

**DATE:** MAY 28, 2015

**TO:** CITY COUNCIL

FROM: ENVIRONMENTAL ADVISORY COMMISSION

WATER RESOURCES MANAGEMENT SUBCOMMITTEE

**SUBJECT:** LEVEL 2 WATER SHORTAGE PLAN

### **RECOMMENDATION:**

At the May 19, 2015 Environmental Advisory Commission meeting, the Commission adopted a motion to authorize the ad hoc Water Resources Management Subcommittee to submit written comments to the City Council recommending that the Level 3 Water Shortage Plan (one day per week watering during warm months) be adopted, with additional provisions and recommendations outlined below.

### **INTRODUCTION:**

The State mandated for Pasadena to decrease its water use over 2013 levels from 2013 by 28% by February 2016. Since we are at ~9% today, this is a high hurdle. At level 2, estimates are that we could achieve ~20% and level three, roughly 28%. Consequently we recommend the City move to level 3 now to achieve the Statemandated target. Since two thirds of Pasadena's water consumption is by residential and multi-family residential, with 60% attributable to watering lawns and other landscaping, a significant number of our specific recommendations relate to landscaping.

## **WATER SAVINGS RECOMMENDATIONS BY THE EAC:**

- Move to level 3 water restrictions coupled with the following conditions
  - Add an additional turf rebate (\$1.50) added to the MWD (\$2.00) for the first 1000 SF of turf for Pasadena residents.

- In order to qualify for the rebate, the turf removal project must include elimination of spray irrigation, installation of drip irrigation and other lowflow watering systems and must ensure that trees are adequately irrigated.
- The turf must be replaced with aesthetically pleasing landscape such as rain gardens, mulch, and native California and drought tolerant plants.
- Modify level 3 restrictions to allow for proper irrigation of trees that are suitable
  for our climate. We need to preserve our mature tree canopy these are our
  foundation plantings, Among the benefits of a healthy tree canopy are mitigation
  of the effects of urban heat sinks and help in lowering costs associated with
  cooling.
  - Publish information regarding which trees are native and or drought tolerant and appropriate for our area (i.e., native oaks are appropriate, redwoods are not.)
  - Adopt and publish watering guidelines for responsibly maintaining trees in both public and private spaces, and help the public understand that trees need to be taken care of differently than groundscape..
- Publish information on what types for grasses are more drought tolerant, e.g. Bermuda Grass, St. Augustine, buffalo grass, sheep fescue, etc., as well as turf alternative groundcovers (such as woolly thyme, dymondia, etc.)
- Implement a training program for local Pasadena gardeners on how to design and install the above as well as how to complete the turf rebate application. Use Pasadena forestry experts and local nurseries to conduct this training.
- Offer a Gray water kit to Pasadena residents to reuse laundry water for irrigation which includes:
  - Hardware and Instructions for installation
  - o Guidance on the type of plants or trees that are tolerant to laundry soap
  - Guidance on what type of laundry soaps and bleaches are compatible for irrigation.
- Increase the free mulch program so be available seven days a week and consider a second location at the Rose Bowl.
- The water reuse project needs to be accelerated. A plan for Indirect Potable Reuse needs to be part of the initial phase.
- Explore all various options, both public and private, for water capture (bioswales, curb cuts, cisterns, rain barrels, etc.). Provide information to the public regarding practices that can be implemented at home, and consider how the larger scale public projects can be incorporated into future planning.
- Public parks and gardens, athletic fields and other recreation areas need to be protected from severe water restrictions. Recognize the benefit to the greater

- population in maintaining shared public spaces versus preserving only individual private spaces.
- Publish clear restrictions on when watering after a rain event is allowed. (For example: after 1" of rain, watering is allowed after 7 days. After 0.5" of rain watering is allowed after 5 days. After 0.25" of rain watering is allowed after 3 days. After 0.1" of rain watering is allowed after 2 days.)
- Publish clear guidelines on Swimming Pools. (For example: No emptying and refilling of swimming poos during Level 2 or higher restrictions, pool covers are required during temperatures higher than 80 degrees F.)
- Publish clear information on all Pasadena water conservation rebates.

# **COMMENTS SUPPORTING OUR RECOMMENDATIONS:**

- Currently, PWP only spends about 0.5% of its annual revenues on water conservation rebates. We believe this is too low.
- Pasadena needs to immediately adjust the current rate structure for the tier levels to reflect the real cost of water, the decrease in revenue from conservation measures, water reuse projects, and additional water conservation rebates. The additional kick to the MWD Turf Rebate will be expensive. This added charge needs to be evenly divided across all tiers because this benefits everyone. This additional cost to residents will also provide an incentive for water conservation. We believe the residents are adequately educated on our drought conditions and will understand the reason for the increase.
- We don't want Pasadena residents to conserve water by stopping the watering of their lawns resulting in brown, dead grass and dirt. We want to use this as an opportunity to transform Pasadena with beautiful neighborhoods featuring native California vegetation. This will preserve the aesthetics of our city and increase property values.

Subject:

FW: Today's meeting!

On May 26, 2015, at 5:29 PM, richard luczyski < rluczyski a hotmail.com wrote:

Margaret, I also want the e-mails that I sent to Eric Klinkner, entered into the record. He hasn't answered my latest e-mail and the other I sent of 7 questions were poorly answered. All questions except the one concerning you ,which I didn't expect an answer were evasive. This is why you have to convince me with answers to questions that whole doubts. I just finished with the plumber and I had to ask him about apt. and condo water issues, since he was working on one at present. He too doesn't believe that multi- story units use less water than a single family house on the same lot. His understanding was that a single family lot has maybe a house with one or 2 toilets, sinks and laundry rm. but a multi- story building on the same lot might have 10 toilets, as many sinks and 5 laundry rooms depending on the height of the building. The building also has other water uses such as a pool and landscaping needs. So show me some buildings to prove the point that all these multi-story buildings going up are using less water and less stress on the sewage system? The accumulated congestion on all of us, even those living in neighborhoods of single family houses is splitting the community. If you think you want more businesses in town where people feel comfortable circulating then think again because it is getting crowded. What will happen is most will shop on line and skip the congestion. Time will tell under your present scenario. Wait till the next economic down turn.

One last question: What is the current vacancy rate in all of the existing residential Multi-dwellings units in the City? Please add to todays hearing of e-mails on this water subject. Richard

From: mmcaustin@cityofpasadena.net

To: rluczyski@hotmail.com

CC: eklinkner@cityofpasadena.net; vflores@cityofpasadena.net; mjomsky@cityofpasadena.net

Subject: Re: Today's meeting!

Date: Tue, 26 May 2015 22:44:09 +0000

Your 2 previous emails and this one will be put into the public record for the meeting today and June 1st.

There is audio of the meeting available, I will ask the city clerks office (Valerie) to get you the particulars on accessing it.

Sent from my iPhone

On May 26, 2015, at 2:50 PM, richard luczyski < rluczyski a hotmail.com > wrote:

Margaret, Because my neighbor has a plumbing problem that needs fixing, he is out of town and has asked me to meet a plumber and the plumber can't get to the house until between 3:30 or 4pm. So I'm saving water but in another way. I would only ask that the comments I've already submitted to you and Eric Klinkner, be considered for review.

I recently went to a large Condo project off South lake and noticed the amount of water that is used for just the outside uses is considerable. I asked weather those in the units have separate water meters and the answer was no. So until the total water use for the entire condo project is known and the space that was using water

in the past is considered. How can we understand what the real water consumption really is? Small parcels are put together to make a larger parcel and I believe you now consider what was 7 parcels as single family residence is now a 5 story building with an unknown number of residents occupying the building. I also believe that more consideration needs to be done about people working, visiting for multi purposes, shopping that come from other cities on a regular basic and use water. Just what is that number? Eric admits that it has been neglected from studies. Just how many city workers live somewhere else is just one example

Since I can't attend: I would like to know what was said so that I can continue to respond before a possible decision is totally made on June 1. So if their is a tape of the meeting I would like to know where I can listen to it.

Richard

## Jomsky, Mark

Subject: FW: Water Issues

From: richard luczyski [mailto:rluczyski@hotmail.com]

**Sent:** Saturday, May 23, 2015 5:52 PM

To: Klinkner, Eric; Nick Kipley; McAustin, Margaret

Subject: RE: Water Issues

Eric, Your chart shows a better average of 30,000 Acre ft. over 55 years, You need to supplement your chart with better population data taking into consideration of what was here in 1960, that population would indicate about 118,000 people? Since then a freeway has been built and many structures have been lost to that construction project but water consumption continued to rise. Why? The same thing has happened in each of our development phases. We increase consumption and water rates continue to go up. You tell me that apartment houses and commercial buildings use less water than a single lot does( as a house) but let's figure that multiple lots are used to make these buildings. I would like to see records of what larger buildings used to what those individual lots used. I would love to see better proof of water use and what the cost of water loss has been over the years to PWP? How have you arrived at the water loss figure? How was it measured? I applaud the efforts of PWP to save water but not at the ruin of the character of Pasadena. This City is looking just like every other city with run away growth, with no controls being put in place to slow it down? I'll bet Air Quality Control disclosers would slow development down and the city hasn't even tried to do this measure?

I don't believe in no growth but what is happening now is crazy. We can't support the existing Infra-structure at present with water for trees, parks and other green spaces we create in the past to make this city "wonderfully different" from other cities. Now you think adding more problems will help solve the problem? We know that it will rain again but we are not certain when and how much. The City seems to think we will wish this problem away by destroying the landscape of residential users with higher water rates? It will work for a while but have you driven around town and see what the landscape is looking like? We are just getting started this time. Maybe we should have a photo contest to see what council district is becoming a distraction? With lower property values to come, drought and down turns will come again! What are our existing water right? What is the surplus we keep for emergencies? Tells us what this IRP water plan is that will meet the 20-25% conservation needs 15 years from now when you can't plan 2 years from now with certainty? When do you plan to tell us how much water visitors and employee from out of area working here use and why hasn't this amount been considered? Your building more Hotels and other water using facilities for those needed shoppers to use.

Eric your last paragraph of your e-mail doesn't sit well with the people paying your salary. We have ask for less growth, less traffic, a better Quality of live for our children as well as ourselves and neighbors and you are doing just the opposite. What will Pasadena look like 20 years from now with growth planning to city ruins? Even though you have started to believe the entire Southland has the drought, and that development will go somewhere else. If that were so, then why is it that everyone in the region is also growing and using more water?

You haven't answered some of my original question yet. The ones asked are questions that need straight answers not diversion answers. Case in point: Question one: Why during years of demolition and construction of the 210 freeway,

why was water consumption rising? If we had fewer landscaping to water, water consumption would drop, If it rained a lot then water consumption would also be dropping. Lets do some homework on all your answers.

Question 2: Surplus

Question 3: Water balance

Question4: Water consumption on the rise since 2010

Question6: Mentioned but with no answer

Question 7: Did have a question in it, mostly a statement that should have had more question marks through out the statement. Particularly my last sentence.

Finishing up today: I would like to see the water consumption records for each Council District? Lets have some idea of where the greatest consumption is taking place so we can also see the conservation efforts of each District? A little contest to see who really is committed and to see that everyone is doing there share without notices and fines? PWP needs to do a better job in getting the word out and our elected Representatives from each district needs to do even more. Maybe they should walk their districts and talk to their constituents first hand and keep records of what the people are saying and report the information to their web site and a city web site?

Richard

From: eklinkner@cityofpasadena.net

To: rluczyski@hotmail.com

CC: nkipley@beaconmedianews.com; mmcaustin@cityofpasadena.net; ttornek@cityofpasadena.net

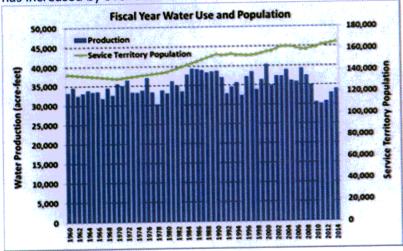
Subject: RE: Water Issues

Date: Sat, 23 May 2015 17:17:30 +0000

Hi Mr. Luczyski

It is pretty clear from your questions that you are concerned that new/economic development may be the cause of increased water use or need to conserve.(Question)

Our data show that the any correlation between development and water demand growth pretty much ended by the late 1950's to early 1960's (after Hastings Ranch area, the last big subdivision, was built out). I started the graph (below) in 1960 to show that consumption has been essentially flat since then (averaging about 35,000 AFY), even as population has increased by over 20%.



Annual variations in water use since 1960 have been driven primarily by rainfall and temperature, but also short-term reductions from "drought response" followed by "return-to-normal" cycles. The increase since 2010 can be mostly explained as a bounce-back after the massive decrease from 2007 to 2010 caused by extraordinary conservation measures due to the drought, the higher tier 4 and tier 5 rates that were in effect, the tanking economy, and the relatively high rainfall during 2010-2011 (26-42% above normal). Since 2010, rainfall has been 40-60% below normal, the higher tiered rates were dropped, and the economy has improved. We don't have data that suggests that development was a significant factor.

MWD, which supplies all of PWP's water demand (once the lower-cost local supply rights have been used), has never indicated an inability to meet the current or future needs of its customers (allocations are meant to encourage reduced use). Nonetheless, our Water IRP established an aggressive water conservation to meet about 20-25% of our total water demand from conservation by 2030 as part of an overarching strategy to reduce reliance on imported supplies and build more drought resilience into our supply portfolio.

You are correct that Pasadena hosts a number of visitors and employees that consume water, and that this is not factored into the "per capita" water use metrics utilized by the state and published in the media.

Whether a given new development uses more or less water really depends on what it is replacing (much more if a parking lot, possibly less if replacing a lot that had previously been irrigated landscape). Regardless, new development is substantially more efficient than existing stock. As a result, new multifamily development helps lower Pasadena's per capita water use. Furthermore, increased population results in higher water allocations from MWD during drought years.

The bottom line is there may be many reasons to either promote or discourage development within the City, depending upon your perspective and values.

From a strict water supply perspective, the drought and water supply availability should not be a reason to ban new development in the City at this time, as the effects would not be felt for years and such a ban would simply move new development to adjacent areas that draw from the same imported water supplies (thus it wouldn't solve Pasadena's supply problem in the near- or long-term).

### Regards,

Eric R. Klinkner Assistant General Manager and Chief Deputy Pasadena Water and Power (626) 744-4478



Eric R. Klinkner Assistant General Manager and Chief Deputy Pasadena Water and Power (626) 744-4478

From: richard luczyski [mailto:rluczyski@hotmail.com]

Sent: Tuesday, May 19, 2015 1:05 PM

To: Klinkner, Eric; Nick Kipley; McAustin, Margaret; Tornek, Terry

Subject: RE: Water Issues

Eric, Thanks for considering my requests. I'll probably continue this effort for the next few days as I muster up my thoughts.

1) Why are you using water consumption records starting in 1960? I believe in the late 60's and early 70's that our existing 210 Freeway was under construction and numerous houses and business's (a number I would also like to know) were removed to make way for the freeway. My question is why during those years

of demolition and construction were water consumption rising? No one was watering their lawns who lost their houses and business's. Could it be totally Construction water that was needed?

- 2) Does Pasadena Water and Power have a water surplus number that can be stated with certainty? If so, what's the amount?
- 3) In your bar chart 30,000 acre feet of water seems to be an established amount that Pasadena has been working with for 55 yrs. Is this the number we can use as the base line for Pasadena's water balance?
- 4) Since we are not building many single family houses in Pasadena, then why with all our conservation efforts has our water consumption been rising since 2010? Now it looks as if it is on a steady rise and I'm wondering if it is due to all the construction projects going on and the additional water used to build these projects? It seems to me that homeowners in my district seem to be responsible with their cut backs. Myself, I have cut back by 40% on my water bill and I still have most of my grass. So I don't think neighborhoods should devalue their property all at once or the City will find that the property values will decline and tax revenue will do likely.
- 5) My council women doesn't seem to be working for her neighborhood because she doesn't even answer her e-mails on several subjects related to all these issues. I see it as if she enjoys the seemingly endless growth that is hampering her Quality of Live definition. I e-mailed to her 5/13/15, some of what I would have liked her to consider in last night water work shop hearing. She didn't mention one thing I asked and the mayor tells us to e-mail our suggestions on this issue. Somehow the public is getting short changed by our leadership.
- 6) Pasadena has become a continuing destination that people from outside our community come to work, shop, visit and be entertained. The number I've heard is 40,000 people. Correct the number if you will? I see a tremendous outflow of water use by those coming to Pasadena each day. How is this amount being measured in our water use numbers? As far as I know people drink water use bathrooms and will not be asked to cutback. I do want employees of restaurants to wash their hands. So tell me how we balance these uses, to homeowners who mostly take pride in their property to make Pasadena a desirable place?
- 7) We need to stop the issuance of new building permits for any large water users until we balance homeowners demands to change habits on water use. You can't tell me, but you need to convince me that 5 story structures with 275 units doesn't use more water that a small Lumber yard with no more than 2 bathrooms and no area for showers or the flat area that is on Wilson and Corson that hasn't used any irrigated water on the property, even when the trains were running. Now we'll have luxury units with multiple bathrms. and still outside water use for landscaping. Please let me know what the water use budget was at the planning stage for these projects and after it is finished what the actual use is? Maybe then we can have a measure to use when planning. Not only will those living in those locations have a water problem but an Air Quality Issue that hasn't been resolved by issuing a disclosure statement when renting or purchasing properties with potential health risks.

More to come but enough for now.

Thank You Richard Luczyski