

An Introduction to the Program

## What is the Carolina Yards & Neighborhoods Program?



- Beautification
- 9 Easy Principles
- Low Maintenance Landscaping with Nature in Mind
- Cost Savings
- Preservation of our Water Resources

CY&N is a landscaping program designed to teach people in a simple way how to efficiently maintain their lawns and protect the environment at the same time. The biggest benefit is the cost savings to you by decreasing the amount of time it takes to care for lawn, use less water and chemicals, and requires less replacement of plants because you'll use the right plants.

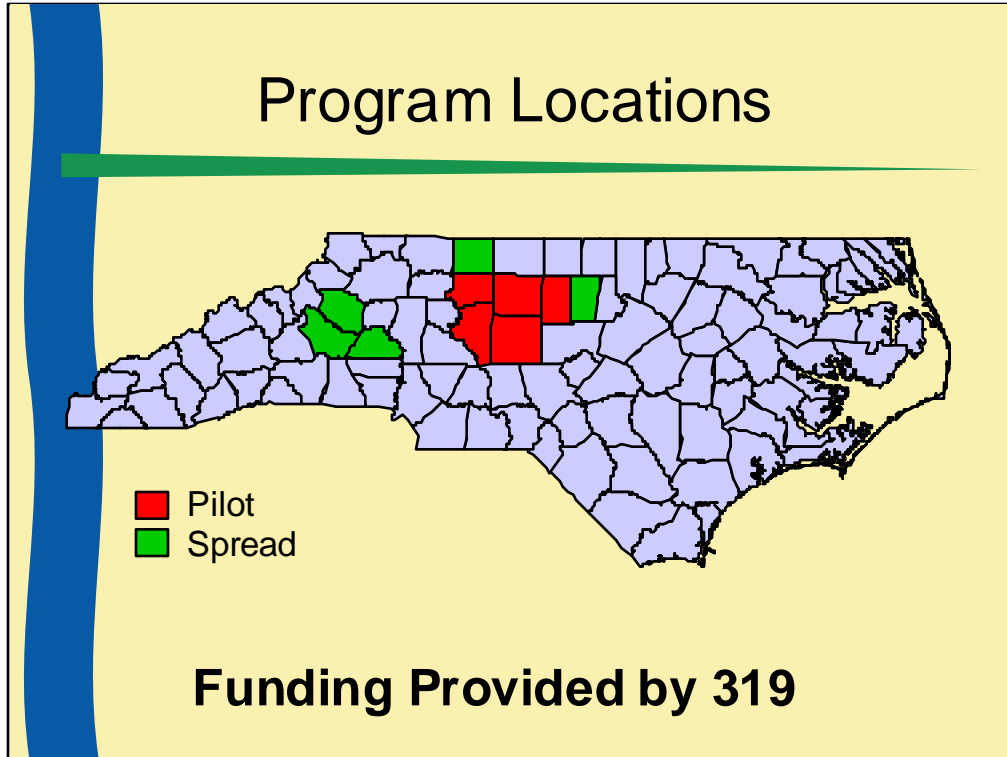
## CY&N Beginnings

- Adapted from a similar Cooperative Extension program in Florida
- Problems with drought and decreased water quality in local streams led to concept



Autumn fern

This program will be advertised in the Piedmont and then implemented statewide with the Cooperative Extension Service in each county.



Red are the pilot areas for the program and green counties are locations where Extension agents are doing the program. A new grant has been applied for to take the program statewide.

# Typical Agenda

- Typically 5-6 hrs (2hr for 3 wks, 3hrs for 2 wks or 1 hr slots)
- The Good, Bad, and Ugly of the Environment in the Piedmont
- Landscape Design Principles
- Tour outside
- Hands-on Landscape Design Plot (in teams)
- Discussion of Designed Plots
- Nine Steps to a Carolina Yard

## **The Bad: Environmental Problems in the Piedmont**

**Stormwater**

**Sediment**



Unfortunately there are many problems that can affect our waters.

## **The Ugly: Environmental Problems in the Piedmont**

**Nutrients**

**Trash**

**Thermal Stress**



We also have ugly, unflattering problems in the piedmont.

## **The Good: Plants and Animals Unique to the Piedmont**

**North Carolina is home to approximately  
5,700 species of plants, more than  
700 species of vertebrates, and more than  
10,000 species of invertebrates.**



Thankfully we also have more than 5700 plant species and over 17,000 animal species.



## What is a “Carolina Yard”?

- Unique or traditional
- You can create a Carolina Yard simply by changing the way you take care of your yard.



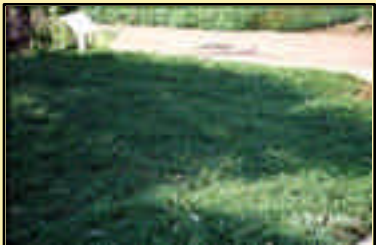
You can design your landscape with a traditional look such as an English garden..... or simply as a native plant butterfly garden. Think about your goals with this yard: do you want well-manicured or low maintenance, do you want to attract certain wildlife or even no grass to mow at all?

## **A Carolina Yard incorporates the following 9 principles:**

- **right plant, right place**
- **water efficiently**
- **mulch**
- **recycle**
- **fertilize appropriately**
- **manage yard pests**
- **reduce stormwater runoff**
- **attract wildlife**
- **protect the waterfront**

Once you figure out your goals for your landscape you can use these 9 basic concepts to incorporate A Carolina Friendly Yard  
(*Read text from slide.*)

## Right Plant, Right Place



Bearberry

- Reduce the need for water, fertilizer, pesticides and pruning by using plants suited to the specific site conditions.

It is important to reduce time, energy and money by selecting plants that are most appropriate for the area that you wish to landscape.

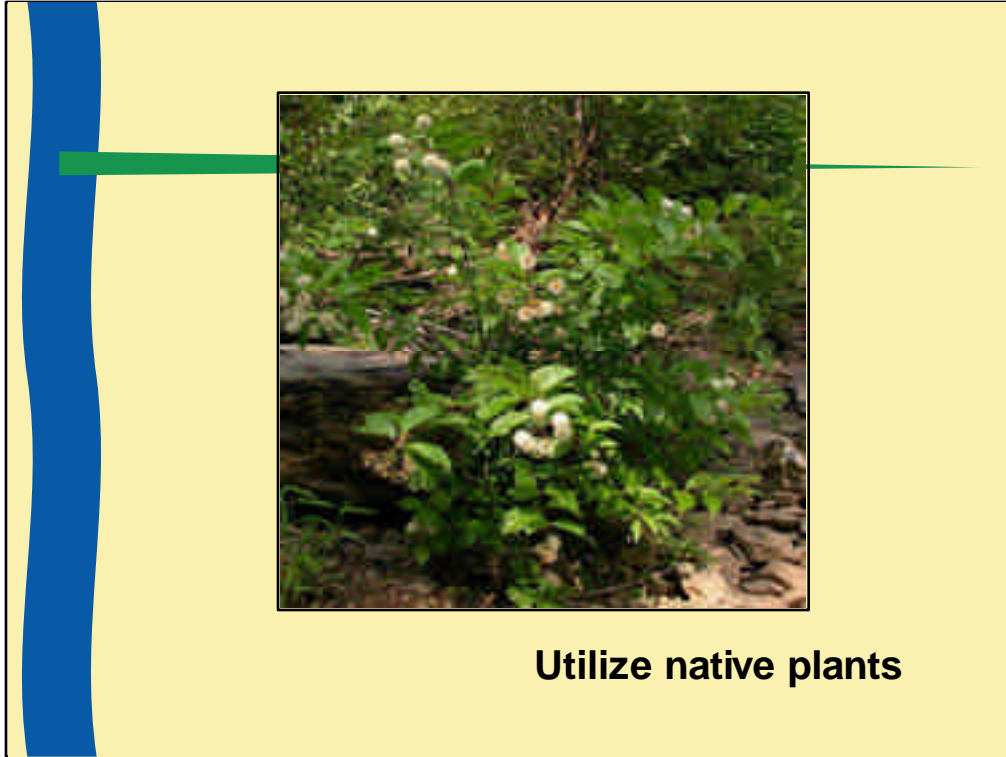


These plants were selected for their love of sunlight and their low watering requirements. When fully developed, this landscape will use a fraction of the water needed for a yard with grassy areas.

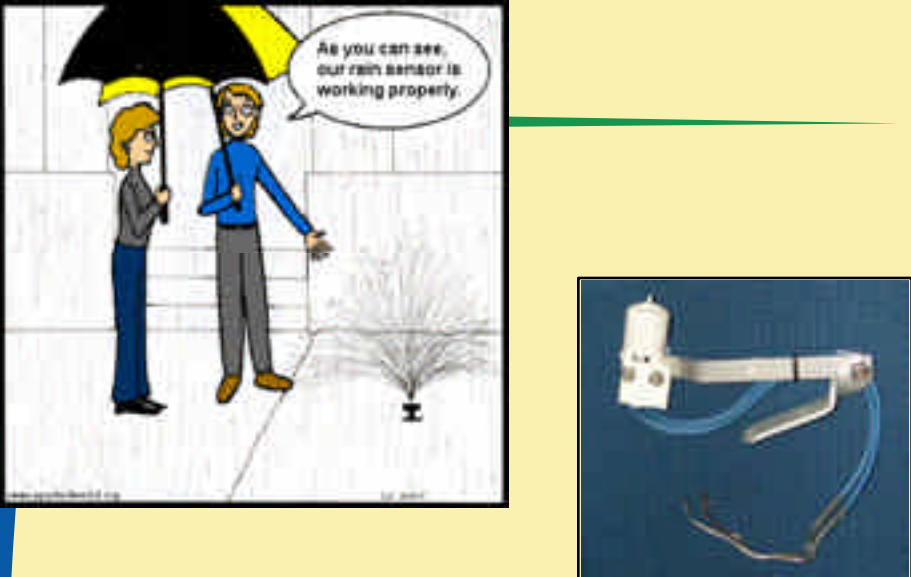
## Water Efficiently



Water quality and quantity are very important factors for the CY&N program. We can reap more benefits to ourselves and the environment by using the proper amounts of water.



When appropriate, it is important to utilize plants that are native to Carolina, or plants that do not require a lot of care or inputs.



As you can see, our rain sensor is working properly.

**Utilize rain sensors**

Water conservation also includes utilizing rain shut off gauges with automatic irrigation systems.

## Mulch



- Removes Pollutants
- Retains Soil Moisture/  
Temperature
- Discourages Weeds
- Prevents Erosion
- Provides aesthetic  
appeal

Mulching is an important principle and can provide great benefits to your landscape.





**Utilize various mulches**

There are many different types of mulch; pine needles, grass clippings, leaves and shredded yard waste are just a few examples.

## Recycle



Recycling the yard waste, by composting it, results in less organic material in the landfill and saves you money by becoming a soil nutrient additive. One does not have to have a complicated composter to obtain healthy compost. This simple wire structure will allow material to compost as well as the more sophisticated ones.

**Utilize rain water that  
falls off your rooftop**



**Rain Barrels**



**Cistern**

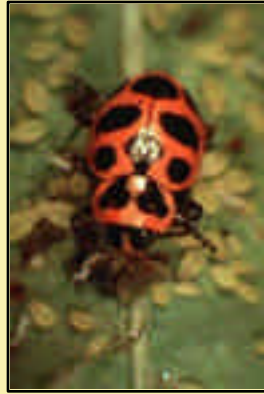
Rain barrels can capture enough rainfall to water your garden. Cisterns can be used to flush toilets and wash garbage trucks and other city vehicles.

## Fertilize Appropriately



Inappropriate fertilizing is one of the main problems that we encounter when it comes to homeowner lawncare.

## Managing Yard Pests



**Beneficial  
Insects**

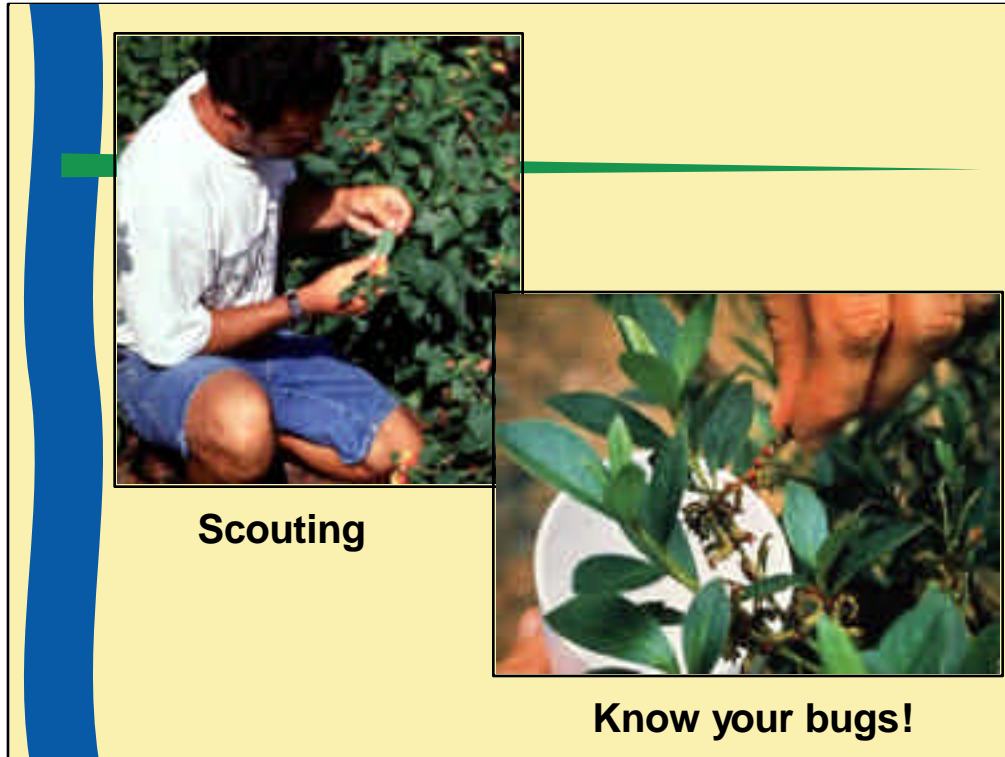


**Chemicals**

Pest management is another principle of the CY&N program. The goal with this principle is to reduce the dependency on the chemical pesticides that might be winding up in our water supply.



If it becomes necessary to use a pesticide, it is important to remember that there are many bio-controls that will be less harmful to you and the rest of your garden.



Integrated Pest Management is a principle that can help reduce the use of pesticides. Instead of pulling out the pesticide every time there is a bug, it is important to know if the bug is really harmful.

## Reduce Stormwater Runoff

**Stormwater Runoff** - rainwater that flows off of yards, roads and parking lots, and washes back into streams, creeks and other waterbodies. This runoff can carry pollutants into our water supply (surface and groundwater).



Stormwater runoff is considered the primary polluter of surface water. Everything, including car oil, fertilizers, pesticides, soil, pet waste, and trash is carried away to the nearest body of water.





Most of the stormwater runoff comes from things we do and travels to our waterbodies via the storm drain.



Photos: Mitch Woodward

**Did you know only 38% of North Carolinians know the difference between these two drains?**

# The difference is...

Sanitary sewers lead to...



Wastewater treatment plants



# The difference is...

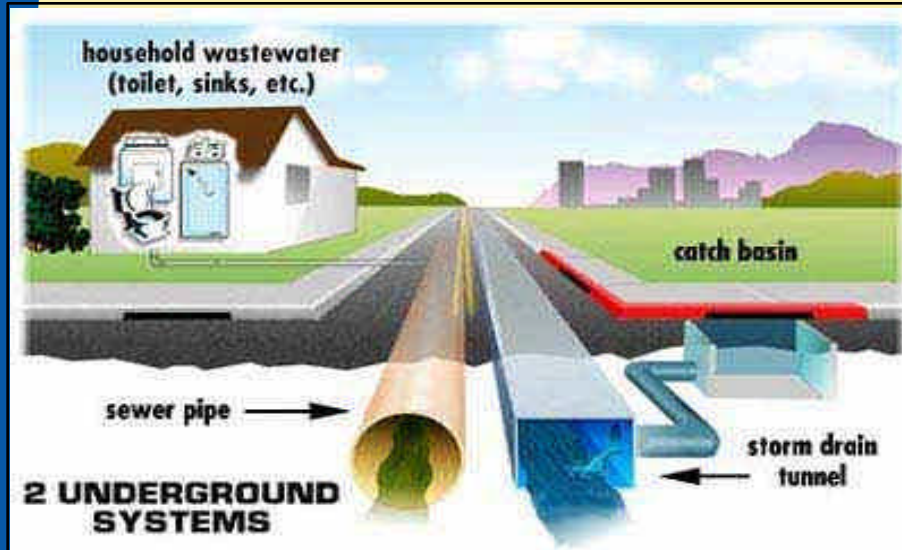
Storm drains lead to...



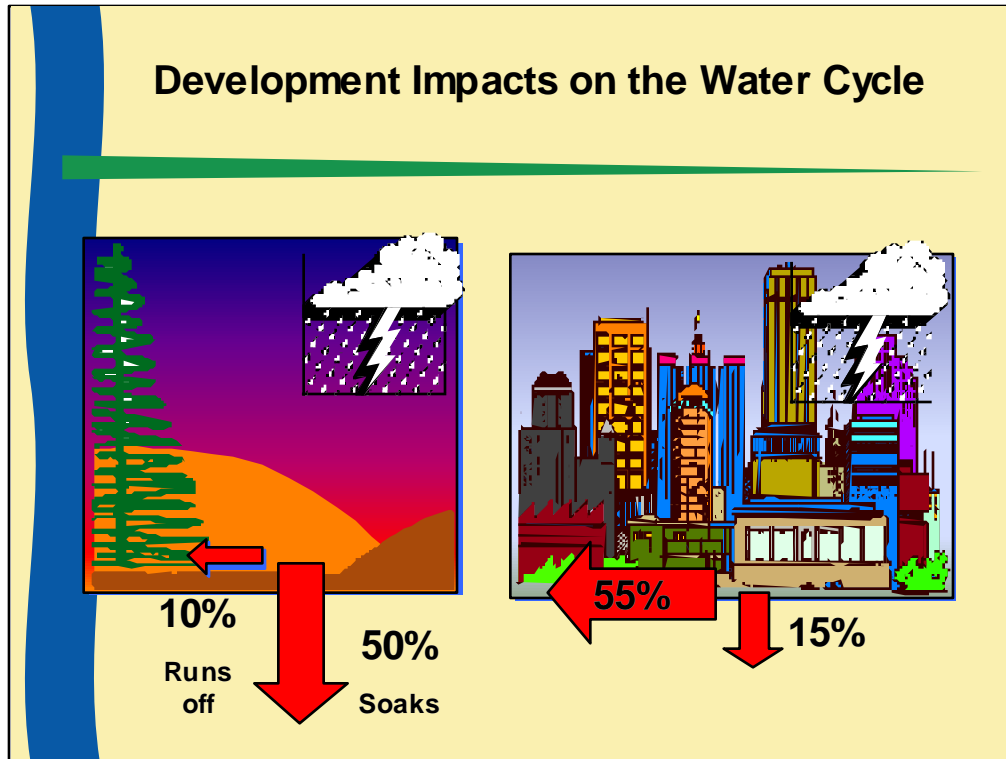
Streams



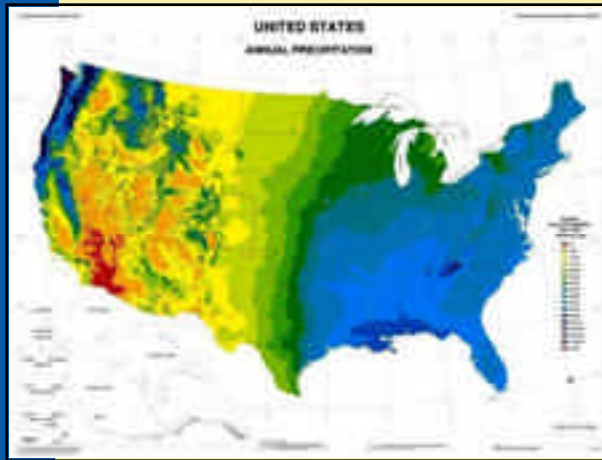
# Stormwater System is Separate System!



## Development Impacts on the Water Cycle



When rain falls on a natural environment it can either soak into the soil or it can runoff into the surface water. Unfortunately, with increased urbanization, the rain encounters more and more concrete and other hardened surfaces which do not allow for infiltration of water into the soil.



Let's say a typical home has 3,360 sq. ft. of hard surface (includes rooftop and driveway)

In a one-inch rainstorm, that's 2,106 gallons of water or over 40 baths!

We live in an area that receives over 40 inches of rainfall a year, often in a limited time frame. With that you have a tremendous amount of water entering our system looking for a place to go. So what happens when all this rain falls on impervious surfaces? Note: The square footage was calculated from a **40x60 ft. rooftop with a 24x40 ft driveway.**

**Slow water down, keep it on your property instead of running off**



**Flat curbs**



**Rain Gardens  
(Bioretention)**

If stormwater has to flow, we need to find ways to slow it down so that it has more time to infiltrate into the soil thereby diminishing its runoff effect.



## Attracting Wildlife



Another principle in the Carolina Yards program is to provide food, shelter and protection for wildlife.



**Enhance existing habitat**



**Create new habitat to attract wildlife**



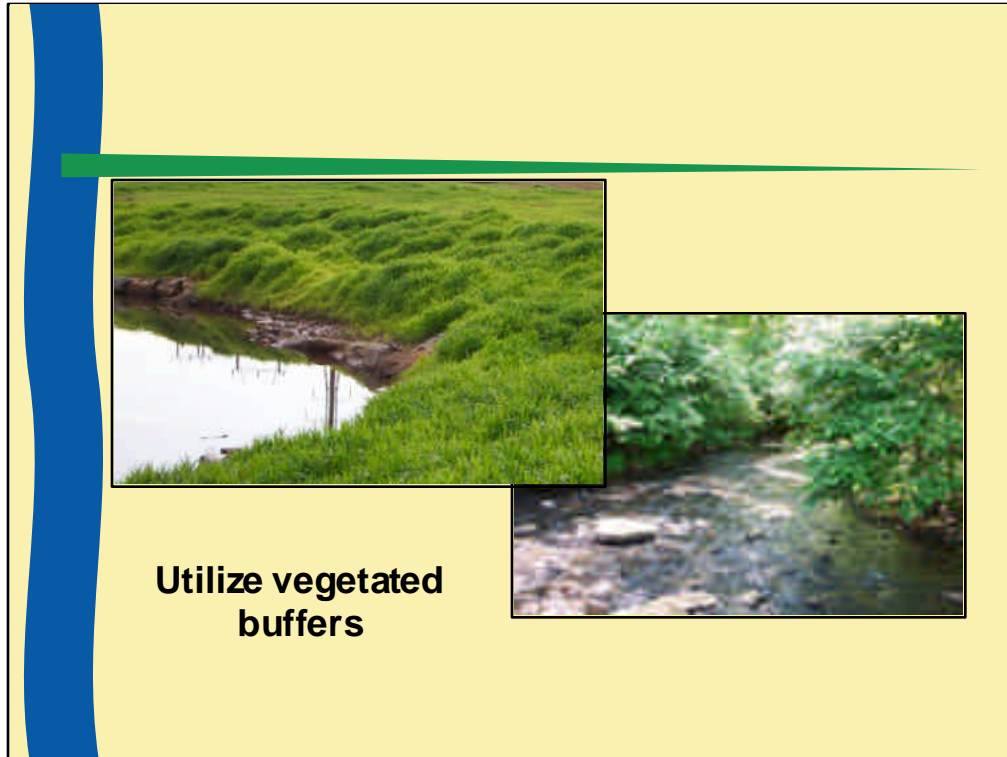
Practices can be as interactive as planting a butterfly garden, putting up a hummingbird feeder, a birdbath.....

.....or adding a birdhouse. It can also be as simple as leaving something that already exists in place so that the wildlife can continue living there.

## Protect the Waterfront



The final CY&N principle is to protect and maintain waterfront areas. For those of you that live on or near a waterbody...it is important to reduce pollution and degradation to that area whether it be a pond, lake or stream.



Low-maintenance or native plants should be planted around water areas to reduce pollution and runoff.

**With a little of your help...**



*Read text from slide.*

**...we can protect North Carolina's natural resources for generations to come.**



*(Read text from slide.)* Perhaps you do not feel connected to Carolina's environmental concerns. However, natives and non-natives alike, need to remember the things that attract us to the Carolinas. We must realize that only our intervention will help preserve the quality of life that we appreciate so much.

CY&N is a landscaping program designed to teach people in a simple way how to efficiently maintain their lawns and protect the environment at the same time.



*Read text from slide.*

## CY&N Program Benefits

### Cost Savings

- Decreases lawn care time

- Uses less water and chemicals

- Less replacement of plants (use right plants)

### Aesthetic Value to Property

- Provides Wildlife Habitat

- Conserves and Protects Natural Resources

*Read text from slide.*





Since the success of this program largely depends upon stakeholder buy-in, across agency cooperation can be encouraged.