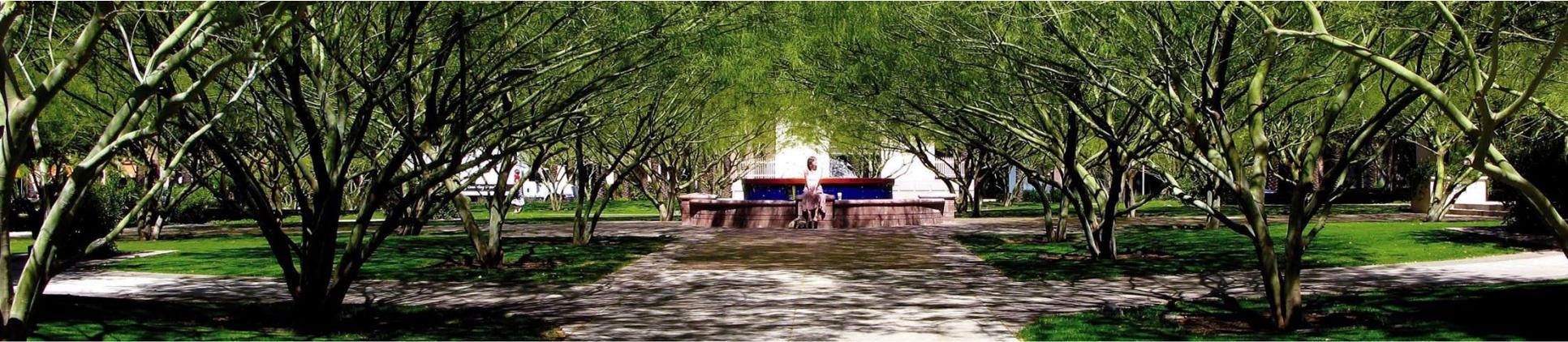


Regional Tree & Shade Summit 2.0

Branching Out One Community at a Time



**Building Capacity
for Our Local Canopy**



Arizona
Department
of Water
Resources
(ADWR)

Einav Henenson



PROTECTING
ARIZONA'S WATER SUPPLIES
for **ITS NEXT CENTURY**



Arizona Department of Water Resources

Low Water Use/Drought Tolerant Plant Lists

Regional Tree and Shade Summit 2.0

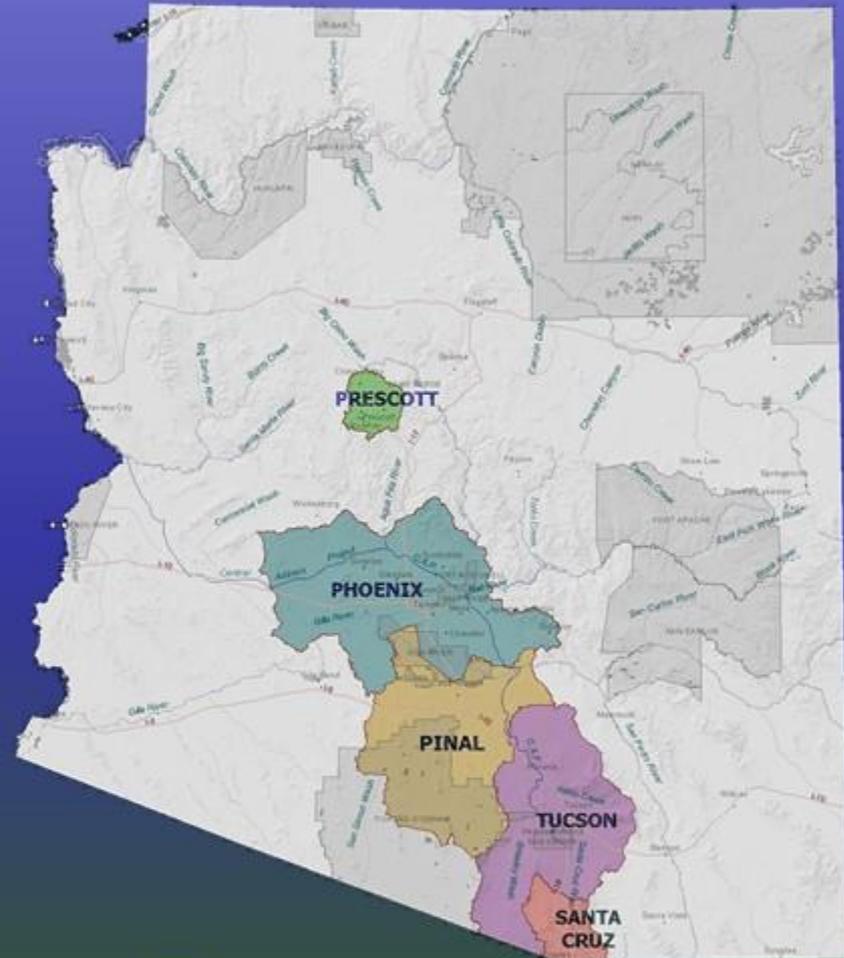
March 9, 2016

Ruth Greenhouse

Einav Henenson



Active Management Areas

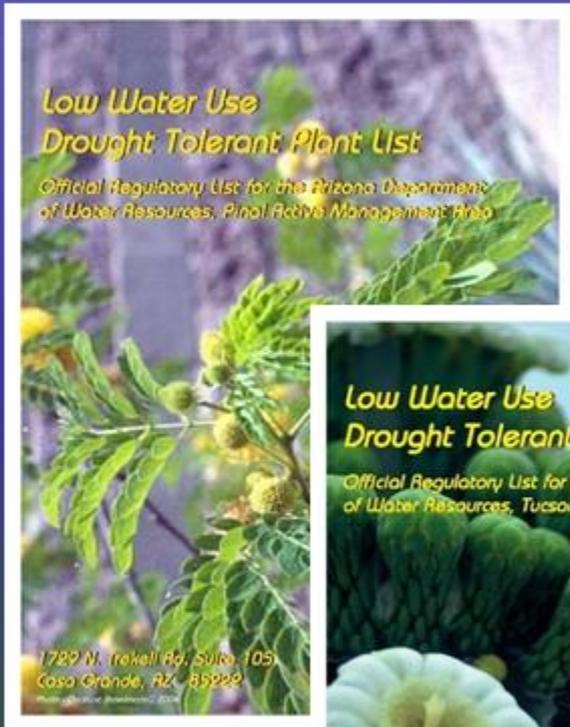


Low Water Use Plants are Required in:

- Public rights of way
- Landscaped areas in some regulated turf facilities & industries



Low Water Use/ Drought Tolerant Plant Lists

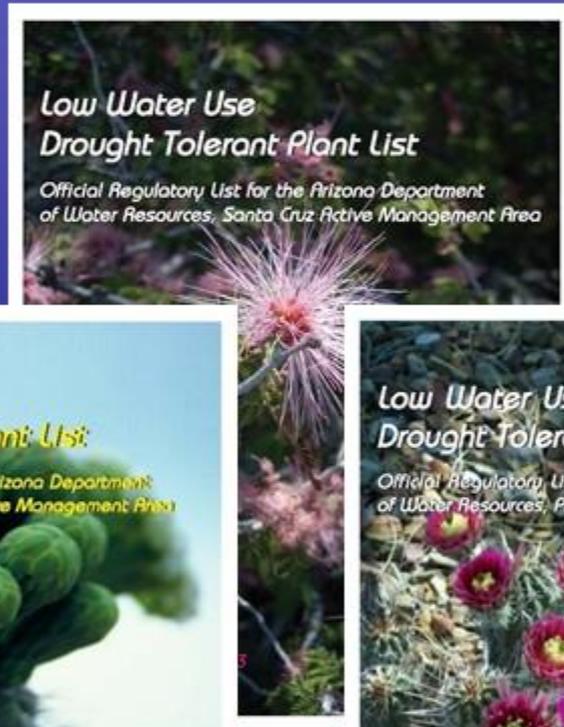


**Low Water Use
Drought Tolerant Plant List**

*Official Regulatory List for the Arizona Department
of Water Resources, Pinal Active Management Area*

1729 N. Trellis Rd., Suite 105
Casa Grande, AZ 85229

Photo: Christine Schellhardt © 2008



**Low Water Use
Drought Tolerant Plant List**

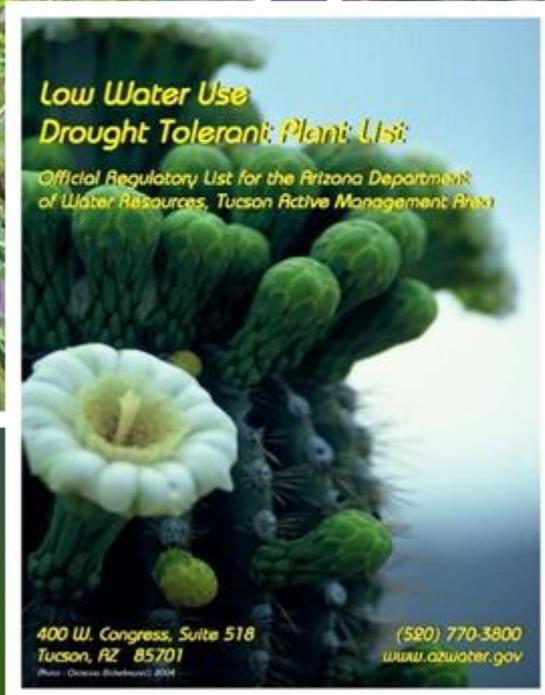
*Official Regulatory List for the Arizona Department
of Water Resources, Santa Cruz Active Management Area*



**Low Water Use
Drought Tolerant Plant List**

*Official Regulatory List for the Arizona Department
of Water Resources, Prescott Active Management Area*

(928) 778-7202
www.azwater.gov



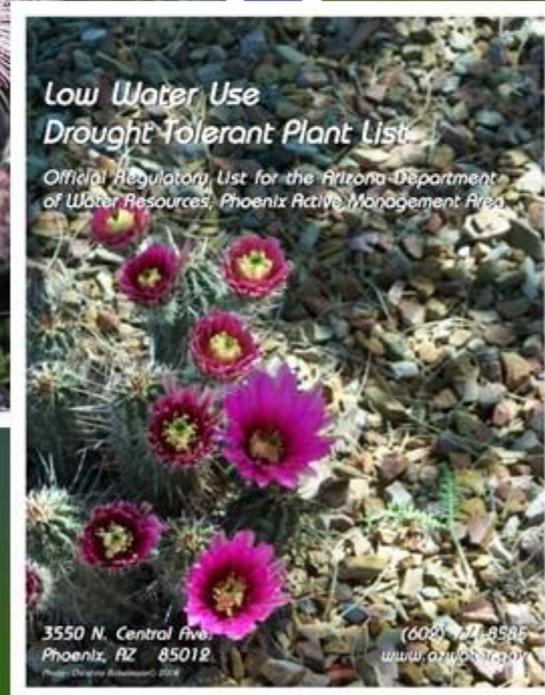
**Low Water Use
Drought Tolerant Plant List**

*Official Regulatory List for the Arizona Department
of Water Resources, Tucson Active Management Area*

400 W. Congress, Suite 518
Tucson, AZ 85701

(520) 770-3800
www.azwater.gov

Photo: Christine Schellhardt © 2008



**Low Water Use
Drought Tolerant Plant List**

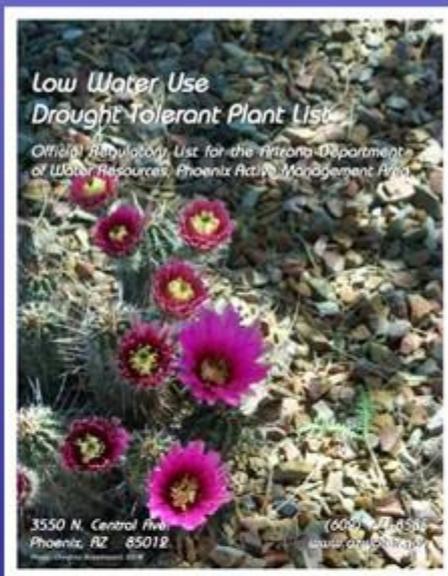
*Official Regulatory List for the Arizona Department
of Water Resources, Phoenix Active Management Area*

3550 N. Central Ave.
Phoenix, AZ 85012

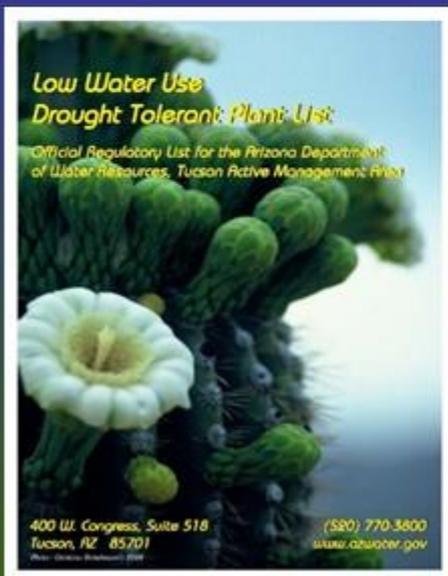
(602) 271-8585
www.azwater.gov

Photo: Christine Schellhardt © 2008

Low Water Use/ Drought Tolerant Plant Lists



- Trees
- Shrubs
- Grasses
- Succulents
- Groundcovers
- Vines
- Flowers

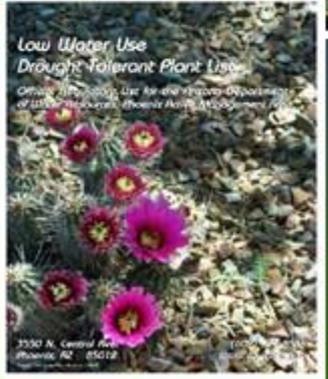
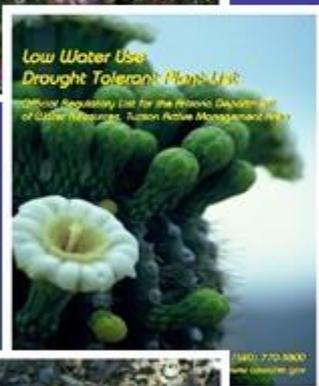
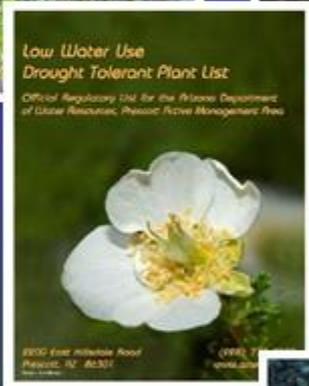


www.azwater.gov/conservation



UPDATES

- ❖ Improve for 4MP
- ❖ Database
- ❖ Standardization
- ❖ Future Modifications



Thank you!

Einav Henenson

ehenensen@azwater.gov

Ruth Greenhouse

rgreenhouse@azwater.gov





Maricopa
County Air
Quality
Department

Philip McNeely



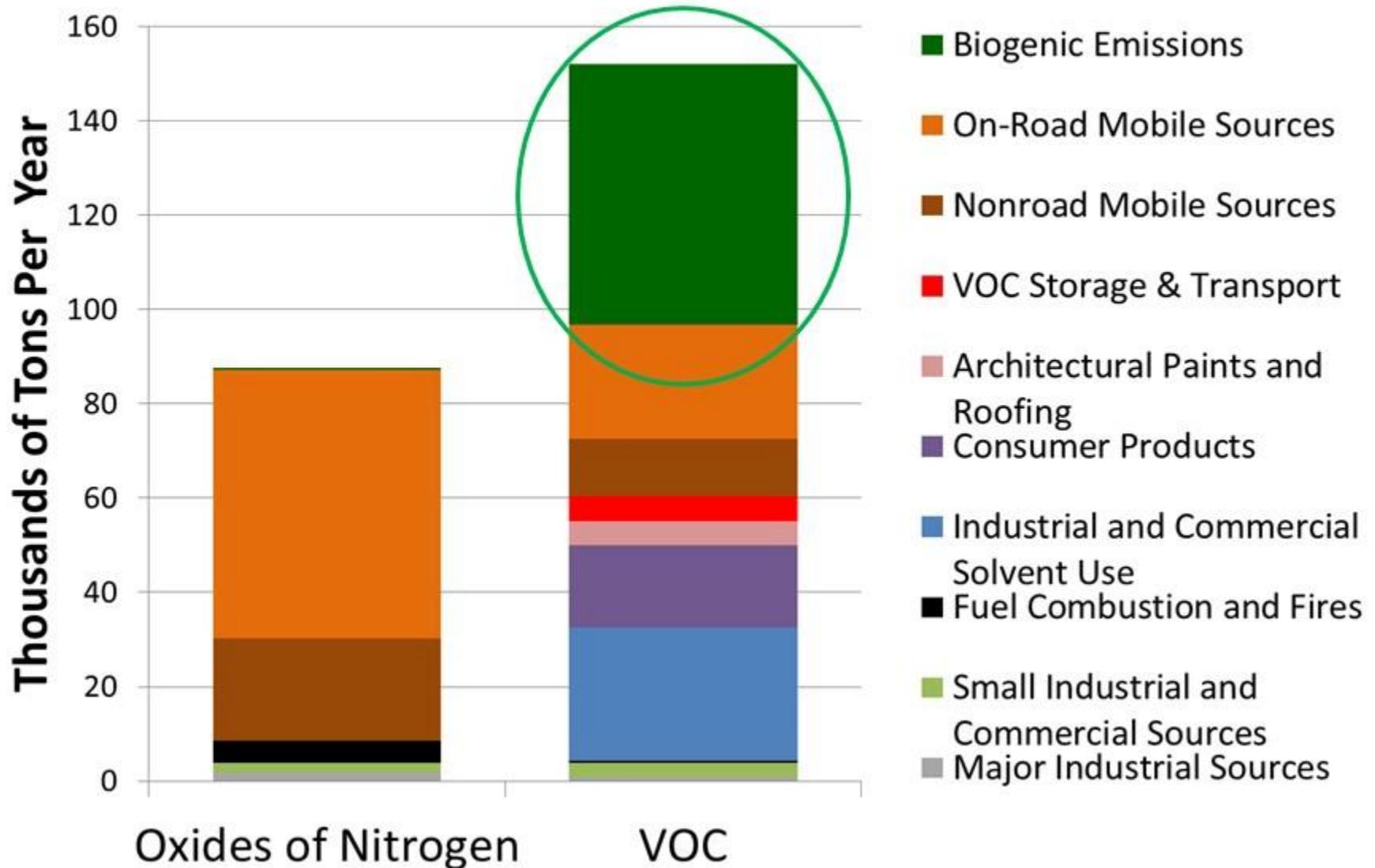
Regional Tree & Shade Summit 2.0



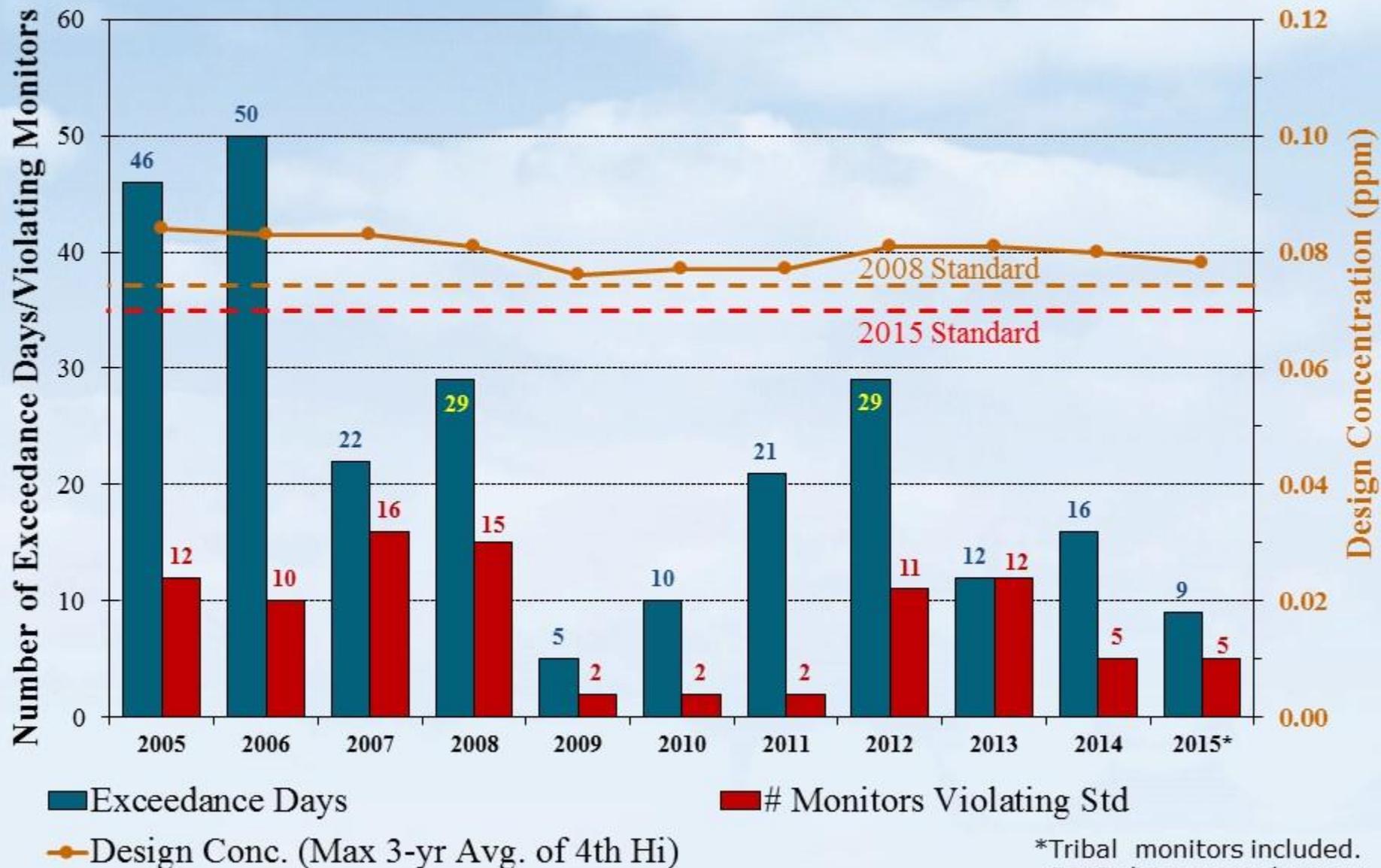
Maricopa County Air Quality Department
Philip McNeely, Director

March 9, 2016

2011 Periodic Ozone Emissions Inventory for the Nonattainment Area



8-hour Average Ambient Ozone Compliance Based on 2008 Federal Standard, Phoenix Nonattainment Area, 2005 – 2015*



*Tribal monitors included.
2015 data are preliminary

The Rest of the Story on Trees

- Biogenic VOC emissions, mostly from trees, is estimated to be from about 40% to over 50%
- But trees are not bad or even all bad for ozone pollution
 - Shade mitigates heat island effects
 - They absorb and consume pollution
 - Over 500 tons of ozone, about as much ozone as they may be responsible for generating
 - About 900 tons of PM₁₀
 - Over 200 tons of nitrogen dioxide
 - About 100 tons carbon monoxide and sulfur dioxide

Trees are Valuable Assets

- Balance shade potential, water use and VOC emissions
- High VOC emitters: palms, Eucalyptus, oaks, sissoo (Indian Rosewood), bottlebrush
- Moderate emitters: most pines, some citrus, Palo Verde, Acacias
- Low emitters: most citrus, other fruit trees, mesquite, ash, African sumac

Thank you.

Philip McNeely

(602) 506-6443

philmcneely@mail.maricopa.gov



Flood Control District of Maricopa County

Harry Cooper





Flood Control District of Maricopa County





Flood Control District of Maricopa County

Created in 1959 to reduce the risk of flooding to people and their property

- Build and maintain structures
- Identify and delineate floodplains
- Issue floodplain use permits
- Operate a flood warning system
- Conduct flood hazard studies to identify risks and potential solutions – structural and non-structural



Flood Control District of Maricopa County



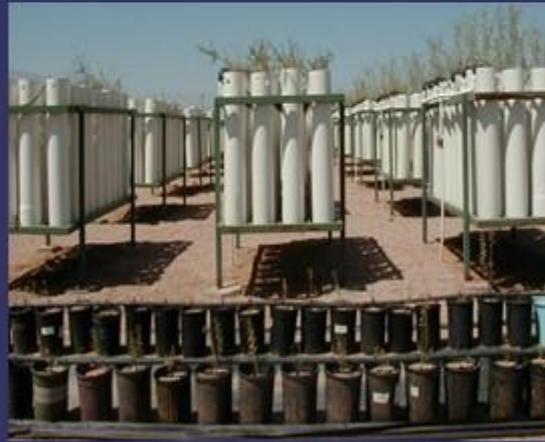
Landscape Architecture and Water Conservation Branch

- Landscape Architecture
- Water Conservation
- Native Tall Pot Tree Nursery



Tall Pot Tree Nursery

- 10,000 trees planted since 2002
- Mimics natural root development
- High root to shoot ratio
- Six tree and three shrub species



Tall Pot Tree Nursery

- Used in District construction projects and restoration efforts
- Do not require supplemental irrigation
- Lower cost
- Good survival rates
- May play a key role in mitigating urban heat island effects, improving air quality, restoring disturbed landscapes



Tall Pot Tree Nursery

- Urban applicability
 - Street trees
 - Tree and shade master plans
 - Residential tree programs
- To irrigate or not to irrigate
- Long-term monitoring and survivability studies
 - Graduate research
- GI/LID applications
 - Use in microbasins, bioswales, urban arroyo restoration
 - Grant proposals
- Cooperative Agreements
 - Lower unit costs, higher use potential





Questions?

Harry Cooper, RLA, ASLA

Landscape Architecture and Water
Conservation Branch Manager

Planning and Project Management Division

***Flood Control District of Maricopa
County***

harrycooper@mail.maricopa.gov

602-506-2956



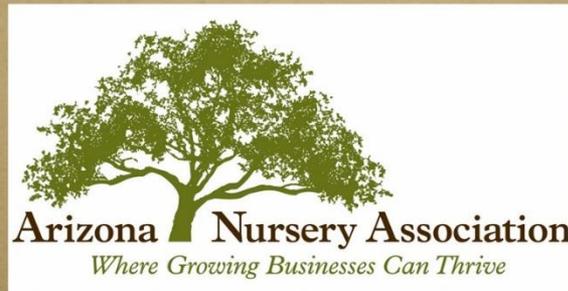


Arizona Nursery Association

Cheryl Goar



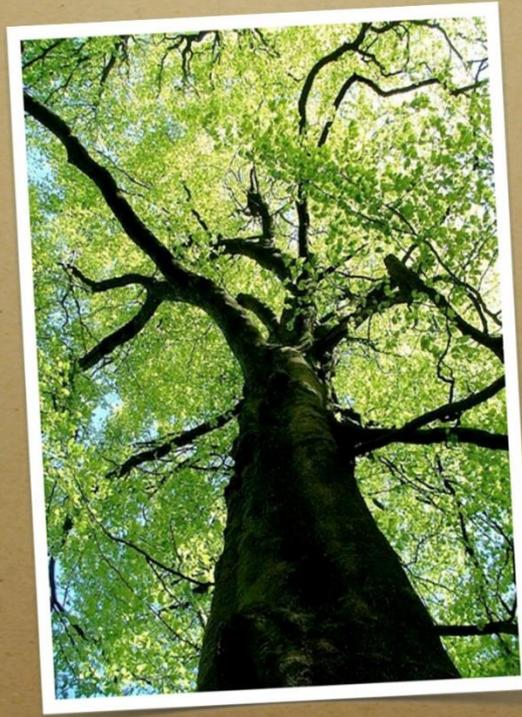
Building Capacity for our Local Canopy



Cheryl Goar, Executive Director
Arizona Nursery Association
March 9, 2016

Plant Something Campaign

Container Grown
Tree Guide



SHADE
Educational
Conference

It all began with a specialty crop grant.....



Just over \$600,000 invested to date

**PLANT
SOMETHING™**
plant-something.org

Promotes the

- Environmental
- Financial
- Health

Benefits of trees and plants



Target Audience: External

Primary

- Single-Family Homeowners

Secondary

- Home Owners Associations (HOAs)
- Cities, municipalities, ADOT, Parks & Rec.
- Community Organizations

Position

The natural investment that offers guaranteed long-term growth, value and beauty.



Promise

Grow a richer world.

Personality

Creative, outdoorsy, thoughtful, nurturing, visionary, optimistic, fun, energetic, sustainable, green, family-focused, community-oriented

Federal Trademark

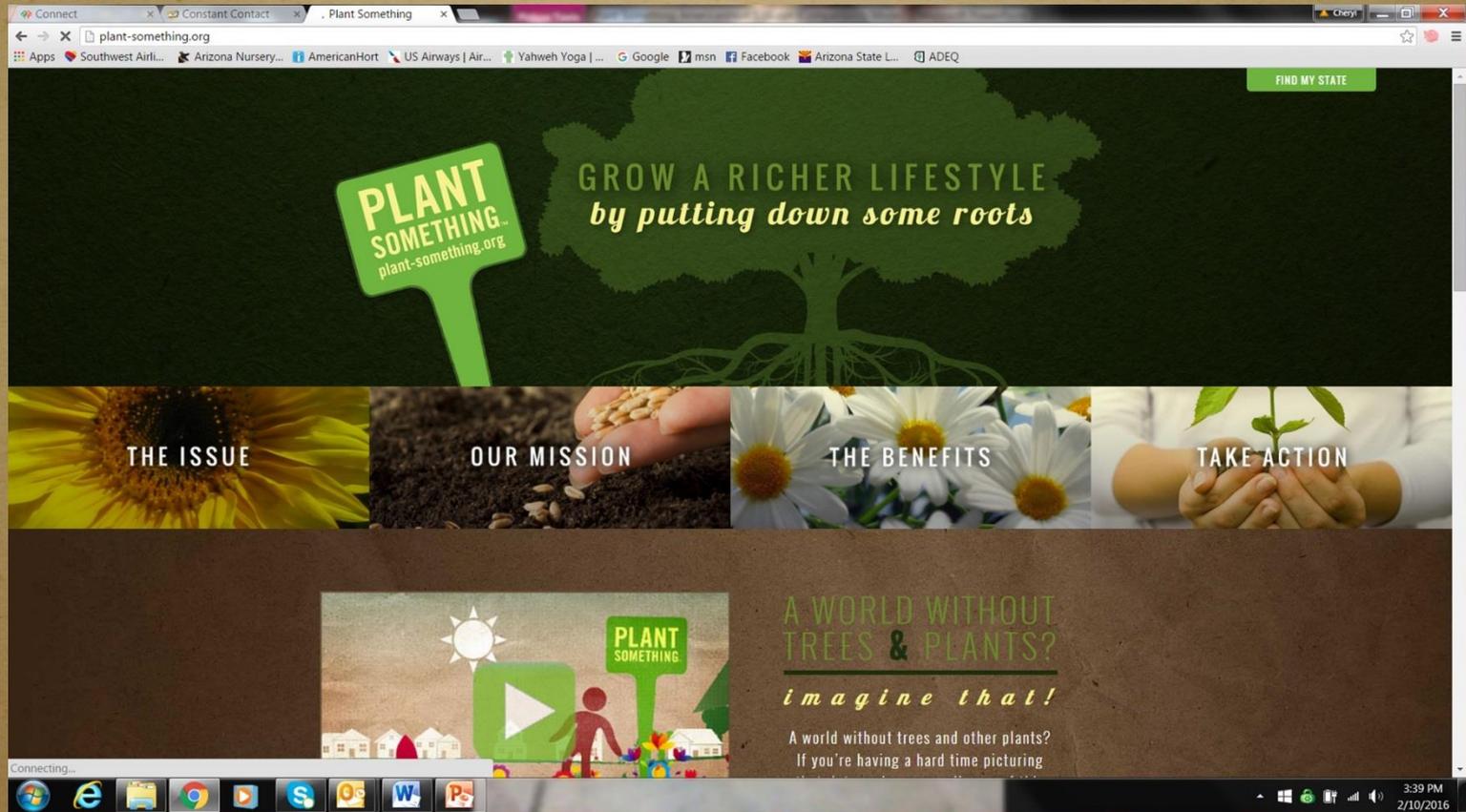


22 total partners to date...

Arizona Nursery Association
Arkansas Green Industry Association
British Columbia Nursery & Landscape Association
California Association Nurseries & Garden Centers
Colorado Nursery & Greenhouse Association
Idaho Nursery & Landscape Association
Illinois Green Industry Association
Florida Nursery, Growers & Landscape Association
Georgia Green Industry Association
Long Island Flower Growers Association
Maine Landscape & Nursery Association
Massachusetts Nursery & Landscape Association
Minnesota Nursery & Landscape Association
Montana Nursery & Landscape Association
New Jersey Nursery & Landscape Association
North Carolina Nursery & Landscape Association
Ohio Nursery & Landscape Association
Oregon Association of Nurseries
Pennsylvania Landscape & Nursery Association
Tennessee Nursery & Landscape Association
Virginia Nursery & Landscape Association
Washington State Nursery & Landscape Association



Website



Website

The screenshot shows a web browser window displaying the website plant-something.org. The browser's address bar and tabs are visible at the top. The website's navigation menu includes "THE ISSUE", "OUR MISSION", "THE BENEFITS", and "TAKE ACTION". The main content area features a map of the United States where each state is colored either light green or dark green. A legend below the map explains the colors: a light green square indicates "Plant Something affiliates. Clicking the popup icon will direct you to their website," and a dark green square indicates "Not yet affiliated." Below the map is a horizontal strip of four images: hands holding a seedling, a family gardening, a close-up of a yellow flower, and hands holding a mesh basket. The Windows taskbar at the bottom shows various application icons and the system clock indicating 3:39 PM on 2/10/2016.

Website

The screenshot shows a web browser window with the URL plant-something.org. The browser's address bar and tabs are visible at the top. The website's navigation menu includes: THE ISSUE, OUR MISSION, THE BENEFITS, and TAKE ACTION. The main content area features a large illustration of a person planting flowers in a neighborhood, with a play button icon overlaid on the scene. To the right of the illustration, the text reads: "A WORLD WITHOUT TREES & PLANTS?" followed by the phrase "imagine that!" in italics. Below this, a paragraph states: "A world without trees and other plants? If you're having a hard time picturing that, let us give you a glimpse of this disaster scenario and how to prevent it." A dark green horizontal band contains the text "WE'RE ON A MISSION" in white. Below this, another dark green band contains the text "Want to improve your quality of life?" in white, with "GET YOUR HANDS DIRTY AND PLANT SOMETHING." in green below it. The Windows taskbar is visible at the bottom of the browser window, showing various application icons and the system clock indicating 3:39 PM on 2/10/2016.

Connect x Constant Contact x Plant Something x Cheryl

plant-something.org

Apps Southwest Airli... Arizona Nursery... AmericanHort US Airways | Air... Yahweh Yoga | ... Google msn Facebook Arizona State L... ADEQ

THE ISSUE OUR MISSION THE BENEFITS TAKE ACTION

PLANT SOMETHING

A WORLD WITHOUT TREES & PLANTS?

imagine that!

A world without trees and other plants?
If you're having a hard time picturing that, let us give you a glimpse of this disaster scenario and how to prevent it.

WE'RE ON A MISSION

Want to improve your quality of life?
GET YOUR HANDS DIRTY AND PLANT SOMETHING.

3:39 PM
2/10/2016

Facebook Page

The screenshot shows a web browser window displaying the Facebook page for 'Plant Something'. The browser's address bar shows the URL <https://www.facebook.com/PlantSomething/>. The page header includes navigation links for 'Page', 'Messages', 'Notifications', 'Insights', and 'Publishing Tools'. The main content area features a cover photo of yellow flowers and a profile picture with the text 'PLANT SOMETHING. plant-something.org'. Below the cover photo, the page name 'Plant Something' and category 'Farming/Agriculture' are displayed, along with buttons for 'Create Call to Action', 'Liked', and 'Message'. The 'Timeline' tab is selected, showing a post from 'Plant Something' published by Cheryl Goar on February 29 at 5:00am. The post text reads: 'Spring is right around the corner! Get ready by checking out these time saving tulip bulb planting tips.' and includes a link to <http://timewiththea.com/.../timesaving-tulip-bulb-planting-.../>. The post image shows a basket of tulip bulbs. The right sidebar displays performance metrics for 'THIS WEEK': 963 Post Reach, 62 Post Engagement, 0 Website Clicks, and a 2 of 4 Response Rate. A '1 hour Response Time' badge is also visible. The bottom of the page shows a Windows taskbar with various application icons and a system tray with the time 1:15 PM and date 3/4/2016.

Facebook Page

The screenshot shows a web browser window displaying the Facebook page for 'Plant Something'. The browser's address bar shows the URL <https://www.facebook.com/PlantSomething/>. The page header includes the name 'Plant Something' and navigation options like 'Cheryl', 'Home', and 'Settings'. The main content area features a video player with a play button, a photo of a dish, and a post from 'Steve Damon' dated January 12, 2015. Below this is a post from 'Ridjunkmail.com' dated December 5, 2015, and another from 'Beat Your Neighbor Plant Food & Fertilizer' dated August 28, 2015. A central post from 'Plant Something' dated February 8, 2015, includes the text 'Are your plants telling you something? Learn the language of your garden.' and a link to a website. To the right, a 'THIS WEEK' summary shows 963 Post Reach, 62 Post Engagement, 0 Website Clicks, 2 of 4 Response Rate, and 1 hour Response Time. A 'Recent' list shows years from 2016 to 2012. At the bottom, a Windows taskbar displays various application icons and the system clock showing 1:16 PM on 3/4/2016.

Plant Something

Page Messages Notifications Insights Publishing Tools Settings Help

THIS WEEK

- 963 Post Reach
- 62 Post Engagement
- 0 Website Clicks
- 2 of 4 Response Rate
- 1 hour Response Time

278 people reached

Like Comment Share

Silvia E. Montoya

Write a comment...

Press Enter to post.

Plant Something

Published by Cheryl Goar (7) · February 8 at 5:00am ·

Are your plants telling you something? Learn the language of your garden.

<http://balconygardenweb.com/plant-deficiency-symptoms-iden.../>

Let's keep the Trees in the FOREST and the Junk out of... See More

Like Comment

Beat Your Neighbor Plant Food & Fertilizer

August 28, 2015 at 5:56am ·

Hello gardening friends. Just a friendly invite to come on over and check us out.

Like Comment

LIKED BY THIS PAGE

Chat (6)

1:16 PM 3/4/2016

Facebook Page

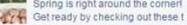
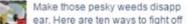
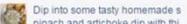
Facebook Page Insights for Plant Something

Navigation: Page, Messages, Notifications, Insights, Publishing Tools, Settings, Help

Overview (Last 7 days)

- Reach: 1,870 (February 26 - March 3)
 - People Reached: +35%
- Page Likes: 9 (February 26 - March 3)
 - Page Likes: -57%
- Actions on Page: 0 (February 26 - March 3)
 - Total Actions on Page: +0%
- Post Engagement: 161
 - Post Engagement: +133%

Your 5 Most Recent Posts

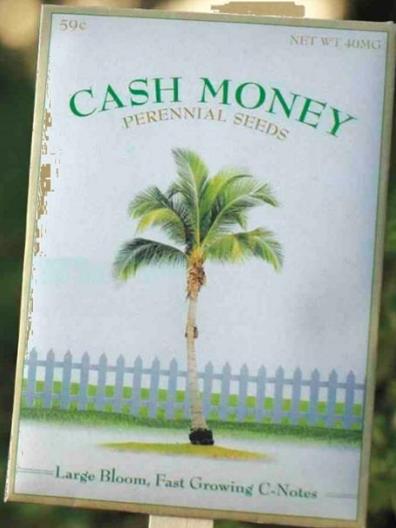
Published	Post	Type	Targeting	Reach	Engagement	Promote
02/29/2016 5:00 am	 Spring is right around the corner. Get ready by checking out these t...	📌	🌐	60	2 2	Boost Post
02/26/2016 5:00 am	 Make those pesky weeds disappear. Here are ten ways to fight off...	📌	🌐	1.7K	154 38	Boost Post
02/24/2016 9:00 am	 Dip into some tasty homemade spinach and artichoke dip with thi...	📌	🌐	356	3 2	Boost Post
02/22/2016 9:00 am	 The Aloe Vera plant is a natural healer. Find out how to plant and...	📌	🌐	435	12 14	Boost Post
02/19/2016 5:00 am	 Today is Love Your Pet Day! Show your animals some love with th...	📌	🌐	1.1K	38 52	Boost Post

Pages to Watch

Pages to Watch helps you compare the performance of your Page and posts with similar Pages on Facebook. Add Pages to get started.

System tray: 1:16 PM 3/4/2016

Print Ads



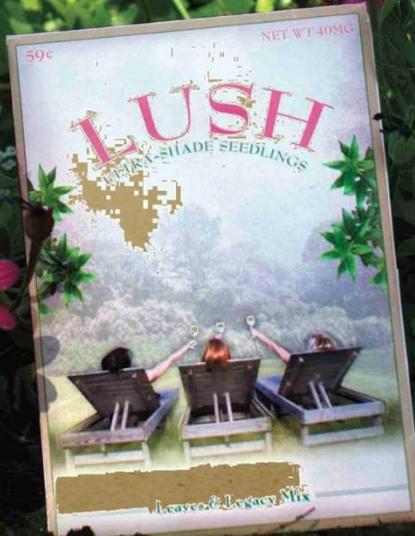
59c NET WT. 40MG

CASH MONEY
PERENNIAL SEEDS

Large Bloom, Fast Growing C-Notes

PLANT SOMETHING.

Who says money doesn't grow on trees? Have you seen what a beautiful yard can do for your property value? By adding a quality landscape to your home, you can boost its resale value by up to 15%. Learn how green investments pay high returns at plant-something.org



59c NET WT. 40MG

LUSH
SHADE SEEDLINGS

Leaves of Legacy Mix

PLANT SOMETHING.

Turn your yard and community into an inviting oasis. Before you pour a tall cool one, try planting one. The right trees and plants will transform an ordinary space into a memorable experience. Unearth a wealth of exterior decorating ideas at plant-something.org

Partner Truck Wraps



Digital Billboards





PARTNER VIDEOS:

Imagine

Arbor Day

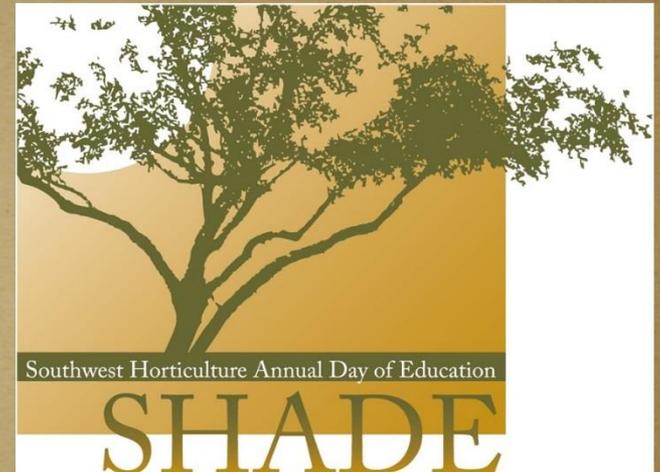
Father's Day

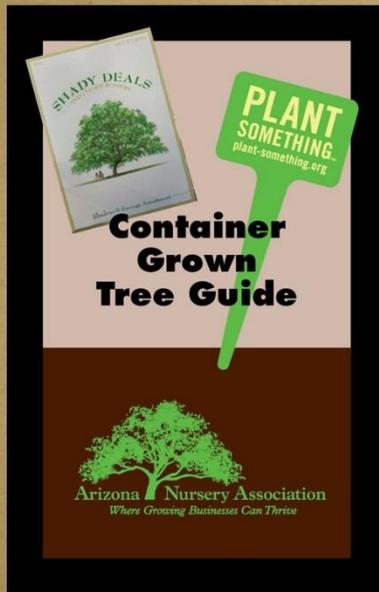
More to come.....

SHADE Educational Conference

Thursday, September 1
The Arizona Biltmore

- 5 Tracks – 6 Sessions each
- Tree & Plant Track
- CEU's Available





Container Grown Tree Guide

- Newly Revised
- Copies available at our booth
- Presentation in our afternoon session

Thank You



www.azna.org

www.plantsomething.org

Cheryl Goar

480-966-1610

cgoar@azna.org



Arizona
Community
Tree
Council

Beverly Babb



**Arizona Community
Tree Council, Inc.**

Arizona Community Tree Council

- Nonprofit 501(c)(3)
- Education Organization
Established in 1993
- **Mission:** *To facilitate the PROPER care and planting of trees throughout Arizona.*



ACTC by the numbers

- **442** members
- **15** Board of Directors
- **20** industry partners and numerous community partners
- **14** educational programs in 2016
- **Training for 500+** Industry Professionals
- **155** CEUs (ISA, SLM, OPM)
- **1,000+** volunteer hours (and counting)



Contact Details

www.aztrees.org

General Email: Info@aztrees.org

Tel: 602.354.3023

Bonnie Ervine

ACTC President

Email: president@aztrees.org

Beverly Babb

Executive Director

Email: execdirector@aztrees.org





Arizona Landscape Contractors' Association

Judy Gausman



ALCA
Contract with Landscape Experts



AZ Landscape Contractors' Association

TRAINING, RESOURCES, & REPRESENTATION
for landscape professionals.

Consists of 440 professional landscape
and affiliated companies and municipalities

Representing over 15,000 employees





How does ALCA help AZ cities further their tree canopy goals?



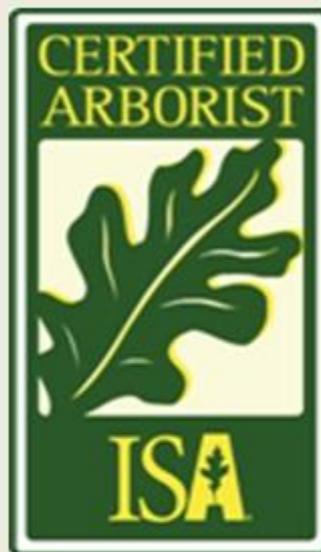


Arizona

Certified

Landscape

Professional



670 certified SLM and 540 ACLP individuals are listed at

www.ALCA.org



CEUs are available

**Nearly 1/3 SLM
Certified are from a
municipality**



SLM employs practices which strive to preserve limited and valuable natural resources such as water, reduce waste generation and strive for longevity and maturity of plant materials.





Sustainable Landscape Management



Frequent Pruning



More trips to landfill



Requires more water



Plants are healthier and more attractive





Arizona Certified Landscape Professional



Plant Identification
Tree Planting & Staking
Annuals & Perennials
Turf Care & Installation
Tree & Shrub Pruning
Pesticides & Calibration
Safety & Tools
Soils & Fertilizer
Irrigation
Plant Problem Diagnosis

Arizona

Certified

Landscape

Professional

A group of people are seated at tables in a room, likely attending a presentation or workshop. They are looking towards the front of the room.



Dave Londen, Back to Nature Landcare



“One of the biggest benefits of ALCA membership has been the education programs that help us grow and get stronger internally. With the SLM, ACLP, irrigation workshops and other courses offered, it makes us a more professional team especially when speaking to clients, property managers and business owners. They seem to realize that we know what we are talking about because our team members feel more confident about the work they are doing and they really take pride and ownership in the job they are performing.”



Every Day is Arbor Day





Protect your Landscape Investment Learn More About SLM and ACLP





Arizona Public Service

John Gauthier



aps

APS
FORESTRY &
SPECIAL PROGRAMS

John Gauthier
john.gauthier@aps.com





Salt River Project

Lori Rogers





Valley Permaculture Alliance

Aimee Williamson





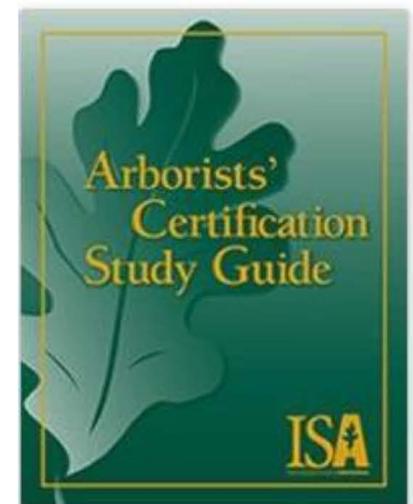
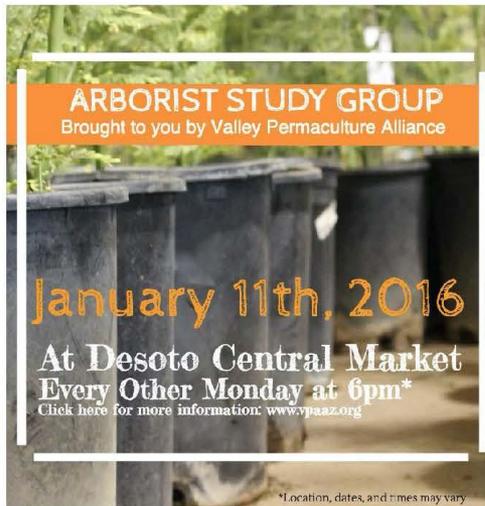
Tree Program

Community Tree Resources

- **Ask an Arborist Forum**
 - Accessible tool for general tree questions
- **Tree Program Blog**
 - Biweekly blog posts
 - Topical

valley**permaculture**alliance

Tree Study Group



valleypermaculturealliance

valleypermaculturealliance

Presents

SUNNY with a chance of PANCAKES



Mesquite Pancake Breakfast
Saturday, April 30

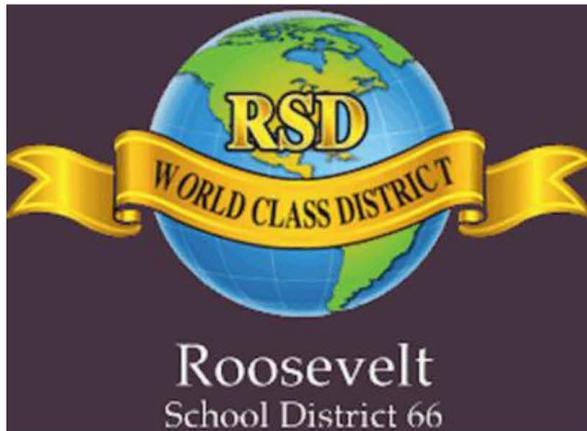
9AM-12PM



The Space Between
517 N 1st St. Phoenix AZ 85004
Buy tickets online at vpaaz.org

Bring Your Own Plate (BYOP)

Community Challenge Grant



valleypermaculturealliance

SRP Shade Tree Partnership

2015 shade tree program impact

the trees

5,790+ trees given away
=
865,000 kWh energy saved/year
+
983,000+ lbs of carbon sequestered this year
+
innumerable edible pods produced & wildlife habitat created



the people

4,060 people attended our tree workshops
+
419 volunteers of all ages registered participants, distributed trees, & helped out behind the scenes

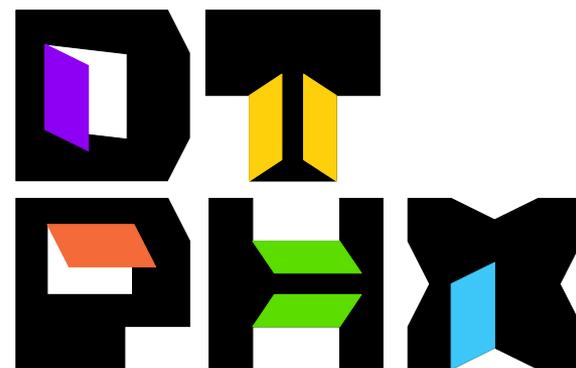
valleypermaculturealliance

valleypermaculturealliance



Downtown Phoenix Inc.

Ray Cabrera



**Downtown
Phoenix Inc.**

DTPHX.ORG

Regional Tree & Shade Summit 2.0

DTPHX: Urban Forestry in the Core

DTPHX

Created in 2013 as a community development group, Downtown Phoenix Inc. (DPI) promotes the continued revitalization of Arizona's urban core. Through collaboration between businesses, City of Phoenix leadership and community groups, DPI coordinates activities between the Downtown Phoenix Partnership, Phoenix Community Alliance and Downtown Phoenix Community Development Corporation. DPI and its affiliate organizations are committed to making Phoenix a vibrant urban destination and one of the nation's great cities.

DPI as Steward and Partner

- Directly manage 218 trees as part of BID contract with CoP
- Manage additional landscape areas with direct stakeholder contracts
- Advocating for City's urban forestry goals at the neighborhood level and holding new development accountable
- In-house Streetscape Team for effective management

DTPHX STREETSCAPE TEAM



M O N S O O N M A I N T E N A N C E

DPI as Advocate

- Promoting City's urban forestry goals to stakeholders and neighborhoods
- Holding developers accountable when it comes to streetscape & trees
- Shade as a priority; including trees
- Close working partnership with CoP Parks, Street Transportation, P&D and elected leadership

TREES SALVAGED FROM CITY CONSTRUCTION PROJECTS



P O P U P N U R S E R Y

Trees & Placemaking

- Partnering with City and developers to salvage over 85 mature trees
- Encouraging “right tree right place” and innovative infrastructure development for core
- Utilizing vacant public land as amenity to talk about shade and urban forestry

VACANT LOT ACTIVATION



T H E S P A C E B E T W E E N

Thank you

Ray Cabrera, Director of Placemaking

rcabrera@dtpHX.org

602 744-6409

dtpHX.org