In a drought, experts say drinking purified wastewater is an option

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At sunrise, wind pushes the receding water to splash up on the banks at Pine Flat Reservoir in Sanger, California. As a fourth year of drought continues in the state, water experts are suggesting a water recycling policy called "direct potable reuse" — taking treated sewage and purifying so it can be used as drinking water. Photo: Allen J. Schaben/Los Angeles Times

LOS ANGELES, Calif. — California has had very little rain for years. Water is getting very scarce there.

California's problem is known as a drought. People are afraid the drought will continue. They worry that the state will not have enough water. Many places already have much too little water.

Experts say they know a way to help.

There is one big problem, though — many people find the experts' plan disgusting. Just hearing about it makes them say "yuck!"

The experts want California to try something known as potable reuse. The word "potable" means drinkable.

The idea is to reuse wastewater, also known as sewage. Wastewater is water that is undrinkable because something unhealthy has been dumped into it.

Think about when we go to the bathroom, for example. The water that is flushed away becomes wastewater.

Wastewater has a lot of poop in it. There is a lot of other unhealthy stuff in it as well.

Experts say sewage can be carefully cleaned. Then, it can be reused as perfectly safe drinking water.

Idea Has Worked In Other Places

The idea of drinking "toilet water" makes some people want to throw up. However, cleaned sewage has been reused as drinking water for years. Several cities in Texas do it, for example.

In California, the idea has not been popular.

A cartoon helped turn people against potable reuse back in 1994. It shows a dog drinking from a toilet bowl. A man next to him orders the animal to "move over" so he can drink too.

People against potable reuse call it the "toilet to tap" plan. The name makes the idea sound disgusting. So far, Californians have not been willing to give it a try.

Still, supporters are pushing the idea again. They say the time has finally come for Californians to accept potable reuse. The idea makes sense now that water is so scarce, they say. It particularly makes sense for large coastal cities such as Los Angeles.

Drought Is Changing Some People's Minds

Coastal cities pour billions of gallons of sewage into the Pacific Ocean each year. They could save that wastewater instead, supporters of reuse say. It could be cleaned and turned into drinking water.

Tim Quinn is a California water expert. The water dumped into the ocean each year is "lost forever," he said. It could be used to help millions of Californians instead.

California's terrible drought is finally changing some people's minds.

Donald Schultz once fought hard to stop reuse in Los Angeles. Now, he says he might support a new plan.

"You know, toilet to tap might be the only answer at this point," Schultz said.

Supporters Say Plan Will Help 8 Million Californians

Water expert George Tchobanoglous strongly supports potable reuse. Cleaned-up sewage could be used to supply water to around 8 million Californians, he said.

Potable reuse is nothing to worry about, supporters say. Wastewater is cleaned many times and very carefully before it is declared ready to drink. Everything dangerous is removed, they say.

Supporters say the wastewater ends up cleaner than most bottled waters.

Critics Say You Can't Get Rid Of All The Bad Stuff

Those who are against potable reuse do not agree. They believe even the most careful cleaning will not get rid of everything harmful.

Scientist Steven Oppenheimer said he would not drink "toilet to tap" water. However, he said he would use it for cleaning and even bathing.

Allison Chan is an expert on potable reuse. She says many people end up supporting reuse after they learn more about it. However, that is not true for everyone.

Some people never change their minds, Chan said. They just cannot stop feeling that the whole idea is "yucky."

Quiz

- 1 Which answer choice could BEST serve as a summary to the introduction [paragraphs 1-9]?
 - (A) California has too little water because of drought and people are afraid that the situation will get worse.
 - (B) Due to a shortage of water in California, the plan of using wastewater is not popular by the people of California.
 - (C) Wastewater that is flushed out of bathrooms and contains plenty of poop in it can be carefully cleaned for reuse.
 - (D) Due to a shortage of water in California, experts have proposed a plan that is not being accepted by many Californians.
- 2 Which sentence from the section "Idea Has Worked In Other Places" BEST highlights its main idea?
 - (A) However, cleaned sewage has been reused as drinking water for years.
 - (B) A cartoon helped turn people against potable reuse back in 1994.
 - (C) People against potable reuse call it the "toilet to tap" plan.
 - (D) It particularly makes sense for large coastal cities such as Los Angeles.
- 3 Read the first five paragraphs of the article. Select the phrase from these paragraphs that helps explain the meaning of the word "scarce" as used in the following sentence.

Water is getting very scarce there.

- (A) had very little rain for years
- (B) Many places already have
- (C) There is one big problem
- (D) try something known as potable reuse
- 4 Read the sentence from the section "Drought Is Changing Some People's Minds."

The water dumped into the ocean each year is "lost forever," he said.

Which answer choice uses the word "dump" in the same way as used above?

- (A) More than 100 trucks dumped 1,900 tons of refuse here.
- (B) She decided to dump him a month before the farewell party.
- (C) He came in with four grocery bags and dumped them on the table.
- (D) The policy was so unpopular that the government vowed to dump it.