

# This presentation premiered at WaterSmart Innovations

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





***Conservation after  
Catastrophe: Rebuilding  
Waldo with efficiency and  
high-performance  
construction***



# Waldo Canyon Fire: 2012

❖ Where: Colorado Springs, Colorado June 23<sup>rd</sup>

Weather: High Winds, Low Humidity, 100+ Degrees

- 2<sup>nd</sup> year of drought; low moisture content in plants, trees
- Dense, Dry, heavy fuels accumulation, low mitigation
- Pikes Peak National Forest, West of Town, Adjacent to city
- Topography: Steep, Dense, Forested, natural area, many trails, some roads, and *utilities infrastructure*
- No burns in recent history - 1980s, 90s, 2000s homes
- Homes directly in urban interface, foothills area
- Scrub oak, pinon pine, juniper, trees and grasses





































*Results: 347 Homes gone, 2 dead  
18,247 acres burned*





# *Restore the community and rebuild*





# *Colorado Springs Together*





# *Volunteers, employees, donations, agency contacts*





# Thank You Donors!









# *How can we continue helping?*

- ❖ *Service shutoffs with CSU staff – Safety 1t*
- ❖ *Permitting staff on site for rebuilds, restarts*
- ❖ *We know energy and water efficiency*
- ❖ *We can share EnergyStar and WaterSense with builders, homeowners, trades and HOAs*
- ❖ *Intent: Rebuild with greater efficiency*
- ❖ *Model a better regeneration for other areas*
- ❖ *Save money, energy, and water*



# Let's "Rebuild with Rebates"



Rebuilding with Rebates

Or...

Maximizing Efficiency,  
Comfort and Value  
through Certification and  
high performance design



# *Proposed training sessions*

- ❖ **Use WaterSense PPT**
  - ❖ **“The WaterSense Label for New Homes & Home Performance Overall”**



# *Engage owners & builders*

- ❖ Outreach Strategies:
- ❖ Appeal to logic, emotion, and intellect
- ❖ Efficiency provides savings, comfort, and value
- ❖ Highlight programs: E-Star, WaterSense, LEED
- ❖ Demonstrate ideas, technology, savings
- ❖ MLS Updates include efficiency -[Greenthemls.org](http://Greenthemls.org)
- ❖ Inflation hedge, sustainability, altruism, performance



## *Audience's condition*

- ❖ Overwhelmed, distressed, displaced
- ❖ Sad, distraught, depressed, shocked, anxiety
- ❖ 6 Stages: Denial, Anger, Bargaining, Depression  
Acceptance, Hope (DABDAH)-where are they?
- ❖ Many are resilient; plan to rebuild; and hopeful
- ❖ Some want better homes than what they had
- ❖ Their needs have changed since purchase
- ❖ Green minded, were sustainable, eco-people.



# *Builders, Partners, Hurdles*

- ❖ Decision overload - many things happening
- ❖ Insurance - site cleanup - life continuity
- ❖ Community support and urgency to build
- ❖ City fast-tracked *original plan re-approval*
- ❖ Minimal code enhancements/requirements
- ❖ Efficiency & Conservation **not** a priority
- ❖ Building community supports lowest cost approach
- ❖ Community culture not one of sustainability
- ❖ HOAs, Suburban predilection against the 'different'



# *Rebuilding with Rebates*

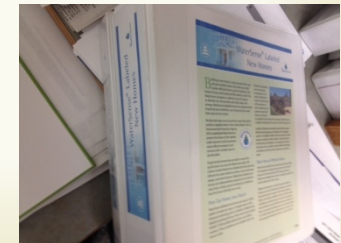
- ❖ Intent: Encourage conservation in - design construction - product choice - installation.
- ❖ Energy Star new home rebate offered
- ❖ Newly created WaterSense home rebate
- ❖ For partial rebuilds, rebates for applicable products; appliances, irrigation, windows....
- ❖ Outreach to; suppliers to inform, builders, HBA, trades, and HOAs.
- ❖ Presentations after work for convenience





# *What we did with CST...*

- ❖ Display of EnergyStar and WaterSense materials
- ❖ Display efficiency products; a Stealth!
- ❖ Rebates and information in Newsletter & Website
- ❖ One-on-one meetings, presentations, on-site meetings, HOA training, some landscape reviews
- ❖ Collaborated with Home Raters & Architects
- ❖ Offered tours of high performance homes







# *Additional conservation efforts*

- ❖ Recommend Xeriscape in revegetated common areas
- ❖ Extended Establishment Permits for reveg
- ❖ Replanting education for burned soils
- ❖ FireWise landscaping design and plants
- ❖ Efficient Irrigation Training Classes
- ❖ Xeriscape training to owners and contractors

## MAIN ENTRANCE LANDSCAPE DESIGN

Mix flowering shrubs, ornamental grasses, and evergreens to ensure year round interest.

Plant in multiples.

Don't space plants perfectly. They will have a more natural look if there is some irregularity.

If you are worried about a plant not being deer proof, try to hide it behind something with a strong scent like Catmint.

Partially bury boulders.

Create a focal point by picking one stand out plant like this dwarf Spruce.

Tuck plants around boulders to mimic nature.

Repeat plants in different areas to create a cohesive look.

For lower maintenance stick to ornamental grasses, shrubs, & trees.

When installing a dry stream bed, incorporate cobble in a range of sizes.

Create an informal path that draws you into the space.




Putting it all together- Use a variety of low water, deer tolerant plants grouped in clusters to provide a beautiful fire-wise garden.

### PERENNIALS:

-  MOONSHINE YARROW
-  SCARLET PINELEAF PENSTEMON
-  WALKER'S LOW CATMINT
-  PINK CHINTZ CREEPING THYME
-  CORAL CANYON TWINSPUR
-  LAVENDER ICE PLANT
-  SHIMMER EVENING PRIMROSE
-  SILVER CARPET LAMB'S EAR
-  VARIEGATED SWEET IRIS
-  HIDCOTE SUPERIOR LAVENDER

### SHRUBS:

-  RUSSIAN SAGE
-  BLONDE AMBITION BLUE GRAMA GRASS
-  PANCHITO MANZANITA
-  MCKAY'S WHITE POTENTILLA
-  WALDBRUNN SPRUCE



WALDBRUNN  
SPRUCE



PANCHITO  
MANZANITA



BLONDE AMBITION  
BLUE GRAMA



RUSSIAN SAGE



CORAL CANYON  
TWINSPUR



SHIMMER  
PRIMROSE

# LANDSCAPE IDEAS FOR FOOTHILL COMMUNITIES

INCORPORATING FIRE-WISE, WATER-WISE AND DEER-RESISTANT STRATEGIES



  
Colorado Springs Utilities

It's how we're all connected

448-4800

www.csu.org

## DEER, DROUGHT & FIRE

As if gardening in Colorado wasn't hard enough, living in a foothill community adds additional challenges due to the possibility of deer, drought and fire. The guidance in this brochure will walk you through some of the most effective approaches to dealing with these challenges plus provide inspirational design ideas.

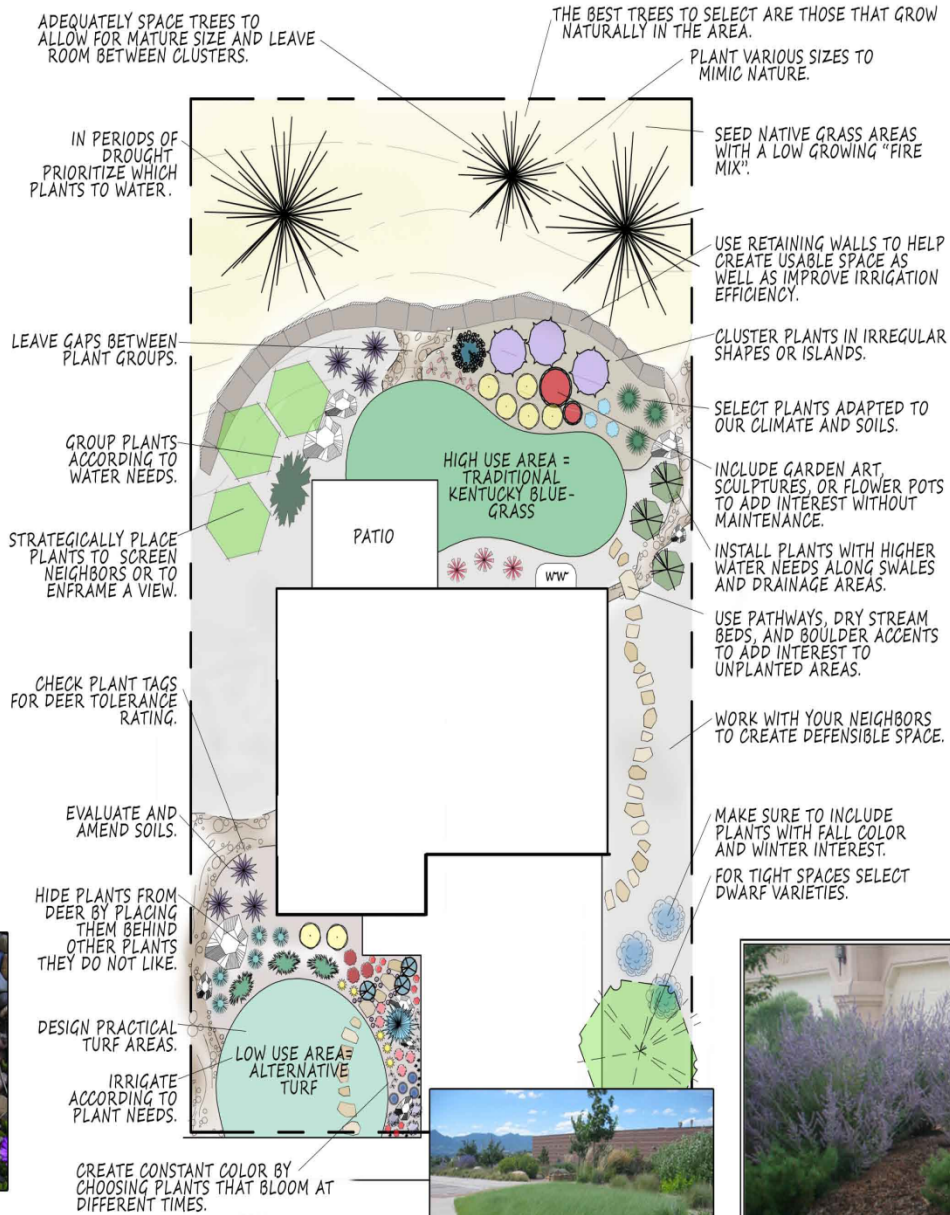


Incorporate plants with winter interest like this Rabbitbrush. Not only is it a native shrub, but the deer don't bother it.

Ice plant is a fantastic low growing succulent. The water content in the leaves make is a great defense against fire.



Lamb's Ear is a great plant choice for dry, hot, deer infested landscapes. Not only does it provide a wonderful blue-gray foliage but the hairy texture on the leaves keep deer away.



Blue Grama is a great alternative turf for low or no traffic areas. It maintains a short height and has a beautiful blue-green color.



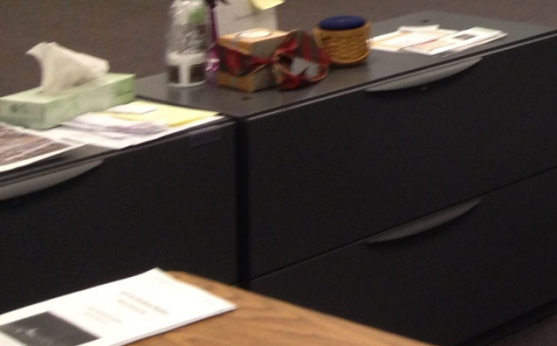
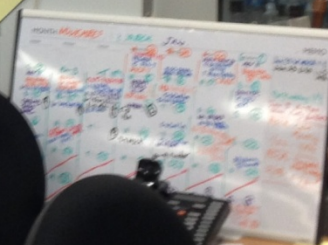
## LANDSCAPING DEFENSIBLE SPACE

- Keep trees at least 10' away from structures.
- Use a variety of plants.
- Plant according to mature size.
- Mow or trim native grass to 6" or less & keep grass away from the base of shrubs.
- Rather than planting in a continuous line, plant in clusters and leave spaces between groups.
- Patios, paths, and unplanted areas of rock help provide fire breaks.
- Rake & remove pine needles or fallen leaves.
- Maintain plants to sustain defensible space.
- Check out [www.colostate.edu](http://www.colostate.edu) for more fire-wise info.



Create breaks between plant groups by using a dry stream bed.

From August 4, 2012  
Colorado Springs Together \$11,417  
Eleven thousand four hundred seventeen dollars  
from The College of Firehouse  
WINDSOR, MISSOURI, 2012





## *Some Results*

- ❖ E.g.: 6/7 homeowners that consulted with us did choose lower water landscapes
- ❖ Influencing factors toward lower water landscapes include; *drought, awareness of water scarcity, water cost, being green and conservation-minded.*
- ❖ Ages of folks who made a change; either very young or very old, the middle areas did not deviate from traditional landscapes



# 2013 Parade of Homes





EPA  
**WaterSense**



**This Home Is WaterSense And Energy Star Certified.**

08/25/2013 01:00

Save water,  
energy  
and money

Colorado Springs Utilities is proud to recognize these 2013 Parade of Homes builders for using ENERGY STAR® and WaterSense® products:

Hi Point Home Builders  
Oakwood Homes  
Pioneer West Homes  
Saddletree Homes  
Walther Homes



ENERGY STAR® homes are independently verified to save at least 10 percent more energy than local code requires.

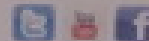


WaterSense® Labeled homes are independently verified and designed to be 10 percent more efficient than local code requires.

At a cost of ownership no more than a conventionally built new home, high-performance homes offer these homeowner benefits:

- ▶ Increased comfort
- ▶ Healthier indoor air
- ▶ Improved durability
- ▶ Quicker hot water delivery
- ▶ Reduced energy & water use and bills

In addition to offering financial incentives to builders for building WaterSense® Labeled and ENERGY STAR® Labeled homes, Colorado Springs Utilities offers rebates for efficiency upgrades to existing homes. Pick up our list of rebates today and visit [csu.org](http://csu.org) to learn how to reduce your utilities use and your bills.



Colorado Springs Utilities  
It's how we're all connected.

08/25/2013 00:09





## *Results: Change is slow*

- ❖ So far, many homes constructed to code standard
- ❖ Hard to get the attention of scattered people
- ❖ Owners trust builders and are focused on material, tangible, aesthetic things kitchens, counters, cabinets
- ❖ Conservation is hard! abstract, complex and invisible
- ❖ Demographics may work against you
- ❖ Multiple drivers -> decisions; time, trust, cost, market
- ❖ 😊 All homes are better than they *were*.
- ❖ 😊 😊 *Some are fantastic examples of best technology*



# *Going forward 2013-2014*

- ❖ More homes to build, more builders interested
- ❖ Other WaterSense examples underway in region
- ❖ Both small custom and large builders on board
- ❖ Multi-family and low-income projects possible
- ❖ Black forest burned 500+ homes (no rebate)
- ❖ WaterSense Homes BIP Rebate formally launched
- ❖ HBA and Parade getting on board! Onward!



# *Thanks!*

# *Let's build WaterSense!*

- ❖ Frank Kinder
- ❖ 719 668 6818
- ❖ FKINDER@CSU.ORG

