Freeze Protection

Hays Trinity Groundwater Conservation District

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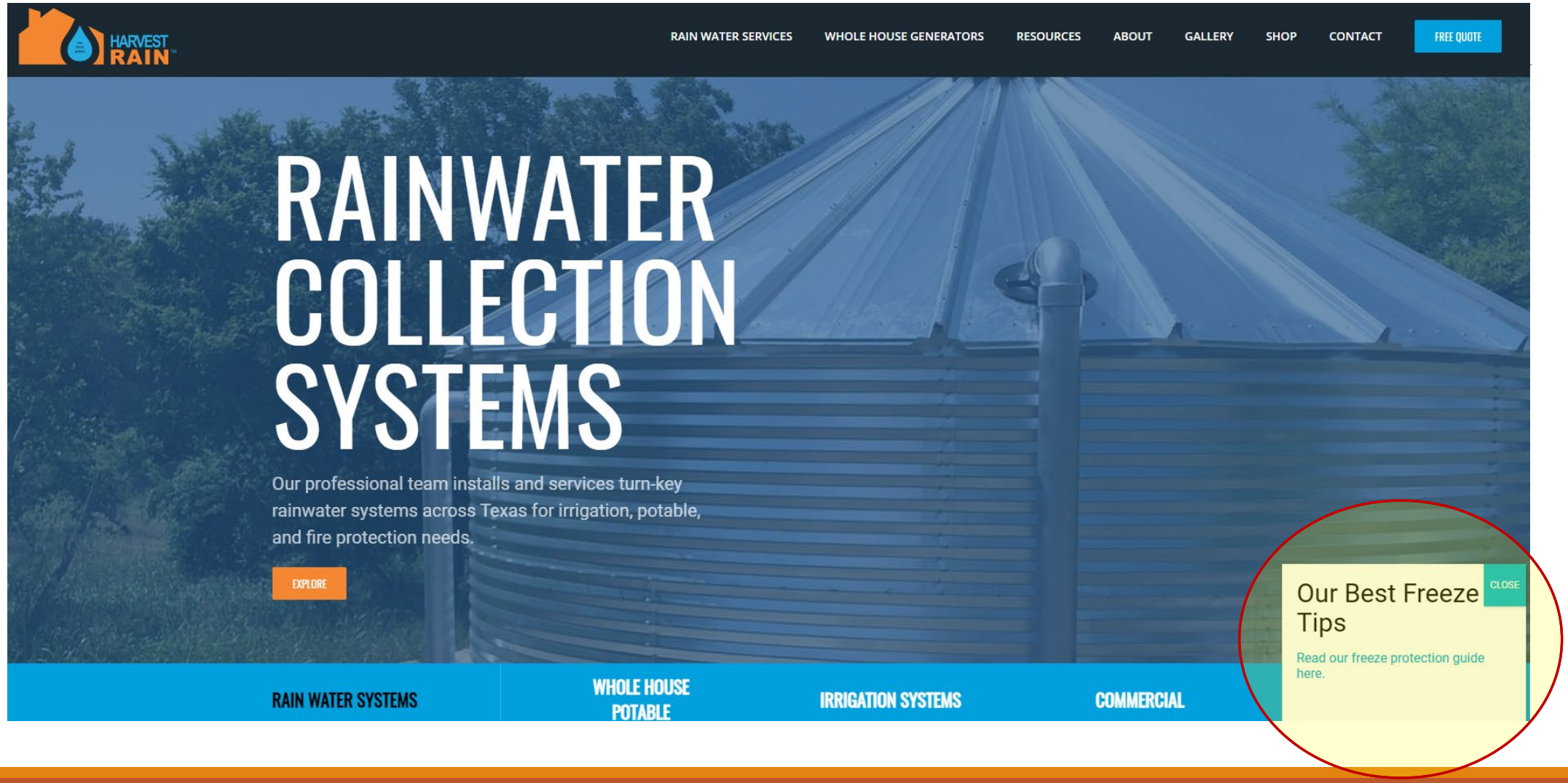
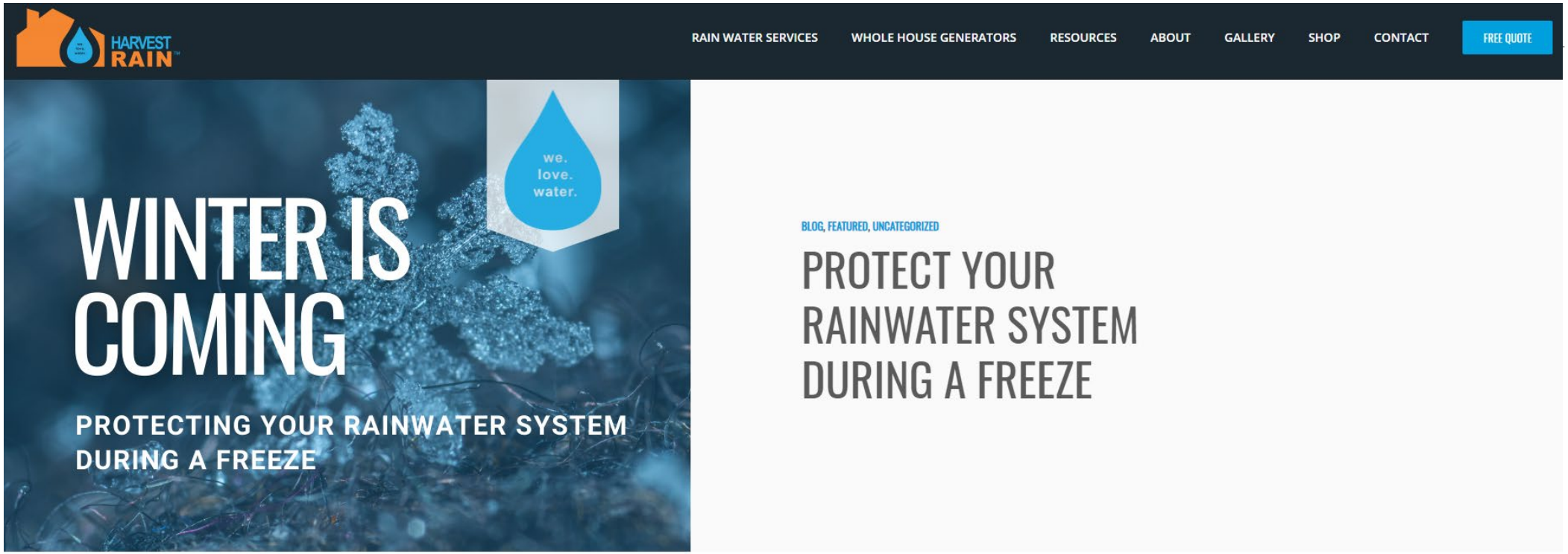
NOVEMBER 3, 2022

HARVESTRAIN.COM

Website Resource: Harvestrain.com

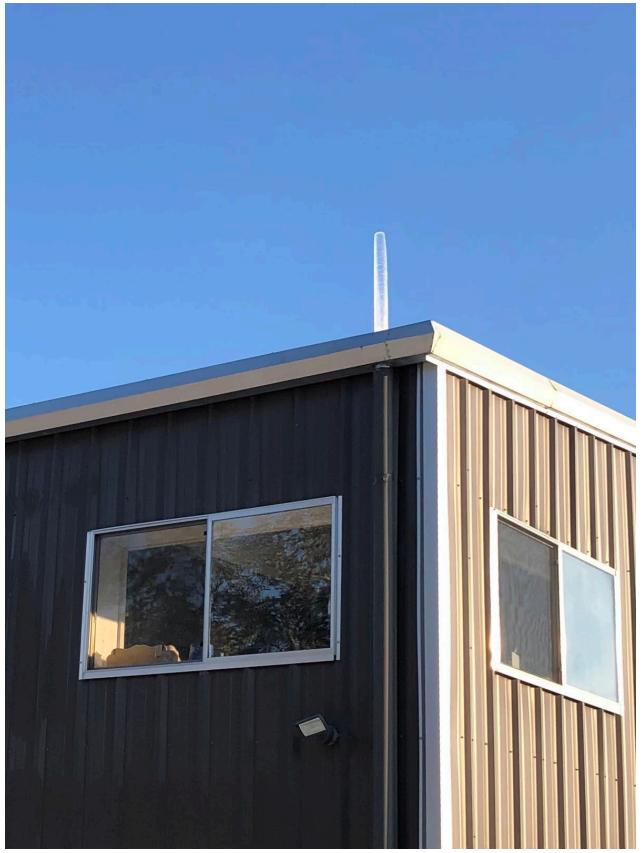


https://harvestrain.com/protect-your-rainwater-system-during-a-freeze



After living and working through The Freeze of February 2021, we want to provide our fellow harvesters with advice about how to best protect your rainwater system during a hard freeze. We recommend downloading the guide **before** the threat of a freeze so you can familiarize yourself with your system, specific valve locations, etc.

2021 Documented Damage



2021 Documented Damage

2021 Documented Damage

5 Steps to Protect Water System

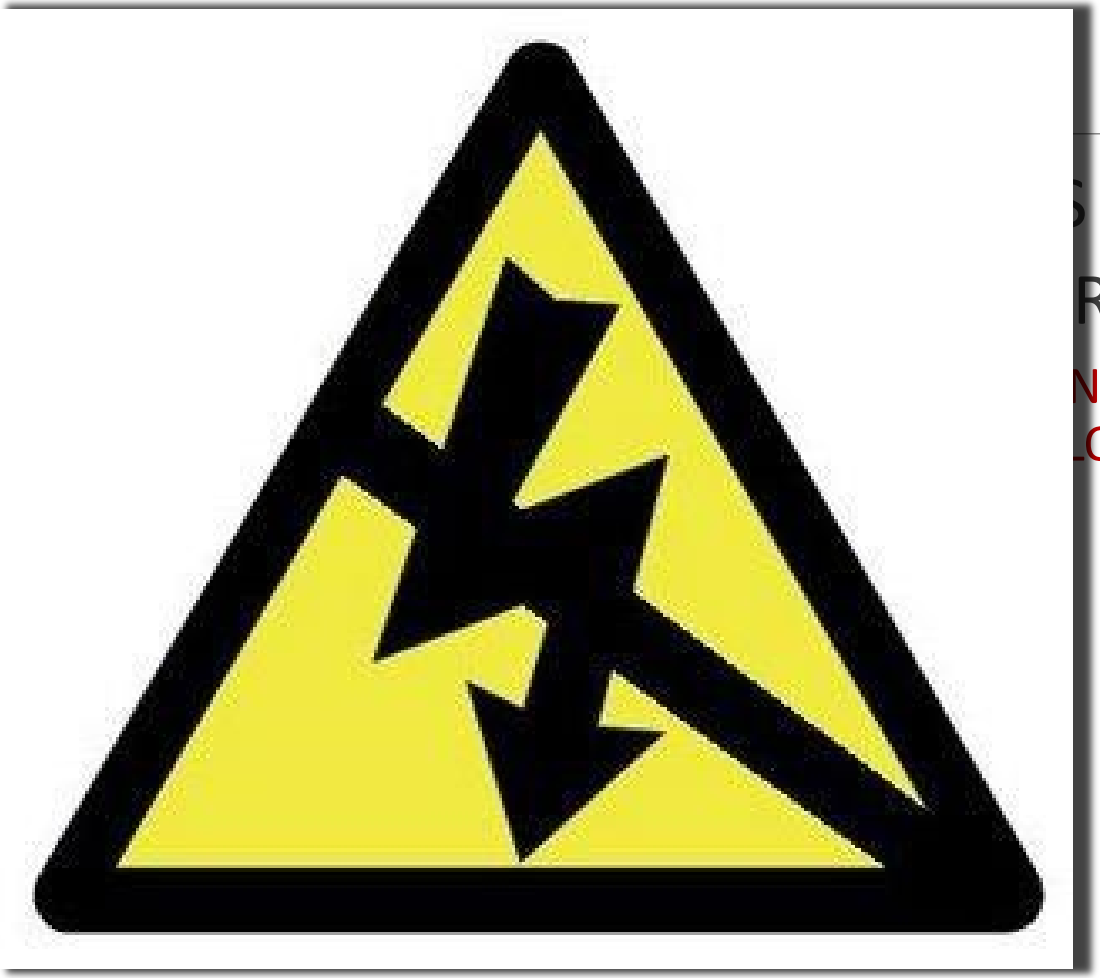
- 1. INSULATE ALL EXPOSED SMALL DIAMETER PIPES
- 2. OPEN DRAIN VALVE OF COLLECTION LINE (OR FIRST FLUSH)

  WARNING: AFTER COMPLETING STEP 2 YOU WILL NOT BE COLLECTING NEW WATER. ALL WATER FROM THE ROOF WILL DRAIN THROUGH OPEN VALVE UNTIL CLOSED.
- 3. DRIP FAUCETS
- 4. HEAT COMPONENTS
- 5. CONFIRM UV LIGHT IS ON SURGE PROTECTOR

Insulated Filter Wall

5 Steps to F

- 1. INSULATE AI
- 2. OPEN DRAIN
  **WARNING: AFTER
  WATER FROM THE R
- 3. DRIP FAUCE
- 4. HEAT COMP
- 5. CONFIRM U



RST FLUSH)

NG NEW WATER. ALL
LOSED.**

5 Steps to Decommission Water System

- 1. TURN OFF PUMP POWER
- 2. CLOSE MAIN VALVE AT TANK
- 3. FULLY OPEN VALVE / FAUCET ON PRESSURE SIDE
- 4. DRAIN PUMP TO PROTECT INTERIOR COMPONENTS
- 5. REMOVE FILTER HOUSINGS / UV LIGHT CONNECTIONS

PUMP DRAIN LOCATIONS (TYPICAL)

GRUNDFOS MQ-345

GOULDS JS PUMP (J10/J15)

HMO 2

Remember: W.O.H., N.O.P.E.

- **W**rap pressure pipes with insulation
- **O**pen / drip faucets or hose-bibs to move water through pipes, and Collection Line Drain (for RW systems)
- **H**eat areas of concern if possible (space heater, heat lamp, heat tape, etc)
- **N**o power?
- **O**pen Everything except main tank valve (hose-bibs, filter canisters, UV light connections, faucets, pump drain plug, etc.)
- **P**ower off all electrical components for water system (preferably at main breaker panel)
- **E**ndure / **E**xercise Patience / **E**xtend a Helping Hand