



**Environmental Advisory Board**

**Tuesday, July 10, 2018**

**6:00 PM**

**Conference Room 10035**

**316 N. Academy Street, Cary Town Hall, Cary, NC  
27513**

- 1. Call to Order**
- 2. Adoption of Agenda**
- 3. Approval of Minutes**
  - 3.1 Environmental Advisory Board - Advisory Board Meeting - Jun 12, 2018 6:00 PM**
- 4. Public Comment**
- 5. Old/New Business**
  - 5.1 Annual Report**

Speaker: Rick Savage  
Members will have a work session to draft the annual report. Members are encouraged to review last year's annual report and be prepared to contribute to the discussion regarding this year's annual report.
  - 5.2 Tree Advisory Committee Update**

Speaker: Scott Merkle  
Members will receive an update regarding this topic. No advance preparation is required from members.
  - 5.3 Drawdown Book Discussion**

Speaker: Rick Savage, Caitlin Burke  
Members will discuss the chapter titled, "Land Use." Members are encouraged to review this section and be prepared to discuss.
- 6. Council Liaison Comments**
- 7. Chair Announcements**
- 8. Sustainability Update and Staff Liaison Comments**
- 9. Member Sharing**
- 10. Administrative Announcements**
- 11. Adjournment**

Please contact Sustainability Manager Emily Barrett  
at [Emily.barrett@townofcary.org](mailto:Emily.barrett@townofcary.org) or (919) 469-5125 with any  
questions about this agenda.

The Town of Cary is committed to providing all citizens with the opportunity to participate fully in the public meeting process. Any person with a disability who needs an auxiliary aid or service in order to participate in any meeting may contact the Town Clerk at least 48 hours prior to the meeting. The email address is [virginia.johnson@townofcary.org](mailto:virginia.johnson@townofcary.org); the phone number is (919) 469-4011; the TDD number is (919) 469-4012.

**Environmental Advisory Board**  
**Tuesday, June 12, 2018**  
**6:00 PM**  
**Jordan Lake State Recreation Area**  
**2582 Beaver Creek Road, Apex, NC 27502**

At Large Representative Patricia Barry: Absent, At Large Representative Caitlin Burke: Absent, At Large Representative Susan Lawson: Absent, At Large Representative Scot Merkle: Present, At Large Representative Rick Savage: Present, Technical Madhura Karnik: Absent, Partner Christina Trexler: Present, Partner Shweta Nanekar: Present, Patricia Cervenka: Present, Andrea Eilers: Present.

Others Present: State Park Ranger Derek Parsons, Wildlife Photographer Ellen Tinsley, Deputy Town Manager Mike Bajorek, Staff Liaison Emily Barrett, and Deputy Town Clerk Brittany Strickland.

**1. CALL TO ORDER**

Savage called the meeting to order at 6:04 pm.

**2. ADOPTION OF AGENDA**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Scot Merkle, At Large Representative
<b>SECONDER:</b>	Andrea Eilers
<b>AYES:</b>	Merkle, Savage, Trexler, Nanekar, Cervenka, Eilers

**3. APPROVAL OF MINUTES**

**3.1** Environmental Advisory Board - Advisory Board Meeting - May 8, 2018 6:00 PM

<b>RESULT:</b>	<b>ACCEPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Scot Merkle, At Large Representative
<b>SECONDER:</b>	Shweta Nanekar, Partner
<b>AYES:</b>	Merkle, Savage, Trexler, Nanekar, Cervenka, Eilers

**4. PUBLIC COMMENT**

No one spoke.

**5. OLD/NEW BUSINESS**

**5.1** Jordan Lake Introduction  
 Speaker: Derek Parsons, State Park Ranger, NC State Parks

Derek Parsons provided the following information regarding Jordan Lake State Park:

- Between 1.5 – 1.7 million people visit Jordan Lake annually.
- There are 1,100 campsites at Jordan Lake.
- Jordan Lake covers almost 14,000 acres.
- Jordan Lake is federally owned land and the state leases it through the federal government.
- Jordan Lake was created for flood control.

**5.2** Bald Eagles at Jordan Lake  
 Speaker: Ellen Tinsley, DVM and Wildlife Photographer

Ellen Tinsley shared the following information regarding bald eagles at Jordan Lake:

- We have one of the largest eagle populations.
- We currently have 20 active nests.
- Approximately 60 year-round eagles take residence at Jordan Lake.

- Like people, eagles benefit from a clean environment.

**5.3** EAB Annual Report  
Speaker: Rick Savage

Savage stated that Barrett will provide members with last year's annual report. He encouraged members to review last year's report and be prepared to contribute to this year's annual report. He added that the report needs to be completed by the September 4<sup>th</sup> meeting.

**5.4** Bloomberg Philanthropies' 2018 Mayors Challenge  
Speaker: Mike Bajorek

Deputy Town Manager Mike Bajorek distributed a questionnaire to members attached to and incorporated herein as **Exhibit A**. He asked members to fill out the questionnaire and later provide feedback on the questions asked in the questionnaire.

Bajorek stated that soon after Thanksgiving 2016, the Town of Cary Fire Chief walked into a Department Director's meeting and announced that his staff responded to 5 opioid-related overdoses. He explained that 7 months later, Cary was named a Champion City by Bloomberg Philanthropies. He explained that Bloomberg Philanthropies awarded the Town \$100,000 to implement its innovative plan to generate opioid consumption data by measuring concentrations of opioid metabolites in sewage.

Bajorek explained that Cary will work and contract with Biobot Analytics, a company that provides opioid testing and data analytics services, to measure the concentration of various opioids in wastewater. He explained that the plan is to measure opioid concentration levels in smaller more distinct areas. Bajorek stated that once we get the chemical analysis for a specific location, we have the demographics for that area and people can start looking for correlations.

Bajorek stated that as an organization, Cary has always been driven to be the foundation for a strong and healthy community. He explained that this project will provide family and friends with actual data which will hopefully get people to start talking about the opioid issue. He added that this project will help create a healthier community by transforming how public health officials get and transport data. Public health officials are making decisions based on retroactive data, but the results from this project will give health officials real-time data.

Bajorek stated that it is important to carry on conversations throughout the community. He added that the Town of Cary Fire Department is being trained on key messages about prescription misuse and opioid addictions. The goal is to have our firefighters help to get the message out in the community.

Bajorek provided a handout attached to and incorporated herein as **Exhibit B**. The handout provided members with information on Cary's opioid response project. Bajorek encouraged members to reach out to him to provide additional feedback.

A member agreed with Bajorek about the positive impact of bringing people together and educating one another on community issues.

**5.5** Straws Documentary Screening  
Speaker: Patty Cervenka

Cervenka stated that Towards Zero Waste bought the rights to show the documentary, *Straws*, and the Cary Theater provided the venue to show *Straws*. She stated that the goal is to have the community view the documentary and become aware of plastic waste. She added that it is a goal to have restaurants involved to reduce the usage of straws.

Cervenka announced that the documentary screening event is sold out. She stated that there will be a panel discussion immediately following the screening.

Barrett mentioned that the Cary Theater is going to showcase quarterly environmental film series.

Cervenka stated that there is interest in requesting a proclamation from the Town recognizing July as “straw free month” in the Town of Cary.

**5.6 Drawdown Book Discussion**  
Speaker: Andrea Eilers, Shweta Nanekar

Nanekar provided members with a handout attached to and incorporated herein as Exhibit C. The handout provided an overview of the items discussed in the chapter titled, “Transport.” Nanekar and Eilers discussed ways Cary could implement many of the ideas discussed in the chapter.

Savage mentioned creating a guideline to refer to for next steps after members have read and discussed the last two chapters.

**6. COUNCIL LIAISON COMMENTS**

No update.

**7. CHAIR ANNOUNCEMENTS**

No update.

**8. SUSTAINABILITY UPDATE AND STAFF LIAISON COMMENTS**

Barrett announced that the Environmental Defense Fund reached out to Mayor Weinbrecht and invited Cary to be a part of the Environmental Defense Fund Cities Initiative, an initiative to bring together cities in North Carolina that have committed to reducing carbon emissions. She stated that the first meeting is scheduled for July and the elected officials will be invited to a meeting in November.

Barrett announced that the Southeast Sustainability Directors Network has a relationship with a private funder called The Kendeda Fund who has started a grant program through the Southeast Sustainable Communities Fund. She stated that she will be finalizing Cary’s letter of intent to apply for a grant to enrich some of our adaptive stormwater efforts to include outreach to the renter population in Walnut Creek watershed. Staff will find out if the Town will be invited to apply for the funding in late July.

**9. MEMBER SHARING**

No one spoke.

**10. ADMINISTRATIVE ANNOUNCEMENTS**

Strickland reminded members that the application period for the Advisory Boards, Commissions and Committees closes on June 30<sup>th</sup>.

**11. ADJOURNMENT**

The meeting was adjourned at 8:07 pm.

<b>RESULT:</b>	<b>ADJOURNED [UNANIMOUS]</b>
<b>MOVER:</b>	Christina Trexler, Partner
<b>SECONDER:</b>	Scot Merkle, At Large Representative
<b>AYES:</b>	Merkle, Savage, Trexler, Nanekar, Cervenka, Eilers

# TOWN of CARY

## Building A Healthy Community



Please check all that apply:

I know someone who has been impacted by the misuse of opioids.

I know someone who has misused opioids.

I have a loved-one who has misused opioids.

I have misused prescription opioids.

I have misused illicit opioids.

I know someone who has died from an opioid-related overdose.

Please answer the following questions on a scale of 1 (strongly disagree) to 5 (strongly agree).

1. There is an opioid problem in my community.

1 2 3 4 5

2. Opioid misuse is growing in my community.

1 2 3 4 5

3. People in my community are aware of the opioid epidemic and its impacts.

1 2 3 4 5

4. There are sufficient resources in my community to fight the opioid epidemic.

1 2 3 4 5

5. I openly talk about opioids and the opioid epidemic openly with members of my community.

1 2 3 4 5

6. I would like to have a better understanding of the prevalence of opioids in my community.

1 2 3 4 5

Please provide any additional comments

I have heard about wastewater monitoring in Cary prior to this questionnaire.

Yes

No

If you are interested in updates on this project please include your name and email here.

Name \_\_\_\_\_

Email \_\_\_\_\_

## CARY'S OPIOID RESPONSE PROJECT

### THE PROBLEM

The misuse of prescription drugs and the increasing availability of synthetic opioids have led to a dramatic increase in overdose deaths.

- The STIGMA associated with the mis-use of prescription drugs is strong. The failure to talk about the extent of the problem in our neighborhoods hampers the use of some highly effective and easily implemented practices ... and is literally killing people.
- The data Public Health officials use to develop programs are REACTIVE, STALE, and over LARGE AREAS which makes it difficult to implement dynamic, effective programs.

### OUR IDEA

Measure the concentration of various opioid metabolites in wastewater from distinct geographic areas with populations ranging between 4,000 – 16,000.

- Number of mg/day/person and doses/day/1,000 people
- Better understand community level opioid trends
- Add datasets (demographics, other data) currently available for distinct area
- Near real time (two weeks turn around)
- Aggregated wastewater sample makes personal information de-identifiable

### WHAT DO WE HOPE TO ACCOMPLISH?

Use the data to facilitate community conversations to increase the awareness about the misuse of prescription drugs in Cary and the tragic results.

Provide easy and effective practices to help curb the mis-use of prescription drugs.

Through working with our data analytics and predictive modeling partners (Biobot Analytics, SAS, and RTI), develop new insights and patterns that will transform the way Public Health Officials evaluate/develop programs and allocate funds.

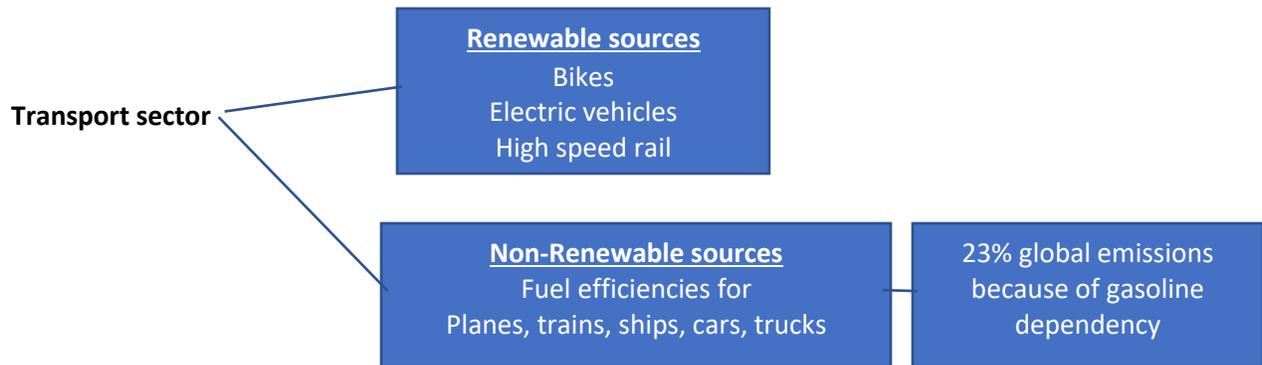
Develop baseline chemical analyses from 10 distinct geographic areas in Cary. With additional funding, expand project throughout NC into more urban and rural areas.

### WHY ARE WE DOING THIS?

Mayor Weinbrecht has challenged the community to take a PRO-ACTIVE approach: "We have the people, the resources and the commitment to make a difference."

- Another example of how Cary is using technology and "smart" city practices to create a stronger, healthier community.
- 11 overdose deaths (46 total overdoses) in 2017  
Over 40% of all solved robberies in Cary were drug related in 2017.

## TRANSPORT



### MASS TRANSIT

- Could be buses or trains
- Example of Brazil: Bus Rapid Transit System- Shared streets with dedicated lanes
- US ridership is only 5% compared to London, Singapore and other developing countries
- Benefits of Mass transit
  - o Reduction in traffic congestion
  - o Reduction in Air pollution
  - o Social equity
- Challenges
  - o Density
  - o Seamless transition between different modes
  - o Behavior change
- What can Town of Cary do?
  - o Look for more seamless integration of modes of transportation
  - o Who are the users?
  - o Who could be the users?
  - o Travel to Raleigh/ Durham/ Chapel Hill/ RTP? Express routes?
  - o Frequency?
  - o Nothing from West Cary yet, though the routes are in plans.

### HIGH SPEED RAIL

- Powered exclusively by electricity
- Benefits
  - o Fastest way of travel alternative to flying
  - o Carbon emission reduction by 90%
  - o Smart growth development will result in more environmental, social, and health benefits
- Challenges
  - o Costs

- Density
- What can Town of Cary do?
  - Support for the light rail
  - Get update on development plans as they will relate to new light rail
  - Build vision for more sustainable development

### **SHIPS**

- Most efficient way of transporting materials
- Energy efficient design index (EEDI) for “safe and clean” ships building
- Sustainable Shipping Initiative- partnership between shipping companies
- Benefits
  - Economics
  - Human health
  - Aquatic life health
  - Environment and climate
  - Air quality
- What can Town of Cary do?

### **ELECTRIC VEHICLES**

- 2/3 of world’s fuel consumption by cars and trucks
- Considerable cost savings with hybrid and electric vehicles compared to gasoline fueled.
- 95 % carbon reduction if solar powered
- More demand will help reduce costs and create more efficiencies
- 30% Government vehicles to be non-polluting – US mandate
- Benefits
  - All environmental, economic benefits
  - Less dependency on fossil fuels
- Challenges
  - Range of travel
  - Charging stations
  - Only 35 electric models?
- What can Town of Cary do?
  - Outreach about government efforts
  - Advertise new projects where charging stations are installed like Whole Foods in West Cary
  - Promote more developments to do the same
  - Does ToC has charging stations for employees?

### **RIDESHARING**

- Adopt technology through smartphone apps
- Combine with mass transit?
- Develop trust and reliability because of perceived safety risks

- When fuel is cheap, car pooling declines.
- Encourage ridesharing by
  - o Tax reduction
  - o Reduce tolls
  - o Parking fee reduction
- What can Town of Cary do?
  - o Encourage employees for carpooling?
  - o Encourage businesses to do the same
  - o Provide incentives for businesses
  - o Drop off services when needed as back up option

### **ELECTRIC BIKES**

- One of the most successful mode of transport that has all benefits
- E-bikes are easy on commuters for longer travels
- Speed cap at 20 m/hr
- E-bikes have higher emissions than regular bikes because of batteries but still efficient
- Challenges
  - o Expensive
  - o Environmental contamination with batteries
- What can Town of Cary do?
  - o Encourage use of bikes
  - o Publicize how ToC supports bikes and facilities that are bike-friendly
  - o Encourage new developments
  - o Dedicated lanes- striping is essential and so is separation from vehicles