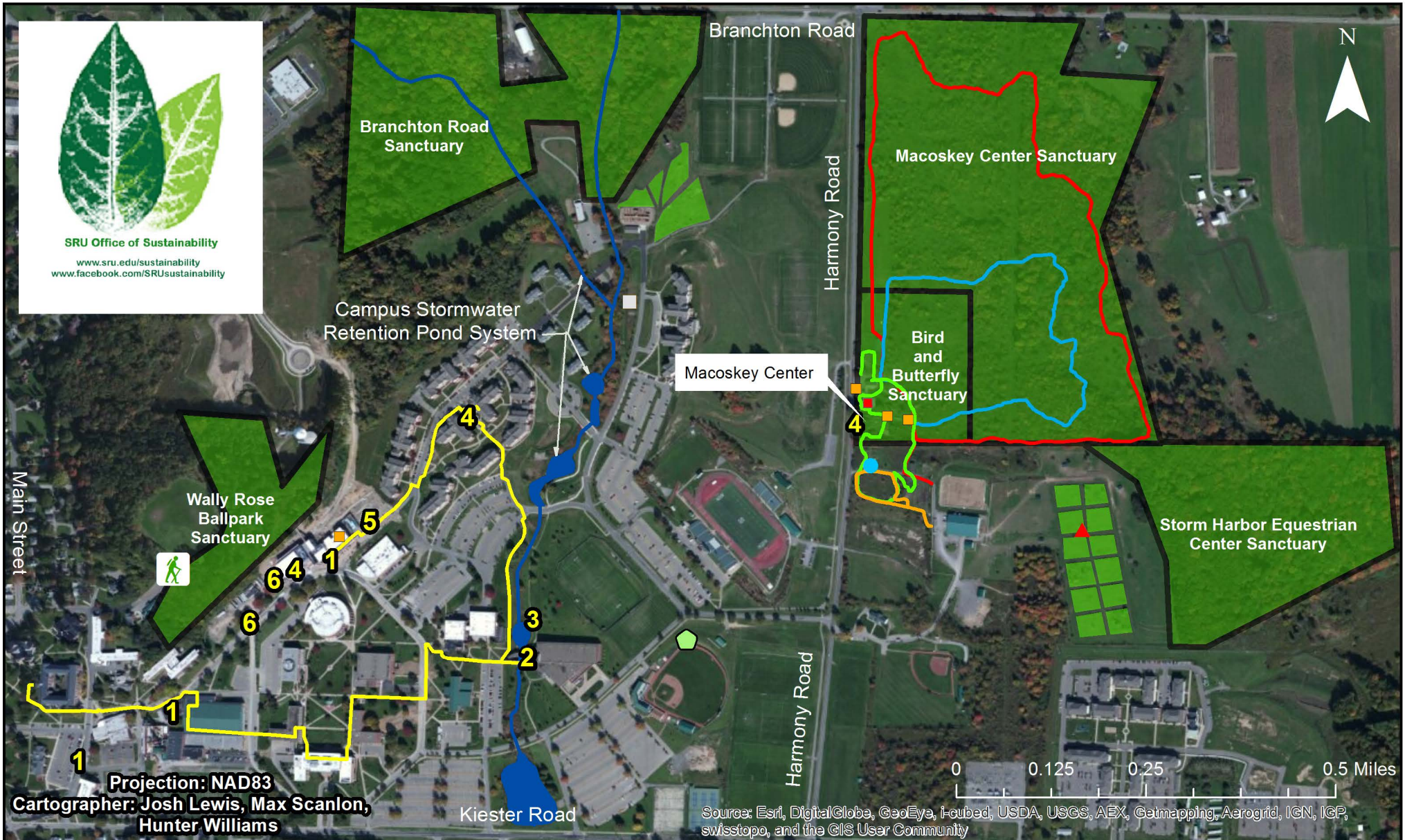


# Slippery Rock University Sustainability Features



Projection: NAD83  
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Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

1. Green Roofs
2. "Harnessing Human Energy" Project
3. Wind-Powered Lake Aeration System
4. LEED (Leadership in Energy & Environmental Design) Certified Buildings
5. Solar-Powered Rain Water Collection & Drip Irrigation System
6. Rain Gardens

- |                            |                  |                     |
|----------------------------|------------------|---------------------|
| Wildlife Sanctuaries       | Green Frog Trail | Wind Turbine        |
| Outdoor Ecology Classrooms | Blue Bird Trail  | Limestone Classroom |
| Hike/Bike Trail Entrance   | Equestrian Trail | Solar Panels        |
| Admissions Walking Tour    | Sensory Trail    | Weather Station     |
|                            |                  | Bat Condominium     |



## Description of Sustainable Features Around Campus

### **1. Green Roofs**

Green roofs offer both environmental and economic benefits – they decrease run-off (which very often picks up contaminants along the way) into storm systems by allowing rainfall absorption into the plantings, they protect the roof membrane from UV deterioration, greatly increasing roof life, and provide additional mass/insulating value to reduce heating / air conditioning costs.

### **2. “Harnessing Human Energy” Project**

An SRU Green Fund Grant was used to convert 13 elliptical machines at the ARC with technology that allows for the carbon-free generation of electricity produced from the kinetic energy of those using the machines. This project includes educational material developed to inform users as to how much carbon-free electricity is being generated and the environmental implications of their contributions.

### **3. Wind-powered Lake Aeration System**

Uses renewable wind energy to oxygenate a retention pond on campus to inhibit the growth of harmful algae.

### **4. LEED (Leadership in Energy & Environmental Design) Certified Buildings**

Residence Halls, Phase I:	LEED Certified
Residence Halls, Phase II:	LEED Silver Certified
Smith Student Center:	LEED Silver Certified (in process)
Macoskey Center Harmony House:	LEED Silver Certified, Existing Buildings O&M

### **5. Solar-Powered Rainwater Collection & Drip Irrigation System**

The Smith Student Center East Parking Lot features a green area where an environmentally friendly rainwater collection system captures rainfall in an underground manhole, where a 65-watt pump distributes the water to a drip irrigation system serving the planters in this area. The pump is powered by a solar photovoltaic panel located on the roof of the building.

### **6. Rain Gardens, Bioswales, PV-Powered Rainwater Drip Irrigation System, & Pervious Pavement**

The Smith Student Center West Parking Lot features an environmentally friendly stormwater bioswale, porous pavement, and three bioretention rain gardens that minimize soil erosion silt run-off by capturing/filtering stormwater runoff on-site, rather than channeling it to the municipal stormwater system.

### **Samples of other sustainable campus features funded by the SRU Green Fund:**

- 21 filtered **Water Bottle Filling Stations** have been located in major buildings across campus to encourage the use of reusable water bottles, reduce the number of plastic bottles and cans used/disposed of on campus, to reduce SRU's carbon footprint, and to protect the environment. As of July 2013 this program had avoided the use of over 250,000 single-use disposable water bottles.

- The **Green Bike Initiative** provides free bicycles for student use, as well as many bike stands located around campus to encourage physical fitness and reduced reliance on automobiles.

- **Energy Dashboard Displays** installed in Residence Halls A – F aid in educating students on how their behavior can affect energy usage and related environmental emissions; these are estimated to save an estimated \$1.5 million over the next ten years, reducing SRU's carbon footprint and making the campus community more environmentally conscious.

- **Recycled Composite Plastic Benches** have replaced the deteriorated wooden benches on campus, while reusing the original bench frames, offering a more sustainable and longer-lasting solution to replacing the original wooden benches.

- A **Biofuels Processor** converts used cooking oil from our Dining Halls to create biofuel that is mixed with diesel fuel for use in the campus grounds equipment such as tractors and lawnmowers, reducing the campus carbon footprint.

For more information, visit the SRU Office of Sustainability at [www.sru.edu/sustainability](http://www.sru.edu/sustainability)!