I’m here to tell you about some of the approaches that Metro Vancouver has been using to try to change people’s behaviours around what they put into our wastewater system.

I also want to share some practical ideas that you can use in your municipality or region if you want to tackle this issue.

I work mainly on the technical side of source control issues, Metro Vancouver also has a communication teams that works with the Liquid Waste Department to educate and engage the public around these issues.
- A bit about us... Metro Vancouver is a regional district made up of 21 municipalities, 1 treaty First Nation and 1 electoral area
- We provide regional services to 2.5 million people, including water, managing solid waste and wastewater treatment
Metro Vancouver operates a regional wastewater system of five wastewater treatment plants, 33 pump stations and about 530 km of trunk sewers.

- We process about 1 billion litres of wastewater every day.
- The region’s wastewater system collectively includes over 15,000 km of regional, municipal and private sewers.
- So we have a lot sewers and a lot of people to flush potentially damaging items into the system.
- I don’t need to tell this group about some of the problems caused by disposable wipes and other products that shouldn’t be flushed.
In 2011, we experienced some of these problems in a significant way, when we had a serious ragging incident at one of our pump stations in the City of Pitt Meadows, which is a semi-rural municipality with a population of about 18,000.

- The incident caused sewage overflows and damaged equipment
- It cost Metro Vancouver at least $400,000 by the time all was said and done
- Because of this incident, we started looking at what we could do to reduce the amount of wipes and other unflushables actually coming into our system
- In 2015 we did an eight week pilot project in Pitt Meadows to test some approaches
Pilot project challenges

• Private behaviours
• Lack of understanding
• Ick factor
• Bathroom taboos

• When we started the pilot project we had never talked to the public about wastewater before and we knew there would be challenges
• It can be really hard to change behaviours and it’s especially hard to shift behaviours that we do in private places, like inside our home or when we’re alone in a bathroom
• It’s often easier to shift public behaviours because we look to our peers when we decide what’s appropriate
• If everyone on your street is putting out their recycling bins, it starts to feel less OK if you’re not doing that.
• Most people don’t think about what happens after they flush a toilet, and they don’t really care, until something stops working. The wastewater system is a bit of an invisible service
• Lastly, this can be a really gross thing for the average person to think about and it also involves talking about private bathroom habits that people are generally uncomfortable talking about
With that in mind, we started by doing a lot of research to better understand how to approach this problem

- We looked at programs in other cities to see what had and hadn’t worked
- We did a telephone survey of 400 residents
- We also did in-person surveys in three drug stores, where we talked to about 90 people
- Lastly, we did focus groups to review the materials that we developed and find out more about what people knew about wipes
What we learned (2015)

- 20% of people flush wipes
- *Personal hygiene* wipes are the main wipes flushed – not baby wipes
- Women are the main users

The key things that we learned are that:

- Most wipes users are not flushing wipes – we have a small group causing big problems for the rest of the system
- Most of the wipes that do get flushed are “personal hygiene” wipes used in bathrooms - not baby wipes.
- Women are currently the main users of personal hygiene wipes, although as you know this is shifting and men are a growing market for these products

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Based on this research, we developed the idea of an “Adult Toilet Training” campaign for the pilot, with women as the target audience.

The campaign was a bit tongue-in-cheek. We wanted to avoid finger pointing and find a funny way to re-teach adults how to use the toilet and how to properly dispose of wipes.

The campaign focused on reaching women in public washrooms. Ideally you want to reach people when and where the problem behaviour is taking place.

Since it’s hard to reach people in their own bathrooms, the public washroom was the next best thing.

We used posters in washroom stalls and had decals for the sanitary products receptacle. Each poster has two flashcards with tips for using personal wipes in the bathroom: the first tip is humorous, followed by a second one that says “Never Flush Wipes”.

This poster says “This is Not a Good Place for a Selfie” and then below it has the tagline “Even if they say they’re flushable, wipes go in the garbage”. It then directs you to the website, which is Neverflushwipes.ca
- We also had a roving pink port-a-potty that we used at a number of community events

- One of the most successful elements of the pilot was our whiteboard video, which got 20,000 views during the pilot

VIDEO WILL PLAY AUTOMATICALLY
- Those were our more interesting elements.

- We also had more standard things like advertising in the local paper, paid ads on websites and social media and some posters in transit stations.
We then had to try to figure out if our approach was working.
- There is no perfect measure for public awareness, so we looked at a bunch of different metrics to get a sense of how the project went.
- We did a post-campaign survey.
- We looked at how much traffic we had for our website and on social media, and how much media attention we got.
- And we built a rag catcher that we used to count the number of wipes coming into the pump station.
- We also used a Go-Pro camera to film and count the number objects entering the pump station.

**Evaluation**

- Post-campaign awareness survey
- Analytics for web, social media, media coverage
- Measuring system impacts
- After the pilot we did a telephone survey of women in the area where the pilot was focused to see who had seen the campaign and what impact it had had
- The pilot had really high awareness for its target audience – probably because it was a relatively large budget in a small population
- Just over half of women in Pitt Meadows had seen some element of the pilot materials
- 35% of the people who said they were flushing wipes less said it was because of the campaign
We also got quite a bit of media coverage – partly because of the Adult Toilet Training name, which stood out because it was a bit cheeky - and also because wipes issues were in the news at the time.
Results

- We did see a decrease in wipes at the pump station during the campaign window
  - Before the pilot: we had average of 18 wipes/hour were entering the pump station
  - This dropped to 12 wipes/hour during the pilot
  - And to six wipes/hour in the two months after the pilot
- The Gro-Pro camera also showed a drop in the overall number of objects entering the pump station from 475 objects/hour before the project to 72 objects/hour after the project
- On the whole, we consider that this was a successful pilot (and it won an award from CWWA)
In 2016 we expanded the pilot into a regional campaign, keeping the same humorous tone

- We kept the same elements, but tested some new ones, including:
  - new videos (Wipes vs Toilet paper)
  - short ads in movie theatres
  - signage in drug stores

- In our post-campaign survey we found that 20% of women in our region had seen the campaign, which is a more typical result that we see in our regional behaviour change campaigns for other issues

- We looked at trying to measure the amount of wipes in the system like we did in the pilot, but we found that it’s really labour intensive to do that on a regional scale.

- It’s also difficult to do it consistently and have good data
- In 2017 we expanded the conversation to include seven unflushables: wipes, paper towels, hair, floss, tampons and condoms
- We developed this list based on feedback from our operations staff and municipal operations staff
• Since we had seven items to talk about, we originally started with something that just talked about what you CAN put down a toilet
• We tested these with two focus groups of staff
• We found that people said they understood them, but then when dug deeper we found they still thought it was OK to flush things like hair and floss
• We also had some concerns about how this would work in our region, where we have a lot of people who speak English as a second language
• So we realized that we needed to be more specific and take the unflushables out of the fine print
- So this is the final version of the creative, where we ended up showing all of the seven Unflushables
- We used this in our regional campaigns in 2017 and 2018
- These are some of the creative materials that we’ve used over the last two years for the Unflushables campaign
- We continued to use washroom posters and also added an infographic handout and some “mugshot” social media images that profile each of the characters (top right)
- We had good support from municipalities to put up posters in their facilities
- We did find that some municipalities didn’t want to put up the posters showing a condom and tampon
- So we ended up creating a G-rated version of the materials, which you can see here on the left
- We have three videos that we use push out through social media - one on medications, one on wipes and hair, and one about a condo that flooded because of flushing wipes
- All together, these videos have had just over 2 million views
- The flooded condo video really seems to have resonated with people and got just over 1 million views this year
[option to play game and audio clip if time permits]

We tried a couple of new things this year:
- We had an interactive game that ran before movies – asking people to identify what’s OK to flush
- Over 44,000 people played the game, which was a big success
- We also used 10-second weather and traffic radio tags for 2 weeks, on 3 radio stations