



### C2E Background and Project Eligibility Information

#### **What is *Conserve to Enhance*?**

The Tucson *Conserve to Enhance* program (C2E) seeks to connect water saved through household and commercial water conservation with environmental enhancement projects that have a need for water in the Tucson area. By connecting water conservation to environmental enhancement, C2E provides a new, unique motivation for water conservation and raises awareness about water resources and environmental projects.

#### **How does it work?**

*Conserve to Enhance* raises money in two ways: participant donations and the Tucson Water check box on the water bill.

*Conserve to Enhance* works when conservation-minded residents and business owners conserve water and dedicate the cost savings from their reduced water use to the C2E Fund. For example, a homeowner in Tucson who previously used municipal water to irrigate her landscape installs a rainwater harvesting system capable of storing 2,400 gallons of rainwater per storm event (average one-inch of rain). By using the captured rainwater on her landscape instead of municipal water for irrigation, over the course of one year (approx. 12" of rain) this homeowner would conserve approximately 28,800 gallons of municipal water. This would cause her water bill to drop by about \$3.80/month, which she could donate to the C2E Fund.

Alternatively, any Tucson Water customer can choose to donate the to the C2E Fund through the "Open Space and Riparian Enhancement Check Box" on their monthly utility bill that will be directed to the C2E Fund through a formal request process to City of Tucson Mayor & Council.

#### **What type(s) of projects are funded?**

**Community Enhancement Projects:** These types of projects should directly benefit a neighborhood's natural areas and waterways through preservation or restoration practices. Practices include passive rainwater harvesting in common areas, green infrastructure to mitigate stormwater runoff, native vegetation restoration and soil conservation and erosion control in or near washes. Proposals will be accepted from a group of three or more individuals from separate, unrelated households (adopted from Pro Neighborhoods guidelines). This group may be affiliated with a neighborhood organization, a school, a church or other type of local organization that has a physical presence in the proposed area of enhancement. Community Enhancement Projects must be consistent with the C2E goals and located within Tucson Water's service area. Community Enhancement Projects are generally funded in the range of \$2,500-\$7,500, not to exceed \$7,500.

**Restoration Projects:** These types of projects should directly benefit a waterway or wash in need of water resources to preserve or enhance a local ecosystem. Activities can involve purchasing short-term water for plant watering/establishment, installing irrigation systems as part of planned maintenance, extending water conveyance systems and rainwater harvesting. Proposals will be accepted from agencies and organizations with the technical expertise to design and successfully implement the proposed work. Restoration Projects must be consistent with the C2E goals and located within or near Tucson Water's service area or in high visibility areas utilized by Tucson Water customers.

**Non-negotiable project components:** All C2E funded projects must meet the following application criteria; submissions not meeting these criteria will be automatically disqualified.

- The proposed project must be located in the Tucson Water service area; a map of the Tucson Water service area can be found here: <http://www.tucsonaz.gov/water/service-area-policy>.



## Tucson Conserve to Enhance Program Information

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- The project site must have a demonstrated connection to a designated Pima County urban wash or riparian area.
- The requested C2E funds as outlined in the proposed project budget may not exceed \$7,500.
- All land owners affected by the project site must sign a letter of support for the proposed project prior to submitting your C2E grant application. Include a copy of these letter(s) with your application.

**2014 C2E funding will focus primarily on Community Enhancement Projects.** *In 2012 a riparian restoration project was completed at Atturbury Wash and in 2013 three community enhancement grants awarded funding to Henry Elementary, Northwest/El Cortez Neighborhoods, and Mountain/1st Avenue Neighborhood.*

Visit [www.conserve2enhance.org](http://www.conserve2enhance.org) to learn more about these previously funded project sites.



### **How much water could be saved in Tucson?**

Assuming 5% participation from Tucson Water customers, C2E participants could save over 1,000 acre-feet (325,851,000 gallons) of water annually.

### **How much money can be generated through the Tucson C2E program?**

A mature program could produce annual revenues of over \$500,000 per year to for local environmental enhancement projects (based on a 5% participation rate in the Tucson Water service area and an average donation of \$5/month).

### **What is the general timeline for collection and disbursement of funds?**

We already have contributions from participant and check box donations and over the last two years we have invested \$43,000 in enhancement projects; \$12,000 at Atturbury Wash in 2012 and \$31,000 to three Community Enhancement Projects in 2013. We have a goal of funding \$20,000 in projects per year, through a combination of *Conserve to Enhance* donations and Tucson Water check box funds.

### **Who will oversee the funds?**

A local advisory board has been established to select which project sites will receive funding. The advisory board will also provide financial oversight and accountability.

### **How can I apply for supplemental funding to support my riparian restoration project or environmental enhancement project?**

Fill out the application (either hand-written or electronically) and email it to [info@conserve2enhance.org](mailto:info@conserve2enhance.org) by **April 11, 2014**. Mail-in applications can be mailed to 350 N. Campbell Ave, Tucson, AZ 85719 and must be received by the deadline. The advisory board will evaluate the applications in May 2014 and finalists will be asked to host a project site tour. The board will make its selection in June 2014 and ***projects can begin July 2014***.



## Additional Information for Community Enhancement Projects

### Application Guidelines and Instructions

#### **Community Enhancement Projects Description:**

These types of projects should directly benefit a neighborhood's natural areas and waterways through preservation or restoration practices. Practices include passive rainwater harvesting in common areas, green infrastructure to mitigate stormwater runoff, native vegetation restoration and soil conservation and erosion control in or near washes. Proposals will be accepted from a group of three or more individuals from separate, unrelated households (adopted from Pro Neighborhoods guidelines). This group may be affiliated with a neighborhood organization, a school, a church or other type of local organization that has a physical presence in the proposed area of enhancement. Community Enhancement Projects are generally funded in the range of \$2,500-\$7,500.

Community Enhancement Projects must be located within Tucson Water's service area, and help to advance the C2E program vision of enhancing quality of life, restoring ecosystems and improving biodiversity. Specifically, C2E works to:

- Increase native vegetation near washes and rivers to expand habitat, cool temperatures, and slow and sink stormwater
- Increase soil moisture near washes/streams to support native habitat plants
- Reduce runoff and associated pollutants that ends up in washes
- Beautify areas near neighborhood washes to create a community resource
- Reduce erosion and sedimentation in smaller tributaries

C2E will fund projects that make on-the-ground impacts in our community. Conserve to Enhance will fund the following types of projects:

- Green Infrastructure along streets, parking lots, parks, or public spaces like churches and schools
  - Priority to projects within 400 feet of neighborhood wash
  - Priority to projects in areas of concentrated flow or flooding
- Habitat restoration along/near washes
- Restoration in tributary washes or upland drainages

#### **Required Proposal Contents:**

A successful proposal will answer all of the questions and will include all required attachments. The list of required attachments is on the front page of the application and includes:

1. Complete & signed application (either electronic or paper copy is fine)
2. Map(s) of the project site and design diagram
3. Project Budget
4. Project Planning Timeline
5. Letters of Support (if needed)

All C2E funded projects must meet the following application criteria; submissions not meeting these criteria will be automatically disqualified.

- The proposed project must be located in the Tucson Water service area; a map of the Tucson Water service area can be found here: <http://www.tucsonaz.gov/water/service-area-policy>.
- The project site must have a demonstrated connection to a designated Pima County urban wash or riparian area.
- The requested C2E funds as outlined in the proposed project budget may not exceed \$7,500.
- All land owners affected by the project site must sign a letter of support for the proposed project prior to submitting your C2E grant application. Include a copy of these letter(s) with your application.

### **Proposal Deadline: April 11, 2014**



### Section 1: Project Description

This section focuses on how the proposed project will improve the environment. Specific points to consider are:

1. Stated site need and project relevance
  - a. The project should directly address one of the overarching C2E goals including enhancing quality of life, restoring ecosystems and improving biodiversity.
  - b. Describe the ecosystem and whether the project protects an existing resource or restores a degraded resource, and how green space, or natural/undeveloped landscapes will be benefited.
  - c. If the project is being developed and implemented in phases, please explain the various phases, indicating which phase(s) you would like us to consider for potential funding. This can also be explained in the Project Timeline.
2. Connection to an urban wash or riparian area
  - a. A demonstrated physical connection to (or within 400 feet) of a designated Pima County urban wash or riparian area is a priority for C2E project sites. The following websites can be used to determine connections to your project site: <http://maps.tucsonaz.gov/stormwater/> or <http://gis.pima.gov/maps/mapguide/>
3. Project outcomes aligned with C2E goals
  - a. Select as many outcomes as you anticipate your project achieving.
  - b. Additional explanation of how the proposed project will address the selected C2E goal(s) is allowed below the list of goals. Be clear in which project components address which outcomes.

### Section 2: Water Resources

4. Water conservation practices clearly described and reasonable
  - a. Water conservation practices should be implemented at all phases of the project, including water use and water storage. Examples include capturing stormwater, controlling runoff, using correct watering rates, improving irrigation systems, using temporary irrigation/hand-watering or removing irrigation systems.
  - b. If possible, estimate of how much water will be conserved throughout the project period.
5. Onsite water resources improved to enhance natural environment
  - a. The project should demonstrate how water will be used to meet the project goals and enhance the surrounding natural environment. This includes how water will be captured, stored or retained on the project site to improve vegetation health and wildlife habitat.
  - b. If possible, estimate how much water will be captured/stored onsite.

### Section 3: Community Investment

6. Organizational Support for project
  - a. Support from local organizations and individuals must be clearly stated in the proposal, including how each organization and individual will support project planning, oversight, fund management, volunteer coordination and/or project sustainability efforts.
  - b. Organizations include government agencies, NGOs, neighborhood associations, schools, churches, etc.
  - c. A minimum of three partners, including organizational and individual partners, must be included in the application to indicate significant community support.
  - d. Partners may offer in-kind services that can leverage funding. Local organizations and agencies can provide additional opportunities for program marketing and funding to increase overall C2E capacity. Proposals that include additional or leveraged funds and in-kind donations will be favorably ranked. These services can be described here and should be included in the Budget.
7. Project Outreach
  - a. Neighborhood engagement & volunteer “on the ground” labor commitment
    - i. Include plans to engage as many local community members/neighbors as possible to educate them about the project and involve them in the on-the-ground work.
    - ii. Volunteers are an important component of the Community Enhancement Projects and volunteer contributions to the project should be explicitly included.
  - b. C2E participant commitment within targeted area or by members of organization applying



## Additional Information for Community Enhancement Projects

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- i. The projects receiving the highest scores will include plans for involving neighborhood organizations and community members in participating in the C2E program and utilizing the C2E Water Use Dashboard (to be released in February 2014 at [conserve2enhance.org](http://conserve2enhance.org))
8. Maintenance plan
  - a. A plan should be in place for maintaining the project site after C2E has ended. Please describe how the site will be cared for, if needed, including who will weed, trim vegetation, pick up litter, etc.

### Section 4: Project Site Map and Design Diagram

9. Site Map & Design Diagram
  - a. Identification of the major crossroads and project boundaries (including property ownership)
  - b. Proximity to adjacent wash(es) and/or riparian area(s), including distance (see websites below)
  - c. Site accessibility information (public access points and project visibility)
    - i. The project site should be accessible for the public to visit and for interested parties to view the site and gather ideas that can be applied in other areas of the community.
    - ii. Signage about the project will be required; C2E will work with you to design the signage and will need to approve final signage before it is created and installed. C2E will cover signage costs.
  - d. Site plan design diagram that clearly identifies primary proposed features (vegetation, earthworks, curbcuts, etc.)
    - i. Designs can be hand-drawn or with computer software, but we strongly encourage you to seek professional consultation to help with your design
  - e. Online mapping services:
    - i. Google Maps
    - ii. <http://maps.tucsonaz.gov/stormwater/>
    - iii. <http://gis.pima.gov/maps/mapguide/>
  - f. Tucson Water Service Area
    - iv. C2E funding comes from the Tucson Water check box, as well as C2E participants, so projects need to be within Tucson Water's service area.
    - v. Service area map:  
[http://cms3.tucsonaz.gov/sites/default/files/water/080410\\_map\\_service\\_area\\_policy.pdf](http://cms3.tucsonaz.gov/sites/default/files/water/080410_map_service_area_policy.pdf) or  
<http://gis.pima.gov/maps/mapguide/>

### Section 5: Project Budget

You can fill out the budget by hand within the application or use the Excel C2E Project Budget Template. The basic budget is split into three categories: Direct Environmental Benefits, Ancillary Project Needs and Outreach/Education. Since C2E is investing in projects that yield on-the-ground impacts, it is important that most project expenses are considered in the Direct Environmental Benefits category. Ancillary project needs should not exceed 20% of the total budget.

C2E will pay for:

- Contractors for planning, designing, and installing features
- Permits
- Materials: rocks, mulch, plants
- Curb cuts
- Temporary watering and irrigation
- Signage
- Maintenance

Typical Project costs:

- 1 block Green Infrastructure: \$2,000
- Design/Build Contractors: \$50 - \$100/hr
- Excavator: \$100/hr
- Right-of-way permit/excavation permit: \$50/block



## Additional Information for Community Enhancement Projects

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- Curb Core: \$50
- Curb Cut: \$200
- Chicane: \$5,000
- Traffic Circle: \$10,000
- One sign: \$250

Additional considerations for putting together a budget include:

- Fiscal agent identified & verified
  - No matter what type of organization you are, you need to have your own fiscal agent that will accept and manage funds for this project, including payment of any sub-contractors, as well as reimbursement requests to the C2E fund.
  - If you are a group of individuals, we recommend seeking a local non-profit organization willing to act as a fiscal agent. It may be that one of the project partners is willing to act in this capacity and the organization could offer this in-kind service as matching time.
  - Grant payments will be made on a reimbursable basis, unless other arrangements need to be made due to financial constraints.
- Ancillary project needs don't exceed 20% of total project budget
  - There will be some need for budget items like permits and tools that are not considered a direct environmental benefit. Projects may also want to provide some funding to students or job training opportunities for community members, so stipends or the like may be included in this category.
- Matching support
  - Although not required, including matching support and funds will help projects score higher. Match can be in the form of neighborhood residents volunteering their time, a local business donating supplies or design expertise, etc.
  - Matching support allows for more individuals to be involved and more work to be done.
  - Matching support also shows greater community support, which is an important part of C2E projects.
  - Volunteer hourly rate to value volunteer service: \$20.08 based on Independent Sector's Value of Volunteer Time for Arizona ([http://www.independentsector.org/volunteer\\_time](http://www.independentsector.org/volunteer_time))
  - Donated hand tools are valued at \$1/hour of volunteer use time. This includes shovels, gloves, litter grabbers, reflective vests rakes, hula hoes, pruning loppers, pruning hand clippers, etc. (Ex: a shovel donated for 5 hours of volunteer use at \$1/hour will provide a \$5 match)
    - If larger/more sophisticated tools or equipment are being donated you may use an industry supported per hour estimate (please provide a source/justification for your estimate) or contact the C2E grant team for assistance.
- Requested funds compare to industry standards
  - The supplies and contract work needed to accomplish each project will vary, however there are industry standards for prices on supplies, as well as hourly rates for different types of work. Proposed budget items should be within these industry standards.
- Appropriate scope of work for budget
  - The scope of work should match the total budget requested for the project. Projects that propose more work than seems possible for a budget may receive lower scores.

### Section 6: Project Planning Timeline

As with the budget, you can fill out the planning timeline by hand or use the Excel C2E Project Planning Timeline Template. The timeline is used to help applicants plan all the steps that need to happen and at what time during the year to have a successful project completed at the end of one year, or summer 2015. You will see that we have included tasks that will be expected of any project we select for funding, but you will need to add additional tasks like ordering materials, clearing invasive plants, preparing/contouring site, planting native vegetation, appropriate watering schedules, educational events/tours, etc.



## Additional Information for Community Enhancement Projects

### Project Evaluation Criteria Checklist

Please use this criteria checklist to ensure that you have answered all of the questions in the application completely. These evaluation criteria will be used to evaluate all proposals received.

<b>Narrative (50 points)</b>		
<b>Section 1: Project Description</b>		
Site need is clearly stated and relevant to local issues (Q1)		
Proposed project improves ecosystem (Q1)		
Connection with urban washes & riparian areas (Q2)		
Project outcomes aligned with C2E goals (Q3)		
<b>Section 2: Water Resources</b>		
Water conservation practices clearly described and reasonable (Q4)		
Onsite water resources improved to enhance natural environment (Q5)		
<b>Section 3: Community Investment</b>		
Organizational support clearly described and sufficient for project plan (Q6)		
Outreach clearly described including neighborhood engagement & education and volunteer commitment (Q7)		
C2E participant commitment (Q7)		
Maintenance plan is clearly described & effective (Q8)		
	<b>Narrative Subtotal</b>	_____/50
<b>Section 4: Site Map &amp; Design Diagram (25 points) (Q9)</b>		
Site map includes project area boundaries and design clearly depicts relation to major intersections		
Proximity to wash/riparian area clearly illustrated		
Site is publicly accessible & highly visible		
Design diagram clearly illustrates project components		
Design diagram illustrates site need and project benefits		
	<b>Map Subtotal</b>	_____/25
<b>Section 5: Budget (20 points)</b>		
Fiscal agent identified & verified		
Ancillary project needs don't exceed 20% of total project budget		
Budget requests are reasonable and within category limits		
Appropriate scope of work for budget		
	<b>Budget Subtotal</b>	_____/20
<b>Section 6: Timeline (5 points)</b>		
Tasks are clearly defined & timeline reasonable	<b>Timeline Subtotal</b>	_____/5
Optional: Matching support (funds and volunteer time) included, innovative project design, or demonstrated exceptional value to community	<b>Bonus (up to 5 points)</b>	
	<b>Total Project Score</b>	_____/100





## Additional Information for Community Enhancement Projects

### Frequently Asked Questions – FAQ's

#### ***What types of projects will C2E fund?***

- Green Infrastructure along streets, parking lots, parks, or public spaces like churches and schools
  - Prioritize projects within 400 feet of neighborhood wash
  - Prioritize projects in areas of concentrated flow or flooding
- Habitat restoration along/near washes
- Restoration in tributary washes or upland drainages

#### ***What types of projects and work will C2E NOT fund?***

- Grey infrastructure
- Bank stabilization with concrete
- Water harvesting on residential properties
- Green infrastructure far away from washes/streams
- Tree planting projects that don't incorporate rainwater or stormwater harvesting
- Projects that use non-native vegetation
- Projects that only do education or design

#### ***Who can provide me with information on necessary permits for my project?***

##### Rainwater Harvesting

City of Tucson Planning and Development Services Department (<http://cms3.tucsonaz.gov/water/rwh-permits> or 520-791-5550)

- A permit is not required to install a passive water harvesting system.
- A permit is not required to install water tanks supported directly on grade of up to 1,000 gallons regardless of aspect ratio.
- A permit is not required to install water tanks supported directly on grade between 1,000 gallons and 5,000 gallons when ratio of height to diameter or width does not exceed 2:1.
- A permit is required to install water tanks exceeding 5,000 gallons.
- Note that permanently installed electrical/pumping equipment incidental to tanks, regardless of size, shall require a building permit.
- Any cistern with over a 2:1 (height:width) ratio or any cistern containing more than 5,000 gallons requires structural review and a building permit.

##### Greywater Systems

City of Tucson Planning and Development Services Department (<http://cms3.tucsonaz.gov/water/gray-water> or 520-791-5550)

- A permit is not required to tap into a pre-existing gravity stub-out from the washing machine.
- A permit is required to modify drainage plumbing/piping from any fixture.
- Homeowners may perform plumbing work on their own residence. Otherwise, licensed contractors must be used.

##### Street side Green Infrastructure

City of Tucson Transportation Department, Landscape Division (<http://cms3.tucsonaz.gov/transportation/landscape> or 520-791-4259)

- Most GI projects will require an Excavation Permit (<http://cms3.tucsonaz.gov/docs/ROWApp.pdf>)
  - From the main Landscape page, go to the Residential section, open the *Permits, Curb Cut and Core Drill* word document for more information
  - Excavation Permits are usually \$50, payable to the City of Tucson
- For more information on Green Infrastructure projects and ideas, download the Watershed Management Group's *Green Infrastructure Manual* (<http://watershedmg.org/green-streets>) or the Green Infrastructure for Public Right-of-way brochures available in the Residential section of Landscape website listed above.



## Additional Information for Community Enhancement Projects

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- Under Landscape Architects section, see the *Active Practice Guidelines – Landscape Design Guidelines* pdf (<http://cms3.tucsonaz.gov/files/transportation/landscape/APG-25.pdf>) for some additional information on landscape design with green infrastructure.

### ***What experts does C2E recommend for help on our project?***

- Organizations/Individuals for Design-Build Projects:
  - Watershed Management Group, Catlow Shipek, watershedmg.org, 520-396-3266
  - Tucson Audubon, Kendall Krossen, tucsonaudubon.org, 520-629-0510
  - Stream Dynamics Inc, Van Clothier, streamdynamics.us, 575-590-0549
  - Dryland Solutions, Craig Sponholtz, drylandsolutions.com, 505-577-9625
- Design
  - Wheat Scharf, wheatscharf.com, 520-884-7911
- City /County
  - City of Tucson, Department of Transportation, Gary Wittwer, 520-400-2645
  - City of Tucson, Department of Conservation and Sustainable Development
  - Pima County Flood Control

For additional questions, please email: [info@conserve2enhance.org](mailto:info@conserve2enhance.org). Good luck!