



FY 2010

USDA Headquarters Green Landscaping Program



USDA
Office of Operations
12/1/2009

Background

The USDA Headquarters complex consists of two structures; the South Building and the Jamie L. Whitten Building. The South Building containing over more than 2 million gross square feet making a larger imprint on the ground; but the Jamie L. Whitten building, one of the largest office buildings located on the National Mall makes it one of USDA's highest profile facilities. The Whitten landscape is a mix of mature and newly planted trees, native and invasive shrubs, and sprawling groundcovers and lawn. Traditional landscaping practices included rotating the bedding material at this site three times a year featuring spring bulbs, annuals, and cold weather bloomers. (Over 35,000 tulips, begonias and geraniums are planted each season.) The landscaping costs at the Whitten Building exceed \$240,000 annually. No master landscape plan exists for the landscape and many incompatible and intolerant trees and where poorly adapted to the site. Heavy amounts of asphalt paving raised summer temperatures and increased storm water runoff into the nearby rivers.

Environmental Footprint

Operation	Elements or our operation that interact with the environment	Environmental Impact
Custodial Services	De-icing	Salt applied to surfaces may run off and enter soil, reduce the availability of water to plants, and significantly decrease water quality.
Ground Maintenance	Fertilizer	Fertilizer can have significant effects on aquatic environments. When aquatic environments are loaded with nitrogen and phosphorous, algae in the water grow at a rapid pace. When the algae decompose, oxygen concentrations drop significantly, killing fish and other aquatic organisms.
Grounds Maintenance	Landscaping – Plant Types	<ul style="list-style-type: none"> ➤ Invasive species are extremely difficult to eradicate and can cause ecological disruption. ➤ Routine plant rotation such as annual bulb planting are labor intensive, require more irrigation and generate more waste ➤ Non-native species typically require additional care and irrigation
Facility Operation & Maintenance	Pavement & Building Foundation	The impervious surfaces created by buildings and pavement cause rainwater to flow quickly over the landscape, rather than soaking naturally into the soil or absorbed by plants. This increase in surface water runoff can increase flooding, and carry pollutants such as oil, heavy metals, bacteria, sediment, pesticides and fertilizers into streams or groundwater.

Program Objectives

Reduce the environmental impacts from depletion of natural resources, chemical and pesticide use, and storm-water runoff.

Improve the appearance of the USDA owned grounds and the wildlife habitat by using environmentally beneficial landscaping that protects the environment as well as adding color and interest to the site.

Provide a demonstration area site for the public and employees to learn about USDA environmental programs, initiatives, and opportunities to recreate this model in their own backyard

Targets

- Implement Water and Energy Efficient Landscape Practices such as drip irrigation and composting to help soil retain its moisture.
- Reduce water use by incorporating Native Plants into the landscape design.
- Practice integrated pest management practices such as biological controls and habitat manipulation.
- Limit product purchasing to materials made with recycled content, biobased content, or other environmentally preferable attributes, such as organic or biobased fertilizers and pesticides.
- Avoid products that require frequent replacement (such as annual plants) or regular maintenance to reduce future waste.
- Incorporate Low Impact Development (LID) to protect natural areas and manage storm water with swales, rain gardens and vegetated areas.
- Create a new habitat with pollinator gardens
- Create Outdoor Demonstration Projects that educate both the public and employees throughout the year by providing learning opportunities for children, organizing and providing a living memorial on site, and creating interpretive signage and interactive features.



Program Status

- The People's Garden

On Earth Day in 2009, the Secretary declared the entire grounds of the Jamie L. Whitten Building part of "The People's Garden". The garden showcases conservation practices that all Americans can implement in their own backyards and green spaces.



➤ Removal of pavement

Pavement removed to make way for the People's garden will aid in preventing storm water runoff from contaminating the nearby waterways.



➤ Organic Gardening

The established organic gardening practice of the People's Garden eliminates the use of fertilizers and pesticides.



➤ Food Donations

USDA donates the harvested vegetables to the homeless through the D.C. Central Kitchen (DCCCK). Last year USDA donated over 150 pounds of harvested produce to DCCCK. To learn more about DCCCK, visit <http://www.dccentralkitchen.org/>



➤ Awareness

To increase awareness regular events took place during the summer months including:

- Garden Tours on Tuesday & Thursdays
- Friday's Chef in the Garden
- Friday's Garden Workshops
- Earth day awareness tent

Targets For 2010

- Begin drafting a Sustainable Landscape Master Plan. The plan will tie together all the Whitten landscape features, demonstrate environmentally responsible practices, and educate and engage the public through accessible exhibits.
- Reduce storm water runoff from Court #5
- Increase awareness thru employee awareness days, people’s garden workshops, and demonstration projects (edible landscaping)
- Partner with DC Central Kitchen to donate harvests and provide training opportunities (Culinary Job Training program).

Action Plan for 2010

Scheduled Actions	Contact Person
Design a green roof on Court #5 of the South Building	Ed Murtagh
Install a cistern in court #5 of the South Building	Ed Murtagh
Implement a edible garden project in Court #2	Tom Hoffman
Revitalize the street tree initiative	Leslie Burks
DC Central Kitchen Coordination	Ed Murtagh
Employee Awareness Days (Earth Day & scheduled People Garden events)	Ed Murtagh & Ed Hogberg
Outreach Event on Sustainable Landscape	Ed Murtagh & Ed Hogberg

Performance Indicators

Many of the benefits achieved from shifting to “greener” landscape management practices are not easily measured or tracked such as diverting storm water flow, and providing a pollinator garden.

1. Service Contract Monitoring is performed on a weekly basis.
2. The Washington Area Service Center Hotline (WASC Hotline) receives comments or concerns on a daily basis. Responsibility – Washington Area Service Center
3. The green team & the EMS core team solicit comments from USDA employees during training and employee outreach events. Outreach events occur at least twice a year and training occurs once a year. Responsibility – Green Team & OO sustainability Staff

Operational Controls

There are certain controls in place to ensure we continue to maximize opportunities for greener landscape practices. Operational controls come in the form of policy, guidance, contractor specifications as well as employee awareness. Various operational controls for this environmental program our outlined in our HQ Environmental management system.

Team Roles

The HQ's EMS core team manages this program. This team relies heavily on volunteer participation from the USDA HQ green team. Team members provide a wealth of knowledge and experience in a broad range of areas, they volunteer their time based on their specific expertise and area of interest. Without their effort many of our achievements would be not obtainable.

Records

Records for this program along with other environmental program at headquarters are maintained by the EMS core team members. Most of the EMS documentation is available on the USDA web.