

Bjork, Rebecca

From: Bjork, Rebecca
Sent: Tuesday, December 02, 2008 3:19 PM
To: Horton, Roger
Cc: Andersen, Christine; Casey, Paul; Armstrong, Jim
Subject: RE: General Plan Update-Water Supply

Roger:

Historically the we have used critical drought water supplies for our water supply planning. In most communities, this is the most conservative approach as it aims to make sure that there is a water supply even in times of shortage.

Mr. Ruiz has expressed concern that the fact that we include 3,125 AF/yr of desal in planning for critical shortages could result in overstating supplies during "normal" years. This is one of the things we will evaluate as we revise our Long Term Water Supply Plan for Council's review and adoption. It is complicated somewhat in that in years that Cachuma spills we have more than 8277 AF/yr from that source which can allow us to carry water forward in Cachuma as "carry over" while also off-setting the need for other supplies such as groundwater.

With regard to Mr. Ruiz's estimated annual volumes for our various water sources, I would say it slightly understates what I would consider our "normal" supplies and doesn't include a couple of supplies, such as water that infiltrates in Mission Tunnel and recycled water which probably add about 1800 AF/yr.

Please feel free to call me at 897-1914 if you'd like to discuss this further.

Rebecca Bjork
Water Resources Manager
(805) 897-1914

-----Original Message-----

From: Armstrong, Jim
Sent: Tuesday, December 02, 2008 11:48 AM
To: Bjork, Rebecca
Cc: Andersen, Christine; Casey, Paul
Subject: FW: General Plan Update-Water Supply

Rebecca,

In Chris' absence, can you respond?

Thanks,

Jim

-----Original Message-----

From: Horton, Roger
Sent: Tuesday, December 02, 2008 11:21 AM
To: Casey, Paul; Andersen, Christine; Armstrong, Jim
Subject: FW: General Plan Update-Water Supply

Am I incorrect, or isn't it the case that we do full long range water use planning all the time?

Are his numbers OK?

Roger

Roger L. Horton

Santa Barbara City Council
805-564-5320

-----Original Message-----

From: ruizsbaw@cox.net [mailto:ruizsbaw@cox.net]
Sent: Tuesday, December 02, 2008 8:02 AM
To: Williams, Das; Francisco, Dale; House, Grant; Schneider, Helene; Falcone, Iya; Blum, Marty; Horton, Roger
Cc: harwood@harwoodwhite.com; Bjork, Rebecca; Info@YouPlanSB.org; ruizsbaw@cox.net
Subject: General Plan Update-Water Supply

Dear Madam Mayor and Honorable Members of the Council:

I communicated with the Planning Commission on this subject for their September hearings and that communication was shared with Water Resources staff and others. No one has indicated to me since that time that there are any factual errors in my Memoranda to the Planning Commission. In my communications with the Planning Commission I included some process suggestions that I have decided not to include here. I want this communication to strictly be the sharing of factual information and I will leave it to your Council to use that information as you deem appropriate.

It is my observation that there has not yet been a thorough examination of our long term water supplies in the General Plan Update process. I also believe that in part because the City's formal statement of water policy, the Council approved Long Term Water Supply Plan, pre-dates most of the current Council and most of the staff (it was adopted by the Council in 1994) there is not a broad and clear public understanding of our water supply situation for purposes of long term land use planning, today.

The focus of this is a subject that I first communicated with you on in August when you considered the matter of the Desalination Facility Study. One of the issues I discussed in that communication is the fact that Desal is currently included in the Long Term Water Supply Plan, at a production figure of 3,125 acre feet per year (afy), as an existing available supply of water for the City. My concern in that regard has since been heightened by the document entitled, "Plan Santa Barbara-Water Supply Summary" ("Water Summary Memo"). The Water Summary Memo is on the General Plan website and I assume you have received it. The Water Summary Memo has been used as the source document for Community Development staff to make the finding in the document entitled, "Resources Capacities Summary" September 2008, that we have 17,900 afy of long term water supply, and up to 1,300 afy of surplus water supply available to serve new development water demand.

The focus of this communication and the issue that I believe is important for your information and that of the public at this juncture, is that the 17,900 afy water supply figure includes a water supply from the Desalination Facility of 3,125 afy. I do not want to be pedantic but it should be clear that if you subtract the 3,125 afy of Desal production from the water supply figure of 17,900 afy, the surplus water supply finding disappears.

As the Water Summary Memo is before you and the public, I will use it as the template for my discussion of our existing water supply.

Gibraltar Reservoir/Mission Tunnel: As you know we have sustained significant siltation impacts to Gibraltar from the Zaca Fire and we have for the first time initiated the so called Pass Through Operation. For long term planning, average yield is probably going to be about 4,000 afy.

Cachuma: Although conservative long term planning might indicate a slight reduction in yield in light of siltation and possible decisions of the State Water Resources Control Board on Cachuma Water Rights, I will use the current yield figure of 8,277 afy.

State Water: This supply is of course subject to much concern and controversy today. The City is very conservative on State Water and that is of course prudent. As I expect you have been informed, this year, at least at this point, the State Water Project is only scheduled to deliver 15% of Table A contract allotment. The City uses a 34% figure. That produces a yield of 1,122 afy.

Groundwater: We are expending substantial financial resources to upgrade our groundwater

facilities. The LTWSP states that our aquifer has a yield of approximately 1,900 afy and there is private production of approximately 500 afy. After all the facilities currently planned are completed, we will probably produce, on average, approximately 1.000 afy.

Totaling the above results in the following:

Gibraltar	4,000
Cachuma	8,277
State Water	1,122
Groundwater	1,000

Total Potable Supply 14,399 afy

Recycled Water: We deliver approximately 800 afy through the Recycled Water system. In my communication with the Planning Commission on this subject I raised the issue of the fact that we currently have a water quality problem with the Recycled facility and we must blend 40% potable water in the Recycled system to meet water quality requirements. I used 40% because I believe if it was necessary that is goal we could meet today. In fact in the last water year that just ended in October, we delivered 803 af of water through the Recycled system and of that, 616 af was actually treated potable water, an over 75% blend. This is a problem that can be rectified and I do not disagree with staff's position that as we do not need that water supply today, we can put off the project until later. I understand the project will cost \$5 million or more when the time comes.

You will note that most of the individual water sources are not quantified in the Water Summary Memo. Part of understanding these issues is to know that there are many ways water resource professionals assess a water supply. Our staff uses a critical drought period analysis and that is of course prudent. The Urban Water Management Plan Act requires water purveyors to quantify their water resources for a normal year; a multi-dry year scenario; and for the critical dry year. Generally for long term land use planning and what I anticipate will be one of the approaches used in the General Plan EIR, the normal year, average yield assessment is used. That is what I have done here. That approach results in what would basically be expected as the yield of a water supply, on average, over a long period of time. That is the analysis used that results in our Cachuma yield being 8,277 afy.

To summarize, our current demand is approximately 15,000 afy. 800 of that is delivered through the Recycled system but in the last water year 616 af of 803 delivered was potable water, blended in the Recycled system because of water quality problems.

Our current average anticipated potable supply is approximately 14,400 afy, without Desal.

For a General Plan that has "Sustainability" as a theme, I certainly hope we can formulate a Plan that may be sustained without use of the Desalination Facility to serve new development. If new development is approved that would require operation of the Desal Facility, when that new development comes "on line" the up front costs of starting the Desal Facility will be in excess of \$20 million (\$20,000,000.00). The ongoing operations costs would make Desal water by far our most expensive water to produce. Those are costs that would be shared by all City residents in our water rates. And my what a carbon footprint we would torch on this good earth.

Based on my understanding of the currently scoped Alternatives for the EIR, Alternative 2 and the Higher Growth Alternative, at buildout, would require operation of the Desal Facility to serve that level of new development. Also keep in mind these water supply figures I have used do not address any buffer. It has historically been City policy to carry a 10% water supply buffer for planning purposes and that is of course prudent.

If any of you care to discuss this or receive more detailed information on these water issues, please always feel free to contact me. Thank you.

Russell R. Ruiz