficial uses and any other conditions the Commission deems necessary to assure no unreasonable impairment to vested water rights.

With changes in water rights, the Commission can publish the application without review. However, the Commission cannot grant any change that would materially injure another vested water right. As a result, the Commission reviews change of water right applications before publication, and either continues with publication because no material injury is evident, or denies the application. If the Commission continues with the publication, the publication is in the county where the change is being sought. Again, any objections to applications for changes in water rights are processed in accordance with Section 37-90-113, CRS, and the "Rules of Hearings for All Adjudicatory Hearings Before the Ground Water Commission," 2 CCR 402-3. Once the Commission approves the change, or the applicant successfully completes the hearing process, the Commission will again issue a Findings and Order authorizing said change. The Findings and Order would include, among other items, the average annual amount of water that can be withdrawn, the location of use, the proposed beneficial uses, and any other conditions the Commission deems necessary to assure that no material injury will occur to other water rights.

As aforementioned, the Commission has the authority to conduct adjudicatory hearings and these decisions are subject to judicial review. These hearings by the Commission and judicial review of such decisions are controlled by the provisions in Sections 37-90-113 through 37-90-115, CRS. Currently, the Commission has delegated to its hearing officer the review of facts, conclusions of law, and initial decisions of the Commission concerning designated ground water. This delegation relieves the Commission from initial hearing procedures and decisions. The Commission may hear or review protests to the hearing officer's decisions and acts as final administrative authority. If a contesting party is still unsatisfied, this party may appeal the Commission's decision to district court in the county where the water right is located.

***State Engineer***

Only the State Engineer has the authority to grant permits to construct small capacity wells within the designated basins (Section 37-90-105, CRS). The ground water management districts have some authority to direct the State Engineer as to how to issue small capacity wells within their respective district through properly adopted rules (Section 37-90-105(7), CRS).

Small capacity well permits are issued pursuant to statute. These wells are intended to be small use wells for residences (maximum three single-family), livestock and small commercial operations. These wells are limited to no more than one acre of lawn and garden irrigation.

Application is made to the State Engineer with the appropriate filing fee. The State Engineer reviews the application according to statute and properly adopted district rules. If the application satisfies the statutory requirements and district rules, a permit is issued to construct a well. This type of application does not require a publication or a final permit.

If an applicant or other party is aggrieved by a decision of the State Engineer (including the issuance or denial of a well permit application), a hearing is conducted before the State Engineer pursuant to the Administrative Procedures Act (Section 24-4-106, CRS).

**Poinsettia farm in the Upper Black Squirrel Designated Basin**

## Are Your Well Permits Still Valid?

The expiration date of a permit depends on the statute under which the permit was issued and on the status of the well. Generally, on recently issued well permits, the applicable statute is cited in the permit conditions in the well permit. The permit expiration date appears in the lower right hand corner of the well permit. The timelines and specific requirements for different types of wells are:

**Sections 37-90-137, 37-90-107, and 37-90-107(7), CRS, Permits – Non-Exempt Wells and Large Capacity Wells** (permits issued for one year):

- For permits issued under the sections referenced above, the well must be drilled prior to the expiration date of the permit.
- For permits issued under Section 37-90-137, CRS, the State Engineer's Office must receive evidence that the well was constructed and pump installed prior to the expiration date of the permit. For permits issued under Section 37-90-107, CRS, the pump must be installed, water put to beneficial use, and a Statement of Beneficial Use filed within three years from the date of issuance of the permit. For information on filing late Statements of Beneficial Use, contact Ground Water Information or one of the seven Water Division offices (see *Contact Information* on the back of this guide).
- For permits issued under Section 37-90-107(7), CRS, the pump can be installed and the well used at any time after well completion. The well owner must file a Notice of Commencement of Beneficial Use within 30 days of use of the well.

After the above-referenced criteria have been met, the permit will not expire.

*[Note: For permits issued under Sections 37-90-137, 37-90-107, and 37-90-107(7), CRS, the permit expiration date can be extended <u>one</u> <u>time</u> for one year maximum, upon receipt of a written request, a showing of good cause, and the appropriate filing fee.*

**Sections 37-92-602 and 37-90-105, CRS, Permits - Exempt Wells and Small Capacity Wells** (permits issued for two years):

- The well must be drilled prior to the expiration date of the permit.
- The pump can be installed and the well used at any time if the well was timely constructed.

After the above-referenced criteria have been met, the permit will not expire.

*[Note: For permits issued under Sections 37-92-602 and 37-90-105, CRS, the permit expiration date can be extended for additional one-year periods upon receipt of a written request and showing of good cause.]*

**Extensions**

Requests for extensions must be received in our office prior to the expiration date of the permit. Requests may be faxed, with the original and any required fees to follow within a few days. If the expiration date has passed, we cannot grant an extension. However, if the well owner has complied with the provision of the law, except that they failed to file the necessary forms in a timely manner, they should file a request for acceptance of the forms in accordance with the above referenced sections.

## Residential Wells and Subdivisions

On May 5, 1972, legislation was enacted which mandated that counties adopt subdivision regulations requiring developers to provide data, studies, and analyses for their proposed subdivision of land. The studies were to include, among other items, adequate evidence that a water supply was available and that the quality, quantity, and dependability was sufficient. In turn, the State Engineer was required to review the water supply information and issue an opinion regarding injury to other vested water rights and the adequacy of the water supply.

Under Sections 37-92-602(3)(b)(III) and 37-90-105(3)(c), CRS, in evaluating residential household well permit applications which are located in subdivisions approved on or after June 1, 1972, for which the water supply plan has not been approved by the State Engineer, the cumulative effect of all such wells in the subdivision shall be considered in determining material injury. The term subdivision is defined in Section 30-28-101, CRS, and does not apply to any division of land, which creates parcels equal to or greater than 35 acres. The Division of Water Resources reviews water supply reports for new subdivisions upon referral from the county as required by Section 30-28-136(h), CRS. A water supply report is required for all subdivision proposals. Section 30-28-133(3)(d), CRS, describes the basic requirements for water supply reports, while Section 30-28-136 describes the review process. These statutes may be viewed at the state of Colorado website under the government links. For new subdivisions in over-appropriated areas, a plan for augmentation, approved by the water court, or a replacement plan approved by the Colorado Ground Water Commission for areas within the Designated Basins, is required before residential well permits can be granted.

When applying for a permit to construct a residential well on a parcel of less than 35 acres, the application may need to be supplemented with additional information concerning the tract of land on which the well will be

## Residential Wells and Subdivisions (cont.)

located. This information is necessary for the evaluation of the application. If the proposed location of the well will be in an over-appropriated stream system, or in a Designated Ground Water Basin, additional information detailing the legal description of the tract, and when or how that tract was created, is typically required. A current deed for the subject property on which a well permit is being sought must accompany the application to provide proof of ownership. The following information is intended to aid in preparing and completing a well permit application of this type.

Application made pursuant to Sections 37-92-602 or 37-90-105, CRS, for residential use:

1. If the parcel is in a platted subdivision, make sure to specify the lot, block, filing number, and subdivision name. While our records reflect when many recorded subdivisions were platted, if this office has no information on the subdivision, or incomplete information, then information verifying the creation date of the subdivision must be submitted before the application can be evaluated.
2. If the parcel was created prior to June 1, 1972, but is not in a subdivision, then a copy of a recorded deed, a county approved plat map, or other document with a legible date showing that such action occurred prior to June 1, 1972, must be submitted. The documentation must contain a metes and bounds legal description that specifically identifies the subject parcel. The legal description must include a tie to a section corner or quarter corner so the parcel can be located on a USGS quadrangle map (scale of 1" - 2000'), or other Division of Water Resources mapping tools. If the legal description is too lengthy to fit on the application form, then the description should be submitted on a separate sheet and referenced in the application. The parcel size indicated on the application should agree with the area identified by the legal description.
3. If the parcel was created by an exemption from the definition of a subdivision, then a copy of one or more of the following must be submitted: (a) the signed and dated County Commissioner's Resolution concerning the exempted tract; or (b) a copy of the county survey plat, referencing approval of the recorded exemption.

## Purchasing Property with a Well or Surface Water Rights: What to Ask and Where to Get Additional Information

Purchasing property usually involves a substantial financial investment and long-term commitment. Prior to making a purchase, the more information you can obtain about any water resources connected with the property, the better off you will be in the long run.

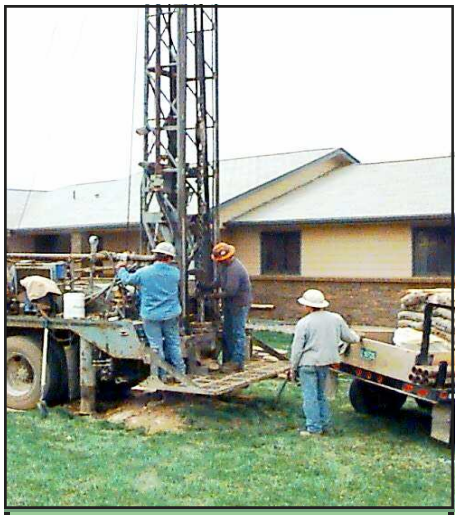
*Individual on-lot wells* - If there is a residence on the property, find out if it is served by an individual on-lot well or central water supply system. If served by a well, ask questions about the well. How old is it? Is it registered with the Division of Water Resources? If it was put to use prior to May 8, 1972, it may or may not be registered (refer to the discussion on *Unregistered Existing Wells* under the section titled, *"What Type of Well Permit Can I Get?"*). Any production well used for residential and/or livestock watering purposes, that was constructed after May 8, 1972, should have a permit file on it. The Division of Water Resources maintains all well permit files. Files usually contain useful information about the well. To find the appropriate file, try to obtain the well permit number, or at a minimum, the section, township, and range location of the well and the name of the party that may have obtained the well permit. Next, to obtain copies of files, contact the Records Section of this office at 303-866-3447, Monday through Friday, between the hours of 10:00 a.m. to 3:30 p.m., or visit the Denver office. (Note: The Records Section is closed the last Friday of each month.) Find out what the water use restrictions are. Water uses are restricted by Colorado state statutes, well permit conditions of approval, county regulations, and subdivision covenants. Don't fall into the trap, as many have when purchasing property, of envisioning your own little *paradise*, complete with home, lawns, gardens and horses, only to find out that the well use restrictions limit the use of ground water to in-house uses only. Contact Ground Water Information of the Denver office at 303-866-3587, Monday through Friday, from 9:00 a.m. to 4:00 p.m., to inquire as to well use restrictions.

*Well pumping rates* - Ask the seller or realtor what the current pumping rate of the well is. Well pumping rates are measured in gallons per minute. Prior to purchasing the property, consider having a well pump test done by a qualified party, such as a Colorado licensed pump installer or water well driller. A current listing of pump installers and drillers, arranged alphabetically by city, is available on our website at *http://www.water.state.co.us*. Low-yield wells may be able to supply a sufficient quantity of water for the intended purpose if used in conjunction with properly sized storage tanks and controlled pumping systems. There will be some water storage in the well itself. For every foot of water in a typical residential well with a four-inch

## Purchasing Property with a Well or Surface Water Rights (cont.)

diameter casing, there are 0.66 of a gallon of water in storage. You can do a quick assessment of daily water needs for in-house uses only. A rule of thumb is to allow 75 gallons per person per day. Therefore, a family of four will require approximately 300 gallons per day for in-house uses. Again, a qualified well tester could be helpful in properly assessing the well's capabilities and providing recommendations regarding a low-yield well situation.

*Well water quality, public health and safety* - Ask about the current water quality. Prior to purchasing the property, consider having the well water tested by a state-certified laboratory. The Water Quality Control Division of the Colorado Department of Public Health and Environment can be contacted at 303-692-3500, and can provide a listing of state-certified laboratories in Colorado. Information may also be accessed from their website at *http://www.cdphe.state.co.us/wq/wqhom.asp.* You can also contact the County Health Department of the county that the well is located in. Some counties can perform a bacteriological/coliform test for water potability. The Division of Water Resources does not do any water quality testing. Do an on-site visual inspection of the well and property you are thinking of purchasing. Is the well physically located on the property? Does the location of the well allow for easy access for repair and maintenance? Does the well appear to be in a sanitary condition? Is the ground surface around the well head sloped such that there would be positive surface drainage away from it? Is the well casing visibly sticking up above the ground surface, and is there a weather-tight seal on top of the casing? Does the visible well casing appear to be made of steel? How far away is the wellhead from any known contamination sources, such as septic tank and leach field disposal systems? The current Water Well Construction Rules require that a well shall not be located closer than 100 feet horizontally to the nearest source of contaminants or 50 feet from a septic tank, sewer line or other vessel containing contaminants, unless a variance to this rule is granted by the Board of Examiners of Water Well Construction and Pump Installation Contractors. State, county, municipal or local government regulations must be complied with if more stringent than the Board of Examiners' Water Well Construction Rules. Are there any existing abandoned wells on the property that are open and not plugged? Try talking to neighboring property owners who are on well water and get their comments on water quality. Ask if they know the depths of their wells and compare it with that of the well you are assessing. Their comments and experiences can be a helpful source of information.



**Well construction near Northglenn**

*Well construction* - This office currently has an inspection program in place for well construction. While inspections are not done for every well constructed, random inspections are done throughout the state to ensure compliance with the Water Well Construction Rules. Water well drilling contractors must be licensed and bonded. The contractor is licensed by the Board of Examiners of Water Well Construction and Pump Installation Contractors. One function of the Board is to promulgate rules and regulations under which contractors must operate. The latest revision to the Water Well Construction Rules became effective on January 1, 2005. A copy of these rules is available from this office for a nominal fee, or can be accessed from our website. In general, the well should be constructed with watertight steel surface casing and joints installed from a minimum of one foot above, to a minimum of nineteen feet below ground level. The space between the borehole wall and the surface casing should be grouted in accordance with the Water Well Construction Rules to prevent contaminants from entering the borehole. If you have questions or concerns regarding well construction, you should contact staff of the Board by telephone at 303-866-3581, or in writing addressed to: Board of Examiners of Water Well Construction and Pump Installation Contractors, Colorado Division of Water Resources, 1313 Sherman Street, Room 818, Denver, CO 80203. An additional source of general information about water well construction is a pamphlet by the American Ground Water Trust in cooperation with the Colorado Water Well Contractors Association titled, *"What Coloradoans Need to Know About Water Well Construction."* Contact the Colorado Water Well Contractors Association to obtain a copy of this pamphlet. Their website address is: *http://www.cwwca.org*.

*Well ownership transfer* – Each time the ownership or mailing address of a permitted well changes, a "Change in Ownership/Address" form (GWS-11) must be submitted to this office. No fee is required. The form can be downloaded from our website at *http://www.water.state.co.us*, or may be obtained free of charge from the Denver office or any one of our seven division offices (see *Contact Information*, on the back of this guide).

*Central Water Supply Systems* – If purchasing property that is served by a

## Purchasing Property with a Well or Surface Water Rights (cont.)

central water supply system, find out what you can about the system and the supplier. Is the water supply from central wells or treated surface water supplies, such as a reservoir? Who is responsible for operation and maintenance of the system? Consider contacting the water supplier and asking about the reliability of the system, and the fee structure. Ask what water uses are allowed. You may be able to obtain water quality information as well. A good source of contact information for water suppliers is the Colorado Water Congress. Their telephone number and website are 303-837-0812 and *http://www.cowatercongress.org*. Additionally, there is an alphabetical listing of water districts for the Denver Metropolitan area under the Special Districts section of the city government white pages phonebook. Lastly, the Department of Local Affairs (DOLA) has online information regarding Data, Information and Publications at *http://www.dola.state.co.us/DataEtc.htm*.

*Other water rights* – In addition to an individual on-lot residential use well or central water supply system, the property you have purchased or may purchase might have water rights associated with it. The source of these water rights could be from rivers and streams, reservoirs, transmountain waters, or other wells. The water could be conveyed to the property by direct pumping from the river or stream, but more typically, conveyance is by way of a ditch or lateral, canal or possibly through a pipeline. A commonly decreed use of this water is for irrigation purposes. Issues sometimes arise over a shareholder's inability to receive water due to the actions of other shareholders further up the ditch or lateral. Often, this office will receive calls from such water users seeking resolution to these problems.

While the Division of Water Resources is charged with the responsibility of administering water rights and for the distribution of surface water within the state, that distribution authority stops at the headgate of the main ditch where it diverts from the river or stream. We do not administer surface water beyond the headgate. That becomes the responsibility of the individual ditch companies or private shareholders. However, this office will assist where possible in a resolution by providing information or offering suggestions. As a potential property purchaser, you can verify a seller's claims to having water rights. Ask to see any contractual agreement with a ditch company or supplier, or stock certificates of ownership of shares of water. Sometimes there is information on the property deed regarding water rights, or on a special water rights deed. If there is a court decree involved, obtain a copy of the decree. This office maintains a database of water rights that are decreed through the water courts. Copies can be acquired for a nominal fee. This database can be searched by location (quarter/quarter and quarter section, section number, township and range) to see if any water right exists at a specified location. Additionally, an online water rights database can be accessed from our website at *http://www.water.state.co.us*. Due to the potential complexity of water rights acquisition, when contemplating the purchase of property with water rights associated with it, it may be advisable to seek legal assistance from an attorney knowledgeable in water rights. For additional information regarding the subject of water rights, refer to other sections of this guide titled, *"Water Rights in Colorado," "How Do I Obtain a Water Right?," "What is an Augmentation Plan?,"* and *"Can I Build A Fishpond?"*

## If My Proposed Non-Exempt Ground Water Well is Within 600 Feet of an Existing Well, What Happens?

If the 600-foot spacing rule applies to this well, the application is returned to the applicant and they are given the option to obtain a consent form or request a hearing. Consent must be obtained from all owners of existing wells within 600 feet of the proposed well location. An example of an acceptable consent form is available from the Division of Water Resources, but other forms may also be accepted. The well owner signing such a consent form should understand that the use of the proposed well could injure or adversely impact their own existing well, and that they are waiving any objection to the issuance of a permit for the subject well.

If consent forms cannot be obtained from all owners of existing wells, or if a hearing is requested, the request should be made in writing to the Division of Water Resources. The request should include a listing of the names, mailing addresses, and permit numbers (if known) of all owners of existing wells within 600 feet of the subject well. Division office personnel may verify this listing. The well permit evaluation staff will notify all owners of existing wells by certified mail of the pending application, and request a response from them. If no response is received within the time set forth in the notice, a hearing is not required. If any response is received in a timely manner, the well permit evaluation staff will request that the hearing officer assigned by the State Engineer proceed to set a hearing schedule. All owners with wells within 600 feet who have responded to the notice

## If My Proposed Non-Exempt Ground Water Well is Within 600 Feet of an Existing Well, What Happens? (cont.)

will be notified of the hearing date and can attend and be a party to the action. The applicant must come to the hearing prepared to present testimony that their well will not cause material injury to existing wells within 600 feet. Legal counsel may represent the applicant if they so choose. If the proposed well is part of a water court proceeding granting a water right for the well, a plan for augmentation, or a change of water right, no hearing by the State Engineer shall be required. However, evidence must be provided to the water court that the applicant has given notice of the water court application at least ten days before making the application by registered or certified mail, return receipt requested, to the owners of record of all wells within 600 feet of the proposed well.

Irrigation well in the Arkansas River Basin

The hearing requirement shall not apply to wells located less than 600 feet from existing wells if the proposed well will serve an individual residential site and the proposed pumping rate will not exceed fifteen gallons per minute.

## What is an Augmentation Plan?

If you are considering using wells to provide water for lawn and garden uses, domestic animals, a subdivision, or another 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 plan, which is designed to protect existing water rights by replacing water used 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. To determine whether or not you need an augmentation plan, you should consult with the Division of Water Resources office responsible for administering water in the area in which your project will be located.

Some basics of water administration will help in explaining what an augmentation plan is and what it is intended to accomplish. As someone contemplating providing water for a new project, you are considered a new water user. Your water right will be "junior" (or later in time) to certain other water rights, which have priority over your use by virtue of past use of water and confirmation of this use by the water court. 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 connected. The connection is through small openings between grains of sand, gravel, and even in some rocks, that allows 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 road cuts. 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, 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 wells, from affecting senior water rights. This allows the junior water right to keep pumping water when a "call" is placed. To obtain approval of an augmentation plan, you must make an application to the water court, which is often prepared by an attorney. 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 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.

## What is an Augmentation Plan? (cont.)

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.

## What Can I Do With That Spring On My Property?

What is a spring? Although the Colorado state statutes do not specifically define a spring, a hydrologic definition is "a discharge of ground water on the surface in sufficient quantities so as to produce a current of flowing water." This office receives many calls regarding springs. The typical caller states that there is a flowing spring located on their property, and they would like to know if they could develop it and put the water to some beneficial use. One issue that quickly arises is whether or not the spring is actually a well. A well is defined by statute as, "…any structure or device used for the purpose or with the effect of obtaining ground water for beneficial use from an aquifer." A change in the law in 1995 provided an exception to the definition of a well for certain limited excavated spring developments of natural springs. If the spring development meets the following conditions, it is excluded from requiring a well permit or compliance with the Water Well Construction Rules:

1. the structure or device used to capture or concentrate the natural spring discharge must be located at or within 50 feet of such spring;
2. the structure or device used to capture or concentrate the natural spring discharge must be no more than ten feet below ground surface; and
3. the owner <u>must</u> adjudicate (obtain a water right through the water court) the structure or device as a spring, which would then be subject to administration in the priority system with all other water rights.

If the spring development fails to meet the above conditions, it must be considered a well, which withdraws ground water, and all of the laws associated with a well apply. If the spring development does meet the above conditions, it is not mandatory that it be considered a spring subject to administration in priority. It is the owner's option to either adjudicate the structure as a spring or permit it as a well. If permitted as a well, the owner must comply with the requirements of the Water Well Construction Rules regarding well construction and variances thereto.

Spring near Buena Vista

Most of the state's natural surface drainage systems are over-appropriated by senior vested water rights. In simplistic terms, that means that there are more decreed water rights claims on the system than can be satisfied by the physical amount of water available. Therefore, under the priority system ("first in time, first in right"), when the most senior rights are making a call for water, the most junior rights have to curtail diverting until the calling senior rights are satisfied. A new water right for a developed spring would be so junior, that on an over-appropriated drainage system, there may be few or no times of the year when water could be beneficially used from the spring. It might seem then that it would be most advantageous to call the structure a well, but that is not necessarily true. A potential problem is that if there is already a well on the property, you may not be able to obtain a permit to permit the spring as a well. Furthermore, even if there was no existing well on the property and you were able to obtain a permit, in many areas of the state, the use of the water would be limited to in-house use only if the well were to be the only well on less than 35 acres. Additionally, use of a shallow spring well as a water source for a residential dwelling raises questions about the quality of the water and the dependability of the supply.

Due to the various possibilities regarding spring development, each situation must be independently evaluated. Therefore, we suggest you contact Ground Water Information of this office, at 303-866-3587, Monday through Friday, from 9:00 a.m. to 4:00 p.m., or the appropriate division office, for more specific information regarding spring development (see *Contact Information* on the back of this guide).

# Can I Build a Fishpond?

You may be thinking how nice it would be to have a little scenic pond stocked with a few fish on your property, and may be wondering how difficult this would be to accomplish. It would be simple enough to get a backhoe on the land, and excavate a depression in the ground, suitable for holding water. Surely creating a little pond couldn't be much of a problem! However, the following issues can arise and must be addressed.

<u>*Exposing ground water*</u> – When excavating for a pond, there is the possibility of exposing ground water, especially in areas with a shallow water table. If this occurs, by statutory definition, a well has been constructed. A well permit from the State Engineer would be required, and all of the laws associated with well construction and ground water use apply (see section titled, *"Glossary of Terms"* for a definition of *Well* in this guide). If the pond is in an over-appropriated area of the state, a permit would not be issued unless the pond well was operated pursuant to a court-approved plan for augmentation, to offset all depletions caused by evaporative losses of water from the pond, as well as any other consumptive uses of water (see section of this guide titled, *"What is an Augmentation Plan"* for more information on plans for augmentation). Developing plans for augmentation can be difficult and costly, and will normally require the services of a water resource consulting engineer and water attorney.

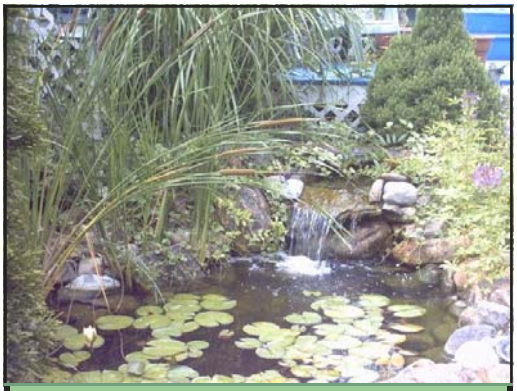
<u>*Storage rights*</u> – In order to store water in a pond, a water storage right must be obtained from the water court (see sections of this guide titled, *"Water Rights in Colorado"* and *"How do I Obtain a Water Right?"* for more information). Most of the state's natural surface drainage systems are over-appropriated by senior vested water rights. In simplistic terms, this means that there are more decreed water rights claims on the system than can be satisfied by the physical amount of water available. Therefore, under the priority system ("first in time, first in right"), when the most senior rights are making a call for water, the most junior rights have to curtail diverting until the calling senior rights are satisfied. A new storage right would be so junior, that in an over-appropriated drainage system, there may be few or no times of the year when water could be legally diverted in priority into the pond. To overcome this problem, a court-approved plan for augmentation would be required. Ponds built on stream channels in over-appropriated areas must be capable of passing all incoming flows, having their water levels regulated, and of being completely drainable. If the pond is determined to be a well, a storage right cannot be granted. If a pond is lined and the liner is approved by the State Engineer, the pond would be allowed to store water and obtain a water right.

**Pond in Wet Mountain Valley**

<u>*Filling ponds with ground water*</u> - Filling a pond from a well is not allowed unless the approved uses of the well specifically allow this use. Most wells cannot lawfully be used for pond filling. The well permit should be referred to for specific uses allowed. If there is any question as to the allowed uses from a well, you should contact Ground Water Information of this office at 303-866-3587 for clarification.

<u>*Impounding water above the natural ground surface*</u> – The property owner who wants to excavate a small pond may be thinking that the excavated material could easily be mounded up to form a dam with the intent to impound water behind it. Impounding of water above the natural ground surface constitutes the creation of a dam, and opens up a whole new array of issues. There are specific statutes that address the construction of jurisdictional and non-jurisdictional dams, livestock water tanks, and erosion control dams. For more information on this subject, please refer to the website of the Division of Water Resources' Dam Safety Branch at *http://www.water.state.co.us/damsafety/dams.asp* or contact the branch by telephone at 303-866-3581.

In summary, there are a number of issues that must be addressed with regard to building a fishpond. Therefore, it is imperative that these issues are addressed prior to construction. Ponds that are out of compliance with state statutes and rules and regulations are subject to orders being issued by the State Engineer to drain the pond or other measures taken to bring the structure into compliance with state law.



**Backyard fish pond**

## Water Rights in Colorado

Water rights in Colorado are unique compared to parts of the eastern United States. The use of water in this state and other western states is governed by what is known as the prior appropriation system. This system of water allocation controls who uses how much water, the types of uses allowed, and when those waters can be used.

A simplified way to explain this system is often referred to as the priority system or "first in time, first in right." An appropriation is made when an individual physically takes water from a stream or well (when legally available) and puts that water to some type of beneficial use. The first person to appropriate water and apply that water to use has the first right to that water within a particular stream system. This person, after receiving a court decree verifying their priority status, then becomes the senior water right holder and that water right must be satisfied before any other water rights are filled.

For example, three water users exist on a stream system with adjudicated (court approved) water rights totaling five cfs (cubic feet per second). The user with the earliest priority date has a decree for two cfs, the second priority has a right for two cfs, and the third priority right has a decree for one cfs of water. When the stream is carrying five cfs of water or more, all of the rights on this stream can be fulfilled. However, when the stream is carrying only three cfs of water, priority number three will not receive any water, with priority number two receiving only half of their right. Priority number one will receive their full amount of two cfs under this scenario. This process of allocating water to various water users is traditionally referred to as water rights administration, and is the responsibility of the Division of Water Resources.

Diversion Structure on Crystal Creek

Of course, the appropriation system is much more complicated than this. Some priorities on major stream systems in Colorado date back to the 1850's, and most of the stream systems have been over-appropriated, meaning that at some or all times of the year, a call for water by a senior appropriator is not being satisfied since the 1890's. The example above does, however, describe the basic theory behind the system.

How does this affect you? Practically speaking, it means that in most river drainages, a person cannot obtain an underground water right or non-exempt well without a plan for augmentation that replaces the depletions associated with that diversion. Surface water appropriations may still be allowed if they can be physically shut off when a senior water right is calling for water. Domestic surface water rights (ditches or pipelines), that do not have augmentation or sources of water replacement, are discouraged in over-appropriated basins. To do so would place the rights of existing water users on a stream system in competition with new housing developments that need a reliable source of water to meet their daily household needs. For the most part, only small residential and livestock wells are exempt from water rights administration that meet strict criteria set forth by the legislature and are allowed to be drilled without providing for protection to senior water rights.

## How Do I Obtain a Water Right?

In Colorado, the process for obtaining a water right is complex, oftentimes requiring a water lawyer and/or water resource engineer to assist in the process. This guideline is provided to give you a general idea of the process. It is not intended to replace professional legal or engineering advice. In most cases, it is recommended that you seek the assistance of an attorney.

In order to initiate an appropriation in Colorado, the user must first show an intent to divert water, put the water to beneficial use, and demonstrate the intent to divert in an open, physical manner. The physical act must be sufficient to put other parties on notice. Oftentimes, field surveys, posting at the diversion point, or filing for a well permit application can be considered sufficient physical notice of the intent to appropriate.

After this has been accomplished, it is advised to file a water right application with the water court in the river basin in which the diversion or proposed diversion exists to verify your place in line within the priority system. Forms for water rights applications can be obtained from Bradford Publishing, located in Denver, from the specific water court, or from the website *http://www.courts.state.co.us*. The fees for filing applications or opposition in the court are:

## How Do I Obtain a Water Right? (cont.)

Application for surface water right .....$156.00
Application for ground water right .....$156.00
Application for change in water right .....$311.00
Application for approval of plan for augmentation.....$311.00
Protest to Referee's Ruling (if not already party) .....$70.00
Statement of Opposition .....$90.00

The water courts are District Courts that hear matters related solely to water. The Colorado Supreme Court appoints the water judges for each of these courts.

Water Rights Administration on East River

Upon filing your application with a court, it is then published in a monthly resume. Your application will also be noticed in local newspapers deemed proper for legal publication. Each court varies somewhat in the publication procedures and, in many instances, you will have to write your own legal notice and will be billed for any and all publication costs. You should contact the water court clerk prior to filing to obtain specific information as to publication procedures (see *Contact Information* on the back of this guide).

Once the application is filed and published in the newspapers and resume, parties who may have concerns regarding your application have two months to oppose the application and file a statement of opposition with the water court. For example, if your application is received by the water court any time between April 1 and April 30, the resume listing your application will be published during May and parties have until the last business day in June to oppose that application. For applications filed with the court in May, parties would have until the last business day in July to oppose your application, and so on.

The Division Engineer of the water division in which the court application was filed will review the application. The Division Engineer will have staff perform a field investigation to verify the claims made on the application. These investigations are routinely conducted by the local water commissioners who work under the direction of the Division Engineer. Upon completion of the investigation, the Division Engineer will submit a written consultation to the water court stating his or her recommendations on the application.

Assuming there is no opposition to your application, the matter usually goes before the water referee. The water referee is an employee of the court that rules on most of the cases prior to final review by a water judge. After the referee has reviewed your application, asked for further information and clarification from you, and received a consultation from the Division Engineer as to his or her recommendations on the application, the referee will issue what is known as a ruling. If any party disagrees with the decision, they may file a protest to the referee's ruling. If no protest is filed, the matter goes to the judge and he/she signs the ruling, making it a decree of the court.

If the matter is protested, the case may go before the water judge for trial unless the parties can reach agreement on any contested issues. If the case goes to trial, the judge will set the matter for hearing and decide whether or not the application should be granted. Should any party participating in the case be dissatisfied with the judge's ruling, they can then appeal directly to the Colorado Supreme Court. The total time required for this process varies anywhere from four months to two years, depending on the complexity of the case.

## Glossary of Terms

***Abandonment of water right:*** the termination of a water right in whole or in part, resulting from the intent of the owner to permanently discontinue its use. A conditional water right may also be terminated by failure on the part of the owner to develop it with reasonable diligence until absolute, or to make filings to the water court every six years showing due diligence has been made towards perfecting the water right.

***Absolute water right:*** a water right that has been put to a beneficial use. See definition for *conditional water right*.

***Acre-foot:*** the volume of water equivalent to covering one acre of land to a depth of one foot; equal to 43,560 cubic feet or 325,851 gallons.

***Adjudication:*** the judicial process through which the existence of a water right is confirmed by decree of the water court.

***Appropriation:*** the right to take a certain portion of the

## Glossary of Terms (continued)

waters of the state to be put to beneficial use. The specific quantity and rate of flow may be confirmed by a water court decree.

***Aquifer:*** a formation, group of formations or part of a formation containing sufficient saturated permeable (able to pass through) material that could yield a sufficient quantity of water that may be extracted and put to beneficial use.

***Augmentation plan:*** a way for junior appropriators to obtain water supplies through terms and conditions approved by a water court that protects senior water rights from the depletions caused by the new diversions. It typically will involve storing junior water when in priority and releasing that water when a call comes on, purchasing stored water to release when a river call comes on, or purchasing senior irrigation water rights and changing the use of those rights to offset the new users' injury to the stream. (Note: These plans can be very complex and it is suggested that an engineering consultant be hired to allow for proper consideration of all hydrologic and water rights factors.)

***Augmentation water:*** water that is added, left, or replaced in a stream system to offset out-of-priority diversions.

***Beneficial use:*** the use of a reasonable amount of water necessary to accomplish the purpose of the appropriation without waste. Some common types of beneficial use are: domestic, household use, irrigation, municipal, wildlife, recreation, and mining.

Arch Ditch Diversion Structure

***Call:*** a request by a water right appropriator that more junior water rights on the same drainage system curtail their diversions of water to the extent necessary, such that sufficient water is made available to satisfy the senior water right placing the call. Such calls are administered by the Division Engineer and staff for the division in which the call was placed.

***Change of water right:*** any change in any way that a water right is used. It can be changed in type, place or time of use, point of diversion, adding points of diversion, etc. It is not considered a change in use if a farmer changes the type of crop grown or the type of irrigation method. Changes of water rights must be approved by the water court to assure that no injury occurs to other water rights.

***Conditional water right:*** a water right obtained through the water court where the water has not been placed to a beneficial use. It gives the holder of that right time to complete a project as long as they diligently pursue completion of the project. Every six years, the court reviews what progress has been made toward completion of the project. Once the right has been placed to beneficial use, the holder of the conditional right must then ask the court to make it an absolute water right. See definition for *Absolute water right*.

***Consumptive use:*** the amount of water that is lost to the stream system, for example, through crop consumption or evaporation, when applying water to beneficial uses.

***Cubic feet per second:*** a rate of flow of water passing a given point each second of time, amounting to one cubic foot. This is equal to 7.48 gallons per second, 448.8 gallons per minute or approximately two acre-feet per day.

***Decree:*** an official document issued by the water court including, but not limited to, the priority date, amount, use, and location of the water right.

***Depletion:*** the withdrawal of water from a surface or ground water stream or basin at a rate greater than the rate of replenishment. Depletion is determined for a system by subtracting system outflows from system inflows.

***Designated ground water:*** ground water that, in its natural course, is not available to or required for the fulfillment of decreed surface rights, or ground water in areas not adjacent to a continuously flowing natural stream, wherein ground water withdrawals have constituted the principal water usage for at least 15 years preceding the date of the first hearing on the proposed designation of the basin, and which is within the geographic boundaries of a designated ground water basin.

***Designated ground water basins or "designated basins":*** those areas of the state established by the Ground Water Commission in accordance with Section 37-90-106, CRS. The designated basins are located in the Front Range and in eastern Colorado. There are currently eight designated basins (see section of this guide titled, *"How do I Obtain a Water Well Permit Within a Designated Basin?"* for more information).

***Diversion:*** to divert and control water from its natural course by means of a structure.

***Division Engineer:*** the State Engineer's principal water official in each of the seven water divisions (also see glossary terms, *State Engineer* and *Water divisions*).

***Exempt uses:*** any recognized uses that are not subject to administration under the priority system. For further information, see Sections 37-92-602 and 37-90-105, CRS.

***Exempt well:*** a well allowed to be used for exempt uses. For further information, see Sections 37-92-602 and 37-90-105, CRS.

## Glossary of Terms (continued)

***Ground water:*** any water not visible on the surface of the ground under natural conditions.

***Ground Water Commission:*** a twelve-member body created by the Legislature, nine of which are appointed by the Governor to carry out and enforce the state statutes, rules and regulations, decisions, orders and policies of the Commission, dealing with designated ground water (see section of this guide titled, *"How Do I Obtain a Water Well Permit Within a Designated Basin?"* for more information).

***Ground water management district:*** any district organized under Section 37-90-118 to 37-90-135, CRS, for the purpose of consulting with the Ground Water Commission on all designated ground water matters within a particular district. There are currently 13 districts (see section of this guide titled, *"How Do I Obtain a Water Well Permit Within a Designated Basin?"* for more information).

***Irrigation year:*** the irrigation year for the purposes of recording annual diversions of water for irrigation in Colorado begins November 1 and ends on October 31 of each year.

***Junior water right:*** a relative term describing a water right with a priority less than that of a "senior right" from a common source of water.

***Native waters:*** surface and underground waters naturally occurring in a watershed.

***Non-consumptive:*** uses that do not reduce the quantity of water available to the stream system.

***Non-exempt uses:*** any recognized beneficial uses of water that are administered under the priority system. For further information, see Sections 37-90-137 and 37-90-107, CRS.

***Non-exempt well:*** a well allowed to be used for non-exempt uses.

***Non-native waters:*** waters imported or not originally hydrologically connected to a watershed or drainage basin physically or by statute; non-tributary ground water and transmountain water are non-native.

***Nontributary ground water:*** ground water located outside the boundaries of any designated ground water basin, where the withdrawal of this ground water by a well will <u>not</u>, within 100 years, deplete the flow of a natural stream at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal.

***Not Nontributary ground water:*** ground water located within those portions of the Dawson, Denver, Arapahoe, and Laramie-Fox Hills aquifers that are outside of any designated ground water basin in existence on January 1, 1985, the withdrawal of which will, within 100 years, deplete the flow of a natural stream at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal.

***Over-appropriated:*** a water rights term used to describe a surface water drainage system that has more decreed water rights claims on the system than can be satisfied by the physical supply of water available.

***Potability:*** a reference to water that does not contain pollution, contamination, or infective agents, and is considered to be safe for human consumption.

***Priority:*** the right of a senior water rights holder to divert water before a junior water rights holder from a common source. Priority is based on both the appropriation date and adjudication date of a water right, as confirmed by the water court.

***Recharge area:*** reservoirs and ditches that are designed to replenish groundwater depletions, due to out-of-priority diversions, by artificially introducing water into the ground water aquifer.

***Resume:*** a monthly publication by the water court of a summary of water rights applications filed in the water court that month.

***River basin:*** the land area and water catchment surrounding a river from its headwaters to its mouth.

***River call:*** usually a written document filed with the Division Engineer stating that, as of a certain date and time, a water right holder is not receiving all of the water they are entitled to by decree, and are requesting that the Division Engineer shut down all upstream water rights junior to them until their senior right is satisfied.

***Senior water right:*** a relative term describing a water right with a priority greater than that of a "junior right" from a common source of water.

***State Engineer:*** the Governor-appointed chief state water official in charge of administering the waters of the state.

***Structure:*** any apparatus constructed to divert water, such as a headgate, pipe, or well.

***Transmountain diversions:*** water that is diverted from one watershed to another across the Continental Divide.

**Standard Water Use Rates**

- Each ordinary household use: 0.3 acre-foot per year
- Use for four large domestic animals: 0.05 acre-foot per year
- Use for each 1,000 square feet of lawn irrigation: 0.05 acre-foot per year

**Water Conversions**

- 1 cfs (cubic feet per second): 646,560 gallons per day (gpd); 449 gallons per minute (gpm)
  Per 24 hours: 1.983 acre-feet (AF)
- 1 acre-foot: 325,851 gallons
- 1 cubic foot: 7.48 gallons

## Glossary of Terms (continued)

***Tributary water:*** water that is hydrologically connected to a natural stream system either by surface or underground flows.

***User supplied data:*** data or records of water uses provided by an owner/user that has not been verified by state officials.

***Water commissioner:*** state water official, appointed by the State Engineer and working under the direction of the Division Engineers, who performs the day-to-day administration of surface and ground water in each water district (also see glossary terms, *Division Engineer, State Engineer, Water districts, Water divisions*).

***Water Court:*** a district court that hears matters related to water. To obtain a judicially recognized water right, change a water right or obtain an augmentation plan, requesting persons or entities file applications with one of these courts and the court will issue a decree or order.

***Water districts:*** eighty geographical divisions of the state that were originally used for the granting of water rights. The districts are now largely used for administrative purposes.

***Water divisions:*** the seven geographical areas of the state of Colorado corresponding to the major natural surface water drainages. The seven divisions are: Division 1-South Platte River Basin; Division 2-Arkansas River Basin; Division 3-Rio Grande River Basin; Division 4-Gunnison River Basin; Division 5-Colorado River Basin; Division 6-Yampa/White River Basins; Division 7-San Juan/Dolores River Basins.

***Water right:*** a property right that is either conditional or absolute and conveys the right to use a particular amount of water, with a specified priority date as confirmed by the water court, or by the Ground Water Commission if within the designated ground water basins (also see glossary terms, *Absolute water right* and *Conditional water right*).

***Well:*** any structure or device used for the purpose, or with the effect, of obtaining ground water for beneficial use from an aquifer. Additionally, any test hole or other excavation that is drilled, cored, bored, washed, fractured, driven, dug, jetted, or otherwise constructed, when the intended use of such excavation is for the location, monitoring, dewatering, observation, diversion, artificial recharge, or acquisition of ground water, or for conducting pumping equipment or aquifer tests.

## Contact Information

**Colorado Division of Water Resources, 1313 Sherman Street, Suite 818, Denver, CO 80203**

**Website:** http://www.water.state.co.us
**Denver Office:**

| | | |
|---|---|---|
| **Main Number:** | 303-866-3581 | **Fax:** 303-866-3589 (24 hours a day) |
| Ground Water Information: | 303-866-3587 | Public hours: 9:00 a.m. – 4:00 p.m. |
| Records Section: | 303-866-3447 | Public hours: 9:00 a.m. – 4:00 p.m. |
| | | **Fax**: 303-866-2223 (24 hours a day) |

| Water Division | Location | River Basin | Division Office Phone # | Water Court Phone # |
|---|---|---|---|---|
| 1 | Greeley | South Platte | 970-352-8712 | 970-351-7300 ext. 5402 |
| 2 | Pueblo | Arkansas | 719-542-3368 | 719-583-7048 |
| 3 | Alamosa | Rio Grande | 719-589-6683 | 719-589-4996 |
| 4 | Montrose | Gunnison | 970-249-6622 | 970-252-4335 |
| 5 | Glenwood | Colorado | 970-945-5665 | 970-945-8109 or 5075 |
| 6 | Steamboat | Yampa/White* | 970-879-0272 | 970-879-5020 |
| 7 | Durango | San Juan / Dolores | 970-247-1845 | 970-247-2304 ext. 115 |

** The White River Basin is located in Division 6, but water rights are decreed by the Division 5 Water Court*

Colorado State Capitol Building, Denver

**Note:** This document is provided as a public service and describes the process for obtaining a water right in broad, general parameters. It is not intended to substitute as legal advice. You should consult an attorney and/or engineer prior to initiating the actions described in this guide.

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