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

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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 and communities needs to incorporate the fats, oil, and grease (FOG) effective communications strategies identified through “Improving Grease Disposal in Multifamily Housing & Latino Populations” research (WRRI Project # 50395). Communication efforts are enhanced as the UWC member agencies benefit from economies of scale achieved in several ways. First, as an overall communication plan was tailored for each utility, synergies were discovered allowing individual components to reinforce and be reinforced by other components of a larger program. Second, the plan supported statewide measures reinforced by coordinated localized measures. Third, UWC member agencies throughout the state were able to pool resources to develop and share creative strengths to reduce costs (stock photography and printing set-up costs, for example). As UNC Charlotte students develop 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 allows for implementation of effective communications strategies for each UWC utility, fosters understanding of concepts, enables a trial and evaluation of strategies within communities, and encourages behavior change while engaging students with cross-disciplinary challenges.

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

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, “Fats, Oil, and Grease (FOG) Communications Implementation” research project has been developed to assist each of the Urban Water Consortium (UWC) member utilities. The research has utilized the recommended communications strategies identified through “Improving Grease Disposal in Multifamily Housing & Latino Populations” research (WRRI Project # 50395) and has tailored messaging to fit with each UWC member utility’s needs and community. The implemented strategies will enhance communication efforts and benefit the economies of scale of the UWC member utilities in several ways. First, as the communication plan is tailored for each utility it will reflect synergy for individual components to reinforce and be reinforced by other components of their program. Second, the plan will support state-wide measures reinforced by coordinated localized measures. Third, UWC member utilities throughout the state are enabled to pool resources for the development and sharing of creative strengths and to reduce costs (translation and printing set-up costs, for example). Sayde J. Brais, lead project investigator and Communication Studies faculty, has 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 includes several
components, the scope of services summarizes these to be: (1) to engage the Urban Water Consortium (UWC) member utilities in the development of program plans that incorporate the strategies identified adapted for their needs and community; (2) to investigate potential partnerships with businesses/organizations within UWC member utilities 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 sought out 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 with state agencies in partnership with utility stakeholders towards a synergistic implementation. The research team worked to identify and pursue areas where State synergies could be established to communicate effectively FOG behavior modifications initiatives, eventually reinforced by local programs.

Deliverables consist of a research report to summarize project results with recommendations developed for each UWC utility 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 conducted to enable building of partnerships within the community, 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 with which each utility will have full and complete access to for use in their own communities.

METHODOLOGY

During the course of the Fall 2012 academic semester (September-December), 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 understand more fully 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, Brais used and disseminated the information included in the “Improving Grease Disposal in Multifamily Housing & Latino Populations” (WRRI Project #50395) to interpret and adapt research results for each utility’s program implementation. Additionally, Brais conducted a series of follow-up emails to update municipalities with progress status, as well as inviting municipalities’ representatives to visit UNC Charlotte in order to speak directly and engage with the students of the Public Relations (PR) Practicum course.

With knowledge gathered though site visits, Brais and course instructor and co-principal investigator, Robin Rothberg, led students in ensuring the proper depth and targeting of communication/marketing materials. Beginning in January 2013 (Spring academic semester), students in the PR Practicum course at UNC Charlotte commenced their project to create public relations materials to assist utility members of the UWC to prevent priority publics within their communities from creating Fats, Oils, and Grease (FOG) sanitary sewer blockages that 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. The three-credit, undergraduate, Communication Studies course: Public Relations Practicum (COMM 3055: Topics in Public Relations) consisted of nine students, enrolled by application only, ensuring entry only to the most motivated, talented students. 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 engagement 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” (WRRI 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 municipalities who attended the on-campus presentations at UNC Charlotte. The three groups had materials developed around their themes:

1. Keep the Water On the Run
2. FOG = CLOG
3. No Fog, No Clog
RESULTS
- A research report to summarize project results to be distributed to each UWC member and through the Water Resource Research Institute (WRRI).
- 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 disseminated based on the first and second phases of project through conference presentations given throughout the North Carolina region and at the Water Environment Federation Conference 2012 in New Orleans.
- Public relations/marketing materials created by UNC Charlotte PR Practicum class. See Appendix C-sample 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.
- Materials enable each UWC member utility to incorporate their own specific messages, logos, and tailor the materials to meet their communities.
- 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 client, presenting materials to client, and meeting needs and desires of client.

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 concepts, enable trial and evaluation of the strategies within their communities, and encourage behavior change of the utilities to address the FOG program from a public relations perspective. Another outcome was projected to be providing the opportunity to use the economy of scale by the UWC to provide research in enabling prototype materials to be produced which can be tailored and implemented within each individual program. Additionally, workforce development and student learning experiences gained by the UWC engaging with the university in involving undergraduates, and an entire PR Practicum class of students for this project. The findings of this research will ultimately involve synergy among local utility programs and initiatives across North Carolina. Ultimately, this project allows for implementation of effective communications strategies for each UWC utility, enables a trial and evaluation of strategies within communities, and encourages behavior change in target publics’ current grease disposal habits.

CONCLUSIONS
The implementation of tailoring Fats, Oil, and Grease communication platforms to fit the needs of NC Utilities, while enhancing the message through statewide synergy was achieved by engaging each of the 12 UWC members to determine their needs and provide connections with the PR Practicum Class representatives to create a meaningful message for members of their communities. The direct capability for each utility to have their logos represented on the materials and electronic versions for their usage provided an easy to use platform of communication with the variety of publics: teachers/students with classroom activities and learning video, bill inserts and brochures, t-shirt design, a recycled grease cookbook, and other materials. Materials were provided to NCDENR to enable a synergy for statewide implementation building upon the messages for local communities. The unique work of this research enables the synergy of the UWC, yet it also preserves the individuality of each utility’s choice of implementation.

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” (WRRI Project #50395) research conducted by Dr. Alan Freitag and Dr. Cliff Scott is also gratefully acknowledged for its prominent role in this project.
## APPENDIX

### Appendix A-

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

Public Relations Practicum

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, if 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.

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.

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/veriec.

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 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: rothberg@uncg.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.uncg.edu.

Name: Sayde Brais
Email: sbrais@uncg.edu
Office: 5030 Colvard
Office hours:
9-10 a.m., T,
3:30-4:30 p.m., R
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, teleco, films), 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).

<table>
<thead>
<tr>
<th>Grading</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Attendance (group grade)</td>
<td>10 percent</td>
</tr>
<tr>
<td>Calendar (group grade)</td>
<td>10 percent</td>
</tr>
<tr>
<td>Average of two group member critiques (written)</td>
<td>10 percent</td>
</tr>
<tr>
<td>Average of two group member critiques (received — group members assign grades)</td>
<td>10 percent</td>
</tr>
<tr>
<td>Set of work</td>
<td>30 percent</td>
</tr>
<tr>
<td>Client presentation including a “wow”</td>
<td>30 percent</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Tuesday</th>
<th>Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 First day of class</td>
<td>17 Class visitors: Charlotte-Mecklenburg Utility Department (CMUD)</td>
</tr>
<tr>
<td>Introductions, syllabus, expectations, etc.</td>
<td></td>
</tr>
<tr>
<td>15 Class visitors: Town of Cary Utility Department</td>
<td>22 Class visitors: High Point Utility Department and CMUD</td>
</tr>
<tr>
<td></td>
<td>24 Class visitor: City of Durham utility</td>
</tr>
<tr>
<td>29 Calendar assignment is due.</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td></td>
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</table>
Appendix C-Examples of Prototype Materials

Pain in the Drain Word Search

<table>
<thead>
<tr>
<th>BUTTER</th>
<th>CAN</th>
<th>CANOLA</th>
<th>MARGARINE</th>
<th>OILS</th>
<th>SHORTENING</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLOG</td>
<td>DAIRY</td>
<td>DRAIN</td>
<td>OLIVE</td>
<td>PIPES</td>
<td></td>
</tr>
<tr>
<td>DRESSING</td>
<td>FATS</td>
<td>FOG</td>
<td>SCRAPS</td>
<td>SEWER</td>
<td></td>
</tr>
<tr>
<td>FOOD</td>
<td>GREASE</td>
<td>LARD</td>
<td>OIL</td>
<td>SAUCES</td>
<td></td>
</tr>
</tbody>
</table>
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

Figure 1: Video Presentation
NO FOG, NO CLOG

FOG is:
- fats, oils and grease
- butter, lard, sauces, dairy products and food scraps.

Pouring FOG down the sink or toilet can cause clogs in the drain!

Other materials never to put down a drain or toilet include hair, wipes (even “flushable” ones), diapers, paper towels, cotton swabs, and floss.

SHOW YOUR PARENTS how to pour FOG into your beautiful can when they finish cooking.

That way, your pipes won’t get clogged, and your can will have a place of honor on the kitchen counter.

Figure 2: FOG Video (Con’t)

Figure 3: FOG Informational Poster
Figure 4: Recycled Grease Cookbook

Figure 5: Brochure