

## ***Attachment A – Comments on Douglas County Water Plan***

**Lauren Pulver** | Planning Manager  
**Douglas County Department of Community Development**  
**Planning Resources**  
**Address** | 100 Third St., Castle Rock, CO 80104

RE: First Draft of the Douglas County Water Plan

Dear Lauren,

Castle Rock Water (CRW) appreciates Douglas County reviewing water resource needs on a County wide basis. We wanted to provide input on the first draft of the Douglas County Water Plan (Plan) for consideration ahead of the next revision. CRW's comments are intended as suggestions to strengthen the value of the Plan both to the citizens, the County and the existing water providers in the County. CRW has generally been attending the meetings of the Douglas County Water Commission (Commission) and looks forward to upcoming planned focus groups with the Commission on the Plan. We are providing these comments well ahead of those focus groups for consideration. The comments provided herein cover two aspects of the Plan. First, global comments on the Plan sections and topics and second detailed feedback on proposed recommendations in the draft Plan. Our team is working directly with Forsgren Associates, Inc. to correct and edit data and information relating to sections on Castle Rock Water.

### **Global Plan Comments**

Major components currently missing from the draft Plan include sections on the current and future mix of non-renewable groundwater supplies and renewable supplies, where non-renewable groundwater supplies are still available and untapped, what the renewable supply goal for the County as a whole should be, connectivity between water providers, water conservation and landscaping requirements used by the existing water providers, long term water plans for existing water providers (e.g. do other providers have a Water Resources Strategic Master Plan like Castle Rock) and what high level projects those plans include, and regional partnerships between the existing water providers (existing and future potential).

Drawings should be added to the Plan showing where non-renewable groundwater supplies are still untapped as a resource for existing water providers and future areas of development. Additionally, drawings should be added to the Plan of existing and future planned connections between the existing water providers as well as identifying other opportunities to connect water providers to create emergency redundancy and reliability. Water conservation, landscaping requirements, water reuse, and conjunctive use should be identified at a high level for each water provider to get a better sense of who already has these important management strategies in place.

A whole section of the Plan should identify large long-term water projects for renewable water supplies currently being planned and implemented by water providers. Examples of huge projects which could attract additional investment or create regional partnerships being implemented by Castle Rock include the Chatfield Pump Back and the Box Elder Project.

Regional partnerships involving the various Douglas County water providers like the South Metro Water Supply Authority, Chatfield Reservoir, WISE, Cherry Creek Project Water Authority, Rueter Hess Reservoir, the Platte Valley Water Partnership, the Sedalia lift station and force main (partnership between Castle Rock and Douglas County), and the Plum Creek Water Reclamation Authority should be discussed in a full section of the plan along with additional opportunities for regional partnerships to share infrastructure and lower costs for existing and future residents.

CRW can provide details on aspects of all of these major components as they relate to CRW for the Plan.

### **Comments on the Draft Plan Recommendations**

Douglas County should start the recommendation section with a blanket statement that the recommendations in the County Water Plan defer to policies in place for water districts and municipal water suppliers already operating in the County and that policies in place in the service areas for these entities control. Where possible, the County should seek to align any policies that come from the recommendations in the Water Plan with the existing water providers in the County. The remainder of this letter provides more detailed input on the draft recommendations from CRW. Each recommendation is addressed in order. Note that the recommendations in the draft document were not numbered correctly and so Castle Rock Water has updated the numbering in order.

#### RECC 1: Lot Size Reductions

CRW's data on this issue indicate that lot size is less important than irrigable area or irrigated area in determining water use. Minimizing septic systems and connecting development to centralized sewer can help water providers reuse water supplies to extinction. Lot size reductions decrease the cost of water and sewer infrastructure required to serve new development by shortening distances that these underground lines must be run. CRW believes a policy direction that reduces irrigable area or irrigated area and promotes connection of new development to centralized sewer will provide more benefit to water supply than simply reducing lot size.

#### Future Development Patterns

#### RECC 2: Increase Multi-family Zoning

While CRW's data does show that multi-family units use less water generally than single family homes, the difference in usage is much smaller given CRW's Coloradoscape ordinance. Further and regardless of the landscaping increasing multi-family zoning and density does not mean that the total amount of water supply needed to serve an acre of developed land will be reduced. For example, assuming 4 single family homes per acre at 0.4 acre feet of water per year (1.6 acre feet of water per year) and 20 apartments per acre at 0.2 acre feet of water per year (10 acre feet of water), the apartments use far more water than the single family homes. In addition, expanding density to increase the number of dwelling units per acre only increases the total water supply required.

#### RECC 3: Establish Priority Growth Areas

CRW agrees with this recommendation. Identifying these areas will allow existing water providers to determine the best way to serve these areas going forward.

#### RECC 4: Minimize Private Wells

CRW agrees with this recommendation. This will ensure that citizens of the County have access to renewable water supplies and are not reliant on non-renewable groundwater wells which could run dry. CRW believes this RECC should also include minimizing private septic systems. These systems make it difficult for water providers to reuse their water supplies to extinction as the water going into septic systems is not easily recoverable.

#### Landscaping

On a global basis, CRW suggests that the term “Coloradoscaping” be used for “Water-wise landscaping”, “xeriscaping” and other similar terms. Coloradoscaping is the current wording of choice on the front range and this term started in Douglas County in Castle Rock.

#### RECC 5: Enhance Landscape Plan Provisions

CRW recommends that instead of developing separate landscape provisions that the County adopt Castle Rock’s landscape requirements by reference or the model landscape code being developed by the South Metro Water Supply Authority. This will help align landscape requirements across the County making it easier for developers to implement.

#### Irrigation

The recommendations in this section are more challenging and nuanced because they cross the lines between land use authority and water use authority. In the case of CRW, Castle Rock has authority over both land use and water use and already has strict water conserving rules and regulations covering both of these items in place. This may not be the case for other areas of the County. In the Town of Parker for example, the Town has land use authority, but Parker Water has water use authority.

#### RECC 6: Irrigation Ordinance

Since the County is not currently a water provider, the creation of this type of ordinance may not make much sense. Regulating private well irrigation could also be problematic. CRW supports the desired outcome of this recommendation, but CRW is not sure that an ordinance or strict regulation will work in every jurisdiction in the County. Many of the water providers in Douglas County already have requirements in place. Instead of creating an ordinance, CRW suggests that the County provide minimum recommended requirements for all water providers that they could adopt if they do not already have requirements in place instead of trying to create an ordinance. CRW offers that the County is welcome to utilize the irrigation rules and regulations that CRW has put in place rather than creating new rules and regulations. Alternatively, using the rules and regulations of one of the other big County water providers could also be a good model that the County could use as a minimum standard for water providers that do not already have something in place.

Since we are a home rule municipality, rules put in place in Douglas County could result in confusion with Castle Rock residents with some incorrectly thinking Douglas County rules would override our local requirements.

As noted, Castle Rock Water does have an ordinance in place and it works in conjunction with our Water Use Management Plan, available here [Castle Rock Water Water Use Management Plan](#). The ordinance language is available in Castle Rock code sections 13.15.020, 030 and 050. CRW has the strictest rules in the State. We do not allow watering after 8 AM or before 8 PM. There are many other details available in the attached plan and the code section.

#### RECC 7: Irrigation Plan Reviews

CRW again supports the desired outcome of this recommendation. CRW already has a very detailed process in place to review and inspect new landscaping and an entire Landscape and Irrigation Criteria Manual which is used for irrigation plan review. For areas of the County that do not already have irrigation plan review processes in place, creating a model approach could be helpful. Where Douglas County is the land use agency, creation of this plan review process makes sense. CRW would offer that Douglas County is welcome to adopt the approach or parts of the approach used by CRW as well as our entire Landscape Irrigation and Criteria Manual if desired.

#### Development Review / Special Uses

#### RECC 8: Classifying Water-Intensive Land Uses

Since the County is not a water provider but is a land use agency, CRW believes it makes more sense to coordinate with the water provider on whether a land use proposed in the County will create a water supply issue instead of creating a new regulatory scheme for certain types of development. If the existing water provider can provide the service, then the water provider can provide a will serve letter and will get the system development fees (impact fees) associated with that development. Perhaps more applicable is for the County to put in place regulations that these types of uses should not be allowed to develop off of non-renewable groundwater wells and should be required to be served by an existing water provider with access to renewable water supplies.

#### RECC 9: Mitigation for Recharge Exceedance

This recommendation seems very complicated and needs more explanation before CRW can comment on it.

#### RECC 10: Graywater Program Permanence

CRW has had an ordinance allowing “CRW approved graywater systems” since 2018. We have incentivized one pilot project, and the company that provided those systems has gone out of business. The systems have had mixed reviews from the 29 customers involved in the pilot. At this point, CRW believes the only thing that needs to be done is to allow for a pathway to “approved” graywater systems. Any proposed system would need to go through an approval process. This is not an area where significant investment in time and resources is worthwhile currently.

#### RECC 11: Stormwater Collection Requirements

CRW does not think that requiring this for all new developments in the County based on the current state of the art for large scale rain water harvesting makes sense. The County could certainly encourage or allow proposed developments to consider stormwater collection as part

of their approach to water use on the site. Ultimately, CRW believes any rain water harvesting should only be allowed if it meets the requirements of the water provider for the development.

#### RECC 12: Update Building Codes for Conservation

CRW generally supports this approach and has already adopted a code for toilets that goes beyond requirements in national model plumbing codes. CRW now requires ultra-high efficiency toilets in all new single and multi-family residential buildings (see 4.06.010), which toilets shall not exceed 0.8 gallons per flush if tank-style or 1.0 gallon per flush if flushometer style.

#### RECC 13: Bonus Density Zoning

CRW doesn't support this recommendation as it will offset water savings achieved from water conservation practices with more density defeating the purpose of the water conservation practice.

#### RECC 14: PUD Conservation Requirements

CRW would support requiring elements which increase open space and include Colorascaping. Due to the questionable status of the costs and benefits of rain water harvesting and graywater systems, CRW does not believe these should be required but they certainly could be allowed.

#### County Infrastructure / Protocols / Procedures

#### RECC 15: Tiered Irrigation Program

CRW supports this recommendation. Since many Douglas County facilities are in Castle Rock Water's service area, Douglas County might qualify for Colorascaping rebates of \$3.25/square foot to remove high water using turf. We would also recommend reaching out to our Water Conservation team to see how we may be able to assist Douglas County's team in implementing this recommendation. Attached is a list of water use for Douglas County facilities in Castle Rock.

#### RECC 16: Soil Amendment Application

CRW supports this recommendation. We would suggest Douglas County use our existing specifications instead of creating new specifications. CRW's requirements are included in our Landscape and Irrigation Criteria Manual which is available here, [Landscape and Irrigation Criteria Manual](#)

In short, CRW's requirements are, "incorporate organic amendment at rates meeting or exceeding **4 yd<sup>3</sup> per 1,000 sq ft**, tilling to at least **6 inches**, and adjust amendment volumes based on soil texture and laboratory test results to achieve measurable improvements in soil water-holding capacity." See pages 35 and 36 of the Landscape and Irrigation Criteria Manual for more detail.

#### RECC 17: Rain Barrels

CRW is generally not in favor of this recommendation. CRW believes limited financial resources would be better used supporting turf removal programs. The impact of rain barrels is very small from a water conserving and stormwater standpoint. They are also dependent on proper maintenance and operation by individual homeowners. When not properly operated or

maintained, they further lose efficacy and can also become a source of nuisance mosquito populations.

#### RECC 18: Turf Replacement Program

Rather than creating its own turf replacement program, it would be much more cost effective for Douglas County to support existing programs. In exchange for this support, Douglas County might be able to bank water supplies with existing water providers that can be used to support future development in unincorporated Douglas County.

Restricting future turf grass installation, however, should be the first priority. It is much more cost effective to prevent the installation of high-water using turf in the first place, then to remove it and replace it with Coloradoscape after the fact.

#### RECC 19: County Buildings

CRW is generally supportive of this recommendation.

#### RECC 20: County Grounds and Infrastructure

CRW is supportive of this recommendation generally although some aspects of the recommendation may not make sense for the County like purple pipe for non-potable reuse since the County is not a water provider. Other items like permeable paving would probably need to be evaluated for cost / benefit.

#### RECC 21: Education/Social Media

CRW is supportive of more education and social media encouraging conservation. The message, where possible, should be coordinated with existing water providers to ensure consistency. Existing water providers may have existing messaging that the County could adopt and convey directly. CRW has a whole website devoted to conservation, for example, [crconserve.com](http://crconserve.com).

#### RECC 22: Participation in Regional / State Forums

CRW recommends key county staff participation in Colorado Water Congress.

#### RECC 23: Update 2040 Comprehensive Plan

CRW supports this recommendation.

#### RECC 24: Partner with Providers

CRW supports this recommendation and is already partnering with the County on the Sedalia lift station and force main project as one key example.

#### RECC 25: Support Provider Consolidation

Castle Rock Water generally supports consolidation within the County, but only if the smaller water provider wants consolidation. Castle Rock Water does not support making consolidation mandatory, but it is willing to help smaller providers when needed. Consolidation provides many benefits, economies of scale, larger influence in the water industry and legislation of water in the State, more technical and financial resources, and better ability to keep up with maintenance and regulations to name a few. Castle Rock Water does worry about using Federal, State and

local taxpayer money to bail out small providers which have not kept up with capital infrastructure replacement and maintenance or regulatory and water quality requirements as this can transfer some of the costs of the small system from the “users” of the system to the broader tax base which is not good. Castle Rock Water does believe the County should generally not allow new small water and sanitation districts to form to serve small developments. Instead, the County should require those developments to seek service from existing providers.

**Closing**

CRW appreciates the opportunity to provide feedback. If you have questions or would like more information on any of our comments, please do not hesitate to call or email.

Sincerely,

Mark Marlowe  
Director, Castle Rock Water

Attachment