<u>**SWATeam Recommendation**</u>

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 (April – May 2016), 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):
Challenge will be funding for the meter and installation and programming dashboard to provide the data.   F&S has indicated that since *dashboard* was originally intended for energy data these data do not belong on dashboard. However, utilizing the existing dashboard will facilitate making these data available using existing technology.

Suggested unit/department to address implementation:

Facilities and Services

Anticipated level of budget and/or policy impact (low, medium, high): ___$5000_____

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

Team Member Name	Team Member's Comments
Keith Erickson	I concur. Excellent demonstration project to give fairly unique and meaningful dataset.
John Berens	I completely agree with this recommendation. This study will be the only way to begin to understand the potential of raw water
N Rajagopalan	Agree fully with recommendation.

Rabin Bhattarai	Since this recommendation will help in planning future building design on campus, I fully agree with this recommendation.
Art Schmidt	I fully concur with this recommendation. The data this recommendation would provide would be of great value in planning future building design on campus. Furthermore, the data this would provide are not available anywhere else, so this would provide a very valuable data set to guide future design.

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

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