

# The Green Initiative Fund

University of California, Berkeley

## 2012 Grant Application

### General Information

**Project title: Water Conservation in the Greek Community**

**Sponsoring Organization/Fiscal Agent: None**

*For Sponsoring Organization/Fiscal Agent, please submit a completed "Project Approval" form. Project Approval forms will not be counted toward your application page limit.*

**Total amount requested from TGIF: \$29,250**

**Amount Requested as:**  Grant  Loan *(Estimated payback period of loan in months: \_\_\_)*

**How did you hear about this grant?**

Greening the Greeks applied last year and received funding for a waste reduction project, and worked with Green Campus to coordinate the TGIF-funded Green Cup competition.

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### Project Description

**1. Please give a brief history of this project/your organization. Describe the overall purpose (goals) of the project.**

Greening the Greeks is an ASUC-recognized and funded student group that works to implement and improve sustainability practices in the UC Berkeley Greek community. The Greek community should be a particularly high priority for sustainability focuses for several reasons. First, the entire Greek community makes up 12% of the student population. Because both the Interfraternity Council and the Panhellenic Council, the governing bodies of the fraternity and sorority systems, respectively, both require that all houses maintain Sustainability Chairs as active officer positions, all chapters are influenced by the actions and programs Greening the Greeks implements, particularly educational programs. The housed chapters, which comprise roughly 1650 students (6.5% of the population) between 41 houses, stand to make especially significant improvements in their sustainability practices. Due to a combination of structural and cultural influences, Greek chapters are, on average, incredibly inefficient in their use of water, energy, and physical resources, and in their reduction and

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diversion of waste. They are large, communal living situations with established and efficient hierarchical organizational structures. They purchase and consume food, energy and water in large quantities, and produce large amounts of waste. In Fall 2011, Greening the Greeks simultaneously implemented recycling and composting in the majority of Greek houses, and coordinated an energy conservation competition, both of which achieved positive and encouraging results.

One remaining issue that has yet to be addressed in Greek houses, and the next logical problem to tackle, is water waste. Greening the Greeks plans to launch an unprecedented effort to reduce water consumption in the Greek community during the Spring 2013 semester. Many Greek houses have not had any sort of water conservation education program, and the appliances that use water in the houses—showerheads, faucets, toilets, dishwashers and washing machines—have not been made to be as efficient as they could be. These two factors, in combination with the large population of students that lives in these houses, lead to the unnecessary and excessive consumption of enormous quantities of water. By the end of the competition, Greening the Greeks aims to have involved 25 houses and seen an average of 15% overall water usage reduction.

**2. What will be the process for implementing your project? Describe the key components and steps of your project.**

The water reduction effort will manifest as a competition between Greek chapters, similar to the TGIF-funded Green Cup Competition, in which they compete to reduce their water consumption per capita to the lowest level. The competition will take place during April 2013. (This date differs from the date proposed in the grant abstract. After much consideration, Greening the Greeks has decided to postpone the Water Conservation Competition until Spring 2013 in order to allow us to run the Green Cup, funded by Green Campus, again in Fall 2012. Hosting the Green Cup in the fall again will allow Greening the Greeks to use all of the data collected in the first Green Cup competition, significantly reducing the amount of data collection necessary.) The Water Conservation Competition will be separated into two divisions: the Inter-Fraternity Council (IFC) and the Panhellenic Council (PHC).

The competition will be tested with a one-month pilot program during February 2013. Two parallel competitions will take place between 2-3 fraternities and 2-3 sororities. The three interns hired for the semester will be in place to support the pilot program. Green Campus has provided a recommendation for showerheads based on their interactions with RSSP, which will be tested along with several others during the pilot to determine which is best for the general competition. Green Campus has offered broad collaborative assistance, and will also assist in distributing a survey to the pilot chapters about their water usage reduction. The education and installation schedule for the remaining competition will be adjusted based on these survey results, as well as the empirical reductions demonstrated by the water bills.

The first step for both the pilot and the general competition will be the outreach and participation generation. This will occur during Fall 2012, and will entail designing a project pitch, reaching out to the Sustainability Chair at every Greek chapter, and pitching the project. This will be done via email and at various Greening the Greeks meetings. Participating chapters

will obtain their water bills from their housing corporations or directly from East Bay Municipal Utility District (EBMUD) for the month of April, as well as for February for the chapters participating in the pilot. This information will be used to measure water reduction over the course of the competition.

During Fall 2012 and early Spring 2013, EBMUD will be conducting water audits for eligible Greek houses. A water conservation professional from EBMUD will come to participating chapter houses and test toilets, showers, sinks and other water consumption areas for efficiency, and provide free water conservation items to address inefficiencies. TGIF interns hired and supervised by the Greening the Greeks Co-Presidents will accompany the professional to provide educational material and photograph the process, as well as ensure that chapters comply with any instructions that require action after the representative leaves. EBMUD will not service houses that have received free materials within the last three years; a representative is currently checking the list of potential participants for eligibility, and has not yet responded with results. These free items will offset the conservation item purchases requiring TGIF funding. However, the representative expressed doubt that all of the houses would be able to be serviced within the time period, and that EBMUD would be able to provide all of the items each house would need, so funding for these items is still quite important.

For this competition, Greening the Greeks will launch a multi-faceted educational program about water efficiency, focusing on the particular significance of water conservation in California. The educational program will unfold through presentations given by Sustainability Chairs during February and April 2013 to the chapters they represent, and attractive, interesting, and strategically placed signage in the chapter houses. After the chapters have begun their educational campaigns, TGIF interns will install high-efficiency appliances and accessories (sink aerators, low-flow showerheads and dual-flush toilet adapter kits) in participating chapters that were not eligible or serviceable by EBMUD water audits. The interns will photograph the installations and check that they are in place mid-competition. The interns will also use dye tabs to check for leaks in toilets as well as implement a system for members reporting repairs in each house.

After the conclusion of the pilot, Sustainability Chairs of the participating chapters will send the Greening the Greeks competition project head the April water bill, which will be used to calculate the results and announce the winner. This success of the pilot will be reported to TGIF, and used to determine whether and to what scale to run the full competition in April. The winner of each division of the pilot will be rewarded with \$500 in funding to put toward a water-reduction project or appliance of their choosing, such as a water-efficient washing machine or dishwasher, or a rainwater capture system. Similarly, the winner of the competition will win \$2000 for the same purpose.

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## **Metrics and Measurability**

- 3. Which aspects of campus sustainability will your project address, and why is addressing these sustainability components important? Does your project tie into any current campus sustainability initiatives or help the campus reach specific sustainability goals?**

**How does your project go above and beyond the requirements already mandated by UC Berkeley and/or state law?**

Our project primarily addresses the issue of excessive, wasteful water consumption, from both a technological and a behavioral standpoint. Addressing overconsumption of water is critically important as freshwater supplies in California and across the world are becoming smaller and smaller compared to the populations that are drawing on them. Education about behavioral and technological choices is necessary in order to ensure that proper management of available freshwater resources is a priority. These behavioral changes will cross into water conservation practices on campus, which will help the campus meet its CalCAP goal of reducing water consumption, and reducing the energy used to heat water on campus. However, most of the improvements will be seen off campus in the chapter houses. There are currently no City of Berkeley laws limiting water usage, so this project goes above the mandated conservation activities.

- 4. What quantifiable sustainability impacts will your project have and what will be the cost savings to the campus? How will you measure these impacts after your project is implemented in order to see if you have met your goal(s)?** *Please also use the CalCAP Statistics spreadsheet for your calculations and submit it separately from your application. The [2010 Campus Sustainability Report](#) contains additional information on campus resource usage.*

The impacts of the water conservation will be measured through the per capita reductions visible in the water bills. April 2011 and 2012 water bills will be collected from all participating houses in addition to house resident numbers to establish per capita baselines for each house. After the competition, April 2013 water bills and live-in numbers will be collected to calculate the per capita reductions in each house. The winners of the competition will be the sorority and fraternity that can reduce their per capita water usage to the lowest level. The cost savings to the campus will be minimal, and as they are not the focus of the project, they will not be measured. The cost savings to the fraternities and sororities, however, will be apparent on the water bills, and will be measured and reported.

Additionally, behavioral changes will be measured through polls and surveys administered to the participating chapters during and after the competition.

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## **Project Education, Outreach, and Publicity Plan**

*Note: This section is about letting the campus know what your project has accomplished after you've met your project goals. If outreach and education are the primary goals of your project and you have sufficiently answered these questions in the Project Description and Metrics & Measurability sections, you may leave these questions blank.*

**5. What is your plan for publicizing your project on campus? In addition to TGIF, who will you report your information to?**

To publicize our project on campus, Greening the Greeks will be participating in all major sustainability events such as semester sustainability forums and ASUC Earth Week. Additionally, Greening the Greeks will collaborate with other sustainability groups through ECO (Environmental Clubs and Organizations). Greening the Greeks will submit articles to the Daily Cal, the Berkeleyan, and the Office of Sustainability's Bright Green Newsletter to publicize the success of the competition.

To publicize our project within the Greek community, Greening the Greeks will utilize Panhellenic and IFC monthly newsletters, in addition to periodic Sustainability Chair Roundtable meetings and regular Council meetings, to inform and update the Greek community regarding the progress of the waste reduction efforts. Greening the Greeks will be recruiting new members and publicizing our efforts at other Greek-wide events. Overall, the infrastructure for sustainability within the Greek community regarding regularly appointed sustainability chairs has vastly improved and will greatly assist with publicity efforts.

**6. Do you have any specific outreach goals? If so, how will they be measured?**

Yes, our specific outreach goals are to improve publicity within Greek community such that the majority of Greek community members are aware of Greening the Greeks' waste reduction initiatives and to continue our involvement with campus sustainability efforts. To measure progress towards these goals, we will gauge awareness of waste reduction efforts through chapter polls administered by sustainability chairs and recording attendance at campus sustainability functions to ensure that Greening the Greeks is consistently represented.

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**Project Approvals** *(Projects will not be considered without the relevant approvals).*

**7. Do any aspects of your project require approval from an entity on or off campus? If so, please explain. (For example, a project which affects campus grounds or buildings must be approved by the Vice Chancellor for Facilities Services) For each described entity, please submit a completed "Project Approval" form. Project Approval forms will not be counted toward your application page limit.**

Our project requires approvals from Rachel Garza of EBMUD, who will be conducting the water audits, from Morwenna Rowe from Green Campus, with whom we will be coordinating the laundry education component of the project using Green Campus's End the Cycle module, and from Robert Jittrikawiphol, our ASUC account advisor who will be handling the grant. The sustainability chairs of the houses that will be participating in this will be different from those currently in place; as they have not yet been appointed, it is impossible to obtain the approvals. Similarly, different head IFC and PHC sustainability chairs will be elected for the Spring 2013 semester, so those approvals cannot be obtained. However, the project will be run almost entirely by Greening the Greeks, and it is required that all sustainability chairs, including the IFC

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and PHC head sustainability chairs, work directly with Greening the Greeks and assist in the projects that it implements. As this is directly within the purview of these positions, their approval is implied. The only variable here is how many sustainability chairs will sign on to participate in the project. The pilot, with just three fraternities and three sororities and ample incentive to participate, will definitely generate full participation. The TGIF committee has indicated that it wanted to consider funding the pilot and then decide whether to fund the entire competition, based on the success of the pilot. By the time this consideration is occurring, the participation generation for the full project will be complete, and the number of participating sustainability chairs will be available to consider alongside the success of the pilot.

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## Project Team

- 8. Please identify the project leader(s) as well as the member of the project team responsible for reporting TGIF project updates (if different from the project leader). For each entity listed, please submit a completed "Project Approval" form. If you want to list additional team members, please add the entries. Additional team member information will not count toward your page limit.**

<b>Name</b>	Patrick Smith
<b>Title and department</b>	Co-President of Greening the Greeks
<b>Project Role</b>	Project coordinator until TGIF interns are appointed
<b>Phone</b>	9165954191
<b>Email</b>	<a href="mailto:Pat.smith@berkeley.edu">Pat.smith@berkeley.edu</a>
<b>Relevant experience or knowledge for this project</b>	Outreach and Greening the Greek leadership experience. Participated in and helped coordinate Green Cup.

- 9. If your project team is partnering with other organizations, departments, individuals, or other stakeholders, please explain their involvement and include their contact information. For each named entity, please submit a completed "Project Approval" form. Project Approval forms will not be counted toward your application page limit.**

Greening the Greeks will be coordinating with EBMUD to organize water audits, starting April 9 2012, where Rachel Garza from EBMUD will inspect the appliances and fixtures in participating Greek houses and identify inefficiencies that can be fixed by switching to more efficient appliances and fixtures, making suggestions, and providing lower-cost fixtures free of charge.

Rachel Garza, EBMUD  
 EBMUD Water Audit coordinator  
 Email: rgarza@ebmud.com  
 Phone: (510) 986-7613

Morwenna Rowe  
 Green Campus  
 Email: morwennar@gmail.com

**10. How much of your project will students be involved in? What roles will students play in your project? Does your project target involvement of a certain section of the student body?**

The project, other than the EBMUD audit component, will be entirely student-run. Greening the Greeks is a student run organization, and the TGIF liaisons, appointed by Greening the Greeks, will be paid student positions. The entire project hinges on student education and behavioral changes in order to quantifiably reduce water usage levels. The project targets students that are members of Greek organizations, which make up more than 10% of the student population.

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**Budget**

**11. List all budget items for which funding is being requested under the appropriate category. Include cost and total amount for each item requested. Please be as detailed as possible. (Insert additional rows if necessary).**

*If you have price quotes from vendors or additional historical budget information for projects that have occurred previously or are on-going, please submit those with this application. Additional budget documentation will not be counted toward your application page limit.*

Item	Cost per Item	February Pilot Quantity	Pilot Total Request	April Competition Quantity	Total April Competition Request
<i>Equipment and Construction Costs</i>					
<i>Low Flow Showerheads (1.5 gallong/minute)</i>	<i>\$30.00</i>	<i>70</i>	<i>\$2,100</i>	<i>180</i>	<i>\$5,400</i>
<i>Faucet Aerators</i>	<i>\$10.00</i>	<i>150</i>	<i>\$1,500</i>	<i>300</i>	<i>\$3,000</i>
<i>Multi-flush toilet adapter kits</i>	<i>\$30.00</i>	<i>75</i>	<i>\$2,250</i>	<i>240</i>	<i>\$7,200</i>
<i>Publicity and Communication</i>					
<i>Signs for Water Conservation</i>	<i>\$10.00</i>	<i>30</i>	<i>\$300</i>	<i>100</i>	<i>\$1,000</i>
<i>Personnel and Wages</i>					

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<i>TGIF Intern/Liaisons</i>	<i>\$500 stipend</i>	<i>1 intern</i>	<i>\$500</i>	<i>2 interns</i>	<i>\$1,000</i>
<i>General Supplies and Other</i>					
<i>Installation Fee of Water Conservation Project - TGIF approved Project for winning chapter</i>	<i>Cap on installation cost</i>	<i>2 x \$500</i>	<i>\$1,000</i>	<i>2 x \$2000</i>	<i>\$4,000</i>
<b>TOTAL</b>			<b>\$7,650</b>		<b>\$21,600</b>

**12. If your project is implemented, does it require any on-going funding after its completion? What is your strategy for supporting the project after this initial period to cover replacement, operational, and renewal costs? (Note: TGIF is unlikely to provide funding beyond the initial year for ongoing projects).**

The project will not require any on-going funding.

**13. List all non-TGIF sources you are pursuing for funding, volunteer time, in-kind donations, etc.**

<b>Source/Description</b>	<b>Amount</b>	<b>Date Request submitted</b>	<b>Date received / date funding will be announced</b>
EBMUD: water audits and free water conservation items. The request is currently being processed	As many as possible	March 7, 2012	April 2012
ASUC: applied for funding for general signage and educational posters	\$900	March 13, 2012	Unclear
Allied HTC: received an unrestricted grant to use on any project we see fit	\$1000	March 17, 2012	March 24, 2012

## Project Timeline

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**14. Please complete the following table to describe your project timeline. List milestones chronologically. For the “Timeframe” column, please estimate how long each task will take to be completed. (Insert additional rows if necessary).**

Each one of the following items must be included on your timeline:

- Project start date
- Target date for project completion
- Date by which you will need the first installment of TGIF money
- Date by which you expect to have spent all TGIF funds
- Target date for submitting final project report to TGIF
- Any significant tasks or milestones along the way (For example: identifying an equipment vendor, begin installing equipment, finish installing equipment, etc.)

Task	Timeframe (# of wks to completion)	Estimated completion date
April 9, 2012: Project begins. Participation generation, outreach, water audit with EBMUD. Continues through end of Spring 2012 and through Fall 2012	41	Jan 14, 2013
October 1, 2012: First installment of TGIF money needed to begin pilot preparation (purchasing supplies for participating chapters that EBMUD will not cover, signage).	-	October 1, 2012
October 1, 2012: Begin advertising paid TGIF Liaison position, conducting interviews	5	November 1, 2012
November 1, 2012: Begin collecting all bills and live-in data for pilot	13	February 1, 2013
November 15, 2012: Design educational signage and presentations for sustainability chairs	2	November 29, 2012
December 14, 2012: Have confirmed all participants in pilot program	-	December 14, 2012
December 20, 2012: Place orders for fixtures and appliances	-	December 20, 2012
February 1, 2013: Begin Pilot	4	March 1, 2013
February 1, 2013: Begin outreach for general competition, generate participation amongst sustainability chairs	9	March 20, 2013
February 6, 2013: Host Sustainability Chair water conservation education session for chapters participating in pilot; all Sustainability Chairs and members of Greek community will be welcome to attend	-	February 6, 2013

February 10, 2013:Begin Pilot TGIF Liaison Audits to make sure equipment is still installed properly and in use, and to deliver signage	<3	March 1, 2013
March 1, 2013: Collect billing data from pilot and calculate reductions	2	March 15, 2013
March 18, 2013: Report results to TGIF in order to determine if general competition should be funded	-	March 18, 2013
*March 20, 2013 Place orders for fixtures for general competition	-	March 20, 2013
*April 1, 2013: Begin general competition	4	May 1, 2013
*April 10, 2013: Host Sustainability Chair water conservation education session for participating chapters; all Sustainability Chairs and members of Greek community will be welcome to attend	-	April 10, 2013
* April 10, 2013:Begin Pilot TGIF Liaison Audits to make sure equipment is still installed properly and in use, and to deliver signage	<3	May 1, 2013
*May 1, 2013: Collect billing data from participating chapters and calculate reductions	2	May 14, 2013
*May 14, 2013: Competition and results analysis completion	-	May 14, 2013
May 25, 2013: Final competition report results to TGIF	-	May 25, 2013
*September 1, 2013: Green Campus audit to select water reduction project to use prize funding for houses that won pilot and general competition	2	September 15, 2013
*October 1, 2013: TGIF approves projects	1	October 8, 2013
*October 15, 2013: Project installations begin	4	Mid-November
November 20, 2013: All TGIF funds have been used	-	November 20, 2013

**\*Contingent on funding approval for general competition**