

# Green Landscaping *for*



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Deep-rooted Native Plants Protect Water Quality



Cyndi Ross

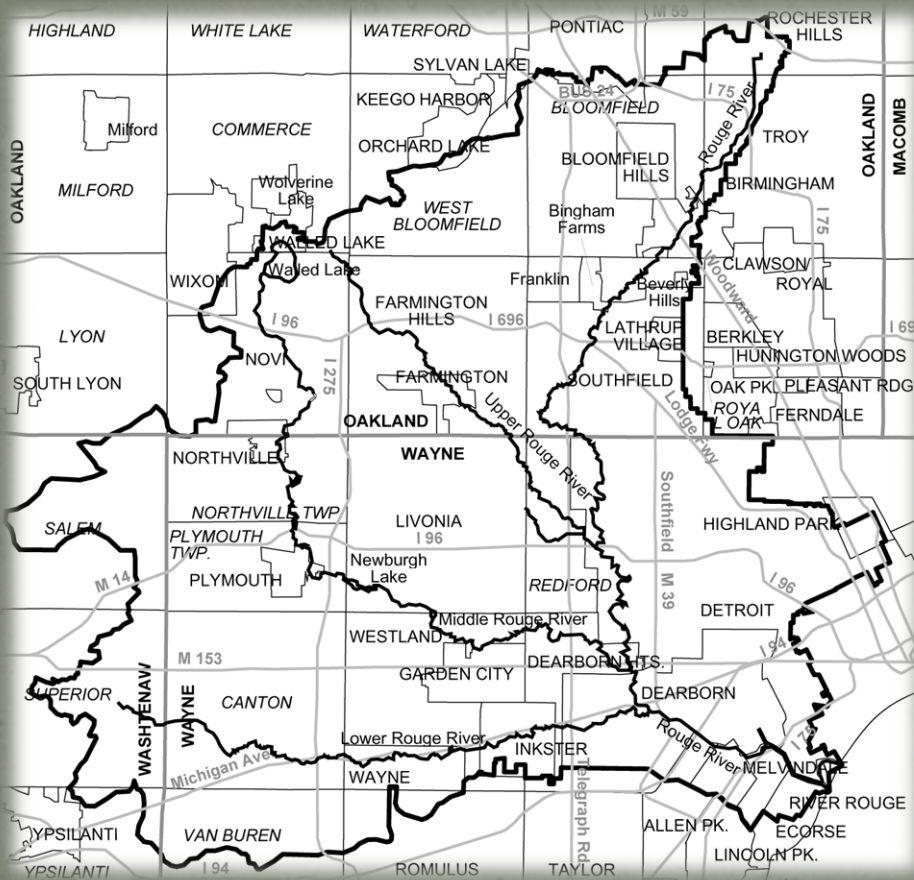
River Restoration Program Manager

# Friends of the Rouge Mission



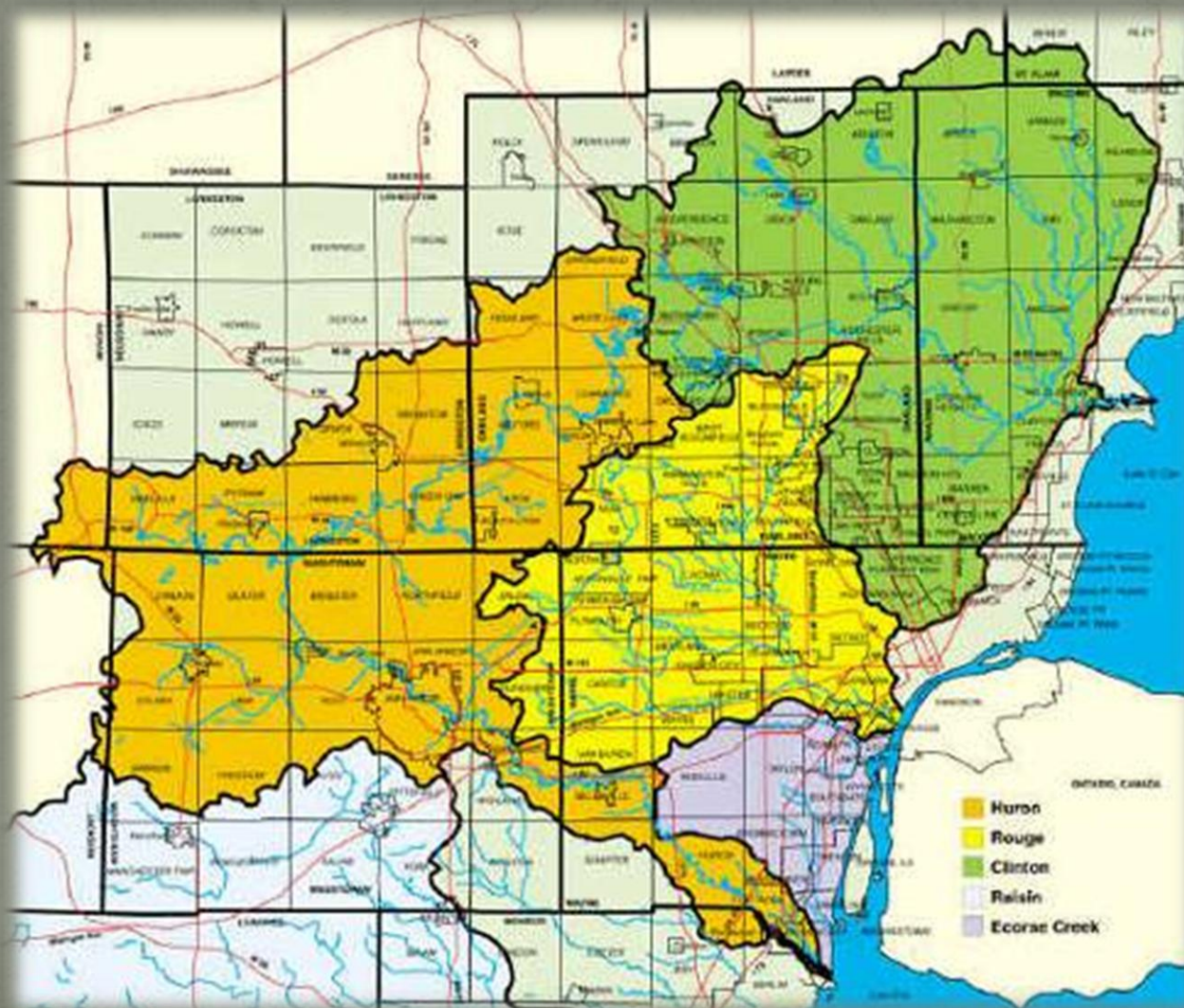
To promote restoration and stewardship of the Rouge River ecosystem through education, citizen involvement and other collaborative efforts, for the purpose of improving the quality of life for the people, plants and animals of the watershed

# The Rouge River Watershed



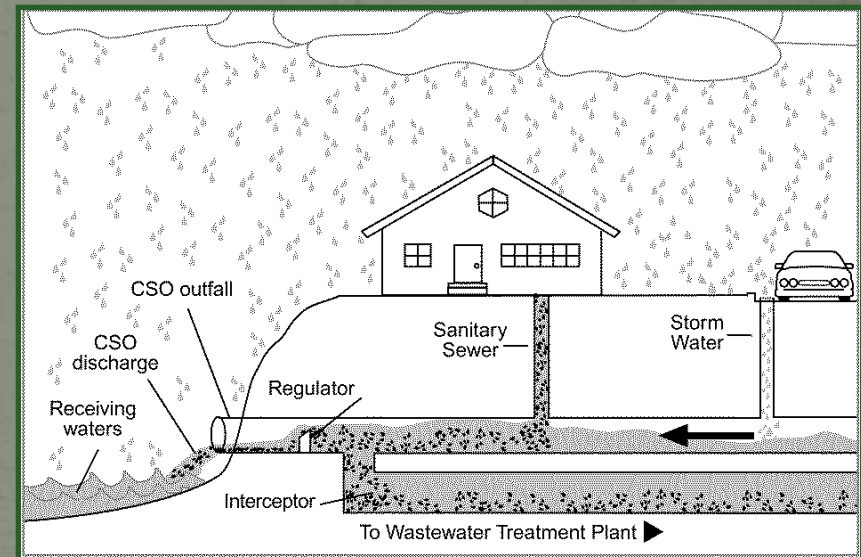
- 467 square miles of land
- 126 miles of river
- 48 communities
- 1.35 million people
- 4 main branches
  - Main
  - Upper
  - Middle
  - Lower

# Surrounding Watersheds



# Problems that Plague the Rouge River

- **Combined sewer overflows**
- Stormwater
- Unstable water levels
- Sediment in the water
- Failing septic systems
- Lack of riparian vegetation
- Illicit connections
- Industrial discharges
- Legacy pollutants in the streambed



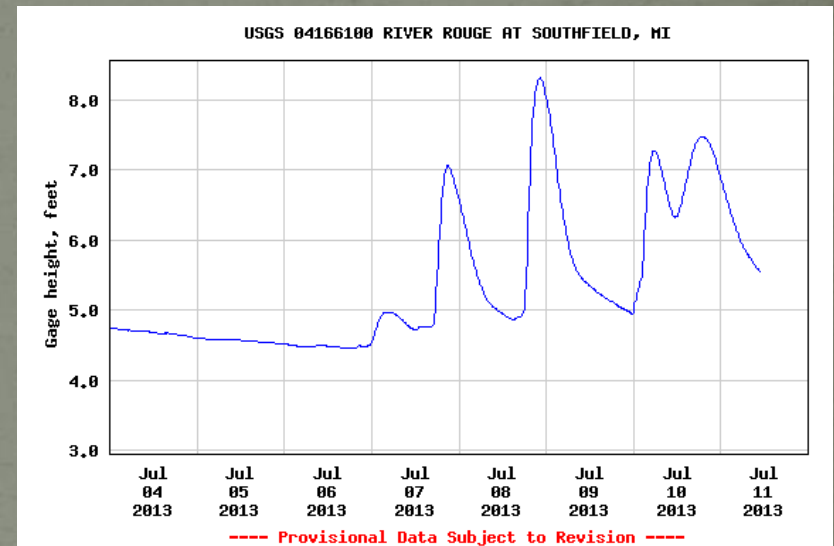
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# Problems that can be Reduced by Altering Landscaping Practices

- Combined sewer overflows
- Stormwater
- Streambank erosion
- Sediment in the water
- Failing septic systems
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WHAT CAN YOU DO?

# Employ Green Landscaping Practices to Improve Water Quality



- Disconnect downspouts
- Install rain gardens
- Create native wildflower gardens
- Vegetate streambanks
- Harvest rain water
- Compost yard waste
- Mulch garden beds
- Limit chemical use
- Reduce imperviousness

# Traditional Landscaping

Traditional residential landscaping consists of a few shrubs and flowers around the home and a few isolated trees.



# Sustainable Landscaping

This environmentally sustainable landscape is designed to improve water quality and wildlife habitat.

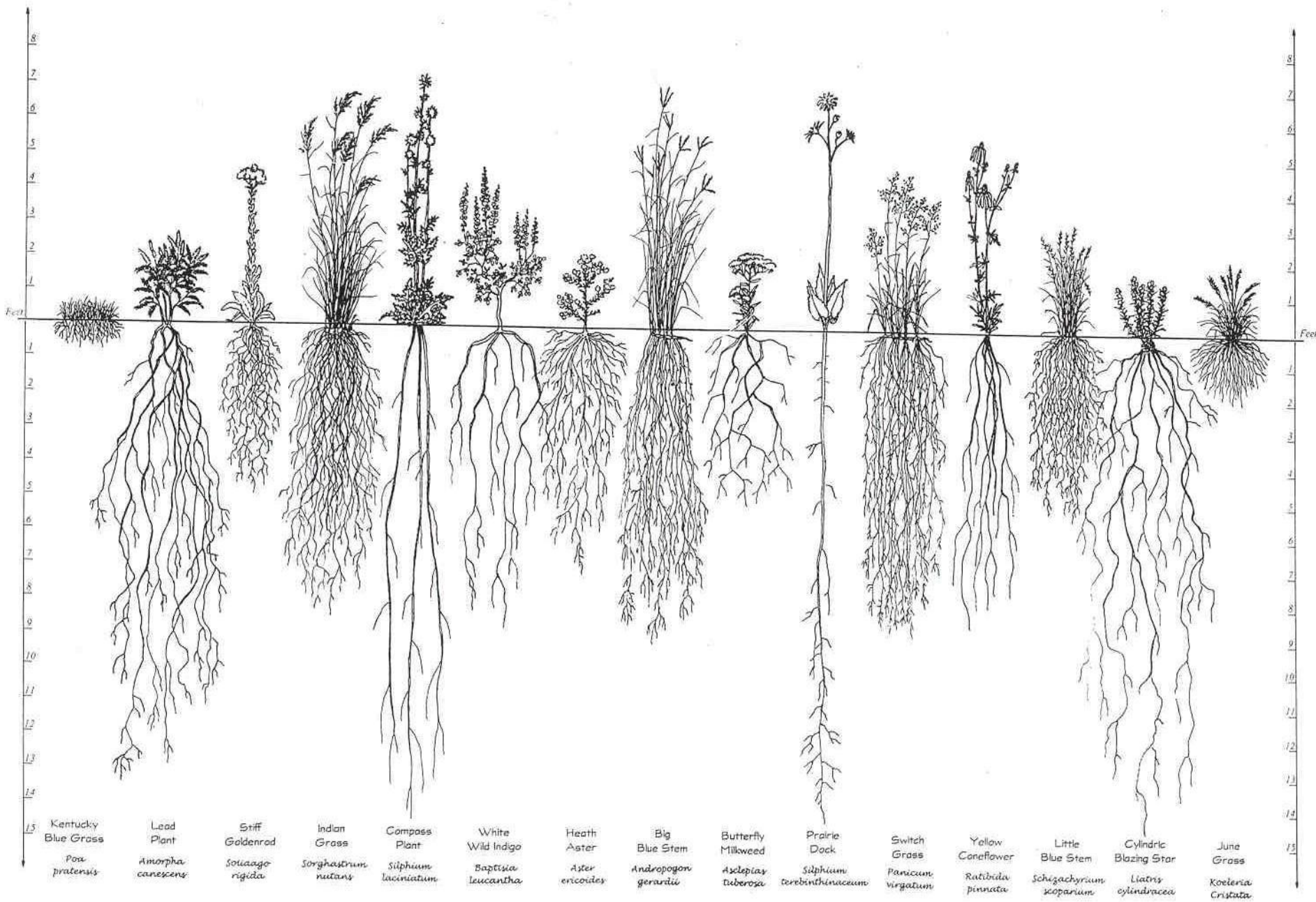
Plantings are clustered. Steep slopes are vegetated with deep-rooted native plants. Rain gardens retain water from the home's downspouts. Streamside vegetation reduces streambank erosion.

Habitat is created for birds, butterflies and other wildlife.



# Why use native plants?

- Improve biodiversity
  - A diverse landscape will support a larger number of species
- Reduce pollution
- Require less care than traditional ornamental plants
- Preserve our natural history and provide a 'sense of place'
- Save time and money



Root Systems of Prairie Plants — Southern Michigan

# Steps to Creating Native Gardens



Maintain



Plant



Site Prep



Design



Educate



Plan



# Plan

- Create a Vision
- Call miss dig (811)
- Identify your goals



PUBLIC

PRIVATE

NATURAL





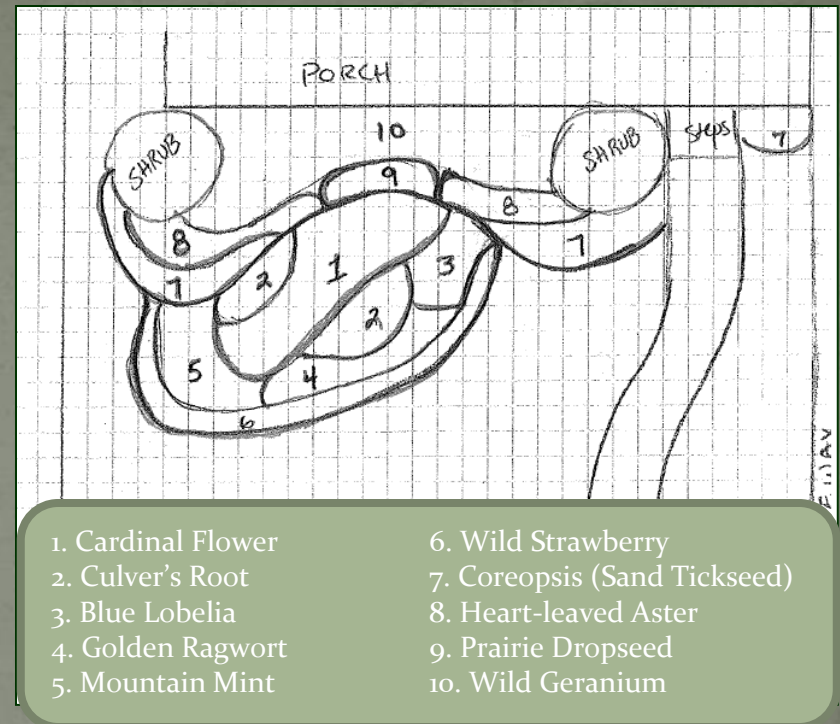
# Educate

- Seek advice and support from others
- Talk to neighbors
- After the garden is planted add signage to educate others



# Design

- Generate a species list taking into consideration
  - Amount of sunlight
  - Soil moisture & drainage
  - Soil type (sand, clay, loam)
- Create a planting plan
  - Select the right plants for the specific garden location
  - Plant in clusters
  - Consider plant height, color and texture
  - Add human elements to give the landscape a planned look
- Start small and expand over time



PUBLIC

# Front Garden

For Curb Appeal:

- Create a Formal Appearance
- Use Native Plants & Non-invasive Exotics
- Minimize Chemicals

Red Maple  
White Oak  
Bur Oak  
River Birch  
Serviceberry  
Flowering Dogwood  
Pagoda Dogwood  
Redbud  
Crab Apple  
Witchhazel  
Viburnum Species  
New Jersey Tea  
Hosta  
Wild Ginger  
Coreopsis  
Coneflowers  
Bee Balm  
Black-eyed Susan



PRIVATE

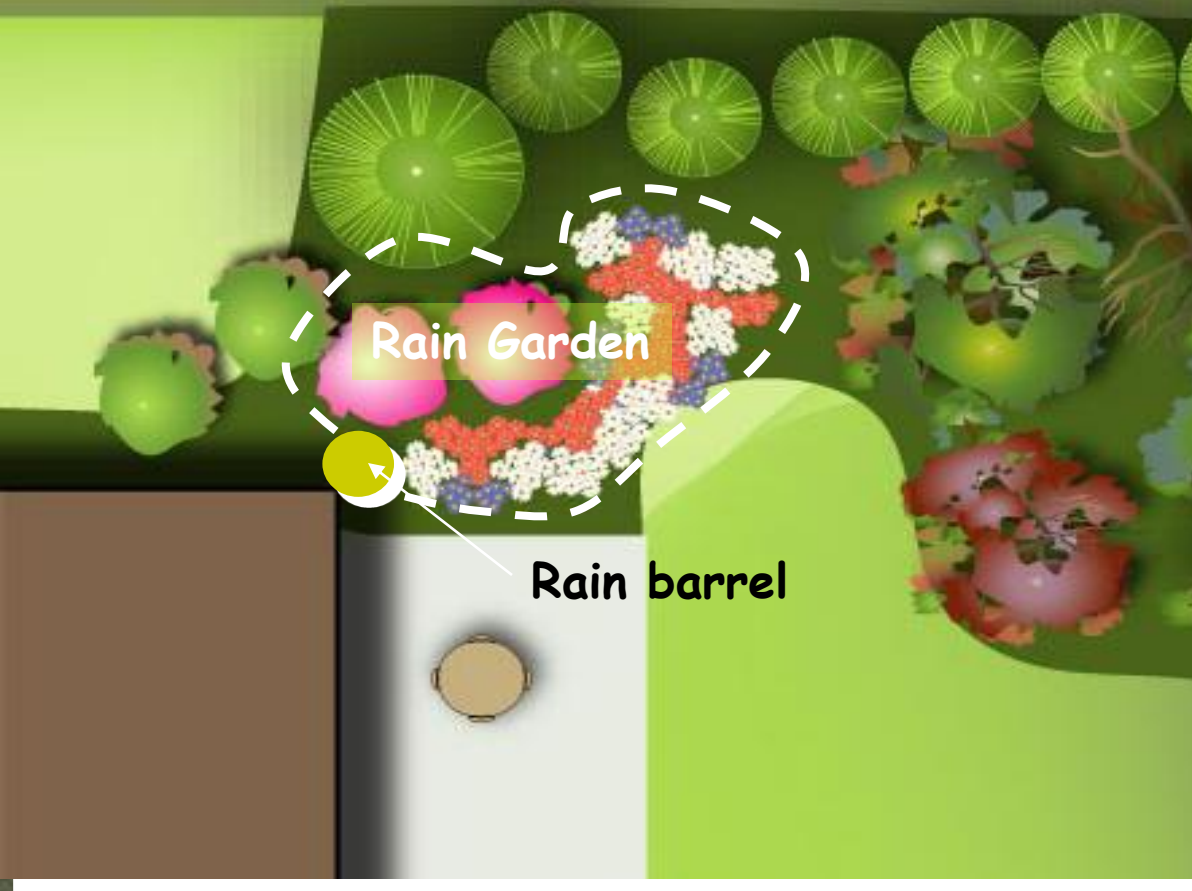
# Patio Garden

For Outdoor Living Area:

- Create Interest
- Use Native Plants
- Encourage Birds, Butterflies & Bats

Serviceberry  
Flowering Dogwood  
Pagoda Dogwood  
Witchhazel  
Redbud  
Meadowsweet  
Cardinal Flower  
Blue Lobelia  
Swamp Milkweed  
Butterfly Weed  
Beard-tongue  
Blazing Star  
Bee Balm  
Coreopsis  
Black-eyed Susan  
Aster species  
Goldenrod species  
Trillium  
Wild Ginger  
Wild Geranium  
Baneberry

# Rain Garden



## Collect & Direct Your Rainwater:

- Save \$
- Use Native Waterside Plants
- Encourage Birds & Butterflies

Serviceberry  
 Meadow Blackberry  
 Turkey Cup  
 Turk's-capushly  
 Cardinal Flower  
 Blue Lobelia  
 Red-leaf Dogwood  
 Turkey Rose  
 Winterberry  
 Sensitive Fern  
 Royal Fern  
 Anemone  
 Oblique Plant  
 Broken Fern  
 Mountain Mint  
 New England Aster  
 Black-eyed Susan  
 Mad dog Skullcap  
 Riddle's Goldenrod  
 Tall Meadow Rue  
 Ironweed  
 Gentian  
 Cucumber Tree  
 Blueflag Iris

An illustration of a natural riparian buffer. It features a blue stream flowing through a green landscape. The stream is bordered by various green plants and trees, some with red flowers. The word "NATURAL" is written in black capital letters on a green background at the top left.

# NATURAL

## Waterside Gardens

Riparian buffers:

- Protect Water Quality
- Control Erosion
- Create habitat
- Use Native Plants
- Restrict Chemical use

Silver Maple

Tulip Tree

Buttonbush

Silky Dogwood

Red Osier Dogwood

Common Ninebark

Arrowwood Viburnum

Nannyberry

Willows

Spicebush

Winterberry

American Black Currant

Meadowsweet

Joe Pye Weed

Cardinal Flower

Swamp Milkweed

# Site Preparation

- Site prep is the most important component in creating your garden
  - Remove or kill sod
    - Smother
    - Remove with sod cutter
    - Herbicide
    - Till
    - Combination of the above
  - Add compost



# Plant

- Arrange plants on prepared soil using your planting design as a guide
- Plant at a depth level with the soil
- Plant in clusters of odd numbers
- Label plants
- Cover with organic mulch

*The best time to plant is in the spring or the fall*



# Maintain

- Water
- Weed
- Control invasive plants
- Edge garden beds
- Trim back herbaceous plants
- Replant, transplant and thin gardens
- Control pests
- Replace mulch as necessary



# Michigan Native Trees and Shrubs



Serviceberry ~ *Amelanchier interior*



Red-osier Dogwood ~  
*Cornus stolonifera*



Spicebush~ *Lindera benzoin*



Buttonbush~ *Cephalanthus occidentalis*



Common Elderberry ~ *Sambucus canadensis*

# Michigan Native Trees and Shrubs



Fragrant sumac ~ *Rhus aromatica*



Steeplebush ~ *Spiraea tomentosa*



Redberried Elder ~ *Sambucus racemosa*



New Jersey Tea ~ *Ceanothus americanus*



Redbud ~ *Cercis canadensis*

# Michigan Native Wildflowers



*Sand Coreopsis*



*Butterfly-weed*



*Great Blue Lobelia*



*Golden Ragwort*



*Foxglove Beard-tongue*



*Golden Alexander's*



*Culver's Root*



*Black-eyed Susan*

# Michigan Native Wildflowers



*Nodding Wild Onion*



*New England Aster*



*Riddell's Goldenrod*



*Purple Coneflower*



*Wild Geranium*



*Blue-stemmed Goldenrod*



*Wild Strawberry*



*Swamp Milkweed*

# Michigan Native Wildflowers



*Columbine*



*Woodland phlox*



*Bee-balm*



*Horsemint*



*Blue Flag Iris*



*Sneezeweed*



*Hoary Vervain*



*Purple Joe-pye Weed*

# Native plants = Wildlife Habitat



# Plants provide



- Fruit/berries
- Nuts
- Nectar
- Seeds
- Plants – leaves, twigs, bark, etc.
- Insects attracted to plants

# To attract wildlife you must provide 4 basic needs

- Food
- Shelter
- Breeding/nesting areas
- Water



# It is important to provide food throughout the year

- Choose plants that will provide food in spring, summer, fall & winter
- If food becomes scarce – animals will go somewhere else to find it OR they will not survive

# Create a Green Landscape & Help

- Stabilize the Rouge River's flow
- Reduce streambank erosion
- Reduce the impact of floods
- Reduce pollution from rain water runoff
- Provide wildlife habitat



**NATIVE GARDENS ARE  
THE SOLUTION!**

# You CAN make a Difference!



**Stormwater leaving YOUR property goes down the storm drain and ends up in THEIR backyard**



**Thank You for Helping to  
Restore the Rouge River!**



# Enjoy!

