

Sammamish Valley Recycled Water Project

A sustainable water source to benefit rivers and salmon



About the Project

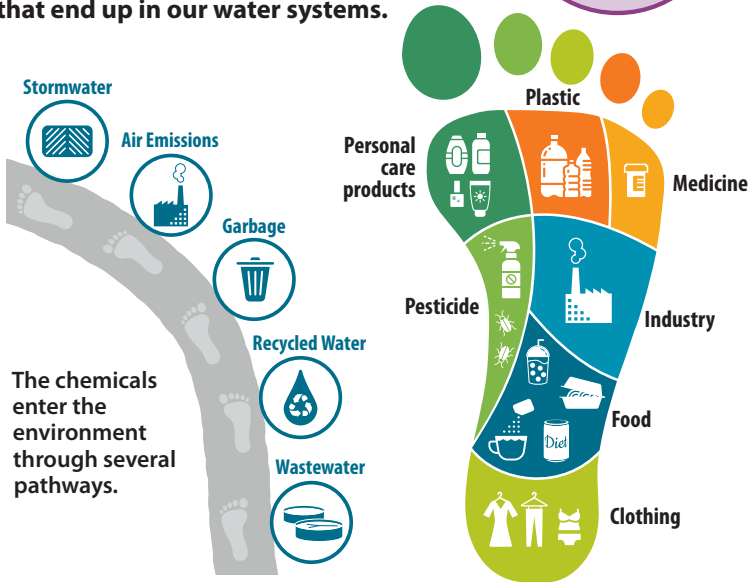
The goal of this project was to determine if recycled water can be a reliable source for crop irrigation, reduce freshwater agricultural use and improve stream flows for salmon.

Between 2020 and 2021, researchers looked extensively at what Contaminants of Emerging Concern (CECs) - unregulated chemicals - were present in vegetable crops (kale and carrots) irrigated with recycled water and compared them to vegetables irrigated with river water.

WHAT ARE CONTAMINANTS OF EMERGING CONCERN (CECs)?

CECs are unregulated chemicals that come from everyday household items that end up in our water systems.

WE ALL HAVE A CHEMICAL FOOTPRINT FROM OUR DAILY ACTIVITIES

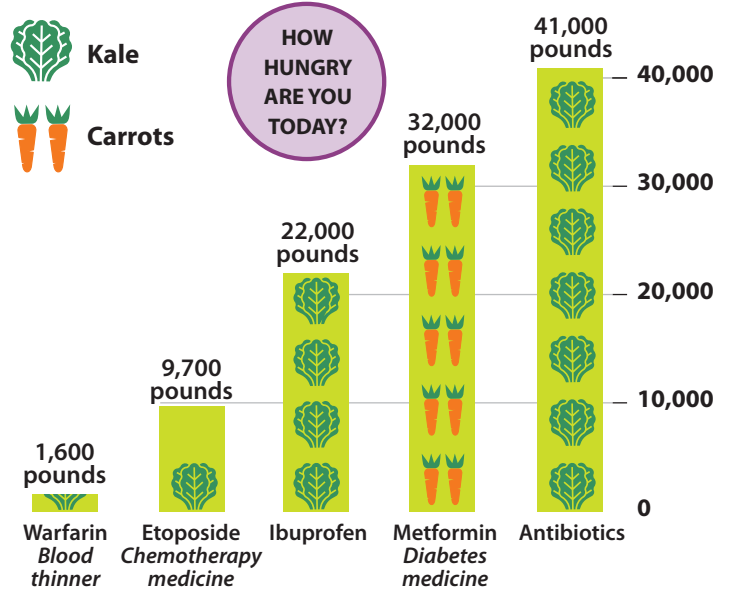


What We Found in Recycled Water

Contaminants of Emerging Concern (CECs) were present in produce irrigated by both river and recycled water but, at such low amounts people would need to eat thousands of pounds of produce each day to reach a single dose of certain drugs.

Crops irrigated with recycled water produced more yield and were found to be low-risk. Irrigating crops with recycled water does not represent a significant source of CECs to humans or the environment.

PHARMACEUTICALS IN RECYCLED WATER

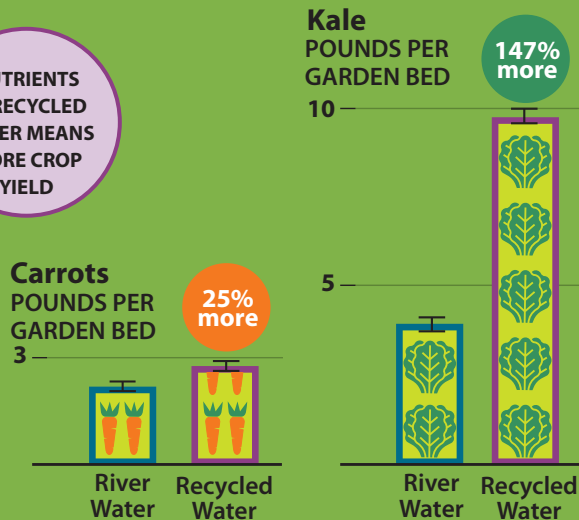


POUNDS OF PRODUCE TO EQUAL SINGLE DOSE OF EACH MEDICINE

* Dosage from drugs.com

RECYCLED WATER TEST GARDEN: YEAR 1 CROP YIELD AND SOIL HEALTH RESULTS

NUTRIENTS IN RECYCLED WATER MEANS MORE CROP YIELD

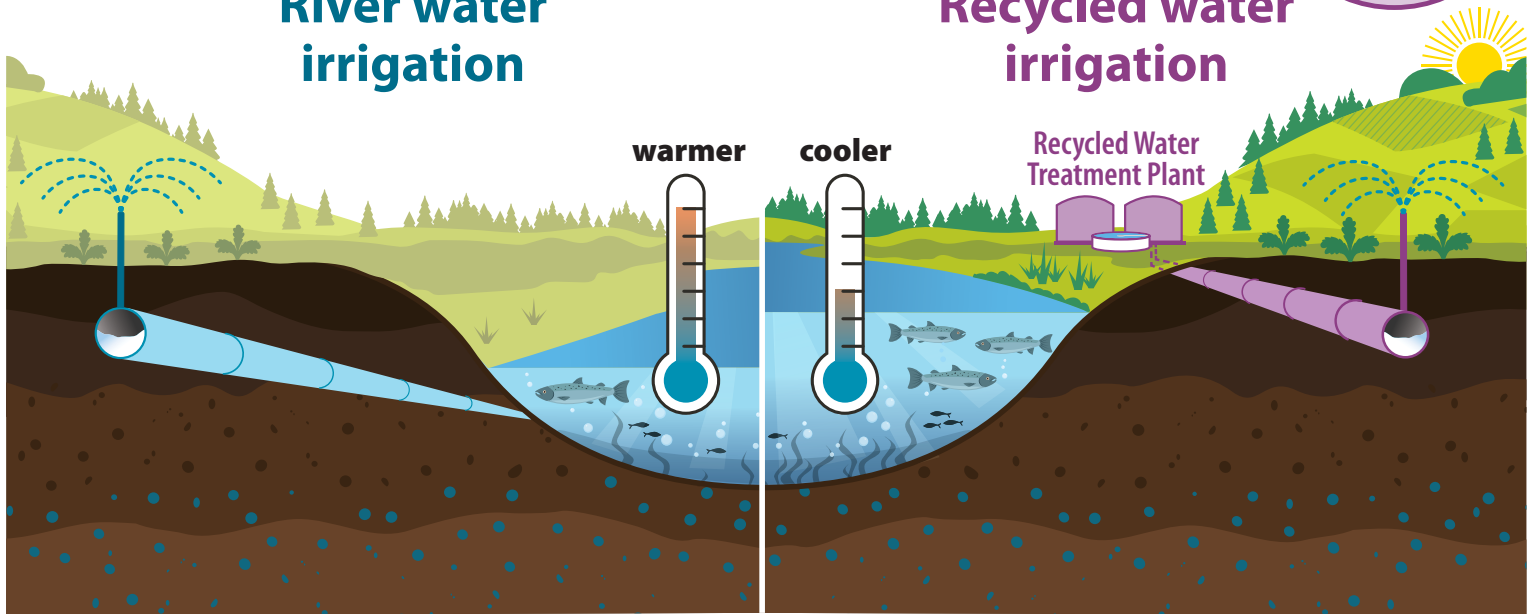


About Our Recycled Water

LEAVING WATER IN THE RIVER MEANS BETTER HABITAT FOR FISH

River water irrigation

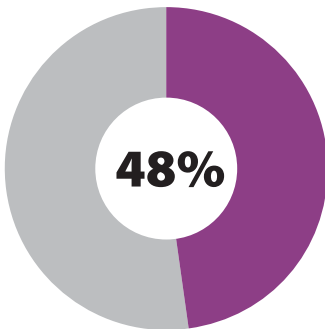
Recycled water irrigation



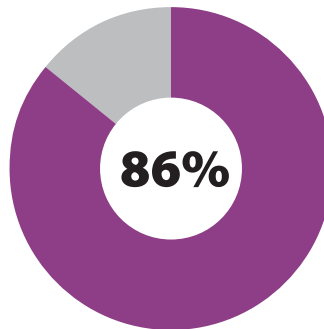
A survey was developed to understand public sentiment towards recycled water.

Participants were provided the following definition: *“Recycled water is highly treated wastewater that has been filtered and disinfected to remove solids and other impurities. Simply put, recycled water is treated water that is used more than once.”*

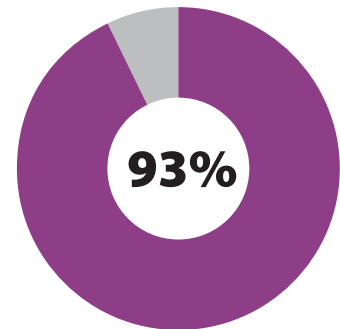
Participants reported:



had “some to a strong” understanding of the term recycled water



would eat crops grown with recycled water



would eat crops grown with recycled water if it helped salmon

SOURCE: Washington Water Trust, 2021

This project was generously funded by



For more information visit rewaterwa.org

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