



**AGENDA NO: B-2**

**MEETING DATE: June 17, 2020**

**AGENDA CORRESPONDENCE  
RECEIVED BY THE PUBLIC WORKS ADVISORY BOARD  
FOLLOWING POSTING OF THE AGENDA IS ATTACHED  
FOR PUBLIC REVIEW PRIOR TO THE MEETING**

## Janeen Burlingame

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**From:** Janeen Burlingame  
**Sent:** Tuesday, June 16, 2020 8:23 AM  
**To:** PWAB  
**Subject:** Public Works Advisory Board Item B-2 RE: WEU Allocations  
**Attachments:** Jennifer Callaway re Water Use.pdf

Hello Everyone,

Hope you are having a good week. Please see the attached correspondence regarding Item B-2 on the 6/17/20 PWAB meeting agenda. As a reminder, per Brown Act regulations, please email staff directly if you have questions about the letter from Mr. Peck and not "Reply All" to the group.

Thanks, and have a good day.  
Janeen

Janeen Burlingame  
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**From:** Stephen Peck <[Steve@PeckPlanning.com](mailto:Steve@PeckPlanning.com)>  
**Sent:** Saturday, June 13, 2020 2:38 PM  
**To:** Jennifer Callaway <[jcallaway@morrobayca.gov](mailto:jcallaway@morrobayca.gov)>  
**Subject:** Public Works Advisory Board Item B-2; WEU Allocations

Here is some correspondence from me regarding water use assumption in the OneWater and WEU Allocations. I find these kinds of issues very common throughout California. Residential buildings are rapidly changing and are at twice as efficient as they were just 5 years ago. It is recommended that the City's allocation process catch up with those advancements.



Jennifer Callaway, Acting Public Works Director / Finance Director  
Damaris Hanson, Environmental Program Manager  
City of Morro Bay

**Re: Public Works Advisory Board Item B-2; Allocation of WEU's**

The staff report for Item B-2 sets forth a good history and analysis of Morro Bay's water sources and uses. Having been involved in development projects in San Luis Obispo County for the last ten years, and for over 45 in the State of California, I know that water supply is a very important issue. It is also one of the most mis-understood areas with respect to new growth and development.

Water supply security depends on a forecast of the sources from a number of available sources, including groundwater, State Project water, local stored surface water (Whale Rock and Nacimiento), recycled water, and in Morro Bay's case the de-salination plant, and an accurate forecast of current and future water demands. An often-overlooked "source" is conservation as older units are upgraded with more efficient plumbing fixtures. Conservation has, in fact been one the greatest "sources" of water for the community. As noted in the staff report, water use in the community is 19 percent less than it was just seven years ago in 2013. And, over the longer term from 1980 to 2019, total water use has actually declined from 1,751 AF to 1,039 AF, a 41 percent reduction, even as the community added 1,200 residents and many businesses over that 40-year period. Because of conservation, growth has been negatively correlated with water use. The fears that spawned Measure F have fortunately not been realized.

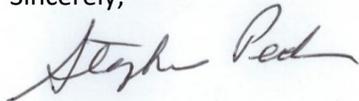
There are several assumptions about water use that are typically misunderstood, including time of use, use by land use type (commercial or residential), standby fire flow water requirements, and the difference between local community historical water use and projected water use. The City assumes that a typical single-family residence uses 90 gallons per capita per day (GPCD) (or about 200 gallons per unit per day) and therefore defines a Water Equivalency Unit (WEU) as 90 GPCD. However, communitywide (old houses and new), the actual residential water use over the last five years has averaged 60 GPCD according to reports submitted by the City to the Department of Water Resources. Further, the actual water usage for new residential projects is substantially less than the community wide average due significant changes in building technology and methods, and the adoption of four successively more stringent versions of the California Building Code in 2010, 2013, 2016 and 2019. These codes have implemented new requirements for indoor and outdoor water conservation and have had the net effect of cutting residential water use in half.

The result of these new codes has been documented in research reports prepared by the California Homebuilding Foundation, the Water Research Foundation, and the Environmental Protection Agency. According to the California Homebuilding Foundation indoor water use for new residential units is estimated to be 31.85 GPCD. The Water Research Foundation has estimated indoor water use under California's 2016 CalGreen building code to be 36.7 GPCD. Finally, the Environmental Protection Agency (EPA) estimated that indoor water use under its "WaterSense" new home standard (very similar to California's CalGreen standard) to be 40.74 GPCD. The average for new residential units, with some

allowance for outdoor water use is approximately 40 GPCD for residential units that are occupied year-round. As we know, in Morro Bay at least 25 percent of all residential units (and perhaps a higher share of new residential units) are second homes or part-time homes whose water use is 25% to 35% of that for full-time residents. Projecting forward would indicate that an accurate WEU for a new residential project is about 35 GPCD  $(.75 \times 40 + .25 \times (.35 \times 40)) = 33.5$  GPCD, 60 percent lower than currently assumed. Usage of the 90 GPCD factor seems to severely overstate the water use of new residential units in the community and may perpetuate the inaccurate belief that growth will tax the City's water supply. In fact, the City's ongoing conservation efforts may continue to result in a decline in water use, even as new development continues.

Thanks for the opportunity to comment. I would be glad to discuss further if there are questions.

Sincerely,

A handwritten signature in cursive script that reads "Stephen Peck". The signature is written in dark ink on a light-colored background.

Stephen J. Peck, AICP