

Basic Motions

Motion
Calls for Action
 Debatable
 Simple Majority

Motion to Amend
Changes Original
 Debatable
 Simple Majority

Other Motions

Table
Postpone Vote
 No Discussion
 Simple Majority

Close Debate
End Debate & Vote
 No Discussion
 2/3 Majority

Reconsider
Change Prior Decision
 Voted in Majority
 Within One Meeting
 Debatable
 2/3 Majority

Recess
Take a Short Break
 No Discussion
 Simple Majority

Consensus Process
If 1-Vote Majority
 Debatable
 3 Votes to Pass

Adjourn
End the Meeting
 No Discussion
 Simple Majority

Actions and discussion are governed by motions. Only 3 motions on the table at once (a 4th would be out of order). Most recent motion is considered first.

☐ Convene meeting + Reminder: Turn off Cell Phone

I. Roll Call/Quorum _____ Board Members (quorum = 4)

II. Pledge of Allegiance

III. Additions/Deletions/Approval of Agenda

IV. Approval of September 3, 2015 Minutes (Attachment A)

V. Announcements

VI. Public Comment Period

Public Comment Period is a period reserved for comments by the public. A total of 30 minutes is allocated with each individual being allowed no more than 3 minutes each. The Public Comment Period will be closed once the allocated time has been reached.

VII. New Business

- a. Election of Officers (10 mins) – D. Kimmel
- b. Street & Pedestrian Bond Information Presentation (15 mins) – S. Hawley
- c. 2016-2017 EAC Grant Discussion (10 mins) (Attachment B) – L. Kirby

VIII. Old Business

- a. Plastic Resolution Discussion (10 mins) (Attachment C) – D. Ames
- b. Earth Day & State of the Environment Subcommittee Formation Discussion (10 mins) – D. Kimmel

IX. Other – FYI

- a. Recycling Report (Attachment D)
- b. 2015-2016 EAC Grant – LAST Final Report (Attachment E)

X. Proposed Agenda Items – November 5, 2015

- a. 2016 Goals & Objectives
- b. Watershed Master Plan Update

XI. Adjourn

Items for Future Consideration

_____	_____
_____	_____
_____	_____

Board Members

Chair

1. Vacant (Chair)

Commission Members

2. David Ames
3. Emilie Kane
4. David Kimmel (Vice-Chair)
5. Ernest Larkin
6. Vacant
7. Vacant

Ex-officio

Kevin Mulligan
(Public Works)

Staff Liaison

Lisa Kirby
(Public Works)

City Council Liaison

Marion Blackburn

Environmental Advisory Commission Mission:

The Environmental Advisory Commission is hereby created for the primary purpose of recommending matters of environmental concern and serve as technical advisory to the City Council.

Environmental Advisory Commission Purpose:

- Inventory and review, on a continuing basis, the condition of threats to, the environmental resources of the City; and as technical advisors, to report all needs for improvement and corrective actions to the City Council.
- To be advisory to the City Council. The commission will recommend to the City Council matters of city-wide environmental concern and shall serve as technical advisors to the City Council on environmental matters. In addition, it will review Environmental Impact Statements required by the City on major development projects.

ATTACHMENT A

(September 3, 2015 Minutes)

Action: For your review and approval.

**DRAFT OF MINUTES PROPOSED FOR ADOPTION BY THE
ENVIRONMENTAL ADVISORY COMMISSION
September 3, 2015**

CALL TO ORDER

Members of the Environmental Advisory Commission met on the above date at 5:30 p.m. in the Council Chambers, City Hall. Dr. David Kimmel, Vice-Chairperson, called the meeting to order and welcomed all those present. The following attended the meeting:

1. ROLL CALL

MEMBERS:

David Ames
David Kimmel

Emilie Kane
Ernest Larkin

OTHERS PRESENT:

Lisa Kirby, City of Greenville
Amanda Braddy, City of Greenville
Daniel Sokolovic, Love A Sea Turtle
Christopher Horrigan, River Park North
Cheryl Tafoya, City of Greenville
Delbert Bryant, City of Greenville

2. PLEDGE OF ALLEGIANCE

Upon the completion of the Pledge of Allegiance, Dr. Kimmel requested a moment of silence to honor Mr. Harry Stubbs, FROGGS representative to EAC.

3. ADDITIONS/DELETIONS TO THE AGENDA

There were no additions or deletions to the agenda.

4. APPROVAL OF MAY 7, 2015 MINUTES

A motion was made by Dr. Larkin to approve the May 7, 2015 minutes as presented. The motion was seconded by Dr. Ames and passed unanimously.

5. ANNOUNCEMENTS

There were no announcements

6. PUBLIC COMMENT PERIOD

There were no public comments.

7. NEW BUSINESS

A. Membership and Officers

Dr. Kimmel stated Council Member Blackburn will present two new potential appointees to City Council at the September 10, 2015 Council meeting. Upon approval, the members should be present at the October 1, 2015 meeting of EAC. Dr. Kimmel suggested postponing the election of officers to the October 1, 2015 meeting as well. Dr. Kane made the motion to table elections and the motion received a second by Dr. Larkin. The motion passed unanimously.

B. 2016 Earth Day Events and Environmental Symposium

Mr. Sokolovic began by giving an update on the Love A Sea Turtle grant project funded by EAC. Mr. Sokolovic stated the Upstream Downstream Camp is complete. A total of approximately

1,900 individuals were served by this camp. Stormwater and water quality testing were some of the focal points of the camp.

Mr. Sokolovic also reported the Earth Day events will begin on April 16, 2016 at River Park North. Events will also continue through the week of April 18, 2016 with Earth Day being April 22, 2016. Mr. Sokolovic gave a brief overview of the anticipated events of the week. Dr. Kimmel asked what assistance EAC could give to assist with the Earth Day events. Mr. Sokolovic requested assistance from EAC in any manner possible but stated the resources most needed are monetary funds.

Dr. Larkin asked if the State of the Environment symposium discussed at previous meetings could be incorporated into the Earth Day 2016 events. Mrs. Kirby added the intent was to partner with events such as these and present information about the State of the Environment. Dr. Kane stated the formation of a subcommittee had also been discussed to address events that could be supported by EAC. Dr. Kimmel suggested adding the formation of the subcommittee to the October 1, 2015 agenda as more members would be available to service on the committee and determine the best course of action for the Commission in assisting with the Earth Day 2016 at River Park North.

C. Recycling Update Discussion

Mrs. Tafoya, City Recycling Coordinator gave a PowerPoint presentation detailing the City's Recycling Program. This presentation will be available with the September 3, 2015 meeting minutes. Mrs. Tafoya detailed the recycling efforts of the City as well as past initiatives to bring awareness of the need to recycle and increase recycling by citizens.

Mrs. Tafoya also stated a grant had been written in connection with Keep Greenville Beautiful for composting and upon completion of a short education and demonstration session citizens could obtain composting bins from the City.

Dr. Larkin directed attention to the recycling chart as presented monthly to EAC. Dr. Larkin asked what the graph represented. Mrs. Tafoya stated the graph was indicative of the percent of recycling diverted from the total refuse collected in a month. Dr. Larkin also asked if the City had considered mandatory recycling. Mrs. Tafoya stated this was not an option for the City at this time.

Dr. Larkin questioned recycling for commercial businesses within the City. Mrs. Tafoya stated laws that enforce recycling with commercial entities are in place by State law; however, private hauling companies are utilized by those commercial businesses to remove the recyclable materials.

Dr. Kane asked if recycling rates could be reported between the various locations such as single family versus multifamily dwellings to provide education, if needed, in those locations. Mr. Bryant responded recycling routes are divided by geographical areas and recycling is comingled. Therefore, the ability to separate the rate of recycling by single family and multifamily dwellings was not possible. Mr. Bryant stated education for either location would be the same due to household recyclable materials being the similar for both.

D. Keep Greenville Beautiful Update

The efforts of Keep Greenville Beautiful were combined with the Recycling Update Discussion in Item 7C above.

E. Town Creek Culvert Update

Mrs. Kirby reported the 90% plans for Town Creek Culvert have been received from the consultant for review by the City. The plan has been modified from the original request to include a Regenerative Stormwater Conveyance (RSC). This would provide more nutrient removal than the Stream restoration components as originally identified. Dr. Kane asked for more information

on the RSC. Mrs. Kirby stated RSCs are a series of step pools that will be placed between 3rd Street and 4th Streets that would increase nutrient removal.

Mrs. Kirby stated meetings were scheduled for stakeholders such as ECU, utility owners, and private property owners. The next public meeting will be held on October 6, 2015 at Sheppard Memorial Library. The project schedule has final plans due to the State for approval by December 2015. Execution of construction contracts are anticipated in August 2016 with a completion of construction within 24 months.

Dr. Kimmel asked the status of the stormwater stakeholders group. Mrs. Kirby stated that group was established to determine stormwater program improvements that could be instituted by the City and was not specifically related to the Town Creek Culvert project.

F. Watershed Master Plan Update

Mrs. Kirby reported the inventory is about 95% complete. Consultants have completed modeling of the existing system and are investigating capital projects. Preliminary water quality data is being collected from sampling of streams. Preliminary results show Swift Creek nitrates increase outside City limits and Greens Mill Run nitrates are significantly lower than Swift Creek.

The 2nd public meeting for the Watershed Master Plan is scheduled for November 2015. Citizens will be informed of the conclusions of results that were identified at the first public meeting. The Watershed Master Plan will be presented to City Council in March 2016. Dr. Larkin asked what will be presented to City Council. Mrs. Kirby stated the actual plan will be presented and will include recommendations on capital projects as identified by the plan. The projects will be separated into flood control projects, water quality projects, and stream restoration or bank stabilization projects.

Dr. Larkin questioned the role of EAC in the process of the plan. Mrs. Kirby stated EAC was instrumental in getting information to citizens for participation in surveys. Dr. Larkin also asked if EAC would be able to review the plan before presentation to City Council. Mrs. Kirby stated the final draft would not be available until January 2016. Dr. Larkin stated he felt EAC should review and be knowledgeable of the plan and support recommendations being identified. Mrs. Kirby will schedule the consultants to present current findings and summarize water quality information at the October 1, 2015 meeting.

8. OLD BUSINESS

A. Representative on the Comprehensive Plan Committee

Dr. Kimmel asked if anyone would be willing to serve on the Comprehensive Plan Committee. Dr. Kane stated she attended the kickoff meeting and would be agreeable to serve on the committee. Dr. Ames stated Council Member Blackburn asked if he would be interested in representing EAC on the committee; however, he did not object to Dr. Kane serving. Therefore, Dr. Ames made a motion to have Dr. Kane represent EAC on the Comprehensive Plan Committee and identify himself as an alternative if Dr. Kane was unable to attend. Dr. Larkin seconded the motion and the motion passed unanimously.

B. Plastic Resolution Discussion

Dr. Ames stated the resolution was endorsed by EAC at the May 2015 meeting and recommended City Council promote elimination or reduction in use of single use plastic bags. Dr. Kimmel asked if the resolution had been presented to Council. Mrs. Kirby stated EAC voted to move forward with the resolution at the May 7, 2015 meeting; however, the resolution was not approved by EAC in its final state.

Dr. Larkin asked if there was a plan to implement the recommendations within the resolution. Dr. Ames stated the steps had not been determined and would need to be finalized by EAC. Dr. Larkin stated a more specific recommendation be made by EAC to City Council by the resolution. Dr. Kimmel suggested the resolution be redistributed and a more definitive action be recommended.

Dr. Ames asked if City staff provide direction and implementation of the recommendations. Mrs. Kirby stated she felt the most advantageous approach would be to present the final version of the resolution to Keep Greenville Beautiful and other commissions or environmental groups to provide a stronger support base for presentation to City Council. Mrs. Kirby stated upon approval of the resolution by City Council, staff would be directed to investigate the costs of initiating the recommendations.

Dr. Larkin stated he felt EAC should identify what they felt should be accomplished by the resolution as well as a discussion of actions that would follow to implement the recommendations. Dr. Kimmel suggested redistribution of the resolution to members to provide a more specific action by the Commission to present to City Council. Dr. Ames made a motion to table further discussion to the October 1, 2015 meeting to allow EAC members to review and provide feedback and be ready to finalize the resolution at that time. Dr. Larkin made a second. The motion passed unanimously.

9. OTHER– FYI

A. Quarterly UST Report

10. PROPOSED AGENDA ITEMS

The following items are proposed for the October 1, 2015 meeting:

A. Election of Officers

B. Plastic Resolution Discussion

C. Earth Day and State of the Environment Subcommittee Formation

D. Watershed Master Plan Review

E. Recycling Report

F. 2016-2017 EAC Grant

11. Adjournment –There being no further business to discuss, Dr. Ames made a motion to adjourn. The motion was seconded by Dr. Larkin and passed unanimously. The meeting adjourned at 7:00pm.

ATTACHMENT B

(EAC Grant Information)

Action: For your information.



Environmental Advisory Commission EAC GRANT PROGRAM

JANUARY 2015 • FACT SHEET #2

DEFINITIONS

Non-point Source Pollution—

Also known as polluted runoff, comes from diffuse or scattered sources in the environment rather than from a defined outlet such as a pipe. As water moves across and through the land it picks up and carries away natural and human-made pollutants depositing them into lakes, rivers and even underground sources of drinking water.

Impervious Areas—

Hard surfaces, like rooftops, roads and parking lots that prevent or slow the absorption of stormwater runoff into the ground.

Stormwater Control Measure (SCM)—

Refers to any stormwater control, best management practice (BMP), or other method used to prevent or reduce the discharge of pollutants.

Riparian Buffer—

An area of vegetated land, adjacent to waterways, streams, wetlands, lakes, ponds, and other surface waters for the purpose of minimizing the impacts of point and non-point source pollution.

Watershed—

Also known as a drainage basin or catchment area. A topographical area from which all precipitation flows or drains to a single river, river system or other waterbody.

Biodiversity—

Wide variety of organisms, from one-celled organisms to large mammals, in the natural environment. Biodiversity decline results in loss of food and increased environmental contamination.

GRANT OVERVIEW

The City of Greenville continually strives to serve its citizens and provide programs that will increase the quality of life and livability of our community. *Non-point source pollution* has a significant affect on water quality, property values and the safety of our citizens. In an effort to address these concerns, the Environmental Advisory Commission (EAC) has developed the EAC Grant Program.

When rain falls on natural areas, such as a forest, it is slowed down, filtered by soil and plants, and allowed to soak back into the ground. In contrast, when rain falls on *impervious areas* rain does not soak into the ground and stormwater runoff is created. Stormwater runoff picks up pollution such as pet waste, fertilizer, pesticides, motor oil, litter and yard waste on the way to local creeks, streams and waterways. In Greenville, stormwater runoff does not go to a treatment plant. Instead, runoff, and the pollution in it, flows into our creeks and streams, then eventually into the Tar-Pamlico or Neuse River.

This Program will provide an avenue for youth organizations to apply for a grant from the City for projects that will minimize the effects of *non-point source pollution*. There are many different types of projects you can initiate on your property or throughout your organization. Most projects are structural and prevent water pollution by capturing polluted runoff and treating or detaining it. Other projects may take the form of education, awareness, or good house keeping measures. All of these components are equally important.

ADMINISTRATION

There is \$2,500.00 available for a project or projects during the July 1st—June 30th grant cycle. In addition, the grant requires the applicant to match 25% of the grant amount awarded. This can be in the form of volunteer labor, donated materials or equipment, or may be monetary.

Funds will be disbursed in three installments: The first 45% will be distributed upon award. The second 45% will be distributed upon receipt of invoices indicating that 75% of the first disbursement has been spent. The final 10% will be disbursed upon final submission of the project, financial report and presentation to EAC. Any maintenance costs associated with the BMP shall be the responsibility of the property owner.

SUPPORTED BY:
CITY OF GREENVILLE
STORMWATER MANAGEMENT PROGRAM

PROJECT IDEAS

- Distribute commercial car washing vouchers to encourage wash water recycling.
- Remove *impervious areas* and restore to pervious ground cover.
- Install pet waste stations in public use areas.
- Develop curriculum or educational materials on stormwater quality, quantity and *watershed* based issues.
- Restore *riparian buffer*.
- Install *stormwater control measure*.
- Repair erosion caused by runoff.
- Install rain barrels for water reuse.
- Retrofit existing stormwater facilities to improve water quality treatment and/or increase *biodiversity*.
- Develop stream monitoring program.



Informational boards serve to educate the public.



Rain barrels or cisterns can store rain water for irrigation or wash water.



Pet waste stations keep stormwater from being polluted with fecal matter.

ELIGIBILITY

Youth organizations must **apply by March 20th** for the funds and act as the fiscally responsible party. Youth organizations may apply for multiple grants however these projects will compete against each other for funding. Depending on the size of the projects several grants may be awarded. The following requirements must be met in order for a youth organization to be eligible for consideration:

- Potential project locations must be within the **City Limits**. Projects located in county and the extra-territorial jurisdiction are not eligible under this Program.
- The project must be **real and measurable**. The results must be available by the end of the grant cycle.
- Increase **public awareness** of the issue. The project must include an awareness component and ensure that as many people as technically feasible are impacted by the results.
- Provide opportunities for **public participation**. Ideally the project will involve a partnership between teachers, students and parents.
- **Demonstrate that the project has improved the quality, reduced the quantity, or created awareness** about stormwater runoff. This may be in the form of pictures, calculations, sampling, questionnaires, etc.
- Prepare **project reporting documentation** which includes: Six-month status report that describes the current status of the project and the next steps anticipated. Final report and presentation to EAC describing the project and its outcomes.



City of Greenville Public Works Department Environmental Advisory Commission

1500 Beatty Street Greenville, NC 27834

Phone: 252-329-4467 Fax: 252-329-4535 E-mail: ajbraddy@greenvillenc.gov

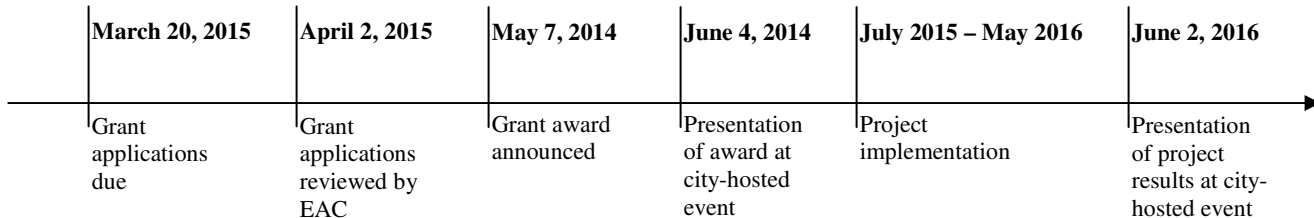
Electronic versions of the application package are available at greenvillenc.gov.

CALL FOR PROPOSALS

Purpose	To increase awareness about the need for improved water quality and good storm water management techniques and their role in maintaining an overall, healthy community environment.
Total funds available	\$2,500
Grant ceiling	\$2,500
Match	Matching goal of 25% of total grant amount awarded. This can be in the form of volunteer time, donation of materials or direct financial contribution.
Process for grant selection	All submitted projects are reviewed by the City of Greenville Environmental Advisory Commission (EAC). Projects will be ranked according to how well they meet the requirements outlined below. Highest ranking project will be awarded the grant. If two projects are deemed to be equally qualified the EAC reserves the right to split the grant.
Requirements	<p>Projects must:</p> <ol style="list-style-type: none"> 1. Be real and measurable <i>Project must be implemented with initial results available by the end of the grant cycle. Examples of project results include: new signage, a report that demonstrates change, presentations to external groups, etc. Research projects may be submitted with the understanding that they contain an implementation component that will be started before the end of the grant.</i> 2. Increase public awareness of the issue <i>Project must include an awareness raising component to ensure the project has as wide ranging an impact as technically feasible. Examples of public awareness can be: creating and distributing a "fact sheet", holding an event where the importance of storm water management is discussed, creating signage to raise awareness on the issue, hosting an informational day, etc.</i> 3. Involve more than one person <i>Ideally the project will involve a partnership between students, teachers and school group.</i> 4. Demonstrate that the project has improved stormwater run-off <i>Some examples are: Before and after pictures documenting the repair of erosion caused by ditches or streams or caused by surface run-off. Calculating the amount of run-off that will be reused or that will infiltrate as a result of the project. Before and after questionnaires indicating a change in knowledge or behavior. Reporting on the habitat of the body of water is a good indication of poor or good water quality. Traditional analytical testing.</i> 5. Prepare project reporting documentation which includes: <ul style="list-style-type: none"> ▪ 6-month status report that describes the current status of the project and the next steps anticipated ▪ Final report presenting the project and its outcomes

	<ul style="list-style-type: none"> ▪ Presentation to the EAC and City Council on the project <p>Applicants must complete and submit the application package (see attached).</p>
Eligibility	Youth Organizations initiating a project located within Greenville’s City Limits are eligible to apply. Projects located in the county or Greenville’s Extra-territorial Jurisdiction <u>ARE NOT</u> eligible.
Grant cycle	July 1, 2015 – May 31, 2016
Disbursement of funds	<p>Funds will be disbursed in three installments.</p> <ul style="list-style-type: none"> • The first 45% will be distributed upon the awarding of the grant. • The second 45% will be upon receipt of invoices indicating that 75% of the first disbursement has been spent. • The final 10% will be disbursed upon final submission of project and financial report and presentation to EAC/City Council. <p>The level and timing of disbursements may be altered by the EAC with appropriate justification.</p>
Submission deadline	March 20, 2015

Grant Timeline:



Resources Information:

For more information about this grant please contact:

Amanda BRADDY (ajbraddy@greenvillenc.gov)
 Public Works Department - Engineering Division
 1500 Beatty Street
 Greenville, NC 27834
 (252) 329-4467

APPLICATION PACKAGE

APPLICANT FORM

Form must be typed using Time Roman 12 point font. Hand-written applications **will not be accepted**

Name of Youth Organization Submitting Application	
Contact Information <ul style="list-style-type: none">• Contact person • Address • Phone number • Email	
Contact Information of Grant Administrator (if different from above) <ul style="list-style-type: none">• Contact person • Address • Phone number • Email	
Project Name	
Project Description (max. 500 words)	

Rationale for Project (max 250 words)

- Outline why this project should be funded, i.e. what will this project contribute to improving storm water management in Greenville?

Partners or Groups Involved (max. 250 words)

- Describe the group(s) and how they will be involved in the project
-

<p>Risks and Responses</p> <ul style="list-style-type: none">• List any possible risks that may hinder the successful implementation of the project and note how these risks may be overcome <p>For example: --Risk: resistance from school group to take on new project. --Response: hold two informational meetings to present project; generate one page overview for students to take home to parents.</p>	
<p>Implementation Timeline</p> <ul style="list-style-type: none">• List key dates	

<p>Post-project</p> <ul style="list-style-type: none">• Detail any anticipated work that will need to be done once the grant is completed e.g. if a wetland is put in place, what will be needed to keep this functioning over the next 5 years.	
<p>Signature of youth organization Authorized Representative</p>	
<p>Date</p>	

BUDGET FORM

If the line item is not relevant to your proposal simply leave the line blank. Indicate in the *School Group Match* column those areas where the school group will contribute the required 25% in either donations or money.

Budget Items		City of Greenville	School Group Match	Totals
Design	Budgeted Amount			
	In-kind contribution			
Survey	Budgeted Amount			
	In-kind contribution			
Education	Budgeted Amount			
	In-kind contribution			
Construction	Budgeted Amount			
	In-kind contribution			
Plantings	Budgeted Amount			
	In-kind contribution			
Printing	Budgeted Amount			
	In-kind contribution			
Monitoring	Budgeted Amount			
	In-kind contribution			
Land	Budgeted Amount			
	In-kind contribution			
Other (please itemize)	Budgeted Amount			
	In-kind contribution			
Administration	Budgeted Amount			
	In-kind contribution			
	Cash Sub-total			
	In-kind Sub-total			
Total				

Final Checklist

- ___ Application Form is completed, signed, and dated.
- ___ Budget Form is completed and attached.
- ___ Provided proof of location of proposing organization's project.
- ___ Letter of support is attached. (optional)

Send complete application packet to:

Ms. Amanda Braddy
Public Works Department - Engineering Division
1500 Beatty Street
Greenville, NC 27834

DEADLINE: MARCH 20, 2015

ATTACHMENT C

(Plastic Resolution and Timeline)

Action: For your information, review, and approval.

EAC Draft Resolution on Plastic Bags (edited) ~~4/7/2015-9/24/2015~~

RESOLUTION OF THE ENVIRONMENTAL ADVISORY COMMISSION FOR CITY
COUNCIL TO ~~PROMOTE~~ REDUCE THE USE OF SINGLE-USE PLASTIC BAGS

~~WHEREAS, plastic bags are made from non-renewable fossil-petroleum fuels-resources,--which are included in the category of non-renewable energy resources and thus contribute to the atmospheric carbon footprint;~~

WHEREAS, the developmental processes for plastics include the use of polyethylene moieties, polyvinyl chlorides, phthalates, and toluenes all of which are toxicants that can adversely impact animal and human health;

~~WHEREAS, the health impacts on children exposed to the toxicants can be broad and severe;--~~

WHEREAS, plastic bags used in retail are designed generally for a single use;~~to be used for one specific purpose;~~

WHEREAS, when casually discarded, plastic bags can float, become air-borne, and can clog up channels, and damage engines; thus their impact on the environment can be devastating;

WHEREAS, because their transport within the environment is multimodal;-, plastic bags can have environmental and animal and human health impacts long distances from where they originated ~~from;-~~

WHEREAS, plastic bags persist for very long periods of time in the environment;

WHEREAS, adverse effects occur when animals including aquatic animals and birds ingest eat-- or become entangled in plastics;

WHEREAS, in 1999 Senate Bill 1018 was passed by the NC Legislature, said bill found that “the distribution of plastic bags by retailers to consumers . . . has a detrimental effect on the environment of the State”; plastic bags “contribute to overburdened landfills, threaten wildlife and marine life, and degrade the beaches and other natural landscapes of North Carolina’s coast”;

WHEREAS, Senate Bill 1018 banned the use of single-use plastic bags in Dare, Currituck, and Hyde Counties beginning in 2009; and subsequent evaluations of the impact has shown that the ban is accepted and supported by affected citizens; and

WHEREAS, similar bans have been implemented in many localities across the country; as well as, by the entire State of California.

NOW, THEREFORE, BE IT RESOLVED that the Environmental Advisory Commission of the City of Greenville recommends to the City Council of the City of Greenville to take action to

reduce the use of single-use plastic bags and to consider the following means of accomplishing this objective: (one or more of the following):-

- Work with the retail industry to develop BMPs-methods to address this issue, which .~~The BMPs~~-could include but not be limited to:
 - Designating an educational section within their-retail stores providing information regarding the dangers-detrimental effects of plastic bags to the environment;
 - Designating an area within their- stores for the purchase of cloth-reusable bags; and/or
 - Training their-staff to not excessively limit the use of plastic bags in packaging the customer's purchase.
- Study the feasibility of a tax on the individualsingle use plastic bags with monies going toward recycling efforts within the city;
- Encourage all relevant city departments and entities to support a public information campaign to educate the public of the need to stop using plastic bags;
- Determine if a complete-ban, by ordinance, on the distribution-use of plastic bags for packaging of items; is feasible within the City; and
- Work with the Pitt County Commissioners and other municipalities in Pitt County to make the chosen option(s) a county-wide effort.

Typical Process for a Resolution:

Once the resolution is finalized and approved by EAC it will be provided to all Council Members through Notes to Council. This is a weekly package Council Members receive with various follow up information, status reports, topics of interest, etc. At that point, if a Council Member wants to pursue the resolution they will request it be placed on the agenda. They may request a representative from EAC present the Commission's position on the subject matter. After discussion, Council may direct staff to research one or more options and provide a report on the impacts to current operations and resources.

While it is not required, it is valuable to have endorsements from other Commissions or Committees. Those endorsements will be attached to the resolution and submitted through Notes to Council for consideration. I have listed the Commissions/Committees below I believe have a vested interest in the resolution currently being discussed. Again this is not required but the resolution will carry more weight if there is buy-in from other Commissions/Committees. If an EAC member or members would like to attend any meetings to share EAC's thoughts and intentions, please let me know as soon as possible so I can make sure we get on the appropriate agenda.

Thank you, I hope this helps a little.

Community Appearance Commission

Duties:	To promote, encourage, inform, suggest, and solicit improved community appearance on public and private property.
Meeting Day:	First Wednesday of each month excluding July and August.
Meeting Time	5:30 p.m.
Meeting Location:	City Hall, Council Chambers

Keep Greenville Beautiful

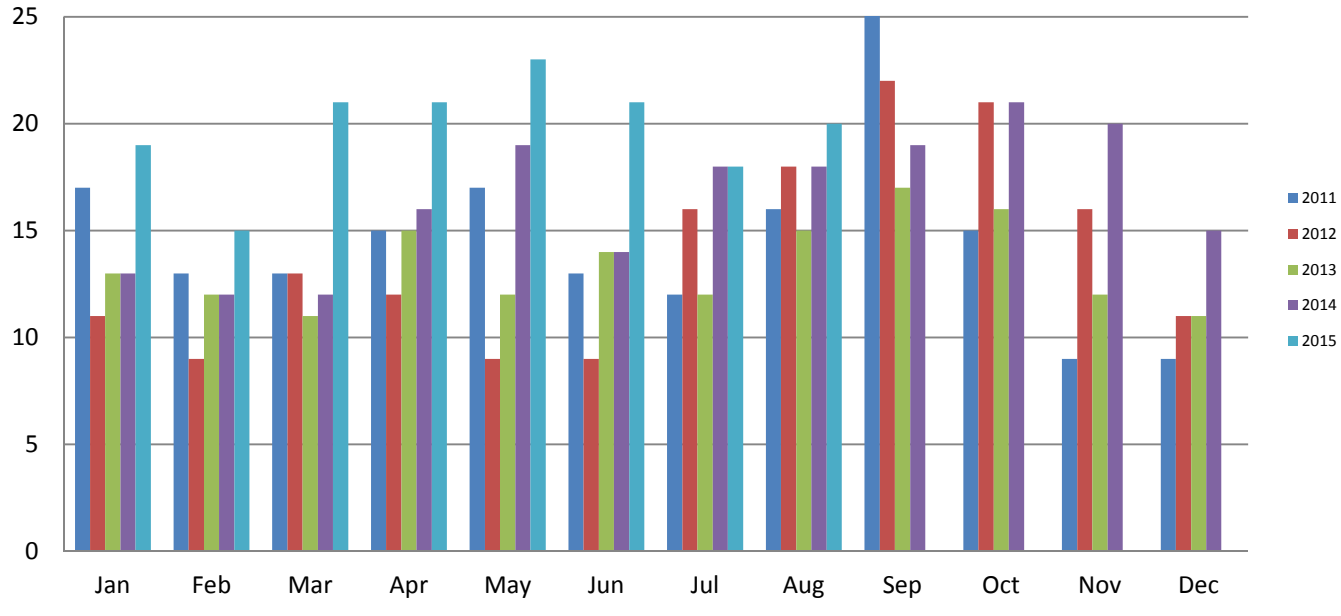
Duties:	To promote, encourage, inform, suggest, and solicit improved community appearance on public and private property.
Meeting Day:	Second Wednesday of each month.
Meeting Time	8:30 a.m.
Meeting Location:	Public Works Department, Main Conference Room

ATTACHMENT D

(Recycling Report)

Action: For your information.

Percentage of Recycled Material From Total Refuse Collected By Tons 2011-2015



ATTACHMENT E

(2015-2016 EAC Grant LAST Final Report)

Action: For your information.

Storm Water and Water Quality Education: The Upstream Downstream Connection Camp

Rebecca Weidner

Abstract:

The mission of the Upstream Downstream Connection Camp, run by Love A Sea Turtle, is to give as many underprivileged youth from the area a chance to experience science, nature, and new outdoor activities for no cost. During this summer alone, Love A Sea Turtle served over sixteen hundred unique students from more than a dozen local organizations. Thirty-seven student volunteers from nearby public and private high schools or universities served as camp counselors. The Upstream Downstream Connection Camp offers a unique opportunity for students to learn about conservation, nature and its ecosystems, as well as how to enjoy new outdoor activities. This camp also offers an amazing and unique opportunity for the students to help collect data about the aquatic ecosystems in the Greenville area.



Introduction:

The goal of the Upstream Downstream Connection camp is to give each student an understanding of storm water and the possible effects runoff can have not only on the habitats surrounding it, but also on the oceans downstream. The other goal is to break down the barriers of fear and ignorance in students who would not normally have the opportunity, resources, or support to get outside and learn new skills. These activities also help to foster in the students a deeper respect and care for the environment through experiencing the fun that nature, especially bodies of water, can offer. The mission of the camp is to teach students about the importance of keeping their planet and bodies healthy. It is through the free opportunity for these underprivileged youth to kayak, go on scavenger hunts, bike ride, and fish that the camp mission is brought to a deeper meaning and hopefully gains a place in the students' hearts. If the students learn how much they enjoy being outside and how great it is to be able to kayak and fish in a clean lake or river, they will be more likely to make positive changes in their lives in order to keep such places healthy. They will also be more likely to want to share their experiences and new knowledge with others at school or at home. On top of gaining a deeper respect and love of nature, they are also provided with the knowledge of how to make a positive difference in their environment and communities.



Methods:

When each group of students arrives at camp, they are shown how to do many outdoor and science activities. During the storm water lesson, the students are asked to help draw out a diagram of the water cycle. This drawing is then used to teach them the effects and origins of storm water runoff and contaminants that could affect freshwater ecosystems and drinking sources. The effects of runoff are shown from different places including farming runoff, runoff from homes, as well as runoff from streets and mining operations. The students then conduct several water quality tests using the same equipment used by professionals. The students learned how to test temperature and dissolved oxygen as well as pH, conductivity, turbidity, nitrate concentration and phosphate concentration. Lessons were delivered by engaging students in hands-on learning techniques of inquiry-based science. Students are taught methods of saving water during their day-to-day lives and take a 40-gallon water challenge pledge where they agree to implement water conservation methods in their own lives. Campers learned about macro invertebrates and how they help determine water quality by tracking the presence or absence of animals or bugs that cannot withstand pollution. Students will then put on waders or boots and go into the lake to catch critters. Discussions will entail identification of their findings and viewing under microscopes. During the camp day, students learn how to steer a solo kayak, bait a hook for fishing, create primitive survival shelters, and go on a scavenger hunt through the woods.



Results

Figure 1: Temperature Comparison (C)

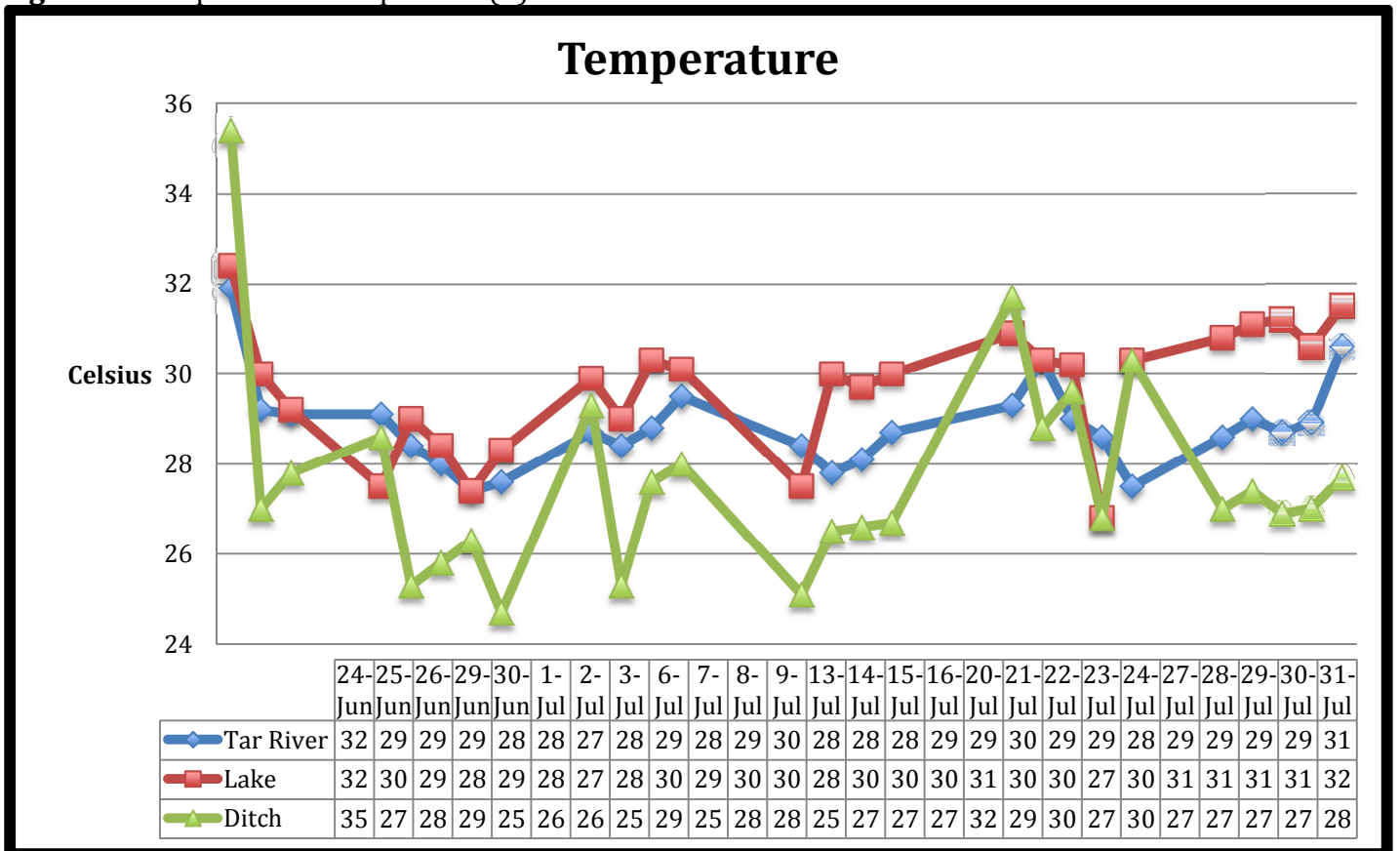


Figure 1: shows the comparison between the temperatures of the three bodies of water in degrees Celsius. These temperatures vacillated with the fluctuations of air temperature each day.



Figure 2: Dissolved Oxygen Concentration Comparison (mg/L)

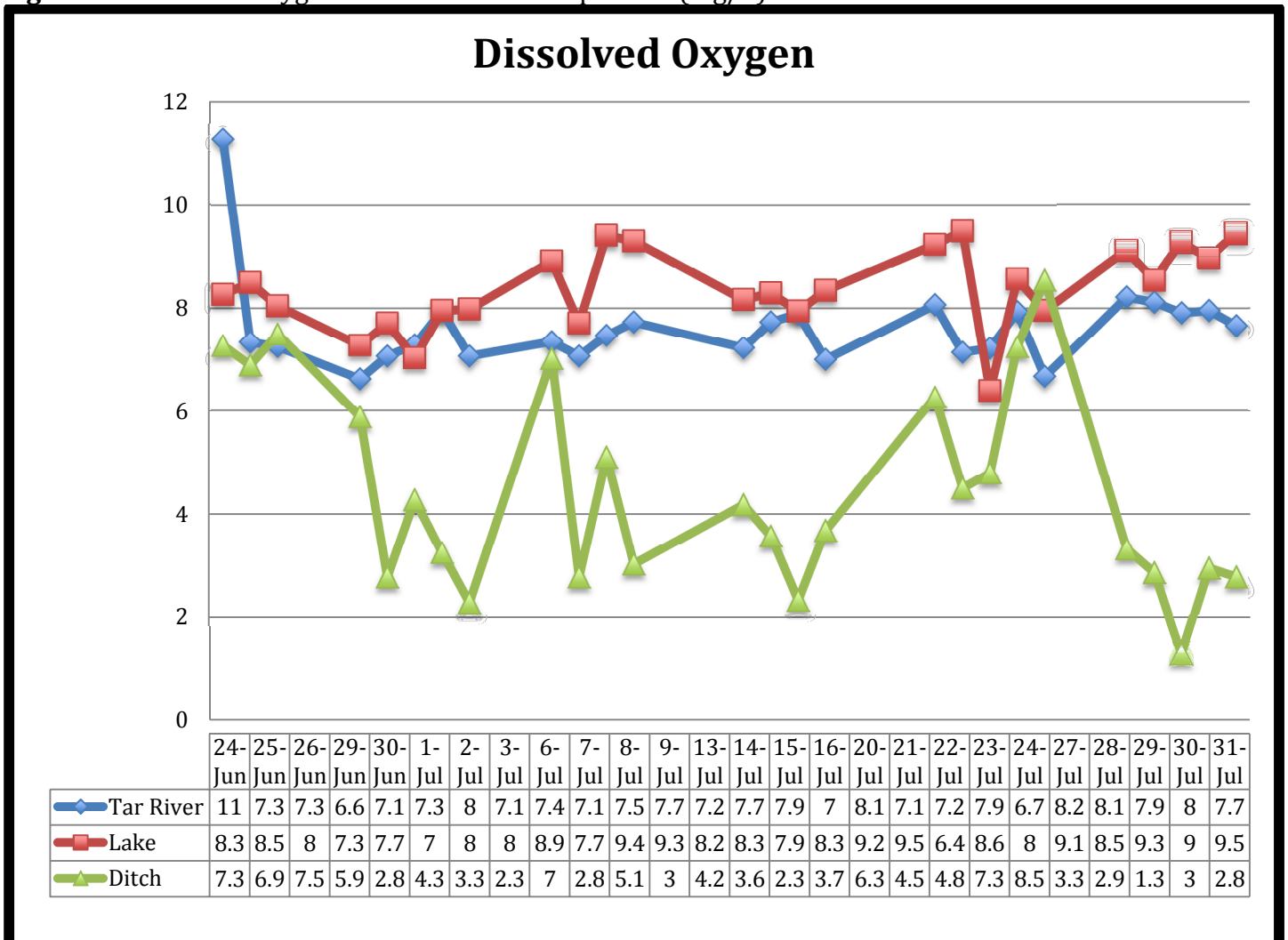


Figure 2: shows the comparison between the concentrations of dissolved oxygen in the three bodies of water. The ditch had the lowest average concentration of dissolved oxygen and the lake had the highest average concentration.



Figure 3: pH Comparison

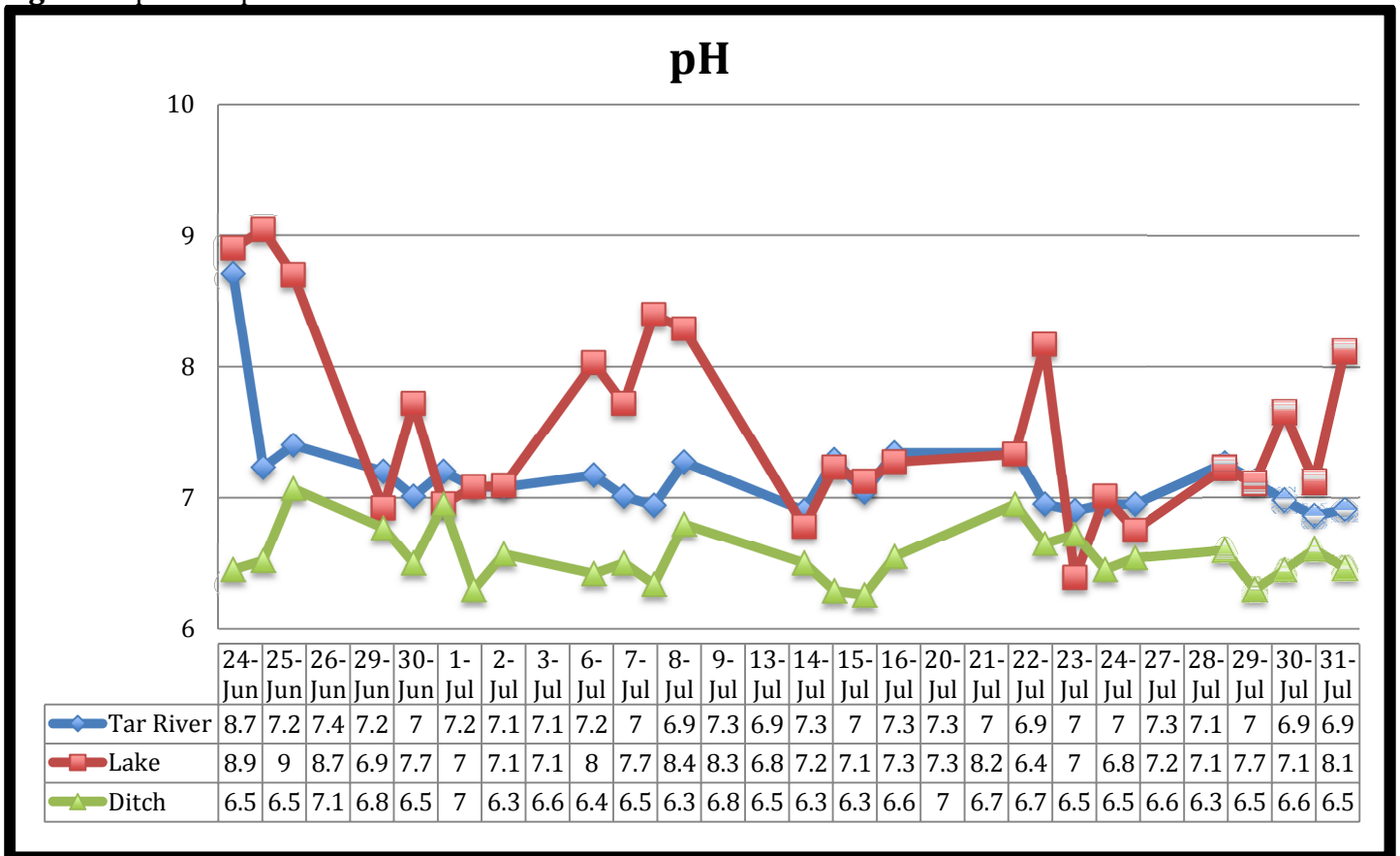


Figure 3 shows the pH of the three different bodies of water. These values stayed between 6 and 10 for each body of water. The ditch had the lowest average pH and the lake had the highest average pH.



Figure 4: Conductivity Comparison (micro Siemens/cm)

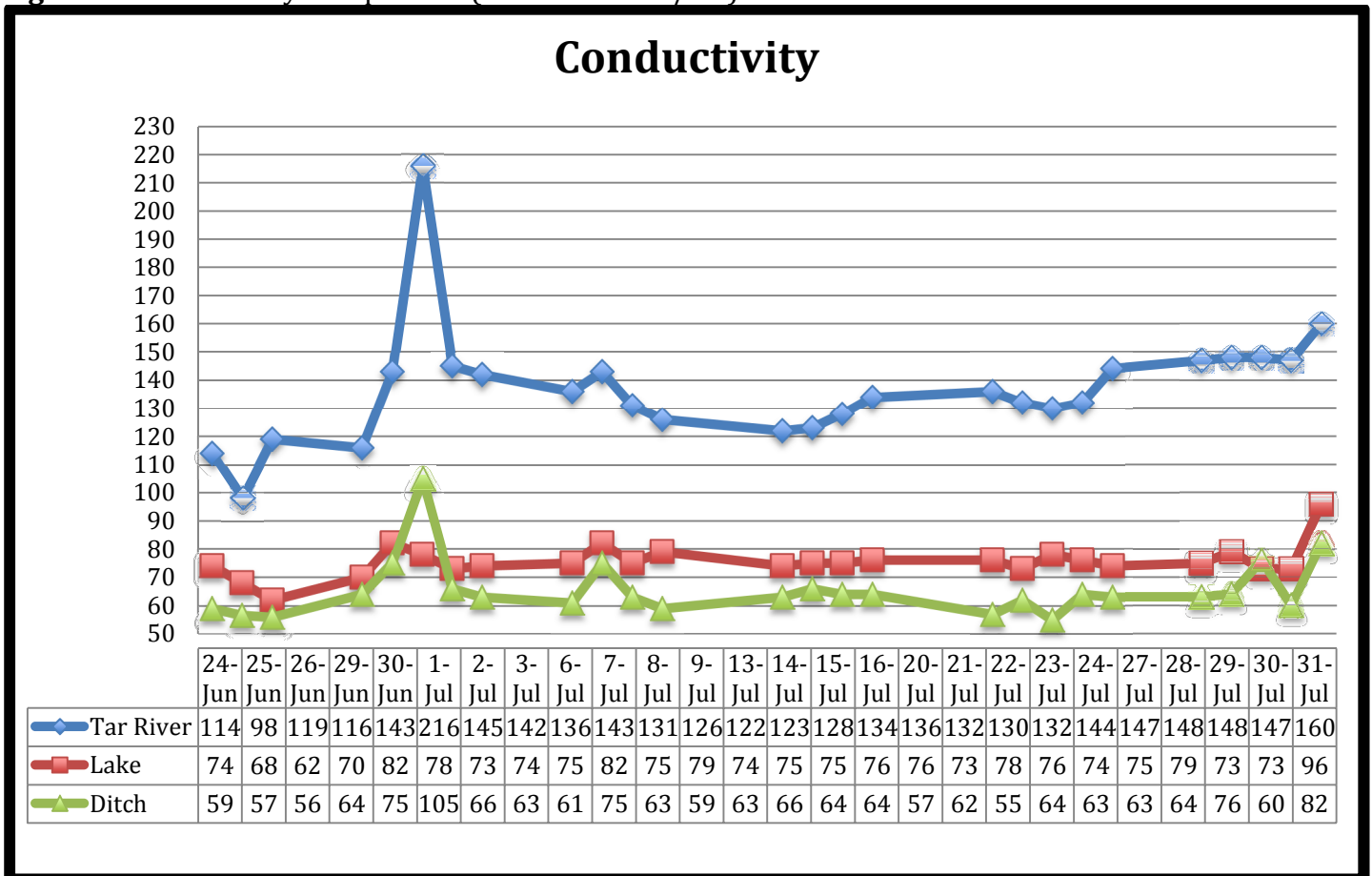


Figure 4 shows the comparison between the conductivities of the bodies of water. The Tar River had a much higher average conductivity, with the lake having the next highest, and the ditch having the lowest average conductivity.



Figure 5: Turbidity Comparison (NTU's)

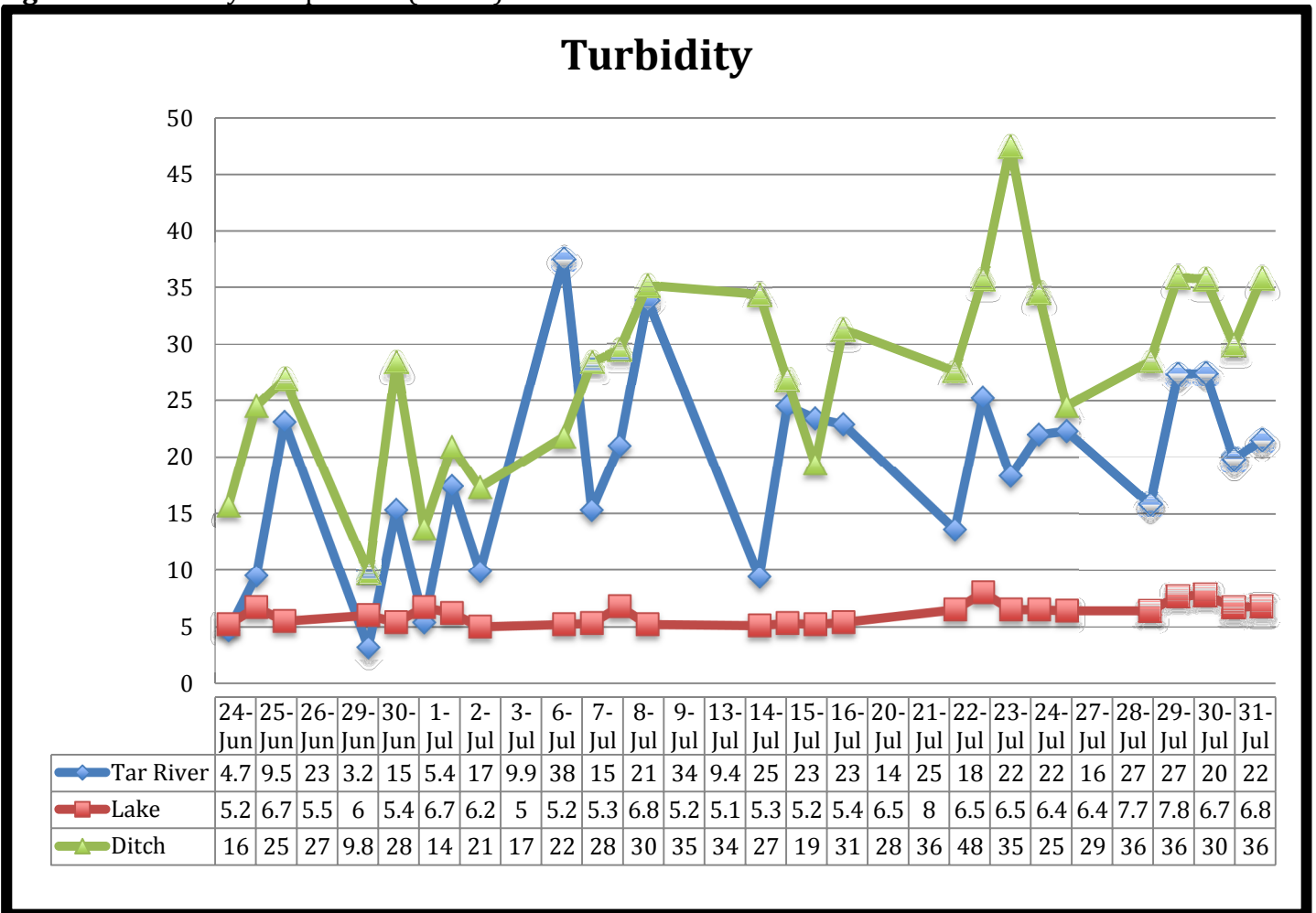


Figure 5 gives the comparison of the turbidity of the three bodies of water in NTU's -Nephelometric Turbidity Units. The ditch had the overall highest turbidity, with the Tar River having the second highest and the lake having the lowest average turbidity levels.



Figure 6: Nitrate Concentration Comparison (mg/L)

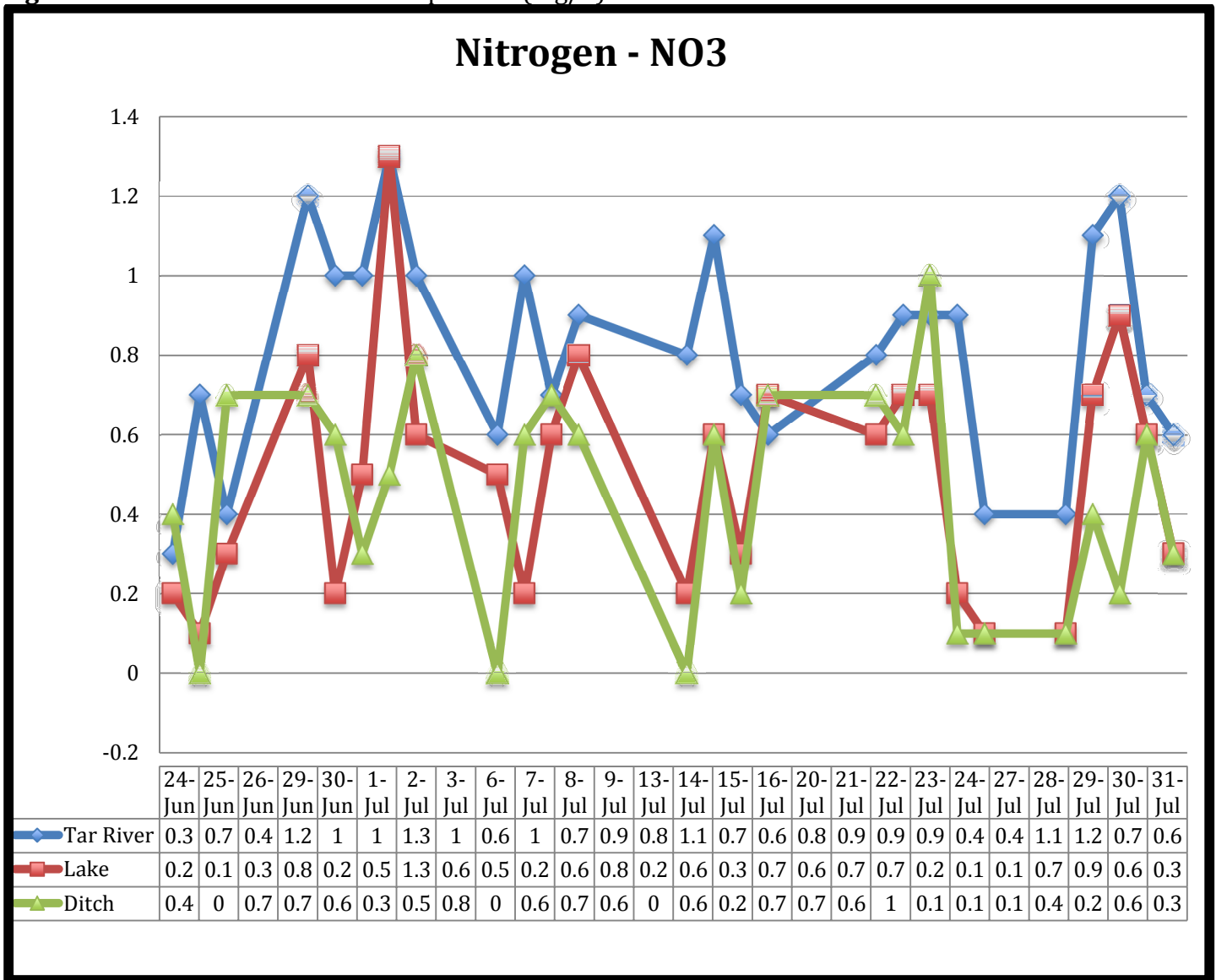


Figure 6 shows that in the lake, nitrate concentration fluctuated between about 0.1 mg/L and 1.3 mg/L and the average concentration was about 0.5 mg/L over the course of the six weeks it was measured (Figure 6). In the river, nitrate concentration fluctuated between about 0.3 mg/L and 1.3 mg/L and the average concentration was about 0.8 mg/L over the course of the six weeks it was measured (figure 6). In the ditch, nitrate concentration fluctuated between about 0.0 mg/L and 1.0 mg/L and the average concentration was about 0.4 mg/L over the course of the six weeks it was measured.



Figure 7: Phosphate Concentration Comparison

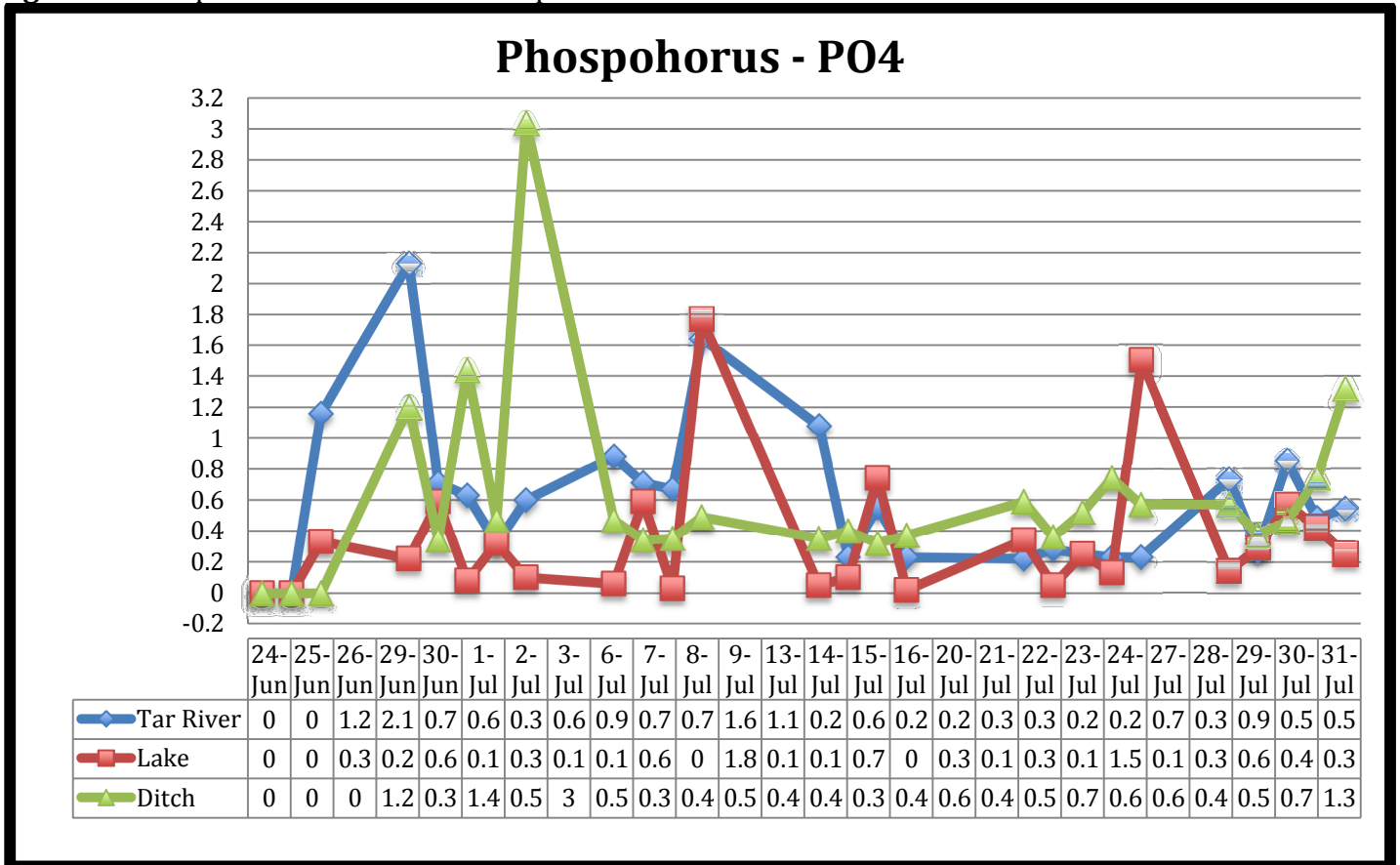


Figure 7 demonstrates fluctuation of phosphate concentrations in the lake between 0.00 mg/L and 1.77 mg/L and had an average of about 0.37 mg/L over the six weeks (Figure 7). Phosphate concentration in the river fluctuated between 0.00 mg/L and 2.13 mg/L and had an average of about 0.65 mg/L over the six weeks (Figure 14). Phosphate concentration in the ditch also had fluctuations. These fluctuations were between 0.00 mg/L and 3 mg/L with an average of about 0.66 mg/L over the six weeks (Figure 21).



Conclusion:

We expected the concentration of nitrate and phosphate in the Tar River was quite a bit higher than those of the lake and ditch at River Park North. This is likely because the river has a much closer proximity to the city and many sewage and other drainage pipes run into it whereas the lake and ditch are much farther away and free of such drainage runoff. The fluctuations in nitrate and phosphate levels are most likely a naturally occurring phenomenon, but the overall average levels that are much higher in the river than in the other bodies of water are likely due to human activity.

This Upstream Downstream Connection camp has given volunteers, students, and youth opportunities to make a difference in their community as well as in the lives of others. The water data collected during the course of the camp can teach local students as well as those in our local government about the differences between the health of the Tar River and lakes as well as the problems facing these bodies of water due to pollution. From teaching camp and having the chance to see some campers more than once, it was amazing to see how much the students learned from one week to the next. Returning campers were able to come back to camp and remember the things they learned about water science. There were students who were able to teach new students about what they had learned in a previous week and even remembered how to use the scientific instruments. This is exactly what the purpose of the Upstream Downstream Connection camp is - to make a difference in the lives of underprivileged students and give them the tools to share what they have learned and experienced with others.



Perspective:

The Upstream Downstream Connection Camp is a unique opportunity in which children learn to embrace getting outside in nature, keeping themselves and their environment healthy, and therefore improving their communities. People who are enthusiastic about improving their environment and communities are rarely made in a classroom. Great people who have made a difference in the past have been people who experienced and learned about their planet and/or communities first hand and loved being in it. People like John Muir who founded the Sierra Club, which has raised money and support for the environment for many decades, began as a farmer and nature explorer. Mother Teresa loved her community and people so much because she got out and experienced what life was like for them. Helping children become comfortable and excited about getting outside and doing science is the only way to give them the chance to become as excited about nature and community as those great people were who made such a difference. Through getting the students outside at camp, a difference is made in the community by increasing awareness of storm water issues and methods of improvement. Students leave camp with first-hand knowledge about how their nearby water ecosystems can be affected by human activities and are also shown ways in which they can help to fix the problems and reduce waste in the rivers. Students who have returned to the camps throughout the summer and over the course of the last few years show a marked improvement in understanding the issues and thinking about new ways to solve them. This camp is irreplaceable in our community, reinforces that we cannot exist without water, and future generations must be able to sustain the earth we love to live on.

