

Empowering Citizens with a Voice and Role in Municipal Stormwater, “Our Voice Our Water”

SESWA Annual Conference

Pre-Conference Workshop - Effective Stormwater Public Education and Outreach
October 6, 2021



Our Supporting Entities

Water Resources Research Institute – Stormwater Consortium



Johnson C. Smith University



Johnson C. Smith University

Regional Stormwater Partnership of the Carolinas



REGIONAL
STORMWATER
PARTNERSHIP
OF THE CAROLINAS

Charlotte-Mecklenburg Stormwater Services



Rising Solutions, PLLC



RISEING
SOLUTIONS
PLLC

Conservation Trust Fund – AmeriCorps NC/NC Resilience Corps



CONSERVATION
TRUST FOR NORTH CAROLINA

Our Researchers

Principal Investigator:

Dr. Bryan Patterson, Johnson C. Smith Univ.

Assistant Professor of Public Leadership Studies

Department of Interdisciplinary Studies, Philosophy, and Religion

Co-Investigators:

Dr. Kari Raburn, Rising Solutions, PLLC.

VP of Chemistry and Engineering

Regina Guyer, P.E., Rising Solutions, PLLC.

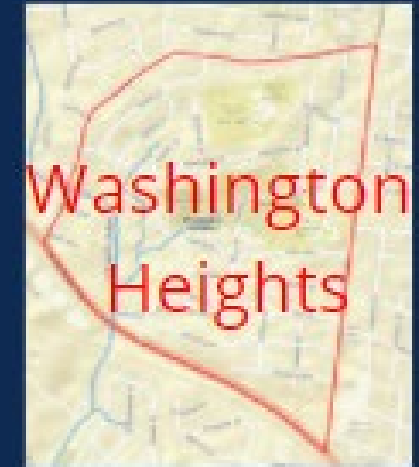
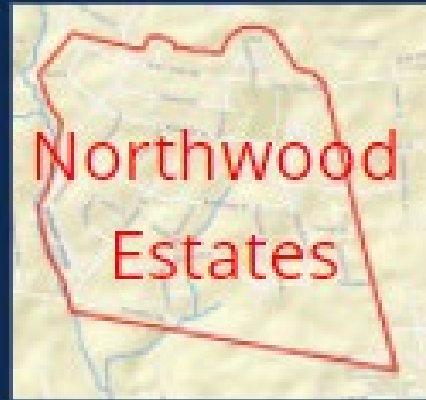
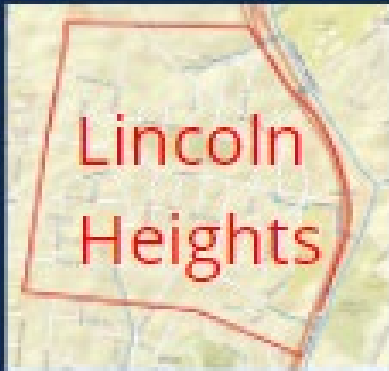
President

Researcher:

Daisha Williams, NC AmeriCorps/Resilience Corps NC



Our Community Leaders



Ms. Thelma Byers-Bailey



Mr. Ron Ross



Ms. Mattie Marshall

Our Community Partners

- Charlotte -Mecklenburg Storm Water Services

David Caldwell, Water Quality Supervisor

Ashley Smith, Senior Environmental Specialist

Ken Friday, Environmental Specialist



- Keep Charlotte Beautiful

Jonathan Hill, Program Manager



- Mecklenburg County Solid Waste

Jeff Smithberger, Solid Waste Management Director

Joe Hack, Engineering & Compliance

Steve Hoffman, Operations Manager



Project Overview

Purpose: In Washington Heights, Lincoln Heights and Northwood Estates

- Foster community engagement
- Enhance community-municipal partnerships
- Address linkages between stormwater and trash, litter and/or illicit discharges

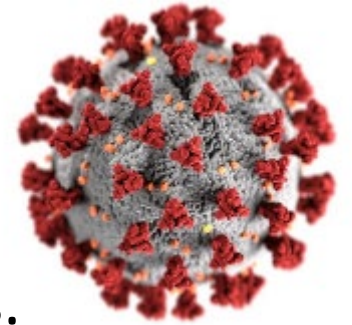
Neighborhood Empowerment Model

1. Meeting citizens
2. Citizens' perspectives surveys
3. Citizens' 3-1-1 calls data evaluation
4. Development of educational materials
5. Having a voice virtual workshop
6. Focus groups
7. Stream indexing assessments
8. Volunteer participation events

Acknowledge that there will be Barriers and Challenges

This time they have included:

- Being sensitive to the realities of covid when engaging with citizens.
- Johnson C. Smith University students virtual learning.
- Overcoming persistent and present racial injustice, while finding room for stormwater/environmental education and insight.
- Lincoln Heights Neighborhood Tragedy during 2020 Juneteenth Event.



Our Voice Our Water Project



www.ourvoiceourwater.com



0:39 / 6:00



<https://www.youtube.com/watch?v=A5LzkCfrLsA&t=45s>

Our Voice

- Meeting Citizens
- Surveys
- 311 Calls
- Focus Groups



Meeting Citizens

- Neighborhood Presidents
 - Emails
 - Phone calls
 - Zoom meetings
- Neighborhood Meetings
 - Request to be included on the agenda
 - Attend meeting (Researchers and Charlotte – Mecklenburg Stormwater Staff)
 - Present information on stormwater and “Our Voice Our Water” project
 - Talk with attendees
- *Challenge: Neighborhood meetings were not occurring due to COVID*
- Board Meeting
 - Thelma Byers-Bailey, President of Lincoln Heights, suggested meeting with their Board
 - Delivery of meals to Neighborhood Board Members
 - Zoom Meeting with Neighborhood Board

Learning Lessons from Our Community Leaders



Ms. Thelma Byers-Bailey
Lincoln Heights



Ms. Mattie Marshall
Washington Heights



Mr. Ron Ross,
Northwood Estates

- Keys to Implementation: 1) Building trust 2) Learning community language 3) Accountability
- Listening to Learn- Each community has its unique way of addressing community concerns.
- Ms. Thelma Byers Bailey - Engaging with neighborhood leaders in leadership team zoom meetings. She provided the community family perspective. Through food and fellowship how the community heals after tragedy and survives challenges of Covid.
- Ms. Mattie Marshall - Christmas card made from informational flyers. Involvement with neighborhood activities and for neighborhood workshop space in reimagining the community surrounding the History Washington Heights Community.
- Mr. Ron Ross - "Learn at the Curb" and building participation with several events. Mr. Ross recognized the need to for action. "More Action = More Results= More Future Engagement"

Surveys

- Initial Neighborhood Survey (Summer 2020-Winter 2021)
 - 47 respondents
 - Volunteer Participation Events Survey (Spring 2021)
 - 32 respondents
 - Post Neighborhood Survey (Summer 2021)
 - 25 respondents
- 
- Greater Charlotte Survey at County Solid Waste Convenience Centers
 - 2019: 1,957 participants
 - 2021: 1,558 participants



OUR VOICE
OUR WATER

NC Water Resources Research Institute-
Stormwater Consortium Grant

EVERY DROP OF PERSPECTIVE AND
INVOLVEMENT MATTERS

SHARE
YOUR
VOICE

ABOUT OUR ORGANIZATION
Our Voice Our Water is a collaboration with the communities of Historic Washington Heights, Lincoln Heights and Northwood Estates to address the linkages between stormwater and trash, litter and/or illicit discharges.

BE HEARD
Share your knowledge and perspectives through focus groups and surveys in order to help the project truly grasp the stormwater and water quality concerns of the community.
Survey available at QR codes above.

GET INVOLVED
Join us for Stream Cleanup & Storm Drain Marking to help keep OUR WATER clean.

ourvoiceourwater.com



Our Voice - Our Water

Lincoln Heights, Northwood Estates & Washington Heights Collaborations for Creating Voice In Order to Improve Surface Water Quality

We would like to understand your perspective on litter and trash, local streams and lakes, flooding associated with safety concerns, and storm drainage infrastructure in your neighborhood. Your thoughts, opinions, and experiences are important to us. They will enable our project in empowering citizens of Charlotte-Mecklenburg with a voice and role in municipal stormwater program goals. We will keep your responses and personal information confidential and will only report your results anonymously with other members of your respective local neighborhood associations.

Thank you for your time and insight!

Demographic Questions:

These questions are optional and any information you share will be kept completely confidential.

1. We collaborate with several neighborhoods. Which neighborhood do you live in?

- ☐ (1) Historic Lincoln Heights
☐ (2) Historic Washington Heights
☐ (3) Northwood Estates
☐ (4) Other Neighborhood: _____ (please provide neighborhood name & zip code)
☐ (5) Other City (outside of Charlotte): _____ (please provide city & zip code)

2. Check ALL the following that describes your race/ethnicity:

- | | |
|---|--|
| <input type="checkbox"/> (1) African American/Black | <input type="checkbox"/> (5) Native American |
| <input type="checkbox"/> (2) Asian/Indian | <input type="checkbox"/> (6) White/Caucasian |
| <input type="checkbox"/> (3) Asian/Pacific Islander | <input type="checkbox"/> (7) Other: _____ |
| <input type="checkbox"/> (4) Hispanic/Latino | |

3. What is your age range?

- | | |
|---------------------------------------|--|
| <input type="checkbox"/> (1) Under 18 | <input type="checkbox"/> (5) 55-64 |
| <input type="checkbox"/> (2) 18-34 | <input type="checkbox"/> (6) 65 or older |
| <input type="checkbox"/> (3) 35-44 | |
| <input type="checkbox"/> (4) 45-54 | |

4. What is your gender?

- ☐ (1) Male
 ☐ (2) Female
 ☐ (3) Other

5. Storm drains are open grates you see located along roads and parking lots.

Are you aware that water that flows into storm drains from impervious surfaces, such as roads and sidewalks, typically goes directly to local creeks, ponds, and lakes?

☐ (1) Yes
 ☐ (2) No

6. The stormwater that flows into storm drains picks up litter, chemicals and other pollutants from impervious surfaces (roads, sidewalks, etc.) and does not get treated at a facility before entering our waterways.

Are you aware that litter on the ground picked up by stormwater can make our streams and lakes unclean and unsafe?

☐ (1) Yes
 ☐ (2) No

7. Stormwater infrastructure refers to pipes and other structures that carry stormwater throughout our community.

How concerned are you about broken stormwater infrastructure and the problems associated with it, such as the potential for localized flooding and erosion?

☐ (1) Very concerned
 ☐ (3) Slightly concerned
☐ (2) Moderately concerned
 ☐ (4) Not concerned

8. Bulky items such as couches, mattresses, and tires sometimes end up in our streams, lakes and rivers because of illegal dumping.

Are you aware that bulky waste must be scheduled for collection and items placed at the curb without scheduling with Char Meck 311 or Solid Waste Services WILL NOT be collected, causing trash accumulation?

☐ (1) Yes
 ☐ (2) No

9. Would you consider flooding an issue in your neighborhood?

☐ (1) Yes
 ☐ (2) No

10. Have you experienced property damage due to flooding while living in Charlotte-Mecklenburg?

☐ (1) Yes
 ☐ (2) No

11. Which of the following would motivate you the MOST to volunteer to help reduce surface water pollution? (Please choose the ONE best answer)

- ☐ (1) Being recognized publicly as a volunteer, such as your picture on social media
☐ (2) Knowing more about how your actions would have a positive impact on reducing surface water pollution
☐ (3) Knowing it would take less than 2 hours
☐ (4) Knowing plenty of details about the work and time commitment
☐ (5) The volunteer event is located within 5 miles or less of your home
☐ (6) Other: _____

12. Please indicate how strongly you feel about the following statements:

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.	The cleanliness of areas around streams and creeks in my neighborhood is of importance to me.	5	4	3	2	1
2.	Having thriving and diverse aquatic life in local creeks is important.	5	4	3	2	1
3.	I am concerned about the impacts from stormwater pollution on my local drinking water sources.	5	4	3	2	1
4.	I am concerned about the impacts of stormwater pollution on my ability to enjoy local creeks for recreational purposes.	5	4	3	2	1
5.	I am concerned about the amount of litter and trash in my neighborhood.	5	4	3	2	1
6.	I am aware of persistent environmental issues in my neighborhood.	5	4	3	2	1
7.	It is important to collect leaves and other yard waste for curbside collection or composting, rather than allow it to be swept up by stormwater.	5	4	3	2	1
8.	It is important for people to pick up after their pets to ensure pet waste does not degrade surface water quality.	5	4	3	2	1
9.	I feel confident and understand the process of reporting pollution in a creek, lake or storm drain to 3-1-1.	5	4	3	2	1
10.	When reporting to 3-1-1 my issues get resolved in a timely manner.	5	4	3	2	1
11.	I would be willing to help with community cleanup days where we pick up litter along creeks and natural areas.	5	4	3	2	1
12.	I trust Charlotte - Mecklenburg to provide services to the community fairly.	5	4	3	2	1

12a. Comments for responses above:

13. What do you feel are the most important environmental issues in your neighborhood? By environment we mean water, air, land, and all the natural areas and resources.

14. In your opinion, what are the best ways to clean up the creeks, streams, and the surrounding areas in your neighborhood?

Information about stormwater infrastructure, pollution, flooding, and volunteer opportunities is communicated to residents in many ways (i.e., television, radio, social media, and direct mail).

15. Have you heard or seen any information from Charlotte-Mecklenburg Storm Water Services in the past 12 months?

____ (1) Yes ____ (2) No

16. How would you prefer to receive information? (Please enter a “1” and “2” next to the TWO options you choose in the list below.)

- | | |
|---------------------------------------|----------------------------|
| ____ (1) Mail / Utility bill insert | ____ (6) Social media |
| ____ (2) Radio | ____ (7) Other: _____ |
| ____ (3) Storm Water Services website | ____ (8) None of the above |
| ____ (4) Email | |
| ____ (5) TV | |

For more information about the WRRIS-SWC Grant please visit ourvoiceourwater.com. If you have additional questions, please contact Dr. Bryan Patterson at 704-378-1254, Bpatterson@jcsu.edu or Daisha Williams at daishasrpe@gmail.com.

Thank you and let your voice be heard!

If you would like to participate in our grant project, learn about volunteer opportunities or receive information about Storm Water Services, please provide your contact information below.

Name: _____

Mailing Address: _____

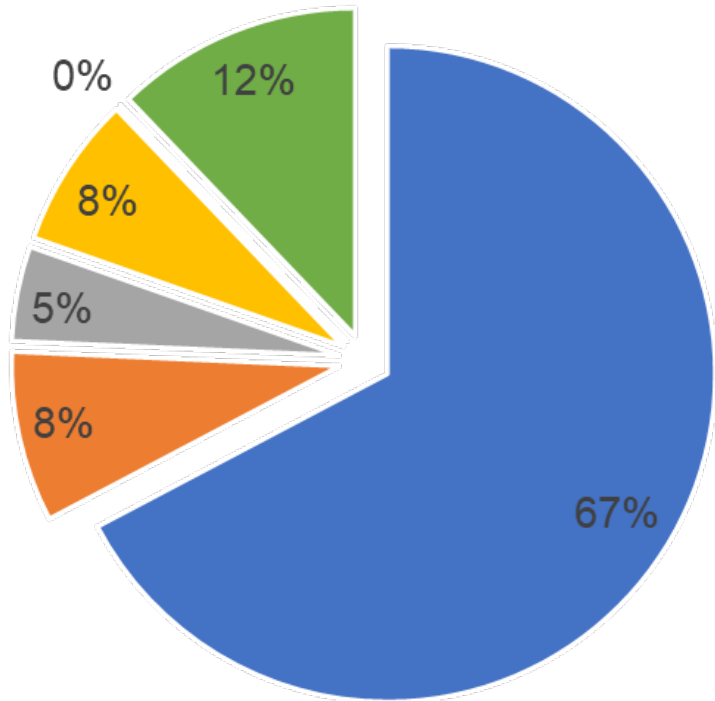
Email: _____

Phone: _____

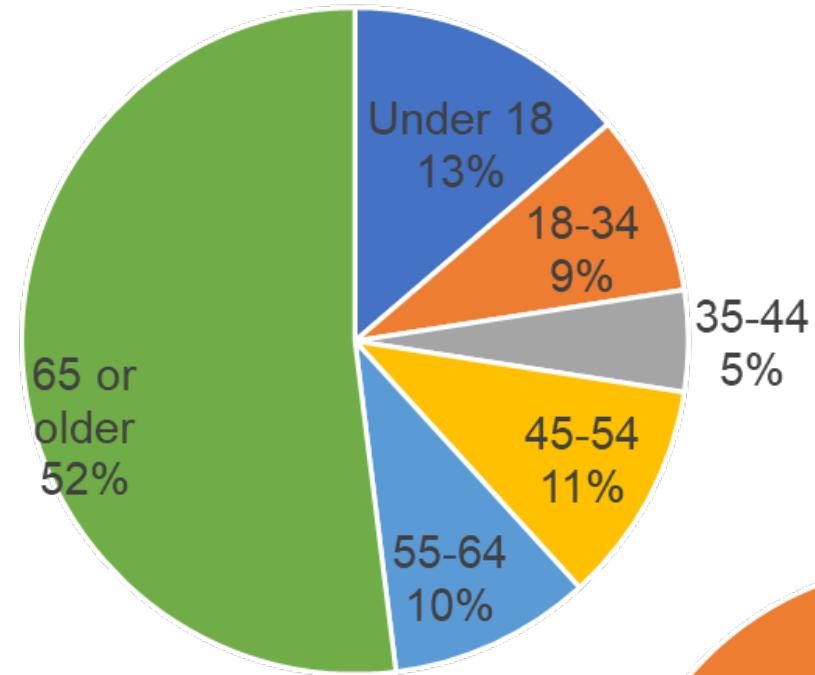
Survey Demographics

Race/Ethnicity

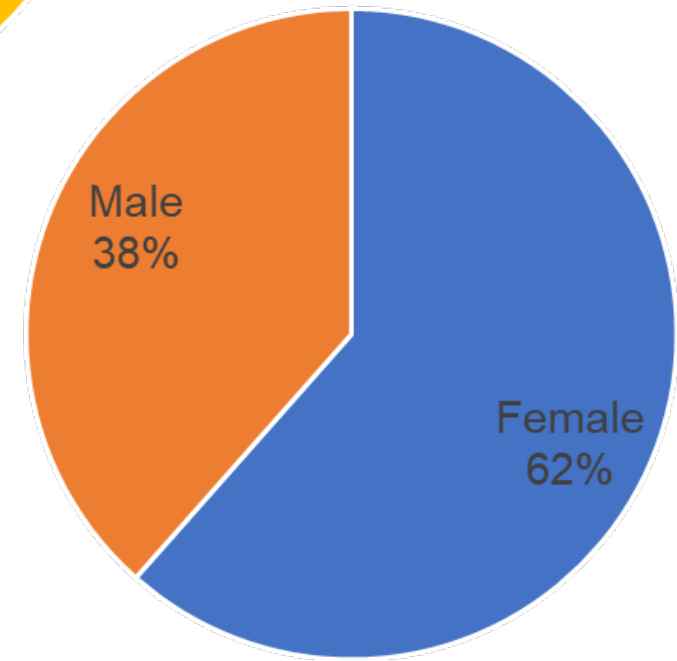
- African American/Black
- Asian/Pacific Islander
- Native American
- Asian/Indian
- Hispanic/Latino
- White/Caucasian



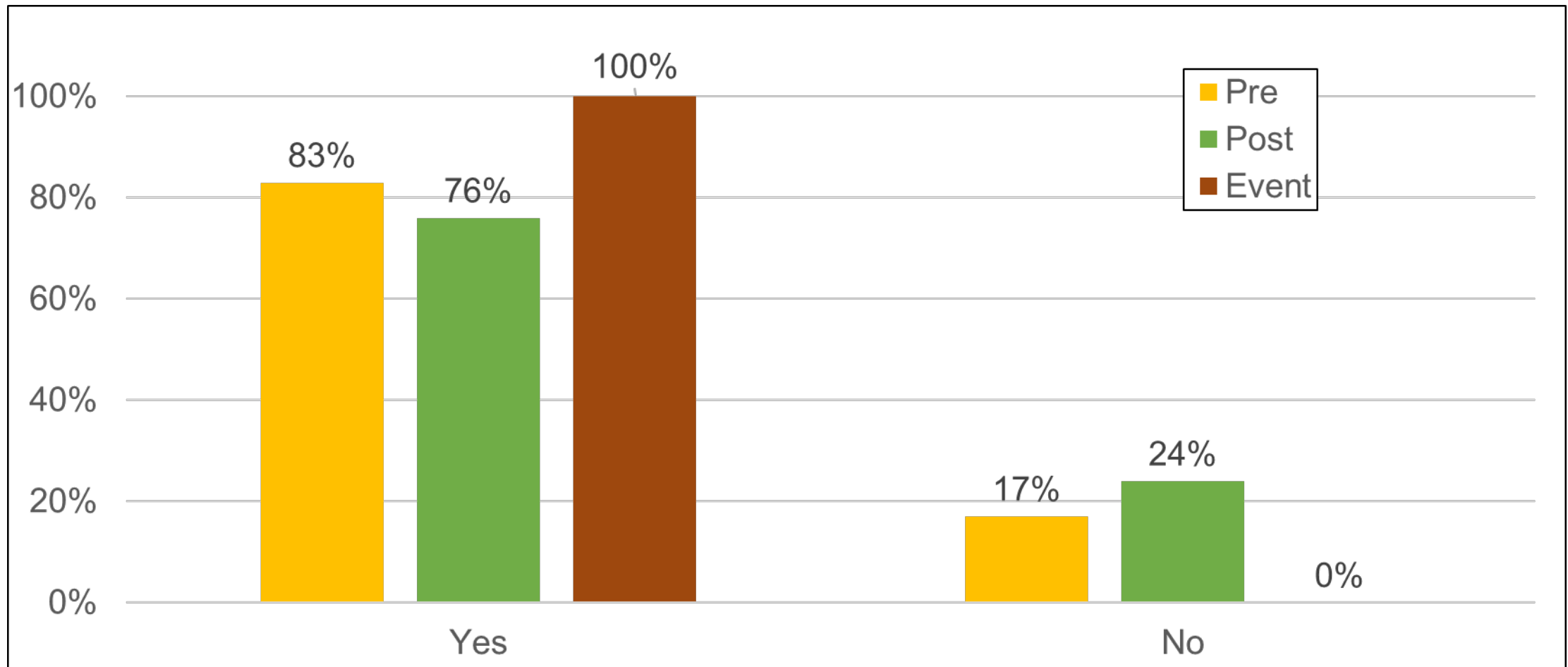
Age



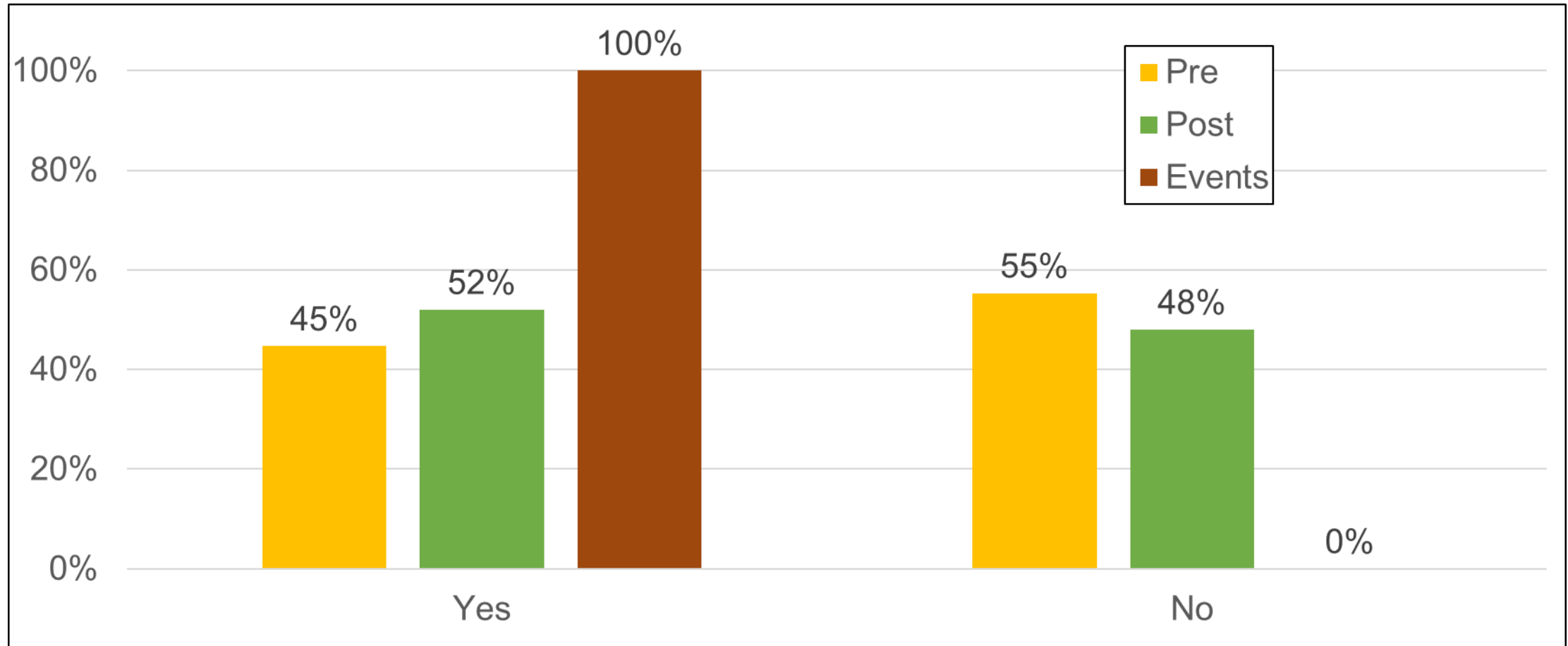
Gender



Are you aware that water that flows into storm drains from impervious surfaces, such as roads and sidewalks, typically goes directly to local creeks, ponds, and lakes?



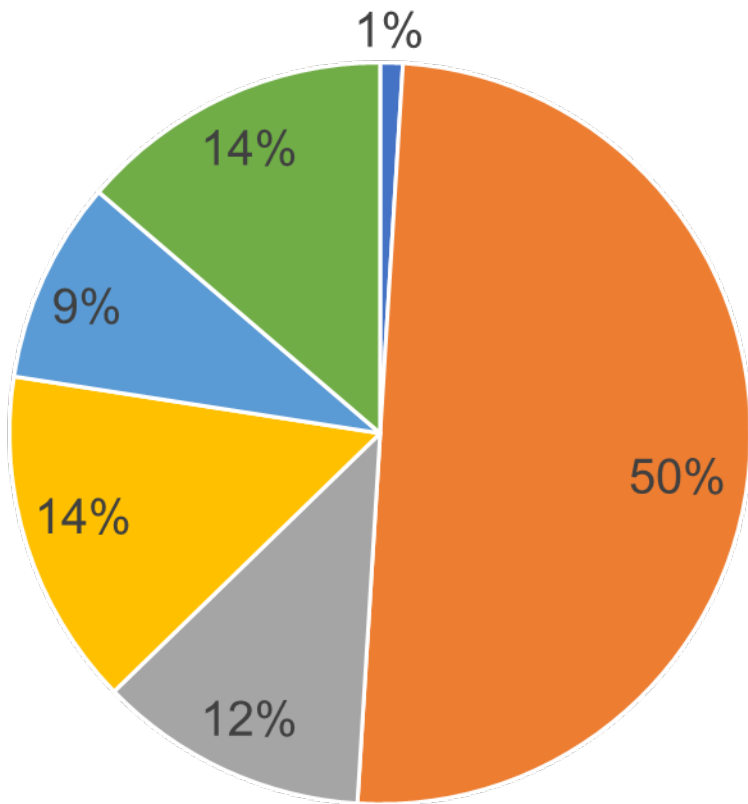
Would you consider flooding an issue in your neighborhood?



Evaluating Strength of Feelings

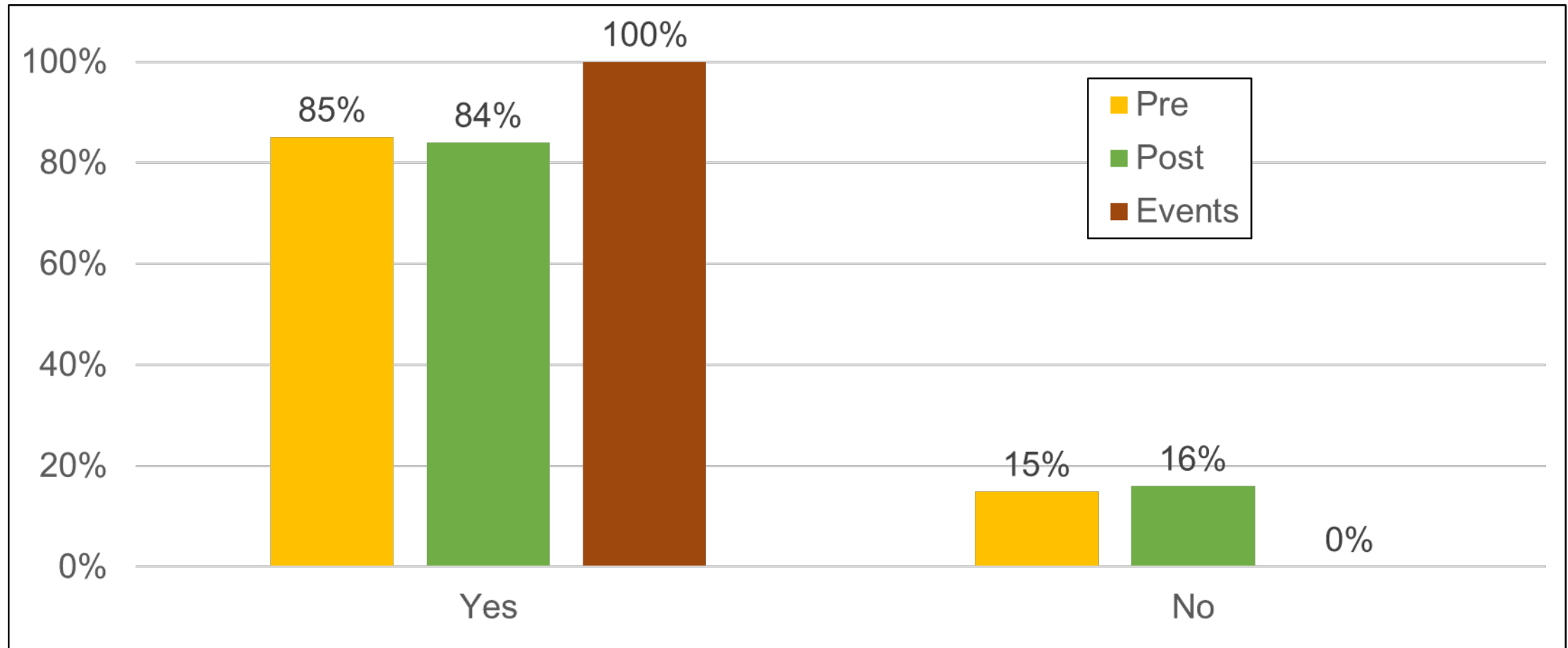
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
3	I am concerned about the impacts from stormwater pollution on my local drinking water sources.	80%	15%	3%	2%	0%
5	I am concerned about the amount of litter and trash in my neighborhood.	67%	18%	9%	6%	0%
9	I feel confident and understand the process of reporting pollution in a creek, lake or storm drain to 3-1-1.	57%	19%	15%	9%	0%
12.	I trust Charlotte - Mecklenburg to provide services to the community fairly.	44%	28%	24%	4%	0%

Which of the following would motivate you the MOST to volunteer to help reduce surface water pollution?



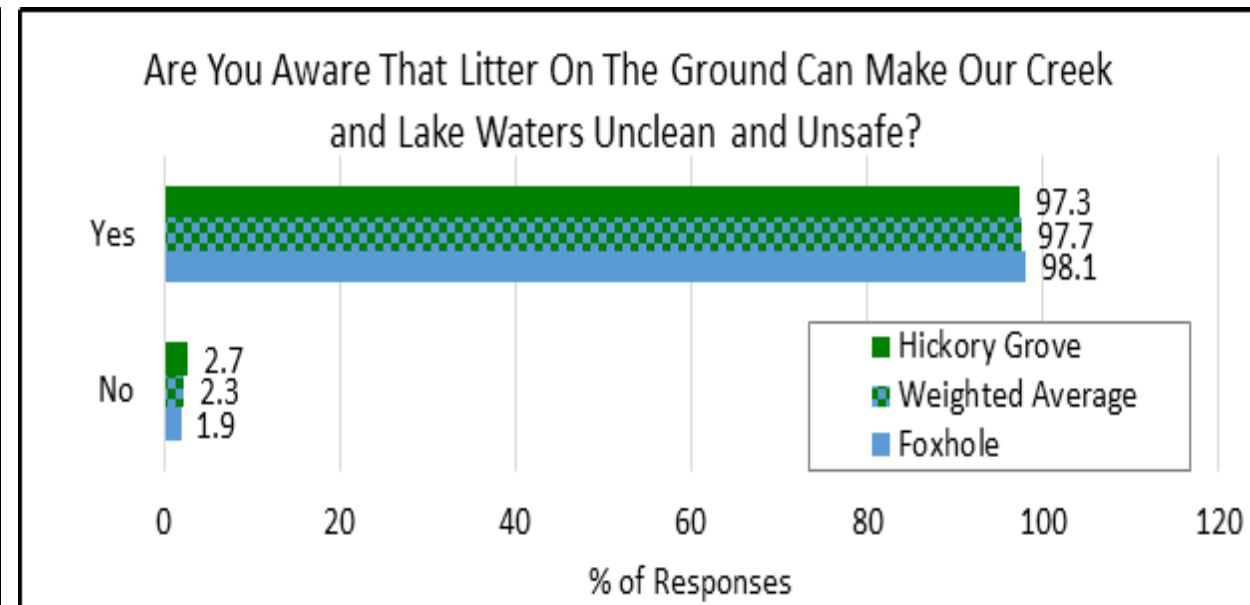
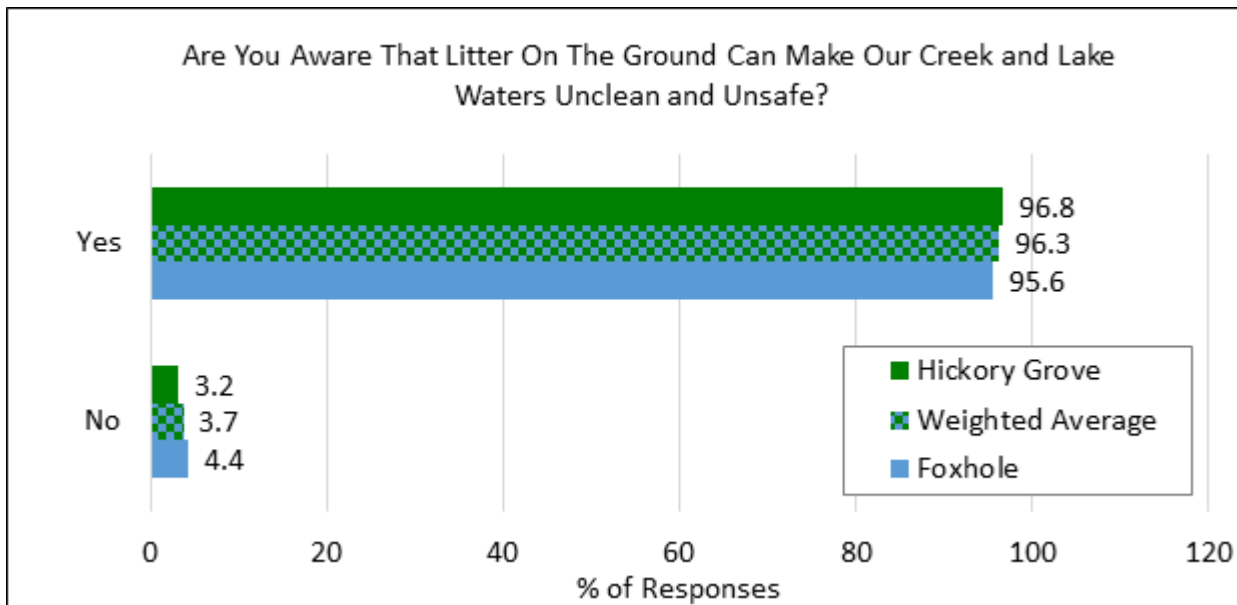
- Being recognized publicly as a volunteer, such as your picture on social media.
- Knowing more about how your actions would have a positive impact on reducing surface water pollution.
- Knowing it would take less than 2 hours.
- Knowing plenty of details about the work and time commitment.
- The volunteer event is located within 5 miles or less of your home
- Other (please specify):

Are you aware that litter on the ground picked up by stormwater can make our streams and lakes unclean and unsafe?

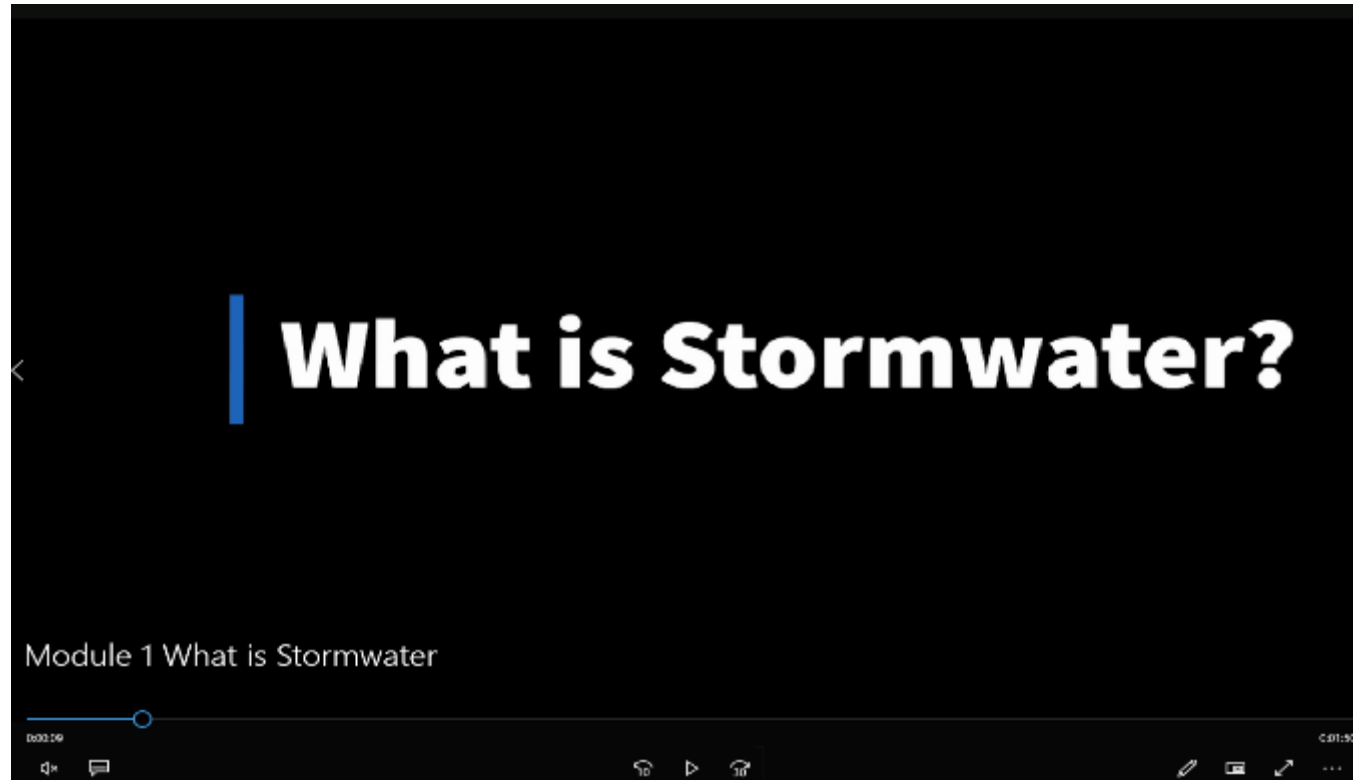


Mecklenburg County Solid Waste Convenience Center Survey

- 1,957 surveys in September-October 2019
- 1,558 surveys in June 2021
- Awareness that litter on the ground can make our creek and lake waters unclean and unsafe did not change significantly across the County



Educational Materials



- Citizen’s Guide for Stormwater
- Educational Modules: (1) What is Stormwater? (2) What are stormwater pollutants?
- Earth Day Bingo
- Multiple newsletters, handouts, etc.

Citizens Guide to Stormwater

Understanding the Storm Drainage System

WHO IS RESPONSIBLE FOR ADDRESSING STORMWATER CONCERNS?

The City of Charlotte repairs and improves the City storm drainage system located within:

- Publicly maintained City streets
- City rights-of way
- Specific areas where the City has entered into a legal easement agreement with a property owner

Private property owners are responsible for all other storm drainage systems

PROCESS AND FOLLOW UP OF REPORTED CONCERNS

1. Reported stormwater concerns are first assessed to ensure that they meet the minimum requirements for Charlotte-Mecklenburg Stormwater Services (CMSWS) to investigate the issues. The minimum requirements are:
 - Stormwater from a city street must contribute to the drainage concern.
 - The drainage concern must be addressed by the Stormwater Program, for example broken stormwater infrastructure such as drains and grates, blocked pipes, flooded City street etc.
 - The City storm drainage system must be improved by the addressing the stormwater concern.
2. If the stormwater concern meets any minimum requirement, it is then assessed on its risk to the public. This risk is determined by factors such as condition, capacity and performance of the existing storm drainage concern.
3. Once the concern is evaluated, CMSWS then addresses the issues and uses the results of reported concerns to identify future storm drainage improvements.

CITIZEN CONCERNS THAT ARE NOT ADDRESSED BY THE STORMWATER SERVICES PROGRAM

- Trash accumulation, especially bulky items such as couches and furniture. These items must be scheduled for pick up with Solid Waste Services. You can schedule pick up here: <https://servicerequest.charlottenc.gov/service/BUCKETITEM> or by calling 3-1-1 to schedule.
- Citizen or neighbor disputes.
- Yard flooding and other drainage issues caused by landscapes.
- Erosion along a creek.
- Runoff from adjacent private properties.
- Occurrence of wildlife such as snakes, bugs etc. in your yard or in a neighbors yard.

WHEN IT RAINS-IT DRAINS!

Rain and melting snow create runoff as they move across the landscape to lakes, streams, rivers, and other waterways. In natural areas, this water is typically infiltrated back into the ground due to soil and natural coverage. However, in urban areas, such as here in Charlotte most stormwater falls onto impervious surfaces such as streets, sidewalks, parking lots, roofs, and carries pesticides, fertilizers, oils, metals, salt, bacteria, litter, yard waste, sediment, and other materials found on these surfaces down storm drains and into waterways. Unlike wastewater, stormwater is not treated before it empties into nearby bodies of water.

A stormwater system in a city that consists of storm drains, gutters, and catch basins is called a municipal separate storm sewer system (MS4). MS4 regulations require that municipalities educate citizens on stormwater management issues and include them in solving stormwater problems, make plans to detect and stop illicit discharges, control runoff on construction sites, and more.

Report storm water concerns, illicit discharges and construction site runoff by calling 3-1-1 or 704-336-7600, Monday- Friday, 7 a.m. to 7 p.m. or through submitting an online form to StormWater.CharMeck.org

Website: OurvoiceOurwater.org

Resources and Modules

The project objective of Our Voice Our Water is to address the linkages between stormwater and trash, litter and/or illicit discharges. To develop understanding, build awareness and implement applied techniques for stormwater management, modules will be provided for community members and grant participants to engage with. Please watch the module below and read on to learn more about stormwater pollution, its impacts on our waterways, and what you can do to prevent pollution.



OUR VOICE OUR WATER

EVERY DROP OF PERSPECTIVE AND INVOLVEMENT MATTERS

NC Water Resources Research Institute- Stormwater Consortium Grant

ABOUT OUR ORGANIZATION

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BE HEARD

Share your knowledge and perspectives through focus groups and surveys in order to help the project truly grasp the stormwater and water quality concerns of the community. Survey available in:

GET INVOLVED








Join us for Stream Cleanup & Storm Drain Marking to help keep OUR WATER clean

9/12, 9am-12pm
1501 McDonald St.
Charlotte

Marking register online @ <https://bit.ly/31JEK2>

Made with PosterMyWish.com

Clean Streams for Earth Day!

 CALL A FRIEND AND SHARE A MEMORY YOU HAVE AT A CREEK OR LAKE	 DO AN OUR VOICE OUR WATER MODULE	 CLEAN A STORM DRAIN
 GO FOR WALK AND COUNT HOW MANY STORM DRAINS YOU SEE	 LEARN ABOUT THE CATAWBA RIVER BASIN	 PICK UP 1 GROCERY BAG OF TRASH
 TAKE THE OUR VOICE OUR WATER SURVEY	 WRITE A CARD TO SOMEONE WHO IS ENVIRONMENTALLY FRIENDLY	 CHOOSE TO REUSE REUSE OR REPURPOSE SOMETHING

Visit ourvoiceourwater.com to complete some of these tasks

Clean Streams for Earth Day!

 CALL A FRIEND AND SHARE A MEMORY YOU HAVE AT A CREEK OR LAKE	 WATCH THE OUR VOICE OUR WATER MODULE ON THE RESOURCES PAGE	 SEND A HAPPY EARTH DAY CARD (APRIL 22)
 LOOK OUT YOUR WINDOW FOR STORM DRAINS	 TAKE THE OUR VOICE OUR WATER SURVEY	 LEARN ABOUT THE CATAWBA RIVER BASIN
 CHOOSE TO REUSE REUSE OR REPURPOSE SOMETHING	 VISIT OUR VOICE OUR WATER WEBSITE AND LEARN ABOUT INITIATIVE IN MY NEIGHBORHOOD	 CALL A FRIEND AND SHARE SOMETHING YOU LEARNED ABOUT STORMWATER

Visit ourvoiceourwater.com to complete some of these tasks

3-1-1 Calls Data Evaluation

- Two rounds of analysis
 1. January 2018- March 2020
 2. April 2020- January 2021
- Purpose: Understand types of issues community members are reporting to the city as it relates to stormwater, environmental pollution and degradation to build content for 3-1-1 workshop and educational materials.
- Main areas of concern:
 - Missed garbage, recycling, or leaf/lawn pickups
 - Illegal dumping
 - Spilled garbage from sanitation services
 - Junk accumulation
 - Bulky items
 - Tires
 - Blockage - storm drains, pipes, ditches, and streams



FY 2020 Data

Call Type	Lincoln Heights	Washington Heights	Northwood Estates
Missed Garbage Pick Up	73	57	30
Missed Recycling Pick Up	71	21	37
Missed Yard Waste Pick Up	58	12	9
Tires	23	14	16
Missed Bulky Item Pick Up	18	19	1
Junk Accumulation	16	28	18
Illegal Dumping	10	7	5
Bulky Items at Curb	8	6	2
Street Sweeping Request	6	6	5
Clean Catch Basin Request	5	2	0
Stormwater	4	1	1
Blockage	3	0	0
Spilled Garbage	3	2	2
Flooding	2	1	3
Citizen Feedback	1	0	9
Spilled Recycling	1	0	6
Erosion	0	0	3
Trash Pick Up Request	0	2	0

FY 2021 Data

Call Type	Lincoln Heights	Washington Heights	Northwood Estates
Trash Accumulation	56	48	50
Tires	35	29	69
Illegal Dumping	27	20	47
Blockage	21	10	2
Street Sweeping Request	15	10	2
Spill Garbage/Recycling	9	6	145
Flooding	6	6	11
Construction Debris	3	0	2
Erosion	1	0	10
Storm drain damage	1	2	2

“3-1-1 Having a Voice” Virtual Workshop

Citizens are Being Heard and Seeking to Bring Forward Two – Way Communication Between Citizens and Charlotte-Mecklenburg Storm Water Services along with other City of Charlotte Entities

Virtual Meeting Via Zoom: June 22nd 6-7:30pm

Presenters and attendees have capabilities for speaking, asking questions, and discussing topics of concern.

Goals:

- Seeking to have a dynamic engaging discussion.
- Sharing ideas not just doing presentations.
- Continued communication and collaboration.

Citizens Participation in Having a Voice

- Emails and Phone Calls
 - Citizens met throughout research.
 - Contact information with survey for interest in volunteering.
- Seeking community members to invite others
 - Requested assistance in meeting neighbors to invite them.
 - Met with citizens in their neighborhood to discuss workshop.
 - Citizens took announcements and invited their neighbors.
- Provided meals at a common location for pickup by attendees.
- Provided \$10 gift cards to participants.
- Encouraged neighborhood participation with grants for 15+ participants.



Empowering Citizens with a Voice and Role in Municipal Stormwater, “ Our Voice Our Water”

“Our Voice, Our Water” – Sharing Perspectives	<p>Bryan Patterson, Johnson C. Smith University, Assistant Professor of Interdisciplinary Studies, Chair of Public Leadership Studies Program</p> <p>Daisha Williams, Resilience Corps NC, Regional Stormwater Educator</p> <p>Kari Rayburn, Rising Solutions PLLC, VP of Chemistry and Engineering</p>
Workshop Overview	Regina Guyer, Rising Solutions, PLLC, President
3-1-1 – Helping Citizens navigate the system and how this service works.	<p>Linette McCallum, City of Charlotte, Partner Liaison Manager Housing and Neighborhood Services – CharMeck 311</p> <p>Keshia Brinkley, City of Charlotte, 311 Program Analyst</p>
Stormwater Pollution – How it affects us, what we can do to make a difference and how to report it.	Sharnelle Currence, City of Charlotte, Sr. Public Information Specialist
Stormwater Related Problems: Flooding, Sinkholes, Erosion - why these problems occur, how to report, stormwater investigations, protocols and criteria for determining work.	Kate Labadorf, City of Charlotte, Strategic Planning Program Manager
Stormwater Projects – Examples of the breadth of stormwater related projects done by Charlotte-Mecklenburg Storm Water Services.	Matt Gustis, City of Charlotte, Engineering Program Manager
Solid Waste – Pick up updates, Bulky items, illegal dumping, and missed trash pickup.	Erika Wiley, City of Charlotte, Community Relations Specialist - Solid Waste Services
Introduction to Individuals Who Are Your Resources	Regina Guyer
Open Dialogue and Share (Comments, Questions, and Ideas) Verbally and through Zoom “Chat”	<p>All Attendees</p> <p>Facilitators: Bryan Patterson</p> <p>Regina Guyer</p>
Meeting Summary, Appreciation, Next Steps	Bryan Patterson
Attendees Complete Information for Gift Cards via Chat Link Survey	
Adjourn/End of Workshop	Bryan Patterson

Contact information for Speakers:

Erika Wiley, City of Charlotte
Community Relations Specialist - Solid Waste Services
Erika.Wiley@charlottenc.gov

Kate Labadorf, City of Charlotte
Strategic Planning Program Manager
Kate.Labadorf@charlottenc.gov

Keshia Brinkley, City of Charlotte
311 Program Analyst
Keshia.Brinkley@charlottenc.gov

Linette McCallum, City of Charlotte
Partner Liaison Manager
Housing and Neighborhood Services – CharMeck 311
Linette.McCallum@charlottenc.gov

Matt Gustis, City of Charlotte,
Engineering Program Manager
Matt.Gustis@CharlotteNC.gov

Sharnelle G. Currence, City of Charlotte
Sr. Public Information Specialist
Sharnelle.Currence@CharlotteNC.gov

Additional Charlotte-Mecklenburg Storm Water Services Contacts:

Ashley Smith,
Charlotte Mecklenburg Storm Water Services
Senior Environmental Specialist
ashley.smith@mecklenburgcountync.gov

David Caldwell,
Charlotte Mecklenburg Storm Water Services
Environmental Supervisor
David.Caldwell@mecklenburgcountync.gov

Ken Friday,
Charlotte Mecklenburg Storm Water Services
Environmental Specialist
Kenneth.Friday@mecklenburgcountync.gov

Community Resources Contacts:

Jonathan Hill, City of Charlotte,
Housing and Neighborhood Services
Program Manager, Keep Charlotte Beautiful
Jonathan.Hill@charlottenc.gov

“Our Voice Our Water” Team WRRI-SWC Grant Project

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311 Having a Voice Workshop

Empowering Communities with a
Voice and Role in Municipal
Stormwater Program Goals

311 Having a Voice Workshop Discussions

- Provided an overview of the different services related to 3-1-1.
- Discussed "how" the various municipalities create their priority list.
- Requested more accountability for services (timelines for actions).
- Discussed the role of solid waste services.
- Discussed the local and neighborhood flooding and great impacts.
- How do you identify the proper resources for requested or needed for emergency services?

Focus Group Questionnaire

- What are your community's experience with stormwater? Are you aware of any experiences your neighborhood has had with stormwater, such as a stormwater construction project, volunteer event, pollution issues, or flooding?
- What is your awareness of the stormwater drains in your community and where they go? Are there stormwater drains near your home? Have you noticed if the drains become blocked by litter, leaves, debris, or in other ways?
- As these drains flow directly into streams and lakes, only stormwater should flow through them. Other materials put into storm drains pollute our water and are considered illegal dumping. Even items placed NEAR stormwater drains, can flow into the stormwater drains if liquid or be carried into them by stormwater.

Focus Groups Results

- Major theme identified were that most participants wanted to be -"System Changers", which meant that people wanted to make the community a more welcoming and better. Noting not all participants were equipped with the knowledge to bring about the systematic change.
- Participants shared that they felt they were positively impacting their community, however many others in the community were not. There was a need to "connect the dots" on the roles and responsibilities of all.
- Many participants shared that they were retired and have lived in the community for over 15 years. Therefore, their investment in change would be meaningful; many were concerned that newer residents did not have the same level of investment.
- They all identified as being concerned about issues around the stormwater awareness. Participants felt the need for the city and county to have a greater presence on addressing these issues in their respective communities.
- Many participants felt they had a personal stake in addressing issues of inequities in neighborhoods.
- They all identified issues and incidents that had affected them personally and involved the community.

Our Water

- Stream Assessments
- Stream Cleanup and Storm Drain Marking



Empowering Citizens with a Voice and Role in Municipal Stormwater, "Our Voice Our Water"

TRASH ITEM TALLY (Tally with (•) if found above high water line, and (!) if below)

PLASTIC	# Above	# Below	METAL	# Above	# Below
Plastic Bags			Aluminum Foil		
Plastic Bottles			Aluminum or Steel Cans		
Plastic Bottle Caps			Bottle Caps		
Plastic Cup Lid/Straw			Metal Pipe Segments		
Plastic Pipe Segments			Auto Parts (specify below)		
Plastic Six-Pack Rings			Wire (barb, chicken wire etc.)		
Plastic Wrapper			Metal Object		
Soft Plastic Pieces			LARGE (specify below)	# Above	# Below
Hard Plastic Pieces			Appliances		
Styrofoam cups pieces			Furniture		
Styrofoam Pellets			Garbage Bags of Trash		
Fishing Line			Tires		
Tarp			Shopping Carts		
Other (write-in)			Other (write-in)		
BIOHAZARD	# Above	# Below	TOXIC	# Above	# Below
Human Waste/Diapers			Chemical Containers		
Pet Waste			Oil/Surfactant on Water		
Syringes or Pipettes			Spray Paint Cans		
Dead Animals			Lighters		
Other (write-in)			Small Batteries		
CONSTRUCTION DEBRIS	#Above	#Below	Vehicle Batteries		
Concrete (not placed)			Other (write-in)		
Rebar			BIODEGRADABLE	# Above	# Below
Bricks			Paper		
Wood Debris			Cardboard		
Other (write-in)			Food Waste		
MISCELLANEOUS	# Above	# Below	Yard Waste (incl. trees)		
Synthetic Rubber			Leaf Litter Piles		
Foam Rubber			Other (write-in)		
Balloons			GLASS	# Above	# Below
Ceramic pots/shards			Glass bottles		
Hose Pieces			Glass pieces		
Cigarette Butts			FABRIC AND CLOTHES	# Above	# Below
Golf Balls			Synthetic Fabric		
Tennis Balls			Natural Fabric (cotton, wool)		
Other (write-in)			Other (write-in)		
Total pieces Above:			Below:		Grand total:
Tally all trash in above rows; make notes below as needed to facilitate scoring.					
Littered:					
Dumped:					
Downstream Accumulation:					

- 100 ft litter assessment
- 1st glance
- Count
- Threats to aquatic life
- human health
- Illegal dumping/illegal littering
- Accumulation

	CONDITION CATEGORY																																		
Trash Assessment Parameter	Optimal					Sub optimal					Marginal					Poor																			
1. Level of Trash	On first glance, no trash visible. Little or no trash (<10 pieces) evident when streambed and stream banks are checked and debris is not visible under leaves.					On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in stream bank and streambed.					Trash is evident in low to medium levels (51-100 pieces) on first glance. Stream, bank surfaces, and riparian zone contain litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, clothing.					Trash distracts the eye on first glance. Stream, bank surfaces, and immediate riparian zone contain substantial levels of litter and debris (>100 pieces). Evidence of site being used frequently by people: many cans, bottles, and food wrappers, blankets, clothing.																			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0														
2. Actual Number of Trash Items Found	0 to 10 trash items found based on a trash assessment of a 100-foot stream reach.					11 to 50 trash items found based on a trash assessment of a 100-foot stream reach.					51 to 100 trash items found based on a trash assessment of a 100-foot stream reach.					Over 100 trash items found based on a trash assessment of a 100-foot stream reach.																			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0														
3. Threat to Aquatic Life	Trash, if any, is mostly paper or wood products or other biodegradable materials. Note: A large amount of paper, biodegradable material like food waste, etc. is high in food demand, and should not be scored as optimal.					Little or no (<10 pieces) transportable, persistent, buoyant litter such as: hard or soft plastics, Styrofoam, balloons, cigarette butts. Presence of settleable, degradable, and non-toxic debris such as glass or metal.					Medium prevalence (10-50 pieces) of transportable, persistent, buoyant litter such as: hard or soft plastics, Styrofoam, balloons, cigarette butts. Larger deposits (< 50 pieces) of settleable debris such as glass or metal. Any evidence of					Large amount (>50 pieces) of transportable, persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam, cigarette butts; toxic items such as batteries, lighters, or spray cans; large clumps of yard waste or dumped leaf litter; or large amount (>50 pieces) of settleable glass or metal.																			
SCORE	20	19	18	17	16	15	14	13	12	11	CONDITION CATEGORY																								
4. Threat to Human Health	Trash contains no evidence of bacteria or virus hazards such as medical waste, diapers, pet or human feces, evidence of medical or chemical containers, or batteries. No ponded water for mosquito production. No evidence of puncture and laceration hazards such as broken glass or metal debris.					No biohazardous or toxic materials. No sharp or metal pieces present which could facilitate injury.					Trash Assessment Parameter					Optimal					Sub optimal					Marginal									
5. Illegal Dumping						5. Illegal Dumping					D: No evidence of illegal dumping. No bags of trash, no yard waste, no household items placed at site to avoid proper disposal, no shopping carts.					D: Some evidence of illegal dumping. Limited vehicular access limits the amount of potential dumping, or material dumped is diffuse paper-based debris.					D: Presence of the following appliances, carts, bags or yard waste with vehicle that facilitates dumping materials to landfill costs														
SCORE	20	19	18	17	16	15	14	13	12	11	Illegal Littering										L: Any trash is incidental litter (< 5					L: Some evidence of litter within creek and					L: Prevalent pieces) in				

	CONDITION CATEGORY																						
Trash Assessment Parameter	Optimal					Sub optimal					Marginal					Poor							
5. Illegal Dumping	D: No evidence of illegal dumping. No bags of trash, no yard waste, no household items placed at site to avoid proper disposal, no shopping carts.					D: Some evidence of illegal dumping. Limited vehicular access limits the amount of potential dumping, or material dumped is diffuse paper-based debris.					D: Presence of one of the following: furniture, appliances, shopping carts, bags of garbage or yard waste, coupled with vehicular access that facilitates in-and-out dumping of materials to avoid landfill costs.					D: Evidence of chronic dumping, with more than one of the following items: furniture, appliances, shopping carts, bags of garbage, or yard waste. Easy vehicular access for in-and-out dumping of materials to avoid landfill costs.							
Illegal Littering	L: Any trash is incidental litter (< 5 pieces) or carried downstream from another location.					L: Some evidence of litter within creek and banks originating from adjacent land uses (<10 pieces).					L: Prevalent (10-50 pieces) in-stream or shoreline littering that appears to originate from adjacent land uses.					L: Large amount (>50 pieces) of litter within creek and on banks that appears to originate from adjacent land uses.							
D-SCORE	10	9				8	7	6				5	4	3				2	1	0			
L-SCORE	10	9				8	7	6				5	4	3				2	1	0			
6. Accumulation of Trash	There does not appear to be a problem with trash accumulation from downstream transport. Trash, if any, appears to have been directly deposited at the stream location.					Some evidence (<10 pieces) that litter and debris have been transported from upstream areas to the location, based on evidence such as silt marks, faded colors or location near high water line.					Evidence that (10 to 50 pieces) trash is carried to the location from upstream, as evidenced by its location near high water line, siltation marks on the debris, or faded colors.					Trash appears to have accumulated in substantial quantities at the location based on delivery from upstream areas, and is in various states of degradation based on its persistence in the waterbody. Over 50 items of trash have been carried to the location from upstream.							
SCORE	20	19	18	17	16	15	14	13	12	11			10	9	8	7	6	5	4	3	2	1	0



Rapid Trash Assessment Worksheet

National Waste Minimization Project, San Francisco Bay Regional Waste Quality Council

WATERSHED/STREAM: **Trinity Creek**

MEMBERSHIP GROUP: **STAFF**

SITE DESCRIPTION: **Watershed Number, etc.**

DATE/TIME: **10/1/00 10:00**

CONDUCTED BY: **Lincoln Vongphol**

CONDITION CATEGORY					
Task Assessment Parameter	Optional	Not optional	Marginal	Poor	
1. Level of Trash	Is the stream free of trash? Is trash visible? Is trash abundant? Is trash abundant and scattered? Is trash piled up? Is trash piled up and visible? Is trash piled up and visible? Is trash piled up and visible?	Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible?	Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible?	Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible?	Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible? Is trash visible?
2. Source	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
3. Actual Number of Trash Yards Found	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
4. Threat to Aquatic Life	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
5. Threat to Humans	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
6. Threat to Animals	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
7. Threat to Plants	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
8. Threat to Insects	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
9. Threat to Birds	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
10. Threat to Fish	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
11. Threat to Reptiles	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
12. Threat to Amphibians	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
13. Threat to Mammals	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
14. Threat to Other Wildlife	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
15. Threat to Cultural Resources	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
16. Threat to Historical Resources	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
17. Threat to Archaeological Resources	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
18. Threat to Paleontological Resources	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
19. Threat to Geological Resources	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
20. Threat to Biological Resources	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12
21. Threat to Cultural Resources	1 2 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9 10 11 12	1 3 4 5 6 7 8 9	

LESS FOUND: There was too much within 100 yards.



Elementary School



Stream cleanup:

- 9 participants
- 80 trash bags collected
- 6 mattresses and a hutch

Storm drain marking:

- 20 participants
- 196 drains marked
- 15 trash bags collected

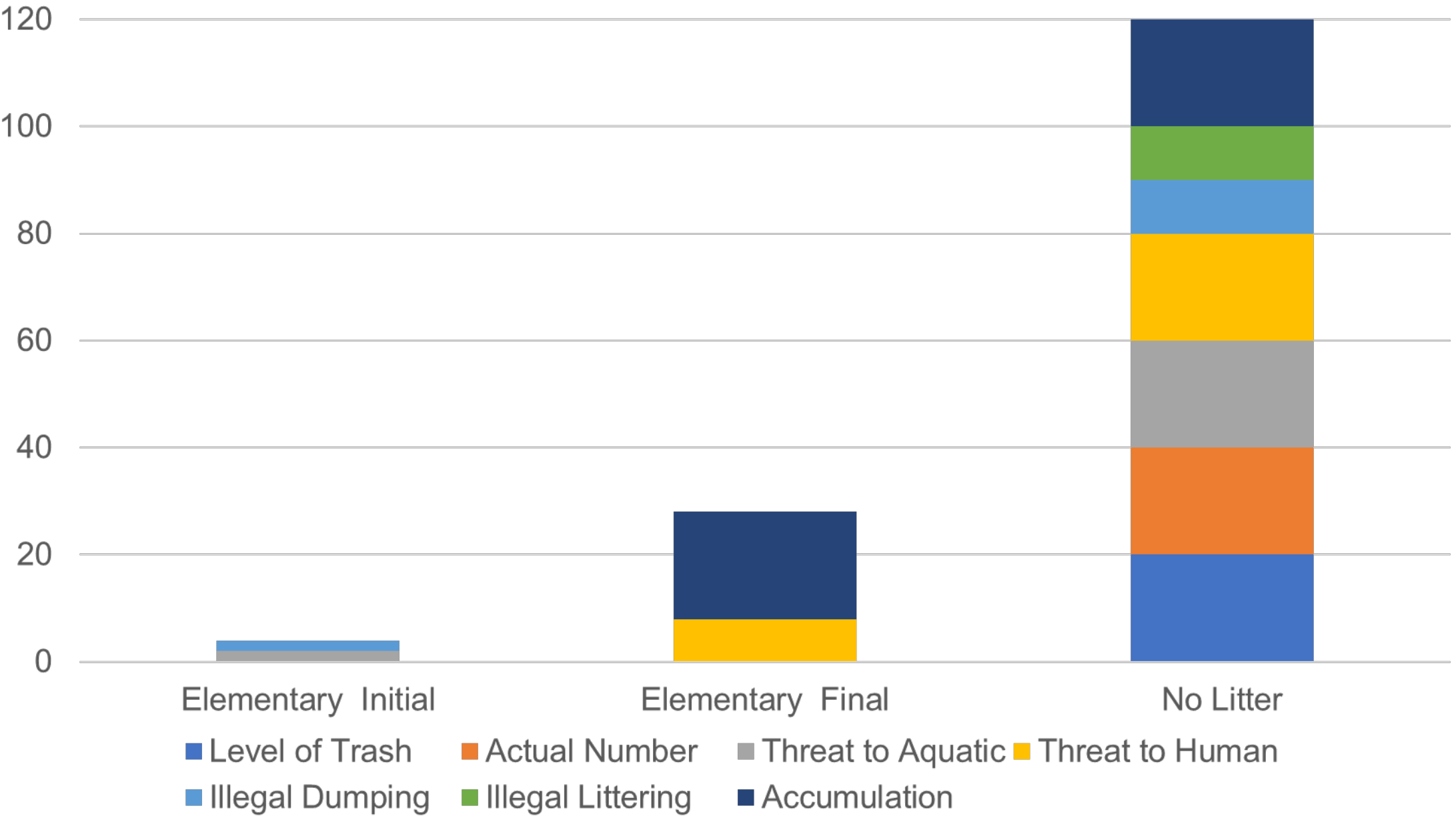
Learning from Citizens:

Neighbor spoke up about source of trash



Collaboration: Charlotte-Mecklenburg Stormwater Services Coordinated

1. Solid Waste Division for illegal dumping actions.
2. Center for Employment Opportunity Work Crew Clean up of 1.5 Tons.





Stream Cleanups

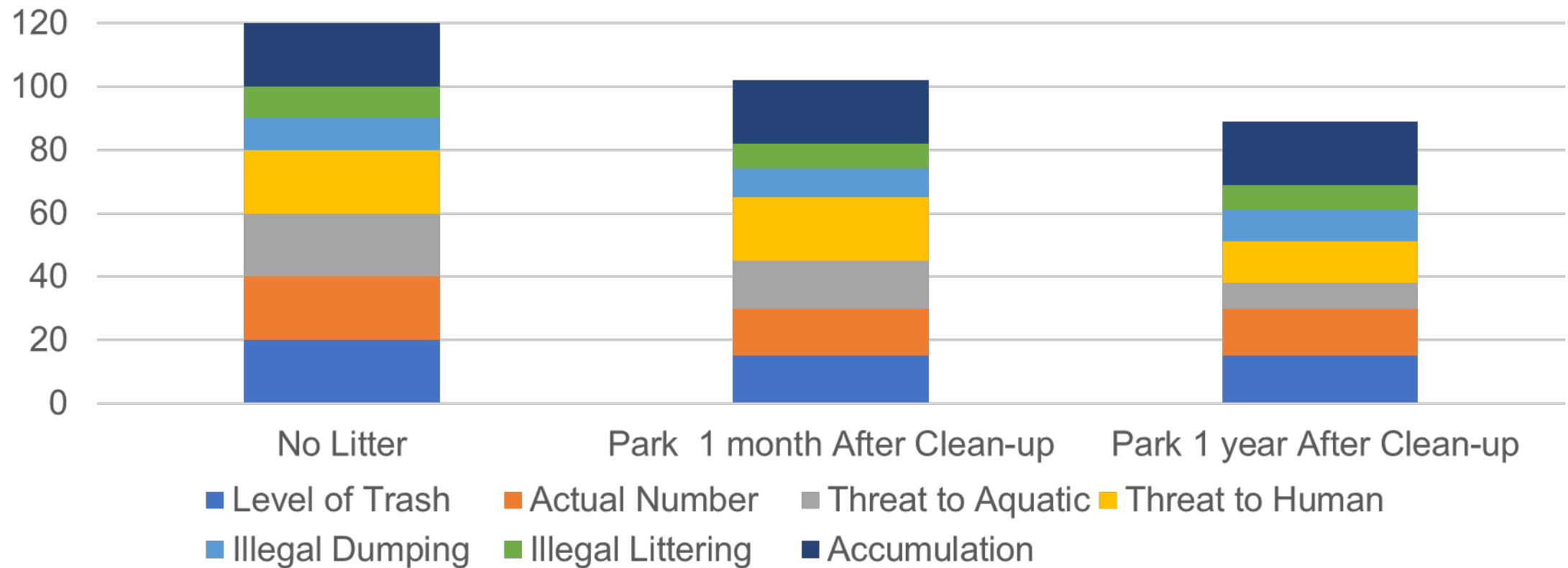
Storm Drain Marking



- 500 Andrill Terrace (Mar 2020)
 - 44 participants: 60 bags of trash, tires and furniture
- 1630 McDonald St (Sept 2020)
 - 20 stream participants: 50 bags of trash collected including 4 tires, a car seat, and four bikes (~ 1,500 lbs of trash)
 - 11 stormdrain participants: 89 storm drains marked
- Northwood Estates (Nov 2020)
 - 4 participants: 30+ storm drains marked and passed out yard waste paper bags to neighbors
- 1900 Newcastle St (Jan 2021)
 - 9 stream participants: 80 trash bags collected, 6 mattresses and a hutch
 - 20 storm drain participants: 196 storm drains marked, 15 trash bags collected
- 1832 Griers Grove Rd (Mar 2021)
 - 12 participants: 10 bags of trash, tire, and a box fan
- 1321 Capps Hill Mine Rd (Apr 2021)
 - 27 stream participants: 75 trash bags, 18 tires, mattress (~ 2000 lbs of trash)
 - 28 storm drain participants: 277 storm drains marked



How often to repeat clean up locations?



Momentum to Continue

- Two-way communication with citizens and Charlotte-Mecklenburg Storm Water Services
- Continued support and collaboration with Charlotte-Mecklenburg Storm Water Services
 - Attending Neighborhood Meetings
 - Stream Clean Ups and Storm Drain Marking in neighborhoods
 - Assessment of community needs in “hot spot” areas
- Project Community Grants
 - Citizens develop ideas for grants to improve their community
 - Citizens participate in improving their community
- Continue to be involved with Neighborhood
 - National Night Out - Backpack Donations
 - Blackness is...
- Continued engagement with Johnson C. Smith University
- Disseminate research findings and empowerment model



BLACKNESS IS...
COMMUNITY CLEAN-UP
AND POP-UP ART EVENT

Saturday, June 26th
9 am - 2 pm
The Dooby Shop School of Cosmetology,
2107 Beatties Ford Rd

- Free Food
- Free art supplies
- Live painting
- Interactive art
- Music

In collaboration with:
The Dooby Shop School of Cosmetology
For the Struggle
Clean-up co-host Impact Global International
(@impactglobalinternational)
The Underground Art Bus
Frankie Zombie (@frankie.zombie_)
Ricky Singh (@mrrickysingh)
DeNeer Davis (@neerperfection)
Makayla Binter (@mkay_15)
@cltchalkart

Neighborhood Empowerment Model

1. Meet citizens in your community.
2. Seek to gain citizens’ perspectives – Listen.
3. Review historic data from the neighborhood/citizens.
4. Realize the uniqueness of each neighborhood.
5. Develop educational materials tailored to citizens.
6. Create an opportunity for citizens to have a voice.
7. Gain insight from small group discussions.
8. Track environmental measures to visualize and inform citizens while evaluating environmental improvements.
9. Engage citizens to volunteer and participate in events.

Lessons Learned

- Work with and through the leaders of the neighborhoods.
- Find interested citizens who are active within the neighborhood.
- Have personal interactions to engage with citizens.
- Realize each neighborhood and community have unique dynamics.
- Host volunteer events within the community.
- Monitor litter and stream impacts.
- Seek to be involved with the neighborhood events and needs.
- Listen – let your citizens have a Voice.
- Involve – engage citizens in improving their community .
- Provide food.

Researchers Conveying Citizens' Perspectives

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With Gratitude to Each WRRI-SWC member!