FEAB MEETING MINUTES February 11, 2022 3 p.m. @ Library Board Room

**Member Attendees:** Gary Gover, Jim Horner, Amy Paulson, Ben Frater, Rick Speight, Mike Shelton, Nigel Temple

#### Members not in attendance:

Michelle Melton, Jennifer Foutch (excused absences unless Gary says otherwise)

City of Fairhope: Kim Burmeister, Christina LeJeune-Planning and Zoning Department

City Council: Corey Martin

**Honored Guests**: Annette Sanders, 401 North Mobile Street; James Watkins, *Fairhope Times* 

Minutes taken by Kim Burmeister

Gary called the meeting to order at 3 p.m.

Summary of meeting:

- 1. Motion approved: Comprehensive Plan / Land Use Plan comments from FEAB were approved and finalized, with request for Kim to send these to Hunter
- 2. Motion approved: Amy Paulson was recognized for her hard work with the board and was given the title "Vice Chairperson" of FEAB
- 3. Motion approved: FEAB approved the initiation of the Litter Gitter program, initially with the Winn Dixie Pond location (Cowpen Creek watershed)
- 4. Motion approved: FEAB encourages the City of Fairhope initiate a comprehensive study of litter and stormwater pollution concerns for all 12 City watersheds.
- 5. Motion approved: FEAB advises the City of Fairhope to engage an environmental professional for an up to date park management plan for Colony Park at 44 and 13.
- 6. Motion approved: FEAB advises the City of Fairhope to follow current park management plan for Colony Park
- 7. Nigel suggested city follow current park management plan recommendations
- 8. Don Bates with Osprey Initiative gave a presentation on the litter removal program and two suggested locations: Winn Dixie Pond; Bayou and N. Section Street pond. Both are city owned. Educational component should be included.
- 9. Kim said boundary signs are being drafted for further consideration: "Property of City of Fairhope", to be placed on undeveloped City property every 100' to help prevent impact to city properties.

- 10. Special FEAB Meeting with Mayor and staff is finalized for March  $11^{th}$  @ 2:30 p.m. (location to be confirmed; agenda to be provided prior to meeting)
- 11. Corey wants Stormwater pollution to be a key component to the city SWMPP and Comprehensive Plan
- 12. FEAB would like to encourage students and younger generation citizens to attend FEAB meetings

### Agenda:

Amy presented an agenda for today's meeting:

- 1. Housekeeping (< 5 min)
  - a. Acceptance of prior meeting minutes Kim
  - b. Dispersal of Final 2022 FEAB Priority Issues Amy / Kim
  - c. Introduction of guests Kim
- 2. Land Use Plan (~5 min) Amy
  - a. FEAB Comment Letter discussion?
  - b. FEAB LUP Comment Letter Resolution
- 3. Presentation: Osprey Initiative (Don Bates) (~15 min)
  - a. Litter Gitter Presentation Don
  - b. FEAB questions / location input
- 4. New Issues (~10)
  - a. FEAB Annual Meeting with City of Fairhope Mayor Sullivan, Jessica Walker, Hunter Simmons, Eric Cortinas, Richard Johnson, Pat White (tentative Thurs, 3/10 or Fri, 3/11)
  - b. Colony Park Management Plan
    - i. History of restoration Mike
    - ii. Current management actions Amy / Kim / Gary
    - iii. FEAB Resolution?
  - c. Big Mouth Gully Protection Project (North Church Street near waste water plant) Kim
- 5. POC Status Report on FEAB Focus Issues (<10 min)

#### LIMITED DISCUSSION ~ PASS IF NO NEWS TO SHARE

- a. Fairhope City Council Jennifer / Corey
- b. Fairhope Mayor's Office Amy
- c. Fairhope City Departments Kim
- Baldwin County Environmental Advisory Committee and EAC sub-committees (wetlands and neighborhoods) –
   Kim
- e. Dyas Triangle Ben / Michelle
- f. Fairhope Wetlands Protection Nigel / Mike
- g. Community Resiliency Index Mike
- h. Eastern Shore Watershed Management Plan Kim
- i. Fairhope Comprehensive LUP Ben / Mike
- j. Recycling Jennifer
- k. Clean Marina Project Mike
- 6. Other Interests (~5 min)

#### LIMITED DISCUSSION ~ PASS IF NO NEWS TO SHARE

- a. New Business?
- b. Stormwater Jim / Rick / Kim
- c. Bike and Pedestrian Committee Gary / Nigel
- d. Parking Committee Nigel
- e. Energy Conservation Initiatives (climate change action) Gary
- 7. Wrap up (< 5min)
  - a. Topics/presenters for next month's agenda
  - b. Action item review

### FEAB Minutes/Updates to Board:

Amy made a motion to approve FEAB January minutes. Minutes were approved unanimously.

Jim recognized Amy Paulson for her hard work with the board. He made a motion to give Amy the title "Vice Chairperson" of FEAB. 1 year term, same as Chairman (Gary). Nigel seconded the motion. Motion passed unanimously.

Motion approved: Amy has a title with FEAB: "Vice Chairperson" of FEAB.

Kim & Corey previously invited a student and parent to attend a FEAB meeting, based on the 5<sup>th</sup> grader's environmental email to the City and FEAB. Corey said it is important to have young representation.

### Osprey Initiative

Don Bates, a resident of Fairhope and founder of the litter service called the Osprey Initiative, gave a presentation on the litter gitter and similar devices. He has evaluated Fairhope and suggests two locations for litter capture: Winn Dixie pond and the basin at Bayou and N. Section Street. Both are city owned. Litter would be evaluated and characterized, litter profile for the area or areas would be created. Educational component to go with this is suggested. Pond or ponds would initially be deep cleaned of all litter by Osprey Initiative staff and then equipment will be maintained monthly by his staff and tweaked if necessary. Osprey Initiative gives back 5% of their charge to the client / community. Client / community chooses how this 5% is delegated (educational signs, service, etc.)

Amy asked how he evaluated Fairhope. Don said he rides his bike around Fairhope and can assess visually. Gary would like to see all watersheds addressed, not just Cowpen Creek and the Winn Dixie pond. Corey expressed the same concern. Kim said this is one outfall of about 650 in the City Limits. It is one outfall that is city owned and represents a stormwater collection area for three shopping centers, so it is a hot spot for litter.

Inventory of City outfalls from 2012 inventory can be found on line:

Storm Sewer Inventory & Mapping Project 2012 | City of Fairhope, AL (fairhopeal.gov)

Kim said City of Fairhope employs litter pick up staff position and the Winn Dixie pond is on the list for weekly litter pick up. City is hiring for this position which is currently vacant.

Gary emphasized education for litter prevention is a key part of this program.

Corey would like litter prevention and stormwater pollution prevention to be a key component in the City SWMPP.

Kim said litter prevention is an important part of the SWMPP and is updated yearly. The Osprey Initiative program, if adopted, would be one compliance item for the SWMPP 2023.

The current City of Fairhope Stormwater Management Program Plan (SWMPP) can be found on-line:

637532085506670000 (fairhopeal.gov)

Nigel has some ideas on natural borders for the Winn Dixie pond, which can help litter stay on the embankment and not enter the pond.

Don and Gary will discuss for further development of the education and outreach component of this tentative program and will discuss further assessment of other city outfalls and areas.

Amy made a motion for FEAB to support the City's initiative to consider the Osprey Initiative effort for the Winn Dixie pond (for starters).

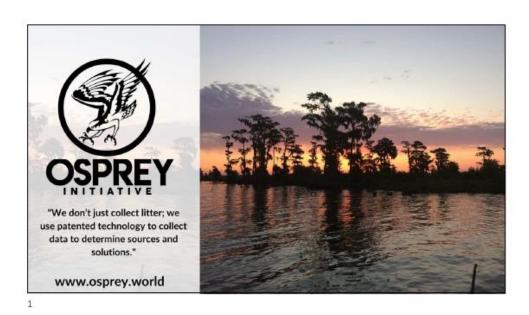
Jim seconded the motion. Motion passed unanimously.

Motion approved: FEAB supports the initiation of the Litter Gitter program and the Winn Dixie Pond location as an initial demonstration project to enhance the City of Fairhope litter program. (Cowpen Creek watershed)

Gary proposed a motion for City of Fairhope to perform a comprehensive litter study assessment of all city watersheds (12 total watersheds in the City limits). Nigel 2<sup>nd</sup> the motion. Corey fully supports this motion. Motion passed unanimously.

Motion approved: FEAB encourages the City of Fairhope initiate a comprehensive study of litter and stormwater pollution concerns for all 12 watersheds in the city limits

Presentation by Don Bates:



The Osprey Way

OUR MISSION is to bridge the gap between intent and action in the sustainability world by bringing and implementing realistic solutions to our clients, partners and communities.

Figure 1 Presentation by Don Bates



The Partners

| Sample | Sampl

Figure 2 Presentation by Don Bates



#### Results Osprey Collection Summary 🚵 Recyclables 👶 Total G. Project lbs. $ft^3$ lbs. $fc^3$ Litter Gitters 8,928 6,938 41,686 19,597 Osprey Tactical Cleanups 13,341 11,767 94,120 42,631 Totals 22,269 18,706 135,807 62,228 Updated December 15, 2021

Figure 3 Presentation by Don Bates



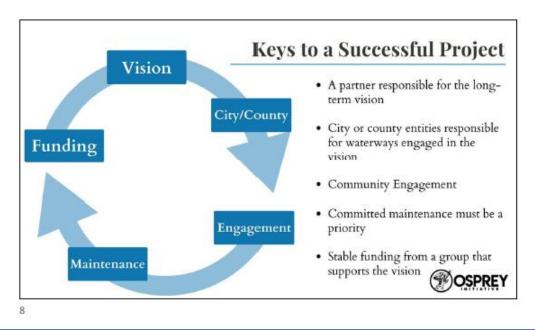


Figure 4 Presentation by Don Bates

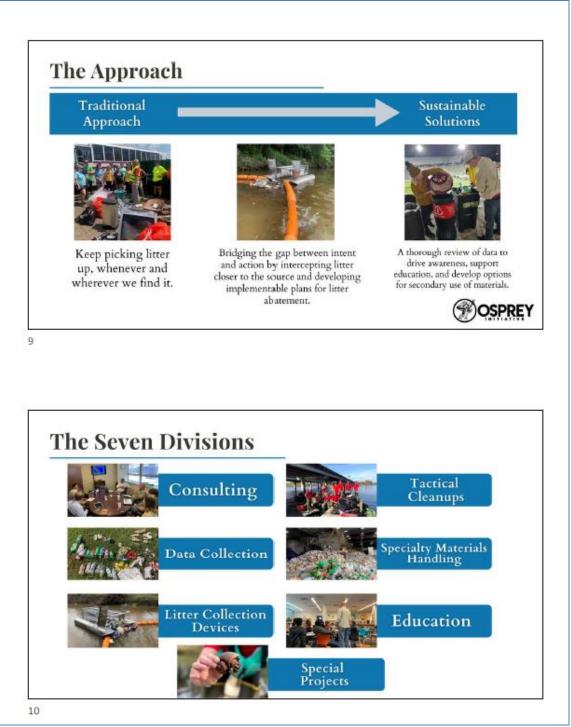


Figure 5 Presentation by Don Bates

## Consulting

Using field results and data to develop realistic, cost-effective litter abatement plans and education campaigns.

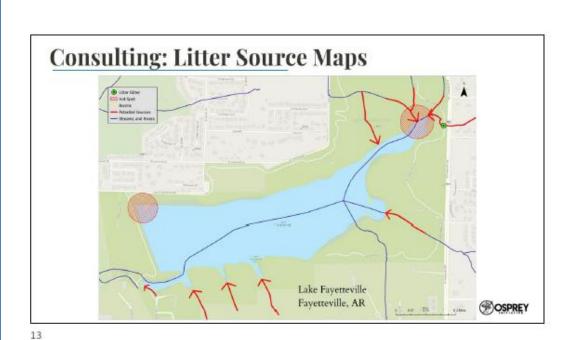




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Zone	Recycle (lbs)	Dispose (lbs) T	otal (lbs)
Zone 03	97.21	256,91	354.12
Zone 04	124.56	656.47	781.03
Zone 08	40.15	607	647.15
Zone 09	24.57	628.18	652.75
Zone 10	101.9	155.13	257.03
Zone 11	153.34	608.14	761.48
Zone 13	49.33	221.25	270.58
Zone 14	234.57	799.65	1034.22
Zone 16	259.27	674.55	933.82
Zone 17	192.72	738.63	931.35
Zone 18	24.98	105.35	130.33
Zone 19	58.12	210.55	274.67
Zone 20	88.86	285.71	374.57
Zone 21	128.03	469.44	597.47
Zone 22	17.97	61.85	79.82
Zone 23	11.41	103.62	115.03
Zone 26	697.93	3300.64	3998.57
Zone 27	74.21	198,79	273
Zone 28	256.97	1498.22	1755.19
Zone 29	443.64	2163.58	2607.22
Zone 30	25.21	127.42	152.63
Zone 32	23.47	586.7	610.17
Zone 39	19.95	355.28	375.23
Grand Total	3148.37	14819.06	17967.43

Figure 6 Presentation by Don Bates



**Data Collection: Litter Profiles** Osprey Initiative breaks down data in OTHER 2% ways that help identify sources and solutions of the litter issues. TYPES OF LITTER COLLECTED · Categorizing by major type and then breaking down those types, including BAGS/FILM BAGS/PACKAGES PLASTIC 52% age and labels STRAWS/LIDS OTHER · Tailored to your requirements and STYROFOAM 8% concerns to create custom **TYPES** environmental solutions OF PLASTIC/ STYROFOAM COLLECTED

Figure 7 Presentation by Don Bates

## **Data Collection: Modified EPA ETAP**

- Escaped Trash Assessment Protocol
- Need for uniform data across watersheds
- Can be used for monitoring, evaluation of management actions, determination of trash accumulation rates, and comparing sites based on surroundings, use, or public access.







Figure 8 Presentation by Don Bates

Data Collec	tion:	rieia	Sne	eet Cont.
Beverage Bottles and Containers	36	1		Prix rada(4) Se tarada(6) Sausa(2)
Water Bottles	25			Powerode (4), Gatorade (5), Faygo (2) Dasani (2), Dear Pork (2), Clover Vally (4)
Straws and Stirrers	1			Dasarden, Daniel Herrich
Bottle Caps				
Cup Lids				
Food Wrappers	2	2	2	Charziet, Pranes.
Chip Bags	8	1		Cheezit, Reeves, Frite Lay (U), Rap Snacks, Golden Flak
Styrofoam Cups Styrofoam Pieces				7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Styrofoam Pieces				
Other Styrefeam Fast Food Items		13	60	
Other Fast Food Service Items				
Food and Drink Pouches	3	2		Kool-ald (4), Caprisun
Other Food Packaging				7



Figure 9 Presentation by Don Bates





Figure 10 Presentation by Don Bates





Figure 11 Presentation by Don Bates



Education

Working with local schools and community groups to educate citizens on litter sources and solutions.





Figure 12 Presentation by Don Bates





Figure 13 Presentation by Don Bates

# Osprey's Plan for Fairhope



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## Winn-Dixie Detention Pond

## Potential Concept

- Routine Tactical Cleanups
- Litter Collection
   Device coming into the pond





Figure 14 Presentation by Don Bates

Figure 15

## **Detention Pond Across from Water Treatment Plant**



## Potential Concept

- Routine Tactical Cleanups
- Education Program with Fairhope West Elementary School



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## **Major Traffic Corridors**

## Areas of Concern

- Fairhope Ave from Section St. to SR 181
- Gayfer Extended from 98/Greeno to SR 181
- · All of SR 181 in City Limits

## Proposed Plan

- · Baseline assessment through tactical cleanups
- · Routine maintenance based on need
- · Develop local Green Team



Figure 16 Presentation by Don Bates



Figure 17 Presentation by Don Bates

**Protection of City Parks and City Property:** Kim said Mayor has her working on a draft for further consideration of a city boundary / property sign. These signs will likely be similar to the wetland buffer signs used to delineate wetland buffers, one sign every 100'. Annette Sanders gave Kim an artistic rendering of a sign to consider.

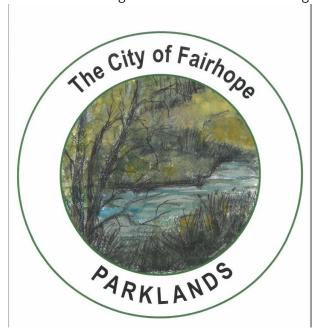


Figure 18 Annette Sanders presented this as suggestion of park boundary sign



Figure 19 Example of typical Fairhope park entrance sign (metal)

### Special FEAB Meeting with Mayor and Staff:

Amy said Mayor, Hunter, Jessica, Richard Johnson, Jason Langley and Pat White with the City have been invited to the Special FEAB meeting in March. March  $11^{\text{th}}$  @ 2:30 p.m. was narrowed down as the best choice. All but Jessica are anticipated to attend. It will likely be a 1.5 hour meeting. Amy will prepare an agenda. Kim will secure location and send out calendar invitations.

### Colony Nature Park Management Plan 2011:

Mike has located a management plan for Colony Nature Park from 2011 and shared with FEAB. Kim shared with Mayor and staff. Fairhope Single Tax owned the park at the time of the management plan, but has since deeded to the City of Fairhope. Amy said it appears some of the plan has been implemented (pine plantings, blue bird houses, etc.) but she is concerned about recent mowing activity performed by the city which could be detrimental to the park. Amy made a motion for City to follow current park management plan. Ben seconded the motion. Ben made a motion for a current management to be conducted (confirming or updating the 2011 plan).

Gena Todia performed the 2011 park management. Amy 2<sup>nd</sup> the motion. Approved unanimously.

Motion approved: FEAB advises the City of Fairhope to follow current park management plan for Colony Park

Motion approved: FEAB advises the City of Fairhope to engage an environmental professional to conduct an up to date park management plan for Colony Nature Park at 44 and 13.

## MANAGEMENT PLAN

## COLONY NATURE PARK

September 2010



Prepared for

## The Fairhope Single Tax Corporation

by



Post Office Box 2694

Daphne, Alabama 36526

(251) 928-6157

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 20 Colony Nature Park Management Plan, 2011, cover

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Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

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## MANAGEMENT PLAN Colony Nature Park

#### INTRODUCTION

Colony Nature Park is a 38.71-acre tract of land located south of County Road (CR) 44 and west of CR 13 in Fairhope, Baldwin County, Alabama. This land was acquired by the Fairhope Single Tax Corporation (FSTC) in 1987 for possible development as a residential area. Later, the decision was made to develop the property as a nature park instead.

Since that time, the FSTC has made numerous improvements to the property, worked towards restoring native vegetation, and opened the park for public use. More specifically, accomplishments to date include the following:

- Mechanical removal of dense stands of invasive exotic trees, shrubs, and other undesirable vegetation
- · Construction of two gravel drives into the park
- Establishment of a system of mowed and maintained walking trails
- Planting of native landscaping within some of the maintained areas
- Installation of rail fencing for access control and aesthetics
- Construction of a council ring
- · Development of plans for boardwalks and a bridge over the creek channel
- Planting of longleaf pine in the southwest area of the property
- Exploration of the feasibility of stream restoration and wetland creation
- Initiation of a control program for invasive exotic plants

The purpose of this management plan is to guide current and future activities on park lands in order to achieve the objectives set forth below.

#### MANAGEMENT OBJECTIVES

The primary objectives of this plan are management of the property in such a way that:

- (1) Restores and sustains natural, native plant communities throughout a majority of the site
- (2) Optimizes habitat conditions for wildlife species that would naturally occur
- (3) Provides the public with opportunity for passive recreational activities, environmental education and enjoyment

These objectives will be achieved by establishing, encouraging, and maintaining natural plant communities through management practices such as prescribed burning, planting, and invasive exotic plant species control.

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 22 Colony Nature Park management plan

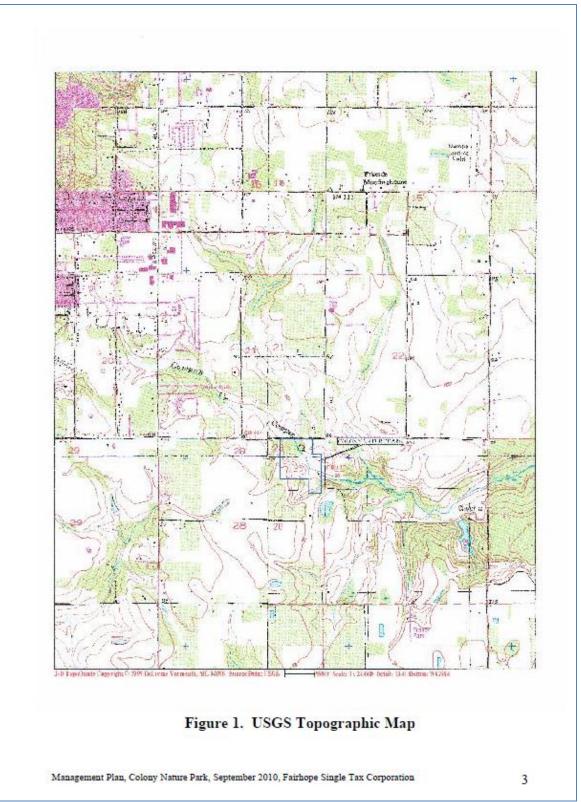


Figure 23 Colony Nature Park Management Plan

#### SITE HISTORY AND CURRENT CONDITIONS

Prior to initial clearing of this land many years ago, most likely it was dominated by longleaf pine, as were the majority of uplands of the southeastern coastal plain. After a history of being used for agricultural production, the park property was fallow for a number of years. The property had become overgrown with a variety of invasive exotic trees, shrubs, vines, and herbaceous plants. Also present are some native desirable species, such as live oaks, broom-sedge, goldenrod, and other grasses and forbs.



Figure 2. Aerial Photo (Baldwin Co. Planning & Zoning Dept., 2009)

Cowpen Creek, which originates in the highly urbanized part of Fairhope and has suffered extreme degradation and manipulation related to development, runs south through the park. It flows out of the Fairfield Place residential subdivision's retention pond on the north side of CR 44 into the manmade channel that runs almost to the new CR 13 bridge. It appears that the current channel, which looks and functions like a drainage ditch, was dug at some time in the past, possibly to alleviate flooding along CR 44 and upstream areas and to move water downstream more efficiently. The channel ends approximately 275 ft. northwest of the CR 13 bridge. At that point, water moves as sheet flow through this low area and under the bridge.

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 24 Colony Nature Park management plan

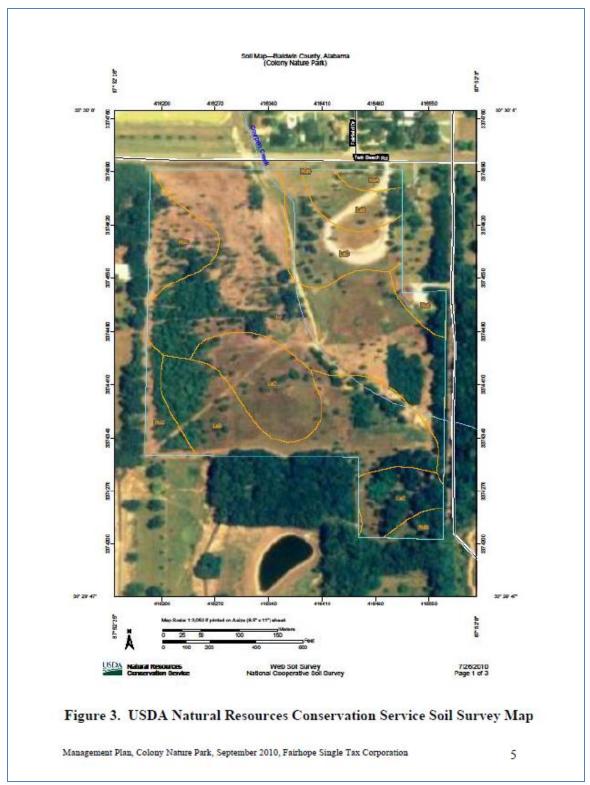


Figure 25 Colony Nature Park management plan

The USDA Soil Conservation Service soil survey (published 1960) shows Cowpen Creek as an intermittent, unclassified stream channel. Soil mapping for the park at the USDA Natural Resources Conservation Service's website (<a href="http://websoilsurvey.nrcs.usda.gov/app/Web\_SoilSurvey.">http://websoilsurvey.nrcs.usda.gov/app/Web\_SoilSurvey.</a>) also labels the channel as Cowpen Creek and shows it as a solid blue line. The USGS topographic map shows the creek as perennial, although we know that is not the case today.

Currently, water flows through the channel during and after rain events for just a few days. Water stands in the channel and in the low area of the property near the CR 13 bridge for several days following significant rain events. Although it has been severely degraded, the channel is considered by the U.S. Army Corps of Engineers (Corps) to be jurisdictional waters of the U.S., subject to regulation under Section 404 of the Clean Water Act. Any further channel manipulation or other work below the ordinary high water mark will require Corps authorization.

Wetland Resources Environmental Consulting assessed the property in 2007 to determine whether wetlands are present and to delineate the boundaries of any wetlands found. It was determined at that time that no wetlands were present. Findings were not submitted to the Corps for verification and documentation purposes.

Development of the property as a nature park was initiated in 2006. The property was heavily infested with several invasive exotic plant species. First the property was mechanically cleared, bush-hogged, and a broadcast herbicide application done. Cleared material was piled and burned. A gravel circular drive into the park from CR 44 was built and later a second gravel drive and parking area from CR 13 south of the bridge over Cowpen Creek was constructed. Other improvements mentioned previously have been made since work began to develop the park.

In spring of 2007, longleaf pine seedlings were planted in the southeast area of the property. Because of low survival due to drought, replanting and supplemental planting was done in following years beginning in spring of 2008. The planted pine and other areas not designated as maintained landscape or mowed walking trails were allowed to grow up in early succession vegetation. Unfortunately, many of the plants colonizing the natural areas were invasive exotic species, including, but not limited to, the following:

Chinese Tallow Sapium sebiferum Camphor Tree Cinnamomum camphora Chinese Privet Ligustrum sinense Multiflora Rose Rosa multiflora Kudzu Pueraria montana Japanese Honeysuckle Lonicera japonica Japanese Climbing Fern Lygodium japonicum Cogongrass Imperata cylindrica Johnsongrass Sorghum halepense Panicum repens Torpedograss

AlligatorWeed Alternanthera philoxeroides
Sessile Joyweed Alternanthera sessilis

Morning-glory Ipomoea spp.

These species had gotten pretty well out of hand and were in the process of displacing desirable vegetation and preventing natural succession of a native, more appropriate plant community. In spring 2010, Wetland Resources Environmental Consulting began work to control invasive exotic plants throughout the property. From mid-March to mid-August, all of the above species were

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 26 Colony Nature Park management plan

treated with appropriate herbicide formulations and significant progress was made. On-going monitoring and maintenance combined with prescribed fire will help control invasive exotic plants on the property and encourage desirable native species.

#### MANAGEMENT PRESCRIPTIONS

The following management prescriptions will be followed in order to meet the stated management objectives:

#### Prescribed Burning

Historically, fire was a natural and regular part of the landscape in many areas of the U.S., including the pine forests of the Southeast. The longleaf pine community is fire-dependent. Without fire, it is soon invaded by hardwood trees and shrubs that shade out the diverse herbaceous component and prevent natural pine regeneration. Keystone species of the longleaf ecosystem, such as the red-cockaded woodpecker, eastern indigo snake, and gopher tortoise, cannot tolerate fire-suppressed conditions and will move or perish if fire is absent from the landscape for too long. Fire controls the unwanted woody growth, promotes a great diversity of grasses and wildflowers, and helps control invasive exotic plants that have become so prevalent in many areas in recent years, including south Alabama.

Permanent grass firebreaks that are maintained by mowing will be established to prevent fire from leaving park property or getting into areas of the park where burning is not appropriate. All areas that are considered natural (not routinely mowed) will be burned, with the exception of around live oaks or other large, desirable hardwoods. If the stream channel is restored, those areas will be excluded from areas burned, along with any additional areas that are landscaped or planted with hardwoods in the future.

Prescribed burning, to be conducted by the Alabama Forestry Commission or a contracted prescribed burn manager, will be done annually beginning in 2010 during late fall – early winter and into the foreseeable future or until on-site conditions dictate otherwise. Site conditions will be monitored to determine the appropriate timing each year to conduct the burn. Due to heavy grass cover throughout most of the property, it will be important to burn prior to the greening up of grasses in late winter – early spring.

The benefits of burning at Colony Nature Park include controlling woody competition in the longleaf pine area, controlling invasive exotics throughout, promoting native grasses and wildflowers, and providing opportunities for public education about fire and fire-dependent plant communities. Burning will also make it easier to find and control any residual invasive exotics. Lastly, there will be significant aesthetic benefits associated with a fire-maintained plant community.

#### Invasive Exotic Plant Species Control

According to a study conducted by Cornell University economists several years ago, alien plant and animal species in the United States cost the nation almost \$123 billion annually. Also referred to as non-natives or exotics, these species cause damage in many ways, including predation on native species, displacement of natives, and outright habitat destruction. According to the Cornell study, fire ants alone cost the nation's economy \$10 million annually; non-native weeds cost us a

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 27 Colony Nature Park management plan

staggering \$35.5 billion every year. As invasive plants and animals continue to spread, these costs continue to increase and are significantly more today than when this study was conducted.

Competition among plant species is a natural part of any ecosystem, but introduction of exotic species can disrupt intricate balances and relationships evolved over thousands of years among native plants and their communities. Offentimes, the result is a loss of biological diversity within both the plant and animal communities. Some generalized characteristics of invasive exotic plants include having a long life span and high dispersal rates and being able to reproduce vegetatively (without seeds) and/or produce large numbers of seeds. These plants typically have a short generation time and are usually habitat generalists.

Some characteristics of habitats that are prone to invasion include those that have a similar climate to the place of origin of the invading plant; habitats that have been disturbed by humans; early succession habitats (for example, clear cuts and abandoned agricultural fields or pastures); and habitats that have low natural diversity. A large contributor to the success of exotic plants is an absence of predators, disease, or other factors that keep populations in check in the plant's native regions.

Like a fever when you have the flu, invasion by exotic plant species typically is just a symptom of a greater underlying problem, usually a disturbed or disrupted habitat or ecosystem. When human bodies are overly stressed, our immune systems are weakened and we become vulnerable to "invasion" by foreign bodies that cause disease. Similarly, when some type of stress weakens a natural system, it is prone to invasion by exotics that can make the natural system "sick." Careful observation will reveal that, in most cases, exotic plant species establishment and invasion is primarily associated with disturbed habitats. Some forms of disturbance that open the door to invasion by alien plant species include ditching, stream channelization, or severe erosion that results in a change in the natural hydrology of the surrounding land; unnaturally high levels of sediment accumulation in flood plains and riparian areas; soil disturbance caused by timber harvesting or agriculture; overgrazing by livestock; a prescribed fire regime that is out of sync with the ecosystem being managed; and activities associated with development. Colony Nature Park has experienced several of the disturbances mentioned above.

Healthy, intact, fully functioning ecosystems are surprisingly resistant to invasion by exotic species. For example, it is not uncommon to find plant communities made up almost exclusively of exotics growing within or just outside of road rights-of-way, a highly disturbed situation. If the adjacent habitat is relatively undisturbed and the plant community is intact, you will seldom find non-native species becoming established beyond the zone of influence of the roadside ditch or the area that has been disturbed. The plants that compose healthy, intact communities are so busy competing with each other that there is no room, or niche, for invasion by exotics. If exotic species become established at all, they are typically just a minor component in an otherwise diverse plant community and will remain so until a disturbance occurs that disrupts the natural balance.

At Colony Nature Park, the broad objective is to reestablish a healthy, native, fully functioning system that is composed of appropriate native plants and that supports native wildlife species, to the extent feasible considering the size of the tract and surrounding development. In order to achieve this objective or something close to it, it will be necessary to aggressively control invasive exotic plants with prescribed fire, mowing where appropriate, and herbicide. The most difficult, labor-intensive phase of control efforts was completed this year. Now, with routine maintenance, invasive exotics can be kept in check as a native plant community develops.

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 28 Colony Nature Park management plan

Twice annually, during spring and fall, a work crew supervised by a licensed herbicide applicator will systematically cover the park property looking for and treating with appropriate herbicide target invasive exotic plants. Additionally, any reoccurring kudzu will be treated in mid-summer. The area of kudzu in the extreme northwest corner of the property where it is growing under a stand of large live oaks will be controlled through a combination of mowing and glyphosate application during the summer. Over time, this species should be eradicated or greatly reduced in this area. Any reoccurrence of kudzu in the open area west of the creek just south of CR 44 will be treated as necessary with Milestone VM or some other herbicide proven to be effective in the control of this species.

#### Stream Channel Restoration

The current Cowpen Creek channel through the property is highly degraded and merely functions as a drainage ditch. It provides little if any habitat for aquatic wildlife or invertebrates and primarily serves as a means to convey polluted stormwater runoff from highly urbanized areas. Cowpen Creek is a tributary to Fish River, which is the primary watershed flowing into Weeks Bay, a National Estuarine Research Reserve. If stormwater flow can be slowed and retained on the nature park property by having it flow through a natural channel and adjacent flood plain, then into a vegetated retention pond/wetland where it can be retained and released more slowly, a large percentage of pollutants can be removed, resulting in better water quality downstream.

The educational opportunities provided by stream restoration project and the associated habitat will be endless. The park will be a far more interesting place with a more natural stream channel, forested riparian corridor, and emergent marsh than without these features.

At the request of the FSTC, a proposal for restoring the Cowpen Creek channel and creating wetlands in the low area near CR 13 was provided in April 2010. If implemented, the project will consist of creating a new stream through Colony Nature Park property that mimics natural channel tendencies. The stream design will include instream habitat structures, appropriate channel dimension, pattern, profile, and flood plain connectivity. Native vegetation will be a key component to restoring the stream and riparian corridor, and will include planting herbaceous species, shrubs, and trees. Erosion control fabric will be used where necessary for instant soil stabilization.

The creation of wetlands will be integrated into the overall design of this project to take advantage of stormwater retention and provide habitat for aquatic and other wildlife species. Wetland creation will occur in the southeast area of the property just west of the CR 13 bridge and will be comprised of varying water depths to encourage plant and animal diversity. Water depth throughout the wetland will range from 0.6 - 3 ft. with deeper water generally being toward the east property line. Wetland configuration will be irregular to conform to surrounding topographic features and to create a more natural appearance.

Wetland creation will be achieved through the excavation of soil from the creation area and construction of a low dam with a clay core across the lower end. Excavated material will be used to fill the existing channel. Flow into the wetland will be supplemented as necessary with well water.

Without supplementation, it is expected that water will typically stand in the wetland area for several days following a rain event. During the late summer and fall when rainfall generally decreases and evapotranspiration is highest, the water level will drop more quickly. The wetland will likely be dry most of the time during this part of the year without the benefit of well water.

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 29 Colony Nature Park management plan

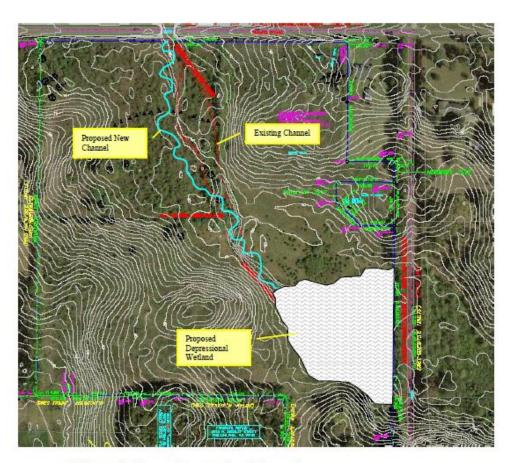


Figure 4. Stream Restoration Schematic

### Reforestation and Supplemental Plantings

Efforts to restore native vegetation to the park will include supplemental plantings of trees, shrubs and herbaceous species. Along the stream corridor, native species will be planted to create a forested riparian corridor a minimum of 50 ft. wide along each stream bank.

Native herbaceous species (grasses and wildflowers) will be introduced into the previously planted longleaf pine area.

The northwest area of the property upslope of the flood plain will be planted with longleaf pine and, when appropriate, native herbaceous species will be introduced.

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 30 Colony Nature Park management plan

A combination of slash pine and native hardwoods will be planted at wide spacing (~ 20 ft. apart) in the low area in front of the Boy Scout lodge, east of the stream channel. Native herbaceous species will be introduced as appropriate.

#### **Bluebird Trail**

Bluebirds live in open woods, fields, and other open habitats. They are cavity-nesters that build their nests and raise their young in natural tree cavities and cavities excavated by other species, such as woodpeckers. However, they will also nest in man-made boxes if suitably built and placed in appropriate habitat. Bluebirds begin nesting in early spring and will nest multiple times throughout the summer under ideal circumstances. Typically, a clutch will include 4-6 pale blue (sometimes white) eggs. Incubation lasts for about 12 days. Both parents feed and care for the baby birds, which fledge at 2-3 weeks of age.

Bluebird nest boxes will be installed along the trail and in other appropriate areas of the park. Nest box plans, other information, and instructions can be found at Appendix C. Box construction, installation, and maintenance can be done by volunteers and/or a contractor.

Nest boxes should be placed in open areas, facing east. Since bluebirds are territorial, boxes should be spaced no closer than 300 ft. apart. Nest boxes should be mounted on posts (rather than trees) and should include a predator guard.

Boxes should be checked at least monthly, but preferably weekly, during nesting season to monitor for wasps, English house sparrow nesting, blow fly larvae, and other problems. Boxes should be cleaned, repaired as necessary or replaced during late winter in preparation for the beginning of nesting season.

Nest material should be removed immediately after nestlings have fledged since the parents will usually nest again once their young have become independent. However, they prefer to construct a new nest each time rather than use or build on top of an old nest due to potential infestation by mites or other parasites.

Other cavity-nester may also use bluebird boxes, such as southern flying squirrel, Carolina chickadee, or house wren.



#### Interpretive Signage

Interpretive signs will be placed throughout the park, primarily along the trails, to educate park users about certain natural aspects, such as the longleaf pine ecosystem and related restoration efforts, stream restoration, invasive exotic plant control, other natural history information specific to the local area, plant identification, and information about the Fairhope Single Tax Corporation and its role in park development and management. Verbiage for signs and placement will be determined by the nature park management committee and its consultants.

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 31 Colony Nature Park management plan

#### SCHEDULE OF PLAN IMPLEMENTATION

#### Fiscal Year 2010

#### September

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas

#### October

- o Invasive Exotic Plant Control: All species as necessary
- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas

#### November

- Prescribed burn
- Mowing and landscape maintenance
- Fire ant control

#### December

Mowing and landscape maintenance

#### Fiscal Year 2011

#### January

- Construct bluebird boxes
- Conduct hydrologic modeling study for stream restoration project
- Mowing and landscape maintenance
- Check irrigation lines, valves, bibs, and heads
- Re-paint metal posts marking hose bibs and valves
- Check / adjust rubber ties around trees and remove stakes as necessary

#### February

- Install bluebird boxes
- o Mowing and landscape maintenance

#### March

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- o Fire ant control

#### April

- Invasive Exotic Plant Control: All species as necessary
- o Monitor bluebird boxes
- o Mowing and landscape maintenance
- Selective herbicide application in landscaped areas

#### May

- Design stream restoration project
- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- o Tree fertilization, mulching, staking, and pruning
- o Monitor bluebird boxes

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 32 Colony Park Management Plan

#### June

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- o Invasive Exotic Plant Control: All species as necessary
- o Monitor bluebird boxes

#### July

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Kudzu control (plus any other species as necessary)
- Monitor bluebird boxes

#### August

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Monitor bluebird boxes

#### September

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Monitor bluebird boxes
- Begin stream restoration project

#### October

- Complete stream restoration project
- Invasive Exotic Plant Control: All species as necessary
- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas

#### November

- Prescribed burn
- Install plants in stream restoration project area
- Other reforestation and supplemental plantings
- Mowing and landscape maintenance
- Fire ant control

#### December

o Mowing and landscape maintenance

#### Fiscal Year 2012

#### January

- Develop verbiage for interpretive signs
- Mowing and landscape maintenance
- Check irrigation lines, valves, bibs, and heads
- Re-paint metal posts marking hose bibs and valves
- Check / adjust rubber ties around trees and remove stakes as necessary

## February

- Order interpretive signs
- o Clean out/repair bluebird boxes
- Mowing and landscape maintenance

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 33 Colony Nature Park management plan

#### March

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Fire ant control

## April

- Install interpretive signs
- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- o Invasive Exotic Plant Control: All species as necessary
- Monitor bluebird boxes

## May

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Monitor bluebird boxes

## June

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Monitor bluebird boxes

## July

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Kudzu control (plus any other species as necessary)
- Monitor bluebird boxes

## August

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Monitor bluebird boxes

## September

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Monitor bluebird boxes

## October

- Invasive Exotic Plant Control: All species as necessary
- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- o Fill old stream channel and direct flow into new channel

#### November

- Prescribed burn
- Reforestation and supplemental plantings as appropriate
- Mowing and landscape maintenance
- Fire ant control

#### December

Mowing and landscape maintenance

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 34 Colony Nature Park management plan

## Fiscal Year 2013

## January

- Check/clean interpretive signs
- o Mowing and landscape maintenance
- Check irrigation lines, valves, bibs, and heads
- Re-paint metal posts marking hose bibs and valves
- Check / adjust rubber ties around trees and remove stakes as necessary

## February

- Clean out/repair bluebird boxes
- Mowing and landscape maintenance

#### March

- o Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Fire ant control

## April

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Invasive Exotic Plant Control: All species as necessary
- Monitor bluebird boxes

#### May

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- o Monitor bluebird boxes

#### June

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- o Monitor bluebird boxes

## July

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Kudzu control (plus any other species as necessary)
- o Monitor bluebird boxes

## August

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- o Monitor bluebird boxes

## September

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Monitor bluebird boxes

## October

- o Invasive Exotic Plant Control: All species as necessary
- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 35 Colony Nature Park management plan

#### November

- Prescribed burn
- Reforestation and supplemental plantings as appropriate
- Mowing and landscape maintenance
- Fire ant control

#### December

o Mowing and landscape maintenance

## Fiscal Year 2014

## January

- Check/clean interpretive signs
- Mowing and landscape maintenance
- Check irrigation lines, valves, bibs, and heads
- Re-paint metal posts marking hose bibs and valves
- Check / adjust rubber ties around trees and remove stakes as necessary

## February

- Clean out/repair bluebird boxes
- Mowing and landscape maintenance

#### March

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Fire ant control

## April

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Invasive Exotic Plant Control: All species as necessary
- Monitor bluebird boxes

#### May

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Monitor bluebird boxes

#### June

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Monitor bluebird boxes

#### July

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Kudzu control (plus any other species as necessary)
- o Monitor bluebird boxes

## August

- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- o Monitor bluebird boxes

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 36 Colony Nature Park management plan

## September

- o Mowing and landscape maintenance
- Selective herbicide application in landscaped areas
- Monitor bluebird boxes

## October

- o Invasive Exotic Plant Control: All species as necessary
- Mowing and landscape maintenance
- Selective herbicide application in landscaped areas

## November

- Prescribed burn
- o Reforestation and supplemental plantings as appropriate
- Mowing and landscape maintenance
- Fire ant control

## December

o Mowing and landscape maintenance

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 37 Colony Nature Park management plan

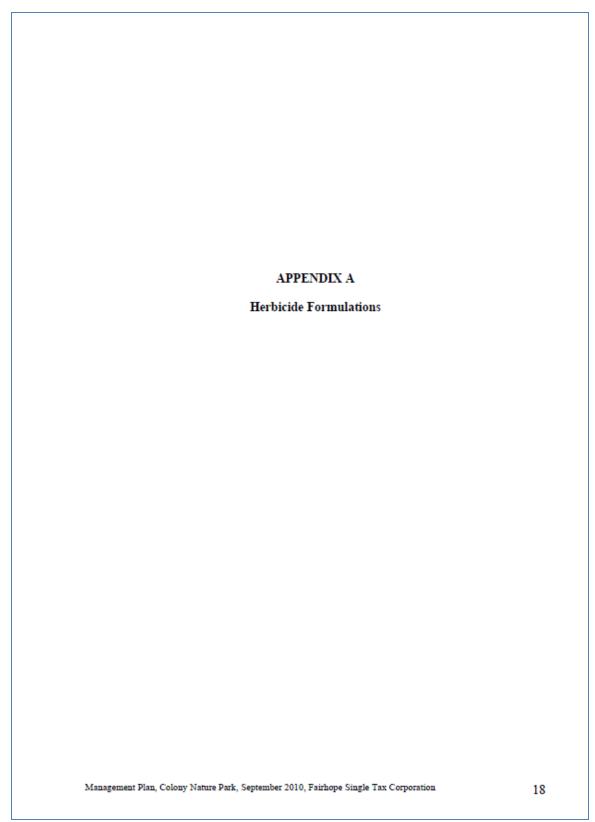


Figure 38 Colony Nature Park management plan

## Herbicide Formulations

<u>Cut Stump Treatment</u> (target species: Chinese privet, all camphor tree, all Chinaberry, Chinese tallow)

50% glyphosate (min. 41% active ingredient)

50% water

Small amount of blue indicator dye

(Spray entire cut surface unless stump diameter is >4 in.; then spray cambium layer only)

<u>Foliar Treatment - 3% solution</u> (target species: Chinese privet, Japanese honeysuckle, Johnsongrass (*Sorghum halapense*), Vasey's grass (*Paspalum urvillei*), torpedograss, cogongrass, and kudzu (*Pueraria montana*) when occurring within dripline of desirable trees)

4 oz. per gallon glyphosate (min. 41% active ingredient)

1 oz. per gallon blue indicator dye

Surfactant according to label instructions if the glyphosate product does not include a surfactant Fill remainder with water

## Foliar Treatment - 2% solution (target species: Japanese climbing fern)

2.5 oz. per gallon glyphosate (min. 41% active ingredient)

1 oz. per gallon blue indicator dye

Surfactant according to label instructions if the glyphosate product does not include a surfactant Fill remainder with water

## Foliar Kudzu Treatment (spot treatment only)

41.4 cc (1.4 oz.) Milestone VM per gallon of water 0.6 oz. Non-ionic surfactant per gallon of water

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

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Figure 39 Colony Nature Park management plan

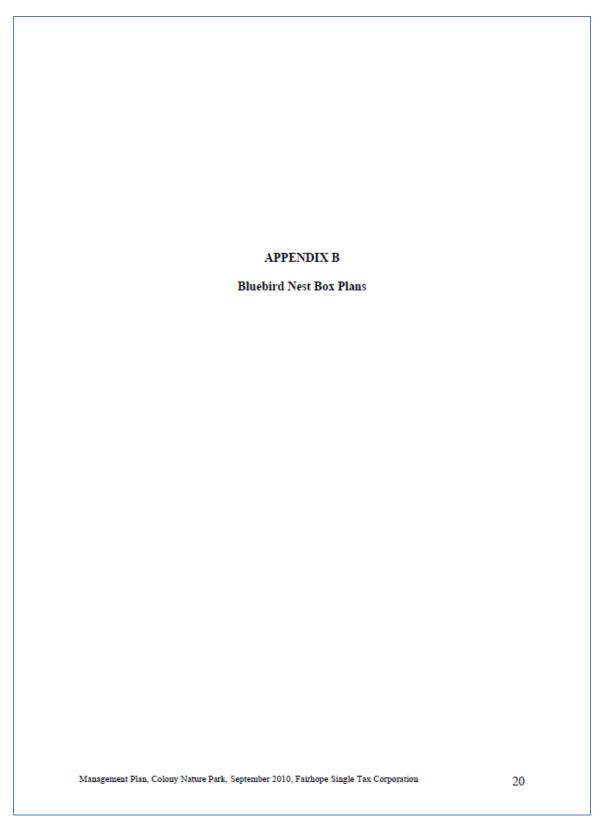


Figure 40 Colony Nature Park management plan

## Eastern Bluebird Nest Box Plans MATERIALS LIST Standard board 1" x 6" x 4' long Standard Board 1" x 10" x 10 1/2" long (for roof) 1-3/4" galvanized nails or screws -- approx. 20 1-3/4" galvanized screw or nail for pivot point -- 2 Double-headed nail for holding door closed - 1 **BOARD DIAGRAM** Start cutting at the "floor" and work towards the "back" since the "back" dimension is the least critical 10 1/4" 9 3/8" арргох 1' 1 3/4' 80° END BOARD VIEW 9 1/4" 10 1/4" 9 3/8" The remainder Side Side Front of the board is Floor used for the back TOP BOARD VIEW

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Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 41 Colony Park management plan

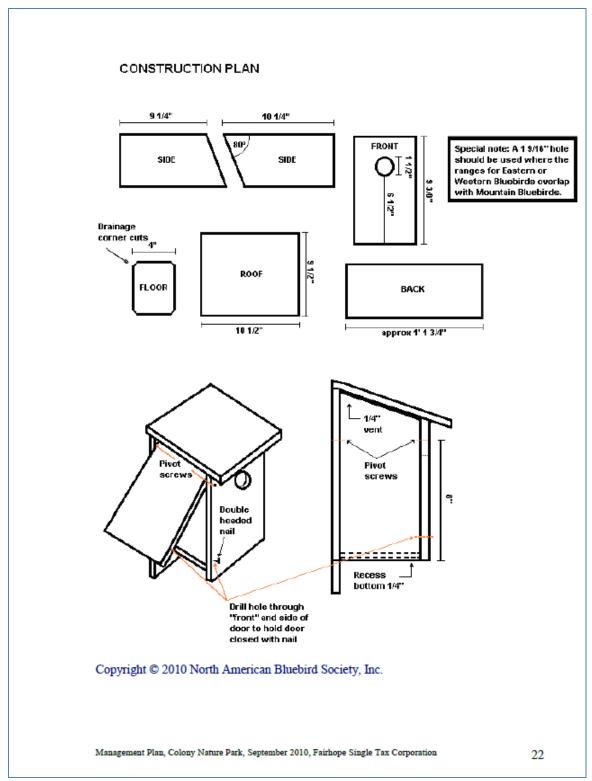


Figure 42 Colony Nature Park management plan

## Getting Started with Bluebirds

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Over the years, land has been cleared for housing and industrial developments, shopping malls, highways, and cropland; many old trees have been cut down for firewood. Wooden fence posts that provided nesting cavities have now been replaced with metal posts. With modernization, the supply of natural nesting cavities for bluebirds and other native cavity nesters has been greatly reduced.

Compounding the problem of habitat loss has been the introduction into North America of two imported species the House Sparrow and the European Starling. Both starlings and sparrows are cavity nesters, and both are very
aggressive. House Sparrows are small enough to enter any hole that a bluebird can, and are so aggressive that they
will chase away the more timid bluebird. Starlings can be excluded from bluebird boxes by using the correct size
entrance hole, but will out-compete bluebirds for woodpecker holes and other natural nesting cavities.

During the summer, bluebirds feed mainly on insects. In the winter, bluebirds depend on many kinds of wild berries for their food supply. However, the supply of wild berries has also decreased over the years. The few berries that remain are often stripped quickly by large flocks of starlings.

Even though the bluebird population has greatly decreased, the future can still be promising for them. The most important step we can take to help bring back the bluebird is to provide nesting sites by setting out a bluebird box or starting a bluebird trail. A bluebird trail is a series of bluebird boxes placed along a prescribed route. In areas where nesting boxes have been put up in suitable habitat, bluebird populations are increasing. Bluebirding is a great environmental, hands-on project that people of all ages can enjoy. By following the instructions below, chances are good that you will be able to attract and enjoy bluebirds.

## THE BLUEBIRD BOX

- A good bluebird box should be well ventilated, watertight, have drainage holes, be easy to monitor, and
  easy to clean.
- Cedar and redwood are ideal, although plywood and other types of wood can be used. Boxes can be
  painted or stained if a light color is used.
- Treated lumber should not be used because of its toxic content.
- · A bluebird box should never have a perch. Sparrows and wrens are attracted to perches.
- Boxes for Eastern Bluebirds should have a round entrance hole of 1 1/2".

## MOUNTING THE BLUEBIRD BOX

- Smooth round pipe is probably the best and simplest mounting system to use -- 3/4" electrical
  conduit works well, but any smooth scrap round pipe will also work.
- Coating the pole with grease will also help to keep predators off the box.
- Hardware cloth placed under a box helps to prevent snake predation.
- Unless your trail is in an area where raccoons are not present, avoid mounting bluebird boxes on a
  fence line or on trees. Raccoons are known to walk fence lines and may find your boxes.

#### SETTING UP A BLUEBIRD TRAIL

Habitat is the key factor to consider when setting up a bluebird trail. Open rural country with scattered trees and low or sparse ground cover is best. Suitable habitat should include perch sites, such as a fence line, wires, or tree branches where bluebirds may perch to search for food. Look for these when you are selecting a location for your nesting boxes. If bluebirds do not like the habitat, they probably will not use

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 43 Colony Park management plan

your boxes.

Pastureland, acreages, parks away from human traffic, and mowed areas such as cemeteries, golf courses are all good locations for a bluebird trail (provided pesticides are not used).

Avoid brushy and heavily wooded areas -- this is the habitat of the House Wren.

Avoid areas where the House Sparrow is abundant (i.e. farmsteads and feedlots).

Avoid areas of heavy pesticide use.

Mount nesting boxes so the entrance hole is approximately five feet above the ground. If possible, face the box away from prevailing winds and facing towards a tree or shrub which is within 100 feet of the box. Trees and shrubs provide a landing spot for the young bluebirds when they first leave the box. This will keep them off the ground, away from predators.

Nesting density for all three species of bluebirds is dependent on many factors. Some of these factors include population density, habitat suitability, individual tolerance levels, visibility between boxes, the number of cavities available, weather, and the level of competition from other species. It is therefore impossible to predetermine the optimal spacing for any given area. The following distances are given as general guidelines only; contact your local bluebird affiliate organization to find out what they recommend, and experiment by adjusting the distances between your own boxes until you have established ideal spacing for your particular location. In many cases, bluebirds have been observed nesting closer than the distances recommended. However, it is better to start a bluebird trail with boxes placed too far apart than too close together. For Eastern Bluebirds – place boxes 125 to 150 yards apart.

Boxes can be mounted in pairs in areas where Tree Swallows are abundant. When paired, boxes should be mounted 5 to 25 feet apart. This provides nesting sites for both species and helps to prevent competition between them. Different species of birds usually do not mind nesting close to each other.

Bluebirds rarely nest in cities. It is possible, but uncommon, for bluebirds to nest along the outer edges of cities or in small towns. Bluebirds generally prefer rural areas.

#### MONITORING A BLUEBIRD TRAIL

Do not put up a bluebird box if you do not plan to monitor it. Check your bluebird boxes at least once a week during the nesting season, until chicks are close to fledging.

Do not open the box after nestlings are 12 to 14 days old. Doing so could result in the nestlings leaving the box before they are able to fly, greatly reducing their chance of survival.

Always remove House Sparrow nests immediately.

Have your bluebird boxes in place by mid-March when the bluebirds return from their winter migration and are looking for nesting sites. However, boxes may also be put up later in the nesting season.

Bluebirds usually nest in late March or early April, depending on weather conditions. In southern states, where bluebirds reside year round, nesting may occur earlier.

Bluebirds usually have two broods per season, but three broods are possible.

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 44 Colony Nature Park management plan

Recognize a bluebird nest -- It is a cup-shaped nest that is usually made up of 100% woven grass. Pine needles may be used.

Bluebirds usually lay 4 to 5 light blue eggs, but may lay as many as 6 or 7. A small percentage of their eggs may be white.

The incubation period for bluebird eggs is 12 to 14 days.

Nestlings remain in the nest 18 to 21 days before they fledge.

Remove bluebird nests and those of other birds as soon as the young birds have fledged.

Keep records of the activity on your bluebird trail. This information is valuable to the North American Bluebird Society (NABS), a non-profit organization, which compiles data on bluebird populations in North America. Annual Nesting Report Forms are available from NABS.

Please don't be discouraged if your nesting boxes are not used the first year. If bluebirds are not common in your area, it may take them a few seasons to find your new box. Bluebirds generally return to the same area each year. Bluebird trails have been an extremely effective method of reestablishing the bluebird populations across North America.

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Figure 45 Colony Nature Park management plan

## Colony Nature Park Budget

Natural Resources Management						
Prescribed Burn (annually) (if done by Alabama Forestry Commission) \$1,200.00						
Invasive Exotic Plant Species Control (annually)						
Stream Restoration (FY 2011)						
Corps of Engineers Permitting         2,000.00           ADEM Stormwater Permitting & Monitoring         4,000.00           Project Management & Coordination         5,000.00           Hydrologic Modeling         12,500.00           Site Design         67,089.00           Construction         230,000.00           Planting         36,000.00						
Reforestation & Supplemental Plantings (annually for $3-5$ yr.)						
Bluebird Trail Establishment (FY 2011) 2,500.00 Bluebird Trail Annual Maintenance 600.00						
Interpretive Signage (FY 2011)						
Landscape Maintenance  FY 2010 (Aug – Dec)  Mowing, maintenance, selective herbicide application, fire ant control \$9,900.00						
FY 2011  Mowing, maintenance, selective herbicide application, fire ant control, Fertilization, mulching, staking, pruning, etc						

(Landscape maintenance budget for Subsequent FYs to be determined at a later date)

Management Plan, Colony Nature Park, September 2010, Fairhope Single Tax Corporation

Figure 46 Colony Nature Park management plan

## **Comp Plan Comments:**

Amy made a motion to accept the final draft of the Land Use Plan comments from FEAB, and for Kim to share with Hunter Simmons.

Motion approved: Land Use/Comprehensive Plan comments from FEAB were approved and finalized, with request for Kim to send these to Hunter:

February 11, 2020

To The Fairhope Land Use Planning Team, Fairhope City Council, and Mayor Sullivan;

The Fairhope Environmental Advisory Board (FEAB) commends the decision-makers that serve our City for undertaking the process to establish a relevant Community-Based Comprehensive Land Use Plan (LUP), and we recognize the professionalism and the expertise available in the consultant team selected for this effort. The current and projected rate of growth in our town demands immediate, conscientious planning and ongoing implementation of and adherence to the results of this project. We are confident that the outcome of this effort will be the equitable and long-term availability of our natural resources, quality of life, and prosperity.

The FEAB is a diverse group of volunteers made up of Fairhope residents with particular environmental professional experience and academic expertise. Our mission is to provide policy advice to the City Council, Mayor, and City Departments regarding environmental matters that concern the City of Fairhope. Our vision is to serve as a trusted, scientific resource providing a local environmental perspective to policy decisions to ensure environmental matters are given full consideration in the City's decision-making processes. We strive to positively affect the quality of life for all residents, their connection to our local ecosystems, and the resilience and sustainment of Fairhope as a small, yet world-class, city. We are dedicated to increasing awareness of environmental issues, offering recommendations to City administrators, and providing state-of-the-science consultation in the implementation of sustainable solutions.

The FEAB submits the following recommendations for your consideration. These recommendations are organized per the Fairhope Community-Based Comprehensive LUP goals and further detailed in this letter. In summary, the FEAB recommends;

- Increased presence, distribution, functionality, and protection of green space.
- Increased emphasis on acquiring, conserving, and managing the City's green spaces.
- Providing legal foundation for enforcement of LUP resolutions through code and/or budgeting.
- Adopting the National Green Building Standards and incentivizing their use.
- Identifying and incentivizing renewable energy solutions.
- Preserving our fresh water capacity and quality through intentional land use planning.
- Upgrading stormwater regulations to ensure post-construction volume, velocity, and peak flow do not exceed pre-construction.
- · Upgrading riparian buffer requirements to 100 feet.
- Requiring traffic flow and congestion become a more dominant factor in the subdivision approval process.

Page 1

Figure 47 FEAB Land Use Plan comments

## 1- Plan Sustainable Community Growth with Aspects of Green Infrastructure

a. The FEAB strongly supports the establishment of green space in our City. We fully encourage and commend the intentional selection, restoration and maintenance, ongoing protection, and inter-connection of green spaces across the City and beyond.

"Green space" is defined as areas that remain in a relatively natural condition and bereft of manmade features, such as infrastructure, impervious surfaces, and facilities. Typically, properties in the vicinity of green spaces have substantially increased real estate values, and cities with a higher proportion of green space and connected green space corridors score higher on quality-of-life metrics for their inhabitants. Green space can be used to protect vulnerable watershed assets, such as stream corridors or shorelines, and is sometimes, but not always, associated with stormwater management. "Green space" can also refer to low-impact-development requirements enacted and enforced through ordinance and code, defined as a per-lot requirement or at the construction campus or subdivision level in a subdivision layout plan. The consideration of green space can be crucial to maintaining character, aesthetic quality, heat island reduction, natural night skies, and stormwater management benefits of a place.

We recognize that in land use planning there are several nuanced connotations of "green space." While they can potentially overlap in function and use, it is important to recognize their distinctions to ensure all green space requirements are met, including:

- Conservation Areas: protect sensitive land or uses that are identified either at an interconnected, landscape scale or focused on an isolated area with unique characteristics. This land is set aside due to its intrinsic value (e.g., unique habitat) or ecosystem services provided (e.g., flood attenuation or water quality protection).
- Parks: are land areas identified at the community scale that are set aside for broader public use (active or passive recreation).
- Construction Requirements: these are specific, per-lot or per subdivision codes, requirements, and/or incentives enacted to protect adjacent land owners from stormwater produced by the topographic changes and impervious surfaces associated with site development.

The FEAB recommends that the City create, balance, and maintain our green space inventory to include outdoor recreation opportunity, habitat for local native flora and fauna, watershed protection, and aesthetic value (i.e., not limited only to stormwater management). Note that in some cases multiple uses can occur in one location, but other times uses are not compatible due to the sensitivity or intrinsic value of a site. The FEAB also recommends that the City create a permanent Green Space Program employee position dedicated to identifying potential green space parcels; acquiring parcels through purchase, gift, or conservancy; and managing the areas for their designated function.

The FEAB, South Alabama Land Trust (SALT), and the Mobile Bay National Estuary Program (MBNEP) Eastern Shore Watershed Management Plan (WMP) team collaborated to identify various parcels of ecological interest that may be prime candidates for protection in a comprehensive green space design (Enclosure 1). Note that this map is based only on parcels with wetlands present and/or those dominated by larger tracts of intact forest habitat. This recommendation is by no means exhaustive of the full potential recommended green space design for the City as it does not consider inter-connection to larger corridors, strategic parcels to be rehabilitated or restored, or potential for recreation and mixed-uses. We'd like to

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Figure 48 FEAB Land Use Plan Comments

point out that the pace of growth within the City of Fairhope has caused many lost opportunities to acquire pristine or undeveloped parcels within its City limits, creating the need to acquire and convert some properties to green space. Please contact the WMP team or SALT if you would like to receive the geospatial data set associated with Enclosure 1 as you further identify recommendations for green space design in the LUP.

With this recommendation we strongly advise the City to develop and implement Management Plans specific to its green space assets. Written plans allow for the clear, long-term dedication to each green space's intent and its relation to other green space in the City. Management Plans contain resource-specific guidance that may go beyond City staff's knowledge base, and serve as a valuable resource for annual budget planning. Management planning does not need to be a complicated or expensive undertaking, but each green space is unique and, therefore, warrants individualized management approaches.

b. The FEAB recommends that the LUP team officially consult with the Mobile Bay National Estuary Program Eastern Shore WMP team as both projects are currently underway and may overlap in crucial areas.

In order to provide the City of Fairhope with the most useful planning process, the FEAB recommends intentional collaboration and/or data sharing between the LUP and WMP teams on issues germane to each project. The Environmental Protection Agency-designed Eastern Shore WMP evaluates the 21,800 acres, 22.6 miles of coast, 74 miles of stream, and 3,168 acres of wetlands in the Fly Creek (HUC-12) watershed – a large proportion of which is within City of Fairhope boundaries. The WMP process includes extensive stakeholder engagement to gage community perceptions and priorities for their watershed. Likewise, the WMP effort includes extensive ecosystem data collection and review that will identify priority areas for protection, restoration, or other management consideration – including streams, wetlands, shorelines and the uplands that impact them. The WMP process will culminate in an integrated, actionable plan to protect what our communities value most about their watershed.

We believe that the data captured for the WMP may be useful to the LUP team, and the integration of these two efforts would provide the clearest roadmap for the City as it seeks funding to implement various projects identified in each effort.

## 2- Provide Legal Foundation for Plan Implementation

a. The FEAB strongly supports the goal of providing a legal framework through which the LUP is continuously implemented by all levels of government in our City.

Historically, there is no obligation for a city to make hard decisions in favor of the long-term outcome outlined in land use plans. This leaves planning commissions and elected officials free of obligation to

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Figure 49 FEAB Land Use Plan Comments

<sup>1</sup> Eastern Shore Watershed Management Plan point of contact: Christian Miller, Watershed Management Coordinator, Mobile Bay National Estuary Program – <u>cmiller@mobilebaynep.com</u> South Alabama Land Trust point of contact: Comile Whittaker, Executive Director – <u>connie@southalabamalandtrust.org</u>

implement land use plans and often favors short-term economic growth over long-term natural resource and economic sustainability.

The FEAB recommends that the City make the LUP resolution more enforceable through code and/or budgeted requirement. The FEAB also recommends that the project team review relevant existing City ordinances and regulations and provide the City with revised or additional draft policies and draft resolutions for implementation of these policies. These commitments should also include an assurance to provide annual budget as relevant to a particular issue. Enclosure 2 is an example of this process in a similar municipality.

In particular, the FEAB has reviewed the existing Fairhope Subdivision Regulations and provides various recommendations for amendments to stormwater management, the integration or compatibility of County and City regulations, wetland protection, and traffic analysis and mitigation in Enclosure 3.

#### 3- Emphasize Environmental Stewardship

a. The FEAB supports the acceptance of the National Green Building Standard (NGBS) as a building code compliance pathway, and recommends the incentivization of NGBS certification for new construction and renovation projects.

The ICC-700 National Green Building Standard (NGBS) is an American National Standards Institute (ANSI)-approved, voluntary building standard used by builders and developers across the US and in the Caribbean.<sup>2</sup> It applies to subdivision site work, single-family homes, duplexes, townhomes, multi-family, mixed-use, and residentially-used buildings (i.e., in the IBC I-1 classification, such as assisted living, group homes, and hotels). In addition to environmental benefits, the NGBS program can ease work burden on city staff, reduce permitting timelines, ensure code compliance for things the city does not typically inspect, and improve the overall quality of housing/building stock.

Many mandatory 2020 NGBS practices are already required by existing City of Fairhope building codes, and many optional practices (available for points) align with LUP goals (i.e., wetlands protection, low impact development [LID], tree preservation, walkability, recycling). The 2020 NGBS Bronze Level is equivalent to 2018 IECC/IRC/IBC, which exceeds the 2015 Alabama Residential Energy Code.

Some examples of similar localities with NGBS programs include:

- Decatur, GA requires high performance building certifications, including NGBS.
- Pensacola, FL offers incentives for green building certifications, including NGBS. All program
  participants receive the benefit of fast-tracked permitting. Commercial projects receive the benefits
  of a density bonus and reduced parking requirements. Residential projects receive the benefit of

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Figure 50 FEAB Land Use Plan Comments

For further information on the successful incentivization of these principles across various numicipalities see the National Association of Home Builders, 2020, Attracting Builders to Your Community Through Green Building Incentives, accessed in January, 2022 at: https://www.naco.org/blog/attracting-builders-vour-community-through-green-building-incentives and Home Innovation Research Labs 2022. Cartification: NGBS Analysis & Incentives. Accessed in February 2022 at: https://www.homeinnovation.com/comparengbs

- waived certification fees. Pensacola also requires green building certification for new city buildings, unless the costs "significantly" outweigh the benefits.
- Montgomery County, MD allows NGBS Bronze as an energy code compliance path. Many places
  in MD offer a property tax credit for Silver and Gold levels. These MD efforts have been so
  successful that builders are pushing for NGBS compliance options to apply statewide.
- b. The FEAB recommends incentivizing renewable energy systems, especially rooftop solar plus battery storage systems for new and existing buildings.

Solar plus battery storage benefits our public utility by reducing peak demand, which can defer transmission and distribution upgrades. These systems also increase resilience, especially during extreme storm events, by providing a safe, quiet alternative to gas-powered generators during power outages.

The FEAB recommends the City create a renewable energy-focused program that begins with identifying and addressing current roadblocks to renewable energy production in our region, identifies and promotes regionally-applicable solutions, and incentivizes implementation in our town. This program could be applicable to public and private buildings (especially big box stores) as well as private homeowners and subdivisions. There are many examples of solar programs across the U.S that include a diverse array of cost solutions that benefit multiple parties at once, including (but not limited to) state and local tax credits, direct payments to landowners or companies that make the investment themselves, partnerships between energy companies and landowners, or leasing rooftop space.

c. The FEAB recommends establishing the maintenance and preservation of water quality as a guiding principle of the LUP, especially groundwater quality and quantity.

As the largest supplier of freshwater in Baldwin County, Fairhope can and should set the highest possible standards for groundwater quality and consumption by eliminating potential pollution sources and using best practices for conservation. The City of Fairhope operates 10 groundwater wells that deliver 4.6 million gallons per day to 40,000 people. In addition, there are hundreds of additional water wells for mostly agricultural and residential use. All of these wells pump from the same aquifer. We recommend that the LUP and the City of Fairhope:

- Develop and implement a comprehensive groundwater protection strategy to ensure an adequate and sustainable water supply.
- Develop and implement a comprehensive pollution management program to monitor and protect groundwater resources.
- Ensure that Local Wellhead Protection Plans are considered during review of development applications to maintain drinking water quality and protect groundwater from contamination.
- Limit the installation of additional wells and limit the number of additional households and
  irrigation systems that are dependent on wells through water conservation efforts and through the
  use of communal and/or central water systems where feasible and as approved by The State of
  Alabama, Baldwin County, and the City of Fairhope.
- Ensure the location, depth, and rate of extraction of individual wells do not impact the quality and quantity of municipal wells.

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Figure 51 FEAB Land Use Plan Comments

- Assess the recharge and consumption rates for groundwater in each watershed by analyzing data from groundwater level monitoring and stream flow measurements. If negative impacts are detected, the information will be presented to the Fairhope City Council for appropriate action.
- Develop standards for uses that consume and/or require the usage of large quantities of water in those areas that could affect neighboring wells and aquifers.
- Provide education to homeowners on the use, consumption, and value of a high-quality groundwater system of aquifers.
- Study best practices/guidelines to reduce impervious surfaces and minimize increases in postdevelopment runoff peak rate, frequency, volume.
- Educate landscapers, pest control companies, and individual homeowners on best practices for pesticide and fertilizer applications.

The FEAB appreciates your time and consideration of these recommendations. The interest, professional expertise, and local experience of FEAB transcends well beyond these topics; thus, please consider us a resource available to you for a variety of questions you may have. Of course, if you would like to discuss these items further or require additional information or clarification, please do not hesitate to reach out and we would be happy to host you at our regular monthly meeting or schedule a special meeting as fits your schedule (contact Amy Paulson at 251-654-7401 or <a href="may.paulson@yahoo.com">amy.paulson@yahoo.com</a>).

Thank You;

The Fairhope Environmental Advisory Board

Ben Frater, Mike Shelton, Gary Gover, Amy Paulson, Jennifer Foutch, Michelle Melton, Nigel Temple, Kim Burmeister, Rick Speight Jim Horner

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Figure 52 FEAB Land Use Plan Comments

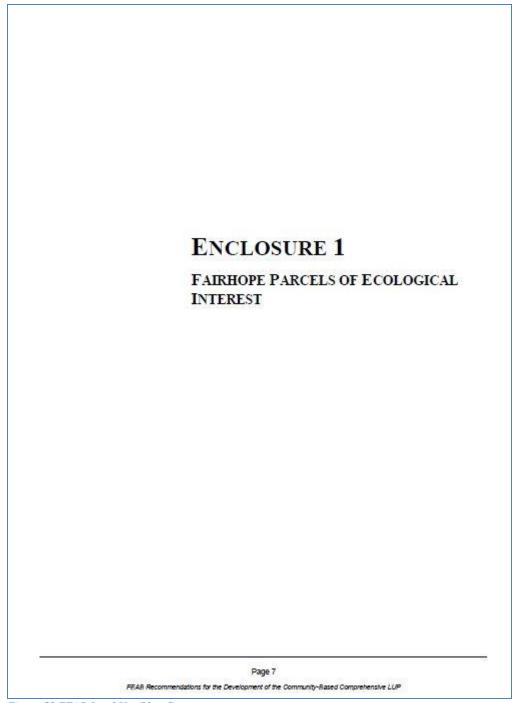


Figure 53 FEAB Land Use Plan Comments

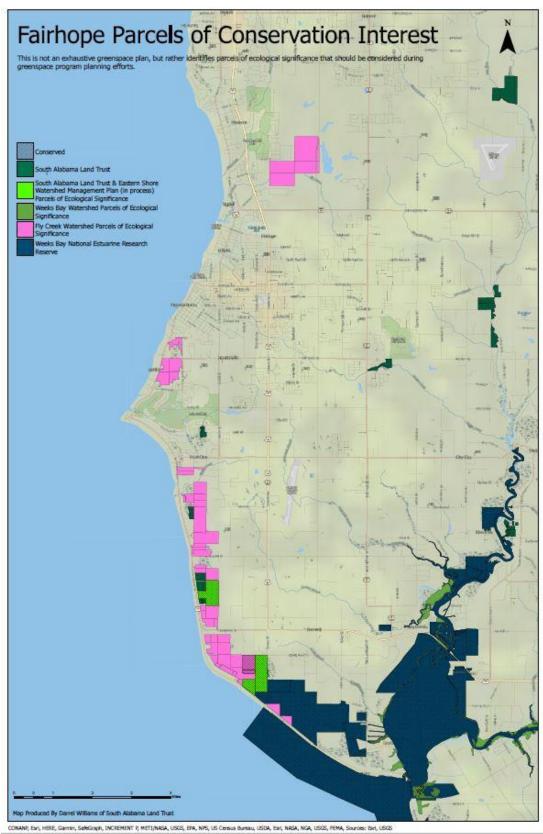


Figure 54 FEAB Land Use Plan Comments

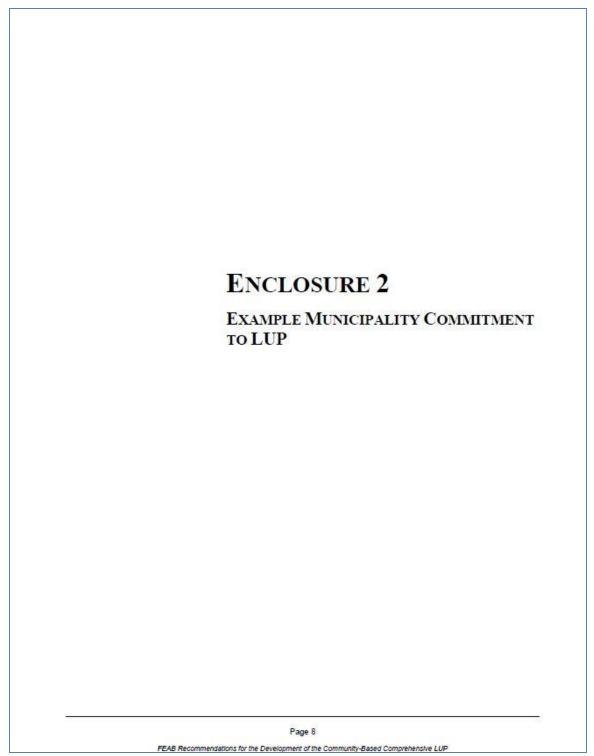


Figure 55 FEAB Land Use Plan Comments

By Council Member Dunbar

A Resolution setting forth the City's Complete and Green Street Policy.

WHEREAS Complete and Green Street policies address the livability and environmental needs of our community with multipurpose streets that better accommodate walkers, cyclists, and public transportation while reducing the environmental impact of our transportation infrastructure by incorporating green infrastructure strategies to reduce waste, stormwater runoff, and energy consumption; and

WHEREAS, Cleveland Heights is committed to the creation of a network of Complete and Green Streets that will improve the economic, environmental, and social well-being of its residents; and

WHEREAS, Cleveland Heights' network of Complete and Green Streets will provide safe and desirable travel for users of all ages and abilities and accommodate pedestrians, cyclists, motorist, and transit while also incorporating best management practices in green infrastructures; and

WHEREAS, Cleveland Heights recognizes the need to provide a Complete and Green Streets Policy to assist in the management of stormwater runoff and provide environmental benefit.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Cleveland Heights, Ohio, that:

SECTION 1. Council hereby adopts the Complete and Green Street Policy set forth in Exhibit A attached hereto and incorporated as if fully set forth herein.

SECTION 2. Notice of the passage of this Resolution shall be given by publishing the title and abstract of its contents, prepared by the Director of Law, once in one newspaper of general circulation in the City of Cleveland Heights.

SECTION 3. This Resolution shall take effect and be in force from and after the earliest time allowed by law.

Figure 56 FEAB Land Use Plan Comments

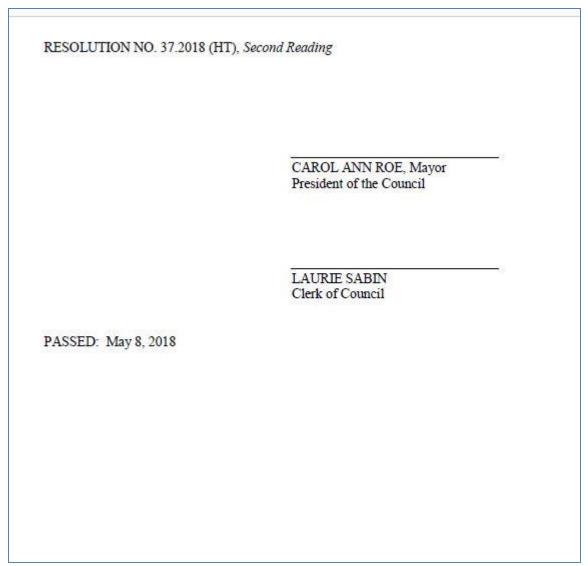


Figure 57 FEAB Land Use Plan Comments

# Exhibit A

## COMPLETE AND GREEN STREETS

## Definition.

"Complete and Green Streets" are roadways designed and operated to safely and comfortably accommodate users of all ages and abilities, including cyclists, pedestrians, transit riders, elderly, wheelchair users, delivery and service personnel, and emergency responders; and to reduce, accommodate and slow stormwater runoff as part of a comprehensive stormwater management system.

#### 1. Vision and intent

- 1.1. The general public will realize long-term cost savings in improved health and better environmental stewardship. Residents will benefit from a "Green Dividend" by cutting transportation costs and making this income available for other, non-transportation expenses such as dining and entertainment in the community. The City and Cleveland Heights' institutions and businesses will save money by constructing and maintaining smaller parking lots and parking structures. A greater proportion of land will be available for green space or for activity-filled buildings occupied by people rather than that same land serving as storage area for motorized vehicles. Another benefit is that a Complete and Green Street policy creates an economical and functional equity to every user of the road and every household regardless of one's income, place of residence, neighborhood, mode choice or any other factor.
- 1.2. The City shall develop a safe, comfortable, reliable, efficient, integrated and completely connected multimodal transportation network providing access, mobility, safety and connections to all users. The interconnectedness of the Complete and Green Streets network shall be explained and documented on a map available to the general public on the City's website.
- 1.3. The City shall efficiently address water quality of its sewer system by assessing opportunities and then conducting improvements where needed for sewer lines in coordination with road improvements. Roads shall be designed to not have excess pavement and considerations such as lane width, turning radii, traffic islands and on-street parking shall be evaluated for pavement reduction opportunities.
- 1.4. The Master Plan, adopted by City Council on March 20, 2017, states on page 146: "ACTION 1: Adopt a Complete and Green Streets Policy." This was categorized by the Master Plan as being of the highest priority to implement.

Figure 58 FEAB Land Use Plan Comments

## 2. Diverse users

2.1. Roadway projects shall be designed and planned, to the greatest extent possible, to accommodate all users of the transportation system, including but not limited to motorists/truck operators, pedestrians, bicyclists, transit riders, seniors, children, those with pets, people with disabilities and emergency responders, while respecting the access needs of adjacent land uses. The City shall provide transportation choices that are safe, convenient, reliable, affordable, accessible, and timely regardless of race, ethnicity, religion, income, gender identity, immigration status, age, ability, languages spoken or level of access to a personal vehicle. Vulnerable users shall be prioritized. Special attention in the design and planning of a project shall be given to addressing the needs of people with disabilities and the elderly so that proposed Complete improvements make a measurable difference in ease of travel, comfort and safety for these most vulnerable users. Infrastructure investments shall be mapped, quantified and evaluated to ensure the provision of Complete and Green Streets projects in all neighborhoods, avoiding pockets of disinvestment or underinvestment.

## 3. Commitment in all projects and phases

- 3.1. All City-owned new construction, reconstruction/retrofit, resurfacing, repaying, restriping and rehabilitation transportation projects in the public right-of-way including, but not limited to, streets and all other connecting pathways shall be designed, constructed, operated, and maintained so that all modes of transportation allow all users to move safely, comfortably, conveniently and independently.
- 3.2. Privately constructed streets and parking lots shall adhere to this policy.
- 3.3. The City shall foster project partnerships with the State of Ohio, Cuyahoga County, neighboring communities and business and school districts to develop facilities and accommodations that further the City's Complete Streets policy for travel between cities.
- 3.4. The City shall approach every street project and each project's phase as an opportunity for transportation improvements for all users and as an opportunity for water quality improvements. These phases include, but are not limited to; planning, programming, design, right-of-way acquisition, construction, construction engineering, reconstruction, operation and maintenance. Other changes to transportation facilities on streets and rights-of-way, including capital improvements and major maintenance, must also be included.
- 3.5. The City shall provide accommodations for all modes of transportation to continue to use the road safely and efficiently during any construction or repair work that infringes on the right-of-way and/or sidewalk.

#### 4. Exceptions

4.1. Exceptions to providing for all modes in each project may be authorized by the City Manager using the process and criteria as described below when:

Figure 59 FEAB Land Use Plan Comments

- 4.1.1. An affected roadway prohibits, by law, use by specified users (such as pedestrian malls), in which case a reasonable and equivalent project shall be designated to accommodate those specified users elsewhere, including on roadways that provide similar access to a route or destination;
- 4.2.2. The activities are ordinary maintenance activities designed to keep assets in serviceable condition (e.g. mowing, cleaning, sweeping, spot repair and surface treatments such as chip seal or interim measures); or
- 4.2.3. The City Manager after consultation with the Director of Public Works, Director of Planning and Development, Manager of Capital Projects, and Transportation Advisory Committee issues a documented exception concluding that the application of Complete Streets principles is excessively disproportionate to the need or probable use. Such exceptions shall be clearly explained and available on the City's website and conspicuously posted at City Hall, the public libraries within the City. On the posting shall be the contact information to share comments about the exception to the Transportation Advisory Committee and to City staff.

#### 5. Jurisdiction

- 5.1. All transportation infrastructure and street design and construction projects requiring funding or approval by the City of Cleveland Heights shall adhere to this Policy. The City Manager shall require the staff of Public Works, Planning, Police, and Capital Projects to implement the Complete and Green Streets improvements in a unified and coordinated manner through consistent and thorough communication including Complete and Green Streets topics at the weekly senior staff meetings and in the staffs' weekly activity reports to the City Manager and City Council.
- 5.2. Projects funded by non-municipal governmental agencies such as state, federal, county government, including but not limited to Section 108 Loan Guarantee, Community Development Block Grant, Transportation Alternative Program, Ohio EPA, Ohio Department of Natural Resources and County Department of Public Works, shall adhere to this Policy. To the greatest extent, coordination between municipal and non-municipal staff responsible for planning and engineering of Complete and Green streets shall receive special attention.
- 5.3. Projects funded by non-municipal agencies and organizations such as the City's Special Improvement Districts, Greater Cleveland Regional Transit Authority and Northeast Ohio Regional Sewer District shall adhere to this Policy.
- 5.4. Private developments including street design and construction components shall adhere to—and fully support—this Policy. The Planning Director or his or her designee with the developer shall agree upon applicable requirements early in the approval process. The City shall verify compliance of the development during inspections prior to the use of such improvements by the general public.

- 5.5. To the fullest extent possible, State of Ohio streets including those on the Federal Primary System, including the design, construction, reconstruction and maintenance of such streets, shall comply with this Policy.
- 5.6. For all streets and trails that connect to neighboring cities, Complete and Green Streets principles shall be encouraged across borders so that accommodations are continuous to destinations in other cities.
- 5.7. For streets and trails that are part of a regional network, the City shall especially provide well-maintained facilities that exemplify Complete and Green Streets principles.

## 6. Design

- 6.1. The best, state-of-the-practice design guidance, standards, and recommendations shall be immediately adopted in the implementation of Complete and Green Streets, including:
  - American Association of State Highway and Transportation Officials (AASHTO) Guide for Planning, Designing and Operating Pedestrian Facilities
  - American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities
  - Institute of Transportation Engineers (ITE) Designing Walkable Urban Thoroughfares: A Context Sensitive Approach
  - Institute of Transportation Engineers (ITE) Policy on Geometric Design of Highways and Streets
  - National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide
  - National Association of City Transportation Officials (NACTO) Urban Street Design Guide
  - Federal Highway Administration (FHWA) publications such as Designing for Pedestrian Safety

## 7. Land Use and context sensitivity

7.1. The City shall require specific evidence in all new or revised land use policies, plans, zoning ordinances or equivalent documents how they support the City's Complete and Green Streets Vision. The projects must be sensitive to the surrounding context including current and planned buildings, parks, trails, as well as its current and expected transportation needs. Land use policies and zoning ordinances must support Complete and Green Streets, promoting dense, mixed-use, transit-oriented development. All Complete and Green Streets' solutions must be appropriate and sensitive to the context and intended character as proposed in the Cleveland Heights Master Plan, the University Circle Cleveland Heights Bicycle Network Study, other NOACA Transportation for Livable Communities Initiative studies and other forward-thinking plans and studies. Unintended consequences such as involuntary displacement shall be avoided when possible or addressed with equity and fairness to the affected party.

Figure 61 FEAB Land Use Plan Comments

- 7.2. Roadway, trail, bus stop and sidewalk design decisions shall include public outreach and input and be sensitive to values of Cleveland Heights as a walkable, vibrant, sustainable, and bike friendly community.
- 7.3. Projects shall be designed at a human scale for the needs and comfort of all people, with due consideration of issues such as street design and width, lane width, desired motorists' operating speed, hierarchy of streets, mode balance, and connectivity.
- 7.4. Design criteria shall be based on the thoughtful application of engineering, architectural and urban design principles such that all projects shall make the City a more appealing, enjoyable, and sustainable place in which to live and work.
- 7.5. Projects in districts listed on the National Register of Historic Places shall be designed to enhance the district's historic character. Examples of contributing design elements include stone curbs, signage, street furniture, trees, and streetlights.

## 8. Performance measures

- 8.1. The City Planning Department shall annually measure and report to the Transportation Advisory Committee, the Citizens Advisory Committee and general public an evaluation using, but not limited to, the following performance measures:
  - 8.1.1. Miles of bike lanes
  - 8.1.2. Crosswalk and intersection improvements
  - 8.1.3. Pedestrian, bicyclist and bus ridership counts
  - 8.1.4. Percentage of employee, student and visitor arrivals by foot, personal bicycle, transit, carpool, bikeshare or carshare, or electric vehicle.
  - 8.1.5. Number of ADA compliant new curb ramps installed along city streets
  - 8.1.6. Number of bicycle parking spaces created and number updated that comply with Zoning Code bike parking location and design criteria
  - 8.1.7. Number of crashes (location and type)
  - 8.1.8. Number of new developments constructing the minimum required number of parking spaces rather than the allowable maximum
  - 8.1.9. Square footage of new bioretention facilities
  - 8.1.10. Square footage of pavement removed
  - 8.1.11. Lineal feet of sanitary sewer lines newly separated from storm lines
  - 8.1.12. Vehicle Miles Traveled
  - 8.1.13. Carbon emissions
  - 8.1.14. Net number of street trees added
  - 8.1.15. Report on project effectiveness of engaging those who are underrepresented, consideration of their suggestions, and documentation of improvements that resulted from their input
  - 8.1.16. Evaluation of plans and improvements to assure they are equitably distributed with respect to factors including but not limited to income, race, vehicle access, and planning district
- 8.2. An annual report shall document the change for each performance measure contained in this ordinance compared to the previous year(s). Such report shall be readily

viewable on-line and in paper version at City Hall and at the Cleveland Heights-University Heights Libraries.

## 9. Project Selection Criteria

- 9.1. Project Evaluation and Criteria Scoring of the Capital Improvement Program shall include Complete Streets as a priority and City Council goal. Capital improvements shall be mapped and quantified to make certain in the City's five-year capital planning document that City resources are equitably provided. Scoring criteria shall be adjusted when necessary to attain an equitable distribution of Complete and Green Streets projects and resultant benefits.
- 9.2. The Department of Public Works, the Planning Department, Capital Projects, and other applicable departments, agencies, and committees shall incorporate Complete and Green Streets principles into all existing and future plans, manuals, checklists, decision-trees, rules, regulations, and programs including, but not limited to, the Capital Improvement Program and annual road program.

## 10. Implementation steps

- 10.1. Senior staff of Police, Public Works, Capital Projects, and Planning shall attend monthly meetings of the Transportation Advisory Committee which includes City Council-appointed representatives of each of the following: 1. Bicycling; 2. Pedestrians; 3. Transit users; 4. Disabled persons; Educational community within the Cleveland Heights-University Heights School District; Business community; and the Regional Transit Authority. The Transportation Advisory Committee per Ordinance 175-2013 shall make recommendations to City Council on conceptual and construction plans to improve transportation by modes which are alternatives to automobiles.
- 10.2. The Department of Public Works, the Planning Department, Capital Projects, and other applicable departments and the Transportation Advisory Committee will annually review current design standards to ensure that they are the best available resources.
- 10.3. The Planning Department shall annually review the Zoning Code and recommend amendments that fully support the City's Complete and Green Streets' Vision.
- 10.4. The City shall fund and encourage staff professional development and training to be fully conversant about Complete and Green Streets issues including motorized and non-motorized transportation conferences, classes, seminars, and workshops. Staff working on such projects shall attend at least ten hours of continuing education and/or documented research on best practices. City staff shall provide educational opportunities for City boards, committees and commissions, business districts, schools, and other institutions so that everyone understands the importance of the Complete and Green Streets Vision.

- 10.5. Transportation planning and engineering consultants shall be selected only if they are leaders in implementation of cost-effective, practical projects that created Complete and Green Streets consistent with this City's Vision and Intent.
- 10.6. City staff of Capital Projects, Public Works, and Planning shall identify all funding sources for street improvements and evaluate every upcoming project as an opportunity for a Complete and Green Streets project. The Office of Capital Projects shall be responsible for adherence to the Complete and Green Streets policy. The City Manager shall oversee Capital Project's adherence.
- 10.7. The City Manager and staff shall promote inter-departmental project coordination among City departments with an interest in the activities that occur within the public rightof-way.
- 10.8. City staff of Capital Projects Public Works, Planning, and Community Services shall create a community engagement plan with specific strategies for when and how public engagement will occur and with whom. Effective strategies include enlisting survey helpers from the group whose input is sought, holding public meetings at accessible times and places, collecting input at community gathering spaces (such as school and City playgrounds, parks and libraries) and hosting and attending community meetings and events coincident with people's daily routines. Input should be augmented by easy-to-use, online methods of participation, like the MetroQuest survey for the University Circle-Cleveland Heights Bicycle Network Study. Outreach would include the City email newsletter, social media and neighborhood emailing systems such as Next Door.
- 10.9. City staff shall actively share and promote best practices and continuation of Complete and Green Streets in neighboring cities to improve Cleveland Heights residents' access to destinations beyond our borders
- 10.10. Every Complete and Green Streets project shall include an educational component to ensure that users of the transportation system understand and can safely use a project's elements.

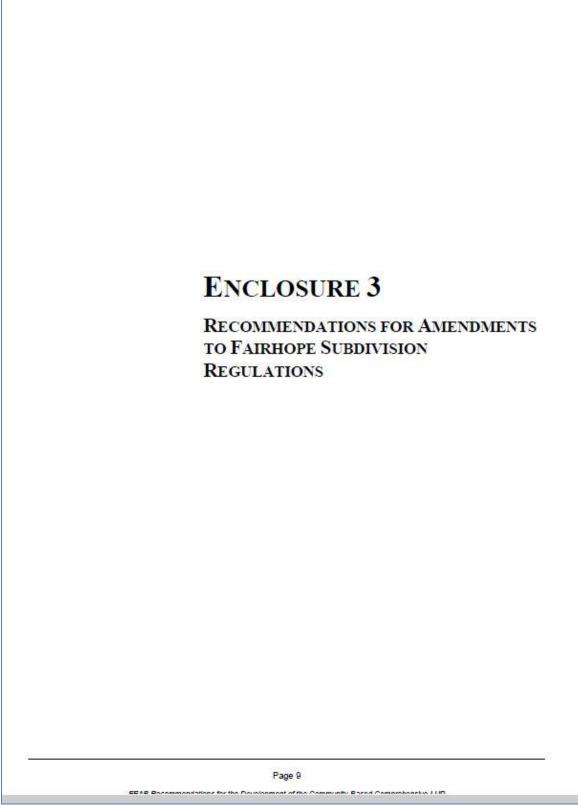


Figure 65 FEAB Land Use Plan Comments

## 1. CHANGE STORMWATER STANDARDS:

- a. Pg. 59: Flow Control Scope of Design ADD: STORMWATER FACILITIES AND CONVEYANCE SYSTEMS SHOULD ATTENUATE STORMWATER VOLUME, VELOCITY, AND PEAK FLOW FROM THE OUTLET OF THE SITE SUCH THAT POST DEVELOPMENT FLOWS ARE EQUAL TO OR LESS THAN PRE-DEVELOPMENT FLOWS FOR THE 2-YEAR THROUGH 100-YEAR STORM EVENT.
- b. MAKE STORM EVENT REQUIREMENTS CONSISTENT, OR DESCRIBE THE INTENT BEHIND A DIFFERENT REQUIREMENT FOR EACH FACILITY. PRESENT REGULATIONS ARE VERY INCONSISTENT. EXAMPLES INCLUDE:
  - PAGE 59: 5 A.

1. CULVERTS 25 YEAR STORM EVENT

- DRAINAGE SYSTEMS WITHIN SUBDIVISION 2 25 YEAR STORM EVENT
- 3. BRIDGES 50 YEAR STORM EVENT
- 4. CALCULATION OF STORMWATER FLOWS 25 YEAR / 24 HOUR
- ii. PAGE 63 (3)
  - DETENTION AND RETENTION FACILITIES 2 YEAR TO 100 YEAR + 100 YEAR PEAK DISCHARGE
- iii. PAGE 66
  - 1. (H) STREAMBANK PROTECTION 2 YEAR STORM EVENT
  - (H) 1: DOWNSTREAM POST DEVELOPMENT VELOCITIES 2, 5, 10, 25 YEAR STORM EVENT
  - (H) 3: STREAMBANK PROTECTION 1 YEAR, 24 HOUR RAINFALL EVENT (4.5")
- 2. THE TERMS DESCRIBING STORMWATER FLOW CHANGE THROUGHOUT THE STORMWATER REGULATIONS. MORE CONSISTENCY WOULD REDUCE AMBIGUITY. EXAMPLES:
  - a. STORM FREQUENCY
  - PEAK DISCHARGE
  - c. ADD 24 HOUR RAINFALL
  - d. STORMWATER VOLUME AND VELOCITY
  - e. FLOOD HEIGHTS / ELEVATIONS
  - f. DESIGN STORMS
  - g. RECURRENCE INTERVALS
  - h. TOTAL RUNOFF VOLUME
- 3. CONTRADICTORY OR MISSING LANGUAGE:
  - PAGE 56 C. (3): UNDER-SIZING SHOULD INCLUDE "ON PRIVATE PROPERTY"
  - PAGE 57 4 (D): ALLOWABLE USES IN THE BUFFER SHOULD NOT INCLUDE "PAVED ROADWAYS".

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c. PAGE 62 7 (A): "ANOTHER IMPACT OF NEW DEVELOPMENT IS AN INCREASE IN THE TOTAL RUNOFF VOLUME OF FLOW". POST FLOW SHOULD NOT EXCEED PRE-FLOW.

## 4. COUNTY VERSUS CITY SUB REGS

- a. WITH SB-107 LAW SHRINKING THE CITIES CODE ENFORCEMENT GEOGRAPHY STEPS MUST BE TAKEN TO ENSURE THE HIGHEST STANDARD IS MET. THIS CAN BE DONE BY ALIGNING MUNICIPAL REGULATIONS WITH UPGRADED FAIRHOPE SUBDIVISION REGULATIONS.
- NEGOTIATIONS WITH THE COUNTY COUD ALSO RESULT IN UPGRADES.
- FAIRHOPE SHOULD SUPPORT LOCAL COUNTY ZONING INITIATIVES.

#### 5. SURFACE WATER AND WETLAND BUFFERS

- a. CITY OF FAIRHOPE BUFFER REQUIREMENTS IN THE SUBDIVISION REGULATIONS ARE "30 TO 100 FEET AROUND WATER BODIES AND WETLANDS." THIS SHOULD BE CHANGED TO 100 FEET FOR ALL.
- b. BUFFER AREAS FROM WETLANDS SHOULD BE MEASURED HORIZONTALLY FROM THE WETLAND DELINEATION LINE.

#### 6. GREEN SPACE

- a. MINIMUM PER LOT GREEN SPACE REQUIREMENTS SHOULD BE SET TO DISTRIBUTE GREEN SPACE THROUGHOUT A SUBDIVISION. PRESENTLY, GREEN SPACE REQUIREMENTS ARE FOR NET DENSITY OF A SUBDIVISION, AND THE EFFECT (TREELESS LOTS WITH A SEQUESTERED STORMWATER FEATURE) IS CONTRARY TO THE CHARACTER OF OUR CITY.
- b. IF GREEN SPACE IS TO BE CONCENTRATED IN ONE AREA, I.E., FOR THE PROTECTION OF A LARGE CONSERVATION AREA OR DEVELOPMENT OF A GREEN COMMUNITY PARK AREA, THE CITY WOULD CONSIDER A TRANSFER OF DEVELOPMENT RIGHTS THAT MAY REDUCE (BUT NOT ELIMINATE) REQUIRED PER-LOT SIZE AND PER-LOT GREEN SPACE MINIMUM REQUIREMENTS. HOWEVER, PERPETUAL CONSERVATION AND MAINTENANCE OF COMMUNITY GREEN SPACE WOULD BE REQUIRED.

## 7. TRAFFIC

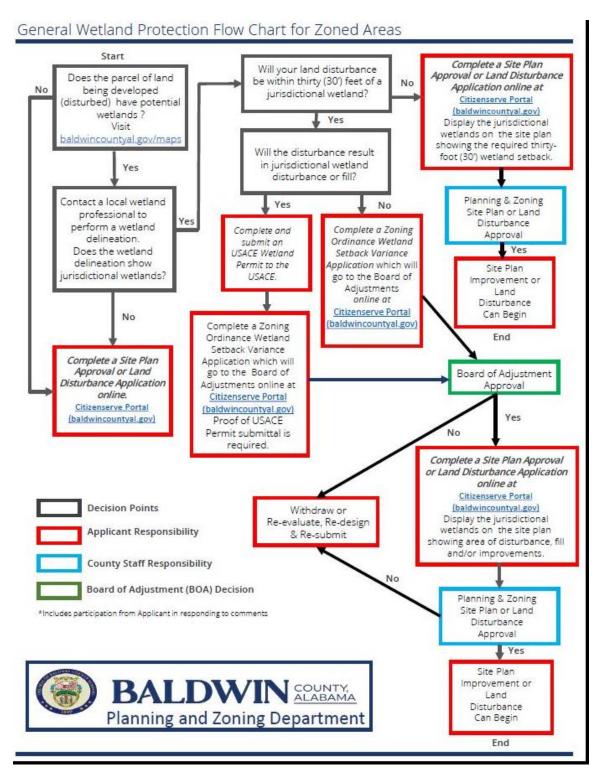
A. EVALUATION OF THE INFLUENCE OF A NEW SUBDIVISION ON TRAFFIC FLOW AND CONGESTION SHOULD BE A MORE DOMINATE FACTOR IN THE APPROVAL PROCESS AND SHOULD BE PART OF THE SUB REGS.

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Figure 67 FEAB Land Use Plan Comments

## Other business:

1. Mike shared a flow chart from the Baldwin County Environmental Advisory Committee (draft, for county zoned properties only):



- 2. Kim gave a brief description of the City project in Big Mouth Gully at Oak & Church Street. This is an emergency watershed protection / NRCS project headed up by Public Works, Richard Johnson. It is also a drainage upgrade for the Church Street project.
- 3. Nigel would like to be removed from parking committee discussions.

Meeting adjourned at 4 p.m.

Next meeting is Friday, March 11, 2022 @ 2:30 p.m. @ Library Board Room \*This will also be the Special Meeting with FEAB, Mayor and Staff\*

## FEAB CONTACT INFORMATION:

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