



Fairfield

UNIVERSITY

Campus Sustainability Plan

SPRING 2021



Campus Sustainability Committee Chair

David W. Frassinelli
Vice President of Facilities Management
dfrassinelli@fairfield.edu

CSC Faculty Representatives

Dr. James E. Biardi
Associate Professor of Biology
jbiardi@fairfield.edu

Dr. L. Kraig Steffen
Environmental Studies Program Director
Lsteffen@fairfield.edu

Dr. Amanda S. Harper-Leatherman
Associate Professor of Chemistry
aharper@fairfield.edu

Dr. Robert Nazarian
Assistant Professor of Physics
rnazarian@fairfield.edu

Dr. David L. Downie
Associate Professor of Politics and
Environmental Studies
ddownie@fairfield.edu

Staff Representatives

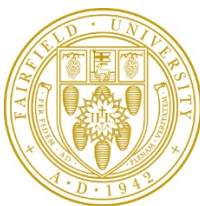
Jay Rozgonyi
Associate Vice Provost
jrozgonyi@fairfield.edu

Joseph Bouchard
Director, Environmental Health and Safety
Campus Fire Marshall
jmbouchard@fairfield.edu

Matthew A. Dinnan
Assistant Vice President
madinnan@fairfield.edu

Curt Krushinsky
Director, Campus Planning and Design
ckrushinsky@fairfield.edu

Charles E. Sousa
Senior Associate Director, Residence Life
csousa@fairfield.edu



Fairfield University

Office of the President

Mark R. Nemec, PhD
President

June 2021

I am pleased to support and endorse this update to Fairfield University's Campus Sustainability Plan. The purpose of this document is to provide clarity and focus for the many sustainability initiatives, projects, and activities that are currently underway or that we expect to initiate in the coming years, all in order to support our obligation support the health of our campus and common environment in respectful stewardship of God's creation, and in keeping with our identity and responsibilities as the modern, Jesuit and Catholic University.

Fairfield has long been committed to this work of stewardship in relation to our environment, and this work has acquired even greater focus and urgency in recent years as the implications of inaction have become increasingly apparent, and as we sharpen our discernment regarding the path of environmental justice. We undertake these efforts also in accord with the four "universal apostolic preferences" that were identified by the Society of Jesus in 2019 as guiding the work of the Jesuits for the following ten years, the fourth of which is "to collaborate in the care of our Common Home."

In a letter to members of the Society around the world on Feb. 6, 2019, Superior General Arturo Sosa, S.J. wrote: "The preservation over time of the conditions of life on our planet is a human responsibility of immense ethical and spiritual importance," and he emphasized the direction given by Pope Francis in his encyclical *Laudato Si* that we must therefore embrace "the moral imperative of assessing the impact of every action and personal decision on the world around us."

This updated Campus Sustainability Plan will serve as a foundational and guiding document for how we will proceed as a community as we follow this moral imperative, mindful in all that we do of our obligation to take our part in expressing God's love for His Creation and in care of our Common Home.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark R. Nemec".

Mark R. Nemec, PhD
President

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I. Introduction

Brief History

The Campus Sustainability Committee (CSC) was originally formed in October of 2008 as part of the American College and University President's Climate Commitment to carbon neutrality. Membership was by appointment, and included student, staff, and faculty membership. The CSC has met approximately monthly since that time, and developed working groups in 2010 to undertake the development of a Campus Sustainability Plan including goals and metrics for implementation. These working groups brought together students, staff, faculty, and administrators from across campus with interests and expertise in sustainability issues. The first plan was published in 2015 and this plan represents the first complete update of the plan.

The Campus Sustainability Plan

The Campus Sustainability Plan is a dynamic document defining major steps toward achieving sustainability into the future. Nine functional areas have been identified (Campus Operations, Energy, Building Design and Construction, Waste Management, Land and Water Management, Student and Academic Engagement, Finance, and Administration) and working groups have developed a series of recommendations, goals, objectives and benchmarks over short, intermediate, and long timeframes. The goals developed by each functional group are interconnected and consistent with a philosophy of sustainability shared across the student, faculty, staff, and administrative domains. A summary of each functional group's long-term vision follows; more detailed descriptions are provided in the body of the Campus Sustainability Plan.

The Vision behind the Plan

Fairfield University is ready to take a leadership role in the promotion of sustainability, and to become a regional center of higher education, discovery and operations. Current initiatives include significant accomplishments in the greening of campus structures, energy sourcing, and accountability for greenhouse gas emissions. In addition to these largely operational initiatives, Fairfield University has a strong tradition of faculty and student engagement in sustainability initiatives leading to establishment of a campus organic teaching garden, student-driven water quality monitoring, vigorous curriculum development, and other academic initiatives inside and outside the classroom.

How to Read this Document

This Campus Sustainability Plan has been assembled based on evaluations of several working groups focused on distinct aspects of campus sustainability. Background information and goals for each section are presented using the following template:

Background: This would describe history of action and current status. For example, for waste management, it could have a graph of recent tonnage (trash vs. recycling).

Goal 1: This is a prioritized list of Goals. Where do we want to be? What should we do first? For example, the goal for waste management could be to increase % recycling from 15 to 25% and reduce overall tonnage of waste produced by 'x' amount.

Strategies to meet goals:

Project (Informative title + brief description)	Contact (Name + email + phone)	Cost (Low, med, high)	Impact on Goal (Low, med, high)	Timeframe (completed, in progress, 1-2 yrs, 5-10 yrs, 10-20 yrs)
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II. Campus Operations

Auxiliary Services (Bookstores, Food Service, Vending, Transportation)

Background: There is a gaining momentum on college campuses regarding the move towards personal water bottles rather than purchasing water in bottles in retail locations on campus. (snack bars, Library, vending machines) This does create some contractual problems in the short period with our vending contracts but in the long run, it is an environmental issue that cannot be ignored.

Goal: To promote the use of bottle filling stations on campus the request that “Stags use bottles, not landfills.” There will also be an audit of current water coolers on campus and the desire to increase the availability of bottle filling water coolers on campus.

Strategies to meet goal:

Personal water bottle promotions	Matt Dinnan	\$500	High	In progress as needed
Install additional water coolers	Curt Krushinsky	Medium	High	Ongoing

Purchasing Policies

Background: There are numerous university policies regarding purchasing with direct/indirect impact on university sustainability efforts in a positive, negative and neutral way. However there does not appear to be a “central” university policy encompassing all areas impacting sustainability.

Goal: It is our goal to complete an audit of all existing university purchasing policies and create a central depository for all such policies in the university purchasing department. Once the audit is complete, these policies will be reviewed by the campus sustainability committee with recommendations being sent to the university purchasing director.

Strategies to meet goal:

Audit and review of University Purchasing Policies	Matt Dinnan & Peter Perez	Low	High	In progress, completion 08/30/2022
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University Vehicles

Background Hundreds of university vehicles exist yet there does not appear to be a central depository for information about said vehicles. In order to plan for new/replacement vehicle purchase, a central location must be designated and a vehicle replacement policy must be established that has environmental issues included as a key component in such purchase review.

Goal: It is recommended that a university vehicle audit be undertaken and that a central vehicle information center is established, reviewed and updated on an annual basis. One of the main components of this audit and depository will be to collect information on current vehicles so purchasing decisions based on key and significant environmental practices may be followed.

Strategies to meet goal:

Audit and review of existing University vehicles	Peter Perez X2205	Low	High	In progress, completion 08/30/2022
Draft and propose policy for purchasing energy efficient vehicles	Peter Perez X2205	Low	High	In progress, completion 08/30/2022
Draft and propose vehicle idling policy	Frank Ficko X4090	Low	High	Complete

Custodial Services

Background: High volume numbers of cleaning products are used daily on the Fairfield University campus by both university departments and auxiliary services (food service & custodial services). Assuming that the purchase of such products is considers environmental policies and practices, there is no central clearinghouse on campus that tracks and reviews such purchases.

Goal: To audit/catalogue on an annual basis the type & volume of cleaning products used on campus and review if such products are compliant with university sustainability efforts.

Strategies to meet goal:

Cleaning product audit	Candido Rosario	Low	High	In progress, completion 08/30/2022
Collect and publicize links to vendor sustainability policies	Candido Rosario	Low	Low	In progress, completion 08/30/2022

III. Energy

Background: The following plan provides insight into utility usage and looks for ways to obtain efficiencies and reduce consumption. The primary objective is to achieve the goals established by Fairfield University’s Climate Action Plan.

Based on the order of magnitudes, energy will be the primary focus. The process will be to first identify the largest areas of usage on campus in terms of electricity and BTU’s of heating and cooling. Recommended changes will involve equipment modifications as well as behavioral changes. Equipment modifications will be sorted by low, medium and high costs. Behavioral changes will be described and accompanied by a description of the methodologies to implement, communicate, monitor and applaud the change in behavior.

See the end of this section for an overview of campus energy infrastructure.

Goal 1: Reduction of Energy Consumption.

Strategies to meet goals:

Heat Recovery Facilities will continue to incorporate this technology in new construction and renovations.	Contact: David Frassinelli dfrassinelli@fairfield.edu , x4254	Cost:Medium	Impact on Goal: Medium	Timeframe: Ongoing
Continue with the replacement of exterior lighting with the new campus standard LED lighting with cutoff features. The new standard fixture eliminates night sky and has an extended life span of 70,000 hours compared to 25,000 hours for conventional fixtures.	Contact: David Frassinelli dfrassinelli@fairfield.edu , x4254	Cost: Medium	Impact on Goal: Medium	Timeframe: in progress, 75% complete
Existing Building Commissioning (formerly known as Retro Commissioning). Fairfield is in the process of rolling out this program. The first building to be done will be the Library. Facilities will start by evaluating the automation of the lighting systems to develop a program to shut off the lights when the building is not in use.	Contact: David Frassinelli dfrassinelli@fairfield.edu , x4254	Cost: Medium	Impact on Goal: Medium	Timeframe: Library lighting complete. Ongoing in other non-renovated buildings
New HVAC Equipment Facilities has continued to upgrade HVAC equipment on an annual basis.	Contact: David Frassinelli dfrassinelli@fairfield.edu , x4254	Cost: High	Impact on Goal: Medium	Timeframe: ongoing
Envelope Upgrades (insulation in window replacements) to improve heat loss.	Contact: David Frassinelli dfrassinelli@fairfield.edu , x4254	Cost: High	Impact on Goal: Medium	Timeframe: ongoing.

BMS Upgrades Facilities will continue to add buildings to the central control system at CUF.	Contact: David Frassinelli dfrassinelli@fairfield.edu , x4254	Cost: High	Impact on Goal: Medium	Timeframe: ongoing.
Shutting off lights Develop a PR program to encourage the community to shut off lights in rooms not being used.	Contact: David Frassinelli dfrassinelli@fairfield.edu , x4254	Cost: Low	Impact on Goal: Low	Timeframe: 1- 2 years
Encourage and educate students toward bringing energy efficient electronics to campus, e.g., LED flat screen televisions rather than plasma screen televisions	Contact: LEAF, Leaders for Environmental Action at Fairfield; leaf.fairfield@gmail.com	Cost: Low	Impact on Goal: Low	Timeframe: in progress
Make greater use of new ultrasonic technology occupancy sensors across campus.	Contact: David Frassinelli dfrassinelli@fairfield.edu , x4254	Cost: Medium	Impact on Goal: Medium	Timeframe: ongoing

Goal 2: Target a reduction in mobile fuel usage by 20% by 2025.

Strategies to meet goals:

Project: Install two electric charging stations for electric vehicles, both University fleet and employee.	Contact: David Frassinelli, dfrassinelli@fairfield.edu , x4254	Cost: Medium	Impact on Goal: Low	Timeframe: Complete
Project: Continue to replace traditional fleet vehicles with hybrids or other alternative technology where appropriate to function.	Contact: David Frassinelli, dfrassinelli@fairfield.edu , x4254	Cost: Medium	Impact on Goal: Medium	Timeframe: on going



Brief Campus Overview

The Fairfield University Campus is provided electricity from a single high voltage electrical loop that originates at the Central Utility Facility (CUF). Since the original plan was drafted, significant portions of the campus have been added to the cogen plant, notably the Townhouses and the Barnyard areas. A few buildings such as Southwell Hall and the Early Learning Center have their own electrical services separate from the campus loop. The bulk of the power coming out of CUF is provided by a 4.6 megawatt gas driven jet engine turbine known as the cogeneration unit. The 4.6 megawatt designation is the potential output of the unit in an ideal factory setting. For practical purposes, the unit produces approximately 3.9 to 4.0 megawatts. There is also a utility line from the local utility that runs through CUF to supplement the power of the cogeneration unit. At all times of the year, Fairfield imports electricity from the local utility over that electrical line. In months such as February when the campus load is close to 3.5 megawatts, the import is minimal. In September, the campus load can exceed 5 megawatts.

In the 1970's, Fairfield centralized the heating and cooling of buildings in the campus core by installing a high temperature hot water loop (HTHW) and a chilled water loop (CW). The generation of the heat was provided by conventional gas boilers and the generation of cooling was provided by conventional chillers. The loop is actually three separate loops, with the first loop serving the Campus Center, Recreational Complex, Bannow North and the School of Nursing and represents 43% of the total CUF production of 78 billion heating and cooling BTU's. The second loop serves Kostka, Claver, Bannow South and the Library representing 49% of production, not including 51 McInnes that was recently added. Prep is on its own loop and consumes 8% of production. The installation of the cogeneration facility has allowed Fairfield to capture the waste heat from the generation of electricity to provide heating and cooling.

Fairfield has a second loop on the other side of campus that provides heat to Canisius, Donnarumma and all of the dorms on the quad. This loop was designed as a dual temperature and it provides cooling to the quad dorms. The heating is provided by a natural gas boiler in Jogues Hall.

The energy department at Fairfield University located in the CUF facility has a sophisticated controls system that allows Facilities to view the building systems on campus. The temperatures in various rooms, the temperature set points and the temperatures coming out of the HVAC supply ducts can all be viewed. Unfortunately, not all buildings on campus have this capability. Extending the ability to control buildings will be an important step in reducing energy costs and effectively managing the university's overall energy consumption. This will complement strategies provide in Section IV: Building Design and Construction.



IV. Building Design and Construction

Background: Fairfield University’s campus is composed of 59 buildings with 2.2 million square feet of space spread across 210+ acres. Fairfield supports a student, faculty and staff population of approximately 6,000, with over 80% of our undergraduate student body residing in on-campus housing. The University continues to grow. Fairfield has made a commitment to make sustainability a focus of every new construction and renovation project.

Building design, construction and renovation projects impact campus sustainability in a number of ways. In the design phases of these projects the Department of Facilities will evaluate the feasibility of green features that could be incorporated into projects. Recent elements incorporated into design have included green roofs, low flow toilets, low flow shower heads, permeable pavement, renewable building products with low carbon footprint, heat recapturing HVAC systems, and LED lighting. During construction, the construction team manages budgets to incorporate as many of these elements as the budget allows.

The goals in this section focus on creating a comprehensive and holistic approach to “greening” processes involved in the planning, design, construction, operation, maintenance and reuse of Fairfield University’s buildings, facilities and built environment.

Goal 1: To the maximum extent possible, design new facilities to LEED Silver sustainability standard.

Strategies to meet goals:

Energy efficient and sustainable design standards shall be utilized on all new construction projects. All new construction shall meet or exceed a LEED Silver level of sustainability.	Curt Krushinsky ckrushinsky@fairfield.edu x2503	Medium	High	In progress
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Goal 2: Develop sustainable plans for renovating and retrofitting existing buildings as resources allow.

Strategies to meet goals:

Energy efficient and sustainable design standards shall be utilized on all applicable renovation projects. All major renovations shall meet or exceed a LEED Silver level of sustainability.	Curt Krushinsky ckrushinsky@fairfield.edu x2503	Cost: Low	Impact on Goal: Medium	Timeframe: in progress
Capitalize on local Utility Incentive programs to retrofit existing buildings with LED lighting and energy efficient HVAC systems	Curt Krushinsky ckrushinsky@fairfield.edu x2503	Cost: High	Impact on Goal: High	Currently underway.

Goal 3: Upgrade Building HVAC Systems as resources allow.

Strategies to meet goals:

Existing building HVAC equipment shall be replaced with more energy efficient models, as applicable,	Curt Krushinsky ckrushinsky@fairfield.edu x2503	Low	High	In progress
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Goal 4: Purchase Sustainable Furniture, Fixtures and Equipment (FF&E) that balance functionality with sustainability.

Strategies to meet goal:

Purchase furniture that is Greenguard Certified, Cradle to cradle rated or Green Label Certified	Nancy Rosado	Low	High	Ongoing
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Goal 5: Communicate Economic and Social Benefits.

Strategies to meet goals:

Develop and document opportunities to communicate “economic” and “social” benefits of sustainable design into construction, operation and maintenance of campus buildings and facilities.	Curt Krushinsky ckrushinsky@fairfield.edu x2503	Low	High	In progress
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Goal 6: Create opportunities for the built environment to provide educational benefits.

Strategies to meet goals:

Incorporate green elements in such a manner that allows ongoing educational benefits	Curt Krushinsky ckrushinsky@fairfield.edu x2503	Low	High	In progress
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Goal 7: Include building systems that promote awareness of energy consumption as opportunities become available.

Strategies to meet goal:

Provide live and online opportunities for students to see the power, water and heating consumption related to their activities	Curt Krushinsky ckrushinsky@fairfield.edu x2503	Medium	High	Partially complete
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V. Waste Management

Background: A formal recycling program at Fairfield University began in 1993. As of January 1, 1991, it is Connecticut State Law that all persons, businesses, and institutions recycle all products possible including but not limited to aluminum, glass, plastic, scrap metal, organics (ie: leaves), and various forms of paper and cardboard.

Historically, Fairfield University has maintained an average diversion rate (percent recycled of total hauled) of around 12 percent. Methods of recycling have been altered since the programs' genesis, in order to explore potentials of increasing the diversion rate. A curbside pick-up program began in 2003 in the Townhouse student housing, as a way to make recycling more convenient and standardized. In 2008, students began the "Gimme 5" Program, focusing on creating on-campus public collection centers for #5 Plastics, which were then shipped to an outside recycling company.

In 2011, the University adopted the Single Stream Recycling Program, which began in the Town of Fairfield the summer of the same year. This allows for a greater quantity of materials to enter the recycling stream, and ideally makes it "easier" to recycle, as there is no separation of materials on the consumer's side, just one recycling bin. Although a learning curve period was expected, the dramatic decrease in diversion rate observed in the first few months of the program was disheartening. The overall reported hauling tonnages, however, were also much less than expected, possibly due to decrease in students and staff on campus, less off-campus sources contributing to the University's dumpsters (illegal dumping), and altered national averages of waste per square yard (the rate that determines the University's hauling weights).

Since 2015, the University has had challenges with the waste hauling contractors with the accuracy of volumes. The current vendor has committed to provide trucks with integral scales to measure the weight of the trash leaving the campus for FY21. Better data provides an appropriate baseline against which improvements can be measured.

Fairfield University also generates some forms of biological, chemical, and other hazardous wastes, which required disposal according to state and federal regulations. The University holds certification as ESQG (Exempt Small Quantity Status) that places limits as to what we "lab pack" out per month. The university contracts with a licensed hazardous waste hauler for disposal of this material.

Goal 1: Track solid waste stream volume and content.

Strategies to meet goals:

Establish reporting rate consistent with past reporting to better track Single Stream Program's progress	Joe Bouchard JMBouchard@fairfield.edu	Low	N/a	<1 year
Establish reporting on biological, chemical, and hazardous waste generation	Joe Bouchard	Low	Medium	<1 year

Goal 2: Increase diversion rate to 15% by 2025.

Strategies to meet goals:

Evaluate reinstating Curbside Recycling	Joe Bouchard JMBouchard@fairfield.edu	Low	Medium	1 Year
Education programs: <ul style="list-style-type: none"> Initiated by students in communication with and support of Custodial. Includes increased signage, more developed website resources, standardized FYE training. 	Peter Crowley pcrowley@fairfield.edu, Candido Rosario crosario@fairfield.edu	Low	Medium	1-2 years

Goal 3: Assess the amount of hazardous waste generated on campus, and search for methods to reduce the type and amount of such wastes.

Strategies to meet goals:

Generate a review of sources and amounts of hazardous waste over the past 5 and 10-year periods.	Joe Bouchard JMBouchard@fairfield.edu	Low	Medium	1 Year
Share review with CSC and the campus entities identified as significant contributors to hazardous waste. Work collaboratively to identify methods to reduce or eliminate hazardous waste generation.	Joe Bouchard JMBouchard@fairfield.edu	Low	Medium	1-2 years
Implement methods to reduce or eliminate hazardous waste generation.	Joe Bouchard JMBouchard@fairfield.edu	Unknown	High	3-5 years



VI. Land and Water Management

Background:

Fairfield University sits on 210 acres in a suburban setting in southwestern Connecticut. The outdoor landscape is a mixture of lawn, athletic fields, landscaped plantings, and mixed hardwood forest. Water resources include 2 small ponds, a small stream, and a wetland. 28 acres are in areas regulated by the Town of Fairfield (wetlands and conservation easements). Land and water management encompasses a wide range of activities on campus. The goals in this section focus on reducing the environmental impact of these activities, enhancing biodiversity, and increasing campus awareness of the importance of land management to sustainability.

Our overall approach to achieving the goals stated below is to formally develop management plans for the campus open spaces and collect them in a comprehensive document. Open spaces include the range of outdoor spaces from highly managed lawns and landscaped areas to conservation easements that have town-prescribed management conditions to relatively unmanaged natural areas. The process of developing the components in the plan has already begun and includes collecting current practices, describing the campus and developing broad management goals for each type of area. Central to this approach is to develop a universal list of place names and descriptions to the various areas on campus. A broad set of open area categories guided by the basic management goals for each area type will be developed. The list of place names, management goals for each area type and specific recommendations for each area will combine to ultimately be the comprehensive management plan for open spaces.

Goal 1: Improve campus awareness and importance of land management practices and various uses of outdoor space.

Strategies to meet goal:

Develop a campus walking tour that capitalizes on QR codes at various campus locations that bring the user to a description that outlines areas of different land use (e.g., lawn, athletic fields, natural areas) and management strategies. Incorporate areas that are used for classroom activities and faculty/student research.	Jay Rozgonyi	Med	High	In progress
Develop an admissions/outreach material (self-guided campus tour) to highlight campus features related to sustainability. Examples of stops on the tour: Geothermal wells, campus garden, Hopkins retention pond, water quality monitoring sites, etc.	Admissions Jay Rozgonyi	Low	High	In progress

Goal 2: Improve outdoor water management where possible and practical.

Currently water is used primarily for irrigating some lawn areas, annual plantings, and new plantings. A small amount of total lawn area is irrigated using traditional sprinkler irrigation. Annual plantings are overhead watered by hand. Mature trees and shrubs are watered by hand during drought conditions. Initiatives which reduce water usage include drip irrigation in new planters at Meditz Hall.

Currently stormwater is managed through a number of retention ponds on campus as well as the absorption in natural areas and, to a lesser extent, lawns. A series of storm drains collect runoff from impervious surfaces and deliver it to the campus streams and ultimately the Town of Fairfield stormwater system.

Strategies to meet goals:

Assess irrigation water use with an eye towards reducing use.	David Frassinelli ¹	Low	High	In progress
Implement water saving measures where needed and practical.	David Frassinelli ¹	Unknown	Unknown	Unknown
Assess current vegetated buffers around water bodies in relation to stormwater run-off and particulate capture.	David Frassinelli ¹	Low	High	In progress
Implement plan to add buffers where needed and practical.	David Frassinelli ¹	Likely low	Likely med	Likely short term

Goal 3: Reduce indoor water consumption by 30%, by 2025.

The potable water source for Fairfield University is Aquarion, a private utility. The campus is served by a variety of water mains that enter the campus from a number of directions. In the Townhouse area, all of the Townhouses are individually metered. Accordingly, the Townhouses have the highest cost for water. A major water main enters the campus from the west and serves the Langguth pump-house. This pump house boosts the water pressure to provide domestic and fire sprinkler water to the quad buildings, Bellarmine and portions of the library. Sewage leaves the campus in Town owned sanitary lines that go to the Town treatment plant. The charge for total sewage is based on the consumption information provided by Aquarion.

Strategies to meet goals:

Project: Install low pressure shower heads in residence halls, townhouses and apartments	Contact: David Frassinelli dfrassinelli@fairfield.edu , x4254	Cost: Low	Impact on Goal: Medium	Timeframe: in progress
Assess low flush toilets in all existing bathrooms	Contact: David Frassinelli dfrassinelli@fairfield.edu , x4254	Cost: Low	Impact on Goal: Medium	Timeframe: in progress
Project: Purchase water efficient washing machines for residence hall laundry rooms when replacement is due	Contact: David Frassinelli dfrassinelli@fairfield.edu , x4254	Cost: Low	Impact on Goal: Medium	Timeframe: in progress

Goal 4: Target a reduction in sewage effluent by 30%, by 2025.

Strategies to meet goals:

Project: Meet water conservation strategies outlined in Goal 3.	Contact: David Frassinelli, dfrassinelli@fairfield.edu , X4254	Cost:	Impact on Goal:	Timeframe: in progress
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Goal 5: Reduce fertilizer input to and export from campus where practical.

As of 2012, all lawn areas are fertilized 4 times per year with 3.5 lbs of nitrogen per unit area. The rate was reduced in 2010 from 4 to 3.5 lbs per unit area resulting in 25% reduction. At least 50% of the nitrogen is slow-release. Three of the four applications to the lawn areas near the townhouses and the former Dolan School of Business use organic fertilizer. Some campus waterways currently have vegetated buffers which act to reduce nitrogen export to the streams and off campus. Some ornamentals are spot fertilized with a liquid organic fertilizer when needed. Lawn fertilizer is applied by an outside contractor. Athletic fields have a different management plan than lawns.

Strategies to meet goals:

Assess current vegetated buffers around water bodies in relation to fertilizer capture.	David Frassinelli ¹	Low	High	In progress
Implement plan to add buffers where needed and practical.	David Frassinelli ¹	Likely low	Likely med	Likely short
Assess current fertilizer application practices near water bodies.	David Frassinelli ¹	Low	High	In progress
Implement plan to add no fertilizer application buffer zones where needed and practical.	David Frassinelli ¹	Likely low	Likely med	Likely short
Assess current fertilizer application practices near natural areas.	David Frassinelli ¹	Low	High	In progress
Implement plan to add no fertilizer application buffer zones where needed and practical.	David Frassinelli ¹	Likely low	Likely med	Likely short
Consider an increase in the proportion of slow release fertilizer to reduce fertilizer runoff.	David Frassinelli ¹	Low	High	In progress
Implement plan to modify current fertilizer composition if needed and practical.	David Frassinelli ¹	Likely low	Likely med	Likely short
Consider an increase in organic application to reduce fertilizer runoff and reduce greenhouse gas emissions in production.	David Frassinelli ¹	Low	High	In progress
Implement plan to modify current fertilizer composition if needed and practical.	David Frassinelli ¹	Likely med	Likely med	Likely short
Consider modifying timing of fertilizer application to comply with best practices.	David Frassinelli ¹	Low	High	In progress
Implement plan to modify the timing of current fertilizer application if needed and practical.	David Frassinelli ¹	Likely low	Likely med	Likely short
Consider designating some areas outside of high use core areas as reduced fertilizer application areas.	David Frassinelli ¹	Low	High	In progress
Implement plan to designate certain areas reduced fertilizer areas.	David Frassinelli ¹	Likely low	Likely med	Likely short

Goal 6: Reduce pesticide use on campus where practical.

As of 2012, pre-emergent herbicide is applied to lawns and areas landscaped with wood chips every spring. In addition, grub control is applied to lawns once per year when necessary and broadleaf weeds are spot controlled with herbicide. Ornamental trees are fumigated with fungicide once per year. Tree disease is assessed by a certified arborist and treated only if necessary.

Strategies to meet goals:

Assess current pesticide application practices near water bodies and create no pesticide application buffer zones around water bodies.	David Frassinelli ¹	Low	High	In progress
Implement plan to add no pesticide application buffer zones where needed and practical.	David Frassinelli ¹	Likely low	Likely med	Likely short
Assess current pesticide application practices near natural areas and create no pesticide application buffer zones.	David Frassinelli ¹	Low	High	In progress
Implement plan to add no pesticide application buffer zones where needed and practical.	David Frassinelli ¹	Likely low	Likely med	Likely short
Consider the use of organic pesticide application.	David Frassinelli ¹	Low	High	In progress
Implement plan to modify current pesticide composition if needed and practical.	David Frassinelli ¹	Likely med	Likely med	Likely short
Consider designating some areas outside of high use core areas as reduced pesticide application areas.	David Frassinelli ¹	Low	High	In progress
Implement plan to designate certain areas reduced pesticide areas.	David Frassinelli ¹	Likely low	Likely med	Likely short



Goal 7: Reduce impact of ice and snow management practices if possible without sacrificing safety.

Campus walks and roadways are treated to ensure safety of students, staff, faculty and visitors. Until 2011, surfaces were treated with both sand and salt. Storm water catch basins were cleaned of sand as necessary and sand was reused. Current practice is use of salt only. Better management of salt and sand use will reduce impacts on campus water bodies. Currently, salinity levels in the campus stream increase significantly during the winter season.

Strategies to meet goals:

Assess current vegetated buffers around water bodies in relation to salt and sand capture.	David Frassinelli ¹	Low	High	In progress
Implement plan to add buffers where needed and practical.	David Frassinelli ¹	Likely low	Likely low for salt, Likely med for sand	Likely short
Consider the use of some alternative ice treatment materials.	David Frassinelli ¹	Low	High	In progress
Implement plan to modify the composition of current ice treatment materials if needed and practical.	David Frassinelli ¹	Likely med	Likely med	Likely short

Goal 8: Reduce the impact of invasive species.

Most of the natural areas on campus contain some invasive species, and in many cases the abundance of invasive species is detrimental to biodiversity. Currently, there is some work to remove invasive vines on campus, especially when they are causing damage to trees. Tree of Heaven (*Ailanthus*), a non-native tree is currently removed when possible. There are a few areas under conservation easement with more active management of invasive species. Removal of invasive species in some cases may require new plantings of native plants in their place.

Strategies to meet goals:

Develop a list of invasive organisms with management priority.	David Frassinelli ¹	Low	High	In progress
Define areas of campus according to invasive species removal practice.	David Frassinelli ¹	Low	High	In progress
Identify priority areas for management.	David Frassinelli ¹	Low	High	In progress
Implement invasive species plan.	David Frassinelli ¹	Likely med	Likely high	Continuous
Develop a plan for replanting of native plants following the removal of invasive species.	David Frassinelli ¹	Low	High	In progress
Implement native plantings plan.	David Frassinelli ¹	Likely med	Likely med	Continuous

Goal 9: Enhance biodiversity with native plantings where feasible. Native plants provide better food and habitat for wildlife than non-native species.

Strategies to meet goals:

Assess current plant choice practices and explore ways to increase planting of native species as ornamentals.	David Frassinelli ¹	Low	High	In progress
Implement native plantings plan.	David Frassinelli ¹	Likely med	Likely med	Continuous
Use plantings of native ornamentals to reclaim marginal areas of lawn in appropriate areas.	David Frassinelli ¹	Low	High	In progress
Implement native plantings plan.	David Frassinelli ¹	Likely med	Likely med	Continuous

Goal 10: Increase the breadth of campus composting activities where economically viable. Currently there is a very successful composting program on campus for leaf waste.

Strategies to meet goals:

Consider composting or other alternative methods of dealing with food waste.	David Frassinelli ¹ Matt Dinnan	Likely high	Likely high	Unknown
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¹ David Frassinelli, Vice President of Facilities Management, dfrassinelli@fairfield.edu, X4254



VII. Academic Initiatives

Introduction:

Fairfield University should maintain, expand and enhance its educational initiatives relating to the Sustainability, including the interdisciplinary Environmental Studies Program (EVST). Key needs include, but are not limited to: developing new courses; increasing the number of departments and Schools that regularly offer courses focused on sustainability related issues; working across schools to facilitate the hiring of new faculty with appropriate disciplinary expertise; increasing logistical support for EVST and sustainability education in general; coordinating with Facilities Management to increase logistical support for campus sustainability initiatives; and creating or enhancing links between sustainability education and other key aspects of the University, including the Core Curriculum, Sophomore Residential Colleges, the Office of Research and Grants, student life, admissions, and course planning within a number of departments and Schools. This section identifies key areas and projects to support this work and ensure that sustainability becomes and remains an important part of academic life at Fairfield.

Area I

Create solid foundation for academic initiatives related to sustainability.

Background: By 2007, academic initiatives relevant to sustainability, including the EVST program clearly required significant attention if they were going to survive. Faculty support and student interest had deteriorated significantly due to administrative and other neglect. Significant efforts were, and remain, required to create the solid institutional foundation necessary for these initiatives to continue, to thrive, and to expand.

Goal 1: Re-Design EVST Minor.

Strategies to meet goal:

Examine EVST Minors at other schools and EVST related resources at Fairfield.	EVST-SC	Low	High	2007-2008. Completed.
Prepare proposal for revised minor.	EVST-SC	Low	High	2007-2008. Completed.
EVST-SC, ASCC, and Academic Council approve proposal for revised Minor.	EVST-SC	Low	High	2007-2008. Completed.
Create New Advising Materials	EVST Director	Low	High	2008-2009. Completed.
Update Advising Materials for the Minor Regular Basis	EVST Director	Low	High	Ongoing.

Goal 2: Hire new EVST Director and create orderly process of appointing future Directors.

Strategies to meet goal:

Seek and receive approval from CAS and University for a new faculty line.	EVST-SC	High	High	2005-2007. Completed.
Recruit new faculty member from outside the University to serve as EVST Director (for six years (and then remain on faculty)	EVST-SC CAS DEAN	High	High	2007-2008. Completed.
Create agreed upon mechanisms for selecting EVST Directors and their term-length, as part of new EVST by-laws	EVST Director	Low	Med	2012. Completed.
Successfully transition to new EVST Director on regular basis	EVST-SC	Low	High	Ongoing.

Goal 3: Develop by-laws for EVST program.

Strategies to meet goal:

Draft potential by-laws	EVST Director	Low	Med	2009-2012. Completed.
EVST-SC discussion and approval of by-laws, as amended and updated.	EVST-SC	Low	Med	2012. Completed.
Review and, if necessary, amend EVST by-laws (as part of program review)	EVST Director EVST-SC	Low	Med	2020-2023
Review and, if necessary, amend EVST By-Laws	EVST Director EVST-SC	Low	Med	2028-2030

Goal 4: Create a new University Committee: The Faculty Committee on Sustainability (FCS).

Strategies to meet goal:

Discuss need to create formal conduit within Fairfield’s faculty governance system for issues related to sustainability	EVST-SC	Low	High	2008-2010. Completed.
Draft proposal for FCS and get approval by EVST-SC, Academic Council and General Faculty.	EVST Director	Low	High	2009-2011. Completed.
FCS begins operation	EVST-SC	Low	High	2011-2012. Completed.

Goal 5: Create new EVST Major.

Strategies to meet goal:

Systematically examine EVST Majors at peer and aspirational schools	EVST Director	Low	High	2012-2014. Completed.
Prepare draft Major and discuss and amend proposal with EVST-SC	EVST Director EVST-SC	Low	High	2013-2014. Completed
EVST-SC, ASCC, UCC, EPC, and Academic Council approve new major	EVST Director	Low	High	2013-2014. Completed
Update webpage to include the major	EVST Director	Low	High	2014-2015. Completed
Create new advising materials for major	EVST Director	Low	High	2014-2015. Completed
Update EVST advising materials on a regular basis	EVST Director EVST-SC	Low	High	Ongoing.
Reach an average of 25-35 majors	EVST-SC	Low	High	2021-2023

Goal 6: Ensure that Admissions has accurate and useful information about academic and other initiatives related to sustainability.

Strategies to meet goal:

EVST Director and interested EVST Steering Committee Members meet with Admissions staff (one to three times) to discuss EVST programs	EVST Director Admissions	Low	High	2020-2022.
EVST creates one-page of key bullet points regarding the program - to use for reference by the Admissions staff.	EVST-SC	Low	High	2020-2022.

Campus Sustainability Committee (CSC) and LEAF, with input from Faculty Sustainability Committee, creates a one-page document with bullet points outlining key sustainability achievements to date and key plans for future.	Campus Sustainability Committee	Low	High	2020-2022.
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Goal 7: Ensure that the Office of Research and Grants has accurate and useful information about academic and other initiatives related to sustainability.

Strategies to meet goal:

EVST Director and interested EVST Steering Committee Members meet with Office of Research & Grants staff each year to discuss funding opportunities	EVST Director Office of Research and Grants	Low	High	2020-2023.
Creates document, with input from EVST Faculty and the Faculty Sustainability Committee, for Office of Research & Grants that outlines key needs and funding opportunities relating to sustainability education at Fairfield	EVST Director	Low	High	2020-2022.
EVST bi-annually updates document for Office of Research & Grants that outlines key needs and funding opportunities relating to sustainability education at Fairfield	EVST-SC	Low	High	2023-2033
Campus Sustainability Committee (CSC) and LEAF, with input from Faculty Sustainability Committee, creates a short document for the Office of Research and Grants with bullet points outlining key sustainability achievements to date and key plans for future.	Campus Sustainability Committee	Low	High	2020-2022.

Goal 8: Conduct annual assessments of EVST Major (and Minor) - as part of normal CAS directed Assessment Process and Procedures.

Strategies to meet goal:

Adopt Student Learning Outcomes (SLOs) for EVST program as a whole - to use in Annual Assessments, Program Review, etc.	EVST Director EVST-SC	Low	High	2015-2016. Completed.
Prioritize courses to assess and which CAS approved modalities to use	EVST Director	Low	High	2017-2019. Completed.
Update SLOs based- as needed.	EVST Director	Low	High	Ongoing. First done: 2019-2020.
Conduct annual assessments - following CAS Mandated/Suggested Practices and Modalities	EVST Director EVST-SC	med	High	Ongoing.

Goal 9: Conduct Complete Program Reviews - as part of normal CAS program review schedule, process and procedures.

Strategies to meet goal:

Prepare for program review	EVST Director	Low	High	2019-2020
Conduct First Complete Program Review - in accordance with CAS Instructions and Procedures	EVST Director EVST-SC Dean's Office	Medium. In CAS Budget	High	2020-2022
Draft report and plans based on internal and external review	EVST Director EVST-SC	Medium. CAS	High	2022-2023
Seek to implement recommendations of EVST-SC in response to external and internal review	EVST Director EVST-SC CAS Dean Provost	Unknown	High	2023-2027
Conduct regular program reviews in accordance with CAS Schedule, Instructions and Procedures	EVST Director EVST-SC CAS Dean's Office	Medium to High In CAS Budget	High	2028-2050



Area II

Enhance and Expand Course Offerings Related to Sustainability

Background: More than a decade ago, it became clear that the number of course offered at Fairfield relevant to sustainability, and the number departments in which they were offered, had to increase. A number of key priorities and opportunities have been identified to enhance and expand Fairfield’s collection of courses related to sustainability.

Goal 1: Secure consistent scheduling of key courses related to sustainability.

The effectiveness and impact of academic initiatives at Fairfield University related to Sustainability, and vibrancy and success of the EVST program, depend on the availability of relevant courses. Students depend on the availability of these courses when planning to meet College Core, major, minor, and other requirements with sustainability related courses. Maintaining and expanding the number and frequency of these courses also increase allow more students, regardless of major, to take sustainability relevant courses.

Strategies to meet goal:

Populate the EVST curriculum with relevant, quality courses likely to be taught on a regular basis because they are required or popular classes in the Core or particular majors	EVST Director EVST-SC	Low	High	2013-2015. Completed. Ongoing.
Discuss with relevant faculty and Department Chairs that courses classified as EVST Foundational Courses will be offered on an annual basis or nearly annual basis.	EVST Director EVST-SC	Low	High	2018-2018. Completed. Ongoing. <small>However, no guarantees exist that any particular course not required by another department will be offered.</small>
Discuss with relevant faculty and Chairs that courses that count as EVST elective courses will be offered on a regular basis, ideally on average of at least once every two years.	EVST Director EVST-SC	Low	High	2010-2013. Completed. Ongoing. <small>However, no guarantees exist.</small>
Review course scheduling on a regular basis	EVST Director EVST-SC	Low	High	Ongoing

Goal 2: Increase the overall number of sustainability related courses.

The ability of EVST to deliver an excellent educational experience and, equally important, the likelihood that non-EVST majors and minors will take a class related to Sustainability, depends to some extent on the sheer number of courses offered on campus on a regular basis.

Strategies to meet goal:

Review and eliminate outdated courses (e.g. EV 101)	EVST Director EVST-SC	Low	High	2008-2012 Completed.
Increase the number of courses directly related to the environment or sustainability to more than 30.	EVST Director EVST-SC	Med	High	2012-2024
Review course numbers, options, and quality on a regular basis	EVST Director EVST-SC	Low	High	Ongoing

Goal 3: Include sustainability related courses within multiple areas of the Magis Core Curriculum.

All Fairfield students must complete the Magis Core Curriculum. Ensuring that opportunities exist to fulfill many of the Core requirements with courses related to sustainability significantly increases the percentage of Fairfield students that can take one or more of such classes and explore these critically important issues.

Strategies to meet goal:

Examine New Magis Core for potential distribution of EVST related courses	EVST Director	Low	High	2017-2019 Completed.
List multiple EVST Courses within Natural Science area of Magis Core	EVST Director EVST Faculty	Low	High	2018-2019 Completed.
List multiple EVST Courses within Social Science area of Magis Core	EVST Director EVST Faculty	Low	High	2018-2019 Completed.
List at least two EVST Courses within the Literature element of the Magis Core	EVST Director EVST Faculty	Low	High	2018-2022
List at least two EVST Courses with the Philosophy, Religious Studies, History element of the Magis Core	EVST Director EVST Faculty	Low to High	High	2020-2025
List at least one EVST Courses within the Visual and Performing Art (VPA) element of the Magis Core	EVST Director EVST Faculty	Low to High	Low	2020-2026
List seven EVST Courses within the Inter-disciplinary Element of the Magis Core	EVST Director EVST Faculty	Low	High	2018-2022
List three or more EVST Course within the WAC/WID element of the Magis Core	EVST Director EVST Faculty	Low	High	2020-2023
List two EVST Course within the Social Justice element of the Magis Core	EVST Director EVST Faculty	Med	High	2020-2024

Goal 4: Include sustainability related courses within the Sophomore Residential Colleges on an annual basis.

Many Fairfield students reside within a Sophomore Resident College (RCOL) during their second year on campus. Each must enroll in one RCOL designated course each of their two semesters. Ensuring that opportunities exist to fulfill this requirement with courses related to sustainability significantly increases the percentage of Fairfield students that will take one or more such classes, ensuring that as many Fairfield students as possible, regardless of School or major, can explore these critically important issues.

Strategies to meet goal:

Review Guidelines for RCOL courses and applicability to EVST courses.	EVST Director	Low	High	2019-2020
Include sustainability related courses are included among SRC courses on an annual basis.	EVST Director RCOL Faculty Chair EVST Faculty	Low	High	2020-2024

Goal 5: Increase the departmental distribution of courses.

Some Schools and Departments have no courses, or very few courses, related to sustainability. Adding courses in more departments would increase the intellectual scope of the academic offerings related to sustainability at Fairfield University and increase opportunities for more students to take advanced courses related to sustainability as part of their major.

Strategies to meet goal:

Regularly offer 2-3 Introductory EVST / sustainability related Biology Courses	EVST Director Chair, Bio	Low	High	2008-2014 Completed
Regularly offer 3-4 Advanced EVST / sustainability related Biology Courses	EVST Director Chair, Bio	Low	High	2008-2014 Completed.
Regularly offer 2 Introductory EVST / sustainability related courses in Chemistry	EVST Director Chair, Chem	Low	High	2020-2025
Regularly offer an Advanced Chemistry Course directly related to EVST / sustainability	EVST Director Chair, Chem	Low to High	High	2020-2025
Regularly offer 2 Introductory EVST / sustainability related Physic Courses	EVST Director Chair, Physics	Low	High	2019-2021 Completed
Regularly offer an Advanced EVST / sustainability related Physic Courses	EVST Director Chair, Physics	Low	High	2019-2021 Completed
Regularly offer 1-2 improved EVST /sustainability related courses in Applied Ethics	EVST Director Chair, Applied Ethics	Med	High	2012-2016 Completed.
Regularly offer 1-2 EVST/sustainability related courses in English	EVST Director EVST Faculty	Low	High	2008-2014 Completed.
Regularly offer 1-2 EVST/sustainability related courses in Economics	EVST Director Chair, Econ	Low	High	2008-2014 Completed.
Regularly offer 2-3 EVST/sustainability related courses in Politics	EVST Director Chair, Politics	Low	High	2008-2014 Completed
Regularly offer an EVST/sustainability related courses in Philosophy	EVST Director Chair, Phil	Low	High	2020-2022
Regularly offer an EVST/sustainability related courses in Religious Studies	EVST Director Chair, Rel Stud	Low	High	2020-2025
Regularly offer an EVST/sustainability related courses in Communications	EVST Director Chair, Comm	Low	High	2020-2025
Regularly offer an EVST/sustainability related courses s in History	EVST Director Chair, History	Low	High	2020-2025
Regularly offer at least 3 EVST/sustainability related courses that fulfill requirements in the International Studies program.	EVST Director Chair, International Studies	Low	High	2020-2025
Regularly offer Courses in the Honors Program (HR designations) relevant to sustainability	EVST Director HR Chairs	Low	High	2020-2027
Regularly offer 2-4 Courses in the Business School directly relevant to sustainability	EVST Director DSB Dean DSB Chairs	Low to High	High	2020-2027

Goal 6: Add specific additional courses that address key issues.

In addition to courses in Departments without them, as outlined above, other important topics related to sustainability studies require inclusion in the University's list of courses. Some of these courses would cover traditional subjects while others would focus on developing skills that students could use to obtain or excel in professional fields.

Strategies to meet goal:

<p>Philosophy Department Currently, there is no class offered by the philosophy department that address the environment or sustainability as a principal focus.</p>	<p>Chair, Philosophy EVST Director</p>	<p>Low if course(s) taught by current or replacement faculty. Low to medium if adjunct.</p>	<p>High</p>	<p>2020-2022</p>
<p>Religion and the Environment Despite its Jesuit heritage, and the explicit Jesuit teachings on the subject, Fairfield has no course in the RS department that examines how religious texts and traditions understand the environment and human responsibilities toward and statements by prominent leaders address the environment. It is a glaring gap in the curriculum.</p>	<p>Chair, Religious Studies EVST Director</p>	<p>Low if course(s) taught by current or replacement faculty. Low to medium if adjunct.</p>	<p>High</p>	<p>2020-2025</p>
<p>GIS Course Develop an interdisciplinary course on Geographic Information Systems that provides an important skill-set for Fairfield University graduates.</p>	<p>CAS Chairs CAS Dean EVST-SC EVST Director</p>	<p>Low if class taught by current or replacement faculty. Low to Medium if an adjunct is needed.</p>	<p>High</p>	<p>2020-2025</p>
<p>Field Testing and Analysis. Develop an interdisciplinary advanced science course that teaches techniques to test for pollutants in air, water, soil and on surfaces of products and materials. Such a course would provide important skills for Fairfield University graduates and could be an important way to incorporate Service Learning into an additional course.</p>	<p>CAS Chairs CAS Dean EVST-SC EVST Director</p>	<p>Low if class taught by current or replacement faculty. Low to Medium if an adjunct is needed.</p>	<p>High</p>	<p>2020-2025</p>
<p>US Environmental History Develop a history course (ideally eligible for Core) that provides a broad survey of environmental history in the USA.</p>	<p>History Dept. CAS Dean EVST Director</p>	<p>Low if taught by current/replacement faculty. Low to medium if an adjunct is needed.</p>	<p>High</p>	<p>2020-2025</p>
<p>Communication Department Develop at least one course directly relevant to EVST/sustainability</p>	<p>Chair, Comm CAS Dean EVST Director</p>	<p>Low if taught by current/replacement faculty. Low to medium if adjunct.</p>	<p>High</p>	<p>2020-2025</p>
<p>Develop 2-4 new courses in the Dolan School of Business (DSB) that address sustainability issues, green business opportunities or related issues.</p>	<p>DSB Dean DSB Chairs DSB Faculty EVST Director</p>	<p>Low if course(s) taught by current or replacement faculty. Low to medium if adjunct.</p>	<p>High</p>	<p>2020-2027</p>

Develop a new course in the Visual and Performing Arts (VPA) that addresses issues of sustainability (e.g., Green Design).	VPA Chairs EVST Director	Low if current faculty. Low to medium if adjunct.	Low	2020-2028
Comparative Environmental Policy	Politics Dept. International Studies Program EVST Director	Low if class taught by current or replacement faculty. Low to Medium if an adjunct is needed.	Medium	2022-2027
State & Local Environmental Policy	Politics Dept. MPA Program EVST Director	Low if class taught by current or replacement faculty. Low to Medium if an adjunct is needed.	Medium	2022-2027
Additional Courses Develop additional sustainability-related courses as needed or as opportunity allows.	EVST-SC EVST Director Department Chairs	Low if class by current faculty. Low to Medium if an adjunct is needed.	Medium to high	Ongoing



Area III

Maintain, Expand, and Enhance Faculty Positions Related to Sustainability

Successful academic initiatives require full-time, tenure track faculty.

Goal 1: Maintain current faculty lines related to sustainability.

Strategies to meet goal:

Work to ensure that current faculty lines connected to or focused on sustainability related teaching or research are replaced only by similarly focused faculty.	University President University Provost Deans School Department Chairs EVST-SC	Low	High	Ongoing
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Goal 2: Add faculty positions related to sustainability in key departments without one.

Strategies to meet goal:

Develop updated case statements outlining advantages of adding faculty in particular fields and submit these to University Office of Research & Grants, Dean's Office, Search Committees, etc.	EVST-SC EVST Director Faculty Committee on Sustainability	Low	Medium to High	2012-2025
Work with the Philosophy department and the Dean to hire full-time faculty member in Philosophy who focuses on sustainability related issues.	Philosophy Dept. EVST-SC	High if a new FTE.	High	2008-2014 Completed
Work with the Religious Studies department and the Dean to hire full-time faculty member in Religious Studies whose foci include environmental and sustainability related issues.	Chair, Rel. Studies CAS Dean EVST-SC Faculty Committee on Sustainability	Low if a replacement hire. High if a new FTE.	High	Long term
Work with the History department and the Dean to hire full-time faculty member in History whose foci include environmental and sustainability related issues.	History Department CAS Dean; EVST-SC Faculty Committee on Sustainability	Low if a replacement hire. High if a new FTE.	High	Long term
Work with the Dean of the Dolan School of Business to hire 1-3 full-time faculty members in the Dolan School of Business whose foci includes sustainability issues relevant to business.	DSB Dean DSB Dept. Chairs EVST-SC Faculty Committee on Sustainability	Low if a replacement hire. High if a new FTE.	High	Long term

Goal 3: Work with the Office of Research and Grants to explore the creation of endowed chairs relevant to sustainability.

Strategies to meet goal:

Draft materials to assist the Office of Research and Grants to understand and seek opportunities to support academic and research activity related to sustainability	EVST Director EVST- Chair Department Chairs Office of Research and Grants	Low	Low to Medium	2020-2022
Work with the Office of Research and Grants to find funding for the creation of endowed chairs relevant to sustainability	University President Office of Research and Grants Deans Department Chairs	Low to High	High	Ongoing

Area IV

Expand and Enhance Living and Learning Opportunities Related to Sustainability

Strategies to meet goal:

Explore opportunities for adding courses related to sustainability to the academic offerings in the Sophomore Residential Colleges.	EVST-SC Faculty Chair - Residential College	Low	High	2015-2025
Explore opportunities for creating a Sophomore Living and Learning Cluster (not Residential College) or floor related to sustainability.	Relevant officials in Academic Affairs & Residential Life.	Low to Medium	Medium	2021-2027
Work to expand and enhance Living and Learning Options for Juniors and Seniors relevant to sustainability.	Relevant officials in Academic Affairs & Residential Life.	Low to Medium	Medium	2021-2027
Create service learning course opportunities related to sustainability.	Office of Service Learning Department Chairs EVST-SC	Low to Medium	High	2020-2030
Expand and enhance internship opportunities related to sustainability.	CAS Dean's Office EVST-SC EVST Director	Low to Medium	High	Ongoing
Ensure that the student environmental origination, LEAF, has appropriate advising.	Relevant officials in Academic Affairs & Residential Life. EVST-SC	Low to Medium	High	Ongoing

Area V

Increase Student Faculty, and Administration Awareness of Educational Opportunities Related to Sustainability

Strategies to meet goal:

Regularly update Environment Program web-site with information relevant to current and prospective students.	Relevant Univ. Staff EVST Director EVST-SC	Low	High	Ongoing
Regularly update materials that describe EVST program and how sustainability courses satisfy Core and other academic requirements; and distribute these materials to officials, department chairs, courses, clubs, events, advisors, etc.	EVST Director EVST-SC	Low	High	Ongoing
Develop and regularly update information materials for students enrolled in specific majors that describe how sustainability courses, and adding the EVST major or minor, fits into their specific curriculums, satisfy College Core Requirements, and count toward particular majors.	EVST Director EVST-SC	Low	High	Ongoing
Develop materials to assist the Office of Research and Grants to understand and seek opportunities to support teaching and research activity related to sustainability	EVST Director EVST-SC	Low	Medium	2020-2022
Continue and expand student access to the Campus Sustainability Committee (CSC) and other relevant committees and that students with access communicate with student body.	Campus Sustainability Committee FUSA LEAF Students on CSC	Low	Medium	2020-2025

Area IV

Improve Institutional Support for Sustainability Academic Programs & Research

Goal 1: Hire staff person to provide support for academic, research, and operational activities relevant to sustainability.

Strategies to meet goal:

Work with the Dean and the Provost’s office to explore the hiring of a “Sustainability Coordinator” to work half-time with EVST on course support, internships, co-curricular activities, fund-raising, and LEAF; and half time with University committees and officials on implementing, tracking, and reporting on sustainability projects and improvements.	Campus Sustainability Committee Faculty Sustainability Committee Relevant Senior Univ. Officials EVST Director	Med to High	Very High	2021-2025
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Goal 2: Provide the Director of Environmental Studies with necessary support.

Strategies to meet goal:

Provide one course release per year, in addition to current stipend, to director of environmental studies.	CAS Dean	Low to Medium	High	2021-2025
Work with Facilities Management and the Academic Division to explore the hiring of a “Sustainability Coordinator” to work half-time with EVST on course support, internships, co-curricular activities, fund-raising, and LEAF	Campus Sustainability Committee; Faculty Sustainability Comm; Relevant Senior Univ. Officials EVST Director	Med to High	Very High	2021-2025
Create second work-study position for environmental studies	Office of Financial Aid EVST Director	Low	Med	2020-2025

Goal 3: Monitor and reduce impact of campus operations and building plans on environmental and sustainability education and research projects on campus.

Strategies to meet goal:

Collaborate, as appropriate, with the Campus Sustainability Committee on the development of a campus environmental report to be run every two years, overseen by Institutional Research and based on agreed-upon metrics that include Faculty Sustainability Committee input. This report can be used for education, research, grant proposals, improving operations, and reporting to the Board of Trustees, ranking organizations, and other entities.	Campus Sustainability Committee Faculty Sustainability Committee Relevant Officials	Med	High	Ongoing
Create map of campus locations used for research and teaching related to sustainability	Completed	Low	High	Completed
Update map of campus locations used for research and teaching related to sustainability	Campus Sustainability Committee Faculty Sustainability Committee EVST-SC	Low	High	2020-2022
Ensure campus building plans are fully discussed within both the Campus Sustainability Committee and the Faculty Sustainability Committee prior to their final approval.	Campus Sustainability Committee Faculty Sustainability Committee Relevant Senior Univ. Officials	Low	High	Ongoing

Goal 4: Work to explore the creation of endowed chairs relevant to sustainability.

Strategies to meet goal:

Draft materials to assist the Office of Research and Grants to understand and seek opportunities for endowed chairs related to sustainability	EVST Director EVST-SC	Low	Medium	2021-2023
Work with the Office of Research and Grants to explore the creation of endowed chairs relevant to sustainability	University President Office of Research and Grants Deans Department Chairs	Low to High	High	Ongoing
Update materials to assist the Office of Research and Grants to understand and seek opportunities for endowed chairs related to sustainability	EVST Director EVST-SC	Low	Medium	Ongoing

Goal 5: Augment resources for student-faculty research and student internships related to sustainability.

Strategies to meet goal:

Draft materials to assist the Office of Research and Grants to understand and seek opportunities to support academic and research activity related to sustainability	EVST Director EVST-SC	Low	Medium	2020-2023
Work to secure endowment or operational funds to augment student-faculty research related to sustainability	University President Office of Research and Grants Deans Department Chairs EVST Director	Low to Medium	High	Ongoing
Work to secure endowment or operational funds to support student internships related to sustainability	University President Office of Research and Grants Deans Department Chairs EVST Director	Low to Medium	High	Ongoing
Update materials that assist the Office of Research and Grants to understand and seek opportunities to support academic and research activity related to sustainability	EVST Director EVST-SC	Low	Medium	Ongoing



VIII. Student Engagement

Introduction

In recent years, students have demonstrated a strong interest in environmental and sustainability initiatives. Student leaders have recognized the importance of applying that interest to the area of campus sustainability.

The student organization LEAF (Leaders for Environmental Action at Fairfield) is one of the most active clubs on campus. One of the primary goals of LEAF is to spread awareness on Environmental initiatives across campus and create positive change by working with the greater student body. LEAF is a vital resource and agent for engaging the greater campus community and student body. In collaboration with Residence Life, FUSA, IRHA, and other Departments on-campus, this plan outlines several ways that students will become more engaged in the Campus sustainability plan.

The CSP plan for student engagement is to increase awareness and spread habits among the student body to minimize Fairfield University's environmental impact and prepare students for a life in balance with the Earth and its precious resources. We develop and refine a campus plan for student engagement, complete with a list of goals, strategies, and a timeline, as well as a list of available networks and tools we can utilize to engage students in living more sustainably on campus.

The Recent History of Student Engagement at Fairfield:

The history of involvement in campus sustainability and the history of LEAF are very much intertwined. LEAF was born when Green Campus Initiative and the Student Environmental Association fused together under the premise that their goals were highly similar. Although LEAF has only been operating since 2009, it has already achieved important accomplishments and continues to grow. The majority of LEAF's work is focused around a critical mass of events and activism in the months of April and November, one for Earth *Month* and the other for No-Impact November which is inspired by the documentary "No-Impact Man". In April of 2011 LEAF brought 13 students all the way to the nation's capital for Powershift 2011 to represent Fairfield and ignite a spirit of urgency and inspiration with which to approach environmentalism in Connecticut. In November 2012, LEAF sponsored a solid month of events to cultivate a tradition of environmental awareness and action. The events included a trash audit where students separated recyclables from a dumpster to demonstrate the remaining potential for more sustainable behavior. LEAF is continuing to grow and develop its own sustainable organizational structure to better reach out to students including a radio show, blogging, and social media. LEAF continues to seek new ways of recruiting members to work toward altering the Fairfield student cultural to now include and promote a strong commitment to sustainability and to preserve the resources and health of our planet.

Goal 1: EDUCATION:

Educate students about which behaviors and actions promote sustainability in the Residence Halls.

Strategies to meet goals:

<p>Project : Resident Assistant (RA) /Resident Hall Association Members (RHA). Educate students about sustainable living by providing information about sustainable living through RA, RCC, Bulletin boards, email, newsletter, opening and closing floor meetings, Orientation</p>	Residence Life Office	Medium	High	Ongoing
<p>List of Student Engagement Opportunities Compile an online resource list of ways students can get involved in sustainable</p>	Academic Departments FUSA/IRHA	Low	Medium	Ongoing maintenance through

actions. This can be accomplished by identifying sustainable programs/opportunities that are currently available to students to volunteer. Resources: Campus Garden, Student Research, Hiking Trips, LEAF etc.				RA/RHA programs
Student Project Support/Collaboration Support students who would like to create civic engagement projects to promote innovative sustainability efforts related to campus operations and or partnership with campus offices (examples of offices students can work with are but not limited to: Sodexo, Transportation, Energy/Power, Waste Management, ABM Custodial Services	Sustainability Committee Student Affairs Division LEAF FUSA/IRHA	Medium	High	Ongoing every semester
Design and distribute campus promotional literature featuring sustainability (LEED ratings, etc.)	Facilities Management Office of Residence Life	Low	High	Ongoing
Publications & Resources All housing information should include Residence life sustainability initiatives materials to new students <ul style="list-style-type: none"> - Student should have access to information on recycling efforts and how we are lowering our carbon footprints. - Student initiatives- LEAF - Overview of Trash Audit - Bike Program 	Office of Residence Life	Medium	Medium	Beginning of each semester for all incoming students

Goal 2: CHANGE BEHAVIOR:

Ensure that all prospective students are aware of and accurately informed about campus sustainability in the Residence halls. Ensure that all incoming students are informed about the residence life sustainability plan which will include sustainability standards, opportunities and practices.

Strategies to meet goals:

Inform new students what to bring to campus to help reduce their carbon footprints. <ul style="list-style-type: none"> - Every student should have a recycle bin in his/her room - Awareness of Global Issues – donating items when during Residence halls closing 	Office of Residence Life Student Programs and Leadership Development Facilities Management	Low	High	Before opening and closing of residence halls.
Training of Important Student Leaders Campus tour guides and New Student Leaders informed about	Office of Residence Life Office of Admission	Low	High	Throughout the semester. During

different aspects of sustainability on campus	Office Student Programs and Leadership Development			specialized training during the Spring, Fall semester and Summer for students' leaders.
Greening Orientation/Fall Welcome Create campus signs during orientation that indicate sustainable implementations (e.g. explaining the recycling program etc).	Office of New Student Programs and Leadership Development Facilities Management Office of Residence Life LEAF	Medium	High	June New Student Orientation Beginning of Academic Year (Fall Welcome)
Prospective Students: During open houses promote sustainability initiatives - RCC/IRHA involvement	Admissions Office Facilities Management Office of Residence Life IRHA/RCC	Medium	Medium	Fall and Spring Open Houses
Campus Residence Hall Competitions <ul style="list-style-type: none"> Residents Assistants coordinate to raise awareness of and participation in sustainable programs including recycling and Residential Energy Challenge Energy Monitors visible in residence halls Recycling bins placed at strategic location in the halls, Signs in bathroom about water conservation, Reduce the amount of flyers used for advertising 	Office of Residence Life Facilities Management	Medium	Medium	Fall and Spring Semester
Promote Initiatives that Interdisciplinary/Departmental Collaboration <ul style="list-style-type: none"> Departments support LEAF who will meet and discuss sustainability or implement programs to educate students about sustainability. Encourage Faculty to promote sustainability to class projects and study. 	Academic Department Office of Residence Life Residential Colleges First Year Living and Learning Communities Clubs Organizations: LEAF/IRHA/RCC/FUSA	Medium	High	Fall and Spring Semester of each academic year
Sustainability Reps in the Residence Halls Explore the feasibility of training RCC "sustainability" representative in current recycling protocol, and coordinate sustainability efforts in the residence halls	Residence Life Fire Marshall Office IRHA/RCC FUSA	Medium	Medium	Fall Semester of each academic year

IX. Finance

Area I

Investment decisions

Many colleges and universities in the university's peer group and aspiration institutions have investment goals regarding sustainability. The Investment Subcommittee of the Board of Trustees is exploring an update of the investment policy statement that incorporates a modification to the review process for future investments to include a review of the ESG rating of the proposed investment/fund manager.

Background: The university endowment fund management is currently overseen by University trustees selected to serve on the investment subcommittee of the board of trustees. Investments are tied up for contractual periods in hedge funds and private equity.

Goal 1: Support the Board of Trustees in its efforts to improve the Fairfield University's ESG rating for the endowment.

Strategies to meet goals:

Project - Endowment Investment Begin a Sustainable Investment Initiative with the Board of Trustees	Kristine Carroll Board Liaison	Theoretically low	High	Commenced
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Area II

Financing of sustainability activities

Changes to Fairfield University to enhance sustainability have associated costs in dollars and personnel resources. Long-term outcomes are expected to be beneficial, but may require investment to initiate and execute initiatives. The Facilities Department implements projects enhancing sustainability. However, there is not a formal University-wide policy or funding source for sustainability projects. Therefore, the funding of sustainability activities is an important consideration in achieving goals of the CSP.

Background: Work with the Advancement division to obtain funds targeted towards sustainability activities on campus

Goal 1: Begin conversations with Advancement on ideas with which they might approach prospective donors. This is an ongoing process. Some money may be project targeted and could involve faculty research and/or campus-wide projects; other money could be endowed with annual income used to pay for expenses such as a sustainability director.

Strategies to meet goals:

Distribute <i>Sustainability at Fairfield: Achievements and Opportunities</i> to Advancement and subsequently to interested potential donors. (An informational white-paper highlighting opportunities to fund sustainability initiatives related to teaching and research.)	Faculty Sustainability Committee, Environmental Studies Program	Varied	High	Ongoing
<i>New Funding</i> Generate ideas through CSC, FSC, faculty and student groups. Bring those ideas to Advancement to be matched with suitable donors.	Development Office CSC, FCS, Environmental Studies Program	Theoretically low	High	5 years

Goal 2: Develop student projects around sustainable themes using grant money made available by the University.

Strategies to meet goals:

Project - Students Sustainable Projects Grant Awards Students and other members of the academic community will write proposals for environmentally sustainable on campus projects. Grant proposals will be submitted in the fall of each year.	Matt Dinnan	Low	Med	In progress
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X. Administration

Background:

A Campus Sustainability Committee (CSC) was originally formed in October, 2008, as part of the American College and University President's Climate Commitment to carbon neutrality. Membership was by appointment, and included student, staff, and faculty membership. The appointment letter outlined the committee as: "...a standing administrative committee charged with coordination and oversight of our campus sustainability initiatives. The coordinating committee...will facilitate continued progress by establishing priorities among the various sustainability projects, proposals, and initiatives, and facilitating effective communication across campus about these efforts and their impact."

From the revised charge "The Campus Sustainability Committee is charged with helping set the University's goals and evaluating its progress with regards to sustainability, which includes but is not limited to meeting the needs of the present with consideration of the impact of our actions on the future. The committee's membership includes staff, faculty, and students. The committee's role is three-fold:

1. As an advisory group, the committee provides input into the University's decisions in matters related to the environment and sustainability, including but not limited to campus construction and development projects and campus conservation efforts. The CSC provides specific suggestions that support the University's sustainability goals and evaluates progress.
2. As a facilitating and coordinating group, the committee serves as a clearinghouse for the myriad sustainability activities and initiatives occurring across campus and helps to establish priorities among them.
3. As a communications group, the committee enables various constituencies on campus to be aware of and informed about programs and activities related to sustainability and disseminates this information to the campus community broadly and to external groups as appropriate or required."

Faculty Initiatives:

In the fall of 2010, parallel to the revision of the CSC, the Academic Council charged a subcommittee composed of seven faculty members to evaluate policies to address environmental and sustainability issues on campus. Following the report of this subcommittee, a Faculty Committee on Sustainability (FCS) was proposed and approved as a handbook committee of the General Faculty in Spring 2011. The general purpose of the FCS is to review and make recommendations regarding campus plans and policies related to the environment with a special focus on how such plans and policies impact curricular development and faculty research. The specific duties of the FCS are threefold:

1. To review, on behalf of the faculty, and make recommendations regarding campus construction and development plans and campus policies related to the environment to ensure their compatibility with current and possible future educational, co-curricular, and research uses of affected areas.
2. To work, on behalf of the faculty, with the Campus Sustainability Committee on policy review, evaluation and generation.
3. To elect faculty representatives to the Campus Sustainability Committee.

The FCS serves as a resource of faculty expertise in issues relevant to sustainability projects under consideration by the CSC, and members of both committees work closely on many projects covered in this document.

Personnel

Responsibilities for sustainability efforts have been spread widely across campus. Some sustainability functions are integrated into job descriptions, others depend on individual passions. There are no existing full-time positions dedicated to sustainability, and historically sustainability advances have arisen from the dedication of students, staff, and faculty individual initiative.

There is currently momentum behind recognition of sustainability as a shared campus responsibility, but questions remain about ongoing coordination, funding, and the possibility of creating a permanent position to oversee sustainability efforts. Alignment of stakeholders is a necessary condition for effective teamwork and sustainability progress, but a major obstacle remains identifying exact decision-making processes. Promoting campus-wide ownership for sustainable change is even more challenging.

Goal 1: Foster campus ownership of the sustainability process and Campus Sustainability Plan.

Strategies to meet goals:

Open meetings of the CSC	CSC (by current charge)	Low	High	Ongoing
Publish minutes of CSC meetings	CSC faculty secretary (by current charge)	Low	Med	Ongoing
Keep student input integral to the structure and process of sustainability on campus	FUSA contact LEAF contact	Low	Med	Ongoing
Submit CSP to senior staff and President	David Frassinelli, with support as needed by CSC	Low	High	Fall 2021

Goal 2: Ensure the Campus Sustainability Plan becomes a living document.

Strategies to meet goals:

Annual Campus Sustainability Report	CSC (by revised charge)	Med	High	In progress
Regular review of Campus Sustainability Plan and Goals	CSC	Low	Med	1-2 years
Regular review of the effectiveness of the CSC	CSC (by revised charge)	Low	High	Every 3 years

Goal 3: Ensure the Campus Sustainability Plan suggests policies when a centralized, top-down approach can provide coordination and consistency across the campus community. This arises from the view that policy acts as a clear statement from leadership about campus priorities.

Strategies to meet goals:

Identify emergent initiatives from individuals/groups that can be prioritized, assessed, and implemented more widely	CSC subsection leads	Low	Med	In progress
Assess existing policies for construction, purchasing, maintenance, and custodial services for sustainability criteria	David Frassinelli, Matt Dinnan	Low	High	In progress
Formalize sustainability as one of several priorities in Campus Purchasing Policy	Matt Dinnan	Low	Med	In progress
Incorporate sustainability perspectives in campus strategic planning		Med	High	3-5 years

Goal 4: Ensure the Campus Sustainability Plan and goals therein are supported by appropriate personnel.

Strategies to meet goals:

Meet with existing senior administration to present CSP and suggest methods to integrate its goals into operation of divisions, departments, and programs	CSC subsection leads	Med	Med	Fall 2021
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