

MERIT WINNER

City of Edmonton Flood Prevention Strategy

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Brief description: This project was a communication and consultative process that moved homeowners in 15 residential neighbourhoods from a position of anger and frustration to one of satisfaction and support.

NEED/OPPORTUNITY

In the first week of July 2004 torrential rainstorms resulted in the flooding of a record 4,000+ homes in Edmonton, a city of 700,000 in Alberta, Canada. Flooded streets, sidewalks, parks and yards were commonplace in 15 neighbourhoods hardest hit by the storms. The 15,000 homeowners and 60,000 people living in these neighbourhoods were negatively affected by the flooding, with some incurring tens of thousands of dollars in damage.

Individuals' insurance and a provincial disaster relief program compensated most people for damages, but residents believed much of the flooding could have been prevented by an adequate municipal drainage system. The city was accused of poor planning and maintenance and of unnecessarily placing citizens at risk. More than 600 people expressed their anger and frustration at three information meetings held in September 2004. Hundreds of others expressed similar emotions through letters and phone calls to the city and media. Residents and city councillors from the affected wards demanded a quick resolution from the Drainage Services Branch, which is responsible for the city's 32,000 kilometers of storm and sanitary sewers.

Surveys completed by flooded homeowners, visual inspections by Drainage Services staff and engineering reviews showed that the majority of the flooding was caused by poor lot grading, disconnected drainpipes and faulty or non-existent sewer line valves on residential properties. The studies also showed that some municipal sewer lines lacked sufficient capacity to carry floodwaters away. Research made it evident that the 15 hardest hit neighbourhoods were at risk of severe flooding in the future but that reducing the risk would require a joint effort by homeowners and the city.

A plan was needed to support Drainage Services' desire to work with the residents of the neighbourhoods and other stakeholders to implement viable solutions to improve flood prevention. Godfrey Huybregts, ABC, partner and senior consultant with Marcomm Works was contracted by Romana Kabalin, communications business partner with Asset Management and Public Works in late 2004 to work with her, City Public Information Officer Elaine Trudeau and Drainage Services staff to develop and implement a communications plan.

TARGET AUDIENCES

External

- The 16,500 homeowners who lived in the affected neighbourhoods. Most of the neighbourhoods are 30 years of age or older. Most homeowners had lived in their homes for more than 10 years.
- The other 16,000 adults living with a homeowner in a single family home or condominium in the affected neighbourhoods. There was an even gender mix, with an age range of 30–80 years. There was no language or cultural barrier to communication. This target group knew little or nothing about the municipal drainage system and had only minimal knowledge about the drainage system on their own property.

- Community league presidents and their boards in affected neighbourhoods. Edmonton Public School Board and Edmonton Catholic School Board, as well as principals of schools in the flooded areas.
- City of Edmonton media, especially City Hall reporters.
- Business and community leaders in the flooded areas.

Internal

- Drainage Services staff.
- The general manager of Asset Management and Public Works.
- The mayor and the 12 members of City Council, in particular the six councillors from the three most heavily impacted wards.
- City of Edmonton community services staff responsible for community league liaison, outdoor sports facilities and parks in the flooded neighbourhoods.
- The city manager and other members of the city's senior management team.

GOALS AND OBJECTIVES

Goal: Engage concerned citizens and other stakeholders in the affected neighbourhoods in a manner that results in their support and involvement in viable flood prevention solutions.

Objectives:

1. Gain the support of 80 percent or more of residents in affected neighbourhoods for a Drainage Services' system improvement plan prior to Drainage Services seeking financial approval from City Council.
2. Achieve 90 percent satisfaction levels for educational programs.
3. Convince the majority of homeowners with flooding issues to take action on their own properties to reduce the risk of flooding.

4. Gain approval from City Council for Drainage Services' implementation plan.

SOLUTION OVERVIEW

Interface with target audiences through questionnaires, meetings, focus groups, phone calls and e-mails in late 2004 showed there was a general lack of understanding and knowledge about how the drainage system works, the connection between surface flooding and sewer backup, and the important contribution private property flood proofing makes to overall drainage efficiency. This lack resulted in misconceptions or unrealistic expectations of what the city could and could not do to prevent flooding.

Residents wanted to be informed and involved in resolving flooding problems. They also harboured some mistrust in the city's ability to act quickly and decisively. It was determined that an integrated communication approach with public education and public consultation components was needed to raise the level of education, shift public opinion, mobilize homeowners to take action on their property and secure public support for flood prevention solutions.

Key messages included:

- Flood prevention is a top priority for Drainage Services.
- Drainage Services is committed to working collaboratively to develop and implement viable solutions that work for all stakeholders.
- Reducing the flood risk requires a joint effort between homeowners and the city.

The first challenge was to facilitate additional input and build communication bridges for information, consultation and educational needs. A stakeholder database composed of individuals who wrote letters, signed petitions, attended open houses, sent e-mails or made telephone contact

was developed and used to make direct mail contact with concerned citizens. An information bulletin was produced and distributed to people in this database and other key stakeholders.

A part of the city's website (www.edmonton.ca/floodprevention) was dedicated to the flood prevention program to allow for a "one-stop" source of information for interested individuals. Community league presidents in affected communities were surveyed and asked for their advice and interest in being information conduits to local residents. An advertising feature was placed in community league newspapers that covered affected areas. The same information was reformatted and provided for attachment to community league newsletters in affected areas.

These communication vehicles were used to develop communication links, begin the educational process and advertise consultative sessions with residents in beginning to mid 2005. Nine meetings were held in March and April of 2005 for residents in the 15 affected neighbourhoods (neighbourhoods were grouped by commonality of problems). Four hundred and eighty people attended. These meetings shared engineering findings, laid out various options and got residents' input, comments and options. This input, additional study and feedback from community leagues, school boards and others were absorbed and incorporated into a proposed implementation plan. This implementation plan was presented to residents at subsequent consultation sessions in November 2005.

In April 2005, the flood prevention program was branded with the word mark *Floodproof!* This branding was incorporated into all public awareness materials, the bulk of which were launched as part of a summer-long promotional campaign in May 2005. Components included television and newspaper advertising, postal drop postcards and flyers, a media kit and tip sheets. Edmonton television station Global-TV was the major media partner of this effort.

To deal with core information and education gaps among homeowners, the communication plan recommended the creation of two new programs. The first was the Home Flood Prevention Check-up Program. This was a new, free service for any residential homeowner in Edmonton who wanted a drainage specialist to come to their home for a one-on-one drainage evaluation and assessment. This program was launched in May 2005. A 32-page self-help booklet called *Homeowner's Guide to Flood Prevention* was produced in support of this program.

The second was a series of educational workshops hosted by a college plumbing instructor on specific home drainage elements. The first topic chosen (based on homeowner demand) was backwater valves.

Implementation and Challenges

The project budget was CDN\$250,000. Approximately CDN\$100,000 of this went to operate the Home Flood Prevention Check-up Program. The remainder was spent on advertising, graphic design, printing, distribution and contract fees. Substantial savings were realized from the media partnership with Global-TV, advertorial discounts in newspapers and inserts in community newsletters. Approaching community leagues at the beginning of the communication process garnered considerable cooperation in communicating information to neighbourhood residents.

The communication plan was completed in November 2004 with the first wave of communications to residents occurring before Christmas. Information bulletins, special features in newspapers and newsletters, web updates, and contact with community league presidents have continued on a regular basis since then. The first consultation sessions were held in March and April of 2005, with a second wave in November 2005. A promotional campaign was launched in May 2005, in advance of Edmonton's flood season. To maximize dollars, a three week spike of ad placement was done instead of spreading it out through the summer. This was supplemented

during the summer with editorial placement and media contacts. The Home Flood Prevention Check-up Program operated from May to October of 2005.

A take-over bid for Drainage Services by a major private utility company in the summer of 2005 caused considerable disruption to Drainage Services' flood prevention work plans. This caused a two month delay in getting back to residents on implementation recommendations (which did not occur until November 2005). Strategic scheduling of the education workshops in July and September of 2005, an October 2005 newsletter, and a September 2005 promotion of an enhanced city subsidy for backwater valve installation ensured that stakeholders did not feel a communication vacuum during this delay period.

Measurement/Evaluation

All of the objectives were achieved. Surveys show that:

- Fifty-three percent of residents in the affected neighbourhoods recalled seeing or hearing information about flood prevention. Forty-two percent of these individuals said this prompted them to make changes to their home to reduce their risk of flooding.
- Ninety-three percent agreed or strongly agreed with the statement that information provided by Drainage Services would help them resolve their property's drainage problems and encourage them to take action to improve and maintain good drainage.
- Ninety-seven percent agreed or strongly agreed that offering information and educational programs and services such as *Floodproof!* to help homeowners is appropriate for the city of Edmonton.
- Ninety-six percent of backwater valve educational workshop attendees said it met their expectations.
- Ninety-eight percent of Home Flood Prevention Check-up Program participants believed it was a valuable public service.

- Ninety percent agreed or strongly agreed that the city should make improvements in drainage systems where flooding has been a problem.

Focus groups showed:

- Reaction to *Floodproof!* communication materials was positive.
- Homeowners understood and accepted that flood prevention in their homes is their responsibility. They accepted that there is a shared responsibility among homeowners and the city to prevent flooding and work together for an efficient system.
- Most homeowners saw value in the city of Edmonton continuing the *Floodproof!* program. It was viewed as a public service by some and as a duty of the city by others.

In addition:

- Approximately 400 people attended the six educational workshops offered in July and September of 2005.
- The Home Flood Prevention Check-up Program was oversubscribed in a month. Extra staff had to be added to handle the demand, which exceeded estimates by 25 percent.
- Many homeowners have asked to be informed when the presentation to City Council on funding for flood prevention work will take place so they can be in attendance to show their support.
- Community leagues, school boards and others impacted by recommended plans have provided their approval in principle.
- The vast majority of consultation participants at the November 2005 sessions have indicated their support of Drainage Services improvement plans for their neighbourhoods.
- More than 2,500 people are on the *Floodproof!* distribution list.

The CDN\$110 million implementation plan will be presented to City Council for approval in April 2006. It is expected that funding for the plan will be approved, as six city councillors from the three most heavily impacted wards have expressed satisfaction to date with the process and have been informed of residents' wishes and expectations.