



WPI

WATER SUSTAINABILITY AT THE JAQUES AVENUE BIOSHELTER

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WORCESTER COMMON GROUND, INC.

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a Community Development Organization

BACKGROUND:

A bioshelter is a self-sustaining greenhouse system. Worcester's bioshelter was built in a low income community to increase access to local produce and provide a valuable community space.

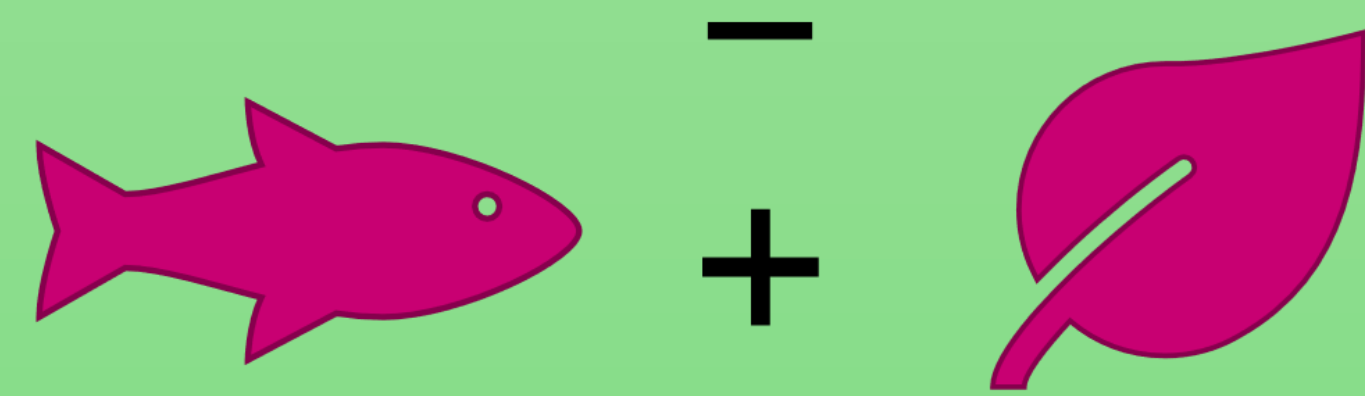
PROBLEM:

The bioshelter lacks a low cost, off-grid, sustainable water source to serve its water needs for aquaponics and agriculture.



SOLUTION: A rainwater catchment system with storage and filtration components specifically designed for the bioshelter.

FILTERS FOR PARTICLES, METALS CONTAMINANTS, AND BALANCES pH



FRIENDLY

ESTIMATED COST: \$2000

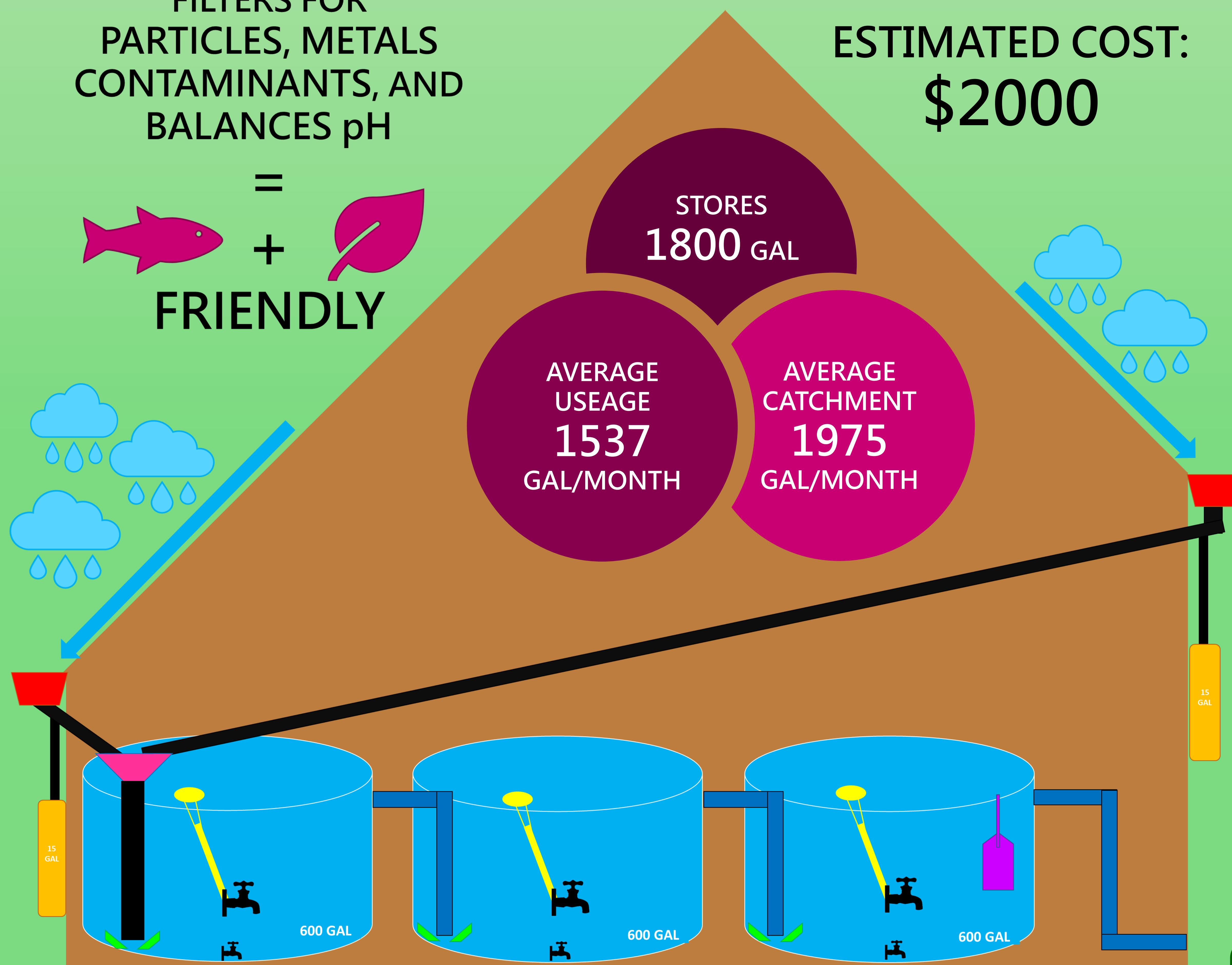


DIAGRAM KEY:

- GUTTERS & GUTTER SCREEN
- FIRST FLUSH DIVERTER
- MESH FUNNEL
- DISPERSION RING
- MESH BAG & pH BUFFER
- OUTPUT WITH FLOAT
- OVERFLOW PIPES

RECOMMENDATIONS:

- Install the catchment system.
- Teach local farmers how to maintain the system.
- Create an education program for local elementary schools.
- Advertise bioshelter events to local community.
- Grow some food!

OPPORTUNITIES:



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