



Water Wise Development Coalition

Intro for newbies!

- Who: ULI, in partnership with the Alliance for Water Efficiency, the Sonoran Institute, and the WaterNow Alliance, is convening land use and real estate professionals with policymakers and decision-makers. This coalition is supported by the Colorado Water Conservation Board.
- What: Advancing water-smart real estate development and supportive policies.
- When & Where: Quarterly virtual meetings.
- How: Participants will have a say in meeting topics, speakers, and efforts.

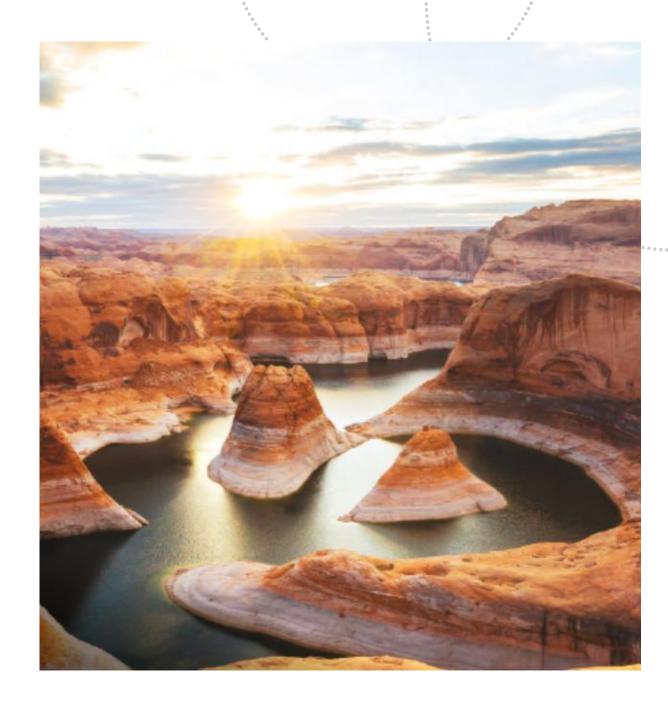




Agenda

- Welcome and Overview (5 min)
- Water Wise Landscape Codes & Resources Presentations and Q&A (60 min: 10 min presentation & 10 min Q&A each)
 - Paul Lander, Adjunct Professor at University of Colorado-Boulder, on his research related to water-wise landscape ordinances for the Lincoln Institute of Land Policy
 - Paul Piazza, Principal Programs Specialist for Sonoma County Water Agency, on water-wise and fire-wise landscape design templates, guidance, and policies
 - Cassy Aoyagi, President of FormLA Landscaping, on the implementation of water-wise landscaping and how that implementation interfaces with state and local water-wise landscaping ordinances
- Group Discussion about landscape ordinance, template, and implementation resources (25 min)







A Center of the Lincoln Institute of Land Policy

Helping urban planners and water managers direct the change needed for creating climate-adapted urban landscapes

Paul W. Lander with Mary Ann Dickinson May 2023





Executive Summary



- 1. Know Your Frames **Bioregion Codes and** Regulations
- 2. Update all Codes now **Applicability Definitions** Professionalism

3. Create, and Engage Your Team Planning Staff Public Works, Utilities, Water Quality Staff Parks, Arborists Landscape **Professionals Extension** Service

The Urban

Ecosystem

4. Utilize Adaptive Management Measure to Manage



Sixth Assessment Report
WORKING GROUP II
Impacts, Adaptation and Vulnerability

Climate change: a threat to human wellbeing and health of the planet.

Taking action now can secure our future

#IPCC

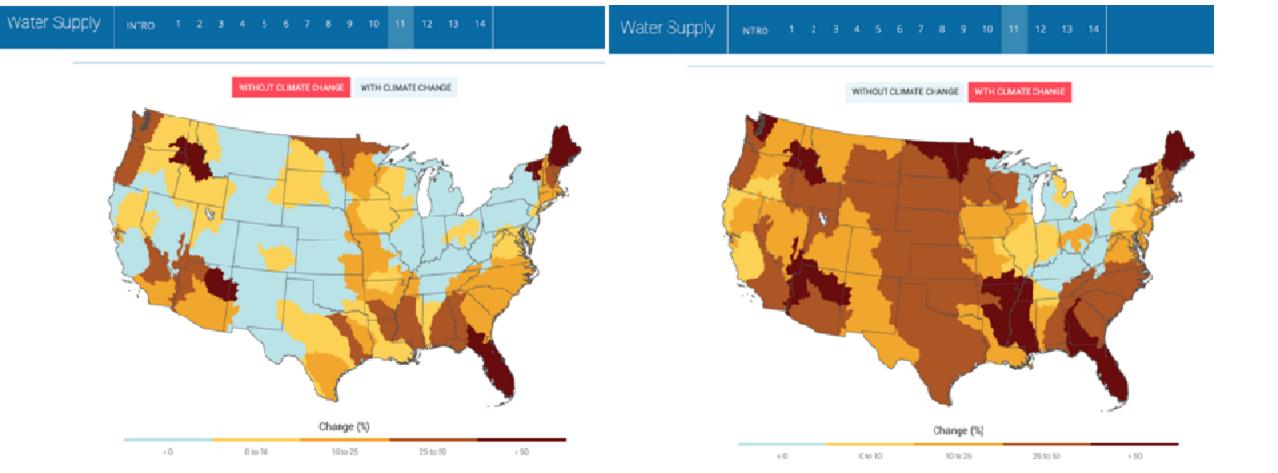
#ClimateReport



- 1. Recognizing need for Climate Adaptation
- 2. Policy spotlight on urban landscapes
- 3. Large infusion of money from states, water providers, and federal government

Non-essential turf





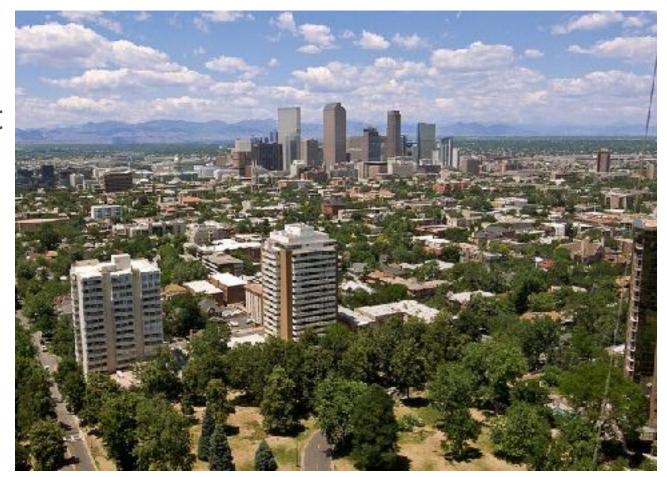
3rd National Climate Assessment, 2014.



Decreased Public Health

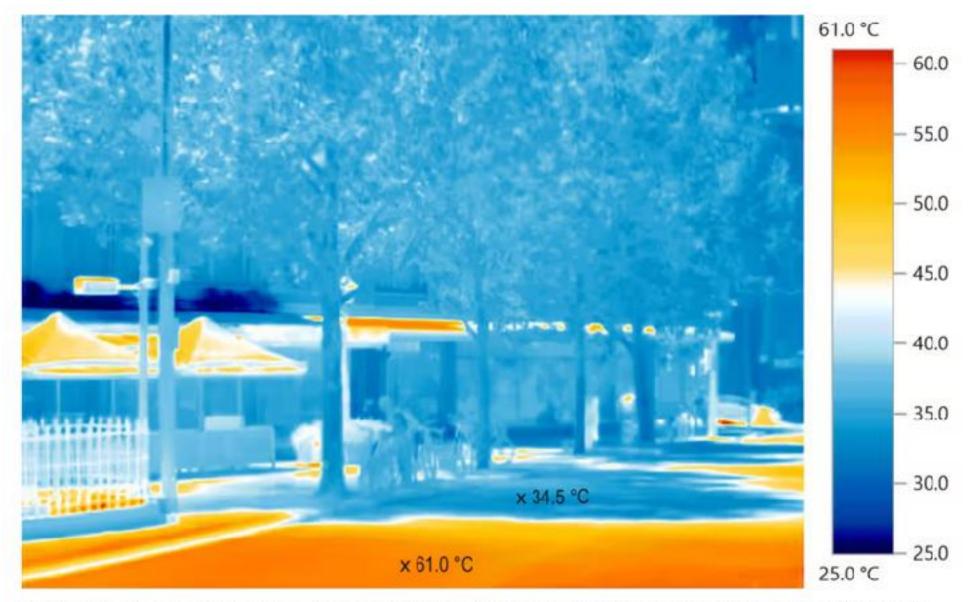
Increased Water Use

Increased Heat



Increased Runoff

Decreased Habitat

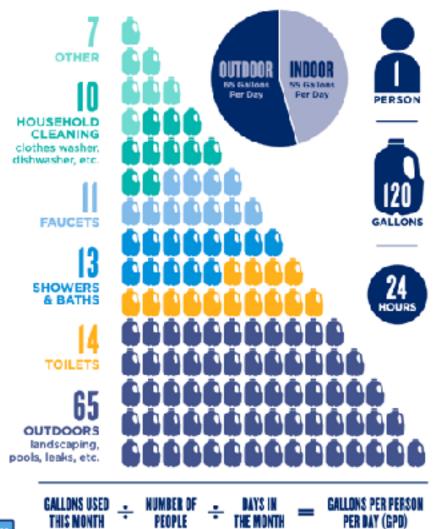


Thermal images taken in a January 2017 heatwave show the impact of urban heat islands in Melbourne. Taken by an Elizabeth Street heat camera opposite Queen Victoria Market. Photograph: City of Melbourne

The Guardian,

2017

AVERAGE DAILY WATER USAGE







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Why Now?

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non essential

CA Water Providers \$100s of Millions State of Colorado \$2 Million State of Utah \$ 5 Million



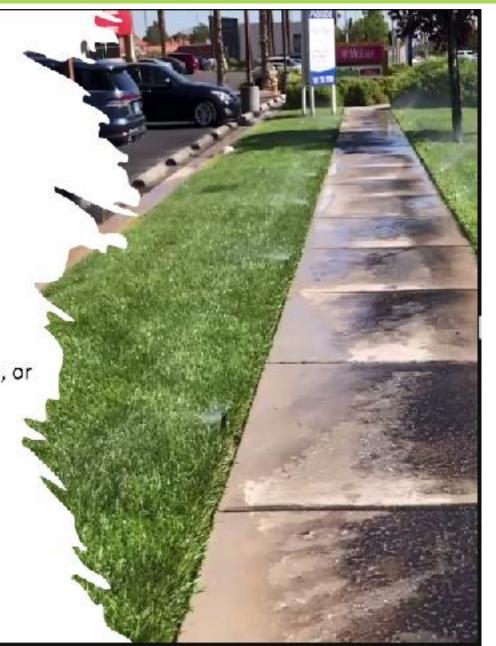




Nevada Legislature: raising the bar

- Assembly Bill 356 prohibits the use of Colorado River water delivered by Water Authority member agencies to irrigate nonfunctional grass, beginning in 2027.
- The law was championed by SNWA.
- It applies to Southern Nevada Water Authority commercial, multi-family, government and other properties.
- It does not apply to grass in homeowners' yards, cemeteries, or grass used for recreation/sports at schools and parks.
- The law established an advisory committee to help with defining what constitutes "nonfunctional" grass.
- Potential savings of 18,000 to 20,000 acre-feet

https://www.youtube.com/watch?v=1jpHRe6C2G0





LANDSCAPE ORDINANCE

OVERVIEW OF RESIDENTIAL CHANGES

- No turf in front yards for new homes
- Backyards for new homes no more than 500 square feet of irrigated turf
- ColoradoScape design instead
- Swimming pools and water features will reduce total allowed turf
- Incentivize front yard and backyard landscapes to be installed by home builder



500 square feet of experimental Tahoma Bermuda Grass (super low water using turf) at Castle Rock Water Administration Building

Trend Watch
Communities
promoting greater
plant diversity,
(plants for
pollinators) in place
of turf-dominated
schemes.



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CA Water Providers \$100s of Millions State of Colorado \$2 Million State of Utah \$ 5 Million





California spends \$350M to get residents to rip out lawn

Oct31,2016 kcra.com

State of Colorado \$ 2 Million

CONCERNING MEASURES TO INCENTIVIZE WATER-WISE LANDSCAPES, AND, IN CONNECTION THEREWITH, CREATING A STATE PROGRAM TO FINANCE THE VOLUNTARY REPLACEMENT OF IRRIGATED TURF AND MAKING AN APPROPRIATION.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. In Colorado Revised Statutes, add 37-60-135 as follows:

37-60-135. State turf replacement program - creation - administration - turf replacement fund - creation - legislative declaration - definitions - repeal. (1) THE GENERAL ASSEMBLY FINDS AND HB22-1151

State of Utah \$ 5 Million

Enrolled Copy

H.B. 121

WATER CONSERVATION MODIFICATIONS

2022 GENERAL SESSION STATE OF UTAH

General Description:

This bill modifies provisions related to conservation of water and related provisions regarding lawn or turf.

Highlighted Provisions:

This bill:

- imposes requirements related to water conservation at state government facilities and by state agencies;
 - provides for incentives to replace lawn or turf with drought resistant landscaping;
 - grams rulemaking authority;



Landscape and Urban Planning 127 (2014) 124-135



Contents lists available at ScienceDirect

Landscape and Urban Planning

journal homepage: www.elsevier.com/locate/landurbplan



Research Paper

Estimation of residential outdoor water use in Los Angeles, California



C. Mini^a, T.S. Hogue b,a,*, S. Pincetl^c

- Department of Civil and Environmental Engineering, University of California, Los Angeles, CA, USA.
- Department of Chill and Environmental Engineering, Colorado School of Mines, Golden, CO, USA.
- Institute of the Environment and Sustainability, University of California, Los Augeles, CA, USA.

HIGHLIGHTS

- Outdoor use is quantified using water billing data methods and remote-sensing model.
- Traditional methods based on billing data underestimate outdoor use in Los Angeles.
- A remote-sensing model is implemented based on vegetation and land cover products.
- The modeled irrigation estimates were validated with previous outdoor use studies.
- Landscaping irrigation represents 54% of single-family water use in the city.

Review of the literature

Physical Elements:

Trees, trees, trees

& shade structures

Native plants Monitoring (site and

remote)

Rain gardens

Soil health

Social elements:

update codes now

promote landscape conversion

measure & adapt: water budgets, GIS

integrate with land planning

collaborate with NGOs & community

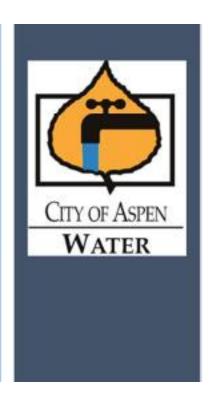
> Annotated Bibliography over 130 references



WATER EFFICIENT LANDSCAPING STANDARDS

The Water Efficient Landscaping Standards provide policies, guidelines, and minimum criteria to governmental agencies, design professionals, private developers, community groups, and homeowners for all new development. These standards promote efficient development and use of water within the City of Aspen's water service area.

OCTOBER 6, 2021



Review of the legislation

Key Code Elements:
Applicability & Definitions
Professionalism
Performance-based guidelines
Trees, Native Vegetation
Turf
Soil Health & Stormwater
Water Budgets & Irrigation
Hardscapes

Metrics for Active Management





The Urban Ecosystem

of Allied Professionals:

Public Planning,
Public Works-Water,
Stormwater Quality,
Transportation
Parks & Recreation, City
Forester
Climate/Heat &
Sustainability
Extension Service
Colleges/Universities

Private Landscape
Professionals-designers,
architects, contractors,
master gardeners
NGOs
Property Management &
HOAs

Benefits

- Water conservation
- Water quality
- Biodiversity
- Resilience
- Wildlife and pollinator habitat
- Improved mental health with access to nature
- Reduced fertilizer and pesticides
- Reuse Water- Native grasses are more resilient to lower quality irrigation



Denver Parks & Rec, Dec



WATERSCAPE REBATE PROGRAM

Stacked Incentives in SD County for Residential, Commercial, and Agricultural Customers

Program	SoCal WaterSmart	San Diego County Water Author/by Out Program's Travient Water Invale		TOTAL
Turf Replacement	\$2/ sq. ft	\$1/ sq. ft.	\$1/ sq. ft.	\$4/sq. ft.
Weather-Based Irrigation Controllers	\$35/station		\$25/station	\$60/station
Rain Barrels	\$35/barrel		\$30/barrel	\$65/barrel
Cisterns	\$250-\$350/cistern		\$100/cistern	Up to \$450/cistern
Agricultural Irrigation Efficiency Program		Up to \$5,000/grower	Matched funding to support more projects	Up to \$5,000/grower
Rain-Saving Landscape Features and Containers			\$0.75 - \$2.25/gallon stored	Up to \$2,100/property

Waterscape Rebate Program - Pilot Performance

INPUTS



402 verified projects



89
projects under construction



\$554,400 County \$1,203,800 SDCWA & MWD

incentives paid





OUTPUTS



178,700 gallons of storage capacity installed



275,900
SQFT of impervious surface treated



751,100 SQFT of turf converted

OUTCOMES



wet weather flow reductions (AF/Y)



bacteria load reductions (MPNx10¹²)



93 water savings (AF/Y)



9.3
dry weather flow reductions (AF/Y)

Coes not include data from partner rain barrel program funded independently from the Waterscape Rebate Program.





Review from Professionals

Long-term policy needed owners interested in climate-friendly landscapes training for Planners aesthetics are important invest in skilled workforce stacked incentives collaborate with WQ programs measure to manage

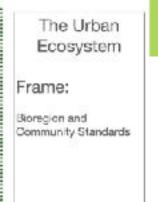






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- Know Your Frames
 Bioregion Codes and Regulations
- 2. Update all Codes now Applicability Definitions Professionalism

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STACKED BENEFITS OF SUSTAINABLE LANDSCAPES





Water Use Reduction



Dry Weather Flow Reduction



Wet Weather Flow Reduction



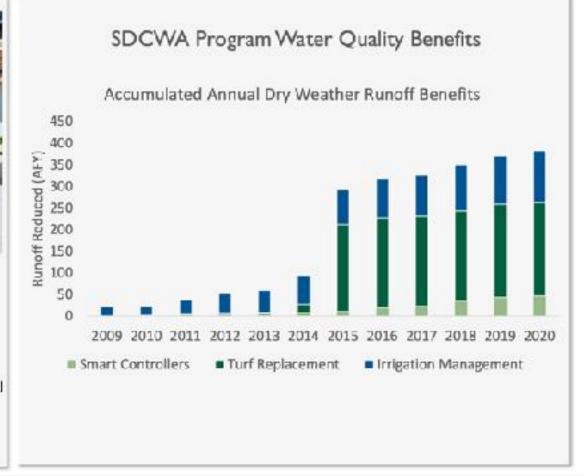
Bacteria Load Reduction



Nitrogen Removal



Phosphorus Removal







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Private Landscape
Professionals-designers,
architects, contractors,
master gardeners
NGOs
Property Management &
HOAs

Collaboration means greater outcomes. (Anderson, 2020) By stacking incentives, agency programs increase participation and program success. (Alliance for Water Efficiency, 2015)



Collaboration, NGOs, and landscape preference





GARDEN IN A BOX

Colorado Oasis

\$123.00



60 sq. ft.





Adaptable

Includes:

15 starter plants 1 plant by number map Comprehensive Plant & Care Guide

525 discounts available in participating cities on select products. Applied at checkout. Learn More.

Sold Out

Description

15/15

plants native to Colorado









plants resistant to deer*

plants resistant to rabbits"

ReSourceCentral.org

23 Colorado cities in '22, and over 9400 GIB units



Takeaways for Planners



The Urban Ecosystem Community Standards

- 1. Know Your Frames **Bioregion Codes and** Regulations
- 2. Update all Codes now **Applicability Definitions** Professionalism

Team Planning Staff Public Works, Utilities, Water Quality Staff Parks, Arborists **Landscape Professionals Extension Service**

3. Create, and Engage Your

4. Utilize Adaptive Management Measure to Manage



Takeaways for Planners



Over 130 specific research citations, reports, and ordinances in the Annotated Bibliography of the full report from the

Lincoln Institute/Babbitt Center.

"Helping urban planners and water managers direct the change needed for creating climate- adapted urban landscapes."

Lander, 2023.



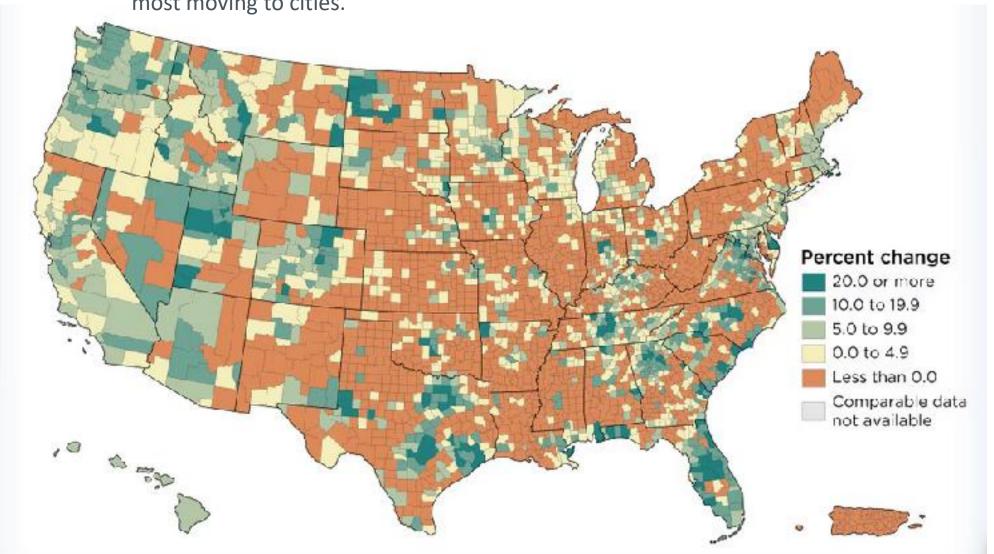


Trend Watch
San Diego requires
the inclusion of
stormwater capture
features

This rain garden is taking advantage of a low area of the yard, slowing and reducing the amount of runoff that reaches the storm drain. Photo: Capitol Region Water District.



Continuing populations growth in regions with limited water supplies, most moving to cities.



census.gov



Landscape regulation could benefit from more multi-objective collaboration. Larson, 2020.

Key highlights	Results compared to	Results compared to a	Incorporates MODA"	Includes
	similar analysis using	similar analysis	framework that SPU	customized
	Autocase tool.	developed using	uses to assess GSI	property value
	Compares incremental	CNT/American Rivers	project priorities /	analysis and
	costs / benefits of gray	Guide.".	benefits.	analyzes
	and GSI scenario.			distributed
				projects.
GSI scenario	Centralized GSI corridor;	Manages 1,265 IA /	ROW bioretention	Nine distributed
	4.8 acres of bioretention;	1,060 MG of	projects managing 6	projects including
	300 trees, large retention	runoff/year through	impervious acres;	bioretention,
	pond / wetland system;	GSI: bioretention	includes 89 trees,	permeable
	10-acres of green space.	(56%); permeable	pedestrian/safety	pavement, and
	Stream restoration links	pavement (26%); trees	improvements, and	underground
	development site to	(13%); green roofs	community gathering	systems.
	recreation/natural area.	(4.5%); RWH (1%).	space.	
Avaided		*		*
infrastructure				
Avoided		★		★
maint./replace. Energy savings		1		1
Water supply	×	7	×	7
		7		X
Air quality	*	*	*	
Heat stress	*	*		
Recreation	*	*	*	
Enhanced aesthetics	*	*	*	*
Green job creation	*	★	*	*
Water	.		+	
quality/habitat			^	
Carbon reduction	*	*	*	*
Terrestrial	→	4	*	*
ecosystem			×	
Flood risk reduction	*			
Total PV benefits	\$27.9 (GSI); \$15.1 (gray);	\$521.8 (50-year PV)	\$8.98 (50-year PV)	\$5.20 (40-year PV
(\$M)	(28-year PV)	\$521.0 (50-year PV)	38.56 (30-year PV)	\$3.20 (40-year PV
Total PV costs (\$M)	\$21.5 (GSI); 18.8 (gray)	\$241.5	\$5.87	3.49
	(28-year PV)	\$241.5	\$3.67	3.49
Benefit-cost ratio	1.3 (GSI); 0.8 (gray)	2.16	1.53	1.455

- Water Research Foundation, 2021.
- (b) MODA = Multiple Objective Decision Analysis



WATER SMART LANDSCAPE DESIGN TEMPLATES

Paul Piazza

Water Use Efficiency Manager Sonoma Water Sonoma-Marin Saving Water Partnership



www.savingwaterpartnership.org



A PROJECT OF THE SONOMA-MARIN SAVING WATER PARTNERSHIP









LANDSCAPE ARCHITECTURE





www.savingwaterpartnership.org



A PROJECT OF THE SONOMA-MARIN SAVING WATER PARTNERSHIP

Key Staff:

Ann Baker, Ann Baker Landscape Architects

Carrie Pollard, Water Efficiency Manager, Marin Water

Sean McNeil, Deputy Director Environmental Services, City of Santa Rosa

Deb Lane, Water Resources Analyst, City of Santa Rosa

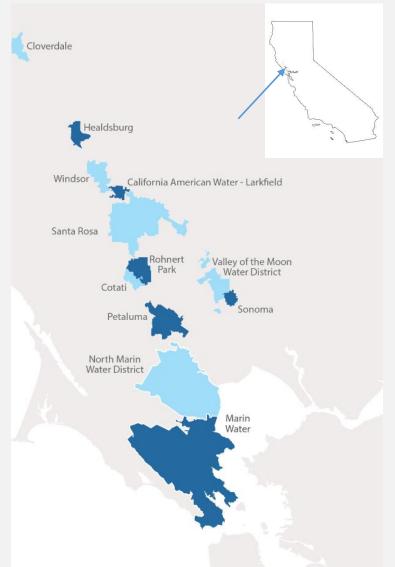
Gabe Osburn, Deputy Director Development Services, City of Santa Rosa

Brian Lee, Senior Program Specialist, Sonoma Water

Kris Loomis, Senior Program Specialist, Sonoma Water

www.savingwaterpartnership.org

Sonoma-Marin Saving Water Partnership Background



- A collaborative of 13 water utilities in Sonoma and Marin Counties
- Formed in 2010 to maximize the cost effectiveness of water conservation in Sonoma and Marin and identify water use efficiency programs
- Regional and coordinated approach

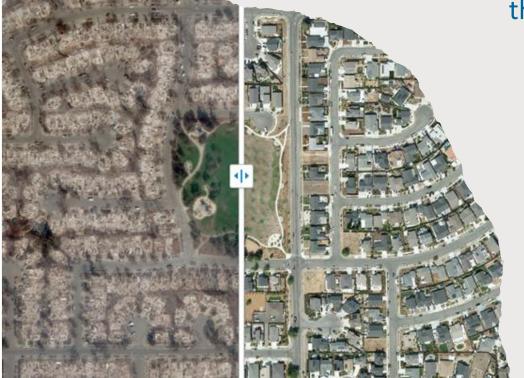






Our Landscape Template Goals

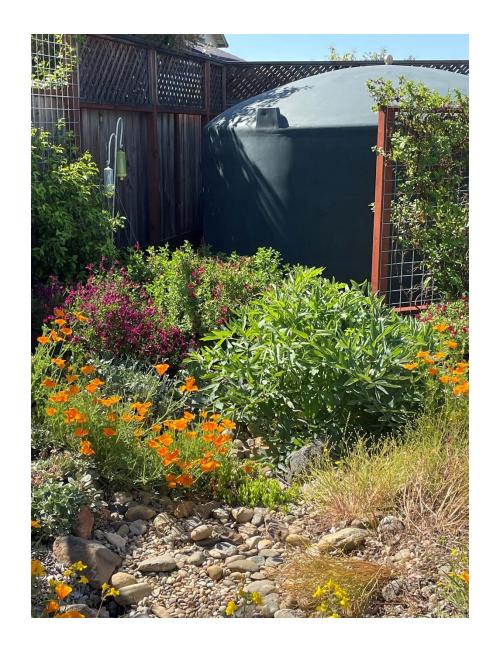
- Support our community in rebuilding
- Streamline WELO permitting and reduce costs
- Increase the number of water efficient landscapes
- Advance water saving designs that:
 - Exhibit "Fire Safer" practices
 - Provide attractive front yards
 - Integrate sustainability elements
 - Restore neighborhood vitality and ecology
 - Improve climate adaptability





Sustainable Design Elements

- Increase Permeability & Reduce Water Use
 - Permeable paving
 - Disconnected downspouts and paving
 - Raingardens and swales
 - Rooftop rainwater capture
 - Graywater
- Cool Urban Heat Shade Trees
- Increase Habitat and Edible Plantings



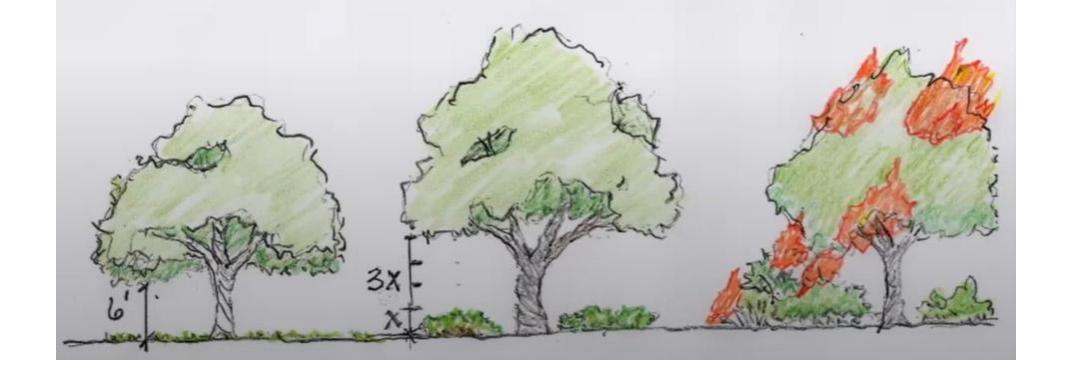




Water Efficient Landscape Ordinance (WELO) Permit Requirements

- Landscape area < 2,500 sf
- Weather-based irrigation controllers
- 75% low water use plants
- 25% medium max
- Drip irrigation systems
- Owners self-certify
- Simplified inspection





Fire Safer Guidelines

- Within 5' of house plantings < 3' tall
- WUI Compliant no plantings within 5' of house
- Defensible spaces front and back
- Place trees away from structures
- Fire safer plant selection Agency lists
- Reduce connectivity of fuels



Garden Design Styles

Sonoma Contemporary

 Modern, minimalistic, WUI compliant, lower cost

Sonoma Native/Adaptive

 Native, fire safer, low water use, habitat oriented, lower cost

Sonoma Cottage

 Sonoma cottage garden, natural materials, colorful plantings

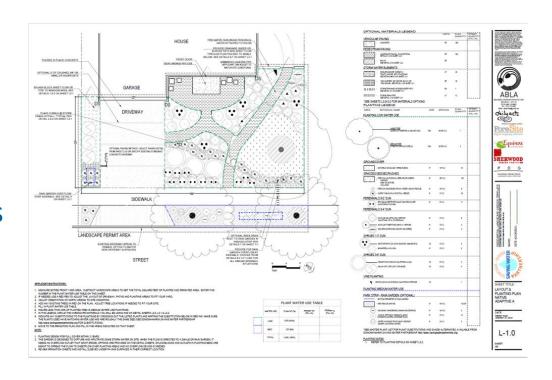
Sonoma Eco-Edible

 Integrate edible and habitat plantings, more sustainability features

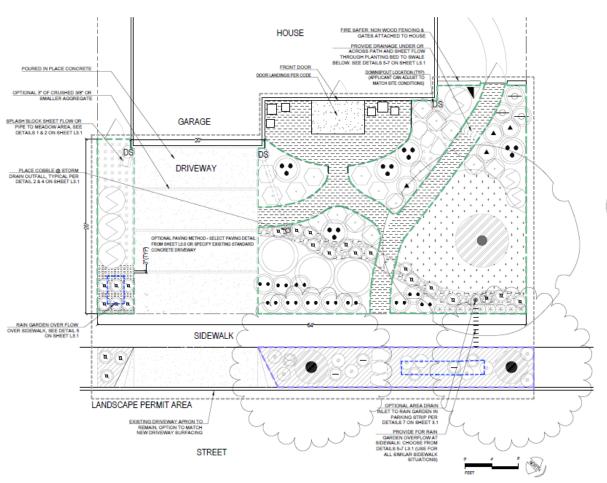


Landscape Design Templates Webpage

- Landscape Design Templates
- 3-D Renderings
- Concept Plans
- Plant Substitution Lists
- Cost Opinions
- FAQs
- Sample Mark-Ups







APPLICANT INSTRUCTIONS:

- 1. MEASURE ENTIRE FRONT YARD AREA. SUBTRACT HARDSCAPE AREAS TO GET THE TOTAL SQUARE FEET OF PLANTED AND IRRIGATED AREA. ENTER THIS
- NUMBER IN THE PLANT WATER USE TABLE ON THIS SHEET.

 2. IF NEEDED USE A RED PEN TO ADJUST THE LAYOUT OF DRIVEWAY, PATHS AND PLANTING AREAS TO FIT YOUR YARD.
- 3. ADJUST ORIENTATION OF NORTH ARROW TO SITE CONDITION.
- 4. ADD ANY EXISTING TREES IN RED ON THE PLAN. ADJUST TREE LOCATIONS IF NEEDED TO FIT YOUR SITE.
- INSURE LESS THAN 25% OF PLANTED AREA IS MEDIUM WATER USE PLANTINGS.
 IN THE LEGEND, CIRCLE THE HARDSCAPE MATERIALS YOU WILL BE USING AND ON DETAIL SHEETS L3.0, L3.1 & L3.2.
- 8. INDICATE ANY SUBSTITUTIONS TO THE PLANTINGS BY CROSSING OUT THE LISTED PLANTS AND WRITING THE SUBSTITUTION SELOW IN RED INK. MAKE SURE THE PLANTS USED HAVE MATCHING WATER USE AND ARE ROUGHLY THE SAME SIZE (SEE SONOMA-MARIN SAVING WATER PARTNERSHIP http://www.savingwaterpartnership.org FOR SUBSTITUTIONS).
- 9. MOVE TO THE IRRIGATION PLAN AND FILL IN THE AREAS INDICATED ON THAT SHEET.

- PLANTING DESIGN FOR FULL COVER WITHIN 3 YEARS.
 THE GARDEN IS DESIGNED TO CAPTURE AND INFILTRATE SOME STORM WATER ON SITE, WHEN THE FLOW IS DIRECTED TO A SWALE OR RAIN GARDEN, IT NEEDS AN OVERFLOW OUTLET THAT WONT ERODE, OPTIONS ARE PROVIDED ON THE DETAIL SHEETS. SPLASHBLOCKS AND OUTLETS IN PLANTING BEDS ARE MEANT TO SPREAD THE FLOW TO SHEETFLOW OVER PLANTING AREAS AND NO OVERFLOW DEVICE IS NEEDED.

 3. REVIEW IRRIGATION SHEETS AND INSTALL SLEEVES UNDER PAVING SURFACES IN THEIR CORRECT LOCATION.

PLANT WATER USE TABLE			
WATER USE	PLAN SF (%)	PERMIT SF (FILL IN)	PERMIT % (FILL IN)
LOW	1273 (91%)		
MED	127 (9%)		
TOTAL	1,400 (100%)		

Series LE FORS OLIVINA P. FERRINA DE COMPIGNO CREEN (DANO FROULD, P. 19°C. 9 Q. CARDA TIMALOCA (POOTINEL SERIES) P. 2°C. 24 PERRINALS 2.5 SUN PERRINALS 2.5 SUN OLIVINOS CIRC A REPORT CONTROL SERIES P. 2°C. 11 PERRINALS 2.5 SUN OLIVINOS CIRC A REPORT PROCESSANCE P. 2°C. 11 PERRINALS 2.5 SUN ACTUAL SERIES ALIES ALIES PROCESSANCE P. 2°C. 4 OLIVINOS CIRC A REPORT PROCESSANCE P. 2°C. 3 SHRUBS 1.5 SUN OLIVINOS CIRC A REPORT P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON PROCESSANCE P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON P. SANCON P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON P. SANCON P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON P. 4°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON P. 5°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON P. 5°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON P. 5°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON P. 5°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON P. 5°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON P. 5°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON P. 5°C. 3 SHRUBS 3.5 SUN OLIVINOS CONTROL P. SANCON P. 5°C				9	LANGE TIME QUENCY STONENTILLA (SILANO CAN)	159	20-50° G.C.	1	
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ARTISELES DOUGLAS (PITRAS BURN)	. V///	////////////	1	/	The contract of the contract o				
PERMIT PANT WATER USE TABLE			1.1	/	GROUNDCOVER				
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Service Ser	4 4	00	5.Hi	5					
CAMBITHMALOCA POORMAL SECTION P	a p	e u		4	POPPES SARY BLUE DYES	2	arac.	120	
PERENNIALS 0.2 SUN	~ /-	lavia da da da		_	* - FESTUCA IDAHOENSIS STONY CREEK (IDAHO FESCUE)	•	18"0.0.		
PLANT WATER USE TABLE	-/=		- /1	2	- CARRIX TUMULICOLA (FOOTHUL SEDGE)	•	200	24	
PERSINAL S 2-4" SUN	\ <u> </u>							-	
ADDIEST ADDIEST NUMBERS POC S	_/_/=				OPLOBLIN SEPTENTRONALE WAYNES SLIVER (CALFORNIA RUCHSIA)	•	9'0.C.	"	
SHRUBS 1-3' SUN	NA:		%°])	PERENNIALS 2-4" SUN				
ACC 3 SHRUBS 1-3 SUN	16			5	ACHILEA MILLEFOLIUM (HARROW)	•	90.C.		
SHRUBS 1-3" SUN	1/2/	////34			ACHILLEA TOMENTOGA (MOOLY YARROW)	•	3°0.0.	4	
MITCH LINE PLANT WATER USE TABLE MITCH LINE PERMIT SI, PER	7			\rightarrow	ASOLEPIAS SPECIOSA (SHOW MUNICIPA)	•	#0.C.	3	
Section Sect	/)	SHRUBS 1-3' SUN				
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SHUBS 3-5: SUN	1			\sim	ARCTOSTAPHILOS JOHN DOURLEY (MANDANTA)				
COMMITTING CONCINT (CALIFORMALIAC) 10 FO.C. 3				ノ	- MONAPORILA VILLOGA	•	90.C.	٠ !	
PLANT WATER USE TABLE PLANT USE PLANT FOR PLANT SIN GRADEN (PTILL NO PTILL		\mathcal{A}			SHRUBS 3-6' SUN				
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PARK STRIP - RAIN CARCEN (OPTIONAL)					 ARISTOLOGHA GALIFORNICA (GALIFORNIA PIPEVINE) 	19		4	
PARK STRIP - RAIN CARCEN (OPTIONAL)					PLANTING MEDIUM WATER USE				
PLANT WATER USE TABLE					PARK STRIP - RAIN GARDEN (OPTIONAL)				
#ATTRIUSE PLAN 67 (N) PERMIT SIT PERMIT N, (FUL. R) -0.0.0MAC DEMOCRAÇÃO (CARRA DOLIDROCO) P			ED LICE TAR	I E					
(FIL. P0)			EK USE TAB	LE	- RED FESCUE (NATIVE)	2	1000	1007	
LOW 1273 (9/%) - ACRES TO EXCLUSION FOR THE COLUMN SHAPE 70 C		PLANT WAT		DEDMITH	 - SOLIDAGO CHANDRIGO (CHANDA GOLIDERICO) 		1810.0	3	
MED 127 (PN) **GE MADTER PLANT JUST FOR PLANT SUBSTITUTIONS AND SHADE ALTERNATES, AVAILABLE FROM DONOMA-MARRING DAVING WATER PARTNERSHIP INto: Swww.pavingwaterpartnership.org. TOTAL 1,400 (180h.) **PLANTING NOTES:**	ATER USE		PERMIT SF	CILL BO					
MED 127 (PR)	ATER USE		PERMIT SF (FILL IN)	(FILL IN)	- LINCUS ETFLUS CATMANS JAPAN (CATMANS SACRE) LAPANESE FLORI)	•	90.C.	10	
TOTAL 1,400 (100%) PLANTING NOTES:		PLAN SF (%)	PERMIT SF (FILL IN)	(FILL IN)	ASTER CHLENGS POINT SANT GEORGE	•			
	LOW	PLAN SF (%) 1273 (P1%)	PERMIT SF (FLL.IN)	(FILL IN)	ATTER CHILDRIGS POINT SAINT SECRET *SEE MASTER PLANT LIST FOR PLANT SUBSTITUTION	IS AND SH	90.0. ADE ALTERNAT	S	E FRON
	MED	PLAN SF (%) 1273 (P1%) 127 (P%)	PERMIT SF (FLL.IN)	(FILL BQ)	- ASTREONLENGS FOR FAM GEORGE DAME CAPETRIA ACTOR! "SEE MACTER PLANT LIST FOR PLANT SUBSTITUTION SONOMA-MARIN DAVING WATER PARTNERSHIP http://	IS AND SH	90.0. ADE ALTERNAT	S	E FROM

OPTIONAL MATERIALS LEGEND

AGGREGATE PAVING, CHOOSE FROM DETAILS 1-5 ON SHEET L3.0

MULCH SEE DETAIL SON SHEET L32

SWILEXASCADE COBBLE & TRINTY GRAVEL WITH PLANTINGS SEE DETAILS #6 & PON SHEET LS: RAIN GARDEN: SIE' GRAVEL MULCH OR PEA GRAVEL, SEE DETAIL 3 ON SHEET L3:1

"SEE SHEETS L3.0-3.2 FOR MATERIALS OPTIONS

11111111 - STORM DRAINAGE ACROSSLINGER PATH SEE DETAIL 57 ON SHEET L3:1

VEHICULAR PAVING

PEDESTRIAN PAVING

STORM WATER ELEMENTS

PLANTING LEGEND

PLANTING LOW WATER USE

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Garden Design Style: Native Adaptive





<u>Architectural Rendering: NATIVE ADAPTIVE – A (without trees for easier viewing of design)</u>











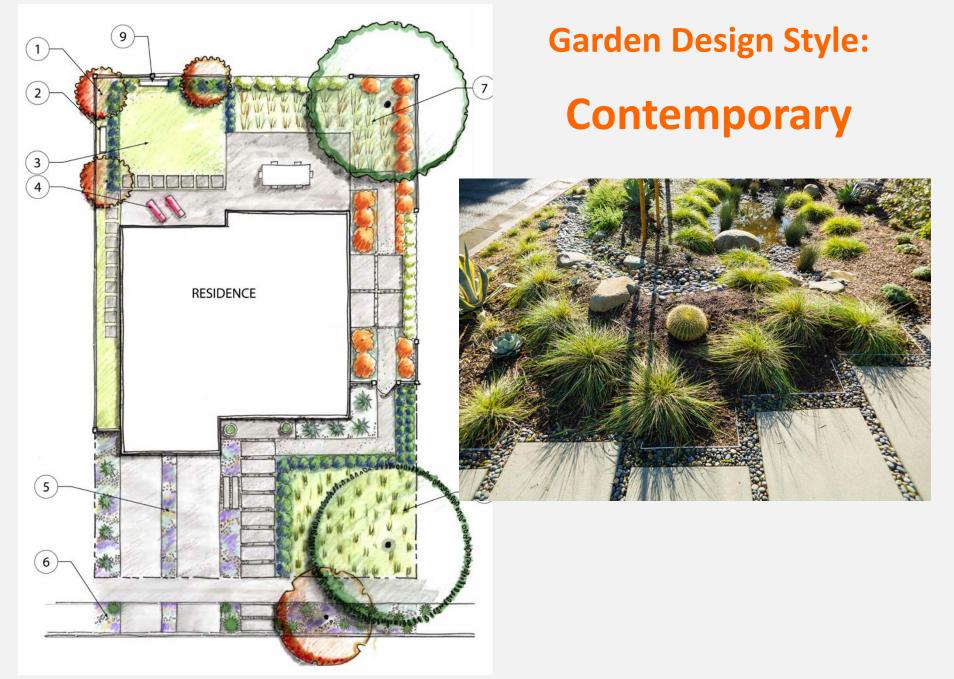
Architectural Rendering: NATIVE ADAPTIVE - A















<u>Architectural Rendering: Sonoma Contemporary – B (without trees)</u>











Architectural Rendering: Sonoma Contemporary - B





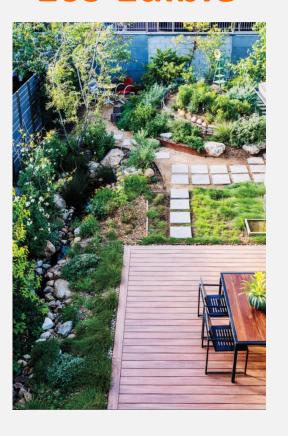




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Garden Design Style:

Eco Edible







<u>Architectural Rendering: Eco-Edible – A (without trees)</u>











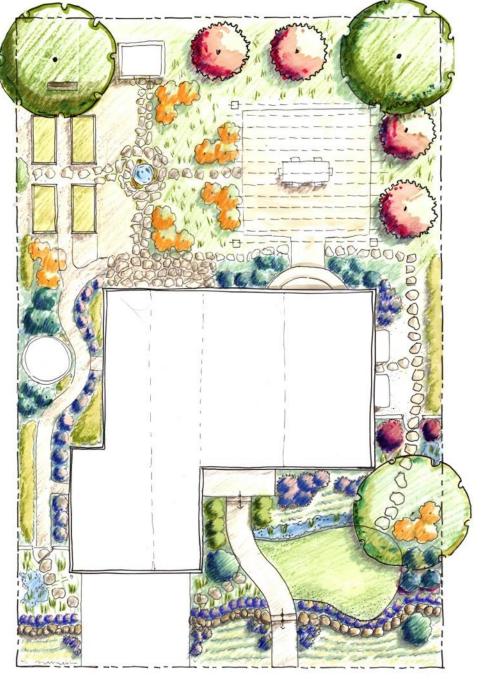
Architectural Rendering: Eco-Edible - A











Garden Design Style: Cottage







<u>Architectural Rendering: Sonoma Cottage – A (without trees)</u>













Architectural Rendering: Sonoma Cottage - A





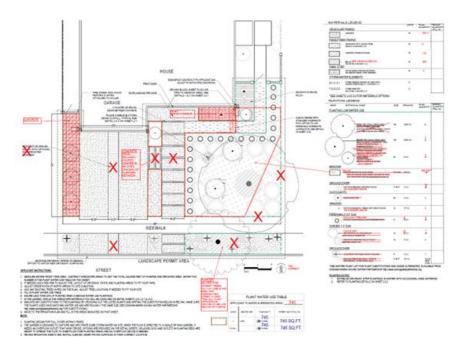




Customize the Plans to your Site

- 1. Verify and select
- 2. Adjust layout and planting plan
- 3. Adjust irrigation plan
- 4. Complete 75/25 Rule Worksheet
- 5. Complete application packet
- 6. Submit plans

Desk manual provided with step-bystep instructions!





Pathways to Rebuilding Landscape Workshops

- 2 workshops held to assist homeowners
 - Overview of templates
 - Hands-on sessions
 - Modifying the templates
 - Obtaining a permit
- To date 40% of rebuild projects used templates





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RESOURCES



NEW! Companion Maintenance Manual

- A step-by-step guide on how and why to maintain a low water use landscape.
- Maintenance calendar that illustrates when seasonally important tasks should occur





Paul Piazza

Water Use Efficiency Manager Sonoma Water Sonoma-Marin Saving Water Partnership

www.savingwaterpartnership.org



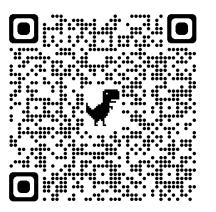
Programming Brainstorm

Let us know what you want for coalition meetings!

Cohort Programming Agenda	Subject Brainstorm
Jan/Feb/March 2024	Water wise policies, regulations, incentives (Waverly, AWE, Babbitt)
April/May/June 2024	Water pricing, tap fees, equity, and affordability (Benji Smith, AWE, WRA, CSU)
July/Aug/Sept 2024	One Water Approach + land use (US Water Alliance, Denver One Water, Tucson)
Oct/Nov/Dec 2024	Water reuse (Water Reuse Foundation, Pacific Institute)
Jan/Feb/March 2025	MLS listings? (adding water, energy, resilience scores), Appraisals?









THANK YOU FOR JOINING US!

You can reach me at Marianne.Eppig@uli.org



Implementation Project Ideas

Pending funding

- A Water Wise Development Symposium bringing together the public and private sectors to advance water wise strategies for real estate.
- Convening local roundtables and/or focus groups between public and private sector land use and water professionals, aimed at supporting water-wise real estate and supportive policies.
- The creation of educational materials that advance and document market demand for water-wise land uses.
- Other ideas?
 - Tours
 - Case studies with financials
 - Etc.



