

# This presentation premiered at WaterSmart Innovations

[watersmartinnovations.com](http://watersmartinnovations.com)



# Developing Collaborative Relationships for Conservation Projects

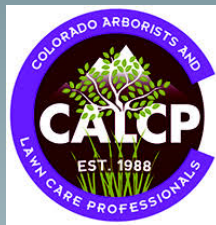


aka... A Collaborative Model for  
Healthy Landscapes

# Project Team



# Affiliated Associations & Agencies





# Introductions

## Your Presenters....

Steve Moorhead, Water Returns

Eric Moroski, Weisburg Landscape Maintenance

David Finch, H2O Landscape Management

Kyle Katsos, Earth Expressions

## And Now About Our Participants...

# Ground We'll Cover

- 🍃 Context, Organization & Process for Real Change
- 🍃 Protecting the Investment & Growing the Return
- 🍃 Outcomes Achieved To Date
- 🍃 Tackling Your Challenges & Opportunities

# Context, Organization & Process for Real Change

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# Real Change - Context

-  Environment, Supply & Demand
-  Regional, State & Local Initiatives
-  Local Incentives
-  Labor Pool
-  USAA Values, Vision & Leadership
-  The Property

USAA understands and values the importance of sustainable landscape practices and the impact corporations can have by setting the example through responsible use of our natural resources.

Roger Lage  
Director Workplace Services  
USAA Colorado Springs Office



# LOT 1 USAA SUBDIVISION FILING #2



## Water Conservation Master Plan

- C** COMPLETED SOD REMOVAL AND AGGREGATE PLANTINGS & RESTORATION
- R<sub>HD</sub>** SOD AREA TO BE REMOVED AND RESTORED WITH LOW WATER PLANTINGS (HIGH DENSITY)
- R<sub>M</sub>** SOD AREA TO BE REMOVED AND RESTORED WITH LOW WATER PLANTINGS (MODERATE DENSITY)
- R<sub>LD</sub>** SOD AREA TO BE REMOVED AND RESTORED WITH LOW WATER PLANTINGS (LOW DENSITY OR NO PLANTINGS)
- (S)** SHADE LOVING - LOW WATER PLANT MATERIAL SOLUTIONS
- EXISTING STEEP SLOPES WITH SOODED TURFGRASS (DOUBLE NEGATIVE)
  1. HARD TO WATER AND RETAIN WATER
  2. HARD TO MAINTAIN
  3. OCCASIONALLY DIRECTING WATER TOWARDS BUILDINGS
- G<sub>1</sub>** POTENTIAL LOW WATER DEMONSTRATION GARDEN PROS - GOOD VISIBILITY TO GUESTS, USAA STAFF & GOOD STREET VISIBILITY/PUBLIC
  1. GOALS/ISSUES:
    - A. TO DISCUSS (EDUCATION (Public/Private, Other)
    - B. LOW MAINTENANCE - XERIC CONCEPT (Sun)
    - C. CONCEPT (LOW WATER ORNAMENTALS, LOW NATIVES, TRUE XERIC, DESERT PLANT MATERIALS)
- G<sub>2</sub>** POTENTIAL LOW WATER DEMONSTRATION GARDEN PROS - ACCESSIBILITY TO USAA STAFF & GUESTS
  1. GOALS/ISSUES:
    - A. SHADE LOVING - LOT WATER DEMONSTRATION GARDEN
    - B. USE / BENEFITS - DISCUSS
    - C. MORE LIMITED, MAY BE MORE MASSING, THAN VARIETY



- G<sub>3</sub>** POTENTIAL LOW WATER DEMONSTRATION OR COMMUNITY GARDEN PROS - POTENTIAL HIGH DEMAND WITH EMPLOYEES
  1. GOALS/ISSUES:
    - A. POTENTIAL HEALTH/LLEGAL ISSUES
    - B. MAINTENANCE
    - C. CAMPUS AND/OR COMMUNITY ASSET



**Natura**
  
DATA FILE SOLUTIONS

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**USAA**

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**USAA BUSINESS CAMPUS**
  
 1855 TELSTAR DRIVE
   
 COLORADO SPRINGS, CO
   
 WATER CONSERVATION OPPORTUNITY PLAN

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PROJ. NO.:  
DATE: 7/27/2018  
SCALE: N.T.S.  
DRAWN BY: JMS  
CHECK BY: JMS  
**SHEET 1**

**ACREAGE:** 17.63 (Confirm)  
**ZONE:** PIP-1/cr HR  
**EXISTING SODDED TURFGRASS** (630,000 SF)  
**GOAL:** REDUCE SODDED TURFGRASS BY (60%)  
           SODDED TURFGRASS REDUCED TO (252,000 SF)  
**TIMING:** (TO DISCUSS)  
**NOTE:** ALL AREAS ARE ESTIMATED, CONTRACTOR TO  
 DETERMINE ALL EXACT QUANTITY REQUIREMENTS.



**CONSERVATION FROM TURF:**

	COST (1 LOW / 5 HIGH)	WATER SAVINGS: (5 HIGH / 1 LOW)
A. NATIVE TO NATURAL	1	5
B. COMMUNITY GARDEN	2	4
C. MULCH & SHRUBS	3	3
D. EMPLOYEE DEMO GARDEN	4	2
E. PUBLIC DEMO GARDEN	5	1

**EXISTING IRRIGATION SYSTEM:**

- A. EXISTING TAP SIZE: 4"
- B. 70 PSI
- C. LARGE SYSTEM WITH 8 CONTROLLERS ?

**IRRIGATION GOALS:**

- A. INCREASE MONITORING AND REPAIRS OF EXISTING SYSTEM, RAISE SPRINKLER HEADS FOR BETTER EFFICIENCY.
- B. IMPLEMENT SMART CONTROLLER TECHNOLOGY.
- C. CONSIDER A FLOW SENSOR.







1855

USAA  
FINANCIAL CENTER

1855

CAUTION



USIA

USIA































# Real Change - Organization Facilitating Agent

- 🌿 Sustainable Organizational DNA
- 🌿 Integrate into Very Competitive Industry
- 🌿 Protect Owner Interests & Intentions
- 🌿 Understand Contractor Perspective & Interest
- 🌿 Independently Facilitate Collaborative Assessment, Planning & Implementation

Facilities organizations have a limited bandwidth (resources), therefore facilitating these changes is difficult to execute. The development of a plan with trusted third party providers to execute the vision allows the needed changes to take place.




Roger Lage  
Director Workplace Services  
USAA Colorado Springs Office



# Real Change – Process

## Xeric Conversions – Assessment

(Summer 2011)

-  Independent Baseline Assessment
-  Assessment Worksheets
-  Scope of Assessment

# Real Change – Process

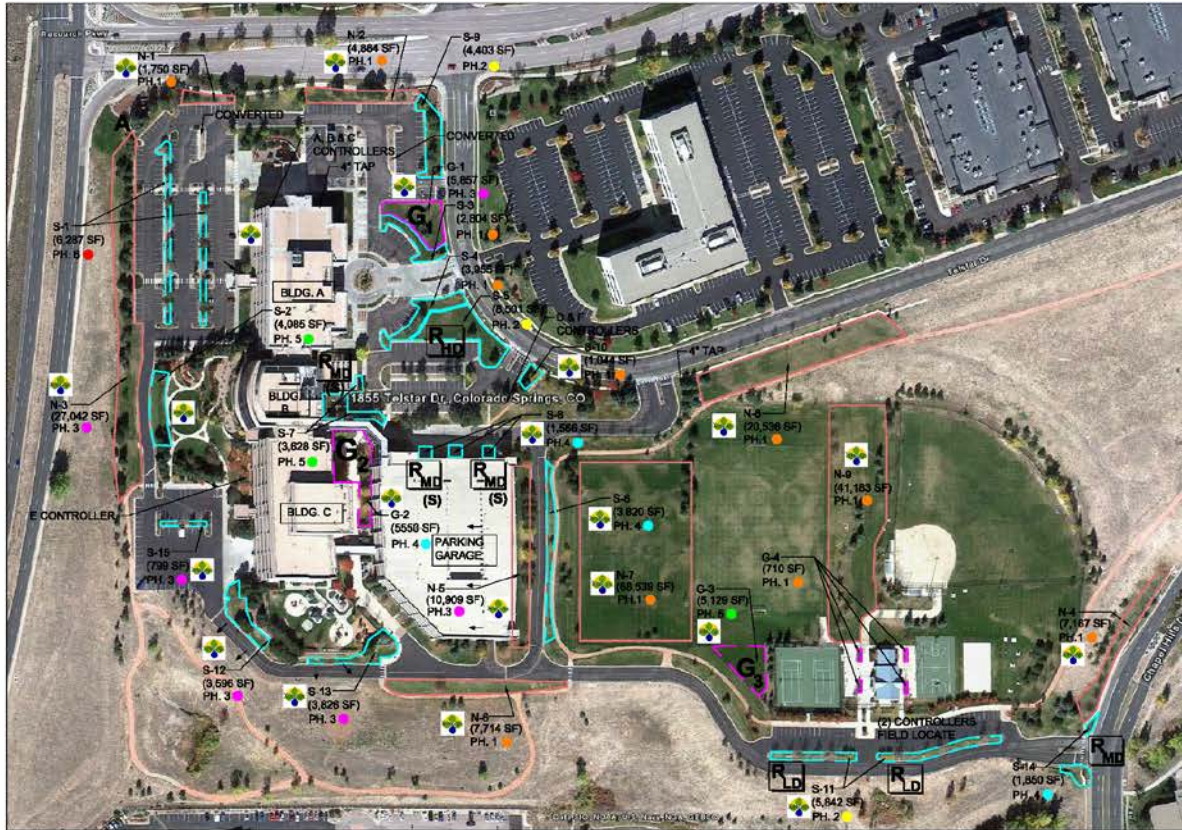
## Xeric Conversions – Planning

(Fall 2011 – Spring 2012)

- 🍃 Integrate Vision & Assessment Findings
- 🍃 Maintenance Costs/Savings; Xeric or Not
- 🍃 Phased Master Concept Plan & Budget
- 🍃 Phase 1 Construction Drawings
- 🍃 Proactive City Plan Review Involvement



# LOT 1 USAA SUBDIVISION FILING #2



## Water Conservation Master Plan

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- G<sub>2</sub>** POTENTIAL LOW WATER DEMONSTRATION GARDEN PROS - ACCESSIBILITY TO USAA STAFF & GUESTS
  - CHALLENGES: SHADE
    1. GOALS/ISSUES:
      - A. SHADE LOVING - LOT WATER DEMONSTRATION GARDEN
      - B. USE / BENEFITS - DISCUSS
      - C. MORE LIMITED, MAY BE MORE MASSING, THAN VARIETY



- G<sub>3</sub>** POTENTIAL LOW WATER DEMONSTRATION OR COMMUNITY GARDEN PROS - POTENTIAL HIGH DEMAND WITH EMPLOYEES
  - CHALLENGES: LEGAL - (PRIVATE VS PUBLIC)
    1. GOALS/ISSUES:
      - A. POTENTIAL HEALTH/Legal ISSUES
      - B. MAINTENANCE
      - C. CAMPUS AND/OR COMMUNITY ASSET



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LOW GROW MIX

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1855 TELSTAR DRIVE  
 COLORADO SPRINGS, CO  
 WATER CONSERVATION OPPORTUNITY PLAN

REVISED: 2/22/2018  
 DATE: 2/22/2018  
 SCALE: N.T.S.  
 DRAWN: JMS  
 CHECKED BY: JMS

SHEET 1

# Real Change – Process

## Xeric Conversions – Implementation

(Summer 2012 & 2013)

- 🌱 Proposal Solicitation & Contract Negotiations
- 🌱 Sustainable Product & Performance Standards
- 🌱 3 Proactive Project Inspections

# Protecting the Investment & Growing the Return – New Maintenance Model





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# New Maintenance Model – Factors

- 🍃 Achieve Longterm Goals & Protect Investment
- 🍃 Size of Property & Scope of Services
- 🍃 Single General vs Multi Specialized Contractors
- 🍃 Care, Health, Aesthetics & Water Savings
- 🍃 Communication, Coordination & Role Clarity

# New Maintenance Model – Process

(Fall 2014 – Summer 2016)

- 🍃 Grounds, Irrigation, Trees & Demo Gardens
- 🍃 Fertigation
- 🍃 Separate & Complimentary SOWs & Standards
- 🍃 Invitation & Selection Criteria
- 🍃 Separate Pre-Bid Site Visits & RFP Revisions
- 🍃 Bid Groupings & Contractor Selection

# New Maintenance Model – Process (continued)

- 🍃 Team Building
- 🍃 Joint Assessments (Owner & Contractor)
- 🍃 Assessment Findings & Recommendations
- 🍃 Condition, Action Plan & Project Priorities
- 🍃 Communication & Coordination



...all the participating contractors have a drive to succeed and help each other out. There is actually comfort in knowing someone knowledgeable has your back, especially Water Returns who ring leaders us all.

Eric Moroski  
Partner/Owner  
Weisburg Landscape Maintenance

... builds relationships and alliances within the industry and allows each company to stay focused on their line(s) of expertise... to ensure a healthy landscape on the USAA campus.

Dave Carpenter

Owner

Tall Timbers Tree & Shrub Service

# Outcomes Achieved To Date

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# Outcomes to Date – Service Areas Grounds

## Upgraded Sports Fields Health & Appearance

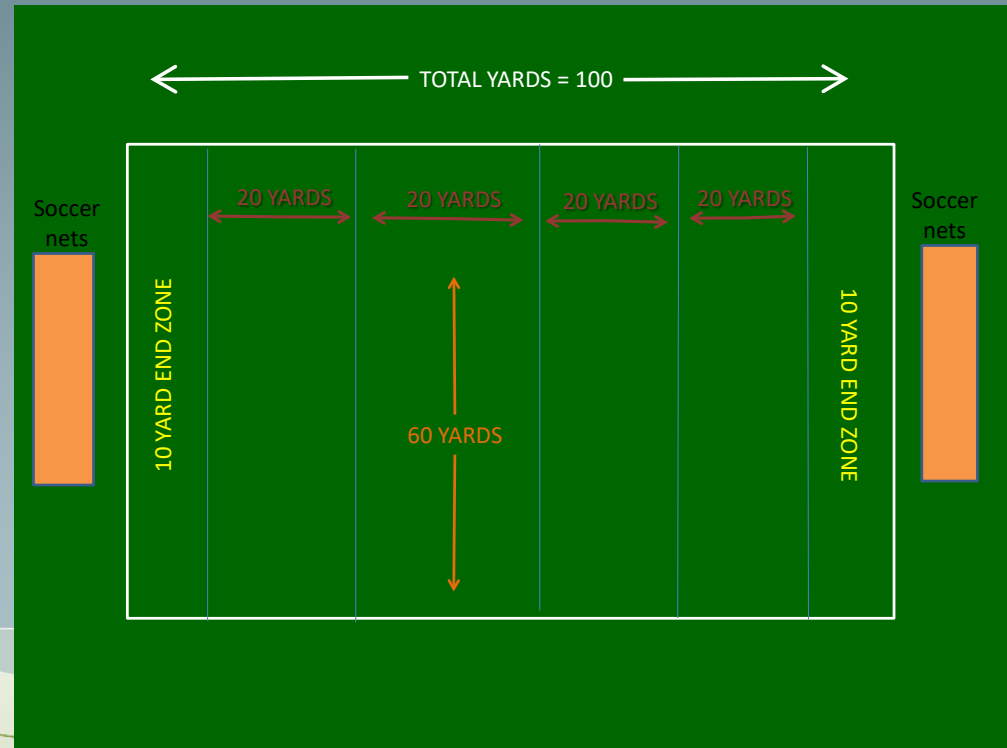
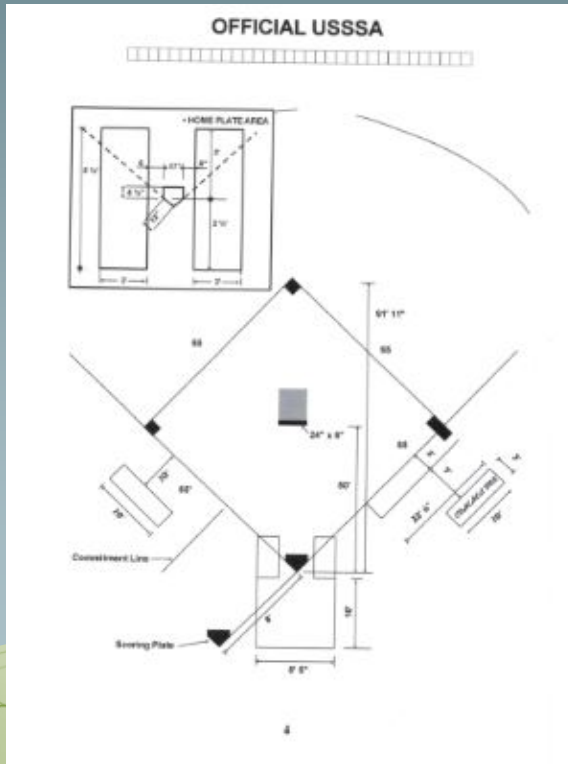
June 2013

June 2017



# Outcomes to Date – Service Areas Grounds

Improved Sports Field Management Within Budget





# Outcomes to Date – Service Areas Grounds

Improved Safety & Aesthetics of Child  
Development Center



# Outcomes to Date – Service Areas

## Irrigation

- 🍃 Major relocation, rewiring & organization of 3 irrigation clocks covering 100 zones
- 🍃 Installation of remotes
- 🍃 Diligent leak identification and repair & timing of winterization – saving \$000.

# Outcomes to Date – Service Areas Irrigation

Relocation, Rewiring & Organizing 3 Irrigation Clocks



# Outcomes to Date – Service Areas Irrigation

## Controlling the Controllers







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# Outcomes to Date – Service Areas

## Trees

Inventoried, diagnosed & implemented first two of 3 year cycle of holistic care, pruning, spraying, deep root watering & feeding and (as needed) removal & replacement program for over 500 trees.

# Conversions - P



The trees have never loved life so much as they have over these last couple years.

Roger Lage

Director Workplace Services

USAA Colorado Springs Office



# Outcomes to Date – Service Areas

## Demonstration Gardens

- ❖ Completed meticulous inventory, diagnosis, care, watering & selective replacement of over 50 species of perennials, grasses, trees, ground covers and other shrubs in Demo Gardens
- ❖ Created Soil Building Mulch Rings saturated w/Compost Tea.

USAA XERIC DEMONSTRATION GARDENS  
(2014)



The benches and trash receptacles in the garden were made by Colorado Rock 'n Log, from burnt timbers harvested from the Mountain Shadows and Black Forest fires in 2012 and 2013.

For more information, including a more detailed landscape plan and plant list visit:  
[www.waterreturns.org](http://www.waterreturns.org)





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Great value has been realized by the detailed gardener level focus being given to the Demonstration Gardens – the degree of improvement to its care and appearance is unmatched.

Roger Lage  
Director Workplace Services  
USAA Colorado Springs Office

# Outcomes to Date – Strategic

- ✔ Converted 4.4ac of KBG to Native Grass
- ✔ Reduced Water Use 35% Annually for 4yrs
- ✔ 28,000sf Demo Garden w/over 50 Xeric Species
- ✔ Reduced Water Use 25% w/Maintenance Model
- ✔ Far Better Service & Condition of Landscape



# Tackling Your Challenges & Opportunities

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Working Together to Apply, Measure,  
Improve & Promote the Benefits of  
Sustainable Practices used in the Installation  
and Ongoing Maintenance of Landscapes.

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# Developing Collaborative Relationships for Conservation Projects



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