

Frequently Asked Questions: Indirect Potable Reuse of Recycled Water through Surface Water Augmentation

What Is Recycled Water?

Recycled water is primarily municipal sewage that has been treated in a wastewater facility and complies with recycled water regulations for a specific beneficial use, including uses related to public health. There are different levels of treatment for recycled water depending on how it will be used.

What Is Indirect Potable Reuse Of Recycled Water?

Indirect potable reuse (IPR) is when recycled water – after treatment and passing through an environmental buffer, such as a groundwater aquifer – is used to supplement raw sources of water used by a public water system to ultimately supply its customers with drinking water. One form of IPR is Groundwater Replenishment, also known as Groundwater Recharge, which has been regulated and successfully implemented for decades in California. With Groundwater Replenishment, the soil and the groundwater aquifer serve as the environmental buffer. Surface Water Augmentation (SWA) is another form of IPR.

What Is Surface Water Augmentation?

Surface Water Augmentation is when advanced-treated recycled water is placed into a surface water reservoir that is a public water system's raw source of drinking water, which is then further treated by the public water system's surface water treatment plant before being distributed as drinking water. When recycled water is placed into a reservoir, the reservoir works as an environmental buffer to provide additional reliability to protect public health.

Has The State Water Board Adopted Regulations For Surface Water Augmentation?

To date, no. However, the State Water Board has been mandated ([Water Code section 13562](#)) to adopt uniform water recycling criteria for SWA. Therefore, the State Water Board has developed SWA regulations and is currently moving through the required regulatory process for the adoption of the regulations. When the public comment period for the proposed regulations begins (expected in July 2017), the regulatory package documents will available for [public review](#).

Has There Been An Independent Review Of The Proposed Surface Water Augmentation Regulations To Ensure They Will Protect Public Health?

Yes, the proposed Surface Water Augmentation regulations have undergone two reviews by two different panels of experts.

- Section 13562 of the Water Code mandates that the State Water Board shall not adopt SWA regulations until an expert panel has made a finding that the regulations adequately protect public health. The expert panel that reviewed the SWA regulations also provided the State Water Board a report regarding the feasibility of developing uniform water recycling criteria for the [direct potable reuse \(DPR\) of recycled water](#). The members of the expert panel, along with information regarding DPR, can be found here: [Expert Panel and DPR information](#). On October 31, 2016, the expert panel made a finding that the proposed SWA regulations would adequately protect public health.
- Section 57004 of the Health and Safety Code mandates that an independent external panel of peers review the scientific basis and scientific portions of the SWA regulations. The external peer review has been completed. Information pertaining to the scientific peer review can be found here: [Water Boards Peer Review](#)

Are Any Public Water Systems Currently Engaging In Surface Water Augmentation?

There are currently no public water systems in California permitted for SWA.

Is My Public Water System Required To Do Surface Water Augmentation?

No. Public water systems and water recycling agencies are not required to engage in SWA. Prior to being allowed to engage in SWA, the public water system must first obtain a permit by the State Water Board's Division of Drinking Water. The water recycling agency that will discharge the treated recycled water into the reservoir must first obtain a permit from the local [Regional Water Quality Control Board](#).

How Will I Know If My Public Water System Decides To Engage In Surface Water Augmentation? Are They Required To Let Their Customers Know? Before moving forward with SWA, a public water system is required to participate in at least three public hearings in the area where it will use SWA to produce drinking water. In addition to the three public hearings, the proposed regulations require the public water system to notice customers of the public hearings by direct mail and via the media. The public water system will also be required to provide its customers - via their Web site and at a local repository (e.g., a library) - information regarding the public water system's plans to engage in SWA.

For more information on the proposed surface water augmentation regulations, please visit: http://waterboards.ca.gov/drinking_water/certlic/drinkingwater/Surface_Water_Augmentation_Regulations.shtml

To receive e-mail updates on the surface water augmentation regulations, please subscribe to our listserve "Recycled Surface Water Augmentation & Direct Potable Reuse," available on this link: [State Water Board listserve](#).

(This fact sheet was last updated on July 20, 2017)