

## Beginner's Guide to Well Permits August 2024

# **Getting Started**

## Online Form Submittal

Please see the Division of Water Resources <u>Form Submittal</u> document for information on how to submit forms to our office, payment options, and the fee schedule.

The individual signing the application or typing/entering their name (and title if applicable) must be the applicant, an officer of the corporation/company/agency identified as the applicant, or their attorney. An authorized agent may also sign or type/enter their name on the application if a letter signed by the applicant or their attorney is submitted with the application authorizing that agent to sign or enter their name on the applicant's behalf.

Once your application is submitted, every effort will be made by the evaluator to review your application as quickly as possible; however, please be aware that evaluation may take up to 49 days. If additional information is required, the evaluator will contact you. You may help expedite the process by fully completing forms before submitting them and attaching all required documents. Please call 303-866-3581 or submit a detailed online request through <u>AskDWR</u> if you have any questions concerning the forms or the application process. If any forms do not have a fillable version available, these forms may also be submitted by email; however those forms must be filled out completely (print and complete or use the text tool in Adobe to complete), scan and/or save the completed document, and attach it to an email message as a PDF document.

## Purchasing Property with a Well or Surface Water Rights

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.

<u>Individual on-lot wells</u> - 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? What is the well permit number? What are the allowed uses? Does the well have any water quality issues? Does the well produce enough water to meet the allowed uses of the well? If the property will require a well permit, find out what permitted uses may be possible for that particular property.

If the well is used for residential or livestock purposes and was put to use prior to May 8, 1972, it might not have a well permit. Any production well that was constructed on or after May 8, 1972 should have a permit file with useful information about the well, including the permitted uses of groundwater from the well. The Division of Water Resources maintains all well permit files. To find the appropriate file, try to obtain the well permit number, or at a minimum, the section, township, and range of the well location and the name of the party that may have obtained the well permit. Next, to obtain copies of files, use the <u>Well Permit</u> <u>Search Tool</u>. If you are unable to locate your permit number using the Well Permit Search Tool you can contact our office through <u>AskDWR</u> for assistance.

The well must have been constructed prior to the expiration date of the well permit and a well construction report received and approved by our office. In some cases, a pump installation report must also be received by our office. Confirm that the well permit is valid and all required documentation has been submitted.

<u>Well pumping rates</u> - 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 <u>here</u>. 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, water stored within the well itself, and controlled pumping systems. A rule of thumb is to allow 75 gallons per person per day for in-house uses. 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.

<u>Well water quality, public health and safety</u> - 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 <u>Drinking water consumer information and data</u> | <u>Department of Public Health and Environment</u>. 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.

<u>Well construction</u> - 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. 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.

<u>Well ownership transfer</u> - Each time the ownership or mailing address of an unexpired permitted well changes, a "Change of Owner Name/Contact Information" form must be submitted to this office, pursuant to section 37-90-143, C.R.S. No fee is required. Filing a Change of Owner Name/Contact Information form is for contact information purposes only. <u>This action does not convey real property.</u> The Change of Owner Name/Contact Information form is an online form, and it can be accessed using the <u>eForm dashboard</u>. Please note, if a name change is being filed by a title company in connection with a real estate transaction, the title company must use the form named "Title Companies - Change of Owner Name/Contact Information". The title company form is also available on the <u>eForm dashboard</u>.

<u>Central Water Supply Systems</u> - If purchasing property that is served by a 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 or the Department of Local Affairs.

<u>Other water rights</u> - In addition to an individual on-lot residential well or central water supply system, the property might have water rights associated with it. Please see the <u>Beginner's Guide to Water Rights</u> for more information. 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 or a special water rights deed regarding water rights. If there is a court decree involved, obtain a copy of the decree. 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.

# Exempt and Small Capacity Well Permits

"Exempt" wells are those wells authorized by statute to operate outside of Colorado's water right priority system. Exempt wells can only supply certain limited uses, including residential, irrigation of home lawn and gardens, the watering of domestic animals/livestock, and drinking and sanitary purposes inside a commercial business. Exempt wells may be issued in areas outside of Designated Ground Water Basins.

Within Designated Ground Water Basins, wells with uses similar to those described above for exempt wells are referred to as "small capacity" wells. The differences between exempt and small capacity wells are generally due to different statutory language that provides for the issuance of these permits.

## Residential or Household Use

#### Household Use Only

Some parcels of land in the state can obtain a limited supply of water from a well for use inside their residential dwelling only.

These types of well permits are issued for ordinary household uses inside one single-family dwelling and do not allow for outside water use or livestock watering. Generally, individuals may obtain this type of permit if they own a parcel of land that was created prior to June 1, 1972, or the parcel was created by an exemption from the subdivision laws by the local county planning authority. In most cases, there can only be one exempt well on the parcel. The in-house use only limitation may apply if you are constructing a new well, and the parcel of land is less than 35 acres and is not included in a court approved plan for augmentation.

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 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 for residential use pursuant to sections 37-92-602 or 37-90-105, C.R.S:

- 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. 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.

If a lot is 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 (see the section in this guide titled "<u>Non-Exempt Well Permits</u>"). Any uses beyond those allowed by the plan for augmentation would have to be added to the existing augmentation plan, if possible, through a water court process, or alternatively, in a new augmentation plan approved by the water court.

#### **Domestic Use**

Some parcels of land in the state may obtain a limited supply of water for residential dwellings and some lawn/garden irrigation and watering of domestic animals/livestock. Depending on which provisions the well permit is issued under, the well may be able to serve up to three single-family dwellings, irrigate one acre or less of home lawn and garden, and provide water for the individual's domestic animals and livestock.

These uses may be available if:

- 1. The parcel of land where the well will be located is 35 acres or larger and is not included in a court approved plan for augmentation, and
- 2. The well will be the only exempt well on a 35 acre or more portion of the parcel.
- 3. Or, if the proposed well will be located within the boundaries of a Designated Ground Water Basin (there are 8 of these located on the eastern plains of Colorado) or the Denver Basin (the Denver Basin corridor extends along the front range from just north of Colorado Springs to Greeley and east to Limon).
- 4. Or, if the proposed well will <u>not</u> be located in an over-appropriated stream system drainage (Note most stream systems in Colorado are over-appropriated. Only a few limited areas located on the western slope are not considered over-appropriated at this time).

A well permit allowing for use inside a residential dwelling and for purposes outside the home may also be available if the proposed well will be located in an area included in a water court approved plan for augmentation that provides for outside uses of water; however, wells operated pursuant to an augmentation plan are non-exempt. See the section in this guide titled "<u>Non-Exempt Well Permits</u>" for additional information.

The availability of any well permit and allowed uses are subject to review and evaluation of an application by this office in accordance with applicable statutes, rules, and regulations. No guarantee is given that any permit can be issued until review by this office is complete.

Form GWS-44 may be used to apply for residential uses.

## Registering an Existing Residential Well

For all residential real estate transactions conducted on or after January 1, 2009, involving an existing well not yet registered with the Colorado Division of Water Resources, the buyer shall complete a registration of

existing well form for the well. While the statute ultimately requires the buyer to complete and submit the application, supporting documentation, and filing fee, the statute does not prevent the seller from doing so. Within 60 days of closing, all applicable forms(s) and supporting documentation and fees necessary for evaluation must be submitted to the Colorado Division of Water Resources.

#### Wells constructed and put to use prior to May 8, 1972

An application for *Registration of Existing Well* (form GWS-12) may be submitted for residential and livestock wells constructed and put to use prior to May 8, 1972, which have continued to be used for those same historical purposes established prior to May 8, 1972. In some limited circumstances, a field inspection may be conducted by the Division of Water Resources to verify the claims made by the applicant.

#### Wells constructed and put to use, or whose use changed or expanded after May 8, 1972

An application to permit an existing well (form GWS-44) may be submitted for residential and livestock wells constructed on or after May 8, 1972, or for those wells where the use has changed or was expanded on or after May 8, 1972. Applications for wells constructed on or after May 8, 1972 must be accompanied by a completed Post-Construction Well Inspection Report (GWS-68) or a well construction report signed by a licensed water well contractor.

## **Commercial Well Permits**

Outside of Designated Basins, it may be possible to obtain a "commercial-exempt" well permit for limited commercial use (drinking and sanitary facilities only). Please use forms GWS-45 and GWS-57 to apply for this type of well permit. Refer to "*Policy of April 9, 1985 Concerning the Evaluation of Well Permit Applications for Exempt Commercial Uses*" for more information. Policies are available from the <u>Well Permitting</u> page of the DWR website, under "Important Documents - Guidance Documents". This type of well permit may be 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 generally limited to the pumping of one-third of an acre-foot (108,600 gallons) of water per year.

If the commercial well was put to use prior to May 8, 1972, and the well has continued to be used for those same historical purposes, it may be possible to register the well for its historical use for indoor drinking and sanitary purposes. Use forms GWS-12 and GWS-57 to apply for this type of well permit. Refer to "Policy 90-1: Recording and Permitting of Existing Commercial Wells Pursuant to Subsection 37-90-602(5), C.R.S., outside of Designated Basins" for more information. Policies are available from the Well Permitting page of the DWR website, under "Important Documents - Guidance Documents". The use of the well is limited to a commercial business, like a convenience store, and is generally limited to the pumping of one acre-foot (approximately 325,900 gallons) of water per year.

The uses of water are restricted to drinking and sanitation facilities inside a business. Outside water uses are not allowed. Well metering devices are required.

Examples of commercial uses that would <u>not</u> qualify under this provision are brewing beer for sale, horse-boarding operations, and any commercial business with outside uses. These uses are non-exempt and a well permit would generally not be available in over-appropriated areas of the state without an augmentation plan. Use both Forms GWS-45 and GWS-57 to apply for this type of well permit.

Within a Designated Basin, please use forms GWS-45, GWS-58 <u>AND</u> GWS-61. All three forms must be submitted to process a small capacity commercial well application within the Designated Basins. Please refer to the Rules for Small Capacity Well Permits in Designated Ground Water Basins and Policy 94-4: "Small Capacity Commercial Wells for Confined Animal Feeding Operations, Designated Ground Water Basins" for more information. Policies and Rules are available from the <u>Designated Basins</u> page of the DWR website.

For Non-Exempt or Large Capacity Commercial Wells please use form GWS-45 and provide supporting documentation for the proposed acre-foot amount. Outside of the Designated Basins, Form GWS-57 may be used as a template. These types of wells may require an augmentation plan. Please refer to the below section regarding augmentation plans, including the referenced Beginner's Guide to Augmentation Plans for Wells. Within a Designated Basin, Form GWS-61 may be used as a template. These types of wells may require a replacement plan pursuant to 37-90-107(5), C.R.S., and Designated Basin Rule 5.6. See the section on non-exempt and large capacity wells below for additional information.

# Non-Exempt and Large Capacity Well Permits

Non-exempt wells and large capacity wells are similar but they are different types of well permits issued pursuant to different statutes that apply outside and inside of Designated Ground Water Basins, respectively.

## Irrigation, Municipal, Industrial and other Large Capacity (Non-Exempt) Wells

Large capacity (non-exempt) well usage includes but is not limited to: center-pivot crop irrigation systems, commercial business operations with inside and outside uses, distribution systems providing drinking water to residential subdivisions and municipalities, or water used in the manufacturing of a product. Use Form GWS-45 in applying for this type of permit.

In over-appropriated areas of the state, new, tributary, non-exempt wells must replace any out-of-priority stream depletions in time, place, amount, and quality. 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. Inside Designated Basins, these types of wells may require a replacement plan pursuant to section 37-90-107(5), C.R.S., and Designated Basin Rule 5.6.

In some cases, there may be a 600 foot spacing requirement. See the section titled "<u>Six Hundred Foot</u> <u>Spacing</u>" in this guide for more information.

## Non-Exempt Residential Wells

Non-exempt residential wells are used to serve residential properties that do not qualify for an exempt well permit, such as lots in a subdivision created after June 1, 1972, or to supply water for uses that would not be allowed under an exempt well permit, such as the filling of a hot tub. If a lot was part of a subdivision created after June 1, 1972, for most areas of the state, the allowed use of the well will be governed by a subdivision-wide 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 augmentation plan approved by the water court. If you are interested in expanding the use of a household-use only well to provide water for lawn and garden uses or the watering of

domestic animals, or using wells to serve a subdivision or another project, you should be aware that in most areas of Colorado you may be unable to get a well permit for these uses without first obtaining a plan for augmentation through the water court. See the section below and the referenced Beginner's Guide to Augmentation Plans for Wells for a brief introduction to augmentation plans.

## Augmentation Plans

Outside of the Designated Basins, an augmentation plan is a water 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 explained in the <u>Beginner's Guide to Augmentation Plans for Wells</u>. As someone contemplating providing water for a new project from a tributary source, 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. In limited areas of the state it may be possible to join an existing augmentation plan; otherwise, it will be necessary to develop your own and have it approved in Water Court.

A court adjudicated augmentation plan is also required to obtain a non-exempt well permit to withdraw not nontributary Denver Basin groundwater outside of the Designated Basins. See section 37-90-137(9)(c.5), C.R.S.

#### **Replacement Plans**

Within the Designated Basins, on Colorado's Eastern Plains, water rights are established by the Colorado Ground Water Commission, rather than the water court. In overappropriated areas of the Designated Basins, replacement plans are similar to augmentation plans, in that they allow new junior wells to pump without injury. Evaluations of Replacement Plans are described in Rule 5.6 of the Designated Basins Rules (found on our website under Well Permitting / Designated Basins).

A Commission-approved replacement plan is also required to obtain a Large Capacity well permit to withdraw not-nontributary groundwater from the Dawson Aquifer, or not-nontributary groundwater from the Denver, Arapahoe, or Laramie-Fox Hills aquifers originating from beneath overlying land located closer than one mile from the contact with the alluvium. Such replacement plan shall provide for the depletion of alluvial water for the first 100 years due to all previous pumping, and if pumping continues beyond 100 years shall replace actual impact until pumping ceases, assuming water table conditions in the bedrock aquifer. See Rule 5.3.6.2.C of the Designated Basin Rules.

## Six Hundred Foot Spacing

Outside of the Designated Basins, new non-exempt wells must be located more than 600 feet from any other production well not owned by the applicant and completed into the same source, 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, or waivers are obtained. 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, pursuant to section 37-90-137(2)(b)(II)(C), C.R.S.

If the 600-foot spacing requirement applies to a 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, the applicant should notify the Division of Water Resources in writing. 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 will be notified of the hearing date and **must** attend and be a party to the action. The applicant must come to the hearing prepared to present testimony and evidence that their well will not cause material injury to existing wells within 600 feet. Any parties opposing issuance of the well permit must also be prepared to present testimony and evidence that their well will be injured by the proposed well. All **parties should consider obtaining legal** counsel to represent them through the hearing process.

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, then no hearing by the State Engineer shall be required upon entry of a decree, provided the applicant has provided evidence 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.

The Designated Basin Rules impose a  $\frac{1}{2}$  mile spacing requirement for new appropriations from aquifers subject to Rule 5.2 (aquifers for which the rights are appropriation based), and a 600 foot spacing requirement for wells in aquifers subject to Rule 5.3 (the Denver Basin aquifers) and Rule 5.4 (other aquifers for which the rights are allocation based), unless: 1) a Waiver of Claim of Injury is obtained; or 2) the Commission finds after a hearing that circumstances allow a permit to be issued; or 3) the proposed well will serve an individual residential site and the proposed pumping rate will not exceed fifty gallons per minute.

## Geothermal Wells and Geoexchange Systems

A "geothermal well" is constructed for the purpose of geothermal exploration, use of a geothermal resource, or reinjection of a geothermal fluid. The term "geothermal well" includes loop fields in geoexchange systems. Different types of geothermal wells have different permitting or certified installer requirements. Find out more in the <u>Beginners Guide to Geothermal Wells and Geoexchange Systems</u>.

### Oil and Gas Wells that Produce Groundwater

All coalbed methane wells, tributary and nontributary, require a well permit. All oil & gas wells, both coalbed methane and not, that produce groundwater that is tributary to an over-appropriated stream are subject to administration by the State Engineer. Whether an oil & gas well requires a well permit or an augmentation plan depends on whether the system is over-appropriated and whether the water is put to use beyond the original withdrawal of the water.

Except for coal bed methane wells, no well permit is required if the nontributary groundwater being removed to facilitate or permit the mining of minerals will be used only by operators within the geologic basin where the groundwater is removed to facilitate or permit the mining of minerals, including: injection into a properly permitted disposal well; evaporation or percolation in a properly permitted pit; disposal at a properly permitted commercial facility; road-spreading or reuse for enhanced recovery, drilling, well stimulation, well maintenance, pressure control, pump operations, dust control on-site or off-site, pipeline and equipment testing, equipment washing, or fire suppression; discharge into state waters in accordance with the "Colorado Water Quality Control Act", article 8 of title 25, C.R.S., and the rules promulgated under that act; or evaporation at a properly permitted centralized exploration and production waste management facility.

All groundwater in the state is presumed to be tributary unless shown to be nontributary. For additional information, see <u>Revised Memorandum: Submittals to the Division of Water Resources for approval of substitute water supply plans and well permits for oil and gas wells that produce ground water while producing oil or gas.</u>

## Gravel Pit Well Permit Applications

If a gravel pit exposes groundwater to the atmosphere after December 31, 1980, a well permit must be obtained. Use the Gravel Pit Well Permit Application (form GWS-27) to apply for a well permit for a gravel pit. Often, a gravel pit will also be required to file a Substitute Water Supply Plan. For details, please see "General Guidelines for Substitute Water Supply Plans for Sand and Gravel Pits". Gravel pits located within a Designated Basin require a Replacement Plan, rather than a Substitute Water Supply Plan.

A report showing all active Sand and Gravel Pit SWSPs approved pursuant to 37-90-137(11) is available through the <u>Colorado Information Marketplace</u>.

# Other Permit Types

## Monitoring, Observation, Dewatering, Testing, or Recovery Well

#### Notice of Intent

In accordance with Rule 6.3 of the Water Well Construction Rules (2 CCR 402-2) (Rules) and the requirement of the State Engineer, Notice of Intent (Notice or NOI) must be provided to the Division of Water Resources before constructing any test hole that penetrates a confining layer, any monitoring and observation hole, or any dewatering well. Rule 6.3 requires Notice to be provided no less than 72 hours prior to construction - see Rule 6.3 for additional details. Notice is to be provided using the <u>Notice of Intent to Construct</u> <u>Monitoring Holes or Dewatering Wells (also Test Holes Penetrating Through a Confining Layer) eForm.</u>

A separate Notice must be provided for each PLSS Section in which a monitoring hole or dewatering well (or test hole that penetrates a confining layer) will be constructed. More than one monitoring hole or dewatering well (or test hole that penetrates a confining layer) can be constructed in the same Section; however, the number of holes/wells that are constructed, must not exceed the number of holes/wells that are indicated on the Notice. Additionally, drillers must not construct holes/wells deeper than proposed on the Notice. Multiple Notices may be filed for projects that require the installation of holes/wells over more than one 90-day period.

#### Test Hole

Pursuant to section 37-91-102(15.7), C.R.S., a test hole is a ground penetration for the purpose of geotechnical, geophysical, or geologic investigation or collecting soil or rock samples. Test holes that penetrate through a confining layer must submit proper Notice of Intent (Notice or NOI) before construction and may only be constructed by a licensed contractor. Test holes must not remain open longer than (20) twenty days, and must be plugged, sealed, and abandoned upon completion of the intended purposes of the test hole in accordance with the Water Well Construction Rules (2 CCR 402-2). An <u>Abandonment Report</u> must be submitted within sixty (60) days after abandoning any test hole that penetrates through a confining layer. Use the <u>NOI eForm</u> when providing Notice of Intent to construct this type of structure.

Any borehole constructed or used for environmental groundwater investigations, or repeated groundwater observations, measurements, or samplings, is a monitoring and observation hole or well, not a test hole, and may only be constructed under a Notice or well permit.

#### Monitoring and Observation Hole (Temporary)

Pursuant to Rule 5.2.30 of the Water Well Construction Rules (2 CCR 402-2) (Rules) and the requirements of the State Engineer, monitoring and observation holes are temporary holes constructed after proper Notice of Intent (Notice or NOI) and in accordance with the Rules' standards for construction. Use the <u>NOI eForm</u> when providing Notice of Intent to construct this type of structure. A Well Construction and Yield Estimate Report (Form GWS-31) referencing the acknowledged monitoring hole notice number must be submitted within sixty (60) days after constructing the hole.

A monitoring and observation hole must either be abandoned in accordance with the rules within eighteen (18) months of construction, or a well permit must be obtained. A monitoring and observation hole can only

be converted (by obtaining a well permit) to a monitoring well, a recovery well, or a dewatering system. Rule 9.6 of the Water Well Construction Rules prohibits the conversion of monitoring and observation holes to any type of production well other than a recovery well or dewatering system. If abandoned, a <u>Well</u> <u>Abandonment Report</u> must be submitted within sixty days after abandoning the hole.

#### Monitoring and Observation Well (Permanent)

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 groundwater, or collection of water quality samples. A monitoring and observation well may be converted from an existing monitoring and observation hole.

Monitoring and observation well permits are issued pursuant to 37-92-602, C.R.S., and may be obtained by submitting a Monitoring and Observation Well Permit Application (Form GWS-46).

Monitoring and observation wells converted from monitoring and observation holes may only be permitted for the uses allowed for monitoring wells in section 37-92-602(1)(f), or 37-90-105(4)(a), C.R.S. or may be converted, by permit, to a recovery well or dewatering system.

Monitoring and observation wells must be constructed either in compliance with or with an approved variance to the Water Well Construction Rules (2 CCR 402-2) (Rules). A Well Construction and Yield Estimate Report (Form GWS-31) must be submitted within sixty (60) days of completing the well. When the well is abandoned, the abandonment must be performed in accordance with the Rules, including the submission of a <u>Well Abandonment Report</u> within sixty (60) days after abandoning the well.

In order to convert a monitoring and observation well to a production well, other than a recovery well or dewatering system, the following three conditions must be met: 1) The well must have been constructed subsequent to obtaining a valid monitoring and observation well permit; 2) the well was constructed by a licensed well construction contractor in accordance with the Rules applicable to the construction of a water well; and, 3) a permit to use groundwater is obtained (Rule 14.2.2).

To submit monitoring/observation well permit applications in large quantities as a batch, please request the "Memo and Instructions for Submitting Monitoring/Observation Applications in Batches" for further direction. Monitoring and observation wells, pursuant to section 37-91-102(10.5), C.R.S., are ground penetrations for the purpose of "locating such well, pumping equipment or aquifer testing, monitoring groundwater, or collection of water quality samples".

#### **Recovery Well**

Recovery well permits are issued pursuant to sections 37-90-137(2), or 37-90-107, C.R.S., for the purpose of removing contaminants from or otherwise remediating groundwater. Wells constructed on RCRA, CERCLA, CHWMA or other types of hazardous waste remediation sites must be permitted pursuant to the relevant statute.

Recovery wells located in the alluvial aquifer of stream systems where water is not available for appropriation may be issued in accordance with Policy 94-5 of the State Engineer, depending upon the circumstances of the well and associated treatment system.

Use the General Purpose Permit Application (Form GWS-45) to apply for a new recovery well, to change the use of an existing monitoring and observation well to a recovery well or to convert an existing monitoring and observation hole to a recovery well.

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 1/30th of an acre-foot (10,862 gallons) per year (see <u>Policy Memorandum 94-5</u> for more detailed information). Use Form GWS-45 in applying for this type of permit.

## Dewatering Wells and Dewatering Systems

#### Dewatering Well (Temporary)

As defined in section 37-91-102(4.5), C.R.S., a dewatering well is any excavation or other ground penetration for dewatering purposes exclusively related to construction projects. In accordance with Rule 6.3 of the Water Well Construction Rules (2 CCR 402-2) (Rules) and the requirement of the State Engineer, Notice must be provided to the Division of Water Resources before constructing any dewatering well. Use the online Notice form, <u>NOI eForm</u> when providing Notice to construct this type of structure.

Dewatering wells must be constructed within 90 days of the receipt of the Notice by the State Engineer's office. Multiple notices may be filed for projects that require the installation of wells over more than one 90-day period. Dewatering wells must be plugged and abandoned within eighteen (18) months of being constructed unless a permit is obtained to convert the dewatering well to a dewatering system. When a dewatering well is abandoned, the abandonment must be performed in accordance with the Rules, including the submission of a <u>Well Abandonment Report</u> within sixty (60) days after abandoning the dewatering well.

#### Dewatering System (Permanent)

A dewatering system is a permanent well, drain, sump or other excavation constructed for the purpose of keeping the water table below a desired level as stated in Rule 5.2.18 of the Water Well Construction Rules (2 CCR 402-2). A dewatering system permit may be obtained by submitting a General Purpose Water Well Permit Application (Form GWS-45). In situations where the operator is unable to return the water intercepted by the dewatering system to the nearest surface stream or to the aquifer without beneficial use (other than incidental losses associated with normal discharge), the operator may be required to obtain a substitute water supply plan or decreed augmentation plan before our office can issue a dewatering system well permit.

## Well Permit Management

## Extension of Permit Expiration Date

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:

Non-Exempt Wells and Large Capacity Wells (permits issued for one year; issued under sections 37-90-137, 37-90-107, or 37-90-107(7), C.R.S.):

- For permits issued under section 37-90-137, C.R.S., the Division of Water Resources must receive evidence that the well was constructed <u>and</u> pump installed prior to the expiration date of the permit. The permit expiration date can be extended one time for a maximum of one year, upon filing Form GWS-64, a showing of good cause, and the appropriate filing fee.
- For permits issued under section 37-90-107, C.R.S., 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 AskDWR.
- For permits issued under section 37-90-107(7), C.R.S., 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.

Exempt Wells and Small Capacity Wells (permits issued for two years; issued under sections 37-92-602 and 37-90-105, C.R.S.)

- The well must be drilled prior to the expiration date of the permit and evidence of well construction must be provided to the Division of Water Resources. The permit expiration date can be extended for additional one-year periods upon filing Form GWS-64 and a showing of good cause.
- 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.

Requests for extensions must be received in our office prior to the expiration date of the permit. 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. See State Engineer Guideline 2017-1 for additional information regarding reinstatement of exempt and small capacity permits.

## 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.

## Abandonment of Wells

If any type of water well is no longer being used, it needs to be properly plugged and a <u>Well Abandonment</u> <u>Report</u> must be filed. The Colorado Board of Examiners (BOE) of Water Well Construction and Pump Installation Contractors publishes a quarterly list of licensed well contractors throughout the state who can assist well owners in properly plugging a well. Please refer to the BOE Rules and Regulations (2 CCR 402-2) to be compliant.

# Introduction to Other Water Sources

## Precipitation

Pursuant to legislation passed in 2016 (HB16-1005), many Colorado residents are able to collect rainwater in up to two rain barrels with a combined storage capacity not to exceed 110 gallons for outdoor uses.

Residents with certain types of well permits may also be able to collect rainwater for the same uses allowed on their well permit, pursuant to legislation passed in 2009 (SB09-080). These residents may be able to have additional rain barrels. For additional information about rainwater collection in Colorado, please refer to the <u>Rainwater Collection Information Table</u>.

## Ponds

Ponds that expose groundwater are wells. For additional information about ponds, refer to the <u>Beginners</u> <u>Guide to Ponds</u>.

## Springs

Although the Colorado state statutes do not specifically define a spring, a hydrologic definition is "a discharge of groundwater on the surface in sufficient quantities so as to produce a current of flowing water." 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 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 must 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 groundwater, 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.

Most of the state's natural surface drainage systems are over-appropriated by senior vested water rights. In an over-appropriated drainage system, a new water right for a developed spring would be so junior that 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 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 AskDWR for more specific information regarding spring development.

## **Dividing Land**

## 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), C.R.S., 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, C.R.S., 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), C.R.S. A water supply report is required for all subdivision proposals. Section 30-28-133(3)(d), C.R.S., describes the basic requirements for water supply reports, while section 30-28-136, C.R.S. 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.

Pursuant to legislation passed in 2020 (Senate Bill 20-155), some wells may keep their presumption of non-injury after the parcel of land that the well is on has been divided into multiple parcels. In effect, this

bill exempts existing wells from the provisions of section 37-92-602(3)(b)(III) if they meet the following conditions:

- 1. The existing well was permitted pursuant to section 37-92-602(3)(b)(II)(A);
- 2. The well is only used on a single parcel of the divided land and remains the only exempt well serving that parcel;
- 3. With respect to the parcel of land the well still serves, the permit holder continues to follow the conditions of approval.

Because the existing well may only serve a single parcel of the divided land, and the provisions of section 37-92-602(3)(b)(III) would apply to the remaining parcels, the other parcels of divided land would not be able to share the presumption well or obtain their own exempt on-lot well and would have to obtain a different water supply such as a municipal water tap or a non-exempt permit.

## Wells and Dividing Land

This information pertains to the Colorado Division of Water Resources' actions regarding the division of land into parcels of less than 35 acres, either by an exemption from county subdivision regulations (section 30-28-101(10)(d), C.R.S.) or as a subdivision as defined in section 30-28-101(10)(a), C.R.S., where the water supply would be from individual on-lot wells. In most areas of the state, you would be unable to obtain a well permit to serve a new lot or lots created through a subdivision process without first obtaining an augmentation plan. Additional information and useful links can be found on the Land Divisions & Water Supply section of our website.

#### Responses Regarding Water Supply

Each year the Colorado Division of Water Resources (DWR) receives numerous requests from individuals for a letter regarding "proof of water" for their division of land. Generally, these requests are for confirmation that either well permits can be issued for the resulting lots or that the proposed water supply is adequate. Regrettably, DWR generally cannot grant these requests for the following reasons:

First, DWR cannot make verbal or written confirmation for any situation where a well permit may be issued. All well permits are issued pursuant to Colorado Revised Statutes and an application for a well permit must be submitted to DWR for a thorough review in accordance with all applicable statutes, rules, and policies. The issuance of any well permit cannot be guaranteed prior to a completed review of an application.

Secondly, DWR only responds to written requests from counties to review a proposed subdivision's water supply plan for adequacy of the water supply and the potential to cause material injury to vested water rights. DWR does not review the water supply plans of proposed subdivisions submitted by private individuals without a corresponding written request from a county. In addition, DWR does not necessarily respond to referrals regarding any other type of land use action such as lot line adjustments, zoning changes, special use of land, and division by exemption.

For more information regarding the Division of Water Resources' role in evaluating the water supply plan for new parcels of land and well permitting in those situations, see the "Updated Memorandum Regarding

Subdivisions" (March 2011) and "Policy 2011-1 Evaluation of Subdivisions and Subdivision Exemptions" or visit the page for additional information about Subdivision Water Supply Plans.

# **Designated Ground Water Basins**

Designated ground water is groundwater which, in its natural course, is not available to or required for the fulfillment of decreed surface rights, or groundwater in areas not adjacent to a continuously flowing natural stream.

The Colorado Ground Water Commission manages designated groundwater resources within the state of Colorado, and this water is not subject to the authority of water courts. Designated groundwater permitting is similar to other groundwater permitting, but there are also differences, including using the names "small capacity" and "large capacity" wells. Most applications for large capacity well permits require publication in the local newspaper. For additional information, reference the <u>Designated Basins</u> section of our website.