SWATeam Meeting

Location: NSRC Room 358

Date: November 4th, 2016 at 4:00 p.m.

Members Present: Arthur Schmidt, Keith Erickson, Nandakishore Rajapolan, John Berens, Rabin Bhattarai, Carley Meeks

Minutes:

* green facilities standards
  + standards that apply to water are on the Water team's box account
  + documents:
    - water distribution systems
    - storm water drainage systems
    - sanitary sewer systems
    - irrigation systems
    - storm sewage systems
    - plumbing equipment insulation
* SWATeam recommendations:
  + BIF gray water metering
    - recommend that water use in the BIF me monitored continuously
    - both total water and amount used by the raw water system should be measured
    - make data available
    - try to get monitoring as soon as possible to quantify it is worthwhile
    - data put on energy dashboard
      * water use
      * potential for saving from raw water use
    - review of draft recommendation
      * specific actions
        + clarify the middle paragraph
      * cost: low compared to Design Center recommendation costs
  + draft recommendation for Design Center
    - recommend infrastructure be put in place for raw water piping
    - design alternative if enough funding
    - recommend that they build infrastructure for future use
    - potential and opportunity
    - investment for future
    - not that much more to add piping
    - water rates are unknown
    - Impossible to put piping in once building is finished
    - positions us to better handle the future
  + Last springs studies
    - Prioritize
    - Cooling water in best shape
    - Talk about next week
* Facilities Standards
  + change to become more sustainable
  + low flow fixtures

**DRAFT OF RECOMMENDATION**

**SWATeam Recommendation**

Name of SWATeam: Water and Stormwater

SWATeam Chair: Art Schmidt Date Submitted to iSEE:

**Specific Actions/Policy Recommended (a few sentences):**

Monitoring the water usage in the Business Instructional Facility (BIF). Specifically, both the total water use and the amount of water used by the *raw water* system should be measured and the data made available to the campus community.

BIF is unique in that it was constructed with a separate *raw water* system that conveys non-potable water to be used for purposes such as flushing toilets. While the system is in place inside the building, it was never connected to an outside source of non-potable water. Use of non-potable water for purposes such as toilet flushing, landscape irrigation, cooling, etc. is recognized as a sustainable practice (e.g., Asano et al, 2007; EPA, 2012). Data to quantify the impact this could have on water use at UIUC, however, is largely unavailable. Metering the *raw water* system at BIF would provide data about the temporal total and non-potable water demand at a typical campus class/office building. These data would be valuable to consider whether such systems should be considered in future campus construction and renovation.

F&S installed a temporary meter to measure the flow to the *raw water* system and operated this meter for approximately one month (from \_\_/\_\_/201\_ to \_\_/\_\_/201\_), so this recommendation has already been demonstrated to be feasible. However, because building usage is highly variable over the course of an academic year, we recommend that this should be a permanent installation. We also recommend that the data be made available to the campus community to encourage consideration of such water reuse options

**Rationale for Recommendation (a few sentences):**

Based on this information, further studies or projects could be implemented to examine the feasibility and costs and benefits of using recycled water for non-potable uses.

**Connection to iCAP Goals (a few sentences):**

Obtain and publicize more granular water use data by FY16, including water quantity and quality data where available.

**Perceived Challenges (a few sentences):**

**Suggested unit/department to address implementation**:

**Anticipated level of budget and/or policy impact (low, medium, high**): \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Individual comments are required from each SWATeam member (can be brief, if member fully agrees):**

|  |  |
| --- | --- |
| Team Member Name | Team Member’s Comments |
| David Douglas |  |
| Keith Erickson |  |
| John Berens |  |
| N Rajagopalan |  |
| Rabin Bhattarai |  |
| Art Schmidt |  |

**Comments from Consultation Group (if any; these can be anonymous):**

**Explanation and Background (can be supplied in an attachment):**