

## Land and Water Sustainability Working Advisory Team Meeting

February 26<sup>th</sup> 2020

9 am NSRC 358

*Members in attendance: Art Schmidt (Co-Chair), Rabin Bhattarai (Faculty), Brent Lewis (Staff), Eliana Brown (Staff), Allen Parrish (Staff), James Ellis (Staff), Bruce Branham (Faculty), Mallory Mahen (Clerk)*

*Members not attending: Reid Christianson (Co-Chair), Ella Liskiewicz (Student), Vikram Sudhan Muthuvel (Student), Claire Samojedny (Student)*

### Agenda:

1. Clarify recommendation format
2. Discuss Land and Water Objectives and form recommendations
3. Discuss student input and from recommendations
4. Delegate recommendations

### Meeting:

1. Recommendation format
  - a. Follow template, specific project idea, recommend to appropriate entity on campus
2. (1) Implement Resilient Landscape Strategies recommendations by FY24
  - a. Brent and James are primarily responsible for this
  - b. Strategies to respond to climate change including rainwater recycling/harvesting and examination of levels of service on un/manicured spaces across campus and F&S grounds
  - c. The team will examine this document and develop recommendations from it
  - d. Team will keep pushing this objective
3. (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. These sites could potentially be near existing stream quality sites
    - i. Airport road, old church road
  - b. Testing phosphorus, pH, nitrate- a standard soil test
  - c. Every year is excessive because soil does not change that quickly, so every 3-4 years is more feasible
  - d. Some of this is already being done, must share information, and need coordination
  - e. Art will develop a recommendation to have a common website for all land-use and water data for students and faculty to access
  - f. Identify a person willing to do this in conjunction with the land managers
    - i. Someone in NRES/ crop science, current soils person is over-loaded
    - ii. Their responsibility would be record keeping, monitoring, and publicizing the data, does not need soils training necessarily
4. (6) Increase # of trees on campus by 20% by FY24
  - a. Conduct tree canopy analysis- possible student project
    - i. Brent will make this recommendation

- ii. Can find where the priority areas are, will give Brent backing to ask for funding to complete objective
  - b. Can use LiDAR, compare with 2016 data, students can help
- 5. Demonstration gardens update- Eliana
  - a. Potential for demonstration gardens in arboretum
    - i. There are a lot of stakeholders in arboretum
    - ii. Brent can bring it up to his committees
  - b. Want to have live demonstration gardens with native plants and appropriate ground cover to use as example for those planting native plants
  - c. What is the kind of information that is needed for this?
  - d. Need a long-term plan for everyone to get behind
- 6. Student suggestion- increase use of rain barrels
  - a. Difficult for institutional scale buildings
- 7. Student suggestion- phase out use of sprinklers
  - a. Do not use many sprinklers/irrigation systems as it is
    - i. Should educate on this more
  - b. Possible recommendation to update sprinkler system to a more modern version that uses atmospheric data- a highly integrated sophisticated system
    - i. Already have pricing to have this replaced but it is too expensive currently
    - ii. Recommendation that this should be prioritized and funded
- 8. Student suggestion- research use of water and target high-use buildings
  - a. We have this data already- but what do we do with it?
  - b. Investigate the specific sources that are causing water use to be so high in these buildings
- 9. Student suggestion- various ways to utilize rooftops
  - a. Vegetable rooftop gardens- team does not support this
    - i. Not efficient, safety concerns
  - b. Solar panels- minimal support from team
    - i. Solar farms are a more efficient use of space
    - ii. It takes engineering restructuring
    - iii. Team would rather see solar on parking deck rooftops
  - c. Make existing green roofs pollinator friendly- team supports this
  - d. Inventory potential new locations for green roofs- team supports this
    - i. Brent will work on turning this into a recommendation
      - 1. Could tie into rainwater fee and project that Eric and Sophie are working on

Action Items:

- 1. Have recommendation forms to specifically discuss in next meeting
- 2. Read Resilient Landscape Strategy document

Meeting adjourned 10:14 am