Rutgers River Friendly Business Program
Morris County Program Overview

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RIVER FRIENDLY BUSINESS PROGRAM

Cooperative Extension

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Program Overview

The River Friendly Business Program (RFBP) of Morris County is a voluntary certification program to encourage businesses to adopt conservation and stormwater management practices aimed at reducing environmental impact on local waterways. The RFBP of Morris County is timely. A 2012 Fairleigh Dickinson University survey of 300 New Jersey businesses (Harmon et al. 2012) looking at external sustainability related factors, ranked water quality and availability just below energy and social stability. The same survey found that key factors for understanding a business' adoption of sustainable practices were the vision of the company, sufficient guidance related to the actions necessary, and milestones or tracking measures for assessing progress (Harmon et al. 2012). The RFBP of Morris County provides solutions for two of these key factors by offering guidance and measures of success. Additionally, this survey found that "Trusted certification programs were seen as more important by companies employing higher levels of sustainability management" (Harmon et al. 2012). Rutgers Cooperative Extension provides that trusted certification process.

The RFBP offers a voluntary certification program that will guide businesses through a personalized program to achieve specific objectives in four categories: stormwater management, outdoor water conservation, lawn maintenance, and wildlife habitat enhancement. The program is discussed in greater detail in the Program Guidance Manual.

The funding for the development of this program is being provided by a grant from the New Jersey Department Environmental Protection (NJDEP) 319(h) program and the New Jersey Agricultural Experiment Station. While this grant targets the Troy Brook watershed, the educational aspects of this program are being made available to all businesses in Morris County. The Program is intended to be collaboration between businesses within Morris County, their employees, and Rutgers Cooperative Extension. Upon completion of the RFBP certification requirements, businesses will receive public recognition for their achievement at an award ceremony. Rutgers Cooperative Extension will provide public acknowledgment of the tremendous achievement attained with a plaque suitable for roadside display. In participating municipalities, the mayor will present a plaque recognizing the business as a sustainable business within the community.

As previously mentioned, the NJDEP grant funding focuses on the Troy Brook watershed. The Troy Brook has water quality impairments and is subject to frequent flooding. A Regional Stormwater Management Plan

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was developed by Rutgers Cooperative Extension (Rutgers Cooperative Extension Water Resources Program 2006) to identify measures to better manage stormwater, improve water quality and to reduce the occurrence of flooding. Most of these water quality and flooding problems can be linked to large expanses of **impervious surfaces** that discharge stormwater runoff directly to the Troy Brook and its tributaries. Stormwater is the water from rain or melting snows that can become "runoff" flowing over the ground surface, picking up nutrients, sediment or other pollution, and returning to lakes and streams. Nonpoint source pollution, transported by stormwater, is a major cause of impairment in the Troy Brook and the waterways in Morris County. These water quality impairments create a greater tax burden on municipalities as they struggle to repair waterways and treat the polluted water for potable uses.

> ***Impervious surfaces*** *are defined as any surface that has been covered with a layer of material so that it is highly resistant to infiltration by water. Examples include but are not limited to paved roadways, paved parking areas, and building roofs.*

In addition to the water resources problems our communities are facing, many of our wildlife species are declining and becoming threatened due to a lack of habitat. For example, native bees are pollinators that provide critical ecosystem services to plants, vegetables, fruits, and flowers. Providing native flowers and grasses can assist in preventing the decline of this essential population. Many of the stormwater management practices that can be implemented as part of the RFBP will incorporate native plants that provide wildlife habitat for desirable species. Moreover, it is becoming more costly to maintain a landscaped campus, making the economic savings associated with becoming a river friendly business more important. It is often possible to maintain a lawn with better practices, while saving money, using less water, using less fertilizer, reducing the amount of fertilizer that enters streams, and using fewer pesticides that harm beneficial insects. The United States Environmental Protection Agency estimates that 30% of residential water usage is for outdoor usage. It is possible to reduce the amount of water used thereby saving money while helping the environment.

Program Goal

The goal of the RFBP of Morris County is to work with businesses to adopt various sustainable practices that reduce their environmental impact on local waterways. These practices will not only improve water quality and help reduce flooding, but will also promote wildlife habitat and provide economic benefits to the business and the community. Estimates are that annual ecosystem services provided by forests, wetlands, oceans, grasslands and other natural landscapes are approximately $33 trillion/year on a global scale while the global gross national product is $18 trillion/year (Sustainable Sites Initiative 2009). Twenty-five percent of large publicly traded companies "have undertaken assessments to identify specific water-related risks" and 43% have a supply chain code in place(Sustainable Sites Initiative 2009). Goldman Sachs has dubbed water "the petroleum for the next century."(Evans-Pritchard 2008). It makes economic sense to be a leader in the community by creating a sustainable River Friendly Business campus. It can have a dramatic improvement on the business's "triple bottom line[1]."

Why become a river friendly business?

There are four targeted benefits to becoming a river friendly business: environmental improvement, increased employee satisfaction and productivity, being a good community partner, and economically a good business decision.

Environmental Improvement

Nonpoint source pollution is often referred to as people pollution and is the diffuse inputs of pollutants into our streams and rivers or other waterbodies. Often these pollutants are derived from everyday actions such as maintaining a lawn; but the inputs can have a significant impact on our waterbodies due to the quantity of people using the inputs. A change in behavior to consider the river or stream (even if it does not flow through the business location) is

> ***Nonpoint sources*** *are defined as everyday pollutants carried by stormwater runoff from diffuse sources. Examples include but are not limited to fecal matter from pets and waterfowl, fertilizer, pesticides, oil and grease from cars, and sediment.*

[1]The triple bottom line is made up of "social, economic and environmental" factors. Triple bottom line accounting expands the traditional reporting framework to take into account social and environmental performance in addition to financial performance.

the first step in reducing the pollution and helping to improve the environment.

The Troy Brook provides a specific example of water quality degradation common in streams and rivers throughout Morris County. In the Troy Brook Watershed, approximately 13% of the watershed is commercial land use (Rutgers Cooperative Extension Water Resources Program. 2005). The Troy Brook is impaired for fecal coliform and is part of the larger Passaic River Watershed, which has an identified impairment for phosphorus, a nutrient that causes excess algae and aquatic plant growth in lakes and streams. These impairments cost water treatment facilities additional costs for treatment. Modeling conducted for the Troy Brook Regional Stormwater Plan found that "changes in these subwatersheds that affect runoff have a significant impact during storms of lower intensities than the storms of higher intensities" (Rutgers Cooperative Extension Water Resources Program. 2007). It was also found that runoff changes may also help eliminate flooding during smaller storms (Rutgers Cooperative Extension Water Resources Program. 2007).

Increase Employee Satisfaction/ Productivity

In recent years, nature and productivity have been noted to correlate well together. Indeed research studies have found that flowers and plants can increase employee creativity, innovation and productivity and may be the difference between "mild and great business success" (Stern et al. 2009). In the field of Human Resources, it is often suggested to offer aspects of the hobbies that inspire employees "to attract and retain top employees" (Stern et al. 2009). The hobby of two-thirds of the American work force is gardening. In businesses where team work is an important aspect of accomplishing goals, nature-centric areas provide centers where talks can be more free-flowing and trust inspiring. A Texas A&M University study found that including plants and flowers in the workplace increased creativity and idea generation (merage.uci.edu/ResearchAndCenters/Beall/CommunityServer/blogs/innovation/archive/2008/07/28/flowers-and-plants-promote-innovation-ideas.aspx) as cited on the University of California- Irvine, Merage School of Business website.

Exposure to nature also can help employees increase their focus and productivity. Attention Restorative Theory is related to mental focus on a task which can be demanding, draining and fatiguing. It is sustainable for short bursts before there is a need for replenishment. Sleep can provide replenishment, but exposure to nature can also be a restorative measure, allowing employees to regain focus (Kaplan 1995; Herzog et al. 1997). By participating in the RFBP, a business will be implementing sustainable practices that not only treat stormwater and enhance habitat, but are also available to engage employees and provide opportunity for nature exposure.

Being a Good Community Partner

Current research shows that New Jersey businesses are interested in sustainability, and a survey conducted by Farleigh Dickinson University found that "New Jersey business leaders say they invest in sustainability as much because it's right for society as to get pragmatic business advantages" (Harmon et al. 2012).

Employees are often part of the community where a business is located. At a minimum the business pays taxes in the community. The community, to some extent, tries to address water quality and quantity issues in the township. It is a problem larger than the municipality. To have a significant impact on water quality, both public and private property owners must implement best management practices. As part of the community, it is possible for homeowners and businesses to slowly begin to implement projects. How does this help a business? The community is a better place to live for employees and a better place to recruit new employees to live. Water quality improvements include recharge to the aquifer, providing sufficient water for business use. Stormwater management can lead to a decrease in the smaller flood frequency storms. The community benefits from cleaner water and less frequent flooding. All of these benefit both the community and the business.

Good Business Decision

The fact is that becoming a River Friendly Business is a good business decision in the long-term and in the short-term. Many larger corporations and universities, as part of their sustainable goals, are looking at their supply chains for sustainable practices, as are consumers. Many of the practices suggested as part of the RFBP of Morris County will provide economic benefit through measures such as re-use of water, reduction of fertilizer or pesticide use, reduction of lawn maintenance time and/or expense, which are all measures that have been successfully conducted on many other properties.

Some examples of the economic benefits of sustainable business decisions include:

- Bloomberg Corporation in releasing its sustainability report produced a financial summary stating that for "every $1 in environmental management it saved $2 in operating costs" (Cerces and Sustainalytics 2010).

- According to a money management company, companies in LEED certified buildings had 20% higher performance than other publicly traded companies on the Dow Jones Industrial Average (Stern et al. 2009).
- Cost savings of up to $4,000 have been documented for naturalizing detention basins, another environmentally friendly practice utilizing less mowing and resources (Haberland et al. 2012).

Program Structure

The RFBP of Morris County is a voluntary program and structured around the needs of the individual businesses. Baseline environmental assets of businesses will be identified during a site evaluation conducted by Rutgers Cooperative Extension staff. Based upon the data gathered during the site evaluation, Rutgers Cooperative Extension staff will work with the business owner to determine which objectives it should pursue to achieve the requirement for each of the four program categories: 1) Stormwater Management, 2) Water Conservation, 3) Lawn Maintenance, and 4) Wildlife Management. There are objectives in each category with minimum requirements that must be satisfied. One or several site visits will be conducted with a Rutgers Cooperative Extension staff person to help the business determine how best to achieve the objectives based on the individual site and business characteristics. Rutgers Cooperative Extension staff will work with the business to develop a plan for achieving the desired objectives. Once the business has satisfied sufficient requirements in each of the four program categories, the business will receive certification. Businesses are expected to continue to maintain their River Friendly Business status.

For more information please contact Pat Rector at rector@njaes.rutgers.edu. For further details on the River Friendly Business Program please see the guidance document at morris.njaes.rutgers.edu/environment/index.html.

Cooperating Agencies: Rutgers, The State University of New Jersey; U.S. Department of Agriculture; and County Boards of Chosen Freeholders.

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