



**Mecklenburg County
Park and Recreation**
*The Natural Place
To Be...*

Invasive Species Contract Planning

Mecklenburg County Park and Recreation

What are Invasive Species?

- Non-Native Organism (plants and animals)
- Grows and reproduces quickly
- Harms environment by pushing out native species
- Invasion often due to poorly informed agricultural, recreational or horticultural practices



Hundreds of invasive Bradford pear trees planted around CLT airport.



Why Should We Care?

- Invasive species kill native plants and wildlife by eliminating food and habitat
- Cause soil erosion and poorer water quality
- Over 30% of federally listed Endangered Species are listed because of invasive species impacts
- Costs the US over \$120 billion every year in damages (Pimental et al. 2005)

Local Issues with Invasive Species

- Outside of development, invasive species are the biggest threat to Mecklenburg County's natural resources
- Most of Mecklenburg County's invasive species are PLANTS
- 84% of Mecklenburg natural areas are negatively impacted by invasive plants
- The County's Natural Resources Section (NR) has goal to treat 10% of impacted acreage each year (per NR management plan)





What Do We Do?

Since the mid-1990's

Prevent

- Educate citizens on what NOT to plant in their yards; suggest alternatives
- Continue to enforce Do-Not-Plant lists for County lands and Contractors

Manage

- Use Prescribed Fire where appropriate to kill invasive plants (outside City Limits)
- Use Chemical and/or Mechanical Control in all other areas

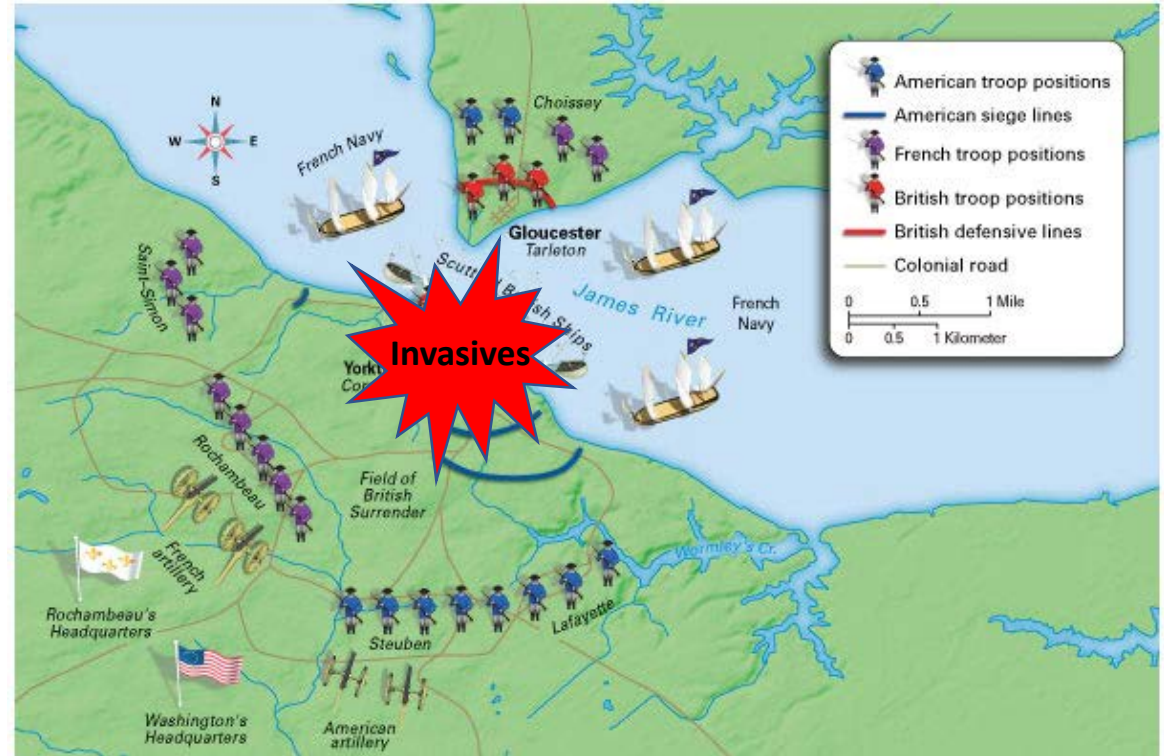


So what can we do with
\$200K?

1. Enhance in-house capabilities, or
2. Hire a contractor and manage contract, or
3. **Combination approach**

The War on Invasives – a multifaceted approach

- Use \$20K on internal supplies (chemicals, equipment)
- Use \$180K on external contractor(s)
- Focus efforts on?:
 - Many properties, or
 - Select properties
- Treat and follow-up

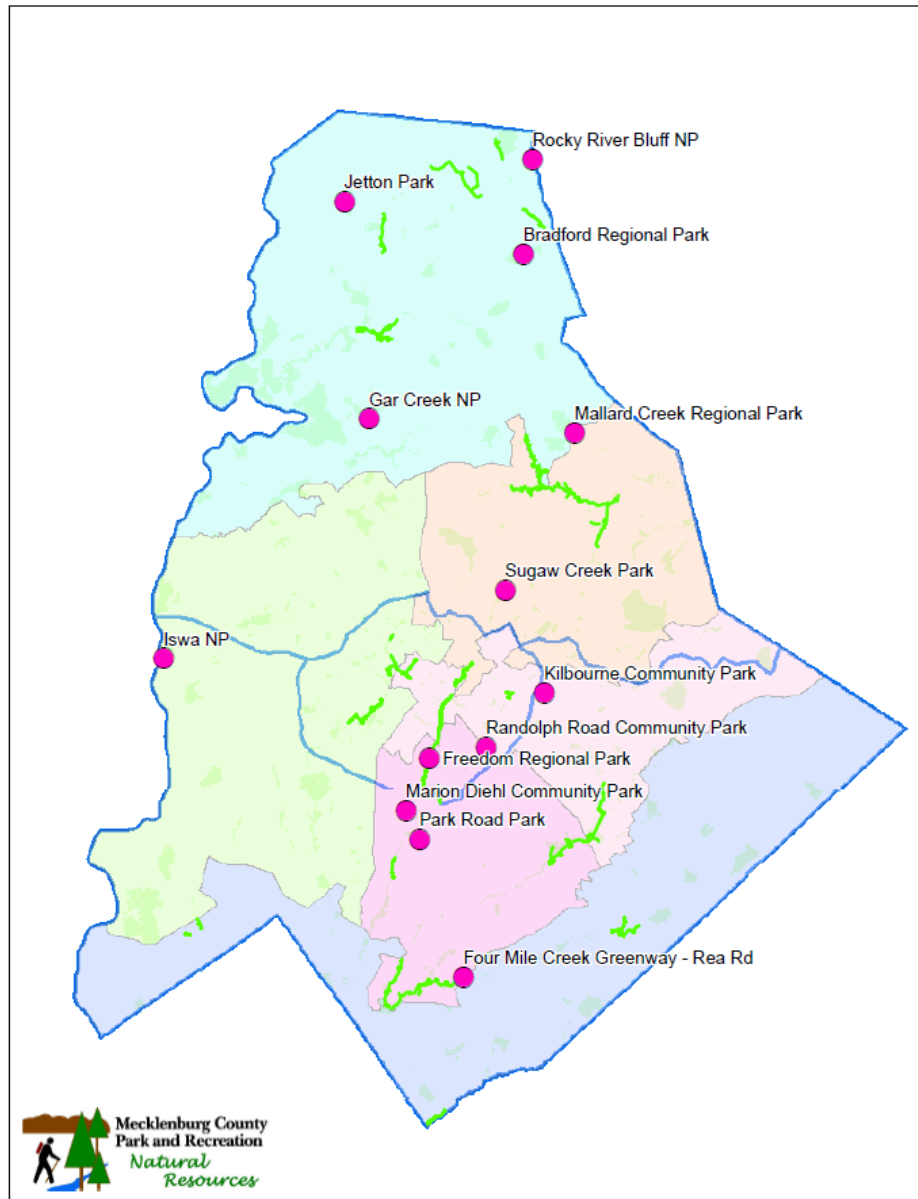


Invasive Species Contracts

Specifications should include:

- Location/Sensitive Habitat
- Access
- Prescription/Chemical Rate
- Patch Size
- Target Species
- Months of Treatment/TOY
- \$200-\$5,000 per acre

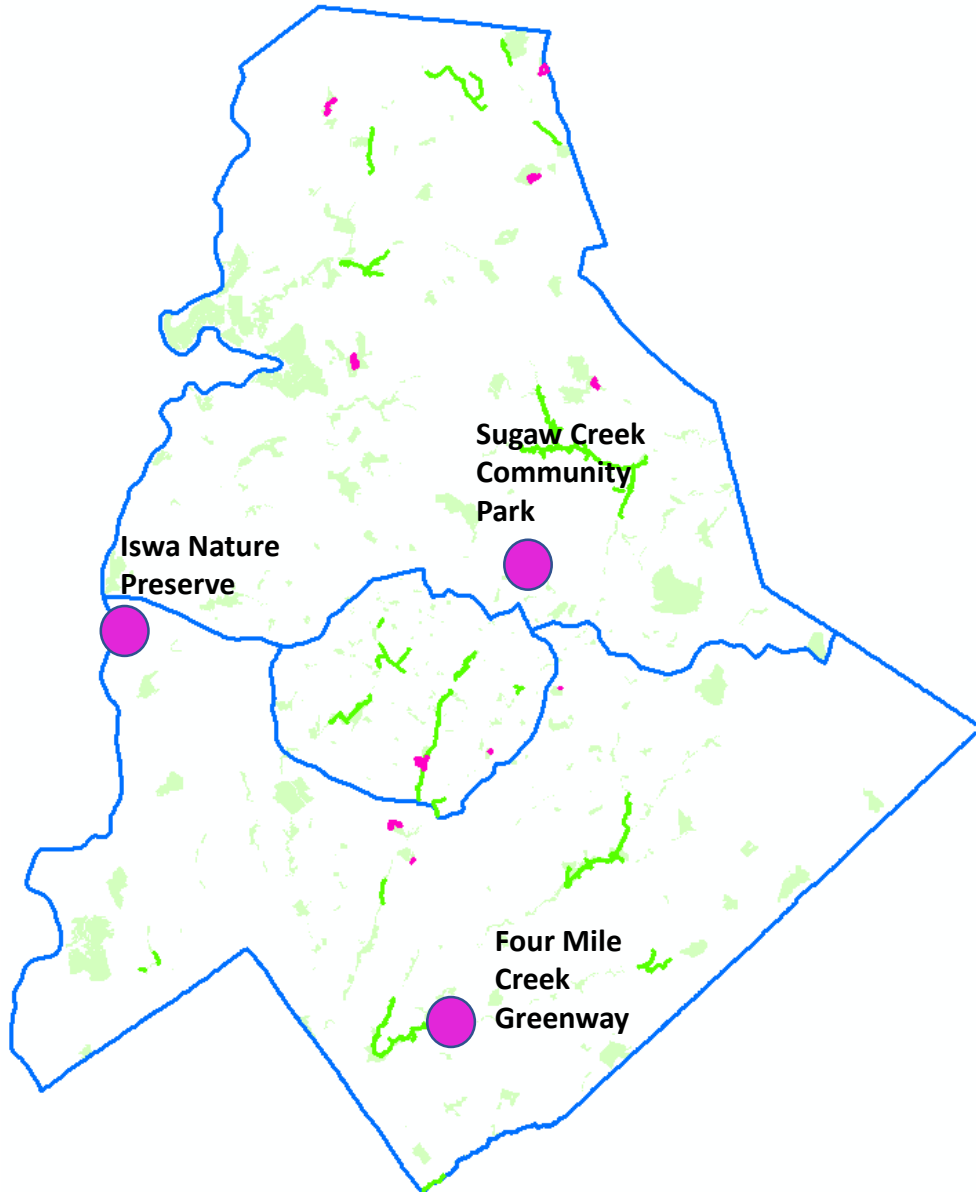




Spread it out...

Target Areas – 200 Acres

- Four Mile Creek Greenway
- Freedom Park
- Gar Creek Nature Preserve
- Iswa Nature Preserve
- Jetton Regional Park
- Kilbourne Community Park
- Mallard Creek Regional Park
- Marion Diehl Community Park
- Park Road Community Park
- Sugaw Creek Community Park



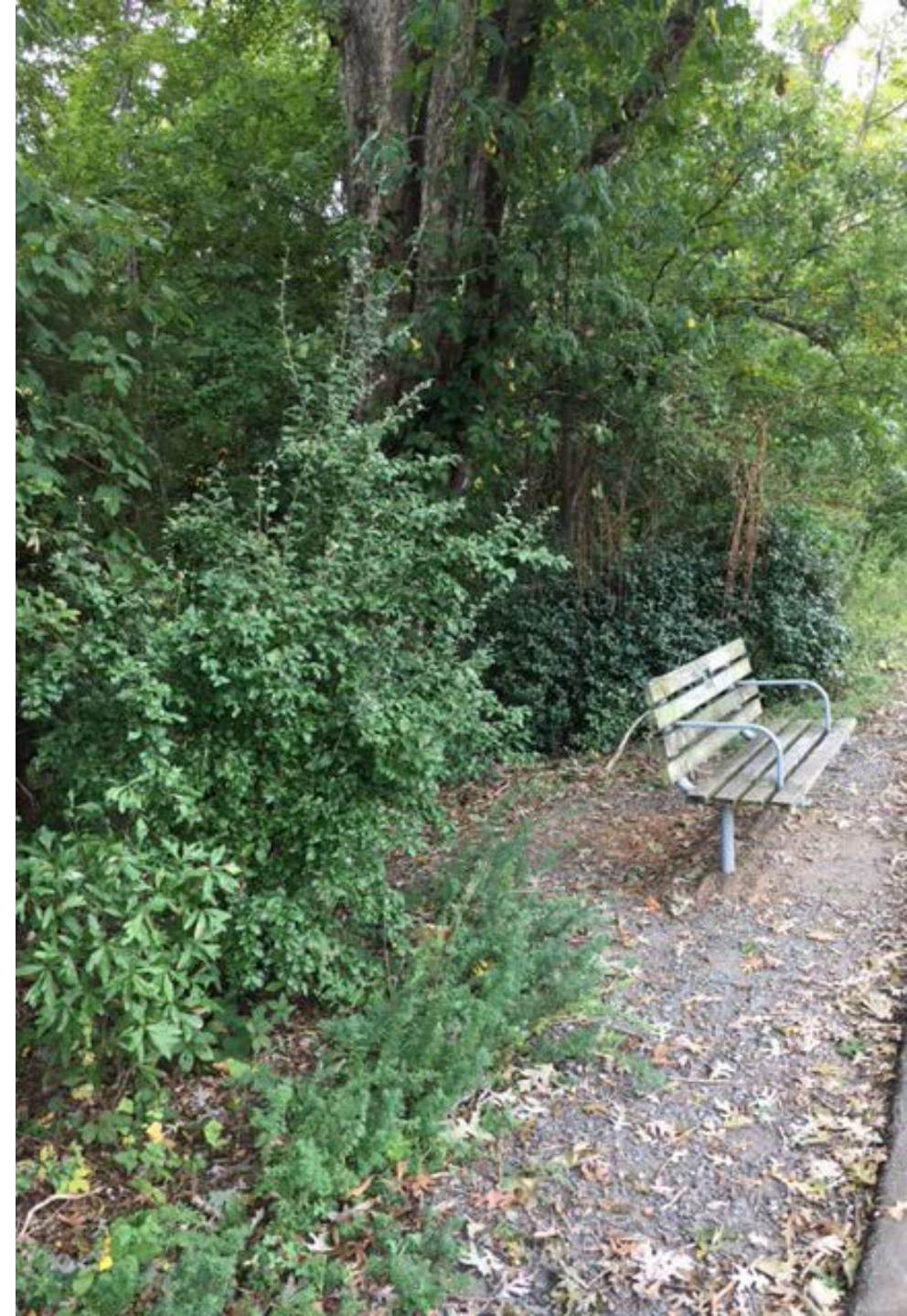
Focused... Target Areas – 184 Acres

- Four Mile Creek Greenway (65 acres)
- Iswa Nature Preserve (66 acres)
- Sugaw Creek Community Park (53 acres)

Four Mile Creek- Bevington at Rea

- Autumn olive
- Russian olive
- Bradford pear
- Japanese stilt grass
- Multiflora rose
- Honeysuckle

Every species of invasive listed
above can be seen in this picture.





Left side: Invasive shrubs pre-treatment

Right side: Invasive shrubs post-treatment

Autumn olive (*Elaeagnus umbellata*)

- \$20K to enhance in-house capability
- \$180K to hire a contractor
- Focus on fewer properties
- Before and after to demonstrate effectiveness of program
- Enhance current budget beyond one-time funding
- Empower LUESA (Stormwater and Solid Waste) and Park and Rec. to work together to improve the environment

Summary