



California  
Water  
Environment  
Association



CALIFORNIA URBAN WATER AGENCIES



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

October 25, 2016

Felicia Marcus, Chair  
And Members  
State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812-1011



**Subject: Comment Letter – Report to the Legislature on DPR**

Dear Chair Marcus and Members of the Board:

On behalf of the organizations listed below, we thank you for the opportunity to comment on the State Water Resources Control Board (Board) draft report to the California Legislature, “Investigation on the Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse” (report).

In general, we are pleased with the contents of the report, including the appendices, which contain the findings from the Expert Panel and the Advisory Group. We believe the issuance of this report, and the finding that it is feasible to develop uniform water recycling criteria for Direct Potable Reuse (DPR), are major milestones toward providing a new drought-proof water supply to California communities. Potable reuse, including DPR, has the potential to provide an additional 1.1 million-acre-feet (MAF) of potable water supplies per year, enough to serve more than 8 million Californians or one-fifth of the state’s population by 2020, according to a 2014 report by the Water Environment & Reuse Foundation (formerly WateReuse Research Foundation). Timely adoption of DPR regulations is also needed to help meet the state’s water recycling goals of an additional 1 MAF by 2020 and 2 MAF by 2030.

In order to ensure that we can collectively move forward as expeditiously as possible to make this important new water supply a reality, we offer several recommendations for modifying the report before submittal to the Legislature.

### **Clarify Phased Development Process for Different Types of DPR**

In talking to staff we understand the Division of Drinking Water (DDW) intends to develop a “common framework” across different types of DPR and then develop regulations for each DPR type progressively. We are pleased that DDW intends to pursue this phased approach. We recommend that the report clarify this process and specifically state that DPR regulations will be iteratively developed over time beginning with the “less direct” forms of DPR.

### **Align the Report with the Draft Surface Water Augmentation (SWA) Regulations**

As the environmental buffer gets smaller, indirect potable reuse approaches DPR. These projects are on a continuum where the “lines” between SWA and different types of DPR become somewhat arbitrary. We note that the DDW report is silent on a clear definition of “direct potable reuse”, but references the SWA regulations. This is problematic as the draft SWA regulations have not been released to the public and there is no way to know if the DPR report and the draft regulations will properly align. We ask that DDW share a draft of the SWA regulations prior to finalizing the report and potentially allow for additional public comment on the proposed DPR definition and the overall report.

### **Allow Case-by-Case Approval of DPR Projects as Regulations are Developed**

We understand that DDW has clear authority to permit DPR projects on a case-by-case basis. We think it is critical that DPR projects that are *fully protective of public health* be permitted before the DPR regulations are finalized. As you know, early groundwater indirect potable reuse projects that were permitted before the groundwater recharge regulations were adopted provided invaluable information to the regulatory development process. We think early DPR projects will provide similar value to DDW and the Board. We ask that the report specify that DPR projects may be permitted on a case-by-case basis while the regulations are being developed.

### **Include Timelines & Funding Sources for Completion of Implementation Plan**

The final report should send a strong signal to the California Legislature, water agencies and the public that DDW has a clear pathway for the development of DPR regulations and that regulations can be developed within a reasonable timeframe. We ask that you include dates for the expected completion of each “milestone” in the Implementation Plan (Table 1-p. 25-27) and include an estimate for how much DDW staff time it will take to implement the report recommendations.

### **Ask the Expert Panel for More Specificity on its Research Plan**

The Expert Panel found that there is no need for additional research to be conducted to establish uniform criteria for DPR, yet consistent with its charge, the Expert Panel suggested additional research that would enhance the understanding and acceptability of DPR. These six research recommendations are included in the report’s Implementation Plan and the report states that this research should be done concurrently with criteria development. However, some of the research items are fairly broad or open-ended, and we are concerned about any potential unintended delays while this research proceeds.

One example of a broadly defined topic is recommendation #7 (p.26), which relates to the identification of low molecular weight compounds in finished effluents. Multiple technical barriers exist that make it unclear whether such identification can be successfully accomplished in the near-term. The Expert Panel, recognizing these technical limitations, highlighted the importance of this research, but emphasized that its completion should not hinder the progress of DPR regulations. Furthermore, these compounds are of potential concern not only for DPR, but also for conventional drinking water systems that employ the same technologies. Thus, realistic, achievable, and relevant research goals and timelines need to be further clarified.

Providing greater specificity on this and the other recommendations will ensure that the research reflects both the potential and the limitations identified by the Expert Panel. It also enables parallel progress on safe and effective regulations while expanding our knowledge and refining approaches to water treatment for the future. We ask that the Board ask the Expert Panel to provide for more specificity on each of its six research items, helping us to understand how that research can be completed in a timeframe that is also reasonable for criteria development.

### **Further Clarify Recommendations in the Implementation Plan**

In addition to seeking timelines, funding sources in the Implementation Plan and additional specificity from the Expert Panel, we recommend that several of the Implementation Plan recommendations be clarified.

#### **Monitoring for Raw Wastewater**

Recommendation #4 states that the Board should work with the Regional Water Quality Control Boards (Regional Boards) to include monitoring requirements for raw wastewater in the permits feeding potable reuse systems. We agree that better characterization of pathogens in the raw wastewater feeding a DPR system would be useful. However, we believe the Expert Panel recommendation can be accomplished as part of a targeted special study and does not warrant a long-term mandatory permit monitoring requirement. The Expert Panel noted that this research can be done either before or concurrently with the development of uniform water recycling criteria for DPR to provide more complete information on concentrations and their variability. Therefore, this information should be gathered to inform the regulatory development process. We recommend that the Board design a targeted effort in partnership with volunteer wastewater agencies to gather the necessary data.

Monitoring of raw water for pathogens can be done but there are no approved methods. Until validated methods are developed, the quality of the microbial data cannot be guaranteed. Prior to implementing this project, we recommend that the Board work on the development and validation of methods (including appropriate QA/QC) that can be consistently applied.

#### **Working with Other Cal-EPA Agencies on DPR**

Recommendation #10 states that the Board partner with other Cal-EPA agencies, such as the Department of Toxic Substances Control (DTSC) and others, “to *develop the research projects* necessary to improve the science and public

knowledge relevant to DPR.” We support the Board coordinating with other Cal-EPA agencies on the implementation of the DPR recommendation in this report. However, this recommendation appears open-ended and suggests that an entirely new research program be developed with Cal-EPA agencies, which we do not believe is the intent. We ask that recommendation #10 be clarified.

### **Wastewater Treatment Plant Optimization and Pretreatment**

Recommendations #13 and #14 address wastewater treatment plant (WWTP) optimization and pretreatment. The quality of the feed water to an advanced water treatment facility is crucial for DPR projects and we agree that there is a role for process optimization, source control and pretreatment. The report recommends that the Board work with Regional Boards to develop a framework for optimizing wastewater treatment plants supplying a DPR project. We recommend that development of a framework include a stakeholder or technical work group process that includes wastewater treatment facility operators and water industry representatives.

It is important to recognize, as the Advisory Group did, that not all potential process modifications must be implemented at every existing WWTP for a DPR project. Also, WWTPs are subject to many different technical and regulatory drivers that determine their process operations and there must be flexibility to do what is best for a project. We agree with the Advisory Group report that “each integrated system needs to be reviewed holistically to determine the most feasible approach to ensure water quality and efficient operations” but it may not be one size fits all and should consider case-by-case conditions.

The report also recommends that the Board work with the Regional Boards to determine improvements needed to pretreatment programs associated with DPR projects. We recommend that the Board instead convene a technical workgroup, similar to that convened to evaluate treatment plant optimizations, that includes water and wastewater industry representatives, to work with the Regional Boards on an appropriate approach to source control requirements, as well as to develop an approach for process optimization that can be tailored as needed for each project. This effort should build from the source control provisions contained in the IPR groundwater recharge regulations as recommended in the Advisory Group report. The existing regulations provide a framework that could be used as a starting point and can be modified to go beyond existing requirements for IPR projects and expanded to address the needs for DPR.

In addition, there may be instances where the state could take a stronger leadership role in carefully managing certain chemicals that are identified as problematic, but are not as amenable to local agency source control efforts. In many instances, the treatment train used for a DPR project will be sufficient to address the issue, but occasionally there may be instances where it may be more appropriate to have a statewide approach for a product or chemical use because, for example, available treatment methods may be ineffective or cost-prohibitive. This might take the form of a recommendation from the Board to DTSC for targeting in the Safer Consumer Product Program, or for statewide legislation.

As these instances emerge, we recommend that the Board lead efforts to find effective ways to address these chemicals or products of concern.

Finally, we encourage the Board to consider utilizing the expertise of the Expert Panel when implementing the recommendations included in the Implementation Plan. For example, the Expert Panel could serve as the “blue ribbon” panel identified in recommendation #2 to “review the scientific literature and report on the current state of scientific knowledge regarding the risks of emerging constituents to public health.”

### **Support Development of Operator Certification for AWT Facilities**

The report recommends the need for an Advanced Water Treatment (AWT) operator certification program (recommendation #11). Requests to construct an operator certification program are included in the Board’s report (section 4.3.11), the Advisory Group and Expert Panel reports, as well as separate reports from the California Urban Water Agencies and WateReuse California. CA-NV AWWA and CWEA are actively engaged in jointly developing an AWT operator certification program and are fast-tracking this process. With the continued support of the Board and staff for the project, CA-NV AWWA and CWEA will move forward rapidly on the basis that an operator certification program be available as soon as possible for future DPR project permits and for regulations. Board staff involvement in the effort remains crucial along with clear timelines for milestones to help us manage and marshal association resources effectively and efficiently. Clear and timely communication from the Board and staff that CA-NV AWWA and CWEA should proceed or should not proceed with constructing the certification program as it relates to the status of the development of DPR criteria and regulations would be appreciated.

### **Conclusion**

We thank the Board and DDW, the Expert Panel and the Advisory Group for all of the tremendous work in developing and issuing this draft report in a timely manner. We believe DPR has the potential to be a safe, reliable, locally controlled water supply that protects the environment, sustains economic growth, and provides a high quality of life for Californians. The issuance of this report and the finding that the development of DPR regulations is feasible are the first steps towards the development of this new water supply. We look forward to working with you on refinements to this report and ultimately in the development of DPR regulations in the near future.

Sincerely,



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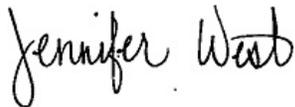
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