

Rainwater Harvesting 101

Jennie Ostertag

Austin Gardening and
Landscape Design Consultant





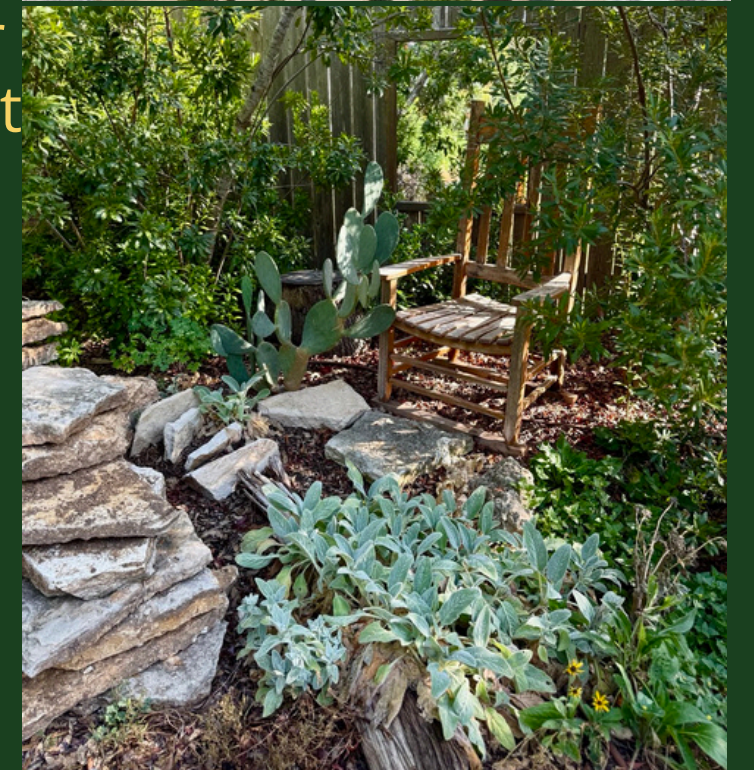
Learn from experience

Gain confidence in your ability

Fighting our
environment



Embracing our
environment



JennieGardens ▾

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she/her/hers

Austin-based Landscape Designer & Gardener

Texas Native & Adapted Plants

<https://lnk.bio/JennieGardens>



Part 1

What is Rainwater Harvesting?

Part 2

Getting Started at Home

Legally Defined in Texas

Rainwater harvesting is

“The capture and storage of rainwater for subsequent use.”

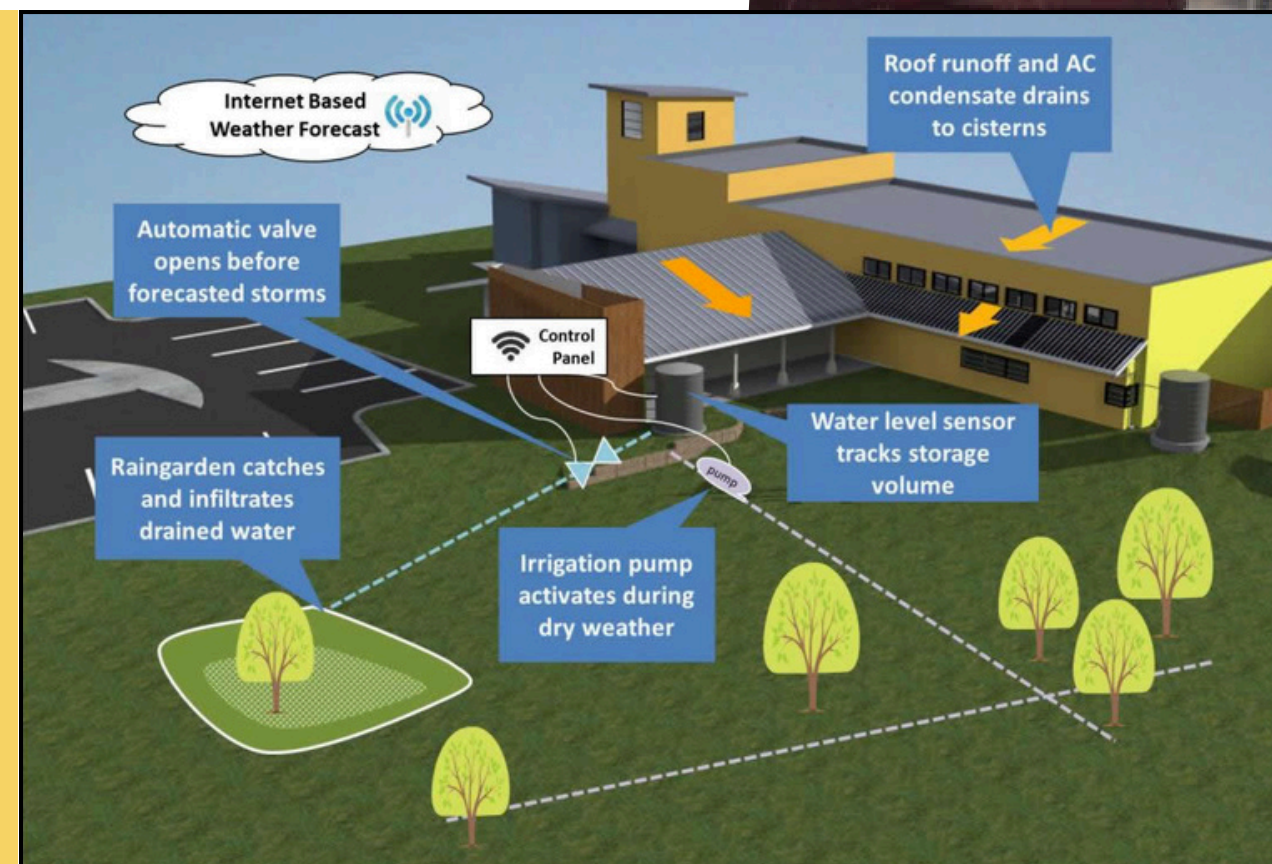
34 Tex. Admin. Code § 3.318(a)(5)

You could also say, rainwater harvesting is **intentionally** slowing or capturing rainfall for the benefit of the environment

The City of Austin Twin Oaks Library was selected as one of the winners of the Texas Water Development Board Rain Catcher Award for 2014.

This presentation covers
NON-POTABLE water uses

A rainwater harvesting system connected to a public water supply system that is used for potable indoor purposes is required to have cross-connection safeguards to ensure that harvested rainwater does not come into contact with the public water supply system's drinking water off the property, in accordance with rules to be developed by the TCEQ.



Look for...



Rainwater Collection At Work
Posted on May 13, 2014 by The Gardener of Good & Evil



Why it Matters

“A renewed interest in this time-honored approach of collecting water has emerged in Texas and elsewhere because of **escalating environmental and economic costs** of providing water by centralized water systems or by well drilling. The **health benefits** of rainwater and potential cost savings associated with rainwater collection systems have further spurred this interest.”



Texas is Encouraging It

Texas Tax Code 151.355 allows for a state sales tax exemption on rainwater harvesting equipment.

Texas Property Code 202.007 prevents homeowners associations from banning rainwater harvesting installations.

Texas House Bill 3391 requires rainwater harvesting system technology to be incorporated into the design of new state buildings and allows financial institutions to consider making loans for developments using rainwater as the sole source of water supply.

Austin is too

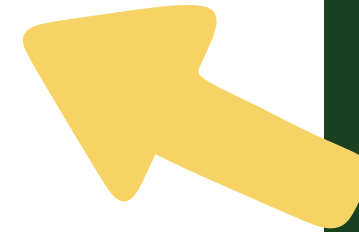
Landscape Rebates as of July 2026

WaterWise Rainscape — landscape features that capture and retain rainwater \$0.50 per sq. ft. converted (100 sq. ft. minimum), up to \$1,500

Rainwater Harvesting — installing a rain barrel or cistern system
Up to \$5,000 based on storage capacity

Benefits

- Rainwater is of superior quality.
 - zero hardness, sodium-free, and nearly neutral pH
- Rainwater harvesting is a water conservation practice.
- Rainwater harvesting can reduce stormwater runoff.



Gardeners love this because Austin's tap water is both alkaline and moderately hard due to our limestone-rich geology

www.twdb.texas.gov  www.facebook.com/twdboard  @twdb

Texas Water
Development Board

The Texas Manual
on
Rainwater Harvesting

The TWDB has published a technical guide on rainwater harvesting. The Texas Manual on Rainwater Harvesting was published in 2005 and is available online in pdf format.



Part 2

Getting Started at Home

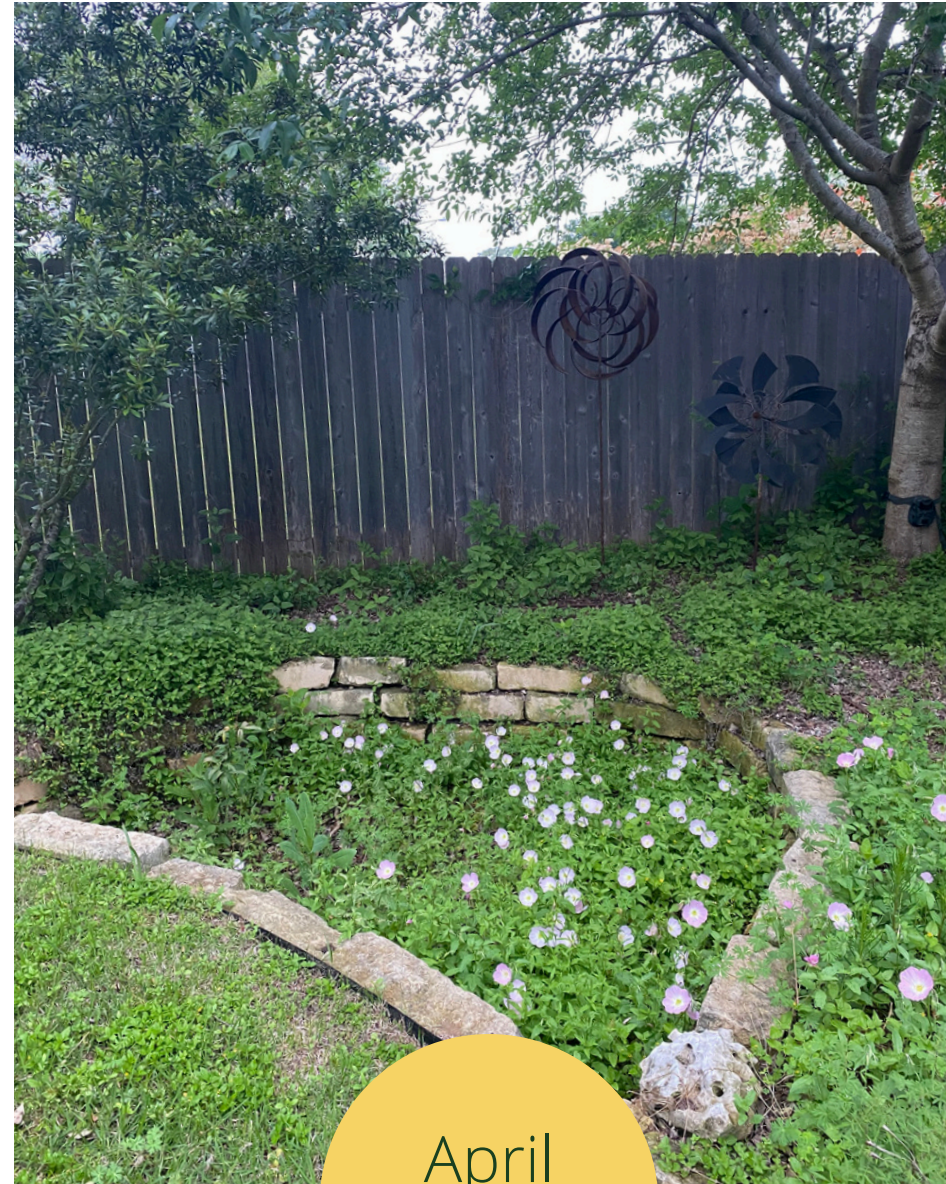


My First Rain garden



April
2013

Invasive Species
Lack of Shade
Poor, Compacted Soil
Flooding



April
2020



April
2023

Biodiversity
Wildlife
Stormwater Control
Beauty

Water Collection in My Garden



One thing...



Led to another...

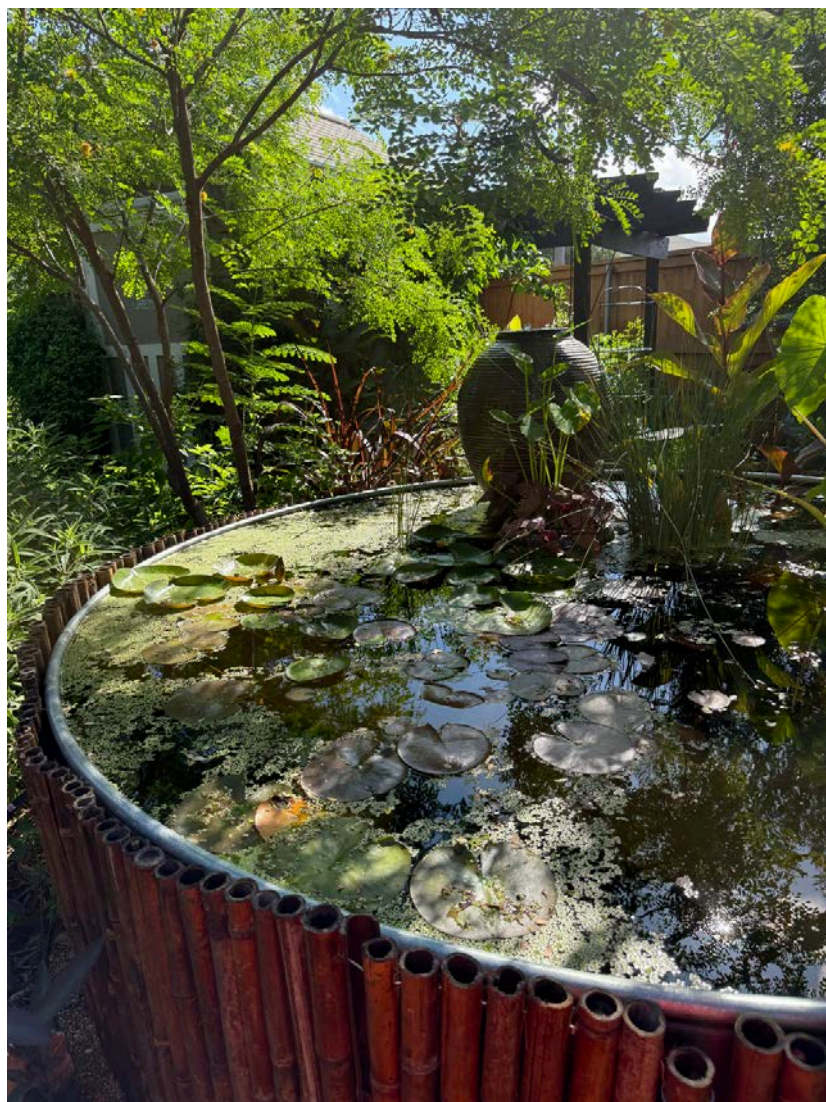


And Another...

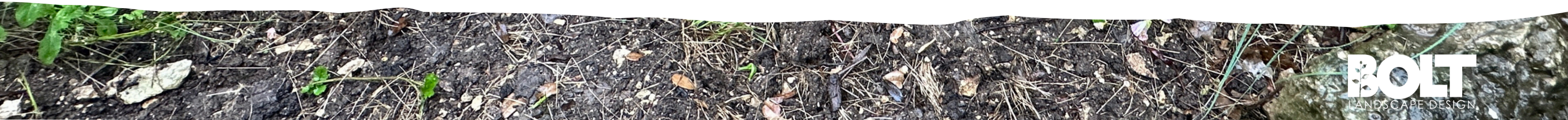


And still going.

Stock Tank Rainwater Harvesting



Appreciating Rainwater



Getting Started

GO TO THE WATER

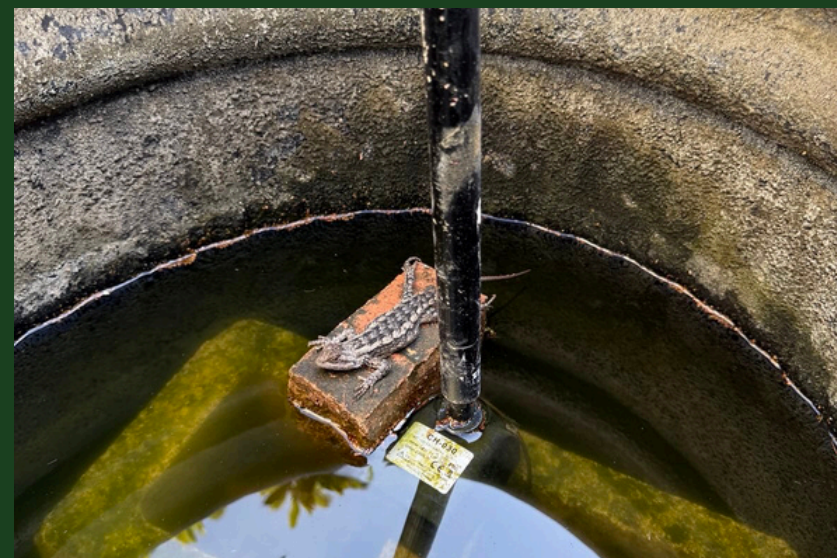
- Locate your container under a downspout or roof runoff
- Ideally place within view of a window to appreciate the squirrels, birds, dragonflies, bees, and amphibians that will visit.

PLAN FOR OVERFLOW

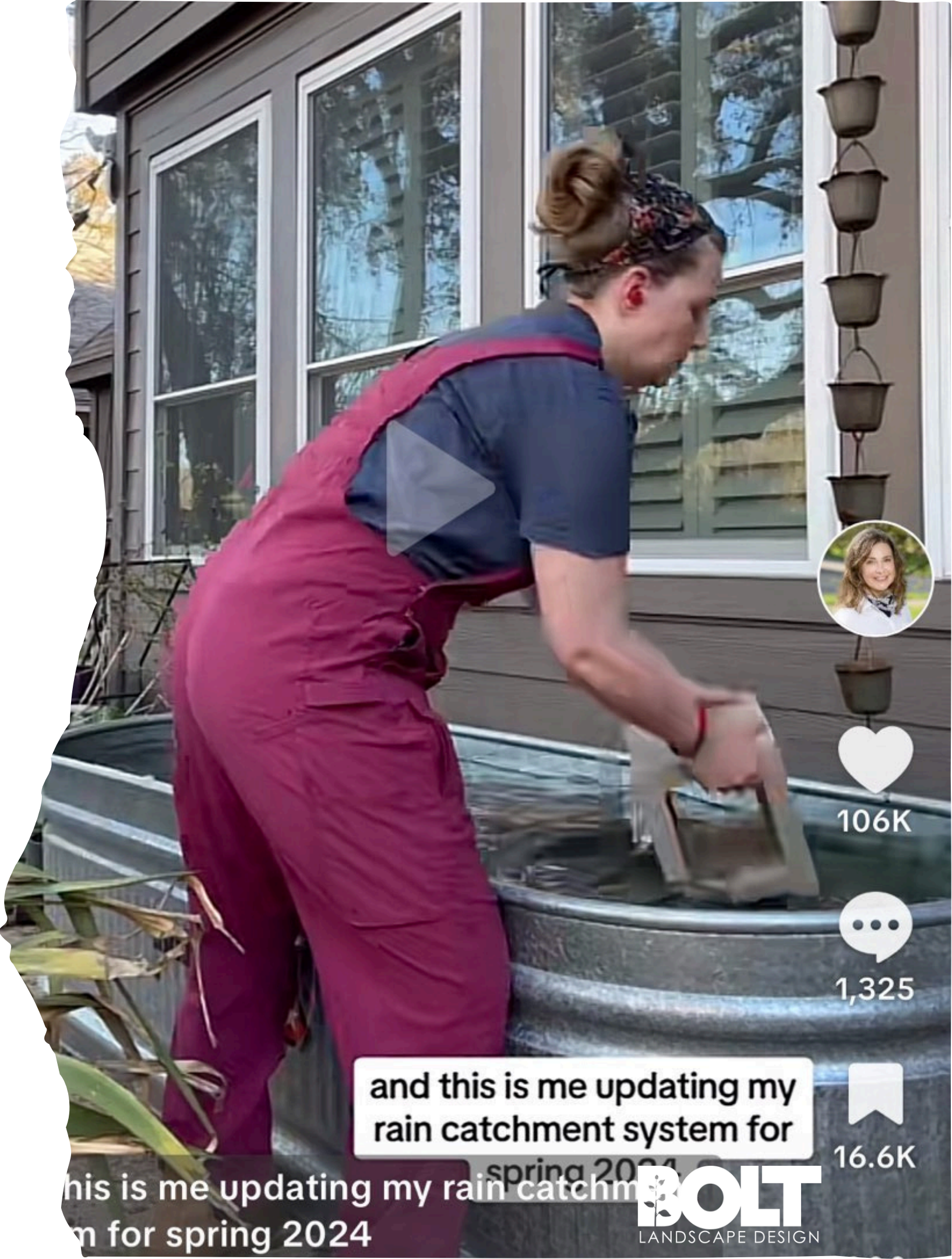
- Ensure a stable, level base, tipped slightly away from your foundation

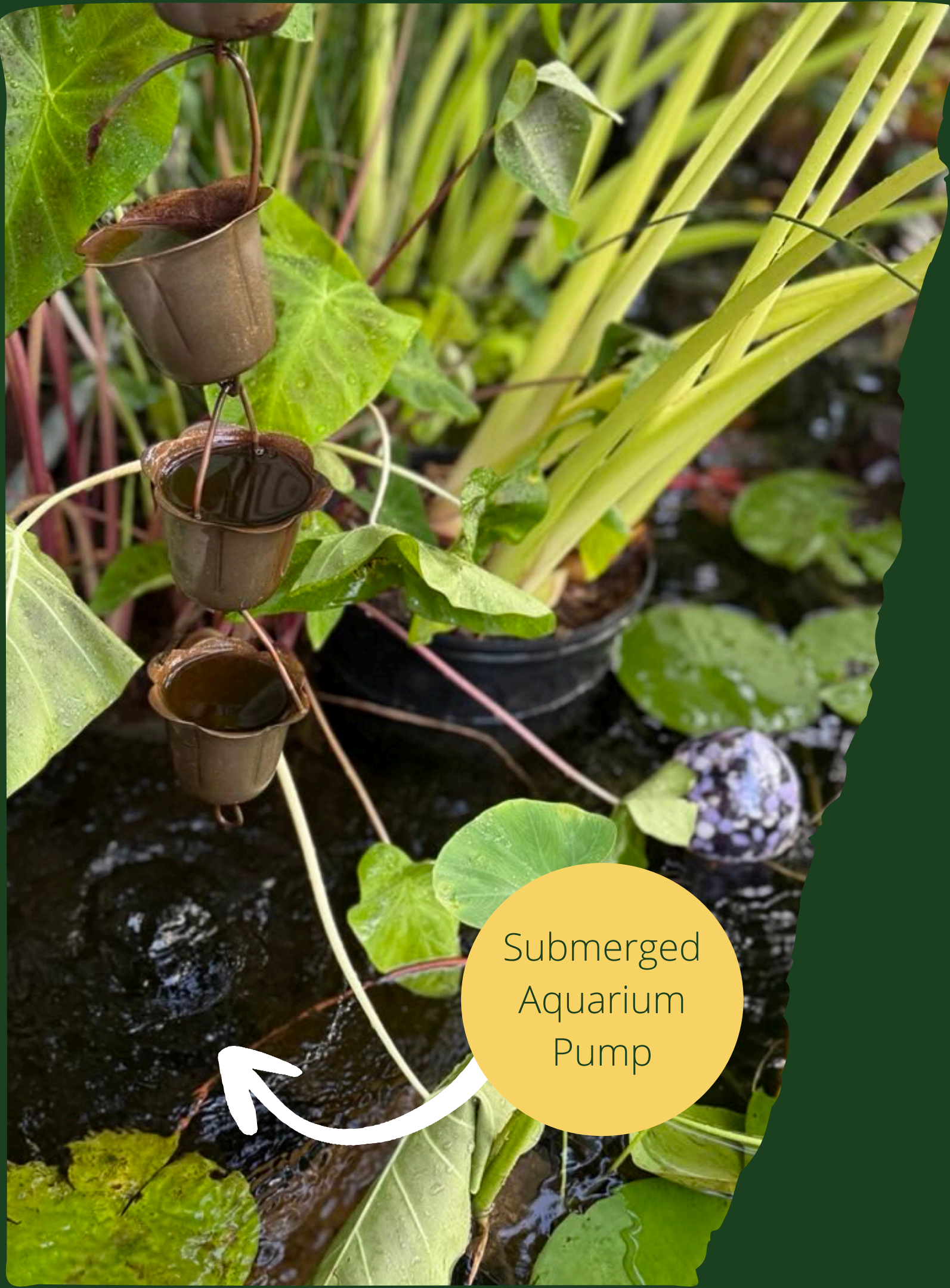
GIVE CRITTERS AN ESCAPE ROUTE

- Wildlife will be drawn to your water source. Add a stick, ramp, or something similarly sturdy to give them a way to climb out if they fall in.



Starter Supplies





Making it Last

MANAGE MOSQUITOS

- Biological: Gambusia fish (where legal/available)
- Bacterial: Mosquito Dunks (*Bacillus thuringiensis israelensis* (BTi))
- Cultural: Agitation or circulation (small fountain pump)

MANAGE ALGAE

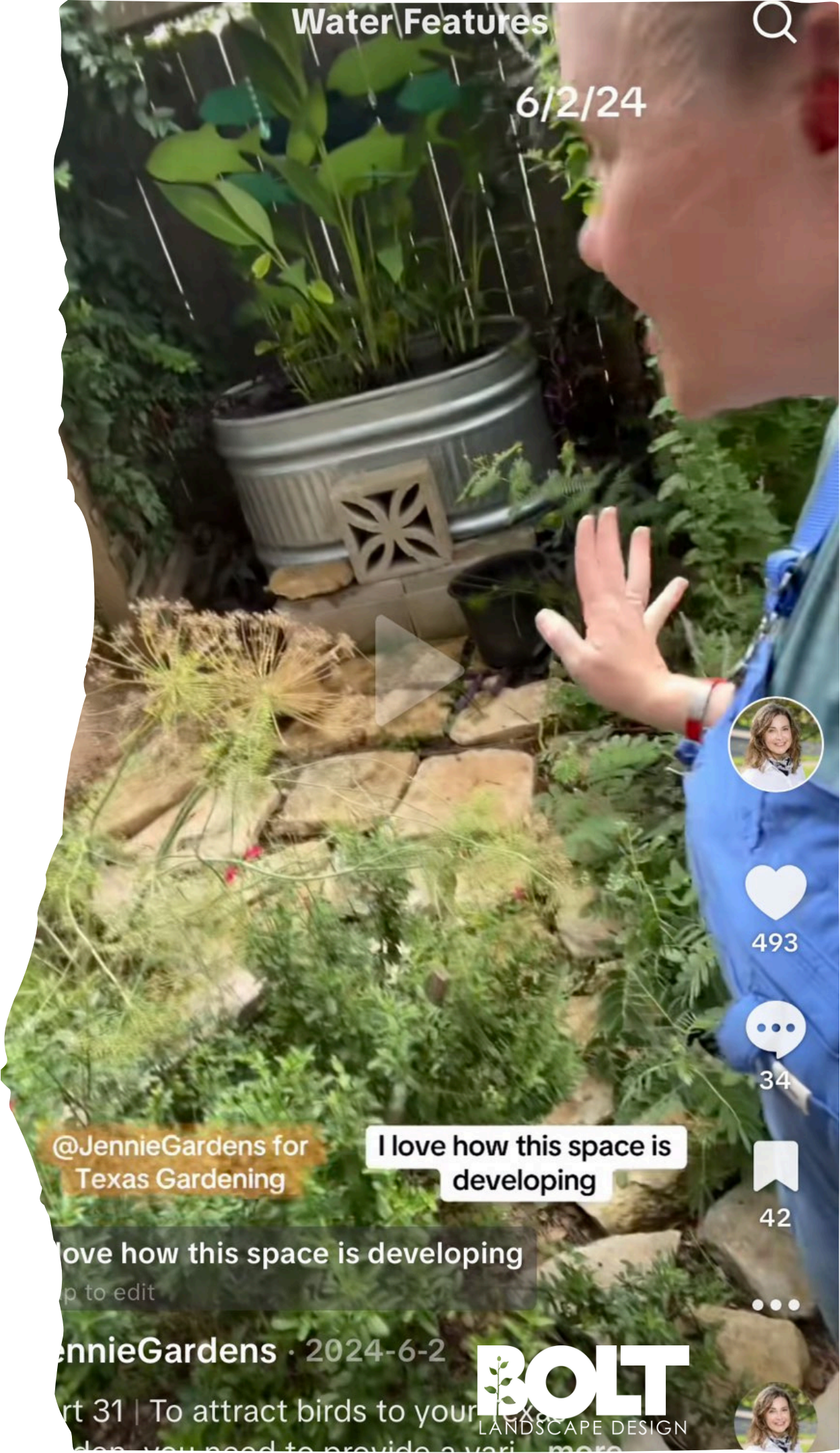
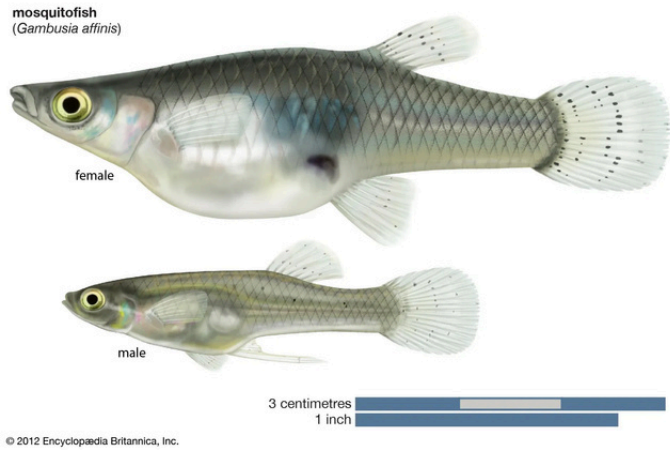
- Partial sun (avoid full blazing exposure)
- Plants (floaters, marginals, submerged oxygenators)

SEASONAL CARE

- Clean out debris/leaves.
- Top up water in dry months.
- Clean out your solar or plug-in pump or bubbler

Submerged
Aquarium
Pump

Maintenance Supplies



A photograph of a pond garden. In the foreground, there are large green lily pads and some purple-leaved plants. A grey ceramic heron statue stands in the water. In the background, there are tall green reeds and other aquatic plants. The scene is set in a container, possibly a large pot or a small pond.

Having Fun

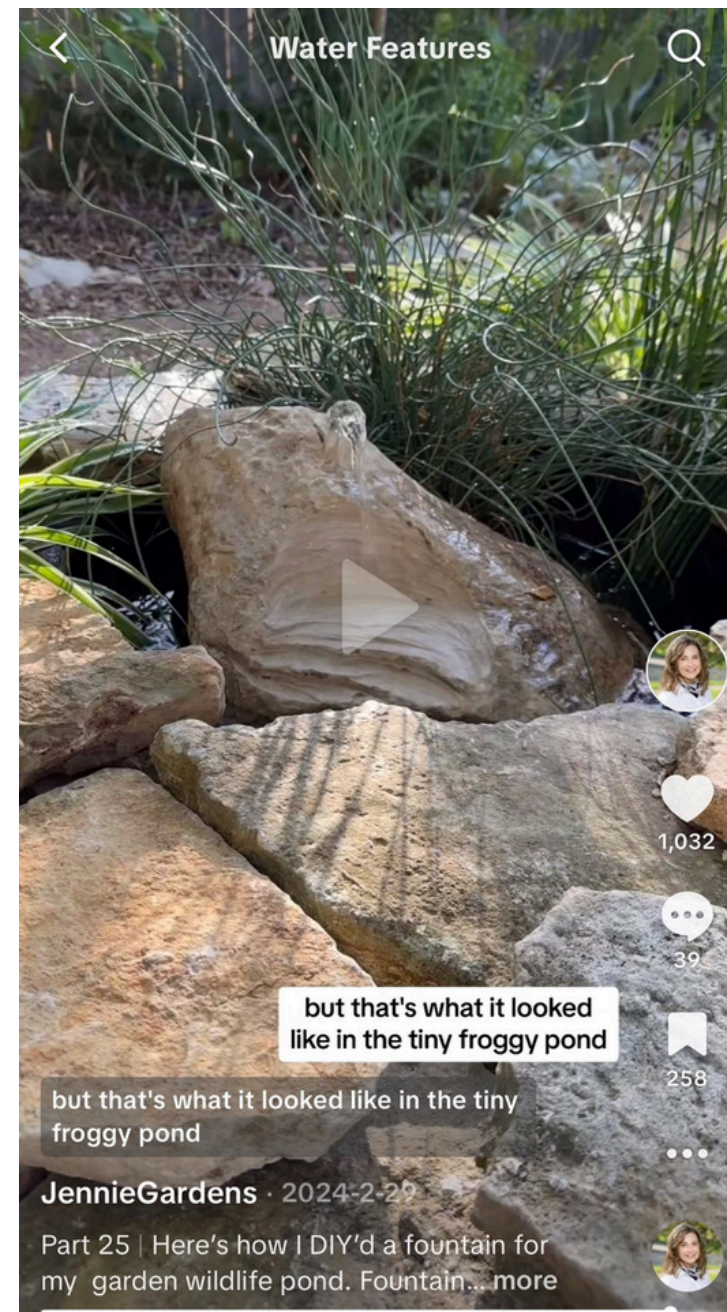
PLANTS

- Place concrete blocks or milk crates in the basin
- Add plants in pots or baskets using soil with higher clay content
- (this helps prevent wash out)
- Here's what I've experimented with
 - Pickerelweed (*Pontederia cordata*) - NATIVE
 - Horsetail Reed (*Equisetum hyemale*) - NATIVE
 - Hardy Water Lilies
 - Canna Lily
 - Colocasia (elephant ears) - INVASIVE - DO NOT LET ESCAPE
 - Papyrus
 - Sweet Potato Vine

PLANT AND POND RESOURCES

- [LBJ WILDFLOWER CENTER Special Collection: Texas Native Pond Plants](#)
- [Hill Country Water Gardens & Nursery](#)

Make it Your Own





Resources

City of Austin Watershed Protection

- [Earth Wise Guide to Rain Gardens](#)
- [Rain Gardens Keeping Water on the Land](#)
- [Rain Gardens: Plant selection](#)
- [Earth Wise Guide to Mosquitos](#)
- [Mosquito Prevention](#)

Texas AgriLife Extension Service

- [Rainwater Harvesting](#)
- [Stormwater Management: Rain Gardens](#)

[Lady Bird Johnson Wildflower Center](#)

**[Rainwater Harvesting for Drylands and Beyond](#)
[Guiding Principles to Welcome Rain into Your Life and](#)
[Landscape by Brad Lancaster](#)**

[Texas811 - Call Before You Dig](#)

A close-up photograph of a pair of hands holding a small, healthy green succulent plant in a mound of dark brown soil. The hands are positioned at the top and sides of the plant, with fingers gently cupping the soil. The background is dark and out of focus.

Sources

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You can do it!
I'm here to help.

Jennie Ostertag

BOLT
LANDSCAPE DESIGN

boltlandscapedesign.com

Design and Consulting
BOLTLandscapeDesign@gmail.com

TikTok [@JennieGardens](https://www.tiktok.com/@JennieGardens)

