



# CALIFORNIA ASSOCIATION of SANITATION AGENCIES

1225 8<sup>th</sup> Street, Suite 595 • Sacramento, CA 95814 • TEL: (916) 446-0388 • [www.casaweb.org](http://www.casaweb.org)

December 15, 2015

*Submitted via Electronic Mail to [Michael.Bedard@sen.ca.gov](mailto:Michael.Bedard@sen.ca.gov)*

The Honorable Bob Hertzberg  
California State Senate  
State Capitol, Room 4038  
Sacramento, CA 95814

**Subject: SB 163 (Hertzberg): Recycled Water Mandate for Ocean Dischargers**

Dear Senator Hertzberg,

The California Association of Sanitation Agencies (CASA) appreciates the opportunity to submit comments on SB 163 pertaining to recycled water and ocean discharge. CASA thanks you and your staff for your willingness to meet with us during the interim so that we may share our concerns with many of the provisions of the bill. You had asked CASA to delineate several of these concerns in a formal letter to you, and we have included them below, along with several suggestions for your consideration.

CASA is a statewide association representing more than 115 municipalities, special districts, and joint powers agencies that provide wastewater collection, treatment, clean energy and water recycling services to millions of Californians. Our membership includes almost all of the ocean dischargers who would be directly impacted by the approach currently outlined in the bill, and many more who are interested in issues pertaining to recycled water production throughout the state. California's ocean dischargers are located across the state from San Diego near the border with Mexico all the way to Crescent City near the border with Oregon. All told, there are at least 50 ocean dischargers ranging in size from a few hundred thousand gallons per day up to 330 million gallons per day. Some of these have outfalls that accommodate discharge from multiple agencies, including some located far inland. As discussed further below, all of these dischargers have differing circumstances with respect to the quantities they recycle and the quantity they discharge, and all have different abilities to eliminate their discharges and recycle the water instead.

The wastewater community is highly supportive of developing recycled water projects and invested in increased recycled water production and use in the future. We appreciate your interest in finding ways to promote this vital renewable resource and initiating this important policy discussion. Unfortunately, the statewide ocean discharge prohibition currently contemplated by SB 163 is simply not feasible, practical, or cost effective. The proposed mandate on all ocean dischargers is counter-productive and does not take into account the numerous barriers that currently exist to beneficially using this water.

Moreover, we believe consideration of a blanket mandate approach is premature given current and ongoing regulatory efforts that have not yet been completed, and the fact that

recycled water production is expected to increase significantly over the next decade absent a mandate. CASA member agencies are already producing hundreds of thousands of acre-feet of recycled water each year, and with recent funding initiatives and the potential for additional incentives down the road, California is well on the way to meeting the goals set forth by the State Water Resources Control Board (State Water Board) to increase recycled water use by 1,000,000 acre-feet per year by 2020 and 2,000,000 acre-feet per year by 2030.

Additional detail regarding CASA's specific technical concerns with the mandate approach, and suggestions for more effective alternatives, are detailed below.

### **100 Percent Beneficial Reuse is Not Feasible for Most Agencies**

As currently drafted, SB 163 would require each wastewater treatment facility that discharges through an ocean outfall to achieve at least 50 percent reuse of the facility's actual annual flow for beneficial purposes by 2026 and 100 percent by 2036. This type of blanket mandate approach is counter-productive and unattainable for a variety of reasons. Perhaps most importantly, in many cases, the regional demand simply does not exist to beneficially reuse 100 percent of an agency's ocean discharge. Every watershed, region, treatment facility and outfall is different, and the capability for beneficial reuse of water varies among communities that would be subject to this mandate. Simply put, in many urban areas such as Los Angeles and San Francisco, unless direct potable reuse becomes feasible in the future (which will be discussed further below), the local supply for recycled water far exceeds the local demand for recycled water, and the recycled water supply is not always available when and where we need it. Even in areas where indirect potable reuse is a more viable alternative, either by replenishing groundwater basins or augmenting reservoir supplies, that option is dependent on local conditions and is not feasible everywhere.

The numerous factors relevant to determining how much recycled water an agency can beneficially reuse include, but are certainly not limited to: (1) availability and variety of potential beneficial uses in the region (demand), (2) proximity of a discharger to groundwater basins suitable for replenishment that can be used for indirect potable reuse, (3) ability to purvey recycled water by the wastewater agency, (4) pre-existing levels of treatment at a facility (and allowable uses to which the existing recycled water can be applied) and existing recycled water distribution infrastructure, (5) susceptibility of the local community to development of purple pipes and other distribution infrastructure (e.g. a newer community being built up or an older community where renovation may be difficult), (6) the cost-benefit analysis associated with financing the necessary infrastructure and ongoing operations and maintenance expenses, including the availability of local, state, and private financing options for agencies and their ratepayers, and (7) whether advanced treatment is necessary for implementation of reuse, in which case 15-20% of the flow will end up as brine that must be discharged to the ocean (meaning that only 80-85% can actually be recycled and there will never be zero discharge). These and a myriad of other factors make each ocean discharger's ability to recycle a set percentage of their wastewater highly variable both in terms of practicality and cost. A blanket mandate on all ocean dischargers to recycle 100 percent of their wastewater does not take any of these nuanced and important factors into account, and allows for no regional variability.

In addition, the ability or authority (or lack thereof) of a wastewater ocean discharger to purvey recycled water is of particular concern and can present some significant problems. Agencies that produce recycled water are not always authorized water purveyors, and the relationship between water and wastewater entities varies widely in different regions. Some agencies are authorized to perform both functions, though many are not. Some are authorized to serve in some areas, but not in others, due to service duplication concerns. Some dischargers would only have to work with a single water purveyor, while others would be required to work with numerous purveyors. The bill does not take into account existing water supply planning efforts being conducted by water purveyors pursuant to the California Urban Water Master Planning Act (see Water Code §10633 regarding recycled water planning), and could result in the development of additional supplies by a wastewater agency with no actual nexus to water supply needs and priorities in a particular area. In other words, a reliable and feasible use for recycled water is not always available, and is dependent on factors other than simply the ocean discharger's technical ability to supply recycled water.

Moreover, the idea that a recycled water "market" might develop in areas where it is difficult to find willing partners to purvey the water fails to account for the transactional realities of providing water and wastewater service. If a mandate were to take effect, as currently contemplated by SB 163, then there is no true "market" transaction available because wastewater agencies with ocean outfalls would simply be *required* to produce and provide the underlying commodity. This is a one-sided market in which wastewater agencies would be hard pressed to recoup any of the costs associated with increasing recycled water production, and wastewater agencies would be operating under a mandate they are required to meet but might not have the necessary authority (or willing water supply partners) to be able to meet it.

### **The Infrastructure Costs Associated With 100 Percent Mandatory Reuse Are Prohibitive**

Even if there were unlimited demand within a reasonable proximity for all recycled water currently being discharged to the ocean, which is not the case, the cost of implementing such a mandate would be in the billions of dollars. Some, if not most, ocean dischargers would be required to add advanced treatment infrastructure (e.g. microfiltration, reverse osmosis, ultraviolet disinfection with advanced oxidation) at a cost of hundreds of millions (if not billions) of dollars, and nearly all agencies would be required to develop additional distribution infrastructure to deliver this new water (e.g. purple pipes, pumps, large-scale storage facilities, etc.). Depending on the region, this too could be in the hundreds of millions (or billions) of dollars per agency, contingent on some of the factors identified above. The "low hanging fruit," in terms of the most affordable and feasible water recycling projects, have already been done in most areas, and the closer the level of recycling gets to 100%, the more expensive the unit cost will be. In some areas, an initiative of this magnitude could be entirely cost prohibitive. Despite recent increases in grant and low interest loan funds provided for recycled water through Proposition 1 and the State Revolving Fund (SRF) Loan program, the current level of assistance is nowhere near enough to make the 100 percent mandate feasible or affordable for local ratepayers. In addition, it should not be overlooked that the ultimate cost of this new program, which will be in the billions of dollars, will ultimately be borne by ratepayers, many of whom have been experiencing significant water and wastewater rate increases already in recent years.

## **The Mandate is At Best Premature in Light of Pending Regulatory Efforts**

Aside from the enormous practical and cost implications of moving to a 100 percent mandate for ocean dischargers, the effort is premature in light of pending regulatory efforts intended to lay the foundation for additional recycled water production and beneficial uses moving forward. Specifically, there is an important existing “regulatory gap” that needs to be filled before wastewater agencies can determine what methods, processes and types of reuse make the most sense for the required increase in use of recycled water in their service area.

Pursuant to SB 918 (Pavley) (Ch. 700, Statutes of 2010), the State Water Board is currently receiving input from an expert panel and an advisory group on the feasibility of developing criteria for direct potable reuse (DPR). Depending on the results of that process and any regulations or actions that arise therefrom, the suite of options for wastewater agencies to beneficially reuse their water could change and expand dramatically. The State Water Board is also currently developing regulations regarding surface water augmentation with recycled water. That process will inform available options for those agencies not in close proximity to groundwater basins conducive to replenishment with recycled water, and could change the dynamics of decision making at certain agencies. These regulatory processes need to be finalized before agencies can fully evaluate their options as it relates to appropriate levels of treatment, available outlets for recycled water, and the best “fit” for a particular region and situation. Adopting a mandate in advance of the completion of these regulations and processes would require agencies to pursue paths that might not be the most beneficial to the agency, the ratepayers, or water supply in the region or state.

## **A Blanket Mandate Fails to Account for Several Other Significant Legal, Practical and Water Quality Considerations**

In addition to the practical and financial barriers to implementing a mandate on all ocean dischargers, and the fact that such an effort is premature in light of ongoing regulatory processes, there are several other issues that do not receive adequate consideration in SB 163. For example, many Southern California agencies use ocean outfalls as part of their salinity management strategies, and the disposal of high salt wastewater and brine from inland areas to the ocean is sometimes the only reasonable and cost effective means of maintaining or improving water quality. As one current example, brine and saline wastewater from the Inland Empire is discharged to the ocean through conveyance to the Los Angeles County Sanitation Districts and Orange County Sanitation District’s ocean discharge facilities. Mandating reuse of 100 percent of all wastewater from ocean outfalls will result in the need to reexamine these approaches, since the point of the current system is to transport salt out of inland areas to the ocean in order to protect inland groundwater basins. If the new mandate were to eliminate that option, it would create potential water quality problems for inland agencies and have a potentially negative impact on the environment. Additionally, most agencies in coastal areas that are using advanced treatment are using ocean outfalls (either their own or those of neighboring agencies) as “brine lines”, which is essential to make potable use projects using recycled water work. Without the availability of ocean discharge as an avenue for brine disposal, other options would need to be developed, which are far more controversial, expensive, energy intensive and less environmentally desirable.

Moreover, water use (including recycled water use) is seasonally variable and requires sufficient storage facilities to meet distribution needs. Adequate recycled water storage may not be available (or could be cost prohibitive to develop) in some cases, and may be simply unreasonable when the storage must account for 100 percent of a facility's discharge.

In addition, a whole host of issues associated with water rights are raised by mandating 100 percent reuse, particularly in areas where there are adjudicated basins, adjudicated water rights and/or fully adjudicated streams. These situations often lead to local disputes related to water supply. A mandate that does not take into account these regional considerations is certain to result in greater confusion, conflict and litigation. Moreover, declaring that "[t]he discharge of treated wastewater from ocean outfalls constitutes waste and unreasonable use of water" as that term has been used in Article X of the California Constitution has potentially significant and meaningful consequences for all waste dischargers. These consequences need to be considered by a variety of interested parties before being included in any part of the bill.

Finally, public acceptance of beneficial reuse of wastewater, both for direct potable and indirect potable reuses, still remains an obstacle for agencies to fully take advantage of recycled water production and distribution. While wastewater agencies and others are actively seeking to educate the public and dispel misconceptions regarding the safety of recycled water, this remains an issue that needs to be addressed. Local resistance to beneficial reuse, or restrictions on the types of uses to which recycled water can be put, could prevent agencies with ocean outfalls from recycling 100 percent of their effluent, and result in customer and ratepayer backlash. All of these issues need to be fully addressed before this concept could practically be implemented, and the examples above demonstrate why these decisions need to be made locally and regionally rather than as a one-size-fits-all statewide mandate.

### **Efforts to Promote Increased Recycled Water Production Should Focus on Addressing Known Gaps: Increased Infrastructure Funding and Information Gathering on Recycled Water Potential**

CASA and the wastewater community support the underlying motivation of SB 163, which we understand to be finding ways to increase the distribution and use of recycled water in the state of California. Recycled water can provide a reliable and sustainable water supply solution to meet at least a portion of the state's water supply needs. While we fundamentally disagree with the mandate approach that is currently in the bill, there are two areas in which legislation might be useful in increasing recycled water production and beneficial reuse in the state.

The first is increased funding for recycled water projects. Recycled water infrastructure funding is needed to get many if not most of these projects off the ground, and increased funding is absolutely essential to ensure that the substantial amount of recycled water projects currently being planned can actually be built. The second is a bill that focuses on information gathering and planning for future use of recycled water. There is currently a lack of high quality and comprehensive information regarding what the actual capacity is for recycling water in the state and indeed in each watershed and region, and what projects are planned for the next 10 to 20

years. It is possible a dedicated effort through the appropriate state government agency, with the participation of water and wastewater agencies, to look into this issue, particularly in the context of Integrated Regional Water Management Plans, Urban Water Management Plans and the Groundwater Sustainability Plans that will be developed in the next few years, would be warranted prior to the consideration of the proposed mandate currently in SB 163. These alternatives are a starting point for legislation that CASA would like to discuss further with you and your staff as a more productive and effective approach to promoting recycled water in the state.

We appreciate your efforts to promote expanded recycled water use in California, and we look forward to working with you and your staff to address the issues raised by SB 163 in the coming year. Should you have any questions or discuss any of the matters identified above in greater detail, please do not hesitate to contact me at (916) 446-0388 or [alink@casaweb.org](mailto:alink@casaweb.org). Thank you for your consideration of CASA's concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Adam D. Link". The signature is fluid and cursive, with the first name "Adam" being the most prominent.

Adam D. Link  
Director of Government Affairs

cc: Mike Dillon, CASA Lobbyist