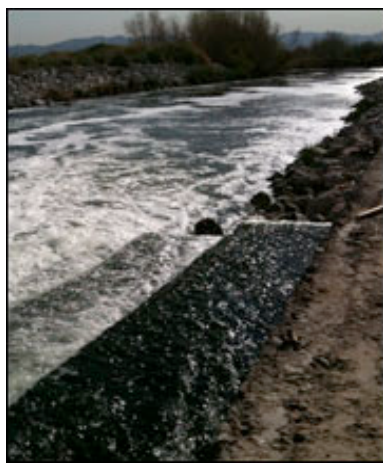


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I-Team: What's in the Water? Painkillers, Chemicals and Estrogen

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LAS VEGAS -- Rob Mrowka worries about what he cannot see. He knows the fish are in trouble and that their fate could say a lot about our future.

But when the sex of fish change and tumors take up a quarter of their bodies, something is clearly going on.

"Like the canary in the mine," he says, sharing a growing frustration with lax laws and few regulations.

Mrowka worries about endocrine disrupting chemicals, EDC's, the very commonplace natural and man-made bits found in household products and pesticides.

Many of the chemicals can be found in deodorants, shampoos, painkillers and food additives. They get into the water supply through human waste or through runoff in the shower.

Mrowka's group, the Center for Biological Diversity is pushing the Environmental Protection Agency and others to set standards to remove EDC's from waste and drinking water.

"You can't hit them over the head and not have the tools for them to address it," he said.

The U.S. Geological Survey worked with the Fish and Wildlife Division to study EDC's in Lake Mead. Erik Orsak and other team members found intersex fish changes and massive tumors.

"We have to suspect that there's some kind of environmental stressor, whether it's one compound or substance or hundreds working in unison," Orsak said as he looked at the Las Vegas Wash. That area is the confluence of wastewater and groundwater runoff and the effluent from treatment facilities from across the valley.

Emerging science is trying to connect the high concentrations of EDC's in Lake Mead areas, the wash and treatment waters.

The EPA has no formal rules in place to stop EDC's from entering the water system and supply.

"It's a matter of making sure you've got good science that underpins your decisions," said Suzanne Rudzinski of the EPA.

The agency does suggest further study and is pushing for multiple screening options, but no firm requirements or regulations appear to be in place.

Robotic arms whirl and quickly move, filling up tubes and emptying them out as Doug Drury looks on. The lab, located at the Southern Nevada Water Authority complex in Henderson, houses Water Reclamation District research.

"The research has gotten ahead of the application of the research," he said.



Both agencies are not required to do this research.

“We’re ahead of the game. We’re out in front of the EPA right now,” Drury said.

There could be millions of reasons to do the research. Investing in expensive technologies is time consuming and it could be a gamble. Without EPA rules in place, if the agencies create an EDC removal system and it is above standards, it

is essentially wasted money. If the standards are lower, retrofit costs will jump.

SNWA and the “Clean Water Team” would rather lead by example and through science.

After the treated water hits the wash and the fish, it becomes diluted in Lake Mead. At that point, the SNWA’s intake and purification systems take over.

J.C. Davis, spokesperson for the Authority says EDC’s have little hope of surviving the ozonation process.

“It’s like finding individual grain of sand on the beach,” he said. “We’re talking unbelievably small concentrations.”

Safe water for humans, uncomfortably questionable for fish, and it will remain that way until firm rules are in place.