



Conserve to Enhance:

A tool for linking consumer water efficiency and urban wash enhancement in Tucson

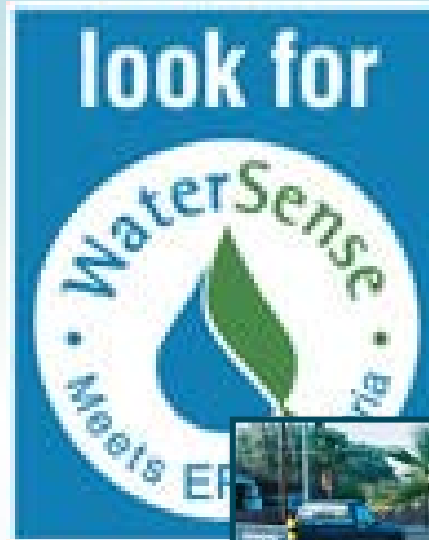
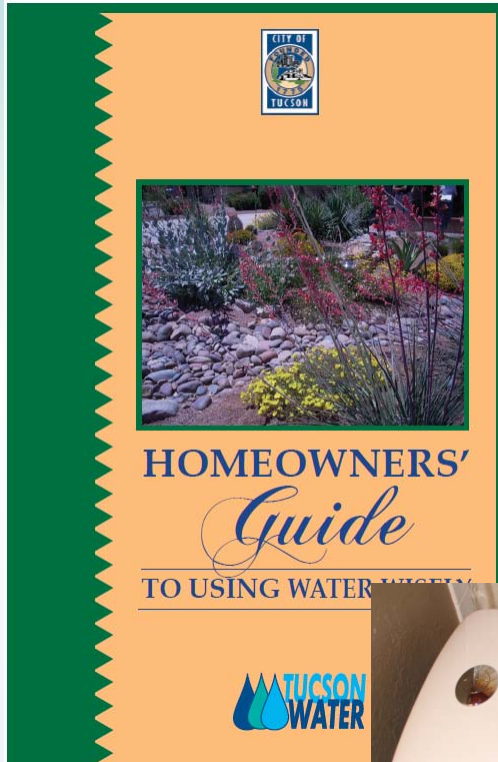


Presentation Outline

- Water conservation & the environment – an untapped potential?
- How is Conserve to Enhance responding to the conservation challenge?
- Tucson C2E Successes
- Tucson C2E Challenges

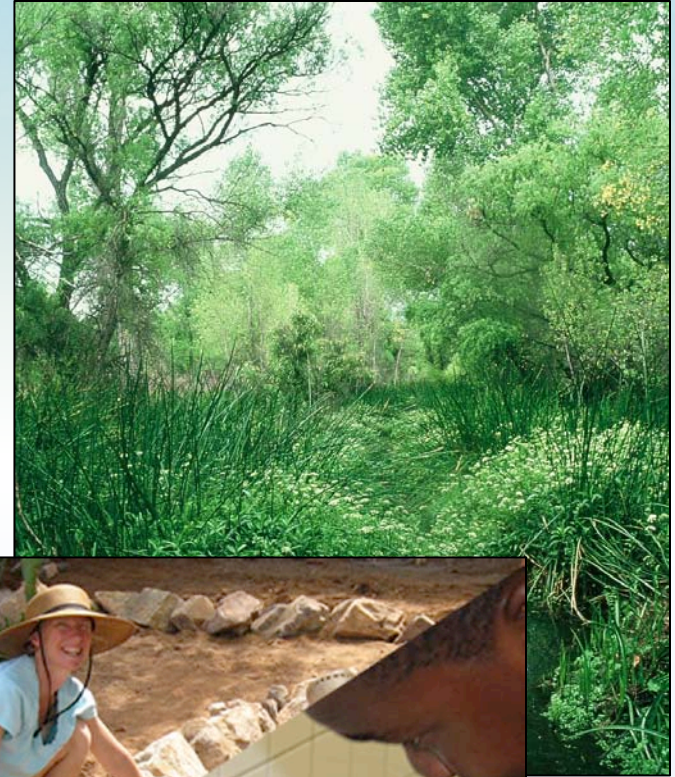


Traditional Approaches to Conservation



Motivation to Conserve Water

- Why should I save water?
- How do I save water?
- How are these things connected?
- The environment can be a significant motivator that makes these connections.



Conserve to Enhance (C2E): An Innovative Voluntary Mechanism



Water saved through
conservation efforts



Donations support
environmental
enhancement



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Benefits of C2E

1. Water conservation with environmental benefits
2. Money and water to environmental projects
3. Education & Awareness
4. Simple accounting and reliable funding source
5. Quality of life, opportunity & good will



Program Benefits:

1. Water Conservation

- Program results in measurable water conservation that would not have occurred otherwise
 - Extends water supplies
 - Lower infrastructure costs
- Water is becoming more scarce – conservation is no longer an option

Program Benefits:

2. Environmental Enhancement

- Meaningful, new funding for local projects
 - Instream flows, green infrastructure, stream restoration – whatever a community is interested in
- Projects benefit local water supply
 - Increase water security, more livable community



Beaver Creek, AZ. Photo credit: Brittany Choate

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BLUE WATER

Blue Water is the result of an innovative partnership between a local non-profit, 100 percent of your gift to Blue Water goes to the River. Your small donation can make a huge difference. Choose from the

RIVER OTTER \$6.40 | BLUE HERON \$4.80 | RAINBOW TROUT \$3.20 | SPOTTED FROG \$1.60

What does my monthly donation do? It helps sustain the quality of life we all enjoy. Additional water in the river boosts water quality, streamside vegetation, fish, wildlife, scenic and recreation opportunities. Fill out the enrollment form on the reverse side and return it with your Avion bill or contact Avion Water Company at 541.382.5342. For more information on DRC programs visit www.deschutesriver.org.

SIGN UP >

WATER

sonaz.gov/water

— Andy Quigley, INTERMEDIATE

quality such as

water in the river boosts water
the enrollment form on the
82.5342. For more information
SIGN UP >

Have a question or a suggestion?
Call us at 791-4321

Program Benefits:

4. Funding Source

- Savings-based donations can create a reliable funding pool for C2E projects

Participant A						
Month	Historical/ Baseline Use (Ccf)	Current Use (Ccf)	Water Saved (Ccf)	Water Saved (gallons)	\$ value of water saved	Conservation-based Quarterly Contribution
Jan-11	7	3	4	2,743	\$5.65	
Feb-11	6	3	3		\$4.62	
Mar-11	6	4	2	1,496	\$3.08	\$13.35
Apr-11	9	2	7	4,987	\$10.27	
May-11	13	6	7	5,236	\$10.78	
Jun-11	14	7	7	5,485	\$11.29	\$32.34

Program Benefits:

5. Multiple Community Benefits

- Water providers and corporations are stewards/environmental leaders
- Quality of life improves
 - Reduced runoff & storm water flows
 - Increased shade & habitat through vegetation
 - Food production
 - Energy savings

C2E Tucson Development



C2E Challenges

- Enhancement Opportunities
- Accounting Mechanism
- Participant Growth
- Getting from here to there



Photo credits: WMG

Enhancement Opportunities

- No iconic project
- Limited at our funding scale
 - Most planned projects already have water
- In 2010, 15 projects identified, but only 3 applied for funding
 - Atturbury Wash selected as recipient site
- In 2011, funding focus shifted to neighborhood scale, urban waterway projects
 - Real community need, better funding match

Accounting Mechanism

- Manual Excel spreadsheet for calculations
 - Slow, human error potential
- Emailed to participants quarterly w/ suggested contribution & donation request
- Participants saved 2.2 million gallons of water & donated over \$2,000 during the pilot
- Currently developing an online ‘My Water Use Dashboard’ to automate participant experience

Participant Engagement

- 60 pilot participants selected
 - 45 received subsidies (\$500 or \$1,000) for rainwater harvesting
 - only 29 projects completed
- Slow response from participants; lower than expected donations
- Online Dashboard will help



Photo credit: WMG

Tucson C2E Projections

- If C2E is scaled up to the entire Tucson Water service area:
 - 12,500 participant estimate (~5% of TW customers)
 - 850+ ac/ft water conserved per year
 - \$500,000/year for local environmental enhancement projects



Atturbury Wash, Tucson, AZ



C2E Successes

- Partnerships
- Water Savings
- Water bill Check Box
- Community Investment



Photo credits: WMG

Tucson Pilot Program Partners



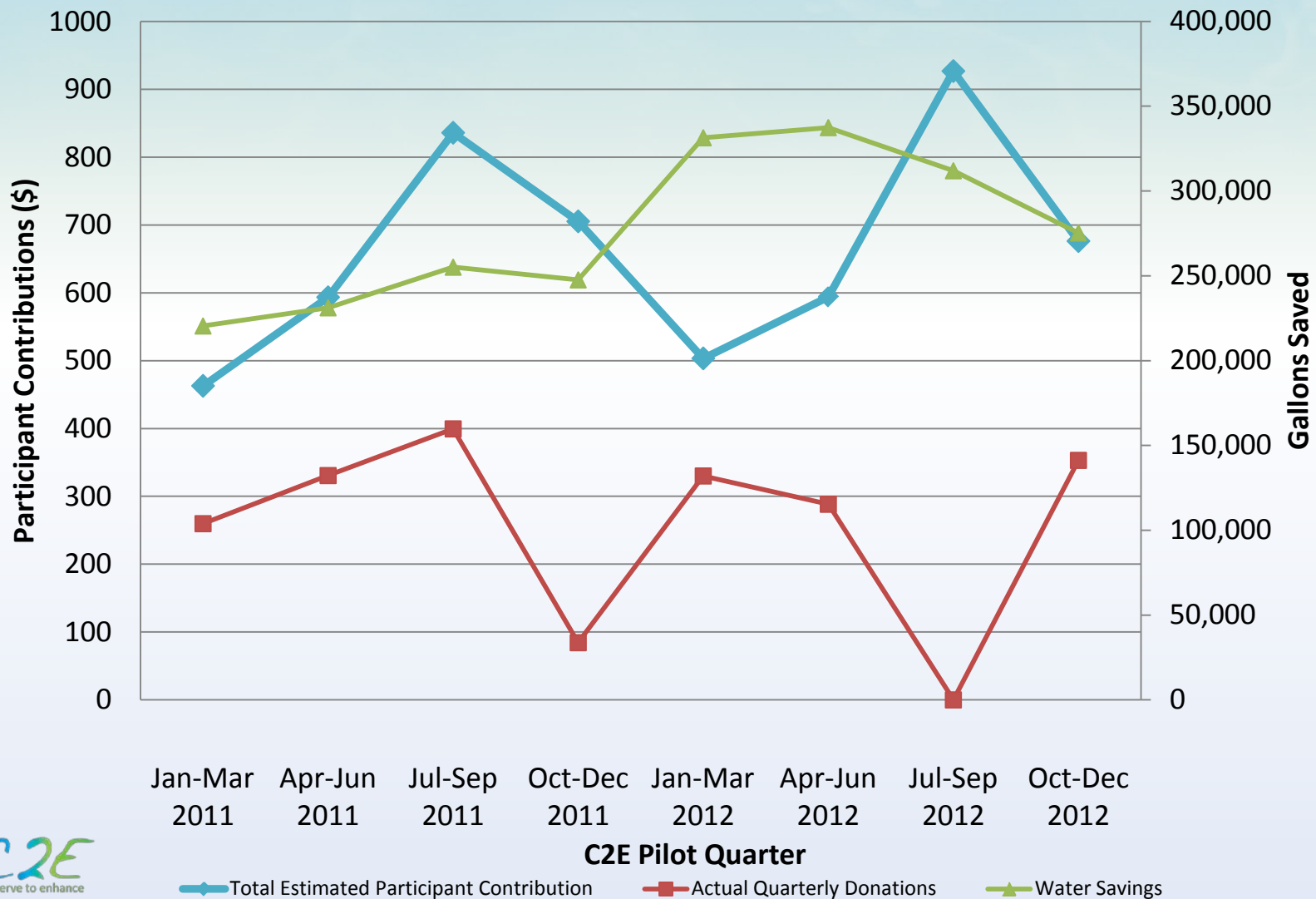
Advisory Board Member Orgs.

- ◆ **Sonoran Institute**
- ◆ **Watershed Management Group**
- ◆ **University of Arizona WRRC**
- ◆ City of Tucson
 - ◆ Attorney's Office
 - ◆ Office of Conservation & Sustainable Development
 - ◆ Ward One Office
- ◆ Ecosystem Economics
- ◆ Pima Association of Governments
- ◆ Pima County
 - ◆ Regional Wastewater Reclamation
 - ◆ Office of Conservation Science and Environmental Policy
- ◆ Tucson Audubon Society
- ◆ Tucson Water
- ◆ University of Arizona Campus Planning

Core Team Orgs. In Bold



C2E Results





Tucson Water Customer Service Office
Phone: 520-791-3242
Outside Tucson: 800-598-9449
www.tucsonaz.gov/water

UTILITY SERVICES STATEMENT

BANK DRAFT - PLEASE DO NOT PAY

Account Name:
Account Number:
Service Address:
Bill Date: 08/03/2011
Service Period: 07/05/2011 to 08/02/2011
Hours: 8:00 am - 5:00 pm MST (Mon-Fri)

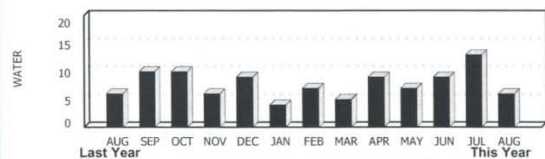


Pima County Regional Wastewater
Reclamation Department
Phone: 520-740-6609
www.pima.gov/wrrm

City of Tucson Environmental Services:
Phone: 520-791-3171
www.tucsonaz.gov/esd

Last Bill	Payments (Credits)	Deposits Applied	Adjustments	Balance Forward	New Charges	ACCOUNT BALANCE
\$74.83	-\$74.83	\$0.00	\$0.00	\$0.00	\$65.33	\$65.33

METER INFORMATION							ACCOUNT ACTIVITY	
Meter number	Service Type	Start Date	End Date	Current Read	Previous Read	Consumption (Ccfs)		
	WA	07/05/11	08/02/11	2141	2135	6	LAST BILL	\$74.83
							TOTAL PAID SINCE LAST BILL	-\$74.83
							ADJUSTMENTS	\$0.00
							BALANCE FORWARD	



IMPORTANT MESSAGE

On July 5, 2011 Water rate changes approved by Mayor & Council became effective. Questions? Please call 791-3242; outside Tucson, 1-800-598-9449.
* On July 1, 2011 an increase in sewer rates became effective as approved by the Pima County Board of Supervisors. Questions on the sewer charge portion of your bill, call (520) 740-6609.
* Environmental Services charges reflect a fuel surcharge and an increase in the groundwater protection fee.

Due date applies to current charges ONLY.
Any balance forward is due now.
Please allow 7 days for payments to post to your account.

A \$28.00 fee will be charged for any returned check.

DRAFT DATE:

08/23/2011

DRAFT AMOUNT:

\$65.33

Open Space / Riparian Contribution (optional)

AMOUNT PAID:

BANK DRAFT - DO NOT PAY

BANK DRAFT - PLEASE DO NOT PAY



UTILITY SERVICES
PO Box 28804
Tucson, AZ 85726-8804

Please fold on perforation before tearing and return bottom portion with your payment.

Account Number:
Service Address:

cycle-route #. 04-02

DRAFT DATE: 08/23/2011

DRAFT AMOUNT: \$65.33

Open Space / Riparian Contribution (optional)

AMOUNT PAID: **BANK DRAFT - DO NOT PAY**

Your tax-deductible contribution to "Open Space or Riparian Enhancement" will support the preservation of biologically-rich open space and the Conserve to Enhance program, an effort that links local river and wash enhancement with individual water conservation efforts. Visit www.tucsonaz.gov/water/checkbox to learn more. Your contribution will not affect service fees.

Tucson Water bill with check box program highlighted

Check box currently has over \$40,000 balance



2012 Atturbury Wash Project

- 1 acre restoration & demonstration site
 - 25+ native trees & shrubs planted to connect habitat w/ wash
 - 3 basins dug & raised path created to capture runoff and create walking path



Just Announced!

2013 C2E Community Enhancement Projects

C2E Program Goals

- Enhance quality of life
- Restore ecosystems
- Improve biodiversity

Funding Details

- \$31,000 investment from check box
- 4 one-year projects
- Publicly accessible demo sites
- Visible community assets



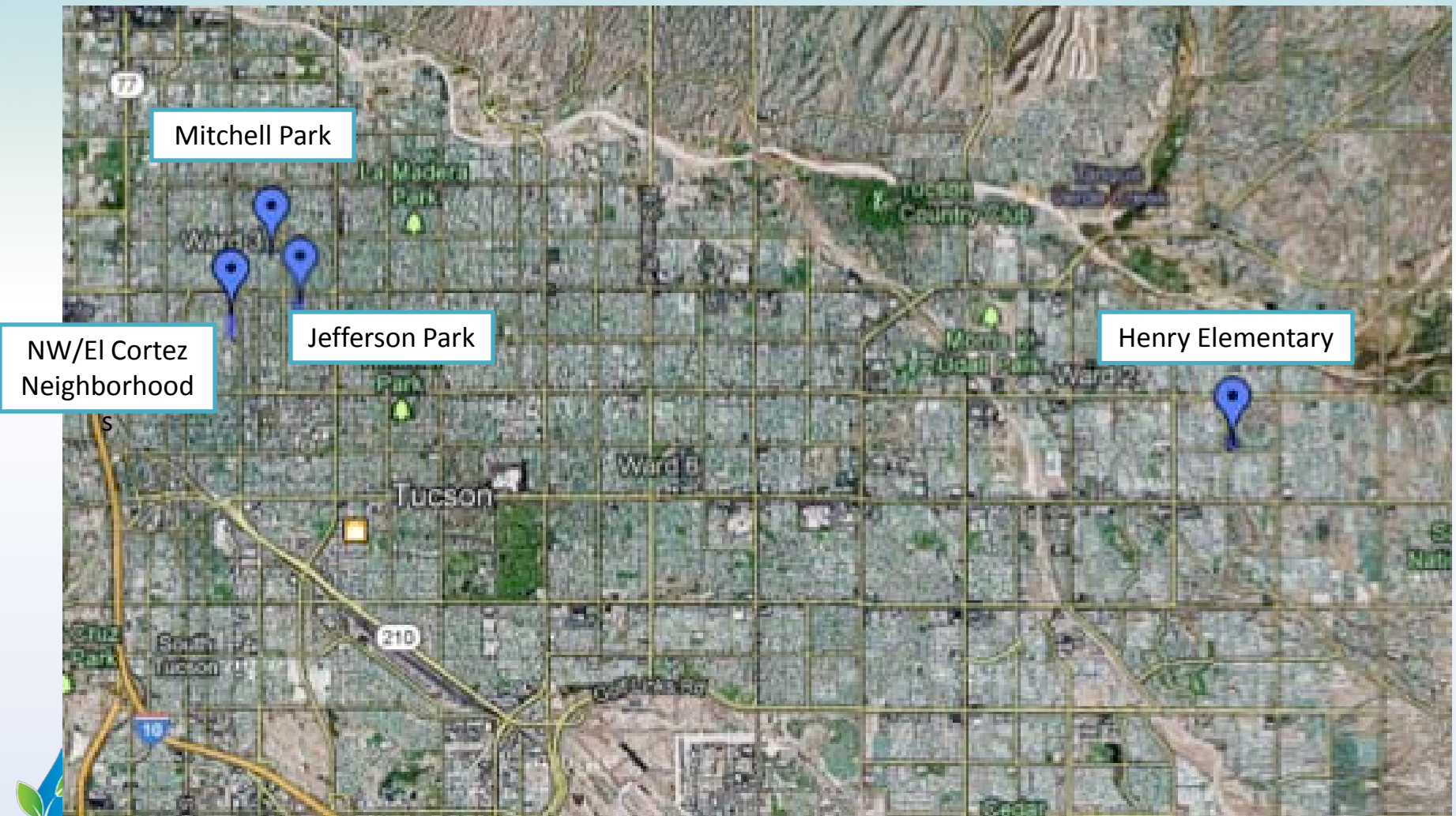
2013 C2E Projects

1. *Henry Elementary WINS! – Wash Improvement and Neighborhood Sustainability* submitted by Henry Elementary
2. *1st Ave./Seneca Greening and Beautification Project* submitted by the Northwest and El Cortez Neighborhoods
3. *Mitchell Park Wildlife Habitat & Green Infrastructure Project* submitted by the Mountain/1st Ave Neighborhood
4. *Jefferson Park's Vine Ave. Green Corridor* submitted by the Jefferson Park Neighborhood



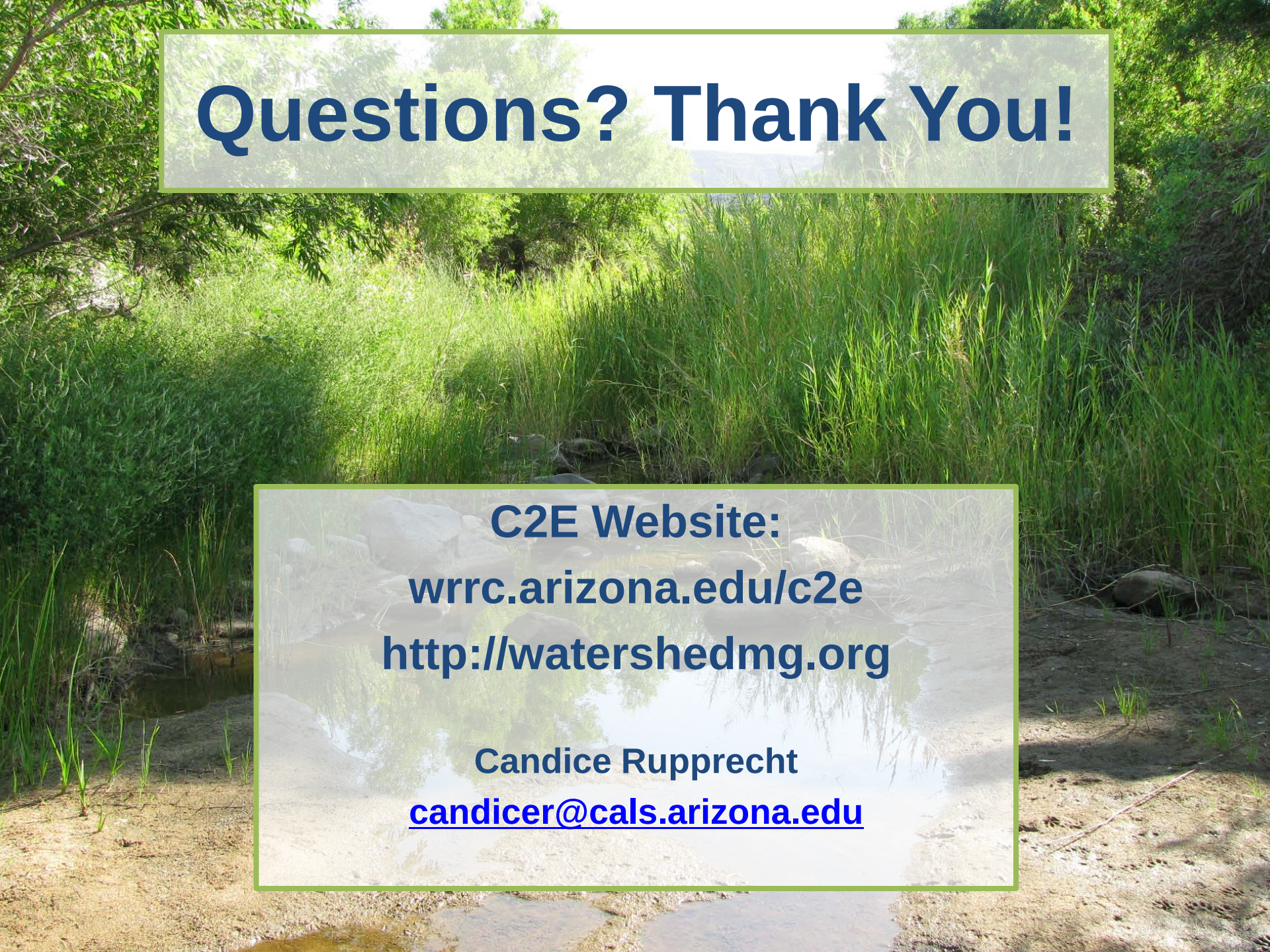
Photo credit: WMG

C2E Project Locations



Tucson C2E – 3 Ways to Engage!

- **Save water:** Become a C2E participant. Sign-up at www.watershedmg.org/c2e
- **Donate:** On the Tucson Water check box or online at www.watershedmg.org/c2e
- **Become a leader – Apply for a grant:** Neighborhood-scale projects to improve the watershed and community



Questions? Thank You!

C2E Website:
wrrc.arizona.edu/c2e
<http://watershedmg.org>

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