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via email

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**To:** Nick Nelson, Senior Planner; Heather Gutherless, Senior Planner; and Pat O'Connell, County Geologist.

**Cc:** Chris O'Keefe, Director.

**From:** Neil Whitehead, III Ph.D. for the *Conifer & South Evergreen Community Committee*

**Subject:** Conifer Commons, Case No. 20-111200 RZ — Comments regarding our analysis of the proposed Conifer Commons Planned Development (PD) during this 2nd Referral period, July 2 — October 28, 2020.

**Reference:** Rezoning Application Case No. 20-111200RZ, Conifer Commons PD, web page containing documents submitted by the applicant and previous comments submitted by the Committee.

### **Proposed Conifer Commons PD, Discussion on Proof of Water?**

Please place this letter in the Second Referral comments of the Conifer Commons case under the file name "Conifer & South Evergreen Community Committee 20-111200RZ Proof of Water? 10-29-20"

**Conifer Commons – The Complexity** There are many pieces to assemble for a major development such Conifer Commons before advancing a proposed ODP [Official Development Plan] before the Jefferson County Planning Commission – Traffic, Fire, Wildlife impacts, Medical infrastructure, Educational infrastructure, and so on. These components, once understood, can with the application of careful planning, engineering, and money, be solved in a rather cut and dried manner.

However, underlying all of the above, literally and figuratively, the question – is there sufficient groundwater for the daily needs of the project [188 dwelling units] that will last [that is, sustainable] for the "life of the project"? The life of the project, in many jurisdictions, but not particularly quantified/emphasized within the Jefferson County P & Z Division, is 100 years. This question, under the general heading of "Proof of Water" has not been addressed but must be before the ODP is presented to the Planning Commission.

**Conifer/285 Corridor mountain groundwater** The aquifer (a layer of earth material [sand or rock] that can produce a useful amount of water into a well) for wells supplying the King Soopers, Staples, and Safeway shopping centers and the vast majority of homes and businesses on a well is fractured crystalline rock. To visualize, imagine breaking a thick layer of poured concrete [without rebar] with the resulting cracks (fractures) variably distributed and variably connected. The cracks become fewer and fewer towards the base of the concrete layer. The part of the crystalline rock that is not fractured (98 to 99% by volume) does not

contribute any water. Now fill the cracks with water. This water flows downhill through the cracks a few tens to a 1,000 or so feet per year. Add a few inches per year to the top of the concrete to simulate recharge by rain and snow melt. Now drill a 6-inch diameter well into this water-filled, fractured concrete and pump a fixed amount daily for 100 years. How does one go forth “confidently”? Perform a pump test where a well is continuously pumped over a set time like 72 hours. The water level in the well (drawdown) is measured against time and the water levels in adjacent wells are measured also. Then apply a mathematical model and obtain an answer. The use of the word “certainty in “Proof of water” over long periods of time in fractured crystalline rock aquifers is risky.

Add in the complexity of cyclic periods of drought, “normal precipitation,” and abundant precipitation coupled with a possible long term increase in temperature from climate change (more or less precipitation? or a change in time of the year?). Add in recharge variations from local surface changes caused by fire, pine tree disease, forest mitigation and paving & building over.

**Proof of Water – It is complicated!** Proof of water with the Jefferson County Planning & Zoning Division can be established in several ways as discussed in the **Pre-Application Review Process** brochure (2/27/2020)

[https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiLINP62NXsAhVMHM0KHXE-CxQQFjAAegQIAxAC&url=https%3A%2F%2Fwww.jeffco.us%2FDocumentCenter%2FView%2F1608%2FApplication-Process-Guide-Pre-Application-Review-ProcessPDF&usq=AOvVaw2uWtZyyE\\_A7cP7yzolijeX](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiLINP62NXsAhVMHM0KHXE-CxQQFjAAegQIAxAC&url=https%3A%2F%2Fwww.jeffco.us%2FDocumentCenter%2FView%2F1608%2FApplication-Process-Guide-Pre-Application-Review-ProcessPDF&usq=AOvVaw2uWtZyyE_A7cP7yzolijeX)

- 1.) **“a written statement from the appropriate water district indicating that they will provide service to the property.”** The applicant did receive a letter indicating that CMD will provide treatment of raw water to drinking water quality and to provide wastewater treatment. It is Conifer Commons’ responsibility to get the raw water to CMD’s raw water treatment plant and recharge the treated wastewater via an infiltration gallery on the Conifer Commons parcel. [Conifer Metropolitan District, Commitment to Provide Wastewater and Potable Water Service, 1/23/2020]  
<https://permitsearch.jeffco.us/amandaltol/PublicDocs/Rezoning/20-111200RZ%20Conifer%20Commons/3.%20Review%20Process%20-%20Agency%20Comments/2nd%20Referral/1%20Referral%20Documents/Conifer%20Commons%20Water%20Supply%20Summary.pdf>
- 2.) **“A court approved plan for water augmentation.”** The applicant did submit a water court approved plan for “augmentation” [that is, dedicated physical water from elsewhere to replace the consumptive [evaporation, and other losses from what was produced to what was recharged into the ground] of 5% of the total amount produced from the ground. [Included in the link immediately above].

Neither of these of these “Proofs of water” are “proof” that even a single drop of physical water could be extracted from beneath the Conifer Commons parcel.

- 3.) The last method involves **drilling wells**. The ODP presented in the second referral (Sheet 2, 10/8/2020) was revised (Sections 11.1.1 to 11.1.4 & 11.3.1)  
<https://permitsearch.jeffco.us/amandaltol/PublicDocs/Rezoning/20-111200RZ%20Conifer%20Commons/3.%20Review%20Process%20-%20Agency%20Comments/2nd%20Referral/1%20Referral%20Documents/CCR%20->

[%20Conifer%20Commons%20Rezone%20-%20ODP%20-%202020\\_1006.pdf](#) to include a traditional approach of an actual Proof of Water program:

1. Drill multiple wells and pump test.
2. Hydrogeologic study of the parcel.
3. Treated wastewater infiltration study. “The purpose of this [the treated wastewater infiltration siting study] is to minimize the size of the cone of depression resulting from the water supply production wells.”
4. A realistic analysis of what could be done in terms of number of housing units based on the amount of water that is likely to be produced.

These actions will be taken “at the time of the preliminary and final plat or site development plan.” [That is, post-ODP approval.]

The site plan map (ODP. Sheet 1, 10/8/2020 [see link directly above]) shows no proposed well locations or proposed infiltration gallery. Nor do we have any knowledge of an application with the water court for an order to permit groundwater extraction beneath the Conifer Commons parcel. This appears if the applicant is proceeding with the idea that all water withdrawal and recharge will NOT be on the Conifer Commons parcel.

#### **If not water from the Conifer Commons parcel, then where?**

- a. **Conifer Corners parcel?** In the documents submitted initially by the applicant and again in the second referral is a “commitment letter” (January 23,2020) to Stuart Borne [second link from the top]. The first sentence reads, “This Commitment Letter is issued to Foothills Housing 1, LLC (the “Applicant”) for a proposed project (the “Project”) to be located on **two parcels** [our emphasis] situated in Jefferson County, Colorado, as more particularly described in Exhibit A, attached hereto and incorporated herein by this reference (the “Property”).

Of course, Exhibit A was not included in the documents released by JeffCo P &Z. There is a very strong indication that the second parcel is the Conifers Corners Project (approved for 75 townhouses) and shares a common boundary to the south of the Conifer Commons parcel.

In 2018, the Conifer Commons and Conifer Corner projects were linked together. Hundreds of people showed up for a Community Meeting at Conifer High School on 1/29/2019 to be totally surprised to find out the two projects had been split apart and the only one to be discussed that night was the Conifer Commons project.

It is curious and possibly prophetic, that the developer in a document submitted as part of the second referral, (“Conifer Commons Rezone ODP Resubmittal – Description of Water System for Rezone [9/8/2020])

[https://permitsearch.jeffco.us/amandaltol/PublicDocs/Rezoning/20-111200RZ%20Conifer%20Commons/3.%20Review%20Process%20-%20Agency%20Comments/2nd%20Referral/1%20Referral%20Documents/Conifer\\_C ommons\\_Water\\_Letter\\_signed.pdf](https://permitsearch.jeffco.us/amandaltol/PublicDocs/Rezoning/20-111200RZ%20Conifer%20Commons/3.%20Review%20Process%20-%20Agency%20Comments/2nd%20Referral/1%20Referral%20Documents/Conifer_C ommons_Water_Letter_signed.pdf) included as an attachment to the letter, as a “proposed drawing” the same utility system figure that he used when the two projects were combined. On this figure, in the Conifer Corners portion are existing water wells and an adjacent proposed infiltration gallery.

If the ODP for the Conifer Commons project is ever approved, perhaps these two developers will get together again, or Foothills Housing could purchase the property which is for sale for 3.5 million dollars as advertised in the Serenity Magazine a few months ago

**Release Exhibit A – the “Project”** Previously, we asked Nick Nelson [the Case Manager] to release to the public Exhibit A. He replied that it was “irrelevant.” We are calling upon Nick again to release Exhibit A. The public needs to know as much as possible how all of these pieces fit together.

**JeffCo P & Z needs to make an activity map of the vicinity of the Conifer Safeway Center** This brings up another problem. There are a lot of projects in various stages of zoning actions swirling around the Conifer Safeway Center. If we were Planning or County Commissioners, we would be so appreciative for an integrative map showing all of these projects in a synoptic view, instead of showing only one piece of the puzzle at a time.

- b. The second possibility for water supply (**Conifer Metropolitan District assumes a dominant role?**) of the Conifer Commons parcel is briefly outlined in the same letter authored by Mr. Borne [9/9/2020] in the immediately above link.

“The water will now come from new wells owned by the [Conifer Metropolitan] district [will this be wells within the Conifer Metropolitan District or on areas outside the District?]. they [sic] are making the determination as to where to best put the wells. It is my understanding that the district has the best performing [sic] wells in the region and does not think physical water will be a problem ...”

“We had planned to put the water back in the aquifer with an infiltration gallery but the district **does it a different way** [our emphasis] so since the district is providing these services we will have an additional reduction in infrastructure costs.”

The Conifer Metropolitan District did not present an update on the thoughts provided by Mr. Borne. We look forward to hearing formally the plans of the Conifer Metropolitan District in the third referral.

**In conclusion**, the search to identify a source(s) of Proof of Physical Water for the Conifer Commons project leads down these three paths:

- a. Produce and recharge on the Conifer Commons property.
- b. Produce and recharge on the mysterious second parcel of the “Project” identified on Exhibit A (which JeffCo P & Z has so far declined to release) and which we believe is the approved Conifer Corners project.
- c. Turn over water activity to Conifer Metropolitan District to drill wells (where?) and to recharge via an infiltration gallery or discharge treated wastewater directly into North Turkey Creek. CMD needs low TDS [Total Dissolved Solids] water to blend with their high TDS water (from the treated wastewater they have recharged by infiltration) to provide acceptable drinking water to the Conifer Safeway Center.

**This situation is in such a flux that a third referral is required for the water alone.**

The Conifer/285 Corridor Community will demand to participate by voice and in writing to provide input on decisions on the water situation. Approving the ODP with provisions to decide these questions afterwards is **NOT** acceptable.

Sincerely,

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For the *Conifer & South Evergreen Community Committee*  
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