

# Earlham College Comprehensive Sustainability Plan Updated for 2016



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#### Introduction

In the fall of 2011, President David Dawson charged the Environmental Responsibility Committee (now Sustainability Progress Committee) with developing a new comprehensive sustainability plan for the college. In the charge, President Dawson noted:

The newly charged committee will have the full weight and support of the College behind it as it follows its new charge. I will ask the committee to consult broadly, act transparently, and develop a new plan for the community to consider by the end of the 2011-2012 academic year.

The committee fulfilled this duty, culminating in a plan that was approved in 2013. This plan also stated that it should be reviewed, updated, and rewritten every three years. What follows is a draft of the second edition of the Earlham College Sustainability Plan written by Environmental Studies seniors during the 2015-2016 school year. In alignment with the previous edition, we have detailed recommendations and suggestions to provide a sense of the scope and consequences of adopting this plan at the institutional level. Recommendations have a stronger weight to them than suggestions. It is expected that if the plan is approved by the Senior Staff of the college, recommendations will be seen as "directives" to the office or college area charged with implementation. Suggestions are included for further deliberation and/or development and do not have the responsibility of direct implementation.

# Process and Acknowledgements

This group held a variety of meetings in order to update this plan to the most accurate and helpful degree. Meetings were held with administrators, faculty, and staff, as well as soliciting input via an online community feedback form. The framework and material for this edition of the plan is based on the previous edition. The students who completed this draft are Nicol Chinchilla Cordero, Hannah Irvine, Anna Seifert, Nicholas Sontag, Erin Stone, and Sorcha Vaughan, with special thanks to advisor Jamey Pavey.

# Assessing Sustainability

The assessment of sustainability on college campuses is a relatively new phenomenon. Prior to 2009, Earlham voluntarily participated in several campus sustainability surveys administered by various groups (e.g. Sierra Club, Sustainable Endowments Institute, Princeton Review). In 2008, a new assessment tool was created by the Association for the Advancement of Sustainability in Higher Education called STARS (Sustainability Tracking, Assessment, and Rating System). Earlham was a charter member of this new system and one of the first 5 schools to complete the assessment in 2009. Since that time both the Sierra Club and the Sustainable Endowment programs have elected to close their assessment system and utilize STARS. It is very clear that STARS is now the widely accepted industry standard for assessing sustainability in higher education, and it is for this reason that this plan has drawn extensively on the STARS framework and categories. The plan's recommendations have emerged from careful consideration

of best practices in sustainability coordination, curriculum, operations and community across higher education and the STARS rating system, with a goal of continuing to achieve higher rankings over time.

# Statement on Sustainability

Earlham orients its sustainability work around the following general definition:

"Sustainability is the continuous effort to meet the needs of the present generation without compromising the ability of future generations to meet their needs by working toward a healthy environment, social justice, and a strong economy."

Sustainability at Earlham is not fixed and static but will be an ever-changing orientation to the question of "how we should best live" both on-campus and in our wider social and ecological communities of interest and influence.

Many view sustainability planning as an operational checklist including technical elements such as recycling, energy conservation, and waste minimization. While these areas are important and must be included in any plan, we see these elements as "necessary but not sufficient" for a full flourishing of what sustainability means on our campus. Guided by our principles and practices of respect for persons, integrity, simplicity, peace and justice, and community, Earlham's sustainability plan moves beyond technical "to do's" to an integrated and comprehensive approach to sustainability that links together social, ecological, and economic spheres of life in a context explicitly framed by our educational mission.

As such, sustainability at Earlham will be visible, educational and effective. An organizing vision for sustainability at Earlham is the idea of "everyday sustainability." Earlham's approach will infuse sustainability across all areas of the College; it will be regularly experienced by all members of the community; and it will include both highly visible (and perhaps symbolic) projects alongside specific, measurable, and accountable resource conservation initiatives. Woven throughout all our initiatives and processes will be the commitment to making sustainability educational. Making our campus carbon neutral through technical means may be feasible, but it would not be the right thing to do if such initiatives remain virtually invisible to the community. Countless opportunities exist to involve students, faculty, staff, alumni, and trustees in sustainability initiatives on campus. Many sustainability-related efforts will require careful deliberation and reasonable debate in which community members may disagree over priorities and best courses of action. To the extent that we make these interactions educative, we have fulfilled the central mission of the college.

#### Financial Implications and Prioritization

Each of the four sections of the plan includes a strategic priority, highlighted at the beginning of the section. Additionally, for each recommendation that has potential

monetary cost implications for the college, those implications have been laid out within the plan and have also been summarized in tables at the end of the plan. While it is important to grasp the cost implications of sustainability initiatives, it is also imperative to see the potential savings to the college of investing in energy savings and the potential synergistic gains to be had from focusing resources on sustainability.

#### **Section 1: Coordination**

#### Introduction

Coordination covers how to coordinate, plan, track, and measure sustainability at Earlham as well as sustainability as it pertains to college investments.

#### **Areas Addressed:**

- a. Coordination
- b. Sustainability Plan
- c. Climate Action Plan
- d. Tracking & Measurement
- e. Investment

# **Strategic Priority:**

Improve environmental sustainability coordination on campus to achieve higher AASHE STARS ratings, and create a Climate Action Plan.

#### a. Coordination

Current Practice: Earlham has a Sustainability Progress Committee (SPC) that is charged with assisting the Sustainability Office in "determining college sustainability priorities using the sustainability plan for guidance, tracking progress on the sustainability plan, and leading sustainability planning processes in the future". The committee is made up of two students, two staff, two administrative faculty, two teaching faculty, the director of facilities, the Director of Food Services, the Directors of Sustainability, the Associate Dean of Student Life and the Vice President for Finance and Administration. Earlham also has a Sustainability Office, which oversees and manages sustainability operations, programming and academics. The office is currently made up of a Director of the Integrated Program in Sustainability, which is an administrative/faculty position (50% teaching, 50% administrative), an Assistant Director of Sustainability, and numerous student interns (Student Sustainability Corps). It is anticipated that funding for the next several years will be paid through accrued interest from an endowed fund earmarked for environmental initiatives.

#### Recommendations:

- 1.1 Secure more permanent funding for the Sustainability Office and Sustainability Office positions by either looking for more grants or funding directly from Earlham's "hard budget".
- 1.2 In coming years, work within the college's planned reallocation of student work-study funds to secure funding for students in the Student Sustainability Corps.

<u>Responsible Office(s):</u> Senior Staff, Sustainability Office, Associate Dean of Student Development, Director of Facilities, Director of Food Service, SPC, Director of Foundation Relations and Sponsored Programs

# b. Sustainability Plan

<u>Current Practice:</u> Updates to the Sustainability Plan will be coordinated by the Sustainability Office and the SPC. Sustainability Plans are to be drafted and approved first by senior staff, and then by faculty every three years, with the last plan approved in 2013. The Sustainability Plan should incorporate details of progress that has been made, structures and systems that are currently in place, and recommendations and plans for the future. The Sustainability Office and SPC are also charged with reporting progress on sustainability to the community every three years.

# Recommendations:

**1.3** The Sustainability Office and SPC will report progress to the community on the Sustainability Plan every 3 years. When the Climate Action Plan is updated, it too will be reported to the community every 3 years.

<u>Responsible Office(s):</u> Senior Staff, Sustainability Office, Sustainability Progress Committee

#### c. Climate Action Plan

<u>Current Practice:</u> Earlham currently has no Climate Action Plan. As part of overall sustainability planning at the college, a Climate Action Plan will be written. This plan will be specific, data driven and involve measurable goals towards the reduction of the college's impact on the climate.

# Recommendations:

**1.4** The Sustainability Office and SPC will work together to facilitate the creation of this plan.

<u>Responsible Office(s):</u> Senior Staff, Sustainability Office, Sustainability Progress Committee

### d. Tracking & Measurement

<u>Current Practice:</u> Earlham participates in the Association for the Advancement of Sustainability in Higher Education's Sustainability Tracking and Rating System (AASHE STARS). This sustainability assessment and tracking is the responsibility of the Sustainability Office. Data was collected and submitted to AASHE STARS in the 2015-2016 academic year, resulting in a Silver rating with a 54.35 score.

#### Recommendations:

- **1.5** STARS will be used as a guide to determine areas in which Earlham can improve regarding sustainability on campus.
- 1.6 Earlham will publicize this data and continue to assess and evaluate itself using STARS or the current best practice in higher education sustainability assessment and tracking. Sustainability assessment and tracking information will be collected in conjunction with a number of college offices and with the

help of various faculty, students and staff. Data will be submitted to STARS for a rating every three years or whenever a higher rating is projected to be achieved.

#### Suggestions:

**1.** Annual internal STARS reporting within the Sustainability Office in order to manage progress more efficiently.

Responsible Office(s): Sustainability Office, with consultation of Director of Facilities

#### e. Investment

Current Practice: Earlham has a Socially Responsible Investment Advisory Committee that monitors investment of directly held stocks (approximately 13% of total endowment) for compliance with our Socially Responsible Investment Policy. In the "Criteria Related to Improving Human Society" section, it states:

Because Earlham believes that certain behaviors are contrary to the desired order for which Friends have historically worked and witnessed, the behavior of certain companies is deemed to be outside the range of those companies in which Earlham desires to invest and derive profit. For these reasons, Earlham seeks to minimize investing in the securities of companies whose overall behavior results in irresponsible use of the natural environment and/or denigrates the dignity of individuals.

SRIAC currently publicizes all minutes and proceedings of meetings on the Earlham Community Moodle page in an effort to become more transparent. SRIAC is also currently in the process of reviewing their policies, with policies regarding sustainability being part of the proposal.

#### Recommendations:

1.7 Using STARS investment guidelines as an example framework, SRIAC will develop a more specific investment statement on sustainability in the "Criteria Related to Improving Human Society" section of the College's Socially Responsible Investment policy. The policy must include measurement and accountability tools. The policy should be written by SRIAC in consultation with SPC and be approved by the Board of Trustees.

Responsible Office(s): College Chief Financial Officer, SRIAC, SPC, Chief Investment Officer, Board of Trustees

#### **Section 2: Curriculum**

#### Introduction

Sustainability efforts intersect with the curriculum in the ways in which students and faculty are engaged with sustainability-focused and related topics and coursework within the formal curriculum at Earlham. The goal of this plan is to define, explore and support sustainability within the formal curriculum and consider ways we might amplify the presence of these values, topics, and themes across the curriculum. With the growing success of the GLI (Global Leadership Initative) and its Global Hubs, there is potential to allow for further experiential education for students in environmental sustainability.

In terms of curriculum, there are three major domains of interest: sustainability-related or focused majors, minors, courses and research.

#### **Areas Addressed:**

- a. Definition
- b. Inventory of Sustainability Curriculum
- c. Across The Curriculum
- d. Sustainability in General Education Requirements
- e. Degree programs
- f. Immersion Programs
- g. Literacy
- h. Research

# **Strategic Priority**

The college will gain approval of the new Environmental Sustainability major during the 2016-2017 school year. The department will then intensively launch the major immediately after approval. Main goals of this launch include expanding the curriculum and adding additional Full-Time Equivalent (FTE) lines as enrollment and interest in the new program increases. The department will work toward marking all sustainability-related courses, as reported from the department head, with a green symbol on the course planning tool.

#### a. Definition

<u>Current Practice</u>: Earlham College *officially operates by* the following general definition and the subsequent course-specific definitions:

"Sustainability is the continuous effort to meet the needs of the present generation without compromising the ability of future generations to meet their needs by working toward a healthy environment, social justice, and a strong economy."

 Sustainability-focused courses concentrate on the concept of sustainability, including its social, economic, and environmental dimensions, or examine an issue or topic using sustainability as a lens.  Sustainability-related courses incorporate sustainability as a distinct course component or module, or concentrate on a single sustainability principle or issue.

# Recommendations:

**2.1** Promote these definitions of sustainability to raise awareness of sustainability across the curriculum.

# b. Inventory of Sustainability Curriculum

<u>Current Practice:</u> The Sustainability Office takes inventory of sustainability-focused and sustainability-related courses every three years.

# **Recommendations:**

2.2 Inventory of all courses categorized as sustainability-focused or sustainability-related by department will be undertaken by the Sustainability Office at least once every three years and will be publicly posted on the Earlham College sustainability website.

Responsible Office(s): Office of the Registrar, Sustainability Office

#### c. Across The Curriculum

<u>Current Practice</u>: While sustainability-focused and related courses currently exist across the curriculum, Earlham does not currently officially promote or incentivize such efforts for faculty nor does the college present a coherent picture of sustainability courses to current and prospective students.

#### Recommendations:

- 2.3 Continue current efforts through the Sustainability Office to promote and encourage sustainability across the curriculum efforts through faculty development and mini-grant initiatives.
  - **Financial Implications:** Seeking outside grant funding would need to be in the range of \$10,000 to \$20,000 annually to adequately incentivize course development.
- 2.4 For scheduling and reference purposes, implement a sustainability symbol or tag in the course planning tool next to sustainability courses that can be easily identifiable to current and prospective students on the web and in print materials.

#### Suggestions:

1. Work with the success and popularity of the Penziner-Matson natural history field trips to amplify field-based experiential study and examine ways it might connect with sustainability initiatives through the Sustainability Office.

<u>Responsible Office(s):</u> Office of the Registrar, Sustainability Office, Environmental Sustainability, Director of Foundation Relations and Sponsored Programs

# d. Sustainability in General Education Requirements

<u>Current Practice:</u> Earlham currently does not have a general education requirement for sustainability.

## Recommendations:

- **2.5** Incentivize the integration of sustainability in the new first-year Local and Global Seminars.
- **2.6** Develop integrated designations /thematic pathways that focus on sustainability and the environment.
- **2.7** Develop a pre-prepared module focused on sustainability that can be implemented into courses throughout departments if applicable or desired.

# Suggestion:

- 1. Use the current Athletics, Wellness, and Physical Education (AWPE) Structure to amplify more opportunities for practical skill development in experiential sustainability (outdoor education courses, etc.).
- 2. Utilize student led courses in sustainable agriculture as an opportunity to educate a broader student population about sustainability.

Responsible Office(s): Sustainability Office, Office of the Registrar

#### e. Degree programs

<u>Current Practice</u>: Earlham currently offers a major and minor in both Environmental Studies and Environmental Science. However, a more interdisciplinary major, Environmental Sustainability, is being proposed, and likely will be approved during the 2016-2017 academic year. Once accepted, this major would replace both Environmental Studies and Environmental Science.

#### Recommendations:

- **2.8** Finalize and implement new Environmental Sustainability major to expand possible degrees related to sustainability and environmental relevance.
- **2.9** As demand for courses increases, continue commitment to adding FTE's in Environmental Sustainability as a College priority as indicated by the current Curriculum Visioning Statement.
  - **Financial Implications**: The costs associated with increased FTE faculty lines are large and are considered part of the expense of growing the college.

Responsible Office(s): Environmental Sustainability, Curriculum Steering Committee

# f. Immersion Programs

<u>Current Practice:</u> Earlham currently offers an off-campus semester program in New Zealand focused specifically on Environmental Sustainability. In addition, several other off-campus semester programs (notably Border Studies) incorporate significant sustainability-related coursework and experiences. Several non-Earlham, Earlham-approved semester programs cater to environmental and sustainability interests, such as Semester at Sea and the Rocky Mountain Field Institute. The Woods Hole Semester in Environmental Science provides an Environmental Science-focused program. Several Earlham May terms are also offered with environmental and sustainability-focused themes, both on and off campus.

#### Recommendations:

- **2.10** Encourage the development of additional Earlham-run off-campus programs that have an environmental or sustainability emphasis.
- 2.11 Consider models that would provide for an on-campus or local immersion experience focused, perhaps, with Miller Farm and sustainable agriculture, the Joseph Moore Museum (environmental education and/or research on environmental change), or in cooperation with Cope Environmental Center (see Penn State University model).

Responsible Office(s): International Programs Office, Sustainability Office

# g. Literacy

<u>Current Practice:</u> Earlham does not currently have a program that deals with sustainability literacy. Elements within our general education curriculum may touch on sustainability issues but it is not an explicit feature of any general education goal.

#### Suggestions:

- **1.** Generate a document that details learning outcomes involved in sustainability literacy.
- 2. Create an assessment protocol to track sustainability literacy from 1<sup>st</sup> year to graduation. This could be done by adding questions to the NSSE survey and/or creating a pre/post survey measure from 1<sup>st</sup> year to graduation.

Responsible Office(s): Assessment Committee, Office of Institutional Research, Sustainability Office

#### h. Research

<u>Current Practice:</u> Opportunities for sustainability research may be funded by Student-Faculty Collaborative Research Projects. Endowed funds administered by the Joseph Moore Museum and Biology Department support student-faculty research, including research that addresses environmental and organismal change over time using museum collections and fieldwork.

# Recommendations:

- **2.12** Pursue new grant opportunities to fund sustainability and environmental research.
  - **Financial Implications**: Such a fund would require at least \$10000 per year to be significant and effective.
- **2.13** Pursue new grant opportunities to supporting existing and new biological collections used in research and teaching.
  - **Financial Implications**: Such a fund would require at least \$50000 per year to support a part-time collections manager and student immersion experiences in biological collections (specimen preparation, care and digitization). Current grant funding for biological collections through the IMLS provides ~\$50,000 annually and extends through October 2017.

<u>Responsible Office(s)</u>: Sustainability Office, Office of the Academic Dean, Director of Foundation Relations and Sponsored Programs

# Section 3: Community

#### Introduction

Sustainability is often said to have three pillars: environmental, social, and economic. This section of the plan focuses on the social aspects of sustainability. For the purposes of the Sustainability Plan, the "Community" section captures many areas of campus life and the co-curriculum including residence halls, relationships with Richmond, and human resources, among others.

#### **Areas Addressed:**

- a. Events
- b. Peer Educators
- c. New Student Orientation Week
- d. Student Sustainability Groups
- e. Living and Learning Residences
- f. Alumni
- g. Diversity
- h. Human Resources
- i. Public Engagement
- j. Sustainable Agriculture
- k. Sustainability Publications
- I. Outreach Campaigns
- m. Revolving Loan Fund

# **Strategic Priorities**

Infuse sustainability across the Earlham experience through NSO, alumni networking, Earlham's events both on and off campus, and public engagement. Support student sustainability leadership in the co-curriculum through Miller Farm, Eco-Reps, and student organizations.

#### a. Events

<u>Current practice</u>: Earlham does not have a visible sustainability ethic when putting on events either on or off-campus. This results in substantial food and other waste being produced when events occur with no effort to minimize their environmental impacts.

#### Recommendation:

**3.1** Develop sustainability guidelines for all events focused on the use of food, resource and waste minimization, and education related to Earlham's sustainability efforts and values.

Responsible Office(s): Events and Operations, Sustainability Office, Metz, Aramark

#### b. Peer Educators

<u>Current practice</u>: We currently have a program called Eco-Reps, which works to model sustainable living practices in the college residences with the help of the Sustainability Office Staff and Resident Assistants. Aside from being in an advisory role to other

students, the Eco-reps have other assignments, such as coordinating various outreach campaigns throughout the semester, overseeing the Move-Out Waste Reduction Project, Conducting Green Dorm audits for the Green Dorm Certification, etc.

#### Recommendations:

**3.2** To select, train, and support at least 2 officially designated Eco-Reps per residence hall and 2 for all the campus houses.

# **Suggestion:**

 The number of Eco-Reps has fluctuated between the years; in order for the Eco-Reps to have a more steady number of volunteers the program could be a 1-credit course or have participation apply toward integrated designations/thematic pathways.

Responsible Office(s): Residence Life, Sustainability Office

#### c. New Student Orientation Week

<u>Current Practices</u>: Earlham does not currently have a prescribed sustainability program as part of New Student Week (NSO) although there have been several ad-hoc sustainability presentations and initiatives in recent years.

#### Recommendations:

- **3.3** Have a more formal program/presentation during NSO week about sustainability and our commitments and expectations related to various campus behaviors and practices (recycling, composting, energy use, etc.)
- 3.4 Develop a sustainability focused peer mentor session where the mentors talk to their mentees about different sustainability initiatives on Earlham's campus and how they can strive to be responsible caretakers of the planet.
- 3.5 Incorporate Farm Day into the NSO week so that new students can learn about sustainable small-scale agriculture at Miller Farm.

## Suggestion:

**1.** Develop a Green Packing List for incoming first years so that they can bring environmentally responsible items to campus

Responsible Office(s): Student Life, New Student Week Committee, Sustainability Office

# d. Student Sustainability Groups

<u>Current practice</u>: There are several student groups focused on environmentalism: ReInvestment, The Outdoors Club, Food Recovery Network, and the Bike Co-op. ReInvestment is a student-run divestment campaign devoted to asking Earlham to divest from fossil fuels and educating about environmental injustices and human rights violations. Outdoors Club is an organization that hopes to bring the outdoors a little

closer to the Earlham Community's daily lives through trips and educational sessions into the greater Richmond community. The Food Recovery Network is a national nonprofit organization that unites and supports college students to fight food waste and hunger by recovering surplus food from their campuses that would otherwise go to waste and donates it to hungry people. The Bike Co-op strives to create a bike-friendly community on Earlham's campus.

# Recommendations:

- **3.6** Continue supporting student sustainability groups by providing increased coordination and good faculty advising.
- **3.7** Facilitate student groups and their outreach efforts to connect with the Richmond community.

Responsible Office(s): Bike Co-Op, Outdoors Club, ReInvestment, Earlham Student Government, Food Recovery Network, Sustainability Office

# e. Living and Learning Residences

<u>Current Practice</u>: Earlham currently has three environmentally oriented residential living options—Outdoor Education House, Miller Farm House, and Environmental House. One living and learning residential option for First Years is planned for the Fall of 2016 with an environmental theme.

# Recommendations:

- **3.8** Explore the "living and learning" theme hall model as a permanent option including various themes ("sustainability," "food," "public health" etc.).
- **3.9** Develop a set of dorm sustainability goals to be promoted by Resident Assistants.
- **3.10** Work with the houses to broaden the outreach for sustainability programs on Earlham's Campus.

<u>Responsible Office(s):</u> Residence Life, Student Life, Sustainability Office, Office of Academic Dean

# f. Alumni

<u>Current Practice</u>: Earlham has established the Earlham College Alumni in Sustainability, a LinkedIn group focused on sustainability or environmental themes. The Alumni Office is moving towards more sustainable practices by recycling old brochures, printing on recycled paper, and sending increasing amounts of e-mails instead of printed letters.

# Recommendation:

**3.11** Utilize the established LinkedIn group to connect alumni with sustainability initiatives on campus. This group should also work in concert with the environmental sustainability majors and the Center for Integrated Learning

(CIL) to better connect current students with sustainability-related careers and futures. This could include bringing alumni currently working in environmental fields to campus for events such as the Alumni Connections Social.

Responsible Office(s): Alumni Development, CIL, Sustainability Office

# g. Diversity

<u>Current Practice</u>: Earlham has a longstanding commitment to creating a diverse, inclusive community that is reinforced within our mission statement. Due to this commitment, the college has an obligation to fully support its diverse community in a multitude of ways. The Diversity Progress Committee, convened by the Director of Diversity and Inclusion and the Senior Associate Vice President for Academic Affairs, and the Diversity Council, comprised of students, are avenues through which Earlham upholds its commitment to diversity. These groups plan campus-wide events, provide input on initiatives related to diversity, and lead strategies to address community concerns about diversity at Earlham.

#### Recommendations:

- **3.12** Construct a multicultural center on campus that would be a hub, safe space, and networking environment for Earlham's diverse student body.
- **3.13** Institute diversity trainings for all Earlham students, faculty, and staff.
- 3.14 Explore ways that environmental, diversity and social justice efforts can take into account, support and strengthen one another in the curriculum, co-curriculum and Earlham community. Focus environmentally themed events on environmental justice or environmental racism and promote similar material in Environmental Sustainability courses.

# **Suggestion:**

1. Director of Diversity and Inclusion and Sustainability Office Director convene at least once each semester to identify key intersections and action steps in their respective positions to amplify each other's work. Strive to interface the work of the Sustainability Office and the Diversity Progress Committee.

Responsible Office(s): Sustainability Office, Diversity Progress Committee, Diversity Council (student), Director of Diversity and Inclusion, Global Hub and Associated Centers

### h. Human Resources

<u>Current Practice</u>: The Sustainability Office coordinates a voluntary Green Office Program that involves a self-audit of current practices and a consultation with suggestions to incentivize green practices in professional setting and to promote environmentally friendly practices that optimize sustainability at Earlham. There is

currently no systematic inclusion of sustainability in employee orientation or professional development.

# **Recommendations:**

- **3.15** Include information about Earlham's commitment to sustainability and practical information on resources available to facilitate personal and office sustainability to all new employees (faculty and staff) during orientation.
- 3.16 Continue and expand the Green Office program currently managed by the Sustainability Office. Align the Green Office Program with the centralized purchasing facility. Offer professional development and education related to sustainability at least twice a year at departmental and Employee Council meetings or via informational emails at least twice a year.

#### Suggestion:

1. Form a voluntary staff/faculty "Sustainability Team" similar to the student Sustainability Peer Educators with one or two members per classroom/office building. These folks would be identified as go-to people for questions about sustainability practices. They would have access to additional resources and would commit to familiarizing themselves with the where, what and who of sustainability at Earlham.

Responsible Office(s): Human Relations Director/Business Office, Employee Council, Office of the Academic Dean (for New Faculty Orientation), Departmental Chairs, Sustainability Office

# i. Public Engagement

Current practice: Earlham has a long history of engagement with the surrounding community including student-led service groups and on-campus blood drives since the 1970's and the Bonner Scholars Program since 1992. Earlham Student Government and student organizations support one-time and ongoing activities and projects that benefit the community such as the annual Day of Service, support for Corazón Latin@ which is a youth mentoring project run by Amigos, and move-out recycling collections that benefit Goodwill. Some faculty members incorporate service learning and community-based research into their courses. Earlham Engage is an online volunteer management platform that allows students, faculty, and staff to find and respond to service needs posted by Earlham's community partner organizations and to record their service hours. A shuttle is available for anyone carrying out volunteer service or work study in the Richmond community. Earlham has also begun supporting alternative break trips related to service and social action including service trips to Ferguson. Chicago. and Ann Arbor, and the Friends Committee for National Legislation's Spring Lobby Weekend in Washington, D.C. In addition, Earlham has a Vice President for Institutional Advancement and Community Relations who works with local government and businesses to help promote the local community's well-being and a Director of Community Engagement who connects the Earlham community with the Richmond community.

In 2015, Earlham established the Perspectives on Living And Community Engagement (PLACE) Program, which is an environmentally focused pre-orientation program for incoming first years. PLACE encourages community engagement by teaching students about Richmond's history and engaging them with the people and places surrounding Earlham.

# Recommendations:

- **3.17** Develop an effective incentivizing mechanism to record service hours on Earlham Engage.
- 3.18 Encourage more faculty to incorporate community-based learning experiences into their courses by including this type of research and teaching in criteria considered for tenure and promotion. With the new local-global focus of the first year seminars, provide ample support for professors interested in developing community-based learning units for existing or new courses by offering seminars, mini grants and other professional development opportunities.
- **3.19** Form strategic partnerships with local government, business, nonprofits and/educational institutions to assist with community capacity-building for sustainability.

Responsible Office(s): CIL, Institutional Research, Academic Dean, Vice President for Community Relations, Sustainability Office

# j. Sustainable Agriculture

Current Practice: Miller Farm House is an on campus house located on College Avenue with the Farm being located next to the Susan Horner Equestrian Center. The Farm supports student farmer learning and campus wide programming in the form of Farm Day (work days) as well as a summer partnership with Amigos, and summer internships. There is a Director of Outdoor and Environmental Education whose responsibility it is to facilitate the running of Miller Farm. Currently the farm is funded through student activity fees and the Sustainability Office, along with any profits earned through the sale of hay and produce from the farm. The Farm is also seeking funding through the Natural Resources Conservation Service for a high tunnel to extend the growing season. Beginning in Fall 2016, there will be student-led courses proposed in accord with student interests coupled with leadership courses aiming to educate students who would like to propose and lead courses in the future.

#### Recommendations:

3.20 Amplify Miller Farm's visibility as a sustainability initiative at Earlham. In doing so, create a Community Collaboration and Engagement fund for Miller Farm to use in creating partnerships with area farmers for consultation and farm improvement. Fund the summer programming at the farm and provide a minimum yearly operating budget for animal care, gardening and farm

improvements, and a separate Living Learning Enrichment fund for conference travel and special enrichment activities at Miller Farm. Continue to develop the sustainable agriculture program through fundraising efforts for a new greenhouse and residence that are laid out in the EC 2014 Master Plan.

- **3.21** Employ student interns during the academic year to facilitate the growth of the farm.
  - **Financial Implications:** School year interns: ~\$5000, Summer interns: ~\$8500, Operating budget: ~\$2500
- **3.22** Continue to support the development of the sustainable agriculture curriculum.
- **3.23** Train Miller Farmers in current health code standards in order to sell produce to the food provider (Metz).
- **3.24** Ensure that insurance for Miller Farm is up to current dining policy.

# Suggestion:

1. Further develop community engagement programs within Richmond through partnerships with organizations such as Amigos, Boys and Girls Club, JUKO, and the Richmond Farmers Market.

Responsible Office(s): Academic Dean, Vice President for Community Relations, Sustainability Office, Director of Outdoor and Environmental Education, Miller Farm, Director of Facilities

# k. Sustainability Publications

<u>Current Practice</u>: Information and publications about environmental action and sustainability at Earlham includes the following:

- The Sustainability Office regularly updates its Facebook page, runs a sustainability blog and sustainability newsletter, and has a sustainability page on the Earlham website.
- The Sustainability Office publishes an Integrated Program in Sustainability Annual Report.
- There is a newly updated brochure developed by the Sustainability Office with a campus map and information for a green tour of campus.

# **Recommendations:**

**3.25** Continually update printed informational materials on topics such as recycling and energy conservation for distribution to departments and posting.

- 3.26 Raise the visibility of Earlham's sustainability commitment and actions on the Earlham website. Consolidate, update and maintain a comprehensive set of sustainability resources on the Earlham website with information relating to all four areas addressed in this plan. Encourage relevant pages on the Earlham website to link to these resources.
- **3.27** Employ student interns, under the direction of the Sustainability Office staff, who would be responsible for regularly updating all sustainability related web pages and publications in coordination with Marketing and Communications.
  - **Financial Implications:** Student Sustainability Corps interns are paid through the Sustainability Office budget. Interns on the Campus Engagement Team are responsible for marketing and communications, along with Sustainability Office staff. Each intern is paid ~\$1600/year.
- **3.28** Develop a regular column in The Word with a sustainability focus.
- **3.29** Create new or improved signage to educate Earlham community members and visitors about sustainable features of buildings and landscaping and on expected practices (such as composting, turning off lights, etc.). Signage will fulfill standards for LEED certification.
  - **Financial Implications**: Signage expenses are part of the Sustainability Office budget. Signage budget will be ~\$1000/year.

<u>Responsible Office(s):</u> Marketing and Communications, Earlham Web Team, Sustainability Office, Director of Facilities

# i. Outreach Campaigns

<u>Current practice</u>: Campaigns focused on sustainability have been led by the Sustainability Office and student run organizations. These include events such as Energy Wars, movie screenings, and Spring Forward.

# **Recommendations:**

- **3.30** Implement at least 1 campaign per year that results in measurable reduction around water, electricity, waste, fuel, etc.
  - **Financial Implications:** Designated line of operating budget of Sustainability Office for outreach campaigns will require ~\$1000/year.
- **3.31** Develop monthly service opportunities with sustainability oriented organizations such as Cope Environmental Center and Hayes Arboretum to help develop sustainability focused experiential learning opportunities.

#### Suggestions:

- 1. Develop a student led Back Campus cleanup initiative to help remove litter and invasive species from Back Campus once a month (weather-permitting).
- **2.** Organize regular trips to the Richmond Farmers Market to develop closer ties to the local small-scale farmers.

# m. Revolving Loan Fund

<u>Current practice</u>: Earlham currently does not have a revolving green loan fund program. From an Earlham College policy brief written in POLS 300:

The concept of a revolving loan fund (RLF) is simple. A fund is created with sufficient capital to fund clean energy projects ... Ideas for projects that would create financial savings for the college are submitted to an RLF administrative body and reviewed... Projects funded by the RLF must be projected to generate saving through reduced energy use of alternative energy use that are equivalent to the capital needed to implement the project within 5-10 years. The savings accrued by the project are paid back to the fund and are then used to fund future projects.

While a Revolving Loan Fund might not currently be a realistic option we have included it as a future aspiration.

# Suggestion:

- 1. Develop a Revolving Loan Fund program for sustainability initiatives on campus. Include strong student participation and leadership into the management of this program to increase student ownership and accountability of the college's energy conservation strategies. Work with Institutional Advancement, SRIAC, Student Government, EEAC, and relevant college administrators for design and implementation of the program.
- **Financial Implications:** Start-up funding needed ~\$30,000, fund will be self-sustaining and will grow over time.

Responsible Office(s): VP for Finance and Operations, Sustainability Office

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# **Section 4: Operations**

#### Introduction

The operations section focuses upon reducing the college's resource consumption, and improving our understanding of both the college's supply chains and waste streams necessitated by consumption patterns. Despite the mostly technical nature of the operations areas, the most profound and lasting impact from these plan elements will only be realized if co-curricular learning opportunities are integrated into their accomplishment. It would be a mistake to implement technically outstanding solutions in ways that are virtually invisible to the general campus population. The operational side of sustainability is integral to sustainability education at Earlham.

# **Areas Addressed:**

- a. Buildings
- b. Climate
- c. Dining Services
- d. Energy
- e. Grounds
- f. Purchasing
- g. Transportation
- h. Waste
- i. Water

# **Strategic Priority**

Implement sub-metering of electricity, heating/cooling, and water usage in all campus buildings. Create a centralized purchasing facility that will handle all transactions of the college and streamline the purchase of more sustainable products. Increase student involvement and support through Miller Farm and the Free Store. Implement mechanisms by which savings accrued in excess of debt service on the energy savings contract are used to fund other operational sustainability priorities.

#### a. Buildings

<u>Current Practice:</u> All new buildings or major renovations must be certified to LEED (Leadership in Energy and Environmental Design) silver. LEED certified buildings include Stanley, Tyler, Center for Visual and Performing Arts (CVPA), and Center for Science and Technology (CST). The CVPA and CST are LEED Gold certified.

#### Recommendations:

- **4.1** Adopt an indoor air quality management policy, plan, and/or practices that include regular auditing or monitoring and a mechanism for occupants to register complaints.
- **4.2** Confirm with the Board of Trustees and Capital Projects office that all new buildings and renovations are LEED gold certified.
  - **Financial Implications:** LEED Silver and higher levels of LEED certification add significantly to construction and renovation costs. Studies have

documented that LEED Silver certification typically adds 10% to 15% to these costs; Gold certification would be expected to add more. However, these upfront costs are expected to be more than offset by substantial reductions in operating and maintenance costs over each building's lifespan. Put another way, LEED certification will reduce total lifecycle costs for campus buildings.

**4.3** Implement U.S. Green Building Council's LEED Existing Building Operations & Maintenance or equivalent standards.

Responsible Office(s): Capital Projects Office, Director of Facilities, Sustainability Office

#### b. Climate

<u>Current Practice:</u> Earlham currently does not have a Climate Action Plan that makes a commitment toward specific greenhouse gas emissions reductions by targeted dates. We are signatories of the Talloires agreement (2006) but have not signed the American College and University Presidents' Climate Commitment (ACUPCC). Earlham completed an initial inventory of greenhouse gas emissions in 2009. An inventory is completed at least every three years. We also have a plot of reforestation for carbon sequestration south of the football field. The plot is almost filled to capacity, with only a few spots where trees didn't make it that are empty.

# Recommendations:

- **4.4** Develop a Climate Action Plan to reduce Earlham's greenhouse gas emissions that is economically sustainable for the college to legitimately pursue.
  - **Financial Implications:** The Climate Action Plan will detail its cost implications.
- **4.5** Become a signatory of the ACUPCC.

<u>Responsible Office(s)</u>: President's Office, V.P. for of Finance and Operations Affairs, Facilities Director, Sustainability Office

#### c. Dining Services

<u>Current Practice:</u> Earlham College currently practices trayless dining, has vegetarian and vegan options, composts pre-consumer and post-consumer food wastes, and utilizes recycled content and compostable napkins. The food services contractor also makes re-usable containers available for dining hall users, has a reusable mug program, and encourages the use of personal glassware in the dining hall. The Dining service (Metz) currently purchases local foods where possible and is working to increase their commitment to sustainable food options. The Dining service (Metz) employs a sustainability coordinator to monitor and improve sustainability practices in food services. Pre-consumer and post-consumer waste is composted as much as possible, and eligible pre-consumer waste is recycled.

#### Recommendations:

- 4.6 Publicly develop and adopt policies that are consistent with dining hall and food service sustainability practices for college and university communities in accordance with STARS guidelines. Policies developed must be conscious of growing seasons within the Midwest climate as well as certifications and liabilities of certain farms that qualify for our health code. The commitment will include the goals described in recommendations 4.6-4.9 (sustainable dining policy).
  - **Financial Implications:** Costs of increased local food purchasing will be negotiated with food services contractor. In the next contract renewal cycle, the request for proposals to food service contractors must include stipulations on the college's goals in regards to this plan.
- 4.7 Following STARS guidelines, Earlham College and its subsidiary contractors will develop a plan that includes 20% or more of food and beverage purchasing budgets will be spent on foods grown or raised within a 250-mile radius of Earlham by 2020. Other food purchases must support the procurement of organically or sustainably grown foods. Locally sourced food should be labeled in the dining hall. To recognize that different parts of the world grow different foods at different time, the plan developed must be conscious of the Midwest growing season and any percentage will be as available.
- **4.8** Commit to establishing a transparent reporting system, to assess food procurement and commit to compiling these assessment results in an annual progress report.
- **4.9** Improve vegan and vegetarian dining options at all meals in all dining facilities.
- 4.10 The Sustainability Coordinator hired by the Dining Service must address reduction of pre-consumer waste through compost and post-consumer waste, possibly working with the Food Recovery Network. They must also coordinate with Miller Farm to use their products when available. Commit to ecologically sustainable, humane, and socially equitable food systems on campus through co-curricular activities, cafeteria-based education, and other appropriate means.

Responsible Office(s): Sustainability Office, Food Service Contractor

#### d. Energy

<u>Current Practice:</u> Earlham College currently uses a central, computer controlled energy management system for some buildings, with the remaining buildings' climate control managed by traditional, stand-alone thermostats. Geothermal energy is used in the CST and there are more plans within the master plan to incorporate geothermal for other

buildings around campus. A comprehensive scope of energy conservation measures are being implemented and this overall program is 95% complete as of April 2016. Real-time electricity consumption monitoring has recently been installed for most of the dormitories. All new buildings (LEED certified) are capable of being monitored for all utilities (water, electricity, heat, cooling), although not all are as of April 2016. In June 2016, concepts of renewable energy investment (solar energy) are going to be set with the Board of Trustees.

# Recommendations:

- **4.11** Complete discussions with RP&L (Richmond Power and Light) and IMPA (Indiana Municipal Power Association).
- **4.12** Update the energy conservation portion of the Earlham website to share information about energy saving and efficiency technologies on campus.
- **4.13** Install meters in all the buildings to monitor energy consumption.

Responsible Office(s): Director of Facilities, Vice President of Finance and Administration, Sustainability Office

#### e. Grounds

<u>Current Practice:</u> Earlham College became a member of the Tree Campus USA program in 2014. The tree campus inventory is updated every time a tree is added or removed. The College prioritizes the use of native species when putting in new plants. One example of this is the rain garden outside of the Athletics and Wellness Center. However, there is not written policy that encourages this practice. There are a few plots of land close to campus that the college owns that are managed as native forests to Indiana. These include Wildman Woods and Cedric's Rock.

#### Recommendations:

- **4.14** Develop an Integrated Pest Management (IPM) program. This approach promotes the health of human and non-pest wildlife while enabling institutions to maintain an attractive campus environment and minimize costs.
- **4.15** Become a member of the Indiana Wildlife Federation, specifically signing onto the Landscaping the Sustainable Campus initiative, which includes fulfilling requirements, related to sustainable lawn maintenance, pesticide/herbicide use reduction, invasive species reduction, and water conservation and reduction.

- **4.16** Create a native plants policy that prioritizes the use of native plant species in landscaping.
- **4.17** Develop a waste minimization and reuse system for college compost or mulch waste from grounds keeping, including grass trimmings. Work with Miller Farm to incorporate grounds waste into existing compost pile.
- **4.18** Follow STARS guidelines to develop an organic land care standard or sustainable landscape management program that eliminates the use of inorganic fertilizers and chemical pesticides, fungicides and herbicides in favor of ecologically preferable materials.
- **4.19** Construct a formal composting facility to expand the composting program to include the organic waste from grounds keeping and the manure from the horse barn.
- **4.20** Expand the creation of rain gardens on campus to reduce the amount of water that ends up in the storm drain. This will help the campus aesthetically as well as financially (less water to pay to go to a processing facility).

<u>Responsible Office(s)</u>: Grounds Management Team including the Assistant Director and Director of Facilities, Campus Landscape Designer, Sustainability Office

# f. Purchasing

#### **Vendor Code of Conduct**

<u>Current Practice:</u> The college currently has a Vendor Relations Committee that addresses the social audit, decide controversies over vendors, recommend principles to revise the vendor code of conduct document, and will meet annually with the Vice President of Financial Affairs to review lists of vendors that align with the code.

# Recommendations:

**4.21** Implement the social audit done by the committee and address vendors that provide inadequate answers.

Responsible Office(s): Vendor Relations Committee, Vice President of Finance and Administration

#### **Purchasing of Goods**

<u>Current Practice:</u> Departments and individuals purchase goods on their own from vendor of their choice and have them shipped to campus. Based on recommendations from Strategic Planning III (SP3), the Vendor Relations Committee has been formed to develop a campus-wide purchasing policy and create a central facility to manage the purchasing of goods.

#### Recommendations:

- **4.22** Create a centralized purchasing area that orders and delivers/provides goods supplies and consumables to campus that are used campus wide.
- 4.23 Provide support for historically underutilized businesses, minority-owned businesses, and women-owned businesses by giving preference during RFP processes. Increase purchases made from these types of businesses. Conduct targeted outreach to these businesses about possibilities to work with Earlham.
- **4.24** Develop a policy that requires all purchases to give priority to sustainable products, as well as give preference to local products or businesses.

Responsible Office(s): Operations, Facilities, and the Campus Store.

# **Computer and Electronic Device Purchasing**

<u>Current Practice:</u> In 2015, all the purchases made by the Information, Technology and Services department were Electronic Product Environmental Assessment Tool (EPEAT) either silver or gold certified.

# **Recommendations:**

**4.25** Write a campus-wide policy to purchase EPEAT Silver or higher for desktop and laptop computers, as well as monitors and peripheral devices when fiscally responsible.

<u>Responsible Office(s)</u>: Information Technology Services, Vice President of Finance and Administration

# **Cleaning Product Purchasing**

<u>Current Practice:</u> Aramark, Earlham's custodial services, uses Blue Cleaning technology across campus, which is chemical-free deionized water. The goal is to minimize exposure of building occupants to potentially hazardous chemicals. Aramark also makes green purchases of cleaning products, specifically ones with a Green Seal or Environmental Choice label. They follow all the guidelines put forth by the EPA for janitorial services. They also have a responsible disposal system in each housekeeping closet for chemicals.

#### Recommendations:

**4.26** Include in any future contract negotiations with housekeeping providers that the most environmentally friendly standard cleaning practices are to be used wherever economically and technically feasible.

<u>Responsible Office(s)</u>: Housekeeping Manager, Vice President of Finance and Administration

# Office Paper Purchasing

Current Practice: The College currently buys copier and printer paper with at least 30% post consumer waste though it is not clear that all individual departments, programs, and offices maintain this standard.

#### Recommendation:

- 4.27 Continue the purchasing of recycled content paper, increasing the amount of recycled content when fiscally responsible.
- **4.28** Departments must purchase office paper through the central purchasing facility that will have a policy on buying paper with post consumer waste (see recommendation 4.23).

Responsible Office(s): Informational Technology Services, offices that purchase paper

# g. Transportation

**Campus Fleet** 

Current Practice: Starting in Fall of 2016, the campus fleet will be rented from Enterprise. The old cars and vans will be sold back to Enterprise and Earlham will receive new vehicles on a yearly basis that will run more smoothly and cleaner for the environment. The Facilities department has a set of electric vehicles that they use around campus for maintenance tasks. There are also three hybrid cars that are at the disposal of the President, the Director of Admissions, and Vice President of Institutional Advancement.

# Recommendations:

- **4.29** To reduce emissions from campus vehicles through low carbon fuel alternatives.
- **4.30** Investigate, as financially viable, opportunities for installing plug-in-electric stations in parking lots.

Responsible Office(s): Department of Public Safety

# **Bicycle Plan and Facilities**

Current Practice: The college has bike racks located around the campus. Public Safety has a space to store bikes over the summer. The 2014 Earlham College Master Plan also includes an extension to connect the Cardinal Greenway to the Earlham Campus.

#### Recommendation:

**4.31** Hire a student worker within the Bike Co-op that will help encourage progress with the Cardinal Greenway connection to campus, as well as other ways to make the Earlham campus and it's connections to downtown Richmond and the Depot District biker friendly. This student worker would help coordinate the volunteers within the Bike Co-op and work with the conveners of the club. **Financial Implications:** The student worker would be paid by the Office of Public safety to encourage the safe transit of student bikers to and from campus.

Responsible Office(s): Office of the President, Bike Co-op, Facilities, Sustainability Office

# **Telecommuting, Car Sharing and Transportation Beyond Campus**

<u>Current Practice:</u> The Center for Integrated Learning provides a shuttle service for students volunteering in town. Public safety provides a daily free shuttle for students to various locations around Richmond after the public bus system stops running for the day.

#### Recommendations:

- **4.32** Consider offering a formal telecommute program for employees whose essential work products are not tied to campus.
- **4.33** Revitalize the Enterprise Car Share Program designed for student's personal use.

Responsible Office(s): Business Office, Community Relations, Sustainability Office

# Vehicle Idling

Current Practice: Earlham College currently does not have a vehicle idling policy.

#### Recommendation:

**4.34** Adopt a policy regarding idling on campus.

Responsible Office(s): The Sustainability Progress Committee

#### h. Waste Reduction

<u>Current Practice:</u> The college does recycle and compost a small percentage of its waste. Stanley Hall, CVPA, and Tyler Hall construction projects recycled at least 80% of construction and demolition (C&D) wastes, and 47.8% of the waste from the CST. The college hosts or participates in local e-waste recycling initiatives. The college has strategies in place to safely dispose of all hazardous, special, universal, and non-regulated chemical waste and seeks to minimize the presence of these materials on campus. The Sustainability Office sponsors waste reduction programs that coordinate the Move-Out Project for the end of each semester. The Office has a formal policy for waste disposal for the Move-Out and other programs. The Move-Out Project partners with Goodwill to donate unwanted items and are a part of the Post Landfill Action Network.

#### Recommendations:

- **4.35** Implement source reduction strategies to reduce total waste generation (garbage, recycling, and compost) per weighted campus user compared to a 2005 baseline.
- **4.36** Develop campus wide policy and procedures for the following areas:
  - Waste Diversion
  - Construction and Demolition Waste Diversion
  - Electronic Waste
  - Hazardous Waste
  - Surplus Materials Exchange
  - Printing
  - Providing Materials Online
- **4.37** Hire a waste reduction/recycling coordinator to oversee the creation of these policies.
  - \$ Financial Implications: A Waste reduction/recycling coordinator at 20 hrs/week year round ~ \$11000 will be required for oversight and effective implementation of these initiatives. The savings to the college accrued by diverting and recycling waste are estimated to balance out the cost of this added position.
- **4.38** Continue to develop the fixed space for the free store.
  - **Financial Implications**: Hire a student worker to help coordinate volunteers within the store.

<u>Responsible Office(s)</u>: Director of Facilities, Information Technology Services, Residence Life, Business Office, Registrar, and the Sustainability Office.

#### i. Water

# **Measuring Water Consumption:**

<u>Current Practice:</u> Earlham College currently has no centrally monitored, real-time measurement. Water consumption is measured by municipal water meters for those buildings with separate accounts.

#### Recommendations:

**4.39** Install submetering in all buildings for water as well as energy (See recommendation 4.13).

Responsible Office(s): Facilities, Sustainability Office

#### **Stormwater Management:**

<u>Current Practice:</u> Full compliance with federal and state requirements of the Municipal Separate Storm Sewer System (MS4).

# Recommendations:

**4.40** Create a campus wide stormwater management plan that mitigates stormwater runoff impacts of new construction, major renovation, and other projects that increase paved surface area on campus or otherwise significantly change the campus grounds.

Responsible Office(s): Facilities, Sustainability Office

#### Water Use Reduction:

<u>Current Practice:</u> We have twelve waterless urinals on campus. We currently use little to no non-potable water on campus, xeriscaping techniques and weather-informed irrigation. Nine water bottle filling stations have been installed around campus.

#### Recommendations:

- **4.41** Continue to integrate waterless urinals and water bottle filling stations.
- **4.42** Use non-potable water (harvested rainwater or greywater) for irrigation and/or other applicable applications.
- **4.43** Use Xeriscaping techniques across campus. Include the use of drought tolerant plants when possible.
- **4.44** Use weather data or weather sensors to automatically adjust irrigation practices.

<u>Responsible Office(s)</u>: Director of Facilities, Assistant Director of Facilities, Grounds Supervisor, Campus Landscape Designer, Sustainability Office, Capital Projects Office