

INDA-MEWEA “Don’t Flush Baby Wipes” Pilot Public Education Campaign

Final Report

April, 2015

INDA, the Association of the Nonwoven Fabrics Industry, and the Maine Water Environment Association (MEWEA; formerly known as the Maine WasteWater Control Association [MWWCA]), jointly committed to conduct a pilot consumer education campaign in Maine. This commitment represented an alternative to legislation proposed by the then-MWWCA in January 2011 that would have created a state-specific approach to the sale and distribution of products labeled as flushable. This campaign was part of a continuing industry/wastewater collaborative effort to resolve impacts on private plumbing and municipal sewer systems caused by products that should not be flushed, such as baby wipes.

The development of the Maine pilot public education campaign occurred from January 2012 through late 2013, and the campaign was executed and analyzed during the first half of 2014. The multimedia campaign was intended to produce positive impacts on consumer awareness and measurable changes in behavior within a limited portion of the sanitary sewer served by the Portland Water District in Greater Portland. The consumer understanding was validated by market research focused on this limited service area, and the consumer behavior change was validated by an observed reduction in the number of baby wipes being disposed by flushing in the limited service area during a time period closely related to the campaign

The campaign materials developed were able to show effective, temporary, improvement in addressing the issue of improper flushing of a non-flushable product. Moreover, the messaging vehicles were identified which were effective at providing community-level public education as well as at creating consumer behavioral change.

Objectives:

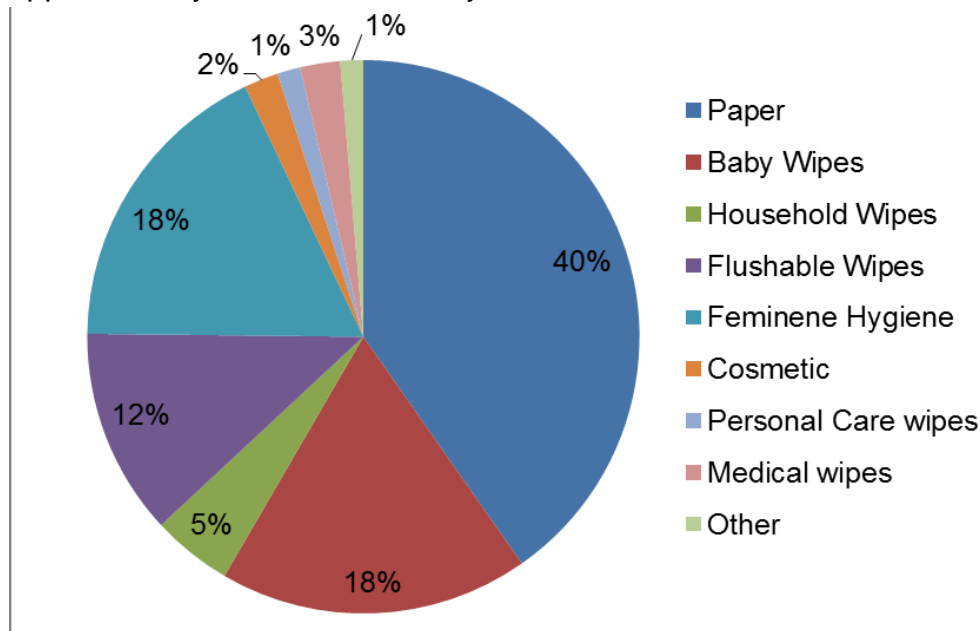
The pilot public education campaign objectives were the following:

1. To raise consumer awareness of the issue (e.g. flushing baby wipes and the impact it can have on their pocketbook, wastewater system and environment and other) and change their attitudes regarding flushing baby wipes.
2. To change consumer flushing behavior to reduce the amount of baby wipes being flushed as a result of the messages delivered by the pilot education program.
3. To validate the flushing behavior change by measuring the quantity of baby wipes captured on screens at the Cottage Place pump station both pre and post campaign.

4. To learn which messaging and vehicles aided in awareness, claimed behavior, and behavior change.
5. To increase awareness of disposal instructions on package ('When in doubt of any instructions or other – throw it out') and measure consumer behavior of looking for and adhering to instructions.

Background:

Prior to the Maine pilot public education campaign, collection data gathered jointly by INDA and MEWEA (with assistance from Water Environment Federation [WEF] representatives) at the Portland Water District Cottage Place Pump Station's influent screen had identified significant quantities of paper towels, feminine care products, baby wipes, hard surface wipes and other improperly flushed personal care wipes. Additionally, data gathered at this facility in Westbrook, Maine had indicated that baby wipes could have been a significant driver of historic pump clogs at the facility (prior to installation of the influent screen) since collection study showed that they were approximately 20% of the total by count.



The Greater Portland media market (fully overlapping with the service area to the Cottage Place Pump Station) was chosen as the target area for an advertising campaign designed to improve the level of awareness of this issue and change behavior regarding the flushing of baby wipes. The advertising test was conducted in Q1 2014. Quantitative research was conducted Q4 2013 and Q2 2014 to measure the effectiveness of this advertising campaign.

- A pre-wave analysis was conducted to measure awareness of the issue prior to the campaign's launch.

- A post-wave analysis was conducted at the end of scheduled primary media blitz.
- Data from the pre-wave was compared to data collected post-wave to measure the effectiveness of the campaign.
- A count of actual baby wipes flushed on a pre/post basis was conducted at the Cottage Place Pump Station to determine if observations mirrored reported behavior changes. The total number of baby wipes entering the station was normalized per 100,000 gallons of flow during the collection period (as measured by flow meters at the pump station), to provide a consistent metric.

Campaign Details: 'Save Your Pipes, Don't Flush Baby Wipes'

| | |
|------------------------|---|
| Target Audience | <p>Baby wipes users within the Greater Portland Time Warner Cable (TWC) Zone were targeted through TV and other media.</p> <ul style="list-style-type: none"> • Consumers on public sewer systems who use baby wipes for personal care to change their behavior by educating them about the clogging issue and its consequences. • Baby wipe users include households with and without children, (both resident and businesses) in the Cottage Place Pump Station service area, which includes parts of Westbrook, Gorham and Windham (considered part of the Greater Portland media market). |
| Schedule/Timing | <p>Oct–Dec 2013 Public awareness research of issue (to be used for campaign data analysis)</p> <ul style="list-style-type: none"> • Pre-wave report issued (12/4) <p>Oct–Nov 2013 Forensic data collection at Cottage Place Pump Station in Westbrook, ME</p> <p>Dec 2013 Campaign Concept Approval</p> <p>Dec–Jan 2014 Development of production materials</p> <p>1/21/2014 Kick-off Press Conference (Westbrook, ME)</p> <p>Jan-Mar 2014 Time Warner Cable TV spots (8 weeks)</p> <p>Additional media</p> <ul style="list-style-type: none"> • Local print ads/inserts, • Website (Saveyourpipes.org), • Social media (Facebook), • Signs/information at Hannaford stores, • Flyers in public restrooms, • Sticky note on the front page of Portland Press Herald, • Local news stories, • Bill stuffers <p>Mar-Apr 2014 Measure of campaign effectiveness:</p> <ul style="list-style-type: none"> • Issue awareness • Issue understanding and attitude • Campaign awareness • Claimed behavior |

| | |
|---|--|
| | <ul style="list-style-type: none"> Measured observations compared to reported behavior changes. <p>Apr-May 2014 Forensic data collection at Cottage Place Pump Station</p> |
| Budget | <p>\$113,000 Total Campaign Budget Cap:</p> <ul style="list-style-type: none"> \$30,400 Research Budget \$40,500 Media Budget \$22,000 Production Budget \$20,000 Services Budget <p>Financial commitment from both INDA and MEWEA.</p> <ul style="list-style-type: none"> Materials produced to be used in other municipalities around the US MEWEA contributed \$15,000 (much of it donations from its members and partners around the country) and the time of its volunteers. \$98,000 funded by INDA through its member company contributions. |
| Brand Character/Tone | <p>Campaign concepts ranged from Informational/public service announcement style to Edgy/Humorous. The style was refined based on pre-wave research results.</p> |
| Creative/Tactical Considerations | <p>Campaign needed to be scalable to other markets as well as to other disposable products which are not intended to be flushed.</p> <p>Additional tactics/ materials were developed, but not implemented in the Portland market. They are part of a creative template “toolbox” to be utilized in other markets and municipalities.</p> |

Awareness Results

To raise consumer awareness of the issue and to change consumer flushing behavior, a single message was used throughout the communication campaign of 'Save Your Pipes: Don't Flush Baby Wipes'. This singular message clearly shared with the consumer that baby wipes were not flushable and that they cause expensive problems by clogging both residential plumbing and public sewer systems when flushed. This message was shared with the public by a variety of methods shown in Appendix B.

Television ads, produced and aired at a cost of \$24,000, were shown on Time Warner Cable (TWC) and were the dominant source of awareness for the campaign; 81% recall. This was followed by local news stories (17% recall) and local print ads/inserts (12% recall). The campaign's website and placed posters were not as noticed among these campaign tactics. Few (3%) noticed the bill stuffers, which has been a popular method used previously by wastewater utilities.

Based on Portland area consumer polling before and after the campaign, consumer awareness of "Don't Flush Baby Wipes" message had increased.

- Awareness of the message was 4 times greater after the campaign
- Consumer belief that baby wipes aren't safe to flush reached the 2/3 mark after the campaign
- Awareness of among Time Warner Cable customers was 10 times greater after the campaign

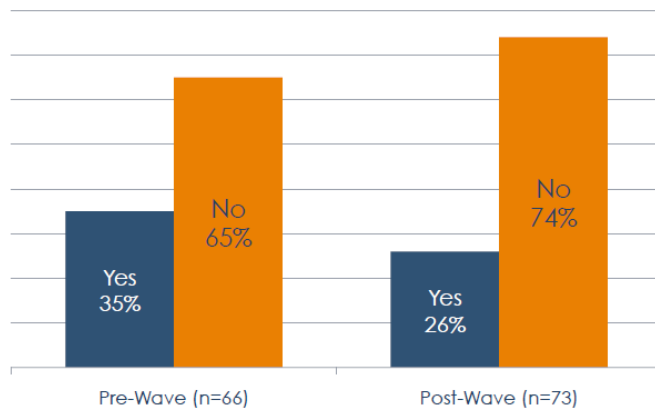
Behavior Change Results

Nearly four out of ten respondents who recalled the ad slogans noted they would be less likely to flush or will no longer flush baby wipes. After the campaign, baby wipes users in Portland area increased their reported frequency of disposing baby wipes in the trash instead of the toilet. Additionally, a significant reduction was reported by consumers who previously said they flushed baby wipes "occasionally"; a drop from 29% to 21% after the campaign.

Even though many of the baby wipes users referenced that they 'looked at the baby wipes package' to determine if it is safe to flush/not safe to flush, most have actually never looked at the package for

| | Recall Specific Ad Slogan (n=52) |
|--|----------------------------------|
| NET: I am less likely to flush baby wipes/I no longer flush baby wipes | 37% |
| I am less likely to flush baby wipes | 23% |
| I no longer flush any baby wipes | 21% |
| I am more likely to tell others not to flush baby wipes | 31% |
| This advertisement has had no effect on me | 29% |
| I am now more likely to read baby wipes packaging | 8% |
| I am now less likely to purchase baby wipes | 6% |
| I have switched from baby wipes to flushable wipes | 4% |

flushing instructions – and this lack of tendency has not changed even with the campaign messaging to read packaging for “do not flush



Have you ever looked on a baby wipes package for disposal instructions?

Validation of the flushing behavior change

To measure the effectiveness of the campaign, and specifically to determine if observed results mirror reported behavior changes, on-site analysis of materials found in the Cottage Place Pump Station, a subset of the Greater Portland market reached by the campaign was conducted. Pre- and post- pilot data collection occurred 6 weeks before and after the pilot campaign at the Cottage Place Pump Station in Westbrook, Maine. Sorting was conducted by MEWEA/Portland Water District members and INDA industry members.



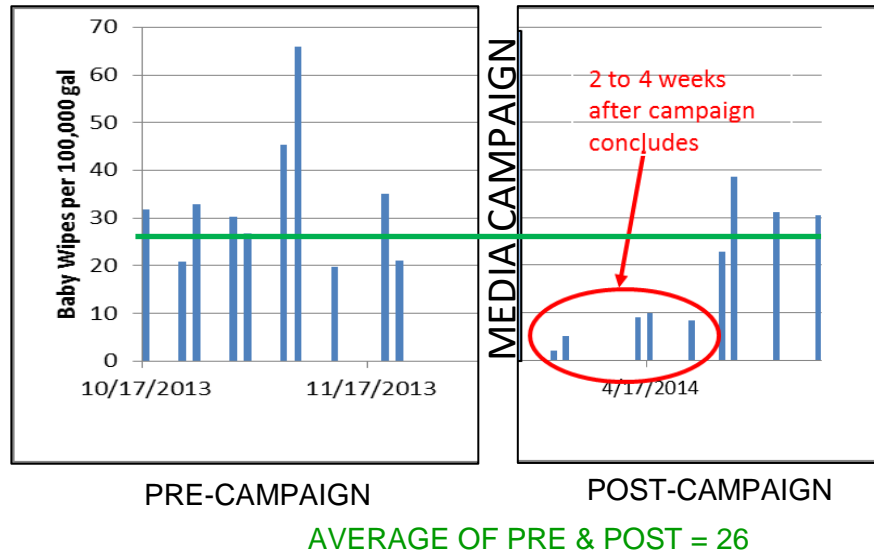
Aubrey Strause (MEWEA), Kim Babusik (Industry member), Gayle Rece (Industry member), and Scott Firmin (MEWEA) compare a wipe to the reference binder.



Materials removed during two hours of flow into the pump station, sorted to separate baby wipes (foreground) from other materials (background). Pre-campaign

The following graph and data in Appendix A shows a quantitative measure of baby wipes before and after the ‘Save Your Pipes: Don’t Flush Baby Wipes’ campaign. It is

clearly evident that the campaign had a measurable, but temporary, effect on decreasing the number of non- flushable baby wipes flushed into the municipal system. This decrease is most visible in the first four weeks after the campaign concluded. Additionally, as the percentage of other articles such as tampons and feminine products remained at a high level, the percentage of baby wipes as compared to total number of articles was shown to be reduced. It was noted that the number of flushed baby wipes started to increase beyond four weeks after the end of the campaign; this points to the need of continuous consumer education for proper product disposal.



Development of a “Toolkit”

To satisfy the pilot education campaign objective of transitioning the creative elements of the Pilot Program into a “toolkit” to be used in other municipalities around the US, MEWEA sought volunteers to create customizable Word documents from the graphic design files provided by the marketing firm. To date, four customizable campaign materials (a bill stuffer, a flyer, and a print ad in two sizes) have been produced by MEWEA and its volunteers

MEWEA hosts these materials and low-resolution versions of the two television ads on its website, www.mewea.org/pump-clog-resources/outreach-materials-dont-flush-baby-wipes-campaign/. This website lists contact information for persons wishing to gain access to the high-resolution television ads, which are too large to put on the MEWEA website. To date, MEWEA has provided files to several municipalities and utilities around the country, although very few have been able to utilize the television ads.

Management of the SaveYourPipes.org website has been transferred from INDA to the National Association of Clean Water Agencies (NACWA), an organization representing

wastewater utilities around the country., . MEWEA intends to work with NACWA to upload the customizable materials MEWEA has produced on this website for downloading by other municipalities and utilities who may have the ability to use them.

NACWA and WEF have been enthusiastic partners with MEWEA in spreading the word about the availability of the “toolkit” materials.

Discussions about incorporating the results of this pilot education program into future packaging, labeling, and marketing decisions by manufacturers, and to include disposal instructions more prominently (or at all), did not occur as part of the Maine pilot public education campaign. These conversations will be part of a Product Stewardship Initiative (PSI) Technical Workgroup kicking off in March 2015. Members of MEWEA, INDA, NACWA, and WEF who participated in the Maine pilot education program will be participating in the PSI Technical Workgroup. We look forward to providing a future update on the results of these discussions and the conclusions of the PSI Technical Workgroup.

Concluding remarks

The INDA/MEWEA ‘Save Your Pipes: Don’t Flush Baby Wipes’ campaign was able to produce measurable, temporary, positive impacts on consumer awareness and behavior within the limited service area of the Portland Water District sewer system targeted by the campaign. A quantifiable reduction in the number of baby wipes being disposed in the waste water system was documented in the first four weeks after the end of the campaign.

This campaign was distinguished by Maine to be noteworthy. In 2014, the Maine Department of Environmental Protection presented MEWEA, INDA, and the Portland Water District with an ‘Environmental Excellence’ award for this “Save Your Pipes: Don’t Flush Baby Wipes” campaign. It was noted that this campaign raised awareness of an important environmental and economic problem facing the country’s wastewater treatment facilities – the flushing of baby wipes. The United States Environmental Protection Agency (USEPA) Region 1 office similarly acknowledged these three organizations in 2014 with the presentation of an Environmental Merit Award for this project.

The collaboration was also noted as creatively seeking a solution with a public/private partnership for a widespread concern in order to protect our environment. Efforts to share the materials developed as part of this collaboration, and to inform decisions about future packaging, labeling, and marketing decisions by manufacturers, are ongoing as of the date of this report.

Appendix A: Quantitative measure of baby wipes before and after campaign

| SUMMARY | Pre week 1 | Pre week 2 | | Pre week 3 | | Pre week 4 | | Pre week 5 | Pre week 6 | |
|--|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|
| Date | 10/17/2013 | 10/22/2013 | 10/24/2013 | 10/29/2013 | 10/31/2013 | 11/5/2013 | 11/7/2013 | 11/12/2013 | 11/19/2013 | 11/21/2013 |
| Start time | 7:00 AM | 8:00 AM | 8:00 AM | 8:00 AM | 8:00 AM | 8:00 AM | 8:00 AM | 8:00 AM | 7:30 AM | 7:30 AM |
| End time | 9:00 AM | 10:00 AM | 10:00 AM | 10:00 AM | 10:00 AM | 10:00 AM | 10:00 AM | 10:00 AM | 9:30 AM | 9:30 AM |
| Total Flow | 189,233 | 182,431 | 188,475 | 215,139 | 186,923 | 214,161 | 207,857 | 178,317 | 213,628 | 208,309 |
| Number of Baby wipes | 60 | 38 | 62 | 65 | 50 | 97 | 137 | 35 | 75 | 44 |
| Tampons,Fem | 73 | 67 | 79 | 65 | 69 | 59 | 64 | 49 | 62 | 70 |
| Others (paper, tampon, other wipes, etc) | 253 | 349 | 368 | 385 | 324 | 472 | 504 | 179 | 332 | 334 |
| Other less Tampons and Baby Wipes | 120 | 244 | 227 | 255 | 205 | 316 | 303 | 95 | 195 | 220 |
| Total articles | 313 | 387 | 430 | 385 | 374 | 569 | 641 | 214 | 407 | 378 |
| % Baby Wipes | 19% | 10% | 14% | 17% | 13% | 17% | 21% | 16% | 18% | 12% |
| Baby wipes per 100K gallons | 32 | 21 | 33 | 30 | 27 | 45 | 66 | 20 | 35 | 21 |
| % Tampons, Fem | 23% | 17% | 18% | 17% | 18% | 10% | 10% | 23% | 15% | 19% |

| SUMMARY | Post week 1 | | Post week 2 | | Post week 3 | Post week 4 | | Post week 5 | Post week 6 |
|--|-------------|----------|-------------|-----------|-------------|-------------|----------|-------------|-------------|
| Date | 4/1/2014 | 4/3/2014 | 4/15/2014 | 4/17/2014 | 4/24/2014 | 4/29/2014 | 5/1/2014 | 5/8/2014 | 5/15/2014 |
| Start time | 8:00 AM | 8:00 AM | 8:00 AM | 7:00 AM | 6:00 AM | 8:00 AM | 12:00 AM | 8:00 AM | 8:00 AM |
| End time | 10:00 AM | 10:00 AM | 10:00 AM | 9:00 AM | 8:00 AM | 10:00 AM | 12:00 AM | 10:00 AM | 10:00 AM |
| Total Flow | 581,220 | 446,760 | 324,780 | 373,560 | 204,540 | 244,920 | 435,240 | 102,532 | 95,163 |
| Number of Baby wipes | 12 | 23 | 29 | 37 | 17 | 56 | 168 | 32 | 29 |
| Tampons,Fem | 56 | - | - | - | - | 71 | 140 | 84 | 67 |
| Others (paper, tampon, other wipes, etc) | 238 | 196 | 216 | 291 | 86 | 263 | 539 | 343 | 337 |
| Other less Tampons and Baby Wipes | 170 | | | | | 136 | 231 | 227 | 241 |
| Total articles | 250 | 219 | 245 | 291 | 103 | 319 | 707 | 375 | 366 |
| % Baby Wipes | 4.8% | 10.5% | 12% | 13% | 17% | 18% | 24% | 9% | 8% |
| Baby wipes per 100K gallons | 2 | 5 | 9 | 10 | 8 | 23 | 39 | 31 | 30 |
| % Tampons, Fem | 22% | | | | | 22% | 20% | 22% | 18% |

Appendix B: Key elements of the campaign

- Cable TV ads,
- Local print ads/inserts,
- Website (Saveyourpipes.org),
- Social media (Facebook),
- Signs/information at Hannaford stores,
- Flyers in public restrooms,
- Sticky note on the front page of Portland Press Herald,
- Local news stories,
- Bill stuffers



**Be a part of the solution:
place used baby wipes in the trash...
every single time!**



Flushing baby wipes can cause toilet overflows, expensive plumbing repairs, clogged pumps and sewer systems, and expensive damage to septic systems. Baby wipes are not designed to be flushed. Sooner or later they'll get stuck, either in your home plumbing or your town's sewer system.

- At home, baby wipes can clog your plumbing, leading to messy toilet overflows and costly repairs.
- Even more serious, they also clog pumps and damage sewer systems, which costs us all big bucks.



Baby wipes can clog your plumbing, leading to messy toilet overflows and costly repairs. Even more serious, they also clog sewers and damage pumps, which costs us all big bucks.

Portland Water District spent \$4.5 million in 2009 to install screen systems to prevent clogging of pumps like this by baby wipes and other items that should not be flushed.



Find Save Your Pipes on:



Save Your Pipes is a project of SCWA, the Association of the Home Appliance Industry and the National Water Pollution Control Association (NWPCA) to address the growing problem of consumer flushing behavior. This pilot campaign is intended to educate consumers about the issue and change behavior to avoid costly repairs both in homes and public sewer systems, and serve as a model for other wastewater entities across the country.



Appendix C: Press Release



For immediate release

Michelle Clements, Maine WasteWater Control Association
(207) 774-5961 | mclements@pwd.org

Dave Rousse, INDA®, the Association of the Nonwoven Fabrics Industry
(919) 233-1210 | drousse@inda.org

“Save Your Pipes: Don’t Flush Baby Wipes” Improper disposal of baby wipes leads to expensive clogging issues

PORTLAND, MAINE (January 21, 2014)—For many communities across the country, the flushing of baby wipes has been a significant contributor to a serious and costly problem. Since baby wipes are not designed to breakdown in water, they can clog home drain pipes, causing messy toilet overflows and requiring expensive plumber visits to repair.

Even more serious, baby wipes can be a significant contributor to the clogging of public wastewater system equipment, which can cause sewer backups into homes and damage to equipment, costing hundreds of thousands of dollars. In addition, clogs can cause overflows which have negative impacts on the environment. The effects on sewer systems can result in dramatic increases in monthly sewer costs for homeowners.

INDA®, the Association of the Nonwoven Fabrics Industry and the Maine WasteWater Control Association (MWWCA) have partnered to address the issue with a campaign to raise consumer awareness with the theme, *“Save Your Pipes: Don’t Flush Baby Wipes”*. “Some products are designed to be flushed, while others are not. It is the products that are not designed to be flushed, but get flushed anyway, such as baby wipes, that are creating the problem for wastewater systems. We are working collaboratively with Maine’s wastewater entities to change this,” said INDA President Dave Rousse. The campaign kicked off with a press conference at the Westbrook Treatment Facility with representatives from both groups. Television commercials featuring a game show titled, *“What the Flush?!?”* will begin tomorrow to educate consumers as to what is flushable.

The Cottage Place and East Bridge Pump Stations in Westbrook serve over 6,000 businesses and homes in Westbrook, Gorham and Windham, and have seen costly repairs as a result of clogs created by baby wipes and other non-flushable products. A \$4.5 million screen system was installed in 2009 to prevent clogging of pumps by baby wipes and other items that should not be flushed. “We hope the campaign will make people stop and think about what they flush, and we will see a reduction of baby wipes at these locations,” said Scott Firmin, Director of WasteWater Services at the Portland Water District. **Consumers can find more information on this issue at SaveYourPipes.org, or on Facebook at facebook.com/SaveYourPipes.**

For more information, please visit SaveYourPipes.org.

SaveYourPipes.org is a project of INDA, the Association of the Nonwoven Fabrics Industry and Maine WasteWater Control Association (MWWCA) to address the growing problem of consumers flushing baby wipes. This pilot campaign is intended to educate consumers about the issue and change behavior to avoid costly repairs both in homes and public sewer systems, and serve as a model for other wastewater entities across the country.

SUGGESTED GRAPHIC REPLACEMENT

