

Gray Water Recycling to Make Living in California Less Spendy

Submitted by California Housing Finance Agency
Marketing Division

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Summary: Install a Gray Water Recycling system into individual homes to store, filter and distribute its own gray water. This system could be installed in new and existing homes that are being brought to compliance with Assembly Bill 2572, requiring all water suppliers to install water meters on all customer connections by January 1, 2025.

Funding for infrastructure would be sought through U.S. Department of Housing and Urban Development's Community Development Block Grants, bonds, and the Rural Utility Service of the U.S. Department of Agriculture which provides funds for rural drinking water and waste water systems.

The viability of the idea.

- With the current environmental conditions (drought & climate change impacts) and state political leadership's interest in environmental conservation/preservation, the timing is highly advantageous to garner the necessary support and buy-in by the public and policy makers.
- See attached [Recycled Water Policy](#) published by California State Water Resources Control Board regarding the importance of water recycling to the future of California.

The extent to which the idea lowers the cost of living at the individual or family scale.

- Reduces the need and cost of using clean tap water for landscapes.
 - Reduces the cost on metered water fees
 - Reduces the cost on pumped well water by saving electricity and equipment wear
- The more "Gray Water" that is trapped, filtered and stored the less metered water will be required.
 - Gray Water kept out of septic systems will also help extend the life on these systems

- Less metered water used on landscaping will save residents money; less well water pumped will save on electricity and equipment costs.

The degree to which it involves new ideas or combinations of ideas.

- The system would be a green initiative and an idea to help California residents save on water consumption and overall costs.
 - Might possibly fall under some type of existing federal/state tax credit or rebate.
- Would require education of how the system works (its only use is for landscaping purposes).
- The system could be combined with a Gray Water Redemption Credit to entice consumers to use more gray water. (See our additional contest entry “Gray Water Redemption Credit” for details)

The scale of impact in California.

- The state of California requires all water suppliers to install water meters by January 1, 2025. Current rates are roughly between \$.97 and \$1.14 per hundred cubic feet. In Sacramento, these rates have nearly doubled in the last two years and may continue to increase with demand.
- The average family of four can use 54 cubic feet of water a day. Approximately 70% is used indoors and relatively easily recaptured. If that indoor water is stored and applied to landscaping (30% of water usage), average predicted direct savings at today’s rates would be \$5.13 per month.

References:

<http://www.cityofsacramento.org/utilities/customer-service/documents/201220132014WATER.pdf>

<http://www.epa.gov/WaterSense/pubs/indoor.html>

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<http://www.waterresources.saccounty.net/scwa/Documents/Projects%20and%20Programs/Meter%20Retrofit%20Fact%20Sheet%20FINAL.pdf>

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