

Project Review Comments

Project Name

Water Master Plan

Description

County Water Master Plan

Location

All of El Paso County

Applicant

El Paso County

Mark Gebhart

(719) 520-6323

File Number

MP181

Project Manager

Nina Ruiz (NinaRuiz@elpasoco.com)

(719) 520-6313

Status

Active

Created

10/10/2018 2:52:55 PM

Review Comments (12)

Agency	Comment	
Colorado Division of Water Resources	12/10/2018 3:12:14 PM	12/10/2018 3:12:14 PM
Douglas County Planning	12/5/2018 5:37:33 PM	12/5/2018 5:37:33 PM

El Paso County Conservation Dist	The Board of Supervisors of the EL Paso County Conservation District have no comments at this time.	12/4/2018 12:00:14 PM
12/4/2018 12:00:14 PM		
Colorado Geological Survey	The plan addresses groundwater in the Denver Basin and Upper Black Squirrel Designated Groundwater Basin; however, these two basins cover only about 60% to 70% of the County. This discussion of groundwater as a supply leaves out much of Region 1, the west side of Region 2, the southern part of Region 6, and all of Region 7. Some of these areas may not be developable (e.g. Region 2, and the military reserves), but much of the other omitted areas that are rural, or slowly being developed, may already rely on groundwater as a sole source. Potential aquifers in these areas include, but are not limited to, Pierre Shale sands, Nussbaum Alluvium, Dakota Sandstone, Fountain Formation, Manitou Group, and the crystalline bedrock aquifer. There should be some discussion of groundwater in these other areas. It may be that, since these aquifers are considered tributary, they could be considered part of the existing renewable supply. To the reader, the fact that groundwater within these formations is a geographically significant source of water is not readily apparent.	11/30/2018 10:54:08 AM
11/30/2018 10:54:08 AM		
Woodmen Hills Metro	Woodmen Hills Metropolitan District has no comment.	11/21/2018 4:04:39 PM
11/21/2018 4:04:39 PM		
Woodmen Heights Metro Dist	The Woodmen Heights Metropolitan District has no comment	11/20/2018 2:19:24 PM
11/20/2018 2:19:24 PM		
Sterling Ranch Metro Dist	The Sterling Ranch Metropolitan District has no comment	11/20/2018 2:18:43 PM
11/20/2018 2:18:43 PM		
Bradley Heights Metro Dist	The Bradley Heights Metropolitan District has no comment	11/20/2018 2:16:03 PM
11/20/2018 2:16:03 PM		

Bent Grass Metro	The Bent Grass Metropolitan District has no comment	11/20/2018 2:13:50 PM
11/20/2018 2:13:50 PM		
Central CO Conservation District	The Board of Supervisors for the Central Colorado Conservation District have no comments at this time.	11/15/2018 2:18:39 PM
11/15/2018 2:18:39 PM		
Fountain	City of Fountain has been involved in process of creating the Master Plan and have no further comments related to the document.	11/15/2018 8:08:15 AM
11/15/2018 8:08:15 AM		
Wigwam Mutual Water Co	The Contract information was omitted in the water plan in Region 7. Contact info is: Gary Smith, President Wigwam Mutual Water Company P O Box 569 Fountain, CO 80817 719.638.0456 generaloffice@wigwammutualwatercompany.org	11/10/2018 9:10:45 AM
11/10/2018 9:10:45 AM		

© 2018 - EPC Development Application Review

Mark Gebhart

From: blackforestnews@earthlink.net
Sent: Monday, December 17, 2018 3:35 PM
To: Mark Gebhart; Tracey Garcia; Cole Emmons; me
Subject: El Paso County Water Master Plan - final Draft for Dec. 18 2018

CAUTION: This email originated from outside the El Paso County technology network. Do not click links or open attachments unless you recognize the sender and know the content is safe. Please call IT Customer Service at 520-6355 if you are unsure of the integrity of this message.

Dec. 17, 2018

To: Members of the El Paso County Planning Commission for Dec. 18, 2018 meeting

Re: El Paso County Water Plan

Dear Planning Commission Members,

Thank you for your faithful service on the Planning Commission. Your decision today is of utmost importance to the future of the County.

I continue to advocate that this document is not yet ready for final adoption - just weeks before new members of the BoCC are seated, and with such a short turnaround time since November 6, 2018 when this document first became available to anyone other than the Consultant, DSD staff, and the Steering Committee members.

I would submit to you that this document has put together only one scenario. It updates the early 2000's El Paso County Water Report, but it fails to consider alternative scenarios of "If-Then" if the procedures suggested, and results expected, do not occur.

The proposed scenario depends a lot on what Colorado Springs Utilities does, on the ongoing demands of drought, on cooperation among current Metro Districts, and on the financial viability of new Metro Districts.

It has some underlying assumptions which are not certain and it offers no protection for existing rural residential neighborhoods and communities in the County which will certainly be seriously impacted by urban development enabled and encouraged by continued satellite wellfield deep water mining.

It has not had robust public discussion.

The importance of maintaining community and neighborhood livability, integrity and identity as solutions are pursued for accommodating explosive growth now, and future extreme population growth provided by the State demographer (apparently without regard for resource limits) is not even acknowledged in this document.

There should be a Goal or Goal/Policy about protecting existing rural residential communities and neighborhoods from urban density incursion, and traffic, including construction traffic and urban utilities.

The 1985 Denver Basin Rules, which supplanted the rules of the early 1970s allocated the water from the bedrock aquifers below the surface to the overlying surface ownership. Unfortunately these same 1985 rules

promote beneficial use of the water "to extinction".

Because of the shape of the basin, the configuration of the Denver Basin geosyncline in El Paso County, the fragmentation of the aquifers by the Front Range mountains uplift, and the County being at the very top of present river basins (Arkansas and Platte), choices for importing surface water or doing conjunctive use are very limited unless water is removed from agricultural uses in the Arkansas river Basin, or mined from the deep aquifers.

If there are long droughts, well beyond what was experienced in the 1930s or 1950s, it is unlikely that renewable water will be available, and the deep aquifers in the Denver Basin may be all that is left.

Only very limited use of these deep aquifers near term to fuel new development should be obvious - but this document does not say that and there is no quantitative scheme to limit the present use of non-sustainable water mining by Metro Districts and in fact the opposite is the case ("**Incentivize the use of deeper Arapahoe and Laramie-Fox Hills aquifers by central water providers**" **Policy 4.3.3**).

Also lacking is a clear message that the State Rules for Denver Basin Aquifer Management need to be changed and not call for use of water to extinction based on 100-year aquifer life as we still have from 1985.

I do not believe this document should contain the words "Master Plan" in the title.

Only the full County Master plan (with all of its elements) should be called a Master Plan. There is huge inconsistency already in the naming of the County Master Plan elements, and in the past, even unzoned Sketch Plans were called "Master Plans". It is time to end this confusion.

There are 55+ documents which collectively comprise the County Master Plan - this is one of them. There are Topical Elements, the overall Policy Plan, Comprehensive Small Area Plans for prescribed areas (which are not advisory for site-specific PUD zoning decisions within their Comprehensive plan area). Otherwise all these elements are Advisory and none by itself is a Master Plan for the entire County.

I would suggest this document be retitled "El Paso County Water Report (or Plan) - 2018 (or 2019)Update". The document would still be used as an advisory element for the revision of the Land Use element development of the continuing El Paso County Master Plan, and appropriate parts could become regulatory by adoption in to the EPC Land Use Code.

I do not understand what the hurry is to get this plan adopted just six weeks after it was released for public review on November 6, 2018. As a member of the public, I had no chance to hear, or interact with, the 3rd draft until December 4, 2016 when this body made revisions. The link to the updated final draft did not come to me (and the 100+ others on the e-mailing list) until after 5 pm last Thursday, Dec. 14, 2018. It has been difficult to give this proper attention because it was released right at the time of the midterm elections and then was confounded by Thanksgiving and Christmas.

Nov 6 to Dec. 18 is hardly a time framework for any meaningful public input and discussion for a topical element of the County Master Plan as important as this water supply topic.

I think it is reasonable to reschedule adoption of this plan to April or May of 2019 AFTER there has been more opportunity for more comment and discussion input to the Planning Commission and time for the new BoCC to become familiar with this report and the issues it addresses.

A huge problem, which is not addressed in this document, and has not been addressed at any of the numerous Planning Commission hearings, BoCC hearings, or public meetings held by developers and

contract planners on specific projects which I have attended, is the issue of fiscal responsibility, financial viability and possible future problems due to Metro District failure.

The current County Policy Plan has a large section discussing issues with Metro Districts, but this topic has never been disclosed at public meetings of any type for current subdivision (at least in Black Forest) that: involve Metro Districts, deals among Metro Districts, dependencies among Metro Districts, and in some cases Metro Districts that are not formed, not operating or have no infrastructure. Yet subdivisions are being approved. It does not appear to me that this Water Report addresses this complex and problematic issue.

The Goals and Policies range from being so general that they are not useful advice for specific situations, to extreme specificity that favor water development at any cost or impact to neighborhoods and communities as long as they are in range of a Metro District pipeline.

At least in the Black Forest Area, which I am very familiar with, projects proposed currently and in the past few years which are dependent on use to extinction of local deep aquifer water use (under an ownership where the water is directly supplied from below that surface), and the building/filling of two large surface "recreational" impoundments using deep aquifer water (one in the City, one in the County). Some subdivision proposals are also dependent on water from satellite deep aquifer well fields where water is purchased as a commodity to enable urbanization in rural residential-zoned areas. These are geographically positioned to hugely impact existing communities and neighborhoods in Black Forest and Falcon, as well as other infrastructure such as County roads, schools and Fire Districts.

The effect of what this document is promoting in the name of water supply needs way more than the six weeks it has had for the public to review.

Kindly continue to edit and revise this, change the name, and table it until after it has had robust public discussion to include CONO, NEPCO and other citizen groups, HOA's, agricultural users on the Arkansas River, and more input from Colorado Springs Utilities and other water providers.

It would seem prudent to give this report a little more time to bloom as the Phase 2 consultant for the Land Use portion of the County Master Plan begins the contract, and to wait until the new Board is seated and has had a chance to get up to speed on this important topic.

Thank you,

Judy von Ahlefeldt

**Inputs to El Paso County Planning Commission
regarding proposed Water Master Plan
December 17, 2018**

**Terry Stokka, Chairman,
Black Forest Land Use Committee**

Policy 4.3.2 – Instead of encouraging, county should DEVELOP a plan for well monitoring throughout the county.

Policy 4.3.3 – The Laramie Fox Hills aquifer is not good for either quantity or quality of water and should not be depended on for a significant source of water.

Policy 4.3.6 – Once again, DEVELOP a well-monitoring plan in the county, not just encourage one.

Policy 4.4.1 – The County Commissioners have the power to preserve water and can take measures and establish regulations that will protect at least the non-renewable Denver Basin and alluvial water.

Policy 5.5.1 – Wells are not permitted on lots smaller than 2.5 acres and wells should not be permitted on lots where central, renewable water is available.

Goal 5.6 – To protect property rights, wells should not be permitted within a certain distance like 200-400 feet of property lines. In Flying Horse North, the Cherokee Metro District wells are sited at the very corners of the lot which means they are taking water from adjoining property owners and this violates property rights.

Policy 6.0.4 – How do you encourage or discourage development in this case? I don't see how this could practically be done.

Policy 6.0.7 – Water sufficiency, quality and dependability should be proven at sketch plan stage.

Policy 6.0.8 – You can't permit higher densities that conflict with existing zoning in areas just because the developer plans water conservation measures.

Policy 6.0.11 – There is no limiting development at this point to areas that do not have centralized utilities. There should be a policy to not permit urban development in areas that do not have renewable water supplies.

Policy 6.1.2.12 – Once again, what does it look like to encourage and support development for projects that incorporate water efficiency.

Policy 6.1.2.12 – Do not weaken the 300-year rule!!

Policy 6.1.3.6 – If you lower tap fees, will that cost be passed on to the rest of us taxpayers? Not good!

Policy 6.2.1.6 – Absolutely DO NOT allow higher densities in areas just because of better water conservation plans. This must NOT conflict with existing zoning rules.

Policy 6.4.1.2 – Do NOT allow higher densities just because renewable water is available. In areas like the Black Forest, the Cherokee Metro District waterline passes through the middle. This does NOT mean that higher density development should be allowed because of that, since the zoning is for 5-acre lots in the forested area.

=====

In conclusion, the following principles should be followed:

- 1. Water sufficiency should be required at the initial sketch plan stage.**
- 2. Do NOT permit higher densities just because renewable water is available. Follow zoning laws as well.**
- 3. Develop and implement well monitoring in the county. It is imperative that wells are monitored to see what is happening to the Denver basin aquifers.**
- 4. Do not permit urban development that relies on non-renewable water. If a development cannot be supported by renewable water, the lot sizes should be limited to 2.5 acres for an individual well.**
- 5. Do NOT change or weaken the 300-year rule.**
- 6. To protect private property rights, wells should not be sited closer than 200-400 feet of the property line to protect the water on adjoining properties.**

Memorandum

Garald L. Barber, Sole Proprietor

P.O. Box 1976

Colorado Springs, CO 80901

To: Craig Dossey, Mark Gephardt

CC: Forsgren Associates, Inc.

From: Gary Barber

Date: December 4, 2018

Re: Review of Revised Water Master Plan Document

Mr. Dossey & Mr. Gephardt:

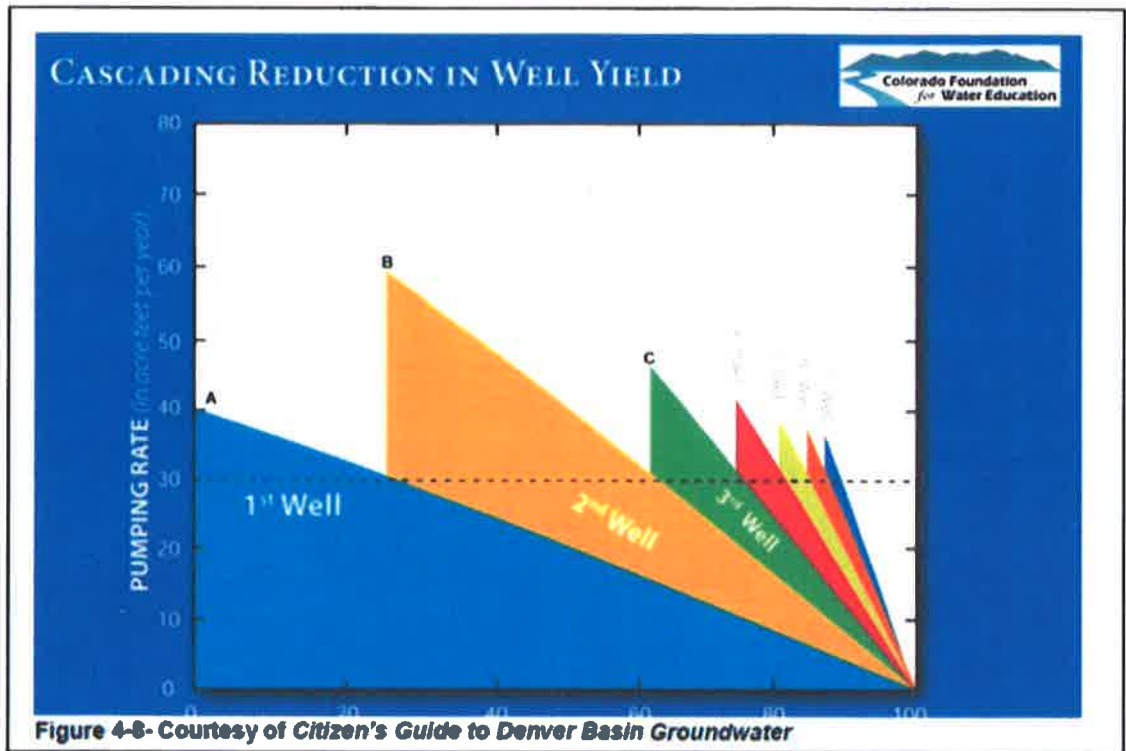
In anticipation of the Planning Commission hearing, I revisited the draft Water Master Plan document. As shown in the box below, my first set of comments to the Plan expressed concern about the characterization of the longevity of the Denver Basin aquifers in Regions 2 & 3. This concern is particularly true for the pie-chart graphics comparing supply and demand for the years 2040 and 2060.

7. Page 58, second paragraph: *"The gap analysis presented herein does not take into consideration any reduction in current supplies for factors such as declining water levels in the Denver Basin aquifer or climate change. Any reduction in existing water supplies would increase the gap for El Paso County."*

8. Page 58, third paragraph, graphics pages 59 & 60: *"However, the northern regions of the County are heavily reliant on Denver Basin, and designated basin groundwater. The economic viability of those sources is expected to decline over time, increasing the gap beyond these projections."* In 2040, Regions 2 & 3 are the only portions of the County showing surplus water supply and in 2060 only Region 2 is shown with a surplus. Defining the terms supply and surplus may help qualify these tables with respect to the 100-year statutory pumping limit of Denver Basin aquifer wells.

9. Page 61, first paragraph: *"Denver Basin groundwater is being mined, but by working together we can help this resource last for generations to come."* Consider adding a clarifying statement about reuse, conjunctive use and aquifer storage & recovery to buttress this assertion. These strategies are highlighted later in this section.

Shown is Figure 4-8 as presented in the Plan. The X-axis depicts a timeline that shows a second well is needed at about the 40th year of pumping and a third well after about 60 years of



pumping the nontributary aquifer. Attached are examples of a couple of Region 2 wells completed in the Arapahoe aquifer that have been pumping since 1972 and 1982 respectfully. Therefore, with regard to declining well yield, these wells (and likely many others) are somewhere in the “2nd Well” range and approaching the need for the 3rd Well. The aquifer conditions in Region 3 are similar with respect to declining well yields, given the thinner and tighter-grained nature of the Denver Basin aquifer in that region.

Page 60 shows the relationship between supply and demand in the year 2040, with year 2060 shown on page 61. Table 5-3, Current Demand and Current Supplies by El Paso County Region is followed by a statement in the body of the text regarding the dependency on the Denver Basin aquifer:

Further, as previously described, current and future water supplies in Regions 2, 3, 4a, 4b, 4c, 5, 6, and 8 include a large share of nonrenewable Denver Basin groundwater. Depending on local aquifer conditions, it may not be economically sustainable to continue heavy reliance on those supplies over the long term. Any reduction in use of those water supplies would only serve to increase the water supply needs for El Paso County. The needs analysis presented herein does not account for reduction in current supplies for factors such as declining water levels in the Denver Basin aquifers, reduced well production, or climate change. With respect to water demands however, the needs analysis also does not account for water-saving measures that may be implemented to reduce water consumption.

Figure 5.10 on page 64 and Table 5.4 depict the relationship between supply and demand in the year 2040. Similarly, Figure 5.11 on page 64 and Table 5.5 depict the relationship between supply and demand in the year 2060. Both tables include a footnote explaining that the Denver Basin aquifer may not be a reliable source in the future.

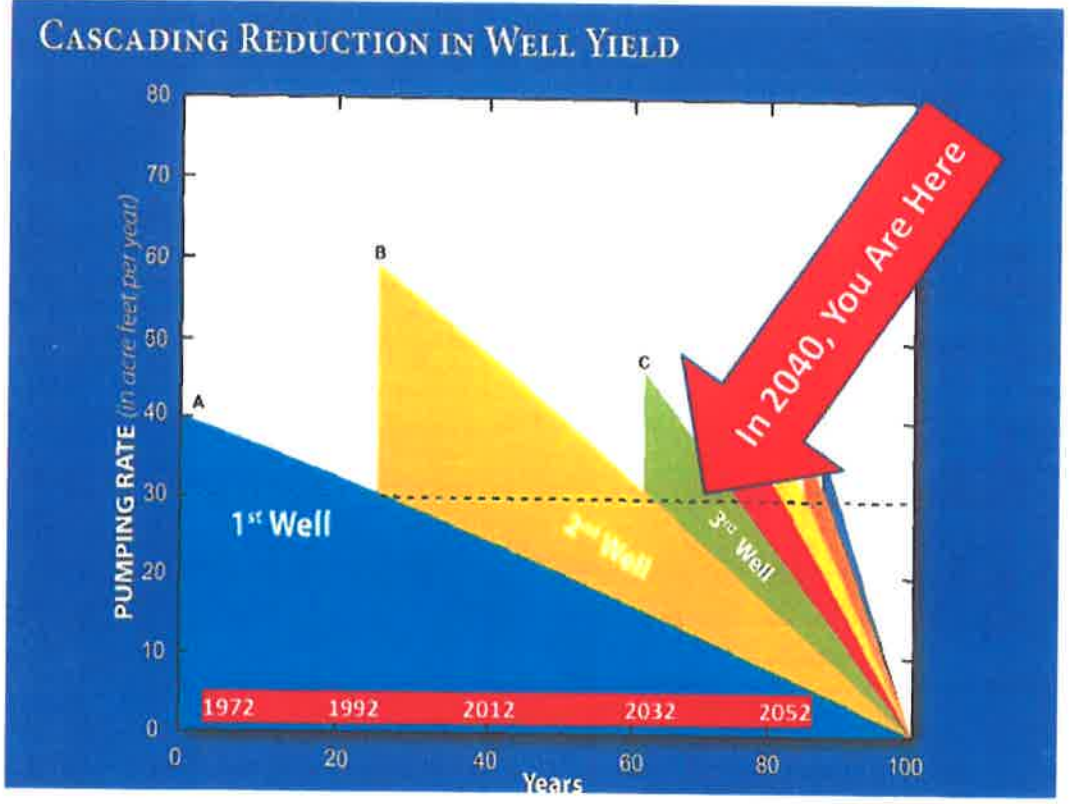
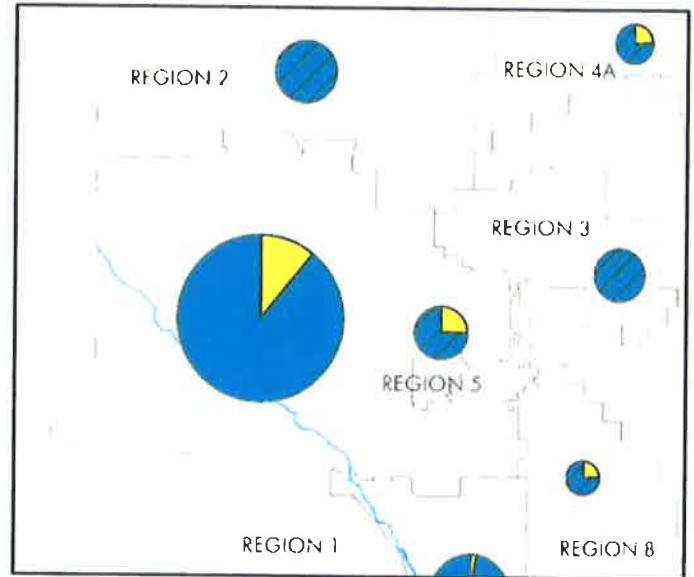
The visual representation of the conditions in 2040 and 2060 indicate no water supply problems in Regions 2 & 3, but a shortfall in Region 1, the Colorado Springs Utilities service area. Granted, the cross hatching is shown in the legend as Denver Basin dependent and the asterisk offers the disclaimer to the future availability of water supply in these regions.

**Water production from Denver Basin wells in this region may not be economically sustainable in the long term, depending on local aquifer conditions.*

However, applying the timeline since pumping began in the Denver Basin in Region 2 to the decline in well yield depiction in Figure 4-8, the comparison of demand to supply shows a need for significant capital investment. This capital investment does not produce new water supplies, it merely sustains pumping of current sources. After about 2030, the cost curve goes up like a hockey stick to add the 4th Well, the 5th Well, etc..

Recommendation: Rather than depict Regions 2 & 3 in “blue” with a cross hatch and footnotes, either pick a new color altogether or show them as yellow. The tables could similarly include some declaration that it is reasonable to assume that

somewhere in the next 20 years many existing wells in the Denver Basin will become uneconomic to continue pumping. Therefore, available supplies are reduced in 2040 by 30% and in 2060 by 50%. The graphics can then show that shortfall in a fashion similar to Region 1. In other words, YES, we need more water and we have 20+ years to figure it out.



UNDERGROUND WATER RIGHT

NAME OF WELL: Donala Well No. 1.

LOCATION OF WELL: Part of Lot 1, Block 2, Donala Subdivision No. 1, El Paso County, Colorado, more particularly described as follows:

That portion of the Northwest Quarter of the Southwest Quarter, of Section 6, Township 12 South, Range 66 West of the 6th P.M., more particularly described as follows:

Commencing at the Southwest Corner of Northwest Quarter of the Southwest Quarter of said Section 6; thence North 0°05'09" West on the West line of said Section 6 a distance of 421.53 feet; thence North 89°54'51" East a distance of 20.49 feet to the Point of Beginning, said point also being the most Westerly corner of the described tract; thence North 41°34'53" East a distance of 25 feet; thence South 48°25'07" East a distance of 40 feet; thence South 41°34'53" West a distance of 25 feet, thence North 48°25'07" West a distance of 40 feet to the Point of Beginning; containing 0.02 acres more or less.

DEPTH: 1,154 feet.

PRIORITY DATE: April 11, 1972, provided, however, that this right shall be junior to all priorities awarded in cases filed prior to 1975, and otherwise junior as provided in CRS 1973, 37-92-306.

AMOUNT OF WATER: 0.888 c.f.s., or 400 g.p.m.

USE OF WATER: Municipal.

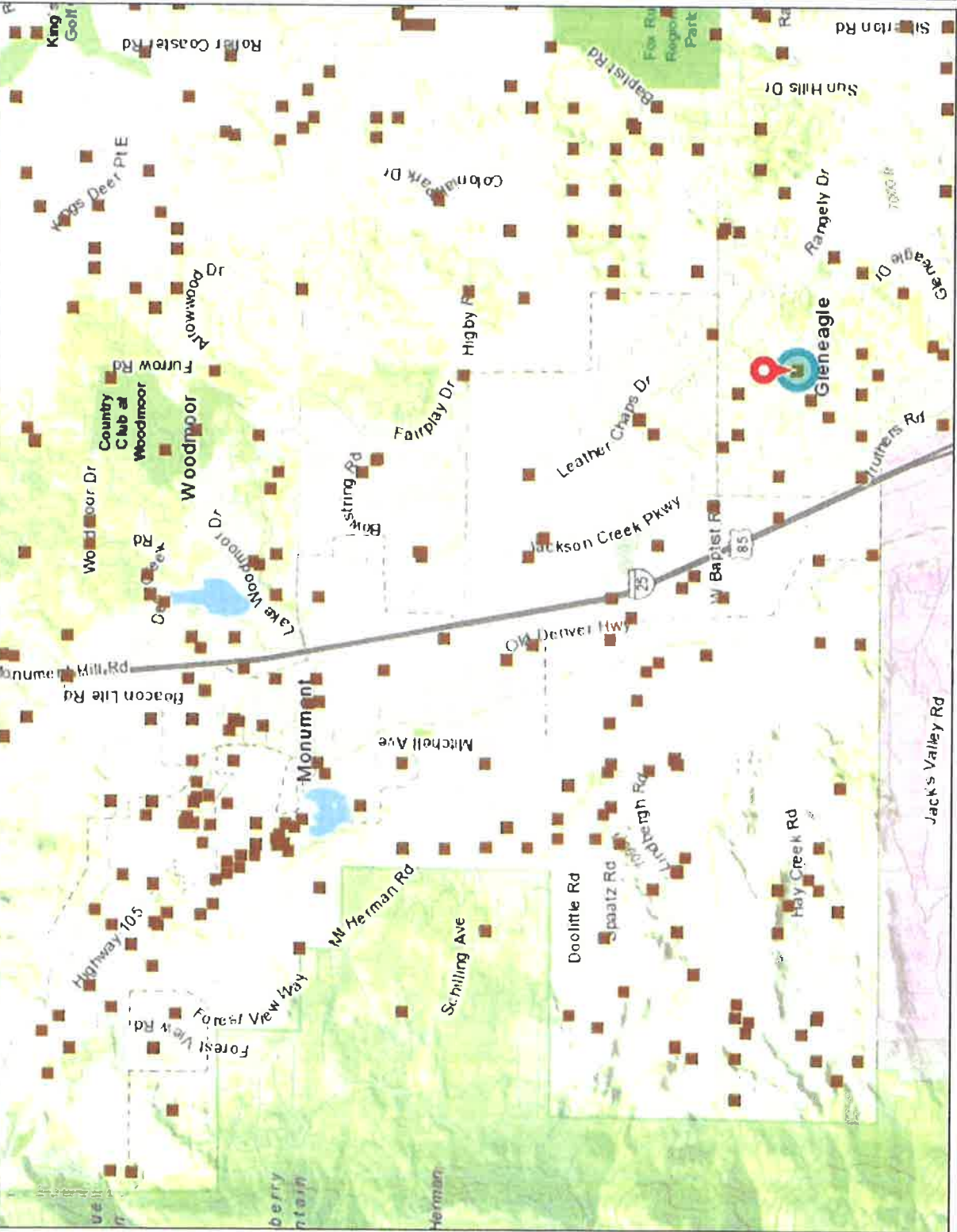
STATE ENGINEER'S WELL NUMBER: 016140-P.

MEANS OF DIVERSION: Well and pump.



CDSS
Colorado's Decision Support Systems

Map Viewer



Legend

- Final Permit
- Ground Water
- County

Location

Notes

ARAPAHOE WELL SUPPLYING
GLENEAGLE SUBDIVISION, FIRST
USE PRIOR TO 1972



1: 56,128

This product is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Date Prepared: 12/3/2018 11:33:49 AM

appropriation date of December 8, 1982. Water may be used for the purposes and in the manner set forth in Paragraph 15.

25. Names and Legal Descriptions of Location of Wells
(all in Township 11 South, Range 67 West of the 6th P.M. in El Paso County, Colorado):

(a) Monument Well A-1: NE 1/4 of the NE 1/4, Section 15, being 750 feet from the North line and 500 feet from the East line of said Section 15.

(b) Monument Well LFH-1: NE 1/4 of the NE 1/4, Section 15, being 750 feet from the North line and 600 feet from the East line of said Section 15.

26. Depth and Source:

(a) Monument Well A-1 will draw water entirely from the Arapahoe aquifer, and its depth shall be to full penetration of said aquifer, estimated to lie at the interval from 1230 feet to 1750 feet below the land surface.

(b) Monument Well LFH-1 will draw water entirely from the Laramie-Fox Hills aquifer, and its depth shall be to full penetration of said aquifer, estimated to lie at the interval from 2020 feet to 2290 feet below the land surface.

27. Date of Appropriation: December 8, 1982.

28. Amount of water:

(a) Flow Rates. Monument Well A-1 will withdraw water at the rate of 250 gpm (0.556 cfs). Monument Well LFH-1 will withdraw water at the rate of 150 gpm (0.333 cfs).

(b) Volumetric Limitations. The above flow rates are limited by the provision that subject to provisions of Paragraph 14 Monument shall not withdraw more than the following average annual amounts of water from each of the aquifers under the water rights granted herein:

Arapahoe 398 acre feet

Laramie-Fox Hills 182 acre feet

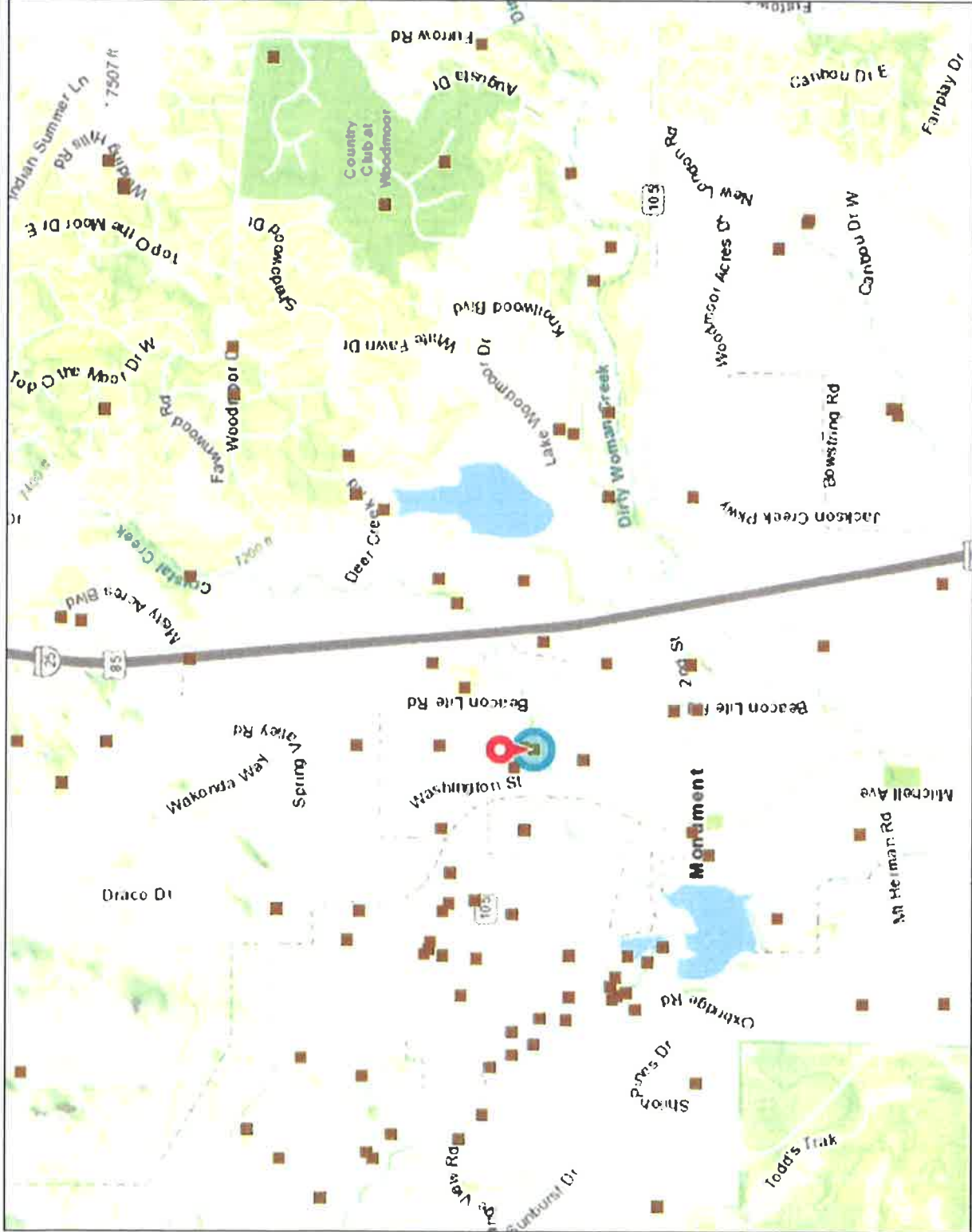
(c) The pumping rates for each well described above may exceed the nominal pumping rates set forth herein to the extent necessary to withdraw the full allocation of water from the Arapahoe and Laramie-Fox Hills aquifers pursuant to paragraph 14 hereof.



CDSS

Colorado's Decision Support Systems

Map Viewer



Legend

- Final Permit
- Ground Water
- County

Location



Notes

DENVER BASIN WELL SUPPLYING
TOWN OF MONUMENT, FIRST USE
1982

4,677 0 2,339 4,677 Feet



This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

1: 28,064

Date Prepared: 12/3/2018 11:22:08 AM

Mark Gebhart

From: Schueler, Carl <cschueler@springsgov.com>
Sent: Thursday, December 6, 2018 1:43 PM
To: Mark Gebhart
Cc: Wysocki, Peter; Bishop, Jenny (CSU); Craig Dossey
Subject: Comments on Water EPC Plan

CAUTION: This email originated from outside the El Paso County technology network. Do not click links or open attachments unless you recognize the sender and know the content is safe. Please call IT Customer Service at 520-6355 if you are unsure of the integrity of this message.

Mark,

We will not be providing complete or formal comments on the draft Water Plan at this time, from our Planning & Development Department, but of course we look forward to opportunities to coordinate and collaborate as appropriate, going forward.

Here are a couple of very general observations-

- 1) This is quite an impressive, comprehensive and well edited piece of work, and clearly a next and positive step forward from the prior plan.
- 2) A comment on version I reviewed is that it would benefit from being more action-oriented, and with some strategic priorities. There is a wide ranging and large number of recommendations and not always a strong sense of what the recommended strategic priorities for El Paso County are. From what I hear about the El Paso County Planning Commission input on this Plan, they had similar concerns, and provided some direction in this regard. How the City might respond to or interact with these strategic priorities would depend on what they end up being.
- 3) There is a lot of front-of-the-document emphasis on the long term vulnerabilities associated with reliance on bedrock groundwater supplies, along with associated language encouraging conservation, interconnection, and back-up supplies. There is less emphasis in the front of the document on the growing awareness of, and experience with, vulnerabilities of alluvial supplies (especially related to contamination).
- 4) It is not entirely clear from the document, what the recommendations are concerning stages at, or the extent to which, the County would or would not approve any new water providers, new master planned development, and/or new increments of major development, without some or all of these recommendations being affirmatively demonstrated.

Thanks--

Carl Schueler, AICP
Comprehensive Planning Manager
Colorado Springs Planning & Community Development Department
(719) 385-5391 (office)
(719) 640-8837 (mobile)

Mark Gebhart

From: Jenny Bishop <jbishop@csu.org>
Sent: Tuesday, November 27, 2018 3:45 PM
To: Craig Dossey; Mark Gebhart; Will Koger (WKoger@Forsgren.com); Jonathan Moore
Cc: Pat Wells; Abigail Ortega; Kim Gortz
Subject: Colorado Springs Utilities Comments re: El Paso County Water Master Plan November 6 Draft

CAUTION: This email originated from outside the El Paso County technology network. Do not click links or open attachments unless you recognize the sender and know the content is safe. Please call IT Customer Service at 520-6355 if you are unsure of the integrity of this message.

I have reviewed the November 6, 2018 draft of the El Paso County Water Master Plan. I appreciate the opportunity to provide feedback.

First, I sincerely appreciate that you have included the caveat that Colorado Springs Utilities did not endorse the regionalization question found on page 19 of the plan and in the online survey. I also appreciate that you removed the Colorado Springs Utilities system map. Both of those considerations are helpful as Colorado Springs Utilities navigates the ability to be able to provide regional water and wastewater service as well as the continued development of water supplies.

Other comments:

- P. 34 - I'm not sure that the way El Paso County Sources of Supply pie charts are terribly helpful. I find them confusing, even with the change in title.
- P. 35 – the first sentence on the page should be edited to read “...El Paso County include Colorado Springs Utilities’ Blue River and Homestake systems.”
- p. 45 Policy 5.5.1. “Discourage individual wells for new subdivisions with 2.5 acre or larger average lot sizes,...” shouldn’t that be 2.5 acre or smaller lot sizes? Seems that if they are larger than 2.5, - 5 care lots, it would be difficult to do a central system.
- p. 62 - 5.4 Needs Analysis – I am hesitant about the characterization of surplus water supplies. In Colorado Springs Utilities’ case, our diverse water rights portfolio has been crafted to provide water supplies for customers even if individual water sources are underperforming that year. While in a given year where hydrology combined with water rights may result in excess water supply, other years Colorado Springs Utilities relies on storage to meet demands that are not met by that year’s hydrology. To imply that we have excess supply may impair Utilities’ ability to continue to develop the water supply needed for current and future demands.
- Section 6 should also call out surface storage and exchanges as other methodologies for reuse, especially as these are specifically called out in later goals when meeting long-term water demands in El Paso County.
- p. 88 – Fountain Valley Authority – Points to clarify – there is only one FVA treatment plant and there are other reservoirs that are part of the Fry-Ark Project, not just Pueblo Reservoir.
- p. 88 – Southern Delivery System – Consider changing the first sentence to read “The Southern Delivery System (SDS) delivers water from Pueblo Reservoir to Pueblo West Metropolitan District, Colorado Springs Utilities services area, the City of Fountain, and the Security Water District...”
 - Also, the first sentence of the second paragraph should read “The SDS Project carries water approximately 50 miles and with the help of multiple pump stations.” The final sentence of that paragraph should read “SDS also provides limited system delivery redundancy for project participants.”
- p. 88 – PPRWA Water Infrastructure Plans – “The Pikes Peak Regional Water Authority (PPRWA) in El Paso County includes a number of water providers that are reliant upon non-renewable Denver Basin groundwater.”
- p.99 7.1 Entitlement Process – One of the questions proposed is “Are you participating with a regional entity, such as the Pikes Peak Regional Water Authority or Colorado Springs Utilities, in long-term water supply

planning?” Colorado Springs Utilities has not yet determined that it will be providing regional water services, therefore, including such a question is premature.

Thank you, again, for the opportunity to review the El Paso County Water Master Plan and provide comments. Please do not hesitate to call me if you have any questions.

Jenny Bishop, P.E.
Senior Project Engineer, Water Resources

Colorado Springs Utilities | 1521 South Hancock Expressway, MC 1825 | Colorado Springs, CO 80947
Phone: 719-668-8575

CONFIDENTIALITY NOTICE - This email transmission, and any documents, files or previous email messages attached to it, may contain information that is legally privileged or otherwise confidential to include customer and business information. If you are not the intended recipient, or an authorized person for the intended recipient, you are hereby notified that any disclosure, copying or distribution of this information, or any action taken in reliance on the information contained within this email, is strictly prohibited. If you have received this email message in error, please notify the sender and then delete the message (and any attachments) from your computer and/or network. Thank you.

UPPER BIG SANDY GROUND WATER MANAGEMENT DISTRICT

520 Colorado Avenue, Suite c

Calhan, CO 80808

719-347-0704

EMAIL: upperbig sandygwmd@gmail.com

To: El Paso County Board of County Commissioners
P.O. Box 2007
Colorado Springs, CO 80901

Dear Sirs,

The Upper Big Sandy Ground Water Management District was legally formed in 1974 as a ground water management water district with taxing authority. The mission was to preserve and protect water resources in the District. We have the authority to adopt regulations in addition to and pursuant to state water laws. The district extends from a few miles west of Calhan to a few miles east of Limon.

The Upper Big Sandy Ground Water Management District includes a significant portion of El Paso County. The El Paso County Water Plan did not include any input from our water district in their deliberations in crafting their plan.

Water usage in our district is being impacted by some of the same growth issues addressed in the El Paso County water plan. We are experiencing an increase in domestic water use and well permit applications in our district. Residential and agricultural water use issues are important to the health of our aquifer. We were not asked for any input on the El Paso County Water Plan which likely contains elements related to the health of our aquifer.

We respectfully request that our needs and issues be considered in any future implementation so that we may work as partners regarding the stewardship of our water resources.

Sincerely,

Morris Ververs, President
Ed Stanko, Vice President
Patty Woodard, Secretary Treasurer
Dave Stone, Director
Joe Frasier, Director
Al Kobilan
Bob Safranek, Director



December 10, 2018

Nina Ruiz
El Paso County Development Services Department
Transmission via email: NinaRuiz@elpasoco.com

RE: El Paso County Water Master Plan
File No. MP181
Entire El Paso County
Water Division 1 and 2, Water District 8 and 10

Dear Ms. Ruiz:

We received the referral material related to the proposed Water Master Plan ("WMP") for the El Paso County. The WMP was developed for the purpose of resolving water supply issues earlier in the land use process for new developments, identify present conditions of water supply and demand, identify ways that can achieve efficiencies, and take steps through the comprehensive planning and development review process to encourage best management practices for water demand management. Implementing this WMP will help ensure that land use decisions are based on balancing efficient use of limited water supplies with the water needs of current and future residents. The WMP also proposes cooperation among water supply entities in the County with respect to water planning efforts.

An analysis of the current water demand and the current water supply was presented in the WMP document. According to the WMP document the current demand is estimated at 116,050 acre-feet/year and it is predicted that this demand will increase to 159,205 acre-feet/year by 2040 and 206,000 acre-feet/year by 2060. The current water supply available is estimated at 146,070 acre-feet/year and it is predicted that by 2040 the future water supplies will be 185,610 acre-feet/year and 212,150 acre-feet/year by 2060.

Based on the above there is currently an apparent surplus of approximately 30,000 AF of water on an annual basis. Thus, the current supplies are sufficient to meet current demands under average climate conditions throughout the County. However at the current level of water supply (146,070 acre-feet/year) there is a projected water need of 59,930 acre-feet/year of additional supplies by 2060. Based on the reported supplies and estimated demands, the current level of water supply could serve approximately 56 percent of the projected water demand in 2060.

The sources of water supplies used by water providers in El Paso County include surface and groundwater sources. The groundwater includes the water in the Denver Basin aquifers (inside and outside of the Designated Basin) and alluvial aquifer. The WMP acknowledged that the groundwater in the Denver Basin aquifers is non-renewable and there is a risk for those water providers who rely upon these sources. Therefore WMP indicated that there is a need to bring renewable water into El Paso County from the Arkansas River system to meet the future growth demands. Ideally,



renewable water should be used in times of wet and average precipitation, reserving non-renewable groundwater for use during drought conditions when renewable water flows are low. The WMP recommends the County help promote any efforts by water providers and developers to deliver additional renewable water supplies into the county. Other goals, besides developing renewable water sources, include alluvial storage, water reuse, evaluate modification to the County's 300-year water supply subdivision regulation and the landscaping standards, to encourage water conservation, efficiency and xeriscaping.

The implementation of this WMP will be reflected in the land use application process and how development projects integrate the goals, policies, and objectives set in the WMP. Although the proposed WMP may impact the types of referrals this office will receive from El Paso County, the subdivision water supply requirements will not change, and our office's opinion on the adequacy of a proposed water supply to a proposed subdivision will continue to be based on adequacy of each proposed source of water to each proposed subdivision. The proposed WMP are administrative only and do not diminish the current water supply requirements.

Should you or the applicant have any questions, please contact Ioana Comaniciu at (303) 866-3581 x8246.

Sincerely,



Keith Vander Horst, P.E.
Chief of Water Supply, Basins

IDC/KVH

Ec: Referral No. 25409

December 5, 2018

Nina Ruiz
Project Manager
El Paso County Planning and Community Development
2880 International Circle, Suite 110
Colorado Springs, CO 80910

RE: El Paso County Water Master Plan, File No. MP181 (DC RE2018-204)

Dear Ms. Ruiz:

Thank-you for the opportunity to review and comment on the El Paso County Water Master Plan. The plan provides guidance on ensuring that land use decisions support water use and supply efficiencies for the present and future needs of County residents. Additionally, the Plan is a strong resource for supporting informed conversation regarding water by the citizens of El Paso County.

Douglas County Planning Services offers the following comments:

- In Figure 4-6, please correct the spelling of Douglas County. Laramie-Fox Hill Formation is incorrectly referenced on the map.
- On Figure 4-7, please consider an explanation for the triangle symbols.
- On page 45, second paragraph, first sentence: Is the reference to "municipal water supply systems" intended to reference municipal and district water supply systems?
- Regarding Policy 6.0.10 which addresses the timing of submission of a water supply plan, Douglas County requires submittal and review of a water supply plan as part of the first review process requiring a public hearing. The formal determination of approval of the water supply plan by the Board of County Commissioners does not occur until preliminary plan for land proposed for subdivision. At the time of preliminary plan review, the water supply plan may be the same as that reviewed in an earlier rezoning application, although the water provider is required to provide a more substantial water supply commitment statement.
- Policy 6.1.2.14 identifies concepts that may be more effective in extending water supplies than is the 300-year rule. Please consider whether discussion of the core rationale of the policy ought to be discussed within the Plan narrative to strengthen its significance.

Regards,

Joe Fowler

Joe Fowler, AICP
Chief Planner

C: Curt Weitkunat, Long Range Planning Manager

Mark Gebhart

From: Ann Werner <awerner62@gmail.com>
Sent: Monday, November 5, 2018 9:45 AM
To: Mark Gebhart
Cc: Ann Werner; Brian Potts
Subject: EPC WMP comments

CAUTION: This email originated from outside the El Paso County technology network. Do not click links or open attachments unless you recognize the sender and know the content is safe. Please call IT Customer Service at 520-6355 if you are unsure of the integrity of this message.

Good Morning Mark,

I finished my review of the document over the weekend. I apologize for not being able to meet the 2- Nov deadline.

These are high-level comments only.

General:

- Some sections have the blue band on the outside of the page, others have it on the inside of the page.
- Some pages are a single column, others are a double column.

Executive Summary:

- Consider adding language explaining rational behind why the document focused on projections to the years 2040 and 2060. Some readers may not go further in the document for those explanations.
- Consider adding language explaining the County's 300-year rule vs the State's 100-year rule, or note where in the document more detailed explanations are found. Same reason noted above.

TOC:

- Consider adding a appendices section listing tables, figures, and website references.

Page 3:

- The first sentence for section 1.2 Master Plan Purpose is located in the last paragraph of 1.1.
- Consider adding a short sentence in the last paragraph of 1.2 noting the other water delivery systems in addition to SDS.

Page 5: Remove the word "that" in the first sentence of the last paragraph, Nonrenewable water resources.

Page 13: Bottom of page, xeric vs xeriscape?

Page 24: Last paragraph, the word "are" should be "and".

Page 28:

- Recommend checking with CSU if Nichols reservoir is still a storage reservoir as it was heavily silted up post-Waldo Canyon fire with very little storage capacity.
- 4.2.1 last sentence change "delivery" to "deliver".

MEMORANDUM

El Paso County Commissioners El Paso County Master Water Plan



DATE: November 8, 2018

FROM: Michael Fink, P.E.
Water Superintendent
Fountain, Colorado

Good Morning Commissioners, I am Mike Fink, the Water Superintendent for the City of Fountain and I served on the Steering Committee for the Water Plan. I would first like to thank all of you for supporting Mr. Dossey and the staff of Planning and Community Development in implementing this initiative.

The Plan that is being presented to you is a part of the overall planning effort that encompasses the Transportation Plan that was adopted several years ago and leads into the Master Land Use Plan effort that will begin soon. This helps fulfill one of the Colorado State Water Plan's Goals, that by 2025, 75% of all Coloradans will live in communities where the water resource planning is congruent with the land use planning.

This Water Plan is a tool to guide the County in planning the future responsibly.

While this Plan looks forward, it is important to remember that there are areas of El Paso County that were developed when less was known about science and the technology was not as developed as we can employ now.

Many individual well owners in Northern El Paso County are dependent on Denver and Dawson Basin wells as their singular supply. These deep aquifers have a finite supply and, when the water is exhausted, these well owners will have no Plan "B" for a water supply. In the Southern part of the County, individual well owners rely on shallow alluvial aquifers as their singular water supply. As irrigated agriculture leaves the area, these well owners who depended on irrigated agriculture underflow will also experience well yields dwindling. These legacy water users had their wells approved under the best technology and science available at that time, but conditions change and these well owners face an uncertain future, since, when their well goes dry, their property has little value and their lifetime investment in their homes will mean nothing.

The El Paso County Water Plan will not solve these legacy water users' challenge. Individual wells drying up are now and will continue to be a policy challenge facing you and the other elected leadership in the cities and water districts.

Hi Mark / Craig:

The County's draft water master plan shows "4-Way Ranch Metropolitan District No. 1" as a water provider; this should be corrected to read "4-Way Ranch Metropolitan District No. 2" - which is the water provider and owner of the water infrastructure per agreement between 4-Way Ranch Metro District No. 1 and 2, as of March 2018 (operating through arrangements with Woodmen Hills Metro District) for the 4-Way Ranch community.

I see the deadline for comments is 11/27/2018 - are you able to make this correction?

Barbara

Barbara T. Vander Wall
Seter & Vander Wall, P.C.
7400 E. Orchard Road, Suite 3300
Greenwood Village, CO 80111
303-770-2700
303-770-2701 (fax)
bvanderwall@svwpc.com<<mailto:bvanderwall@svwpc.com>>
www.svwpc.com<<http://www.svwpc.com/>>

CONFIDENTIAL/PRIVILEGED COMMUNICATION. This e-mail may contain attorney-client or otherwise privileged and confidential information intended only for the use of one of our clients. Dissemination, distribution or copying of this communication is strictly prohibited. If you believe that this e-mail has been sent to you in error, please reply to the sender that you received the message in error and delete this e-mail. Although this e-mail and any attachments are believed to be free of any virus, the files should be virus scanned before opening them.

From: EPCDevPlan Notifications
<DoNotReply@epcdevplanreview.com<<mailto:DoNotReply@epcdevplanreview.com>>>
Sent: Tuesday, November 6, 2018 12:47 PM
To: Barbara Vander Wall <bvanderwall@svwpc.com<<mailto:bvanderwall@svwpc.com>>>
Subject: EPC Development Application Review: Please logon to provide Review Comments for Water Master Plan

EPC Development Application Review website:
<https://epcdevplanreview.com/><<https://epcdevplanreview.com/>>
Project: Water Master Plan
File #: MP181
Agency: Four Way Ranch Metro
Project Manager: Mark Gebhart (markgebhart@elpasoco.com<<mailto:markgebhart@elpasoco.com>>)
Due Date: 11/27/2018

Contact Name: Barbara Vander Wall
Contact Email: bvanderwall@svwpc.com<<mailto:bvanderwall@svwpc.com>>
Access: You are the primary contact for this project. You have full access to upload comments and manage contacts.

Please go to the EPC Development Application Review website and logon to review the documents for this project. Log in with the Contact Email above. If you forgot your password, you can use the Forgot password link on the Log in page to reset it.

Mark Gebhart

From: Mark Belles <glencanyon1188@gmail.com>
Sent: Tuesday, November 13, 2018 6:26 AM
To: Mark Gebhart
Subject: El Paso County Water Master Plan
Attachments: 2010 USGS Water-Year Summary for Site USGS 07134180.pdf; 2012 USGS Water-Year Summary for Site USGS 07134180.pdf; 2006 USGS Water-Year Summary for Site USGS 07134180.pdf; 2008 USGS Water-Year Summary for Site USGS 07134180.pdf; 2017 USGS Water-Year Summary for Site USGS 07134180.pdf; 2014 USGS Water-Year Summary for Site USGS 07134180.pdf; 2016 USGS Water-Year Summary for Site USGS 07134180.pdf; 2009 USGS Water-Year Summary for Site USGS 07134180.pdf; 2013 USGS Water-Year Summary for Site USGS 07134180.pdf; 2015 USGS Water-Year Summary for Site USGS 07134180.pdf; 2011 USGS Water-Year Summary for Site USGS 07134180.pdf; 2007 USGS Water-Year Summary for Site USGS 07134180.pdf

CAUTION: This email originated from outside the El Paso County technology network. Do not click links or open attachments unless you recognize the sender and know the content is safe. Please call IT Customer Service at 520-6355 if you are unsure of the integrity of this message.

Mr. Gebhart,

I have reviewed the El Paso County Water Master Plan and have two comments.

Page 30 & 33

Policy 4.2.2 states

In order to reduce the dependency on non-renewable water supplies and accommodate new development, allow for the potential to import new and preferably renewable water supplies from outside the various planning areas, potentially including the Arkansas River.

The graphic on page 33 shows a historical average annual stream flow for the Arkansas River of 154,800 AF. This historical average, while accurate, vastly overestimates the trends for Arkansas River. Over the past eleven years the annual flows for the Arkansas River at the USGS streamflow gage [07134180] closest to the Colorado State Line are shown in the following table and represent an average annual stream flow for the Arkansas River leaving Colorado over the past 12 years of 52,075 AF. This is 34% of the value shown on page 33. Whether or not one accepts Climate Change, these numbers are sobering and represent a much smaller source of renewable water than is stated in the El Paso Water Master Plan. I've attached the USGS data, taken from their website to support these data.

2006	40,500 AF
2007	96,780 AF
2008	69,710 AF
2009	70,890 AF
2010	86,120 AF
2011	44,750 AF
2012	17,440 AF
2013	7,700 AF
2014	25,030 AF

2015 51,460 AF
2016 56,880 AF
2017 57,640 AF

Page 44

Policy 5.2.2 states

Recognize the water supply challenges and limitations inherent in each of the regional planning areas, with particular emphasis placed on Regional Planning Area 3 (Falcon), as a result of current reliance on non-renewable Denver Basin wells and the renewable, but limited and overappropriated, Upper Black Squirrel alluvium.

As a resident of 4-Way Ranch Metropolitan District No. 1, whose District water comes from wells drilled into the Arapahoe and Laramie-Fox Hills formations, moving from non-renewable to renewable water resources is of vital interest. I fully support this goal. As a means to achieving this goal I urge Colorado Springs Utilities to expand its service of renewable water to our District and other Districts.

Mark Belles
13610 Bandanero Drive
Peyton, Colorado 80831-3808

Mark Gebhart

From: Canterbury HOA <chairman@canterbury-hoa.com>
Sent: Monday, November 12, 2018 5:34 PM
To: Robert Swedenburg; Aspenson, Mike (Vista Clara Villas HOA); Dee, Donna (Paradise Villas); Fitch, Duane (Bent Tree); Lynd, Greg (Fox Pines HOA); Oliver, Larry (GCA); Sawyer, Chet (Misty Acres HOA); Vierzba, Tom (Higby); Mark Gebhart; Holly Williams
Subject: Re: FW: El Paso County Water Master Plan Review

CAUTION: This email originated from outside the El Paso County technology network. Do not click links or open attachments unless you recognize the sender and know the content is safe. Please call IT Customer Service at 520-6355 if you are unsure of the integrity of this message.

I guess I'll be the one to ask the hard questions since I haven't seen anyone else do it:

1) County leadership has frequently, consistently, and with the blessing of the judicial system made decisions that directly contradict their own planning documents. Many times they have explicitly stated on the record that they are not bound by these documents and will do whatever they want. Why is this particular document going to be any different?

2) The policies outlined by this document are all very non-committal, repeating "action" words like "support", "encourage", "consider", etc. It's an entirely pointless document with no real plan that I can identify. Have I missed the actual plan somewhere? You know, the part that outlines how we're going to get from where we are to where we want to be? "Considering", "encouraging", and "supporting" doesn't get anything done, especially if leadership has no incentive to go along with it in the first place.

3) Water laws are very complex and involve state, federal, and even international law. Does this plan even take those considerations into account?

4) The county continues to fail at basic government responsibilities, like maintaining minimum standards for roads and other collective infrastructure under their purview. How much money did the county spend having this beautiful piece of meaningless fluff created? How much of that could have been spent to make a meaningful difference in some tangible county deficiency somewhere? The money spent on this document wasn't even kept inside the county, so that potential economic benefit was lost as well.

I'm really not trying to be contrarian, but I continue seeing resources wasted on these bureaucratic softballs that never produce any tangible results for anyone except all the Denver-based consultants that keep taking the public's money to create them. Where is the leadership?

Chris Davis
board chairman

On 11/12/2018 3:41 PM, Robert Swedenburg wrote:

To NEPCO Reps and HOA Presidents,

Below is the link to the draft El Paso County Water Master Plan. As you are well aware, water sources are critical in our part of the county. You may be interested in reviewing this draft water master plan.

Bob Swedenburg

NEPCO Secretary

(PS: Member email addresses are in the bcc line to reduce proliferation.)

From: NEPCO Vice President [<mailto:TvierNEPCO@comcast.net>]

Sent: Monday, November 12, 2018 7:46 AM

To: 'Bob Swedenburg' <swedenburg@comcast.net>; Chet Sawyer <cbsawyer1@comcast.net>; Donna Dee <donnadee970@gmail.com>; Fitch, Duane (Bent Tree) <duane.fitch@gmail.com>; 'Greg Lynd' <gklynd@gmail.com>; nepco-ma@comcast.net; president@nepco.org; Bill Eckert <billsueeckert@aol.com>; 'Donna Wood' <dwoodhockey@comcast.net>; 'James Desautel' <jimandcindydesautel@yahoo.com>; Jerry Richardson <JerryR@classichomes.com>; Jon Mills <jondavidmills@yahoo.com>; 'Larry Osgood' <ldogood1@aol.com>; 'Louise Link' <L3par@q.com>; 'Paul Pirog' <pep123@comcast.net>; Richard B Robertson <robbyvmi@netscape.net>

Subject: FW: El Paso County Water Master Plan Review

Board and Team,

Attached is the link to the Draft El Paso County Water Master Plan. Please find time to review the document.

Bob,

Please send the link to our membership.

Mike,

Please post the link to our website. Thank you

Tom Vierzba

Vice President & Chairman, Transportation & Land Use Committee

H (719) 487-1411 C (719) 237-5684

<http://nepco.org/>

landuse@nepco.org

Subject: El Paso County Water Master Plan Review

Please take the opportunity to view and comment on the development of the El Paso County Water Master Plan, which is now publicly available by clicking on the attached link: <https://epcdevplanreview.com/Public/ProjectDetails/110995>

Please note that this a large file and may take some time to download.

You have been included in this notice since you were an initial point of contact for a water provider at the start of this master plan effort, were present at our open house, or were contacted by us regarding this project. If you do not want to receive further notices regarding this plan, please contact me by email.

The review schedule is:

Available for Public Review and Comment	Nov 6th
Board of County Commissioner Report Item	Nov 13th
Planning Commission 1st Public Hearing	December 4
Planning Commission 2nd Public Hearing	December 18

Mark Gebhart

Deputy Director

El Paso County Planning and Community Development