Wednesday, 27 September, 2017, 4:00 pm

309 ACES Library

**SWATeam Water/Stormwater Meeting Minutes**

Present: Rabin Bhattarai, John Berens, Ximing Cai, Lauren Excell, Kishore Rajagopalan, Arthur Schmidt, Colleen Williams, Morgan White

I. Intro

A. Made Colleen Williams the owner of the Water Box site and edited members

B. Point brought up: the Box site should be available for anyone to see, and meeting schedule

should be made available to the public so anyone interested can attend

II. Updates on Objectives (includes an email Morgan White sent to the swat-water email list)

A. Objective II: Cooling Towers

1. Morgan White spoke with David Boehm of F&S and learned that most cooling towers had been

replaced since the iCAP was made in 2014. They have been connected to a more centralized and

water-efficient chilled water plant, with the other two to follow within the next few years.

2. Kishore Rajagopalan explained several treatment regimes, such as ozone and water softening.

3. Idea to have one of these methods put into action as long as remaining cooling towers are not replaced

4. Need cooling tower water use data- would help for data to be accessible by the Chair

5. Suggestion that the Water SWATeam may not have much to do with Objective II if remaining towers are to be replaced- could suggest studies on improving new system’s efficiency

6. For now, 20 percent of campus water is used by cooling towers

7. Some parts of current system could have up to 50 cycles of concentration, but for now, the number is at 4-4.5.

B. Previous Water Usage Data

1. One graph’s title is labelled “Weighted”; this is based on occupancy of a building. For instance, dorms are occupied for a greater part of the day than other buildings.

2. Some causes of increased water consumption are ice makers and labs

C. Objective III: Water Audit

1. Previous year: had no external consultant

2. This year: An NRES student minoring in Sustainability plans to perform a water audit as a capstone project, especially considering DRES and NSRC

a. NSCR water consumption has gone up since 2008, may be because staff have been moved into this building from Burnsides Lab and other buildings

b. Question: Would the shifting of people affect the audit?

3. Idea behind the audit

a. To create an inventory of performance and time period of faucets, showers, etc. to compare to what is currently available and make sure facilities are kept up to standard

b. When buildings are updated, these parts would be too.

c. To target the places of highest water usage and know why- age, specific equipment

d. To make individualized water reduction plans for buildings

D. Objective VI: Stormwater Runoff

1. Pavement/Parking Lots

a. Mahomet Lots, a project to renovate Parking Lot E12 at 4th and Gregory to reduce stormwater pollution runoff: did not get funding due to high funding request and discrepancy on the specificity of outcomes expected

b. Flooding occurs near the ACES library at Lot F4. Burnsides Laboratory will be torn down, so the focus of the EPA RainWorks project may be on this lot

Would involve straightening out roads, redesignation of parking space

c. Lot F23

i. Has vault set up for instrumentation but no meters in place.

ii. The intent was to take measurements before and after replacing the d. lot with permeable pavement, but no renovation took place.

e. Lot C9 has porous pavement, potential for studies- may be able to be brought up for the workshop on October 11th, “Using Campus a “Living Laboratory”

Need better communication among Parking and iSEE

f. Permeable pavement was added to the Ikenberry interior quad, near Wassaja.

2. Agricultural Field Runoff

a. Brent Lewis believes pollution mainly comes from these fields.

b. Question: Are BMPs used on the fields? Yes, ex. bioreactors

3. DRES raingarden- potential to make volunteer watering more official

E. Action Item: find out if BIF meter work order has been submitted yet