

Proposal for the Use of the California Urban Water Conservation Council's BMPs as an SBx7-7 Compliance Method, Option 4

The BMP Option for SBx7-7 compliance is very short and simple and is addressed at the beginning of this document. The bulk of this document comprises responses to questions about the proposal.

SBx7-7 20 x 2020 legislation articulates three options water agencies may choose from in order to be in compliance with the legislation. The legislation directs DWR to adopt a fourth option based on certain criteria. The following is a proposed 4th Option for DWR's consideration.

BMP Option Proposal

The BMP Option proposal has only these three elements:

1. A water agency is in compliance with SBx7-7 in any year that it files complete annual conservation reports with the CUWCC and is found by the CUWCC to be in compliance with the Foundational and the Programmatic BMPs. For purposes of compliance with SB7-x7, no cost-effectiveness exemptions will be allowed.
2. Reporting future targets in current UWMPs: for the purpose of reporting future "urban water use target" in UWMPs, the water agency shall assume a 20-percent reduction in GPCD by 2020 (10-percent reduction by 2015) from the SBx7-7 "Option 1" 10-year baseline.
3. Reporting actual compliance with SBx7-7 in the then-current UWMPs (2015 and 2020): if the water agency meets the standard set in #1, above, the water agency shall amend its "urban water use target" to equal its "compliance daily per capita water use" for that reporting year (2015 or 2020). If the water agency fails to meet the standard in #1, above, its "urban water use target", #2, above, shall not be amended.

Frequently Asked Questions

The following are frequently asked questions related to the above proposal.

Is the legislative intent of SBx7-7 congruent with a BMP Option?

Yes. SBx7-7 Section 10608.4 (f) states that it is the intent of the Legislature to promote urban

water conservation standards that are consistent with the California Urban Water Conservation Council's adopted best management practices and the requirements for demand management in Section 10631.

In fact, this BMP Option is the only option which creates standards that are consistent with the CUWCC BMPs. Option 2 and 3 are essentially blind to the CUWCC BMP standards; Option 1 is consistent with the standards on with respect to the BMP's GPCD option.

Furthermore, this is the only compliance option that helps with the State-mandated transition from the CUWCC BMPs to the SBx7-7 compliance requirements.

In the absence of the BMP Option, the transition will be especially challenging to small and medium water agencies.

Is the BMP Option the only option that actually helps water agencies achieve the goals of the legislation by creating a road map to success?

Yes. The BMP approach goes beyond just providing a numerical target for agencies. It also provides guidance and a road-map on how to achieve the target, with significant flexibility built in. The fact that agencies will be implementing a series of best practices/programs increases the likelihood that agencies will be able to meet (or exceed) their 20 x 2020 target.

Many water agencies, particularly smaller agencies, lacking substantial administrative staff capable of on-going analysis, will find it difficult to plot out a strategic plan for reducing GPCD 20% by 2020, and evaluate the success of that plan and adjust it as needed between now and 2020. Adopting the BMPs as a compliance method provides these agencies with assurance that they will not be found out of compliance with SBx7-7 so long as they fully implement the water conservation best management practices as adopted by the water and environmental communities

For this reason, the BMP Option is especially helpful to small and medium water agencies.

Could DWR feasibly implement a BMP Option for compliance with SBx7-7?

Yes; there is perhaps no option requiring less effort or resources on the part of DWR. This is a very important consideration given the State's financial problems. Little more would be required of DWR staff than to contact the CUWCC once every 5 years to get a list of water agencies that are in compliance with the BMPs.

Is it reasonable to assume the BMP Option would result in a 20-percent reduction in water use?

Yes. Water use in urban California has been calculated to be about 192 GPCD; a 20-percent reduction from there equals about 38 GPCD; this BMP Option would result in a reduction of at least 46 GPCD (for a total reduction of about 24-percent). Even if the state's water use were higher, say 202 GPCD, the reduction would be about 22-percent.

The 20 x 2020 Water Conservation Plan estimates the water savings from major water conservation and recycled water programs. The following table shows the statewide savings estimated by the report and, in the two right-most columns, the savings from the BMP Option 4.

Reduction in GPCD

	20 x 2020 Report Table 7	BMP Option	
		Min	Max
Code	8	8	8
80% of local cost effective (CE)^	11	11	11
Grant funded	4	4	4
Efficient clothes washers	3	3	3
Residential ET controllers	3	0	3
Subtotal	28	26	29
Accelerated coverage goals*	9	9	9
Recycling	3		
Water loss control (30 g/conn./day)**	6	8	10
Irrigation restrictions (1 day/week)	16	--	--
Miscellaneous PBMPs	2	--	--
Subtotal	36	17	19
Total	64	43	48

^ This underestimates the BMPs because it is based on the BMPs prior to the major revision that took place in 2009.

* The BMP Option does not allow for cost-effectiveness exemption

** Water loss control requirements of the BMPs have been greatly increased since 2008, source of Table 7 data. AWWA had assumed average water loss = 15%; new BMP will require significantly lower losses, perhaps as low as 5%. This table only assumes a reduction from 15% to 7%.

If the baseline average urban water use GPCD equals 192 GPCD; a 20% reduction from that is 38.4 GPCD (192 * .2). Using this table, we can see the BMP Option 4 would result in a statewide savings of from 43 to 48 GPCD, easily surpassing the 38.4 needed for a 20% reduction. Therefore, it is reasonable to assume a BMP Option, if implemented by all urban water agencies, were achieve a statewide reduction of more than 20% of GPCD.

If watering restrictions of 1, 2 or 3 days per week are included, the reduction in GPCD greatly exceeds the statewide target of 38 GPCD.

Using the table in this way is not an endorsement of the table or a validation of any of the numbers in the table, but simply recognition that this is DWR's best estimate in the year 2010 of potential water saving. The numbers in the tables are not meant to be incorporated into a target-setting process.

Does SBx7-7 allow water agencies to amend their Urban Water Use Targets?

Yes. For example, to determine the urban water use target under Method 2 (what's referred to as the 'efficiency approach', the "Urban water use target" is adjusted regularly, depending on population growth, the amount of landscape, growth in CII, etc.

For another example, SBx7-7 requires DWR to evaluate the need to recommend in 2016 some amount different than the 55 gpcd for indoor use for Option 2, in which case water agencies will have to adjust their urban water use targets accordingly.

For another example, water agencies may, over time, develop more accurate means of estimating the amount of landscape in their service area, requiring adjustments in their urban water use targets.

For another example, water agencies can expect to adjust the CII component of their urban water use target as more decisions are made with respect to how to adjust for process water, calculating the amount of process water, changes in CII growth in their service area and the impact of changes in the economy on CII use, etc.

Does the BMP Option protect agencies that make a good-faith effort to do the right thing?

Yes. The BMP Option provides assurance to water agencies, agencies that make a good-faith effort to do the right thing with respect to conservation, that they will be in compliance with the SBx7-7.

First, the other options set targets that water agencies have to figure out how to meet and hope that forces outside their control do not frustrate their good-faith efforts to meet those targets. Outside forces include things like changes in population, housing density or landscape, and changes in economic activity.

It also takes the pressure off the water agency that, in good faith, implements a program with the expectation that the program will achieve the results necessary to meet a fixed target, only to find the program was not as successful as hoped for and, therefore, the agency is out of compliance with SBx7-7.

This option allows water agencies to plan and implement programs and avoid the uncertainty associated with chasing specific targets.

Therefore, the BMP Option will be especially helpful to small and medium sized agencies that lack large administrative staff.

Does the BMP Option give water agencies credit for the use of recycled water?

Yes, the BMP Option allows water agencies to use alternative supplies in order to meet their SBx7-7 goals. For example, the CUWCC BMPs recognize and provide credit for recycled water development. Agencies selecting the Flex Track Approach or choosing the GPCD Approach receive equivalent credit for conversions when converting demand from potable to recycled water.

Other options in the Flex Track Approach include credit for on-site reuse of the following alternative water sources: cooling condensate, foundation drain water, gray water, storm water, rain water, pond and water feature recycling.

If the CUWCC BMPs change in the future, could water agencies be on the hook to do BMPs they are not able to or that would require much more of an investment than is feasible for them?

CUWCC BMPs can only be changed by a majority vote of CUWCC Group 1 members – the water agencies themselves. In other words, water agencies, as a group, would have to agree to changes before the CUWCC BMPs could be altered.

Does the BMP Option give water agencies credit for past investments in conservation?

Section 10608.4 (g) states that it is the intent of the Legislature, by the enactment of this part to.... Establish standards that recognize and provide credit to water suppliers that made substantial capital investments in urban water conservation since the drought of the early 1990s. And Section 10608.2 (2)(b)(4)(F) declares the intent to avoid placing undue hardship on communities that have implemented conservation measures or taken actions to keep per capita water use low.

A BMP Option would provide credit for past conservation in several ways. For example, credit is given for local ordinances (retrofit upon resale), proven levels of saturation, the number of past water audits and the degree of compliance with certain other BMPs prior to 2010. These credits are standardized and equitable and agreed to by both the water and environmental communities. For ease of implementation, coverage requirements are automatically calculated by the CUWCC's reporting database, and are adjusted for past credit based on previous reporting.

A BMP Option would require all water agencies to comply with what are called the Foundational BMPs. These are certain best management practices all retail water agencies should practice. The Foundational BMPs give credit for past conservation in several ways. For example, water agencies that have already create water conservation rate structures and public and school education program automatically get credit for having done so. Additionally, the Foundational BMP related to system losses will require significant reductions in system losses; but water agencies that have been investing all along in system maintenance and improvement, effective meter testing and replacement programs, and experimenting with AMI and leak detection and data inaccuracy, will find it much easier to comply with the higher standards of the new BMP 1.2.

A BMP Option would also provide credit for past conservation through its GPCD compliance option. The standard baseline is calculated over a ten-year period beginning 1997. This baseline gives water agencies 50-percent credit for conservation during that ten-year period (when measured as a reduction in GPCD). Furthermore, the MOU creates a GPCD Appeals Committee, water agencies may appeal for a GPCD baseline that stretches further into the past if an agency can prove substantial investments in conservation took place prior to the start of the normal ten-year baseline.

Does the BMP Option provide flexibility to water agencies for meeting their targets?

The BMP Option provides water agencies with the maximum flexibility possible in order to meet their SBx7-7 goals. The BMP Approach provides agencies with maximum flexibility to implement programs most suitable for their location, customer composition, local climate and weather and other relevant factors.

It is recognized by all parties that a single implementation method for a BMP would not be appropriate for all water suppliers.

Compliance with the BMP water savings goals can be accomplished in one of three ways including: accomplishing the specific measures as listed in Section A of each BMP; accomplishing a set of measures which achieves equal or greater water savings, referred to as the Flex Track; and accomplishing set water savings goals as measured in gallons per capita per day consumption.

The Flex Track Approach gives agencies a tremendous amount of flexibility to meet their water savings targets. Agencies can choose from a menu of options or can use alternative implementation options. There is no requirement that the savings be derived from specific sectors, only that the total water savings equals or exceeds the agency's coverage requirement. As noted above, Flex Track also promotes the use of recycled water and alternative water savings, consistent with the legislation. Specific language from the CUWCC's MOU addressing the Flex Track is as follows:

The Flex Track approach may be implemented in part or any combination to meet the savings goal for the BMPs.

A signatory may elect to adopt additional or alternative measures, in part or in any combination, as described in the Flex Track Menu, provided that the demonstrated water savings in the Flex Track Menu activities are equal to or greater than the water savings that would be achieved by the BMP measures.

"Demonstrated water savings" represent unit water savings for individual BMP or Flex Track Menu conservation technologies and activities as established by either: (a) a water utility; (b) independent research studies; or (c) CUWCC- adopted savings.

Why doesn't the BMP Option allow water agencies to use the cost-effectiveness exemptions?

The proposal recommended that agencies selecting the BMP Option not be permitted to exempt out of implementation on a cost-effectiveness basis. There are two reasons for this. First, agencies cannot exempt themselves from aspects of the other three compliance option in SB x7-7, therefore in order to be equitable, it should not be allowed in Option 4.

Second, this “no cost-effectiveness exemption” clause only affects the Traditional Approach to the Programmatic BMPs. The MOU does not allow the exemption for the Foundational BMPs or for the GPCD Approach to the Programmatic BMPs and the Flex Track Approach to the Programmatic BMPs basically says if one approach is not cost-effective, find another that is.