ENVIRONMENTAL ADVISORY BOARD

The Environmental Advisory Board of the City of Raleigh held a meeting on Thursday, February 23, 2017 at 5:00 p.m. in Room 303, Raleigh Municipal Building, 222 West Hargett Street, Avery C. Upchurch Government Complex, Raleigh, North Carolina, with the following present:

BOARD MEMBERS	**STAFF**
Anya Gordon, Chair	Megan Anderson, Sustainability Manager
Rob Gelblum, Vice Chair	Cindy Holmes, Assistant Sustainability Manager
Beverly Clark	Tansy Hayward, Assistant City Manager
Aranzazu Lascurain	David Eatman, Raleigh Transit Authority
Laurel Passera	Wayne Schindler, PRCR Department
Larry Larson	Leslie Bartlebaugh, Urban Design Center
Brian Starkey	Beth Nooe, Urban Design Center
Dave Toms	Sally Thigpen, PRCR Department
	Gretchen Sedaris, PRCR Department
	Diane Sauer, PRCR Director

ABSENT	**VISITORS**
Justin Senkbeil	April Hamblin, NCSU student
	George Matthis, RiverGuardian Foundation

I. Call to Order

Ms. Anya Gordon, Chairperson called the meeting to order at 5:07 pm.

II. Approval of Meeting Minutes

The minutes were approved as written after some discussion from Rob Gelblum about amending his motion from the prior meeting.

III. Public Comment

April Hamblin, a student in Entomology from NC State University was present and spoke about mapping pollinator gardens throughout the city and her interest in native bee habitats.

George Matthis, of the RiverGuardian Foundation also provided public comment at the meeting.

IV. Presentations

a. Update from Transportation

David Eatman, Transit Administrator, provided a PowerPoint Presentation on alternative fuels as busses are added and replaced in the City Transit Fleet. The report included information on the efforts for diversification of the bus fleet fuel types and technologies (Diesel, Compressed Natural Gas/CNG, Electric, Battery), and the infrastructure required with each type; the need for facilities upgrades; short term 5 years and long term 25 year plans. Tansy Hayward, Assistant City Manager updated the board on the plans to generate CNG as a renewable resource at the Neuse River Resource Recovery Facility. The board members discussed the different alternative fuel options in the future for the fleet. The PowerPoint presentation is attached as part of the minutes.

b. Pesticide Use Policy

Wayne Schindler, Assistant Director Parks, Recreation and Cultural Resources Department provided a PowerPoint Presentation on the use of pesticides and chemicals by the City of Raleigh and the policy measures in place to protect those who apply and are exposed to the pesticides. He reviewed the components of a successful policy and the reasons for adherence to the policy. He stated that the COR policy is recognized as a model by the NC Department of Agriculture. Training and licensing is required of staff as well as those contracted by the COR to provide services. The Public Utilities Department and the Transportation Department currently do not have the same program in place, but are evaluating the Parks & Recreation program. The board members had a brief discussion of the presentation. The presentation is attached to the minutes.

c. Pollinator Activities

A brief overview of the different pollinator activities taking place in the City was provided. Leslie Bartlebaugh presented information on the different species of pollinators, trees and turf being planted in FEMA properties for the stabilization of the bee population. Their goal is to promote projects to be replicable within the communities and agencies, along stream banks and bridges. Beth Nooe discussed the pollinator garden that will be part of the Union Station project. NCDOT is also working to include habitat plans along 7 interchanges as part of the Fortify project. The Public Utilities Department is planting sunflower fields, white clover, buffers and native species.

d. Bee City Update

Megan Anderson discussed the staff review of the BeeCity information, the resolution template and an upcoming discussion with the Parks and Recreation board on this topic. A follow-up report will be brought back to EAB.

V. Staff Report(s)

a. Community Survey Update –The results of the Citizen Survey are now available and posted to the city website. Some of the highlights are that 91% of respondents rated the City of Raleigh as an excellent place to live and 68% felt the quality of services provided are very good. Board members were encouraged to view the complete results online.

b. Vista Introduction– Grace Levin was introduced as the AmeriCorps Vista that will begin working with the Office of Sustainability in March on the Greenhouse Gas Emissions and energy efficiency project.

VI. Other Business/Announcements - None

VII. Environmental Awards Ceremony Discussion

The board members discussed the upcoming Environmental Awards Ceremony. Larry will serve at the Jury Chairperson again this year. Members were reminded that March 9,

2017 is the Jury event. The board discussed fundraising outreach and Anya suggested the need to double what was raised in 2016. The Communication Department will be creating a video about the Environmental Awards program. The video will take the place of a keynote, and the Mayor will share some program highlights.

With no further business, and a motion by Rob seconded by Dave, the meeting was adjourned at 7:15 PM.

Respectfully Submitted,
Jeanna L. Benoy

Attachments:
GoRaleigh Presentation
PRCR Pesticide Management Presentation

GO Raleigh

Alternative Fuels

Environmental Advisory Board

February 23 2017

Strategic Plan
Transportation & Transit

Objective 4 - Establish Raleigh as the leader in transportation innovation

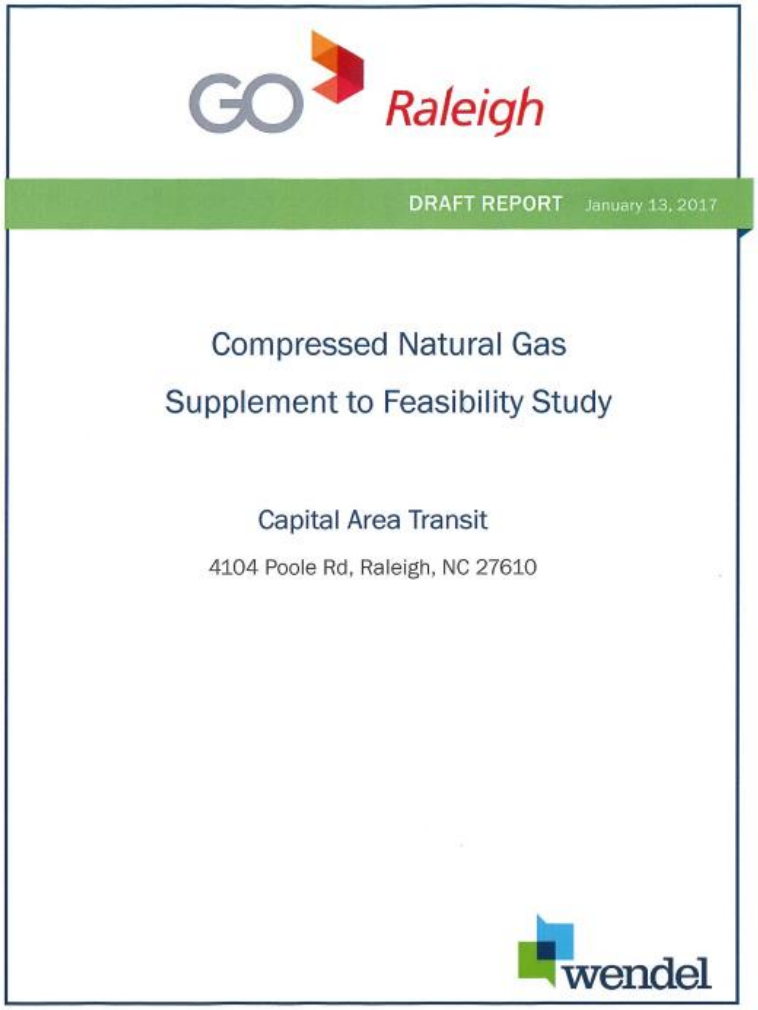
Initiative 4.2 - Examine and plan for alternative fuel technologies for transit services

GO Raleigh

GoRaleigh CNG Conversion

Key Assumptions

- 75% of existing fleet
- 25% of fleet available for Zero Emission Technologies
- EPA's median fuel projections used
- Does not include one-time infrastructure improvements


GO Raleigh

DRAFT REPORT January 13, 2017

Compressed Natural Gas

Supplement to Feasibility Study

Capital Area Transit

4104 Poole Rd, Raleigh, NC 27610

wendel

GoRaleigh CNG Conversion - 75%

- Conversion of the GoRaleigh transit fleet to CNG operations provides positive environmental benefits and potential cost savings, e.g. 20% less CO_2, 70% less CO
- 25 Year Projected Fuel Savings: $23 Million (existing fleet)
- 25 Year Projected Capital Costs: $4.5 Million (existing fleet)
- 25 Year Net Savings Projected (EPA)
  - Low ($6.8) Million
  - Medium $18.5 Million
  - High $65.3 Million

GO Raleigh

GoRaleigh CNG Conversion

Maintenance Garage Upgrades – Poole Road

- The existing maintenance garage has very few items that need to be modified to become compliant for servicing and major repairs on CNG vehicles.
- $283,872 Opinion of Probable Cost

Fuel Facility Addition & CNG Station – Poole Road

- The existing complex has space for adding a CNG station.
- Fueling islands are expandable and can be modified to become compliant for fueling CNG vehicles.
- $4,707,538 Opinion of Probable Cost

**Fourth Compressor Add Option; Equipment Only $475,000*

GO Raleigh

GoRaleigh CNG Conversion – Cool Facts

A GoRaleigh transit bus operated on CNG eliminates an average of 10,300 gallons of B5 biodiesel annually

The net impact is an annual reduction of 20 metric tons of carbon dioxide (CO_2) per bus.

This is equivalent to the annual GHGE's from:

- 7.2 tons of waste sent to the landfill
- 21,484 pounds of coal burned
- electricity used for 2.8 homes for a year
- carbon sequestered by 513 tree seedlings grown 10 years

GO Raleigh

PRCR Pesticide Management Policy and Practice

Environmental Advisory Board Meeting

February 23, 2017

Introduction

- Policy only applies to staff or contracted individuals applying pesticides on grounds managed by PRCR.
- Highway Division and Downtown Crew (Transportation Department)
- Public Utilities farm operations

Maintenance Responsibility and Magnitude

- Parks Division tasked with maintenance of over 10,000 acres of parkland, greenway and public open space.
- Staff Resource: 189 in division; 98 directly involved in grounds maintenance; 22 staff apply pesticides.

Maintenance Responsibility and Magnitude

- Public expectation for well-maintained, safe and aesthetically pleasing grounds.
- This is balanced against…

Maintenance Responsibility and Magnitude

- Environmental stewardship of our natural resources.

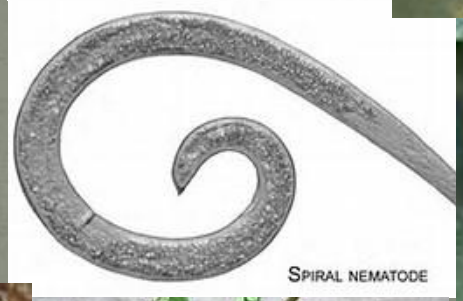
Natural habitat

Milkweed: Monarch butterfly habitat

Invasive management

- Pesticide types:
  - Insecticides, fungicides, herbicides, algicides, rodenticides, miticides, fumigants, nematicides, acaricides, molluscicides, defoliants, etc.

- PRCR policy limits use to primarily herbicides and a few insecticides for fire ant control. Exceptions are greenhouse operation and contractual applications at the Raleigh Rose Garden.



Integrated Pest Management (IPM)

- A comprehensive approach to pest management including biological, cultural, mechanical and chemical controls.
- The use of a combination of methods to prevent pest damage from exceeding acceptable levels.
- Limiting the use of pesticides and exploring alternatives where possible, taking into consideration public health and safety, environmental stewardship, budgetary and staffing constraints, and the need and desire of the public to have well-maintained grounds and facilities.

Components of a Successful IPM Program

- A Knowledgeable Manager
  - Understanding the biology, ecology, and pest behavior.
- IPM Through Design (Pre-Practice)
- IPM Methodologies (Post Practice)
  - Identify specific locations, targets, pest threshold levels, environmental hazard potential, set limits, outline control practices including biological, cultural, mechanical and chemical controls.
- A Pesticide Management Policy
  - Approved policies and practices related to the use of pesticides.
- Pest Problem Identification
  - This is critical to provide appropriate response.

Components of a Successful IPM Program

- Setting Tolerance Levels and Thresholds
  - Comparing current conditions to tolerance levels and determine if thresholds have been exceeded prior to treating.
- Monitoring Pest Activity
  - Monitoring to determine what pests are present and assessing for presence of environmental conditions that would promote pest problems.
- Recordkeeping
  - Maintaining complete and accurate records are important to the success of an IPM program.

Reasons for a Pesticide Management Policy

- Confirmation of agency philosophy on pesticide use.
- Adherence to laws, standards and best practice:
  - GHS standards, EPA, FIFRA, State requirements
  - THE LABEL IS THE LAW
- Identify pesticides, targets, and application locations
- Application equipment and use; pesticide storage and transport; public notification; application site closure and re-entry period; and pesticide spill management.
- Constant Oversight (Pesticide Core Team)
- Documentation, monitoring, accountability.

City of Raleigh Parks, Recreation and Cultural Resources

Pesticide Management Policy

Landscape and Grounds

Revised January 2016

DRAFT DOI

Recognized as a "model" policy for public operations by the State of North Carolina Department of Agriculture and Consumer Services, Pesticide Section.

Routine inspections conducted by a State Pesticide Inspector: greenhouse/nursery operation and general operations.

Table of Contents

A	Purpose	Page 4
B	Policy Requirements and Practices	Page 4
C	Definitions	Page 6
D	Departmental Qualified Pesticide Applicator Requirements	Page 10
E	Pesticides	Page 15
F	Pesticide Application Procedures	Page 19
G	Pesticide Spill Procedure	Page 21
H	Contractor and Non-Departmental Pesticide Application	Page 24
I	Neuse River Buffer Rules Internal Guidelines	Page 24
J	Violations of Policy	Page 26
K	References and Resources	Page 27

Pesticide Management Policy Appendix
(attachment)

A. Approved List of Pesticides
B. Pesticide Application Sites
C. Qualified Applicator and Spotter List
D. Pesticide and Application Report
E. Pesticide Distribution Record
F. Invasive Species List

Above and Beyond State Law Requirements

- Established Pesticide Core Team
- All Applicators Trained and Licensed by the State
- In-house Training and Certification Program
- Comprehensive Recordkeeping
- "State of the Art" Pesticide Storage Facility
- Use of Spotter during application

Above and Beyond State Law Requirements

- Pesticide Application Records for all pesticides – required by law only for Restricted Use Pesticides (RUP's)

- Pesticides applied are General Use (unclassified)

Friday, July 22, 2016 05:35 AM City of Raleigh Cemetery 9919-831-8199 p.C1

DAILY PESTICIDE APPLICATION REPORT

Date: 07/19/2016
Time Started: 8:30 am
Time Ended: 3:30 pm

Weather Conditions: ☐ Sunny ☑ Partly Cloudy ☐ Overcast
Wind Speed (mph): Actual: 3.7
Forcasted High Temperature Degrees (°F): 93
Rain Chance %: 0%

Applicator(s): Nethercot, Laura
Spotter(s): Thomas, Peter
District: Pullen
Park / Location: PULLEN NORTH
Pullen - Zone 19
Pullen - Zone 21

Treatment Targets(s) *(Please check all that apply)*

☑ Landscape Beds ☑ Tree Rings ☐ Turf ☐ Guardrails
☐ Concrete Medians ☐ Fence Lines ☑ Sidewalks, Curbs, Gutters
☐ Unit Paver Area ☐ Bollards ☐ Infield
☑ Gravel Lot, Trail, Strip or Area
Other:

☑ **Equipment Inspected**

Target Area Location(s) *(describe)*
Bank between Valley and Upper Infield Entrance way to Northside. Mulch bed at Art Gr parking lot and perennial beds

Pesticide(s) Used/Container Number(s)/Rate(s) ONE Chemtracker per box
(Rate Units shall be either: ozgal, lb/ac, lb/gal, oz/round, grams/gal)
*(** when using multiple partial containers ONLY indicate amount from each container **)*

Product Name:	ChemTracker ID	Rate Unit
Aquaneat	AQT 16-5	2 oz per gallon
Surf AC 820	SFA 16-21	1/3 oz per gallon
Prosedge	PRO 16-30	.9 grams per gallon

Sprayer Used (Specify Type/Numb.): PULSPX
Supervisor's Initials: DSM
Total Amount Gallons Mixed or Granular Product Applied: 15 gallons

Truck Mounted/Self Contained Unit Only
Tank Size (gal): Boom Length (ft.): Nozzle Spacing
Vehic. Spd (mph): Gallons/Acre: Pressure:
COMMENTS

Above and Beyond State Law Requirements

- Least Toxic or Reduced-Risk Pesticides:
  - "Caution" label (New Global Harmonization Standard SDS)
    - Caution is not a hazard rating only Warning and Danger

Other :

- Post-emergent:
  Spot treatment of pre-approved targets
- Pre-emergent:
  Reduce need for frequent post-emergent applications
- Organic products:
  Some efficacy w/ limitations (corn gluten, vinegar, citric acid, clove oil, etc.)

PRCR Pesticide Management Policy

- Summary:

- Based on IPM Principles
- Exceeds State requirements
- Model program in NC for public agencies
- Balances available resources, public expectation and environmental stewardship