CALIFORNIA COASTKEEPER ALLIANCE

Public Comments
Report to the Legislature on DPR
Deadline:10/25/16 12:00 noon

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October 25, 2016

Chair Felicia Marcus and Board Members
c/o Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Sent via electronic mail to: commentletters@waterboards.ca.gov

RE: Comment Letter - Report to the Legislature on DPR

Dear Chair Marcus and Board Members:

On behalf of the California Coastkeeper Alliance, representing California Waterkeeper groups spanning the coast from the Oregon border to San Diego, we appreciate the opportunity to comment on the Report to the Legislature regarding Direct Potable Reuse (DPR Report). We urge the State Water Board to continue the momentum towards developing DPR criteria, while cautioning the Board to not proceed recklessly or in a way that would risk public health.

Most cities in California use water once, then dispose of it like waste. Approximately 12 billion gallons of treated wastewater are discharged into the ocean or an estuary each day. And based on a recent estimate for California, 50 percent of all water now discharged to the ocean could be used by 2020 for either DPR or Indirect Potable Reuse (IPR) projects (collectively Advanced Treated Water or "ATW"). ATW offers a significant untapped water supply, particularly in coastal areas facing water shortages or in areas that rely on imported water. ATW provides a local, drought resilient water supply that can reduce wastewater discharges to the ocean. ATW uses the same filtration technology as ocean desalination, but requires only one third of the energy and is half the cost of desalinated water.

It is critical that California achieve DPR. With more frequent droughts and the need to protect instream flows, local communities are moving away from imported water to begin developing local, resilient water supplies such as water conservation and efficiency, stormwater capture, and ATW projects. However, many California communities are constrained in their ability to develop IPR projects. For example, in San Diego, the lack of groundwater aquifers forces the region to pump ATW to local reservoirs, which may or may not be available based on the pending Surface Water Augmentation regulations. In many locations, piping ATW to existing water storage sources can be expensive, energy intensive, and thus limit opportunities to develop more ATW. Therefore, it is critical that California provide local communities with the flexibility to choose what type of ATW is right for their region.

CCKA has been a long-time champion of ensuring water recycling is protective of the environment, that it is used in a reasonable and drought-resilient manner, and that we prioritize resources towards advancing ATW. In 2009, CCKA served on the stakeholder working group to develop California's Water Recycling Policy, which among other things, set a state goal to increase water recycling by approximately two million acre-feet per year by 2030. CCKA has since worked with the State Water Board to adopt a clear and consistent regulatory pathway to help California's water agencies meet its water recycling goals. CCKA also supported legislation, SB 918 and SB 322, requiring California to develop regulations for potable recycled water, and to direct the Drinking Water Program to develop the DPR Report.

The local Waterkeepers are also champions for promoting advanced purified recycled water. Our Orange County Coastkeeper was a strong supporter of the Orange County Groundwater Replenishment System – the world's largest highly advanced purified water recycling system. Orange County Coastkeeper's Executive Director – Garry Brown – is the chair of the DPR Advisory Group, which determined that developing DPR criteria is feasible. The San Diego Coastkeeper was a strong champion of advanced purified recycled water during the approval of San Diego's Pure Water Project. And Los Angeles Waterkeeper has been a leader advocating for ATW for the Los Angeles region. Los Angeles Waterkeeper has supported large-scale potable reuse at the Hyperion plant that discharges nearly 250 MGD to the Pacific Ocean, recently advocating for a waste and unreasonable use analysis as part of the NPDES permit renewal for the facility as a way to expedite water reclamation. Los Angeles Waterkeeper has also been a vocal supporter of the City's Groundwater Replenishment (GWR) Project that will provide up to 30,000 acre-feet per year (AFY) – more than 9.7 billion gallons – of purified water by 2023 to replenish the San Fernando Groundwater Basin, as well as a recently-approved pilot project being pursued by the Metropolitan Water District to determine the viability of up to 150MGD of water reclamation at the Joint Water Pollution Control Plant in Carson.

CCKA is not always supportive of water recycling efforts. CCKA advocates for environmentally protective non-potable reuse regulations, and has fought for rigorous monitoring for chemicals of emerging concern (CECs). In 2012, CCKA worked to prevent AB 2398, an omnibus bill that aimed to remove the Water Boards' oversight of recycled water by no longer considering it a "waste" under the Water Code. And during California's drought, CCKA and the California Waterkeepers have stressed the need to use recycled water reasonably – particularly when Proposition One funding is involved.

California has always been on the cutting edge of ATW. To remain a national leader, California must continue to move forward on the development of DPR criteria. In 2009, California set a goal to increase the use of recycled water by at least one million acre-feet per year by 2020 and two million acre-feet per year by 2030. We are failing to meet those aggressive goals – largely because regulations need to be in-place before we realize the mass potential for ATW. DPR can be a game-changer in California's drive to meet our water recycling goals, but if we move too quickly, and public confidence is shaken because of a mistake, it could set us back decades.

The State Water Board should begin developing DPR criteria immediately, but the criteria should be developed concurrently with the DPR Expert Panel's recommended research recommended. If the research is not done concurrently, the State Water Board would be forced to develop overly cautious and stricter regulations due to the scientific unknowns. Alternatively, if the State Water Board were to develop the criteria concurrently with the recommended research, than the criteria can be tailored to the best available science – protecting public health while providing project proponents with the flexibility necessary to conduct DPR operations. CCKA urges the State Water Board to continue its momentum towards the development of DPR criteria, but develop the criteria in a responsible manner so it matches the best available science. To help California continue to be a leader on ATW, we offer the following recommendations for the final DPR Report:

- Be explicit regarding what perceived challenges lay ahead – and state clearly how the Legislature, other government agencies, and stakeholders can help overcome those challenges;
- Direct the Legislature to hold a Joint Budget hearing to provide an opportunity to present the DPR Report findings;
- Define the three types of DPR so that California speaks with the same language as we develop DPR criteria and projects;
- Add more specificity to the Implementation Plan to explain which research recommendations must be completed before the adoption of DPR criteria;
- Incorporate estimated timeframes for when each research recommendation should begin and how long each activity will take to complete; and
- Retain the possibility of permitting a DPR project on a case-by-case basis.

1. *The State Water Board should be clear and direct regarding what potential barriers might exist in the development of DPR criteria – and ask for help where it is needed.*

Statewide DPR regulations would be nation precedent setting. Regulations for DPR have not been adopted by any state in the United States. Nine states have regulations or guidelines for IPR, including California (2015), Florida (2014), Virginia (2014), and Washington (1997). Currently, Texas is the only state with existing DPR projects, which are evaluated and regulated on a case-by-case basis.

The State Water Board should move forward with DPR cautiously, but without undue delay. Developing statewide DPR regulations can be challenging, but California has determined it to be feasible and should progress forward. Most importantly, we should not lose our current motivation, stall for unnecessary reasons, or go backwards because the public has lost confidence in ATW. The final DPR report should be explicit as to what challenges the State Water Board perceives moving forward – and state very clearly how the Legislature, other government agencies, and stakeholders can help overcome those challenges.

Be clear and direct as to what is needed to finalize DPR criteria. Will the State Water Board need additional resources to complete the recommended research? If so, tell the Legislature and be precise as to how much additional resources will be necessary. Does the State Water Board need the water recycling industry to continue providing technical assistance? Is there something local agencies and project proponents can begin researching or monitoring to help with the recommended research or inform the DPR criteria? If so, tell WateReuse and their associated water agencies so the water recycling community can begin providing the necessary information. Is the State Water Board concerned that public confidence is still a barrier to permitting a DPR project or adopting DPR regulations? Tell grassroots NGOs how we can help better educate the public regarding the current science as to the safety and public health issues associated with DPR.

Expanding California's ATW is important to a diverse array of stakeholders. The California Legislature is highly interested in developing additional potable reuse – as is evident by the funding appropriated in Proposition One and the numerous water recycling bills proposed annually. CCKA can attest that every year we are approached by numerous Legislative members asking for legislative water recycling ideas. The water recycling industry is obviously self-interested in expanding potable reuse, but they have gone to great lengths to offer resources, expertise, and partnerships in order to move DPR forward. And finally, NGOs – like the California Waterkeepers – are able and willing to help educate other NGOs and the general public as to the benefits and current science pertaining to DPR. Earlier this year, CCKA partnered with Orange County Coastkeeper and the National Water Research Institute to host a workshop to help inform NGOs and the general public about ATW. California is ready and willing to help the State Water Board move forward on DPR criteria, but we have to know what barriers exist and how we can help. We recommend the final DPR Report <u>be explicit regarding what challenges the State Water Board perceives moving forward – and state clearly how the Legislature, other government agencies, and stakeholders can help overcome those challenges</u>.

The State Water Board should present its DPR Report to the Legislature at a Joint Budget hearing. Senate Bill 918 required the Drinking Water Program and the State Water Board to "report to the Legislature from 2011 to 2016, inclusive, as part of the annual budget process, on the progress towards developing and adopting the water recycling criteria for surface water augmentation and its investigation of the feasibility of developing water recycling criteria for direct potable reuse." We are unaware of whether this has been occurring over the last five years, but regardless, submitting the DPR Report is an opportunity to get the Budget committees' attention. Therefore, we recommend the State Water Board <u>direct the Legislature to hold a Joint Budget hearing to provide an opportunity to present the DPR Report findings and to discuss additional resources necessary for the Water Board to complete the DPR criteria</u>.

2. *The State Water Board should help California speak with the same language by defining the three types of DPR.*

It is important that as we move into a new frontier of water recycling, we speak the same language so there are no misunderstandings. The Legislature defined DPR in 2010, but the concept of DPR has evolved over the last six years – requiring the State Water Board to develop a new set of terms and definitions. "Direct potable reuse" means the planned introduction of recycled water either directly into a public water system, as defined in Section 116275 of the Health and Safety Code, or into a raw water supply immediately upstream of a water treatment plant. This definition results in two forms of DPR: one that introduces the water directly into the drinking system, and one that introduces the water before the final drinking water treatment process. The State Water Board is proposing a third type of DPR – one with a small environmental buffer. None of these processes have names; instead, we are forced to describe the process to explain what we are referencing.

The State Water Board needs to define the three types of DPR to ensure we are all speaking the same language to prevent misunderstandings. The State Water Board is proposing each type of DPR have different criteria. The DPR Report states that "it is important to recognize that there are at least three possible types of DPR projects that will have *different risk profiles*." If the State Water Board is going to develop different criteria for each type of DPR, then there needs to be definitions associated with each type so we understand what criteria goes with what type of DPR.

The State Water Board needs to define the three types of DPR to provide consistency. Over the years, the three types of DPR have been called different names. DPR with a small environmental buffer was called surface water augmentation. And while we appreciate the State Water Board's willingness to allow projects that do not fit under the Surface Water Augmentation regulations to move forward as DPR, the State Water Board needs to define this new type of DPR. The definition is critical so that we can distinguish it from IPR projects that would fit under the alternative IPR regulations.

Raw water augmentation should be defined differently than "flange to flange" DPR. During the development of SB 322, the Legislative working group discussed defining the introduction of ATW prior to the drinking facility as "raw water augmentation" rather than DPR. We support the State Water Board developing raw water augmentation criteria as a different risk profile, but the term should be defined. The Board should define introduction of ATW prior to the drinking facility as "Raw Water DPR".

Finally, the third type of DPR, introduction of ATW into the drinking water system has traditionally been solely DPR. If DPR is going to go forward as an umbrella term for the three types of DPR, then the "flange to flange" process needs to be defined and given a common term. We recommend that the State Water Board use the DPR Report as an opportunity to <u>define the three types of DPR so that California speaks with the same language as we develop DPR criteria and projects</u>.

3. *The State Water Board should be precise as to how it will conduct the recommended research concurrently with developing the criteria.*

The State Water Board has stated it will develop DPR criteria concurrently with the recommended research, but has not explained what "concurrently" entails. The Draft Report states that "knowledge gaps and research recommendations must be addressed before criteria can be adopted." The Report then concludes that "State Water Board can start developing criteria for DPR, but the following implementation recommendations in Table 1 must be addressed before criteria for DPR can be adopted." Table 1 then goes on to outline 14 research recommendations that need to be done, with milestones that state "ongoing" or "evaluate demonstration projects to assess efficacy". How will all of the recommendations in Table 1 be finalized if some of the milestones are ongoing? Or how will demonstration projects be evaluated if we projects are unable to be permitted because DPR criteria does not exist?

At the October 6th Board workshop, the issue of what "concurrently" meant was raised by Chair Marcus and CCKA. The question was proposed to State Water Board staff and the Expert Panel: what research recommendations must be completed before DPR criteria can be adopted? And what research recommendations are ongoing and expected to occur after projects were permitted and built? The Expert Panel responded that some of the recommended research could be completed before the DPR criteria was adopted, but other recommendations were intended to act as a feedback loop to help us understand whether the DPR criteria was suitable or if it needed to be adjusted. Therefore, we recommend that the State Water Board add more specificity to the Implementation Plan – specifically Table 1 – to explain which research recommendations must be completed before the adoption of DPR criteria, and what research should be done as feedback and verification that the DPR criteria is protective of public health.

4. *Provide an estimated range of dates by which the State Water Board believes it can initiate and complete the assignments identified in the Implementation Plan.*

The State Water Board needs to provide estimated dates for when the Table 1 recommended research should start and estimated to be completed. Table 1 of the Implementation Plan provides metrics and milestones for each research recommendation, but ignores the most critical piece of an implementation plan – a schedule. We understand that precise dates are not likely feasible to provide at this time. But it is critical that the Legislature and the general public have an idea of what timeframe each of these research recommendations will start and be completed.

We understand the State Water Board's concern that it does not want to be held to precise dates. It is not our intent to create self-imposed mandatory deadlines from the State Water Board. Rather, we want to see timeframes associated with each research recommendation so that a responsible schedule is developed and stakeholders are provided notice as to how long each activity is estimated take. It is also important to provide some time of schedule, because not having dates and timeframes could actually encourage the Legislature to impose their own deadlines. Rather than have the Legislature dictate when research activities should be completed, we recommend the State Water Board set its own deadlines. Therefore, to ensure research recommendations are developed in an organized schedule, and to provide the Legislature and the public notice of how long the development of DPR criteria should take, we recommend that the State Water Board incorporate estimated timeframes for when each research recommendation should begin and how long each activity will likely take to complete.

5. *The State Water Board should only consider permitting DPR projects on a case-by-case basis if public health can be protected and project proponents are willing to invest additional resources.*

The State Water Board should consider the possibility of permitting DPR projects on a case-by-case basis. The Drinking Water Division has stated numerous times that it currently has the authority to permit DPR projects on a case-by-case basis, but the Division is unlikely to permit a project until DPR criteria is adopted. To be clear, we are not asking the State Water Board to begin permitting DPR projects immediately. Our recommendation is to only consider the possibility, and set ground rules for what would be expected from a project proponent if the State Water Board were to move forward with the permitting of a DPR project prior to the DPR criteria finalized.

The groundwater replenishment regulations were largely informed by the Orange County Groundwater Replenishment System (GWRS). Orange County spent years conducting research, building pilot projects, and conducting monitoring to ensure the safety of the GWRS operations. This work was instrumental to the development of the Groundwater Replenishment regulations, and if not for permitting the GWRS on a case-by-case basis, California would be further behind on its water recycling goals. We should learn from our past achievements in Orange County and not place a complete moratorium on permitting a DPR project on a case-by-case basis.

We should not stall progress on DPR. If the State Water Board finds it can permit a DPR project that is protective of public health, and the project proponent is willing to provide additional resources, then the

State Water Board should consider the possibility in order to complete the recommended research and to inform the DPR criteria. Therefore, we recommend the State Water Board keep open the possibility of permitting a DPR project on a case-by-case basis, and direct staff to consider a framework of expectations a project proponent would need to provide to help inform the DPR criteria.

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We look forward to working with you to ensure that DPR regulations progress in a cautious yet steady manner so that we can reach our water recycling goals and make California's water supplies local and resilient.

Sincerely,

Sean Bothwell
Policy Director
California Coastkeeper Alliance