iWG Meeting Minutes

February 3, 2020, 3:30-5PM, NSRC 358

Attendees: Brian Bundren, Brian Johnson, Morgan White, Renee Wiley, Jonah Messinger, Joey Kreiling, Sandy Yoo, Meredith Moore

Statements in bold are new comments discussed at the meeting

Land and Water Questions for iWG

1. We need to talk with the SWATeam about their recommendations to include energy and transportation objectives in this chapter. They need to know that the chapter scope is only about how we make our lands more sustainable and water usage and management more sustainable.
2. What do we want to include about perennial monoculture crops?
    a. **We will come back to this**
3. Should we include something about the nutrient loss reduction program? Do we need more information about Ag emissions?
    a. **We can think about creating a goal to reflect this, and can present this to Eliana Brown on the Land and Water SWATeam.**
    b. **Could we pick out specific strategies from the Nutrient Loss Reduction Program instead of one overarching goal? We can identify specific strategies that align this plan together.**
    c. **Jonah said that specific details are helpful. For example, nitrogen capture is very energy intensive; we could look up statistics to support this.**
    d. **We will not include more information about Ag emissions because we will focus on strategies. Instead, we should include a paragraph in the introduction paragraph.**
4. Are off campus research farms in the scope of the iCAP?
    a. **The iCAP scope is the urban boundary of campus (Urbana)**
    b. **However, the Resilience Commitment reflects our relationship with the community and surrounding areas so off-campus research farms could still be included. This would be a reasonable area to include, especially for the extension offices.**

Land and Water Objectives

1. Implement the Resilient Landscape Strategy recommendations by FY24.
   ****review this document sent out by Morgan**
    a. **Strategy recommends doing a Landscape Master Plan, establishing a Campus Landscape Department, increasing staffing to support landscape, bring back Grounds Gardiners, hire a horticulturalist and an ecologist**
    b. **We had not hired grounds workers since 2012, so we would like to update staff so we do not have vacancies (example: adding 4 more grounds workers to more closely align us with our peers)**
    c. **Establish a component of every capital project that will go toward the exterior (allocating a portion of budget to go toward the site, e.g., bike path, trees, etc.)**

    d. **Focus on rainwater strategies, native plantings, and Living Labs**
2. Establish a Rainwater Utility Fee through Utility and Energy Services at F&S, and use it to fund a Rainwater Management Plan in FY23. *<<see SWATeam's file>>*
    a. **This will help get buy-in and will be an ongoing monthly charge, right-size this from the current sanitation fee**
    b. **This needs to include a list of what the fee can and cannot go toward. We will need a clearer definition to help justify the fee.**
3. Establish a soil monitoring initiative on south farms in summer 2021 and continually monitor soil quality. Analyze soil in 20 areas per year.
    a. What parameters? Are we going to have targets for soil quality? Maybe specify the soil quality targets?
        i. **What do other schools do for this?**
    b. Could this be in conjunction with fertilizer runoff monitoring? Can this be expanded to measure runoff as well?
        i. **This would be its own objective measuring water quality impacts from campus/south farms; we need to pass this on to the SWATeam to discuss this.**
    c. What about herbicide/pesticide usage on south farms?
        i. **Ask SWATeam. Housing contracts F&S for Grounds (meaning they do follow Integrated Pest Management strategies),**
        ii. **Develop a goal related to reduction in herbicide/pesticide usage on farms, and increase IPM in areas not under Grounds management**
4. Use cover crops in at least 10% of South Farms acreage by FY24.
    a. **Ask SWATeam: Could this be more than 10%? Where did this number come from?**
5. Increase pollinator supportive areas on campus by xx% by FY24.

    50% increase (in specifically on-the-ground pollinator-friendly landscaping) by FY24

    a. Renovation and conversion of 10% of the low mow acreage to a low prairie or meadow, with an emphasis on pollinator support.
        i. 10% sounds too low, would that even be a significant amount of land?
            1. **10% is because we may not have the staff to support this.**
            2. **What would it take to maintain? We could train students to help them be more independent.**
            3. **Joey said that we have master naturalists who could be included in this training. Could this be an annual activity like a Boneyard Creek Clean up? Could this be an iHELP (volunteer day) event?**
        ii. We should convert a substantial amount of land (*10 acres? 25 acres? start with a few acres and commit to increasing its size by 5 acres every year?*) off campus (*South Farms land?*) to native prairie, wetland, and/or forest by 2025.

1. **This would fit in Resilience section and would link to the local carbon offsets discussion.**

b. Maintain Bee Campus USA status

6. Increase # of trees on campus by 20% by FY24.
   Increase by 50% by FY24 (but expand to include surrounding campus area, not just on campus)

   A major question: how many trees can we realistically plant on campus?

   a. Conduct tree canopy analysis
   b. Maintain status as Tree Campus USA, annually.

7. Reduce potable water consumption by xx% by FY24.
   a. Self-closing or sensor faucets should be installed in all buildings
      i. **This is a lot. In the first year, identify instead which buildings do not have these; create inventory of existing/old-style fixtures**
   b. Communicate water usage by building to occupants, using metered water consumption.
      i. **Energy report cards (which includes water from ECIP winners) could be passed to sustainability ambassadors (Zero Waste SWTeam recommendation of starting student sustainability ambassador program)**
   c. Land that is being irrigated needs to be taken off municipal water sources and have wells installed or alternate water sources based on needs of the research.
      i. **What is the current irrigation level? Is this just for ACES?**
   d. Develop method to locate and redesign research equipment with once-through cooling systems using potable water (picture it: the faucet is on 100% of the time, all day, every day, all year, every year).

8. **Increase # of green infrastructure**
   a. **i.e. 20 to 40**

Student Suggestions

- Increase the use of rain barrels and phase out the use of sprinklers
  - **Add a rain barrel at each pollinator garden**
- Audit residence halls to see how much water they use
  - **This is already available; we need to identify which residence halls have low flow fixtures and which do not**
  - Install more low-flow fixtures in more residence halls
  - Target buildings with abnormally high water usage to reduce water use
    - **We could start an Eco Olympics challenge for water usage**

        - **Identify which building reduces the most water based on previous trends. What do other schools do for this?**
- Use leaves removed from the ground as fertilizers and organic matter
    - **We already do this**
- Rooftops!
    - Put native landscapes on green roofs to support pollinators
        - **How are our current green roofs maintained?**
        - **Sandy will look at her inventory from a few years ago to see how many we have.**
        - **Morgan will share the list of green infrastructure. What does it take to maintain? What are the takeaways that we need to implement to improve?**
    - Install solar panels on roofs (even alongside rooftop gardens)
    - Install a vegetable rooftop garden on top of Ikenberry (SDRP) building