Land and Water Objectives

1. Implement the Resilient Landscape Strategy recommendations by FY24.

   -Can we send this to the team? This could provide opportunities for recommendations.

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>>*

   Eliana: This could tie into project that Eric and Sophie are working on. We will talk more about this.

3. Establish a soil monitoring initiative on south farms in summer 2021 and continually monitor soil quality. Analyze soil in 20 areas per year.

   -20 areas/yr may be too much
   -A lot of this is being done, it is a matter of sharing the information.

   Identify a person willing to do this (record keeping, monitoring) and publicize the data - plus land manager (this is happening but not coordinated), someone from NRES or Crop Sciences

   Art will work on developing this into a recommendation and we will go over it as a team during the next meeting

4. Use cover crops in at least 10% of South Farms acreage by FY24.
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.
   b. Maintain Bee Campus USA status

6. Increase # of trees on campus by 20% by FY24.

   a. Conduct tree canopy analysis → Brent can start developing this recommendation, it could potentially be a student project
      i. LiDAR data
      ii. Can compare with 2016 data – perhaps geography or NCSA students can help
   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
   b. Communicate water usage by building to occupants, using metered water consumption.
   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.

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).

Student Suggestions

- Increase the use of rain barrels and phase out the use of sprinklers
    - → More education, how can we do this?
    - Feasibility of connecting the sprinklers w/ atmospheric data?
    - Turfgrass irrigation
- Audit residence halls to see how much water they use
    - Install more low-flow fixtures in more residence halls
    - Target buildings with abnormally high water usage to reduce water use
        - We have this data, but what do we do with it?
- Use leaves removed from the ground as fertilizers and organic matter
- Rooftops! – We are installing more green roofs around campus (is there a goal for this?)
    - Put native landscapes on green roofs to support pollinators – are the green roofs that we have supportive of pollinators?
        - Inventory spaces for green roofs (potential recommendation?) → Brent can start the recommendation and we will go over it in the next meeting
        - This could potentially go to the manager of each building, good student project
    - Install solar panels on roofs (even alongside rooftop gardens)
        - Parking decks? Takes engineering restructuring, withstand wind
        - More projects around parking lots
    - Install a vegetable rooftop garden on top of Ikenberry (SDRP) building
        - Safety issue