Mentor name, title, and department (the mentor is the direct supervisor of the PSI intern):
Sarah Gilchrist, Energy Analyst, Energy Department

Proposed title for PSI intern position:
Water Conservation Coordinator

Please describe the role of the primary staff mentor:
The Staff Mentor will establish goals and create a structured plan for achieving the goals. The Mentor will provide technical guidance on data collection methods and safety precautions in the work environment. Additionally, the mentor will provide a source of knowledge in system wide administration of water utilities, water billing, meter data collection methods, problem solving and communications planning.

What identifiable product or result do you expect the intern to achieve by the end of their internship?
- Fall Quarter: Publicize software and graphical tools to campus stakeholders: building managers, staff, faculty, and students
- Fall Quarter: Learn details and capabilities of Beacon AMA software/web interface
- Fall Quarter: Develop a campus-wide communications roll-out plan
- Winter/Spring Quarters: Educate responsible and interested parties on how to use the tools the system offers
- Winter/Spring Quarters: Help building managers take ownership over their water consumption by setting up automated email alerts for each meter located in their area
- Spring Quarter: Support the Water Working Group in bringing useful analytics and information to support the formation of water conservation goals and information publication

Statement of duties including % of time and description of duties:
This intern will implement persistent water conservation on the UCSC campus, both through education, and with powerful software analytics. He or she will educate the campus community about the water management infrastructure deployed on campus, and tools from the metering system’s software interface to bring water consumption information directly to the eyes of those using it promoting change, and mitigate waste.
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<th>% of Time</th>
<th>Core Functions/Duties</th>
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| 30%       | Core Function: Software Use  
Learn the functionality of the Beacon system web interface and the tools it provides. Create training and process documents for how to use certain high-priority tools and features, or make certain requests related to the water management software and infrastructure (how to set up email alerts, check for leaks, correct information needed to add a meter to the system...) |
| 30%       | Core Function: Leak Detection  
Regularly check for leaks and follow up on findings by researching/troubleshooting in the field. |
| 20%       | Core Function: Leak Detection Training  
Meet one-on-one, or in small groups, with building managers, home-owners, and other water use stakeholders, and set up email alerts for them on the meters in their area for automated leak notification. Go through training for any other desired tools with interested groups. |
| 20%       | Core Function: Promote and Inform Campus Community  
Duties/Responsibilities: Create a communications plan, training documents, write posts to campus newsletters, present to sustainability class students at pre-class announcements about the Beacon software and the data available through it, and generally about water conservation on campus. Present findings and results to the Committee on Sustainability and Stewardship |

**What skills will this internship strengthen?**

The exposure to and experience within a utilities based department will prepare the intern for real life problem solving, communications at various levels (within an academic environment) and experience with enterprise scale database systems. Data manipulation and analysis, problem identification, corrective action planning, follow through to completion and verification of results and presenting findings will be skills learned and strengthened while going through the internship.

**What value does this internship have for your unit/department and for the campus as a whole?** It might be helpful to review the [Campus Sustainability Plan](#) in answering this question.

Campus contributions in support of Water Conservation, within the Energy Department, are the sole focus of this internship. The internship will add a needed depth of service to the department within the areas of meter data collection, data analysis and site communications. The UC-wide water conservation goal is a stretch goal requiring increased efforts on our part to achieve. Our campus contributions to the goal will necessitate additional focus and ongoing attention to detail for success. This internship will add value to our efforts by enhancing campus-
wide communications and supporting efforts with data analytics that help drive decisions.

**How will you evaluate your intern’s success?**
The three areas of measurable success will include: first, the total number of water system indiscretions identified and resolved. Second, the deliverable of a concrete communications plan and follow through to completion. Finally, the results on our annual Customer Satisfaction Survey will provide insights into the intern’s effectiveness.

**What staff/faculty, other than you, will the student intern interact with regularly and in what capacity?**
The intern will interact with two other Energy Analysts within the department as well as the Energy Manager (supervisor). The Energy Manager, Patrick Testoni, will provide high level strategic direction and impart knowledge of the various database configurations and their access requirements. Energy Analysts Erik Erikson and Lauren Mills will share their knowledge of recharge systems, water distribution systems and metering systems. The department operates in a collaborative, inclusive, structured and supportive manner that will provide a great opportunity for the intern to work directly on physical attributes of the campus while learning how to interact in a team environment.

**If there are any resources that the intern will need that your office cannot provide, please explain (i.e. computer, printer, key documents?):**