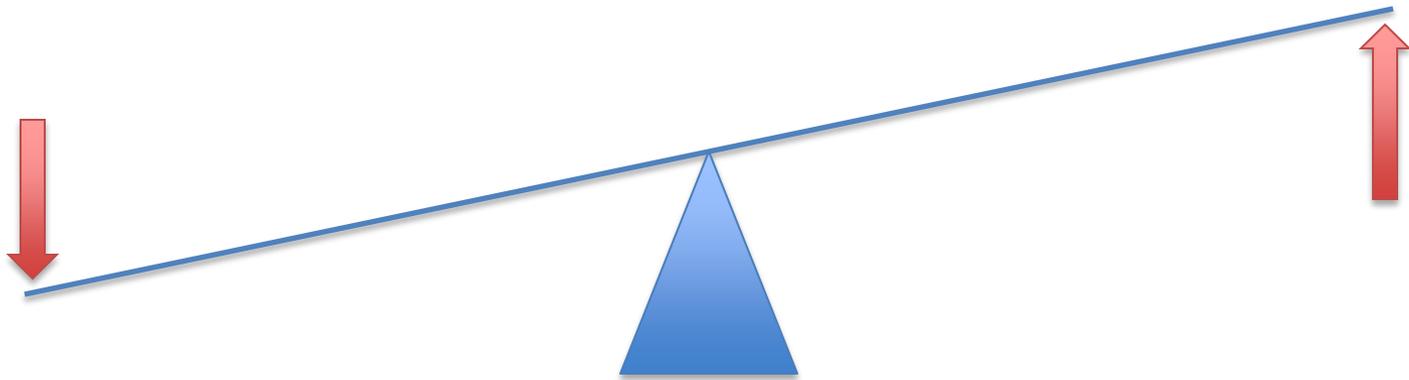


A vibrant garden scene featuring a variety of plants. In the foreground, there are several bright yellow shrubs. Behind them, there are purple irises and lavender plants. The background is filled with lush green trees and a clear blue sky. The text "Strategies for Reducing Water Use" is overlaid in the center of the image.

Strategies for Reducing Water Use

Reducing need – Increasing efficiency



Reduce Water Need

- Remove unnecessary turf
 - *ASK: Is it being used?*
- Replace with
 - Low-water beds
 - Permeable paths
- **BONUS:** reduces man-hours



Reduce Water Need

- **Hydrozone**

- Group plants with similar water needs on the same valve – *Why?*



Highest water user will call the shots!

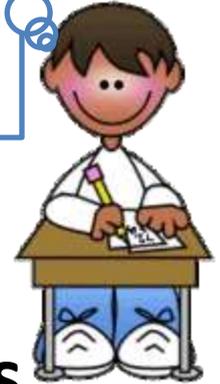
Reduce Water Need

- **Balance High-water zones (turfgrass) with Low-water**



**YAY!
MATH!**

Balance your Zones



- **Total landscape goal of 50% ET_0**
 - 1. Measure square footage of all zones**
 - 2. Divide ft^2 of each zone by total = Area%**
 - 3. Multiply each Area% by its $ET_0\%$ = Use%**
 - 4. Add up all Use% = 50% or less**

Balance your Zones

YAY!
MATH!



Area%

- | | | | |
|----------------|---------------------------|----------|------|
| • Bed A = | 137 ft ² | • A = | .137 |
| • Bed B = | 53 ft ² | • B = | .053 |
| • Lawn = | 400 ft ² | • Lawn = | .400 |
| • Vegetables = | 160 ft ² | • Veg = | .160 |
| • Bed C = | <u>250 ft²</u> | • C = | .250 |
| Total= | 1000 | | |

Balance your Zones

Area% x ET₀% - (cool season turf ex.)

- A = .137 x .10 = .014
- B = .053 x .10 = .005
- Lawn = .400 x 0.8 = .32 – 3/5 of my budget!
- Veg = .160 x 1.0 = .16
- C = .250 x .10 = .025

Target = .50

Actual: .524

Balance your Zones

Area% x ET₀%- (reduced turf/warm season)

• A = .137 x .50 = .0685

• B = .253 x .20 = .05

• Lawn = .200 x 0.6 = .12

• Veg = .160 x 1.0 = .16

• C = .250 x .40 = .100

Target = .50

Actual: .4985!

•Reduce the lawn by half- use warm season type

•Add the area to a LOW water area

•Balance with more moderate areas

Reducing Need

- **Keep turf healthy**
 - Maintain proper height
 - Fertilize regularly- but not more than **1lb. N/1000 ft²/app.**



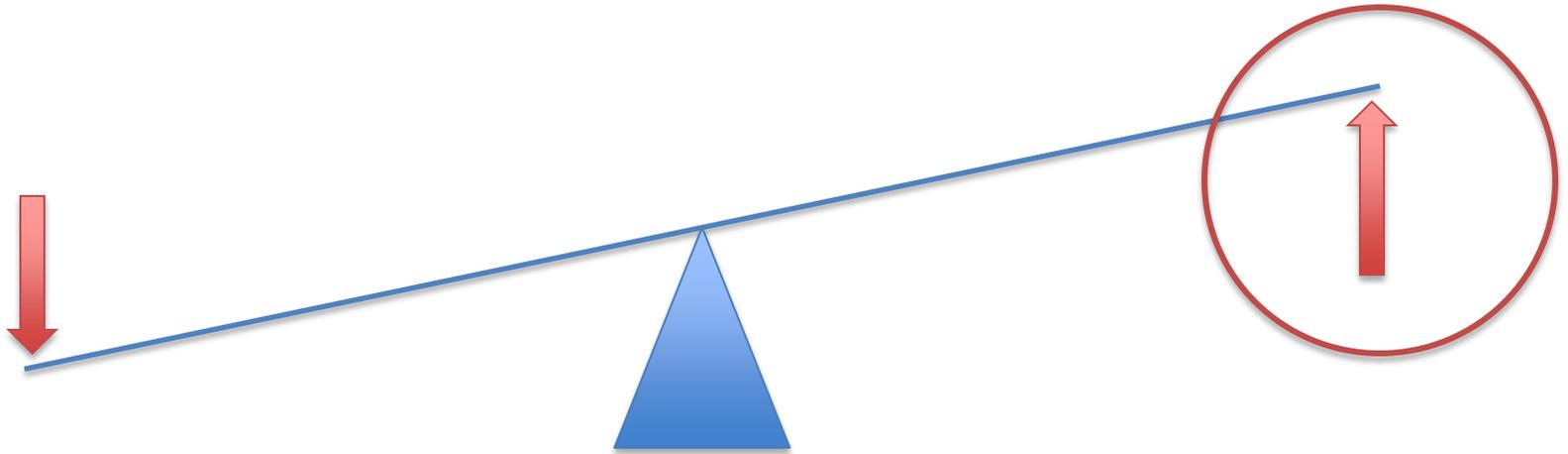
- **During severe drought, fertilize less**

Reducing Need

- **Don't over-fertilize beds – if at all**
- **Flushes of new leaves = higher water need**



Reducing need – Increasing efficiency



Increase Efficiency

- **System Check**
 - **Pressure adequate?**



Increase Efficiency

- **System Check**
 - **Make timely repairs**



Increase Efficiency

- **System Check**
 - Make timely repairs
 - **MISMATCHED**
 - **COCKED**
 - **BLOCKED**
 - **BROKEN**
 - **ROTATED**



Increase Efficiency

- **Systems Check**
 - Upgrade
 - Lowest practical PR
 - Check valves



Increase Efficiency

- **Replace sprays in beds with drip**

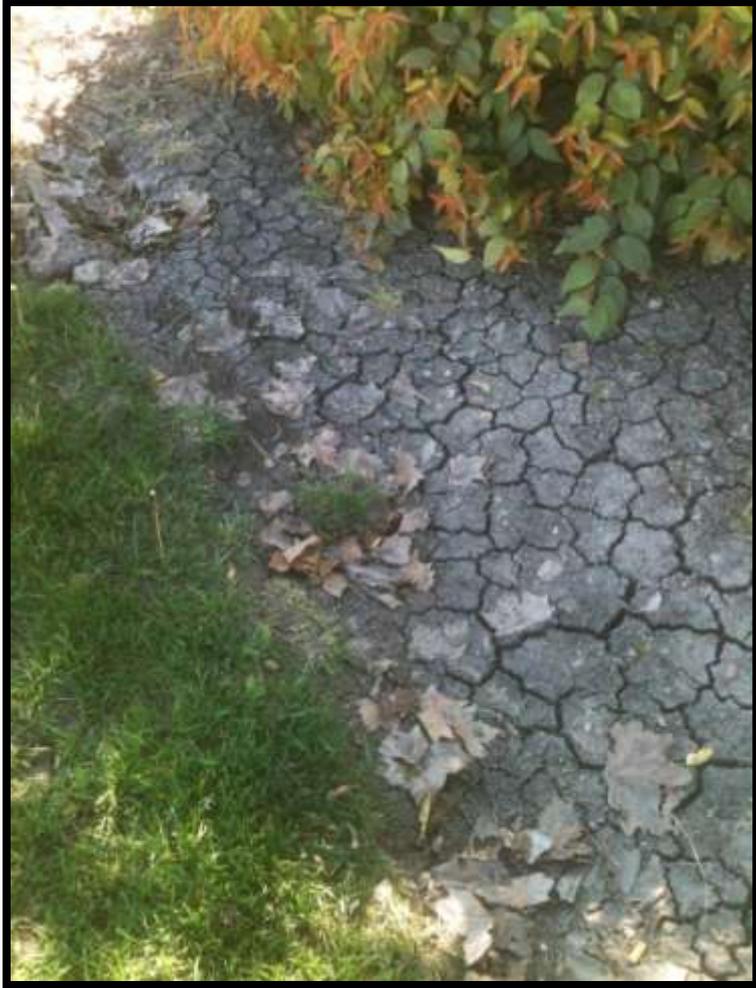


Increase Efficiency

- **Improve your soil**
 - **Till compost into new plantings**



Increase Efficiency



- **MULCH BEDS!**
 - Reduces water loss
 - Improves soil texture
 - Increases infiltration
 - Keeps plant roots cool
 - **LEAVES CAN BE MULCH!**

Increase Efficiency



- **Improve your soil**
 - Aerate turf regularly
 - Top dress with compost
 - Avoid fungicides
- **Healthy soil absorbs and releases water better**

Increase Efficiency

- **Irrigate according to plant maturity**
 - **MATURE-**
 - **Deep but infrequent**
 - **NEWLY planted**
 - **Frequently to just below root zone**
 - **Gradually increase interval**

Increase Efficiency

Pay attention to density



Increase Efficiency

Pay attention to density



Increase Efficiency

Pay attention to microclimate



Increase Efficiency

Pay attention to microclimate



Increase Efficiency

Pay attention to seasons

- **Minimum changes-4**
 - Winter –OFF
 - Spring (April-May)
 - Summer (June – Aug)
 - Fall (Sept. – Oct.)
 - **NOVEMBER- OFF**



Increase Efficiency



- **ELIMINATE
RUN-OFF!**

QUESTIONS?