## AGRICULTURE, LAND USE, FOD A SEQUESTRATION

### OBJECTIVES

#### **7.1.** Perform a comprehensive assessment of GHG emissions from agricultural operations — and develop a plan to reduce them — by the end of FY16.



Status: In progress

- Submitted a proposal for hiring a research tech to quantify the greenhouse gas (GHG) emissions of South Farms.
- Formed a consultation group focused on implementation strategies.

Next Step:

• Support ACES in the development of a plan to assess and reduce GHG emissions on South Farms and university owned farmland throughout the state."

#### **7.4.** Implement a project that examines the food service carbon footprint for University Dining and other on-campus food vendors, while increasing local food procurement to 40% by FY25.



Status: In progress

- University Dining conducted research on food waste during the 2016-17 school year and worked with Professor Brenna Ellison on the impact of plate size on food waste.
- Dining is implementing the Leanpath Spark tracking system for post-consumer food waste at Ikenberry Commons.
- Dining is partnering with the Urbana-Champaign Sanitary District, which will take some food waste and use it to create energy for its plant.
- The South Farms are dedicating 30 acres to growing perennials, including currants.

#### Next Steps:

- Reach out to off-campus food vendors about calculating their food waste — and buying locally.
- Create educational fliers and signage as passive programming.

# program by FY17.



Status: In progress

- Consultation group to assist campus.
- Completed Tree Care Plan and IPM Plan.

Next Step:

stakeholders.

**7.5.** Increase carbon sequestration in campus soils by determining the sequestration value of existing plantings and identifying location for additional plantings, with a specific objective of converting at least 50 acres of U of I farmland to agroforestry by **FY20**.



Status: In progress

- Fall 2018.

Next Step:



**7.2.** Design and maintain campus landscapes in a more sustainable manner; expand the specification of sustainable plantings in campus landscape standards, and develop and implement a tree care plan by FY16 and an integrated pest management

• Recognized as a Bee Campus USA, which includes a committee with faculty, staff, and students as a Pollinator

• Recommendation supported to improve Green Stormwater Infrastructure, including sustainable planting.

• Prepare a sustainable campus landscape plan with campus

• Explore opportunities for expanding current agroforestry holdings an additional 15 acres to achieve a total of 50 acres. • Survey of trees and sequestration values to be completed in

#### **7.3.** Incorporate sustainability principles more fully into the Campus Master Plan.



• Incorporation adopted in 2017.



**7.6.** Reduce nitrates in agricultural runoff and subsurface drainage by 50% from the FY15 baseline by FY22.



Status: In progress

- Funding received through Student Sustainability Committee (SSC) in April 2017 for project on Fly Ash Phosphorous Filtration.
- Received approval for formation of South Farms Management plan for Best Management Practices (BMP).
- Recommendation supported and SSC funding application submitted for nitrate monitoring equipment at a campus outlet point.

• Submit recommendation for Embarras River plantings.





We would like to acknowledge and thank our South Farms and pollinators consultation groups for assisting us with developing and designing implementation strategies. We would also like to thank the College of Agricultural, Consumer, and Environmental Sciences (ACES) for the constant support in meeting the Illinois Climate Action Plan (iCAP) objectives.



