## iCAP Working Group Agenda

Tuesday, December 20<sup>th</sup>, 2016

Present: Gary Kling, Sean Reeder, Robyn Deterding, Joe Edwards, Morgan Johnston, Scott Willenbrock, Ben McCall

 Review assessment for Econs004, Green Labs Coordinator Ben reads through the draft.

Very focused on fume hoods; consider broadening terminology Inserted a reference to the SWATeam recommendation.

Will insert names of peer institutions which have implemented a green labs program Possibly attach final report from the Green Labs student interns, including interviews with other universities

All SWATeam members should add their comments so that assessment can be forwarded to the OVCR before break.

2. Develop assessment for Water003, Design Center Greywater Piping

This is one of several alternatives. One of the others is creating a solar-ready roof.

There already exists a design of a greywater system for the building. The question is whether this is the design which will actually be built. Thus, iWG would be recommending that this alternative be built instead of another one. Do we have the expertise to make that decision?

Morgan: Of all alternatives, this is the only one that can't be retrofitted later. Solar roofs are difficult to retrofit, but greywater pipes are nearly impossible.

Sean: Not sure when we will receive prices for the bids; the architect was just hired in November.

Ben: Regardless of when that information comes, we don't have enough information to make a decision on this rec right now.

If built, we would consider requesting a variance on the state requirement that greywater be cleaned to potable levels before being reused. To follow this requirement would take a million-dollar pipeline to the Illinois-American Water plant and back (and that plant is closing).

What we can do is write back to the SWATeam and ask them to instead develop a set of recommendations about incorporating greywater designs into building standards in the future, with consideration for the different sizes and purposes of buildings.

3. Discuss Water001, BIF Greywater Meter

Water usage from BIF is not appearing on energy dashboard. Persuading EBS to display it is a task yet to be accomplished.

A meter was temporarily placed on the raw water system (which currently uses potable water) at BIF, but was not built for permanent use. A permanent meter costs about \$5,000. The purpose of the permanent meter would be to provide data to support the case that raw water should be used, and perhaps to show our commitment to sustainability.

Doubtful that it shows any commitment to sustainability unless raw water is actually being used.

Would this information be helpful since there are many other buildings in the country that use greywater systems, including large university buildings? Data from our own campus is viewed as more trustworthy.

Since Keith Erickson, who serves on the Water SWATeam, would be the one to make this decision, it appears that funds may be too tight to purchase a meter without further discussion.

We will consider this a low-level recommendation which Morgan will transmit to Kent Reifsteck in January without a formal iWG assessment.

## 4. Discuss Water002, Cooling Tower Increase COC

After water has circulated in the chiller system several times, it becomes concentrated with minerals and will start depositing them in the system unless dumped out, referred to as "blowdown". To reduce the frequency of blowdown, softeners can be installed to replace calcium in the water with more soluble minerals.

This has already been done with a cooling tower in Research Park, but it is not owned by the University. It will be more helpful to F&S to see it tested at a university-owned tower.

A ballpark estimate of potential savings is 500 kgal/yr, or about \$1,000/yr.

It will be most efficient to recommend this to Housing.

Gary mentions the many pieces of lab equipment that are cooled by large amounts of potable water. Although purchases of equipment that waste water in this way are no longer permitted (they must be hooked up to the chiller system), there are so many machines that have been "grandfathered" in that it is a major waste of water.

Robyn will recommend Water002 to her sustainability group.

## 5. Discuss Trans005, Bike Parking in Ramps (forthcoming)

Sean mentions that what staff and faculty pay for a parking space is grossly underestimating its actual value to the University and Ben confirms.

Further discussion deferred to next meeting.

## 6. iCAP Portal Overview

Deferred to next meeting.