

iWG Assessment

SWATeam Recommendation Ref #: Water001

Date of iWG Assessment: 12/20/16

Original SWATeam Recommendation: 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

iWG Assessment of budget and policy impacts (*check one*):

moderate budget and/or policy impact OR major budget and/or policy implications

iWG Routing Need (*check one*):

transmit recommendation OR forward to Sustainability Council

iWG Routing Direction (*department name or Council*): F&S

iWG Assessment: A permanent real-time water meter should be installed on the greywater piping system in BIF, and the collected data should be made available in the Energy Billing System and through an online dashboard.

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

| iWG Member Name | iWG Member's Comments |
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| Assoc. Director for Campus Sustainability (iSEE) | This position is currently vacant. |
| Morgan Johnston (F&S) | F&S supports this recommendation. |
| Robyn Deterding (Student Affairs) | Student Affairs supports this recommendation |
| Matthew Tomaszewski (Provost's Office) | I support this recommendation. |

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| Gary Kling (Academic Senate) | I support the implementation of this recommendation to monitor raw water flow to BIF. We need more accurate data before considering the implementation of raw water systems in new or existing campus buildings. |
| Joseph Edwards (Student Sustainability Leadership Council) | This could help with outreach and education on water usage on campus |
| Sean Reeder (OBFS) | I support this recommendation |
| Scott Willenbrock (Provost's Fellow) | Seems like a good idea. |
| Rob Fritz (college-level facility manager) | I agree with recommendation |

Attach any comments from subject matter experts (with names and roles).