



Water Resources Research Institute  
of The University of North Carolina

Report No. 442

TAILORING FATS, OIL, AND GREASE COMMUNICATION PLATFORMS TO FIT THE  
NEEDS OF NC UTILITIES, WHILE ENHANCING THE MESSAGE THROUGH  
STATEWIDE SYNERGY

By  
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## **ACKNOWLEDGMENTS**

The research described in this document was conducted by Sayde J. Brais, Regina Guyer, and Robin Rothberg along with students in the Public Relations Practicum course in the Communication Studies Department at the University of North Carolina at Charlotte. Funding for this project from Water Resources Research Institute for the Urban Water Consortium is gratefully acknowledged. The “Improving Grease Disposal in Multifamily Housing & Latino Populations” (WRI Project #50395) research conducted by Dr. Alan Freitag and Dr. Cliff Scott is also gratefully acknowledged for its prominent role in this project.

## **ABSTRACT**

Urban Water Consortium (UWC) member utilities engaged the Infrastructure, Design, Environment, and Sustainability (IDEAS) Center's Environmental Assistance Office and the Communication Studies Department team at UNC Charlotte to develop program materials tailored to fit utility needs and communities (specifically Latino populations and multifamily/apartment housing, among other target audiences) that incorporate the Fats, Oil, and Grease effective communications strategies identified through "Improving Grease Disposal in Multifamily Housing & Latino Populations" research (WRRRI Project # 50395). Communication efforts were enhanced as UWC member utilities benefited from economies of scale achieved in several ways. First, the overall communication plan was tailored for each utility. Second, the plan supported statewide measures reinforced by coordinated localized measures. Third, UWC member utilities throughout the state were able to pool resources to develop and share creative strengths, and to reduce costs (i.e. stock photography and printing set-up costs). As UNC Charlotte students developed marketing materials and strategies to suit the UWC members' needs with faculty guidance during the Public Relations Practicum course (COMM 3055: Topics in Public Relations), continued enhancement of FOG communications needs developed through discussions with state agency representatives. This should result in synergistic implementation through state strategies and tactics, reinforced by local programs and initiatives across North Carolina. The project outcome allowed for implementation of effective communications strategies, fostered understanding of concepts, and encouraged behavior change for UWC members, while engaging college students with cross-disciplinary challenges.

## **KEYWORDS**

Fats, Oil, and Grease, Communications, Public Outreach, University/Utility Partnership, Public Relations, Influencing Behavior Change

## 1.0 INTRODUCTION

The Infrastructure, Design, Environment, and Sustainability (IDEAS) Center's Environmental Assistance Office (EAO) at UNC Charlotte, in partnership with the Department of Communication Studies developed the research project "Fats, Oil, and Grease (FOG) Communications Implementation" to assist each of the Urban Water Consortium (UWC) member utilities. FOG consists of fats, oils and grease generated through every day cooking, and it's a potentially serious problem because sanitary sewer overflows (SSOs) often result from improper FOG disposal (i.e. down the kitchen sink), acquire significant corrective costs for water utilities and pose potential public health issues. The UWC is interested in addressing this problem through targeted outreach for specific audiences which include Latino populations, minority populations unique to respective city/town, multifamily/apartment housing, school systems, and more.

The research utilized the recommended communications strategies identified through "Improving Grease Disposal in Multifamily Housing & Latino Populations" research (WRII Project # 50395) and has tailored messaging to fit with each UWC member utility's needs and community. The implemented strategies enhanced communication efforts and benefit the economies of scale of the UWC member utilities in several ways. First, as the communication plan was tailored for each utility it reflected collaboration for individual components to reinforce and be reinforced by other components of the utilities' existing FOG programs. Second, the plan supported state-wide measures reinforced by coordinated localized measures. Third, UWC member utilities throughout the state were enabled to pool resources for the development and sharing of creative strengths and to reduce costs (translation and printing set-up costs, for example). Regina C. Guyer, EAO Executive Director, and Sayde J. Brais, lead project investigator and Communication Studies faculty, facilitated meetings with the UWC members in understanding the needs and current practices of their utility.

This research is beneficial for two main reasons. First, it will help to enhance the capabilities of the Urban Water Consortium member utilities to share and build collaboration as a team, and continue the dissemination of ideas, lessons learned, and a network of expertise contacts. Second, it will facilitate important and effective methods of outreach to various communities to continue to raise awareness about the issue of FOG, with the goal of changing individual users' behaviors when cooking with and disposing of FOG. This research included several components: (1) to engage the Urban Water Consortium (UWC) member utilities in the development of program plans that incorporated the strategies identified adapted for their needs and community; (2) to investigate potential partnerships with businesses/organizations within UWC member utilities' target areas, enabling each specific utility to more easily contact individuals or agencies to pursue building a partnership, as these partnerships would be valuable as a venue into the community to assist in communicating with audiences being targeted by the utility; (3) development of communications and marketing materials by UNC Charlotte students with faculty (Robin Rothberg) guidance through the Public Relations (PR) Practicum class; (4) to facilitate a partnership with state agencies and utilities to

implement outreach and communication strategies. The research team worked to identify and pursue areas where state synergies could be established to effectively communicate FOG-related behavior modification initiatives, eventually reinforced by local utility programs.

Deliverables consisted of: (1) a research report to summarize project results with recommendations developed on the process of implementation of FOG communication strategies; (2) findings from discussions with UWC member utilities in the development of program plans, summary of materials developed and strategies suggested by students of PR Practicum course; and (3) a set of prototype PR/Marketing materials for each of the UWC member utilities to which each utility would have full and complete access for use in their own communities.

## **2.0 METHODOLOGY**

During the course of the Fall 2012 academic semester (September-December), Guyer assisted Brais in conducting initial interviews and visits with some of the UWC member utilities. Brais travelled to 10 out of 12 member utilities for an on-site meeting, and conducted two phone conversations with the remaining member utilities, in an effort to more fully understand the uniqueness of the utility, current programs and materials, community logistics, and program areas of interest. Please see Appendix A-site visit table. During on-site and phone meetings, Guyer and Brais used and disseminated the information included in the “Improving Grease Disposal in Multifamily Housing & Latino Populations” (WRI Project #50395) to interpret and adapt research results for each utility’s Fats, Oil and Grease (FOG) program implementation. Additionally, Brais conducted a series of follow-up emails to update municipalities with progress status, and invited interested and able municipalities to visit UNC Charlotte and speak directly and engage with the students of the Public Relations (PR) Practicum course.

The knowledge gathered through site visits, Brais and course instructor and co-principal investigator, Robin Rothberg, ensured the proper depth and targeting of communication/marketing materials developed by students. A three-credit, undergraduate, Communication Studies course: Public Relations Practicum (COMM 3055: Topics in Public Relations) began in January 2013. The course consisted of nine students, enrolled only through student application and selection by the faculty, ensuring entry only to the most motivated, talented students. Students in the PR Practicum course were tasked with creating public relations materials to assist utility members of the UWC in mitigating the creation of FOG-related sanitary sewer blockages by certain target groups. These blockages can lead to sanitary sewer spills and overflows that endanger people and wildlife, as well as raise issues of cost for home and business owners, as well as for the utility itself. Rothberg primarily led students in publication design and copy, and oversaw the development of communication/marketing messages. Three groups of three students each competed to design statewide materials and/or materials specific to each UWC member utility through the use of graphic design, marketing components, and communication strategies developed through the class during the Spring 2013 semester. Please see Appendix B-course syllabus. Students used the “Improving Grease Disposal

in Multifamily Housing & Latino Populations” (WRI Project #50395) research report and communication strategies publication as their “textbook” and guide for their efforts. For published materials (online and print), students had access to stock photography, allowing utilities to reproduce many materials almost instantly, without needing to secure photography permissions.

In March 2013, during the semester’s mid-point, students discussed current progress with various member utilities in-person and via video chat. Representatives from member utilities provided detailed feedback and critiques of current materials, concepts, and messages.

In May 2013, at the semester’s conclusion, students presented their findings to UWC member utilities and North Carolina Division of Environment and Natural Resources (NCDENR) representatives who attended the on-campus presentations at UNC Charlotte. UWC members had the opportunity to decide which concepts and materials they liked or disliked, and provided critiques and feedback regarding student work in a roundtable discussion immediately following the presentations. The roundtable consisted of present UWC member representatives, NCDENR representatives, Guyer, Brais, Rothberg, and colleagues. UWC members left with electronic versions of all concepts and materials personalized with each utility’s logo, as well as a hard copy booklet summary of all concepts and materials and display booth “hands on learning” material.

As a follow-up to the roundtable discussion, FOG graphic posters designed by a student team were created on vinyl for each UWC member. These posters were delivered to all UWC members. In addition, UWC members who were not available to attend the May presentations were visited on-site by Guyer and delivered the materials with an explanation of how they could be implemented.

On October 11, 2013, Brais and Guyer attended the quarterly meeting of the Urban Water Consortium leadership to present the research findings, provide an overview of the materials developed with their application, and discuss implementation of future synergies for FOG communications.

The synergy for dissemination across the state of NC was achieved by interactions with NC Division of Environment and Natural Resources (NCDENR) representatives Deborah Gore, Supervisor of the Pretreatment, Emergency Response and Collection Systems (PERCS) Unit and Michael Leggett, Environmental Engineer. They were involved during the project with discussions on FOG and by attending the Public Relations Practicum Class presentation. The applicability of the messages created by the students was statewide, as all utilities have regulations for FOG public outreach. In further follow up with NCDENR’s NC Division of Environmental Assistance and Customer Service, Jamie Ragan, Outreach Coordinator, and Joe Fitzpatrick, Environmental Specialist, the EAO has pursued being able to post materials as a resource for other utilities through the state website.

### 3.0 RESULTS/DELIVERABLES

Materials enabled each UWC member utility to incorporate their own specific messages, logos, and tailor the materials to meet their communities, which included Latino populations, minority populations unique to respective city/town, multifamily/apartment housing, school systems, and more. Students involved in the project were provided with valuable learning experiences for further developing workforce skills which include: comprehending client needs and desires, critiquing public relations/marketing messages, updating and re-designing current messages, creating a variety of original messages/materials, publishing materials through professional means, receiving and using feedback from clients, presenting materials to clients, and meeting needs and desires of clients.

In a roundtable discussion conducted at the close of student presentation on May 7, 2013, UWC and state representatives discussed their likes/dislikes, constructive criticism, and reactions to student-created materials—with many voicing positive reactions to the creative and innovation displayed in the materials (specifically the “tube” event display and cookbook), excitement toward the improvements to FOG messages/logos/slogans, and reservation toward social media templates/approaches. Less than a month after the student presentations were delivered to respective UWC and state members, the City of Charlotte began using FOG disposal techniques as described and written by student teams on brochures, as well as implementing the usage of the “potty pamphlet”, which describes the proper way to dispose of regular household items down other drains found in most homes.

The synergy for dissemination across the state of NC was achieved by interactions with NC Division of Environment and Natural Resources (NCDENR) representatives Deborah Gore, Supervisor of the Pretreatment, Emergency Response and Collection Systems (PERCS) Unit and Michael Leggett, Environmental Engineer. In further follow up with NCDENR’s NC Division of Environmental Assistance and Customer Service (DEACS), Jamie Ragan, Outreach Coordinator, and Joe Fitzpatrick, Environmental Specialist, the EAO has pursued being able to post materials as a resource for other utilities through the state website. This project has also enabled the EAO to begin discussions with the NCDENR DEACS to pursue collaborations for the next phase past effective communication in creating a pilot project for behavior change and the infrastructure needed to reinforce those changes by investigating cooking oil collection.

- Two research reports which summarized the project results were developed and submitted to the Water Resources Research Institute. These were completed as a progress report on February 4, 2013 and the final report on January 6, 2014.
- Recommendations developed for each UWC utility member on how the communication strategies could be implemented within their organizations. Includes findings from the discussions with UWC member utilities by lead investigator, Sayde J. Brais.
- Presentations and research reports were disseminated based on the first and second phases of project through conference presentations given throughout the

North Carolina region and nationally. These presentations included: North Carolina Pretreatment Consortium (NC-PC) Conferences in September 2012 and 2013; NC-PC “FOG Day” on December 12, 2012; NC American Water Works Association / Water Environment Federation Conference November 2013; Water Resource Research Institute Conference 2012 and 2013; and the National Water Environment Federation Technical Exhibition and Conference 2012 in New Orleans, Louisiana. In addition, an abstract is currently being submitted for the Water Resource Research Institute Conference 2014.

- Public relations/marketing materials created by UNC Charlotte PR Practicum class. See figures 1-4 below for examples of prototype materials. Materials are print ready or electronic materials which include the development of information tailored to suit particular audiences (landlords, students, end users, etc.), as well as, website evaluations and re-design concepts, FOG informational video, brochures, flyers, television and radio scripts, curriculum plans and supplemental materials, event displays and social media outreach plans.
- Each UWC member utility received a set of prototype public relations/marketing materials tailored with their company’s logo for utility representatives to use as a resource within their utility FOG programs.

Each group created a logo and designed materials around their themes which are shown in Figures 1a-1c. The materials that were provided to the utilities included: brochures, bill inserts, postcard / info graphics, door hangers, fact sheets tailored to different audiences, grocery store flyer, receipt stamp, teaching modules (including classroom engagement activities, games, awards, and background materials), cookbook (which implemented FOG in its recipes), video tool, public service announcement storyboard, “hands on learning tube”, T-shirt designs, website designs, “Pinterest” posting examples, blog ideas with monthly posting categories, and follow up contact information with the Public Relations at Delhaize Group (Food Lion LLC). Sample prototype materials are shown in Figures 2-4.



**Figure 1a: Team 1 Logo and Design**



Figure 1b: Team 2 Logo and Design



Figure 1c: Team 3 Logo and Design

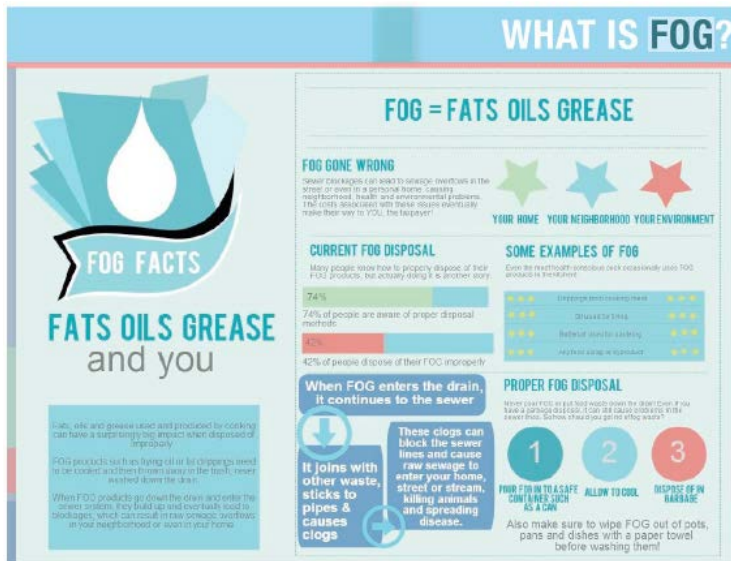


Figure 2: Infographic created by Team 1 to be used in multiple facets (i.e. local events, mailed to residents, shared online through website or blogs). This material was described as a need by several UWC member utilities including City of Durham, City of Charlotte, City of Greenville, etc.

- Introduction to FOG
  - FOG stands for fat, oil and grease that come from cooked food.
  - show pictures of grease in pan after burgers made (provide examples)
  - To prevent FOG from going down the drain, scrape or wipe the fats, oils and grease off of the cooking supplies you have used (Emphasize they cannot do this without parental supervision)
  - When fats, oils and grease are poured down the drain, it clogs the pipes we get our water through and our wastes out (show images of SSOs)
  - present display created and show how clogged pipes look
- Activities
  - Cool, Scrape, Pour! This activity will take 20-25 minutes
  - Divide children into groups of 3. Let each child get a chance to scrap and pour.
  - Use props and show how to let oil cool, scrape and pour.
    - Explain the upcoming contest
    - Hand out contest layout to bring home to parents
  - Materials needed: 3 frying pans and Container of Crisco
- Rubber spatula
  - Create your own Can- Activity will take 25-30 minutes
  - Show example of already decorated can
  - Tell students to bring in used, opened cans
  - Have construction paper, crayons, markers, glue and scissors available

**Figure 3: FOG lesson plan created by Team 3 to be used specifically for UWC utility members (i.e. Town of Cary, City of Durham, City of High Point, etc.) that expressed a need for educational materials that may be used in elementary/middle schools by teachers.**



**Figure 4: The door hanger with information translated into Spanish, created by Team 2 to be used specifically for multifamily housing/apartment residents, a target audience important to all UWC member utilities. The updated design and slogan, paired with the concise wording and graphics provide requesting utilities () with an additional outreach tool for Latino audiences.**

## **4.0 DISCUSSION**

The projected outcome was to enable the implementation of the effective communication strategies developed through “Improving Grease Disposal in Multifamily Housing & Latino Populations” (WRRI Project #50395) research to suit the individual needs of each UWC member utility, foster understanding of the communication/marketing concepts, and encourage behavior change (communication outreach strategies) of the utilities through addressing the FOG program from a public relations perspective. Another projected outcome was to provide an economy of scale in the development of prototype materials, which could then be tailored and implemented within each individual utility’s FOG program. Additionally, workforce development and student learning experiences were gained by the interactions between the UWC members and undergraduates. The findings of this research will ultimately involve synergy among local utility programs and initiatives across North Carolina. This project allows for implementation of effective communications strategies and public relations materials for each UWC utility, and encourages behavior change in target publics’ current grease disposal habits. Even though they may each choose different ways to incorporate it into their public relation materials, outreach programs, or bill inserts; the message from the 12 Urban Water Consortium members will create a reinforced outcome. The messages are further emphasized through NCDENR DEACS program’s ability to post the materials for use statewide.

## **5.0 SUMMARY**

This research consisted of a three-tier process concluding with deliverables including a research report to summarize project results with recommendations developed for each UWC utility member on the process of implementation of communication strategies, as well as findings from discussions with UWC member utilities in the development of program plans. All research findings were compiled and discussed to enable building of partnerships within the community which included a summary of materials developed and strategies suggested by students of PR Practicum course as well as a set of prototype PR/Marketing materials for each of the UWC member utilities to which each utility will have full and complete access for use in their own communities. This research provides a gateway for further collaboration and statewide synergy surrounding the best FOG disposal communication practices. It also provides an invaluable real-world experience for college students, most of whom graduated immediately following the conclusion of the course and entered into the workforce.

## **6.0 CONCLUSIONS**

The Urban Water Consortium (UWC) member utilities engaged the Infrastructure, Design, Environment, and Sustainability (IDEAS) Center’s Environmental Assistance Office and the Communication Studies Department team at UNC Charlotte to develop program materials tailored to fit utility needs and communities that incorporate the Fats, Oil, and Grease effective communications strategies identified through “Improving Grease Disposal in Multifamily Housing & Latino Populations” research (WRRI Project

# 50395). The tailoring of appropriate materials to suit each UWC member utilities' needs were developed by on-site visits and interviews to determine their individual program needs, discuss current practices for FOG materials, and their community's needs. This information along with the WRII Project #50395 report and utilities representatives meeting directly with the students in the PR Practicum Class enabled the development of meaningful Public Relations/ Marketing materials by three groups of students.

Implementation of the marketing materials and strategies which were suited to fit the UWC members' needs will allow for continued enhancement of FOG communications within their communities. The collaboration developed through discussions with state agency representatives allows for synergistic implementation through state strategies and tactics, reinforced by local programs and initiatives across North Carolina. The project outcomes allowed for implementation of effective communications strategies for each UWC utility through fostering the understanding of communication/marketing concepts, and encouraging behavior change (communication outreach strategies) while engaging students with cross-disciplinary challenges.

## **7.0 RECOMMENDATIONS**

The recommendations for the project include:

- 1) Implementation of PR Practicum Class developed materials to suit the needs within each UWC member utilities' communities. It is recommended for each utility to tailor the variety of materials with their logos and messaging to create a synergy with current messages and new ones. The development of materials from the class included expanded messaging develop an understanding of the impacts improper disposal of not only FOG, but other household items (i.e. "flushable" wipes, cotton swabs, dental floss, hair, etc.).
- 2) Use the synergy of the UWC in following up with Public Relations Contact with Delhaize Group (Food Lion LLC). This would allow potential collaboration across the state with messaging and synergy with the retail grocery chain which could interact with a large audience of their clients.
- 3) Continued synergy of the UWC in developing needed effective communication materials to suit the programs of the utilities. These may include further development of FOG program materials or pursuit of additional needs of the utilities such as reclaimed water/ water reuse messaging and communication materials to allow for a successful understanding of the key program elements for the public.
- 4) Continued collaboration between the Environmental Assistance Office and the Urban Water Consortium that meets UWC member needs through meaningful project development needs. This may include focus groups and surveys to determine the understanding of target audiences, effective communications strategies, public

relations and marketing materials, literature/website research for understanding common practices of utilities, or other project scopes.

## **8.0 REFERENCES**

Scott, C., Freitag, A., Oliveira, M., Guyer, R., and Boughton, M., 2012, “*Improving Grease Disposal in Multifamily Housing & Latino Populations*” (WRI Project Report # 50395).

## APPENDIX

### Appendix A-Site Visit Table

UWC Member Utility	Person(s) met/spoke with	Date of meeting
City of Burlington Water Resources Department	Steve Haller, Pretreatment Compliance Specialist	In-person meeting, December 12, 2012
Cape Fear Public Utility Authority	Kipp Glazier, Community Compliance Supervisor	Phone meeting, January 14, 2013
Town of Cary Department of Public Works and Utilities	Donald Smith, Utility Pretreatment Manager Maria Vanderloop, Utility Pretreatment Technician II	On-site meeting, December 7, 2012
Charlotte-Mecklenburg Utilities Department	Ruby Tarver, FOG Program Manager Cam Coley, Advertising & Community Information Bill Gintert, Environmental Compliance Manager	On-site meeting January 9, 2013
City of Durham Department of Water Management	Tyrone Battle, Industrial Pretreatment Coordinator Mike Fike, Industrial Pretreatment Technician Erick Bluford, Industrial Pretreatment Technician	On-site meeting December 7, 2012
Fayetteville Public Works Commission Water Resources Division	Tim Davis, Systems Protection Supervisor Chad Ham, Environmental Programs Manager Jeff Whims, Environmental Systems Protection Technician	On-site meeting December 10, 2012
City of Greensboro Water Resources Department	David Phlegar, Stormwater Division Manager Ignatius "I.G." Chukwu, FOG Program Coordinator	On-site meeting, December 5, 2012
Greenville Utilities Commission	Deanna Castellow, Environmental Control Officer Sue Hatch, Public Information Office/Communications Manager Linda Clark, Communications Technician Steve Porter, Water Resources Systems Engineer	On-site meeting, December 19, 2012
City of High Point Public Services Department	Carrie Boyd, Pretreatment Supervisor	On-site meeting, December 5, 2012
Orange Water and Sewer Authority (OWASA)	Greg Feller, Public Affairs Administrator John Greene, General Manager of Operations Thurman Green, Water Distribution and Wastewater Collection Systems Manager	On-site meeting, December 14, 2012
City of Raleigh Public Utilities Department	Marti Gibson, Environmental/EMS Coordinator	Phone meeting, January 9, 2013
City of Winston-Salem Utilities Division	Sherry Bagwell, Utility Plant Supervisor Cheryl Tilly, Grease Compliance Officer	On-site meeting November 28, 2012

## Appendix B-Course Syllabus

COMM 3055-01

TR 11 a.m.-12:15 p.m.

5041 COLVARD

SPRING 2013

# Public Relations Practicum

## Course description

COMM 3055-01 Topics in PR

Prerequisite: COMM 2145.

Timely and important areas relevant to the study of public relations. May be repeated for credit with permission of the major advisor.

## Class project

Create public relations materials for water utilities across North Carolina to use to help publics learn to properly dispose of fats, oils and grease. Materials may include, but not be limited to, scripts, posters, online items, fliers and newsletters.

## Instructor information

Name: Robin Rothberg

Email: rrothber@uncc.edu

Phone: 704-687-0777

Office: 5032 Colvard

Office hours:

12:45-1:45 p.m., TR;

11 a.m.-noon, W

To schedule a time to meet, use [nineradvisor.uncc.edu](http://nineradvisor.uncc.edu).

Name: Sayde Brais

Email: sjbrais@uncc.edu

Office: 5030 Colvard

Office hours:

9-10 a.m., T;

3:30-4:30 p.m., R

## Students can help prevent health danger

Members of the North Carolina Urban Water Consortium (UWC) are waiting. They are waiting for public relations materials to help prevent priority publics from creating sewer blockages that can lead to spills and overflows that endanger people and wildlife.

PR Practicum students will determine best practices, tactics and strategies using primary research, information from research associate Sayde Brais and the findings of "Improving Grease Disposal in Multifamily Housing & Latino Populations."

Students will also create prototype materials for UWC member utilities across North Carolina. Items may include website evaluation/design concepts, brochures, scripts (TV, radio, *telenovela*), curriculum plans, event displays, bulletin board materials and social media.

Students will compete to design statewide materials and, when necessary, specialize for regions (Triad, Triangle, etc.).

### Real-world resources

In PR Practicum, good copy will be critical. Good graphic design will be crucial.

For published materials (online or print), students will have access to stock photography. This will allow utilities to reproduce many materials almost immediately, without needing to secure photography permissions.

Students will also have class time dedicated to work, or to knowledgeable guest speakers.

### Conference possibility



**No matter where they are, greasy pipes are hazardous, and not attractive.**

One student or a few students may volunteer to present at the 15th Annual Water Resources Research Institute Conference in Raleigh, N.C. (Student presenters attend free; student posters are entered into a student poster competition.)

More information about the March 20-21 conference is at [go.ncsu.edu/wrriac](http://go.ncsu.edu/wrriac).

### Sheer opportunity

With real-world clients, resources and presentation opportunities, PR Practicum is a chance for students to showcase their skills for eager clients waiting to be wowed. Portfolio materials will be useful for job interviews. Finally, after all these years of preparation, it's time.

# PR Practicum Calendar, Spring 2013

Wait. Where are the assignments? Where are the deadlines?

Well, that's up to the groups in this class. Everyone has the same starting point, the same rules, the same materials and the same access to information. Everyone has the same deadline, too. Most things in between, though, are up to individual groups.

Required items are:

- Attendance; because so much in-class time is work time, each student gets one absence and one telecommute (work from outside the classroom, approved by all group members). After that, each absence deducts from a student's attendance grade. (Speak to an instructor for a religious exemption.)
- A calendar noting deadlines and definitions for progress, for materials and for group member critiques.
- Group member critiques — two during the semester. The critique should include information the group deems important (see calendar), as well as both a grade and advice on how the critiqued group member can improve. The instructor will remove the critique-writer's name and give a copy of the critique to the person critiqued.
- A set of work that includes website evaluation/design concepts, brochures, scripts (TV, radio, *telenovela*), curriculum plans, event displays, bulletin board materials and social media.
- A client presentation during the final exam time that explains and showcases all class work and includes a "wow" (something the client didn't ask for that will impress the client).

## Grading:

Attendance.....	10 percent
Calendar (group grade).....	10 percent
Average of two group member critiques (written).....	10 percent
Average of two group member critiques (received — group members assign grades).....	10 percent
Set of work.....	30 percent
Client presentation including a "wow".....	30 percent
	... of your final grade

Grades are based on a 10-point percentage scale:

90-100 = A      80-89 = B      70-79 = C      60-69 = D      59-below = F

Additional information for all groups:

- Check 49er Express email each business day for potential course updates, new materials or class cancellation.
- Abide by the UNC Charlotte Code of Student Academic Integrity, <http://legal.uncc.edu/policies/up-407> Among other things, the code forbids cheating, multiple submission of academic work, plagiarism, abuse of academic materials and complicity in academic dishonesty. There are penalties up to and including expulsion.
- During class time, only use computers to work on class work. Keep food or drinks in a bag, not on tables or near computers.
- Students who need special accommodations should notify the instructor via letter from the Office of Disability Services (<http://ds.uncc.edu> or 230 Fretwell) as soon as possible.

Disclaimer: The calendar and other elements of this syllabus are a plan subject to instructor discretion.

## January 2013

Tuesday	Thursday
	10 First day of class Introductions, syllabus, expectations, etc.
15 Class visitors: Town of Cary Utility Department	17 Class visitors: Charlotte-Mecklenburg Utility Department (CMUD)
22 Class visitors: High Point Utility Department and CMUD	24 Class visitor: City of Durham utility
29 Calendar assignment is due.	31

## February 2013

<b>Tuesday</b>	<b>Thursday</b>
5	7
12	14
19	21
26	28

## March 2013

<b>Tuesday</b>	<b>Thursday</b>
There is no class March 5 or 7. Enjoy your Spring Break!	
12	14
19	21
26	28

## April 2013

<b>Tuesday</b>	<b>Thursday</b>
2	4
9	11
16	18
23	25
30 Last day of class.	<b>Final exam: Tuesday, May 7, 11 a.m.-1:30 p.m.</b>

# Appendix C

## Examples of prototype materials

**FOG=CLOG**



Regina C. Guyer, P.E.  
Sayde J. Brais

Urban Water Consortium Project

WRI Final Report - Project Deliverables Summary



# COMM 3055: PR Practicum

## Project Teams

- “No Fog, No Clog”: Ashley Heath, Erica McDaniel & Shayla Sadler
- “Keep Water on the Run”: AnneMarie Bombardieri, Alexes Johnson & Janyenne Neves
- “FOG=CLOG”: Alexis Brethauer, Jaclyn Harris & Chase McBride



# **NO FOG, NO CLOG**

**Ashley Heath  
Erica McDaniel  
Shayla Sadler**

# Door Hangers

**NO FOG, NO CLOG**

**What is FOG?**  
Fats, oils, grease, butter, lard, sauces, dairy products and food scraps

**How to Dispose of**

**Step 1**  
Pour cooled FOG into can

**Step 2**  
Wipe pan clean with paper towel

**Step 3**  
Allow FOG to cool and solidify

**Step 4**  
Once oil is solid, throw away can

**NO FOG, NO traba**

**¿Qué es fog?**  
Grasas, aceite, mantequilla, manteca, salsas, productos lácteos y pedazos de comida

**Cómo se puede eliminar**

**Medida 1**  
Se echa el FOG frío en una lata

**Medida 2**  
Se limpia cosas grasientas con una toallita de paper

**Medida 3**  
Se espera para el FOG a enfriarse y solidificarse

**Medida 4**  
Cuando el FOG es sólido, se tira la lata en la basura



# Utility Brochure (Outside)

## Fact or Myth?

"I can dissolve grease in my pipes with hot water."

-Myth

Hot water gives the illusion of dissolving grease. Actually, hot water pushes the grease further down the drain, where it quickly cools and sticks to the inside of the pipes.

"I don't create enough grease to clog pipes."

-Myth

Once deposited inside a pipe, grease does not go away. Over time, any household can put enough grease down a drain to clog its pipes.

Phone number

Insert  
Logo  
And

**NO FOG,  
NO CLOG**



Insert  
Logo  
And  
Phone number

# Utility Brochure(Inside)

## How to Dispose of FOG

Pour warm FOG into can



Wipe pan clean with paper towel

Allow FOG to cool and solidify



Step 4



Once oil is solid, throw away can

## What is FOG?

FOG consists of fats, oils, grease, butter, lard, sauces, dairy products, shortening, salad dressings and food scraps.

FOG is a problem because when these items get poured down the drain, they stick to the inside of the pipes. The FOG builds up over time and ceates a blockage. When a blockage occurs, it causes untreated sewage to back up, leaving it nowhere to go but into homes, restaurants, streets or storm drains.

## Pain in the Drain



Butter



Hair



Napkins



Cotton Swabs



Dairy Products



Paper Towels



Oil

# Bill Insert

Water utility companies spend thousands of dollars a year on spills

To lower costs, make sure you:



Pour cooking oil, grease, butter, margarine, sauces or food scraps into a can and let cool.

If you pour these things down the drain, they cause clogs.



Only throw toilet paper in your toilet.

Wipes, cotton swabs, diapers, paper, paper towels and floss should never be flushed down the toilet. These items will cause clogs.

Insert website and phone number

# Activity

## Pain in the Drain Word Search

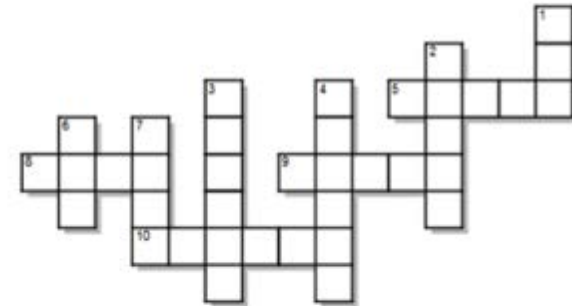
E D M E L G P W L G E F M G L N Y H X O  
 V I A I N X Z N U N T V F R S I Y R I T  
 Q E O N O I K I Y I T P I E X A Z R Y O  
 G N I N E T R O H S D D P L I R L P F S  
 Y B D R A L C A N S V I Z W O D N O H S  
 J Y U A U A E R G E P S E W E R O I J C  
 A T N T N T D S A R O L C E H D S X G R  
 E C A O T E I Q S D A L T O Q C R H E A  
 L G L W S E K H A S I M F J T K M B C P  
 E A O A E J R G T H O I W M B G E N X S  
 K E E L Q S V V H E Q C O N K O N N A V  
 X R R X C I C F C O F C Z S M F L H D E  
 G O L F O X C P X V Y A O Q X Y Y Q S K  
 H N J Q J J V O W M E W T F Q B G B M T  
 V L B B B R W Q R D V R W S S V S Z B F  
 Q C H W A G B C V M S I B N R K O Y L G  
 V H T O Q Z O Q X V H A K R E K I K R N  
 N W Z U M W K G D G Y R I A D R L P T J  
 P F C K U B L Q J Q F F C H Q W S U R P  
 E S Q W Y N Z U V J C P F S A U C E S E

BUTTER	CAN	CANOLA
CLOG	DAIRY	DRAIN
DRESSING	FATS	FOG
FOOD	GREASE	LARD

MARGARINE	OIL	OILS
OLIVE	PIPES	SAUCES
SCRAPS	SEWER	SHORTENING

Name \_\_\_\_\_

## FOG Puzzle



### ACROSS

- 5 Something that you never pour FOG down
- 8 After pouring your fats, oils and grease in the can, you let it \_\_\_\_\_
- 9 What your water flows through
- 10 What you're supposed to pour in your can

### DOWN

- 1 What you pour your fats, oils and grease in
- 2 Put other items you wish to get rid of in here
- 3 You put this on toast, not down your drain
- 4 You are only supposed to put toilet paper in here
- 6 Fats, oil, grease
- 7 These make it hard for water to flow through pipes

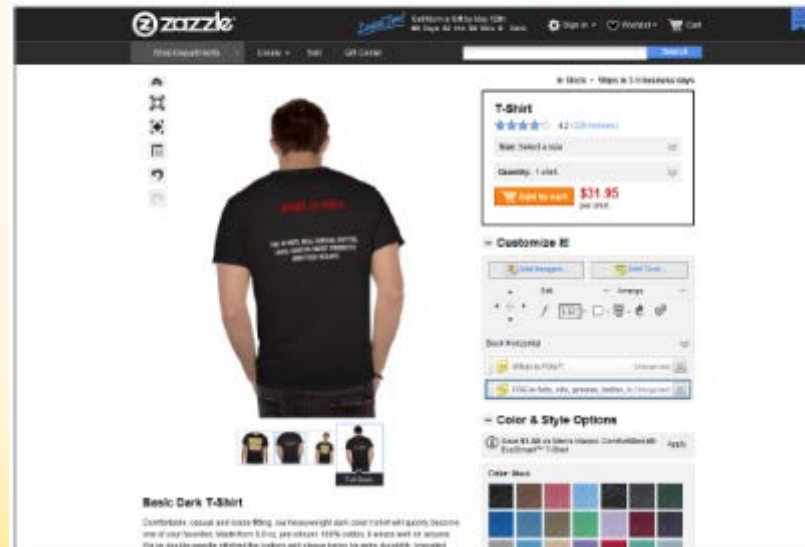
**WORD BANK:** TRASH, TOILET, PIPES, GREASE, FOG, DRAIN, COOL, CLOG, CAN, BUTTER



# Presentation



# T-Shirt

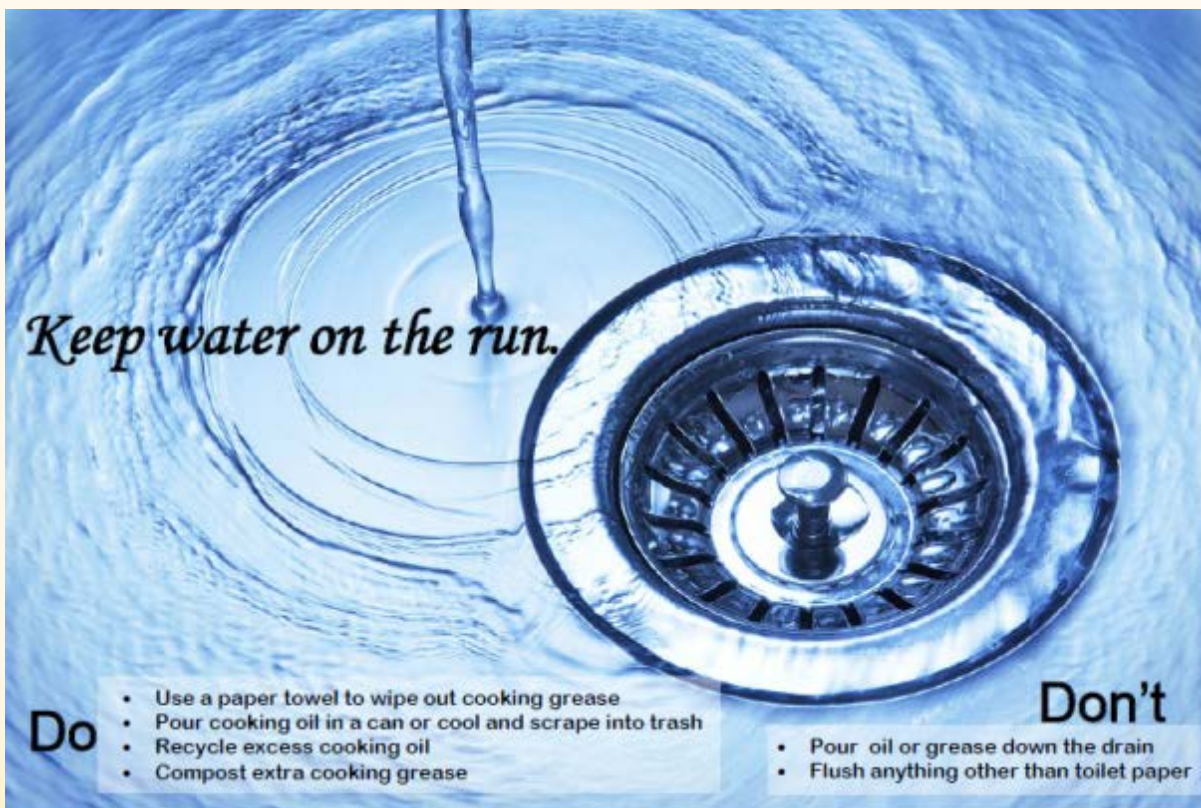


# JAAgency

Janyne, Alexes and Annemarie



# Bill Insert



Did you know you can **prevent sewer backup** from entering *your home*?

**R**aw sewage can come through toilets, sinks, showers and washing machines. Sanitary Sewer Overflows (SSOs) are backups caused by clogs in underground pipes that wastewater runs through. The clogs can be triggered by fats, oils and grease. These substances congeal, blocking pipes and catching other debris that don't break down.

SSOs in your home can be **costly** to repair, **harmful** to the environment and a **threat** to public health. Slow running and slow draining water can be **signs** of an SSO.

If you notice slow water in your home, contact your water utility right away.

For more information and to learn how to help your community, visit [UWCNC.org](http://UWCNC.org)

# Brochure (Outside)

## Beware bathroom backups

Sewage back-ups can also occur in the bathroom. Disposable DOES NOT mean flushable!

Avoid flushing items such as:

- "Disposable" adult/baby wipes
- Cotton swabs, tips or rounds
- Feminine hygiene products
- Unused prescription drugs
- Cigarette butts
- Hair
- Rocks, dirt, or other sediments



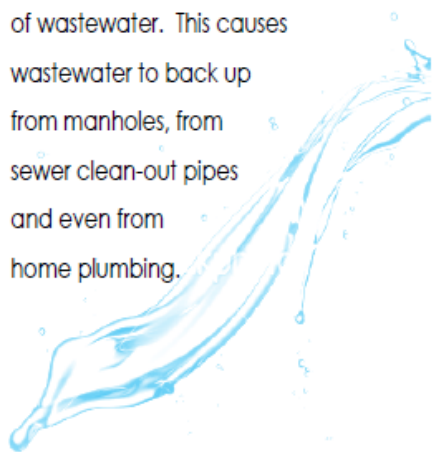
*Keep  
Water  
on  
the  
Run...*

# Brochure (Inside)

## Protect your health: Prevent sewer overflows

Improper disposal of cooking fats, oils and grease into the sanitary sewer system is the number one cause of sewer pipe blockages and sanitary sewer overflows in North Carolina. These back-ups too often cause sewage to overflow from the system and into our creeks and streams.

Cooking fats, oils and grease cling to the interior of pipes and block the flow of wastewater. This causes wastewater to back up from manholes, from sewer clean-out pipes and even from home plumbing.



When grease goes down the drain, it can then coat the insides of drain and sewer pipes. Over time, grease builds up until it blocks the pipe. When this happens, sewage in the drain can back up into a home, spill into the street or empty into a creek or stream.

For information about grease control, call the utilities division at 336-883-3109.

## Proper disposal of grease

- 1** Allow hot grease to cool to a safe temperature.
- 2** Pour grease into sealable metal or plastic container.
- 3** Wipe all excess grease with a paper towel; throw away paper towel.
- 4** When container is full of solid grease, seal container and put it in the garbage.

# Fact Sheet

- What should I already know about FOG problem?
- Where does FOG usually come from?
- Who is responsible for sewers if the sewer backs up?
- How much damage can FOG clogging cause?
- What are some easy steps to follow to prevent any FOG-related incidents?
- What additional precautions can we take against clogging?



# Resident Fact Sheet

- What do I do about FOG?
- How do pipes clog?
- What is the worst case scenario with clogging pipes?
- I don't want to harm the environment, so what do I do with my FOG after I'm done cooking?
- \*Spanish version available also



# Teacher Lesson Plan

- Introduction to FOG
  - FOG stands for fat, oil and grease that come from cooked food.
  - show pictures of grease in pan after burgers made (provide examples)
  - To prevent FOG from going down the drain, scrape or wipe the fats, oils and grease off of the cooking supplies you have used (Emphasize they cannot do this without parental supervision)
  - When fats, oils and grease are poured down the drain, it clogs the pipes we get our water through and our wastes out (show images of SSOs)
  - present display created and show how clogged pipes look
- Activities
  - Cool, Scrape, Pour! This activity will take 20-25 minutes
  - Divide children into groups of 3. Let each child get a chance to scrap and pour.
  - Use props and show how to let oil cool, scrape and pour.
    - -Explain the upcoming contest
    - -Hand out contest layout to bring home to parents
  - Materials needed: 3 frying pans and Container of Crisco
- Rubber spatula
  - Create your own Can- Activity will take 25-30 minutes
  - Show example of already decorated can
  - Tell students to bring in used, opened cans
  - Have construction paper, crayons, markers, glue and scissors available
  - Decorate and create best can

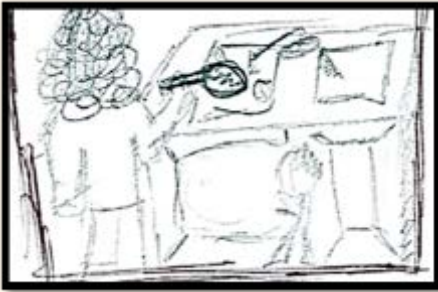


# Contest Layout

- Students in elementary schools ( K-5) in 12 of NC counties will have the opportunity to create the best jingle/video/dance showing the way their family conserves oil, grease and fats to keep their pipes clean!
- Parents, friends and family members are all welcome to partake in the video.
- The best jingle/video/dance in each county will be selected and will be eligible to win the class a pizza party(can be changed)
- Videos can be uploaded through the water consortium's Facebook Page and the winner will have a highlighted spot on the page!
- The winners will also be mentioned on the water consortium's main webpage and videos will also be uploaded on the page.



# Storyboard for FOG PSA



The mom is in the kitchen about to pour grease down the drain, kid yells stop!



The kid begins to explain to mom what he learned about F.O.G in school.



The mom asks kid what to do instead? How do I properly dispose of F.O.G?



The kid is explaining the proper disposal of F.O.G. Mom opens cabinet to get the proper materials.



The screen goes black... voice over begins explaining the importance and benefits of disposing F.O.G properly.

Notes:

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# FOG = CLOG

Alexis Brethauer  
Chase McBride  
Jaclyn Harris



# Apartment/Housing Flyer

## FOG = CLOG

**FOG:**  
[Fog, faw]; Noun.  
Acronyms for **FATS**,  
**OILS**, and **GREASE**.  
Contaminated from  
cooking. Improper  
disposal can lead to  
costly plumbing  
repairs.



Keep your drains clean!  
Keep **FOG** away from your drains!

**APARTMENT COMPLEX RESIDENT NAME,**

Learn how you can prevent FOG build-up in your community. What takes place in the drains at one apartment home can affect the whole building. Help keep your building clear of FOG.

FOG comes from the fats, oils and grease that many people use in cooking. When the meal is over, some people wash out their pans and let the FOG go down the drain. The FOG then solidifies into a hard substance that does not allow water to pass through. When FOG is continuously put down the drain, the build-up continues until there is a clog. Since all drains in a building are connected, this build-up can affect not only your sinks, but also your toilet and shower. This is where things get costly.

In apartment homes, when so many units are connected and there are multiple families disposing of FOG incorrectly, the build-up can happen quickly.

Plumbing costs for removing contaminants from drains and pipes add up for apartment owners and, depending on the manager, those costs could affect you with increased taxes, bills and rent. FOG cleanup also adds inconvenience for all residents.

So how can you prevent FOG clogs and the associated expenses? Well, you can pour the FOG in an old tin can or a FOG storage box. When the FOG hardens, you can toss it away with the trash. This eliminates contaminants from your sink and extra costs to you.

If we all work together we can keep our community clean and FOG free.



Pipe affected by FOG.

**THANK YOU**  
for keeping our community FOG free



# Brochure

**HOW TO PROPERLY DISPOSE GREASE:**  
Four simple steps to guide you to proper FOG disposal.

**IF IT'S FOG IT WILL CLOG**

**1** Set aside an old coffee can or jar as your FOG container.

Pour greasy food waste into the FOG container. Don't pour waste down drains or disposals. Wipe excess grease off pan with paper towel and dispose.

**2**

**3** Allow fats, oils and grease to cool or freeze in the designated container.

Compost FOG material or throw the FOG container away in the trash.


**4**

**FOG** [fog, fawg]: *Noun.*  
Acronym for **FATS**, **OILS** and **GREASE**. These are contaminated from cooking. Improper disposal can lead to clogging your pipes, causing costly plumbing repairs in your home.



# Postcard/Infographic

## WHAT IS FOG?



### FOG = FATS OILS GREASE

#### FOG GONE WRONG

Sewer discharges can lead to sewage overflows in the street or even in a personal home, causing neighborhood, health and environmental problems. The costs associated with these issues eventually make their way to YOU, the taxpayer!

YOUR HOME YOUR NEIGHBORHOOD YOUR ENVIRONMENT

#### FOG FACTS

### FATS OILS GREASE and you

Fats, oils and grease used and produced by cooking can have a surprisingly big impact when disposed of improperly.

FOG products such as frying oil or fat drippings need to be cooled and then thrown away in the trash; never washed down the drain.

When FOG products go down the drain and enter the sewer system, they build up and eventually lead to blockages, which can result in raw sewage overflows in your neighborhood or even in your home!

#### CURRENT FOG DISPOSAL

Many people know how to properly dispose of their FOG products, but actually doing it is another story.

74%	
74% of people are aware of proper disposal methods	
42%	
42% of people dispose of their FOG improperly	

#### When FOG enters the drain, it continues to the sewer

It joins with other waste, sticks to pipes & causes clogs

These clogs can block the sewer lines and cause raw sewage to enter your home, street or stream, killing animals and spreading disease.

#### SOME EXAMPLES OF FOG

Even the healthiest conscious cook occasionally uses FOG products in the kitchen.

●●●●	Stagnant hot cooking grease	●●●●
●●●●	Drainage in the sink	●●●●
●●●●	Refuse used for sautéing	●●●●
●●●●	Any other cooking product	●●●●

#### PROPER FOG DISPOSAL

Never pour FOG or fat food waste down the drain! Even if you have a garbage disposal, it can still cause blockages in the sewer lines. So how should you get rid of fog waste?

- 1 POUR FOG IN TO A SAFE CONTAINER SUCH AS A CAN
- 2 ALLOW TO COOL
- 3 DISPOSE OF IN GARBAGE

Also make sure to wipe FOG out of pots, pans and dishes with a paper towel before washing them!

# Remade Poster



IDEAS Center, 9201 University City Blvd., Charlotte, NC 28223  
 Regina Guyer - rguyer@unc.edu  
 Department of Communication Studies | COMM 3055-PR Practicum  
 Alexis Brethausers, Chase McBride and Jaclyn Harris



Fats, oils and grease (FOG) used and produced by cooking can have a surprisingly big impact when disposed of improperly. FOG products such as frying oil or fat drippings need to be cooled and then thrown away in the trash, never washed down the drain. When FOG products go down the drain and enter the sewer system, they build up and eventually lead to blockages, which can result in raw sewage overflows in your neighborhood or even in your home.

## FOG = FATS OILS GREASE

### FOG GONE WRONG

Sewer blockages can lead to sewage overflows in the street or even in a personal home, causing neighborhood, health and environmental problems. The costs associated with these issues eventually make their way to YOU, the taxpayer!



### CURRENT FOG DISPOSAL

Many people know how to properly dispose of their FOG products, but actually doing it is another story.

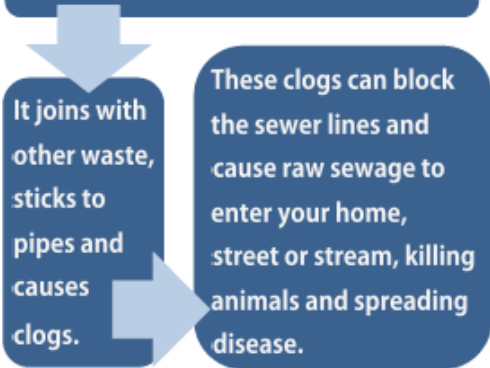


### CURRENT FOG DISPOSAL

Even the most health-conscious cook occasionally uses FOG products in the kitchen!

★ ★ ★	Drippings from cooking meat	★ ★ ★
★ ★ ★	Oil used for frying	★ ★ ★
★ ★ ★	Butter/oil used for sauteing	★ ★ ★
★ ★ ★	Any food scrap or byproduct	★ ★ ★

When FOG enters the drain, it continues to the sewer.



### PROPER FOG DISPOSAL

Never pour FOG or put food waste down the drain! Even if you have a garbage disposal, it can still cause problems in the sewer lines. So how should you get rid of FOG waste?



1. POUR FOG INTO A SAFE CONTAINER SUCH AS A CAN  
 2. ALLOW TO COOL  
 3. DISPOSE OF IN GARBAGE

Also make sure to wipe FOG out of pots, pans and dishes with a paper towel before washing them!



# Potty Pamphlet



## THE TOILET IS NOT A TRASH CAN

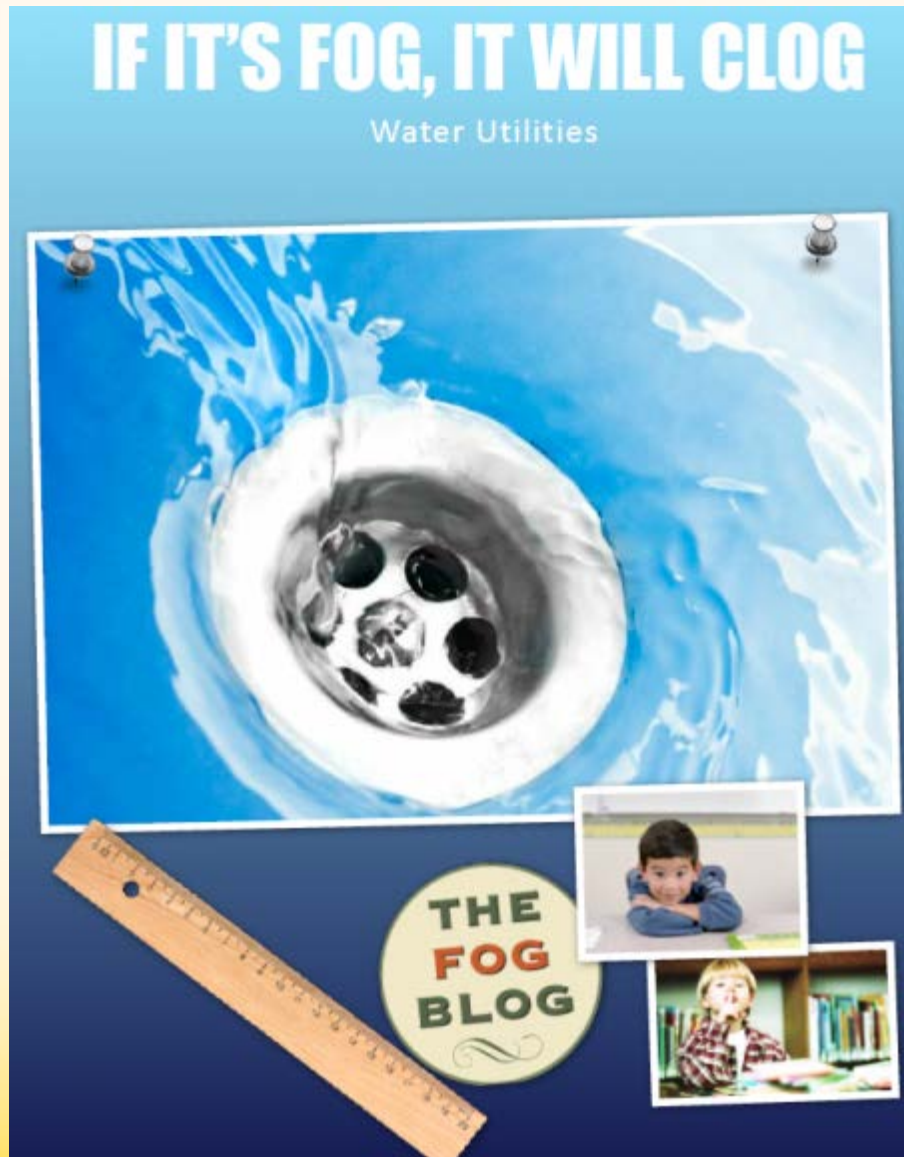
If you flush items down the toilet that don't belong there, you are inviting clogs. In the sewer, these items group together or with improperly disposed of cooking oils to cause major problems.

A clog can have a bigger impact than people may think. Clogs cause Sanitary Sewer Overflows (SSO), spilling raw sewage into a street, a stream or even in a person's own home.

Even products labeled as "flushable" do not decompose in the sewer system and these products can contribute to clogging.

Your tax dollars are used to deal with this problem, so if you dispose of trash items correctly, you eliminate the problem and the expense!

# Lesson Plan



# Lesson Plan Contents

## Subject: Earth Environmental Science



**Objective:** To reinforce the existing knowledge of the states of matter and how it fits in with their everyday life through the topic of FOG (fats, oils and grease).

**Procedures:** Discuss common terminology and explain what happens when FOG is poured down the drain. Reinforce the benefits from disposing of FOG properly, and encourage children to take the knowledge gained through class and put it into practice in their everyday lives.

**Materials:** Children will need pens/pencils and coloring materials (crayons, markers, colored pencils). Copies of the Terms and Activities pages will need to be made for students.

**Evaluation:** Children k-5 grades will receive a certificate upon completion of the program. We suggest a homework pass or a similar incentive for students 6-12 grades or younger students if approved by the teacher.



## Terms

**FOG:** [fog, fawg] *noun*. Acronym for fats, oils and grease. These are contaminants from cooking whose improper disposal can lead to clogging your pipes, causing costly plumbing repairs in your home.

**Oil:** [oil] *noun*. Any numerous vegetable oils used in cooking.

**Fat:** [fat] *noun*. Flabby tissue on cooking meats. Consists of or containing fat, grease or oil.

**Grease:** [grees, greez] *noun*. The melted or rendered fat of animals, especially when in a soft state. Fatty, or oily matter in general.

**Matter:** [mat-er] *noun*. The substance or substances of which any physical object consists or is composed. Something that occupies space. A particular kind of substance.

**SSO:** [S-5-O] *noun*. Acronym for Sanitary Sewer Overflow. This is when back-ups due to clogs cause the sewers to overflow into the streets and communities causing an insanitary environment.



### FOG FACTS

## FATS OILS GREASE and you

**FOG GONE WRONG**

Some discharges can lead to sewage overflows in the street or even in a personal home, creating neighborhood health and environmental problems. The costly associated with these discharges eventually make their way to YOU, the taxpayer!

**CURRENT FOG DISPOSAL**

Many people think they're properly disposing of their FOG products, but actually doing it is another story.

74%	74% of people are aware of proper disposal methods.
40%	40% of people dispose of their FOG improperly.

**When FOG enters the drain, it continues to the sewer**

Fats, oils and grease used and produced by cooking can build a fat/protein layer that when disposed of improperly...

FOG products such as beef oil or fat drippings need to be cooled and then thrown away in the trash, never washed down the drain.

When FOG products go down the drain and enter the sewer system, they build up and eventually lead to blockages, which can result in raw sewage overflows in your neighborhood or even in your home.

**It joins with other waste, sticks to pipes & causes clogs**

These clogs can block the sewer lines and cause raw sewage to enter your home, street or stream, killing animals and spreading disease.

### FOG = FATS OILS GREASE

YOUR HOME

YOUR NEIGHBORHOOD

YOUR ENVIRONMENT

**SOME EXAMPLES OF FOG**

Even the most health-conscious often accidentally use FOG products in the kitchen:

<ul style="list-style-type: none"> <li>Thermostat thermometer fluid</li> <li>Oil used for frying</li> <li>Butter/A salad dressing</li> <li>Any kind of grease</li> </ul>	<ul style="list-style-type: none"> <li> </li> <li> </li> <li> </li> <li> </li> </ul>
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**PROPER FOG DISPOSAL**

Never pour FOG or put food waste down the drain. Even if you make a particular disposal, it can still cause problems in the sewer line. Do not throw it away in the trash!

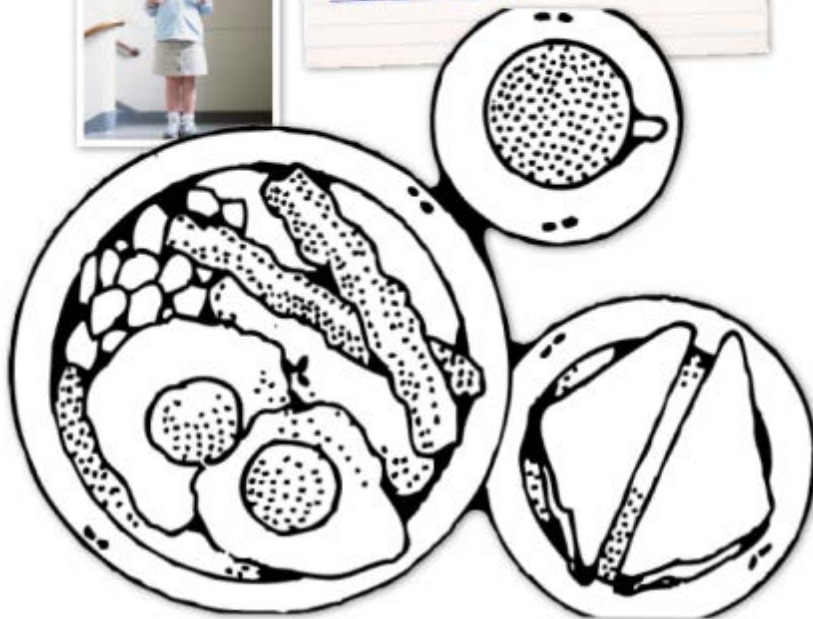
- 1** POUR FOG IN TO AS SAFE CONTAINER SUCH AS A CAN
- 2** ALLOW TO COOL
- 3** DISPOSE OF IN SAFEGATE

Also make sure to wipe FOG out of pots, pans and dishes with a paper towel before washing them!



# Lesson Plan Contents

Links: <http://wix.com/fogblog>  
 Pinterest: <http://pinterest.com/ncurbanwater/>



### Activities

Elementary School Level

**FOG**

FOG GREASE WATER  
 DRAINS PIPS  
 CLOGS  
 FATS OILS  
 CLEAN DIRTY  
 SINKS  
 TOILETS

### Activities

Middle School Level

**ACROSS**

- Fleety tissues in cooking meats
- Acronym for Sanitary Sewer Overflow
- The method or material of animal, especially when in a soft state

**DOWN**

- Something that occupies space
- Any numerical, vegetable oil used in cooking
- Acronym for Fats, Oils and Grease

### Points Question Game

**Level: High School Students.**  
 Rules: Each question is worth a certain amount of points. There are five teams of students and the team can select the points they want to earn based on the difficulty of the question. The winning team is the one with the most points.

<p><b>1 POINT QUESTIONS:</b></p> <ol style="list-style-type: none"> <li>What is the acronym for fats, oils and grease?</li> <li>What is the acronym for sanitary sewer overflow?</li> <li>How are most FOG materials produced?</li> <li>What areas does improper FOG disposal affect?</li> <li>True or false: improper disposal of FOG can eventually lead to wastewater.</li> </ol>	<p><b>2 POINT QUESTIONS:</b></p> <ol style="list-style-type: none"> <li>What is the substance of what are physical object consists of?</li> <li>What is the proper way to dispose of FOG materials?</li> <li>What happens when FOG goes down a drain?</li> <li>True or false: FOG affects just your sink drains.</li> <li>True or false: improper disposal of FOG can eventually lead to wastewater.</li> </ol>	<p><b>3 POINT QUESTIONS:</b></p> <ol style="list-style-type: none"> <li>What is the name of the sewer clog that overflows into the street?</li> <li>What is the step that often overlooked when disposing of FOG materials?</li> <li>Large down the pots/pans with paper towel to completely dispose of the FOG materials.</li> <li>What percentage of people dispose of FOG improperly?</li> <li>What percentage of people know how to dispose of FOG correctly?</li> <li>White can you go to get more information about FOG?</li> </ol>
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**CERTIFICATE**  
*of TRAINING*

*This certifies that*

*has successfully completed the average program requirement for*

**IF IT'S FOG, IT WILL CLOG**

DATE: \_\_\_\_\_

ISSUED BY: \_\_\_\_\_

# Cookbook

*Thank You*

for keeping our community free  
of fats, oils and grease!

**ECFPUA**

Recycled Grease  
*Cookbook*

## Caramel Banana French Toast

*Thanks!*  
Credit to Cheryl Sossan from  
Only Men (delmon.net)



**Ingredients**  
**FOR FRENCH TOAST:**  
4 thick slices of bread  
4 eggs  
3-4 tbsp milk or cream  
1-2 tbsp Orange Juice  
1 tsp sugar  
1/2 tsp Vanilla  
1 pinch of salt  
2 tbsp grease, liquid  
**FOR CARAMEL SAUCE:**  
2 ripe but firm bananas, in thick slices  
2 tbsp butter  
4 tbsp brown sugar, packed  
1 sprinkle of cinnamon

### Instructions

Preheat oven to 350°F.

Whisk together eggs, milk,  
orange juice, sugar, vanilla and salt.

Cool bread evenly with egg mixture. Let soak.

Place skillet on medium-high heat. Add grease  
to melt. Place soaked bread on skillet and cook  
until the bottom is golden brown.

Remove bread from skillet and place on baking  
sheet. Transfer to oven; bake for 10 minutes.

Wipe out skillet with a paper towel and add  
butter and brown sugar. Combine and melt.  
Peel and slice bananas and add to skillet.  
Cook until bananas are lightly brown.

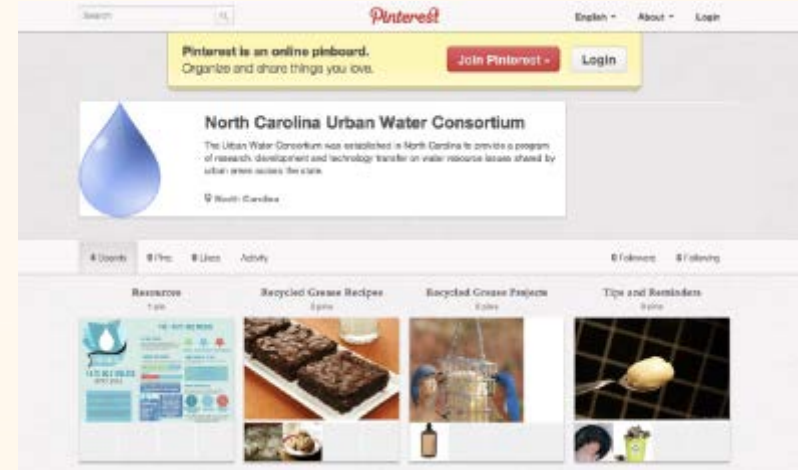
Serve french toast piping hot, topped with  
spoonfuls of caramelized bananas. Garnish  
with whipped cream if desired.

# Blogs

- Created Blog to share ideas using
  - Email: [waterutilities01@gmail.com](mailto:waterutilities01@gmail.com)
  - Password: uncccharlotte123

- Blog websites

- Wix
- Pinterest



- Blog Inspiration

- Monthly Celebration to this campaign
  - Creative Beginnings Month, Family Wellness Month, National Salad Month, Country Cooking Month, Dairy Alternative Month. And etc...



# Grocery Store Flyer

## THE FOG BLOG

*Information about Fat, Oils and Grease*



**RECYCLED FOG BROWNIES**

**FOG** [fog, fawg]: Noun.  
Acronym for **FATS, OILS** and **GREASE**.

**KEEP YOUR DRAINS CLEAN! REMEMBER: FOG=CLOG**

**F**OG comes from the fats, oils and grease that many people use in cooking. When the meal is over, some people wash out their pans and let the FOG go down the drain. The FOG solidifies into a hard substance and does not allow water to pass through.

When FOG is continuously put down the drain, the build-up only continues to increase until there is a clog. Build-up can affect your plumbing costs for removing contaminants. Those costs could show up in taxes, billing or higher rent. With proper disposal of FOG, it is possible to prevent this added cost and added inconvenience to yourself and your neighbors.

So, how can you prevent a FOG clog? Set aside an old coffee can or jar as your FOG container. Pour greasy food waste into it. Don't pour waste down drains or disposals. Wipe off excess grease with a paper towel. Allow fats, oils and grease to cool or freeze in the designated container. Lastly, throw away the container in the trash. Some gardeners even use FOG as compost!

Instead of throwing the container away, you can save the FOG for later. Recycle FOG in everyday recipes to add extra flavor!

**Recycled Recipe**

CREDIT TO HEATHER ROCK FROM TART AND HEATHERED TARTANDHEATHERED.BLOGSPOT.CA

**Ingredients:**  
2 eggs  
1 cup of strong coffee  
1/2 cup grease (liquid or room temperature)  
1 cup maple syrup  
1/2 cup flour  
1/2 cup + 1 tbsp cocoa powder  
1 tsp salt  
1 tsp baking powder

**Directions:**  
Preheat oven to 350°F.  
Blend eggs, coffee, grease and maple syrup in a food processor. Add flour, cocoa powder, salt and baking powder. Process until just mixed.  
Pour batter into into 4 to 6 small ramekins or a small baking dish. Bake for 15 minutes and let the brownies sit for 10 to 15 minutes before serving.

## Grocery Store Partnership

**Introduction to Benny Smith, APR**  
External Communications Manager at Delhaize America

Benny Smith is a public relations professional who worked his way into the External Communications Manager position at Delhaize America (Food Lion) almost three years ago. Smith has earned his APR, meaning that he is accredited in public relations, and attended the University of South Carolina – Columbia to earn his Mass Communications/Public Relations degree and Harvard University Graduate School of Education to receive his certificate in Management Development.

Smith also served as the immediate past president of PRSA, the Public Relations Society of America. He has also served as the Public Relations Director at Johnson C. Smith University and is a current Communications instructor at Central Piedmont Community College. Additionally, he has held multiple staff writer positions at multiple newspapers.

In his position with Delhaize America, Smith has led a team of people that are striving to boost the reputation of Food Lion and continue to build relationships with consumers. We believe that starting a partnership with Delhaize America would prove to be very beneficial to your goal and it will help their company show a more environmentally friendly grocery store. We have provided Smith's information below for your team to contact should you decide to pursue this potential partnership. His office is located in Salisbury, North Carolina.

Benny Smith  
Email Address: [BL.Smith@foodlion.com](mailto:BL.Smith@foodlion.com)

# Receipt Stamp

**FOG = CLOG**



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Energy Production Infrastructure Center (EPIC)

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## Appendix D-Presentation Listings

Presentations and research reports were disseminated based on the first and second phases of project through conference presentations, abstract and report submittals given throughout the North Carolina region and nationally. These included:

- North Carolina Pretreatment Consortium (NC-PC) Conferences in September 2012 and 2013;
- NC-PC “FOG Day” on December 12, 2012;
- NC American Water Works Association / Water Environment Federation Conference November 2013;
- Water Resource Research Institute Conference 2012 and 2013; and the
- National Water Environment Federation Technical Exhibition and Conference 2012 in New Orleans, Louisiana.

In addition, an abstract is currently being submitted for the Water Resource Research Institute Conference 2014.