Residential groundwater pumping cannot drain to the sanitary sewer, it needs to be properly drained to the municipal storm sewer system or to your property, without impacting others.



## **Boulder Revised Code**

8-2-8 Discharging Water Prohibited

(a) No owner, lessee, or occupant of property shall cause or permit water to flow upon any sidewalk, street, alley, or other public right-ofway:

(1) So as to impair the use of such place;

- (2) When the weather is such that the water may be frozen into ice;
- (3) Where the drainage is such that it may create a hazard to persons or property; or
- (4) Where it may cause damage to any public property or facility.

(b) If the city manager finds that any person has caused or permitted water to flow upon any such public grounds in violation of this section, the

manager may require that such person correct the violation.

(c) The city manager shall notify such person of the duty to correct the violation and that such owner has a specified time to complete such correction, established by the manager according to the severity of the violation, the hazard to public health, safety, or welfare, and the time reasonably necessary to correct the violation. Notice under this subsection is sufficient if it is either personally delivered to such person or, if the person is the owner of property from which the water is discharged, deposited in first class mail addressed to the last known owner of such property in the records of the Boulder County Assessor.

(d) If any person so notified fails to correct the violation, the city manager may perform the work and charge the costs thereof to the person.

(e) If any person fails or refuses to pay when due any charge imposed under this section, the city manager may, in addition to taking other collection remedies, certify due and unpaid charges to the Boulder County Treasurer for collection as provided by section 2-2-12, "City Manager May Certify Taxes, Charges, and Assessments to County Treasurer for Collection," B.R.C. 1981.

## **Frequently Asked Questions**

### Did you know?

Discharging groundwater to the sanitary sewer can create big problems. It's expensive to treat wastewater and that extra groundwater going into the sanitary sewer uses electricity,

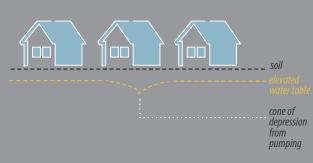
chemicals and plant capacity that increases costs for the city. More importantly, putting groundwater into the sanitary sewer uses up capacity that's needed for wastewater and can increase the risk of backups.

### Need a Permit?

City of Boulder Planning and Development Services (P&DS) is available to assist customers with the permitting process. Contact P&DS at plandevelop@bouldercolorado.gov or visit www.boulderplandevelop.net to determine if a city permit is required. You can also visit the P&DS Center at 1739 Broadway, third flood, during regular business hours.

### Can you lower the water table?

When a sump pump is used to remove groundwater, it creates what is known as a "cone of depression" or a funnel shaped area where the groundwater is lowered. However, unlike large scale irrigation pumping, residential sump pumps have minimal impacts on lowering the water table itself. In times of elevated groundwater, the volume is simply too much for sump pumps to make a difference in the groundwater table. The City of Boulder does not get its drinking water from groundwater aquifers and has no specific systems that monitor or manage groundwater levels.



## **Discharges & Code Enforcement**

The city regulates the discharge or diversion of water onto public property which may be subject to enforcement action. Drilling pipes through the sidewalk/curb or installing chase drains is prohibited. These tend to clog, freeze, crack the sidewalk and create trip hazards especially during winter when discharged water can freeze.

If you are experiencing stormwater ponding or runon issues, you may have the option to connect to the city's storm sewer system. For more information contact the city at plandevelop@bouldercolorado.gov. You can also report problems when you see water running onto sidewalks, streets or the right-of-way to 303-441-4237 or visit www.inquireboulder.com.

If you have a specific question as to whether your internal plumbing is properly connected or need to design a drainage system, you may need to contact a plumber or a professional engineer.

Discharging water onto sidewalks or in the rightof-way causes trips, slips and falls and can crack roads and walkways when it freezes!

# Discharging Groundwater

What you need to know to be safe, resilient and to protect your property.



### **CITY & HOME PREPAREDNESS**

Home preparedness means planning and taking action before events like flooding or ongoing issues associated with elevated groundwater happen. The following information is meant to help better explain what the city is doing to prepare for floods, related ordinances and requirements you should be aware of and what you should consider to best protect your property:

- CITY: The city is investing in repairing, improving and replacing sanitary sewer pipes to ensure the integrity of the system and to reduce the inflow and infiltration (I&I) of groundwater into the sanitary sewer which increases flows at the Water Resource Recovery Facility (WRRF). This can help reduce the potential for sewer back-ups and reduce flows (and treatment costs) to the citv's WRRF.
- HOME: Personal preparedness is key. Sump pumps installed in homes can help mitigate the impacts of rising groundwater which can cause substantial damage, even if you're not in a flood plain! If you have a sump pump, make sure it's working properly and that you have enough back-up power generation. If you don't have a sump pump and/or generator, you may want to consider if you should have one installed. Other home preparedness techniques can include:
  - Place water heaters and furnaces on risers and remove valuable items from basements
  - Have a professional inspect your sewer lateral; replace or line your lateral as needed
  - Make sure downspouts drain at least 5 feet away from the house foundation
  - Clean gutters regularly to ensure proper drainage away from your foundation
  - Check the condition of your roof every 2-4 years and repair as needed
  - Alter landscaping so water drains from the house but not into the right of way

### **ILLICIT SANITARY CONNECTIONS**

Boulder Revised Code does not allow for the connection of sump pumps to the sanitary sewer. Especially, during times of flooding or high groundwater excess groundwater entering the water resources recovery facility can compromise the city's ability to treat waste. Any sump pump that is discharging to the sanitary sewer must be connected and then discharged appropriately to land or the municipal separate storm sewer system.

### **GROUNDWATER & INFILTRATION**

The soil underground contains and conveys water (called groundwater) and the depth at which soil is saturated with groundwater is called the water table. Flooding saturates soils, water tables rise and homes can be impacted. During this event, Boulder received so much rain that the water table was above ground for many days, which impacted surface flooding as well as the storm and sanitary sewer systems.

RM SEWER = LEADS TO CREEKS

The City of Boulder does not get it's drinking water from groundwater aquifers and has no specific systems that monitor or manage groundwater levels. State and federal agencies do monitor groundwater to administer water rights, regulate wells, and track environmental cleanup sites, but do not have data that would predict when groundwater levels will return to pre-flood levels. Levels will likely remain elevated for several months, particularly as future rain events and spring runoff add more moisture to the soil.



### **PROPERLY DISCHARGING GROUNDWATER**

Groundwater can be discharged to land or to the city's storm sewer. Discharges to the storm sewer lead directly to creeks with out being treated. Any water being discharged to storm must be free from contaminants and pollutants and cannot impact city right-of-way on its way to the storm sewer.

> DISCHARGE TO LAND: -----Groundwater can be discharged to land so long as it stays on your property and does not negatively impact neighbors or enter the right of way. Proper landscaping should be considered to accommodate the additional water. Regular or prolonged discharges to land may lead to ponding or runon conditions which are not appropriate.

Discharging a volume of stormwater to land often requires careful consideration of best management practices like rain gardens which can slow and absorb some of the discharged water. In other cases, installing a small detention pond (or dry pond) can be helpful where the property owner is looking to contain intermittent discharges so they have time to infiltrate into the soil. In some cases excessive ponding or runon may not make a rain garden a viable option. Check out the following resources:

#### **DISCHARGE TO STORM:**

In some cases, a physical connection to the city's storm sewer will be necessary. These connections can be costly due to the trenching and installation costs. However, this may be the only appropriate long term solution to residential groundwater discharges. Connecting to the city's storm system will require a permit and must be constructed by a licensed contractor. For more information, please see the section on **Discharges and Code Enforcement** (see back).

• LEARN ABOUT RAIN GARDENS: Check out the Colorado State University Stormwater Center's Guide to Rain Gardens visit

• START YOUR OWN GARDEN: Each spring the city supports the sale of low-cost, xeriscape gardens which are sold through

NEED TO KNOW ABOUT STORMWATER BMPS? Learn about stormwater best management practices (BMPS) like ponds and swales by

