This presentation premiered at WaterSmart Innovations

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THE FUTURE OF BLUE IS GREEN:
Using pre-designed gardens to jumpstart landscape change

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Presentation Overview

The Future of Blue Is Green: Using pre-designed gardens to jumpstart landscape change

- Center for ReSource Conservation (CRC)
- Garden In A Box Program
- Garden In A Box inspires the Turf Removal Program
- Turf Removal Program – utilizing CRC’s strengths
  - Structure and impact
  - Sample turf removal projects
  - Survey results, lessons learned, and conclusion
CRC Mission: Putting conservation into action

CRC History: 501(c)(3) nonprofit social enterprise; founded in 1976 by a group of citizens concerned about our dependence on non-renewable resources

Program Areas: Waste Diversion, Energy, & Water Conservation
CRC’S WATER PROGRAMS

• Putting **WATER** conservation into action

• Program areas: Landscape Change, Turf Removal, Fixture Retrofits, Indoor/Outdoor Audits, Education

• **30** utility partners

• **5,000** customer interactions per year

• **Over 206 million gallons** of expected lifetime savings from 2017 programs
GARDEN IN A BOX:
Water conservation via landscape change
WHAT IS:

GARDEN IN A BOX

An easy and affordable way for community members to save water and beautify their landscapes with professionally designed Xeric (low water) perennial gardens
Do it yourself garden kits that come with 15 to 30 starter plants, a comprehensive planting and care guide, and 1 to 3 plant by number maps.

**WHAT IS:**

**GARDEN IN A BOX**

2015 GARDEN IN A BOX: PLANT AND CARE GUIDE

**NATIVE ROOTS**

Designed by Kenton Seth, Landscape Designer

1. **Redbud (Cercis Canadensis)**
   - Mature Height: 6'-8' Spacing: 8'-10'
   - Water: Late Fall
   - Sun: Full Sun

2. **Bluegrass (Poa Annua)**
   - Mature Height: 1'-2' Spacing: 12'-14'
   - Water: Late Fall
   - Sun: Full Sun

3. **Daisy (Bellis Perennis)**
   - Mature Height: 6'-10' Spacing: 12'-14'
   - Water: Late Fall
   - Sun: Full Sun

4. **Sage (Salvia Officinalis)**
   - Mature Height: 1'-2' Spacing: 12'-14'
   - Water: Late Fall
   - Sun: Full Sun

5. **Butterfly Weed (Asclepias Tuberosa)**
   - Mature Height: 3'-5' Spacing: 12'-14'
   - Water: Late Fall
   - Sun: Full Sun

6. **Redbud (Cercis Canadensis)**
   - Mature Height: 6'-8' Spacing: 8'-10'
   - Water: Late Fall
   - Sun: Full Sun

7. **Daisy (Bellis Perennis)**
   - Mature Height: 6'-10' Spacing: 12'-14'
   - Water: Late Fall
   - Sun: Full Sun

8. **Sage (Salvia Officinalis)**
   - Mature Height: 1'-2' Spacing: 12'-14'
   - Water: Late Fall
   - Sun: Full Sun

9. **Lavender (Lavandula Angustifolia)**
   - Mature Height: 1'-3' Spacing: 12'-14'
   - Water: Late Fall
   - Sun: Full Sun

10. **Queen Bee (Dianthus Barbatus)**
    - Mature Height: 1'-2' Spacing: 12'-14'
    - Water: Late Fall
    - Sun: Full Sun

**3 Plant by Number Design Options:**

- **10' x 10'**
  - 1 box = 1 sq. ft.
- **7' x 14'**
  - 1 box = 1 sq. ft.
GARDEN IN A BOX: IMPACT
2017 at a glance

- Over 4,200 gardens sold!
- 20 partner cities

- Xeric landscapes use up to 60% less water than traditional turf lawns

- 2017 gardens = a lifetime savings of 20.5 million gallons of water!

- Through 2017, nearly 1.4 million square feet of landscape converted to low-water gardens
GARDEN IN A BOX:
An impetus for turf removal and landscape change
THE CHALLENGE

- City of Lafayette
- Increasing water rates
- Concerned customers
- How can CRC solve this problem for us?

THE SOLUTION

Utilize Garden In A Box to incentivize residents to remove turf via the Turf Removal and Replacement Program model
GARDEN IN A BOX:
An impetus for turf removal and landscape change

- Solves and gets to the core of residents’ struggles

46% of survey respondents said that design help and plant materials would be the #1 incentive to remove turf

- Offers a practical, easy to implement solution
- Removes stress & complication of plant selection and landscape design
- More time to focus on other landscape elements (hardscape, irrigation, etc.)
- It looks good!
- Allows CRC to capitalize on our strengths (Garden In A Box, Slow the Flow)
TURF REMOVAL AND REPLACEMENT PROGRAM

2016 Pilot Program

CENTER FOR ReSource Conservation
TURF REMOVAL PROGRAM:

1) INCENTIVES

- FREE 200 sq. ft. garden
- FREE spray to drip irrigation conversion kit

RAIN BIRD RETRO 1800

- $1/sq. ft. with a 1,000 sq. ft. max

GARDEN IN A BOX

HARDSCAPE CREDIT
TURF REMOVAL PROGRAM: 2) EDUCATION

- MUST attend 2 hr. *expert-led* seminar
- Topic: “Transforming Your Lawn into a Xeriscape Garden”
- Seminars FILL UP!!
  - 2 seminars per year per city
  - **Attendance ~100 to 130 people!!**
TURF REMOVAL PROGRAM: 3) THE PROJECT

- Participant sends application materials
- Participant completes the work
- Pick up Garden In A Box and Rain Bird Retro 1800
TURF REMOVAL PROGRAM: 4) SLOW THE FLOW

• In addition to a full irrigation assessment, this includes:
  ✓ Confirming measurements of the turf removal area
  ✓ Confirming that irrigation has been appropriately changed for the area
  ✓ Photos of the completed project

• Award hardscape water bill credit based on measurements
TURF REMOVAL PROGRAM: 2017 IMPACT

- 2 partner utilities
- **41** participants removed an average of **350 sq. ft.** of turf
- **15,000 total sq. ft.** removed

Estimated water savings per year from all replaced turf = **166,000 gallons**
SAMPLE TURF REMOVAL PROJECTS
MATT’S PROJECT
Lafayette, CO

Removed: 307 sq. ft.
Cost: ~$250

Potential water savings: 3,200 gallons per year
Time: ~35 hrs. each for he and his wife

BEFORE

AFTER
SUE’S PROJECT
Lafayette, CO

Removed: **296 sq. ft.**
Cost: ~**$2,000-$2,500**

Potential water savings: **5,000 gallons per year**
Time: **2.5 days** for landscaper to complete

BEFORE

AFTER
THERESA’S PROJECT
Lafayette, CO

Removed: **655 sq. ft.**
Cost: ~**$950**

Potential water savings: **6,800** gallons per year
Time: ~**50 hrs.** between April and June

**BEFORE**

**AFTER**
TURF REMOVAL AND REPLACEMENT PROGRAM: 2016 SURVEY RESULTS

“This was an incentive to do what I've wanted to do for a while.” –Lafayette Participant
TURF REMOVAL PROGRAM: 2016 SURVEY RESULTS

Overall Program Satisfaction

1 = Very Dissatisfied
5 = Very Satisfied

Overall experience

Application process

Overall success
TURF REMOVAL PROGRAM: 2016 SURVEY RESULTS

When ranking the difficulty level of their project:

- **91%** rated it as “Difficult” or “Very Difficult”
- **8%** rated it as “Neutral”
- **0%** rated it as “Easy” or “Very Easy”
TURF REMOVAL PROGRAM: 
2016 SURVEY RESULTS

How likely would you have been to complete the Turf Removal and Replacement program without the structure and support of this program (i.e. education, monetary support and free garden)?

66% responded "Unlikely" or "Very Unlikely"
TURF REMOVAL PROGRAM:
2016 CUSTOMER COMMENTS

• “I think this program is terrific. I did most of it myself, renting a sod cutter, designing the new layout, running the drip lines from the conversion kit. Your program is very well designed and gave me the courage to attempt to do it.”

• “We have been wanting to do this. The support of the program helped push it forward and helped us justify the changes to our HOA.”
LESSONS LEARNED
LESSONS LEARNED

• Barriers to participation:
  – Insufficient time for project completion (1.5-2 month minimum; fall seminar)
  – Seminar attendance (For every 100 attendees, 8-20 will actually participate in full program)
  – Requiring turf removal to be in the front lawn
  – HOA approval

• Softscape is more popular than hardscape option

• Time stamped photos work well as pre-qualifier
Lessons Learned

• Slow the Flow is perfect way to follow up and verify that irrigation has been changed

• Clear expectations need to be set or people will take advantage: Reiterate steps and requirements to prevent information overload

• Ongoing lesson: Appropriately quantifying water savings
  – The area will need 1-3 years of higher water use to establish
  – Year to year precipitation variance
  – New homeowners vs. previous homeowner’s water use
  – When did they stop watering the area?
CONCLUSION

• Water rates and demand are on the rise
• Utilities are seeking ways to make turf removal more appealing and accessible to customers
• Residents are interested in easy ways to remove turf and beautify their landscape

• THE FUTURE OF BLUE IS GREEN!
Pre-designed Gardens In A Box jumpstart landscape change
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