

Stephenville Flood

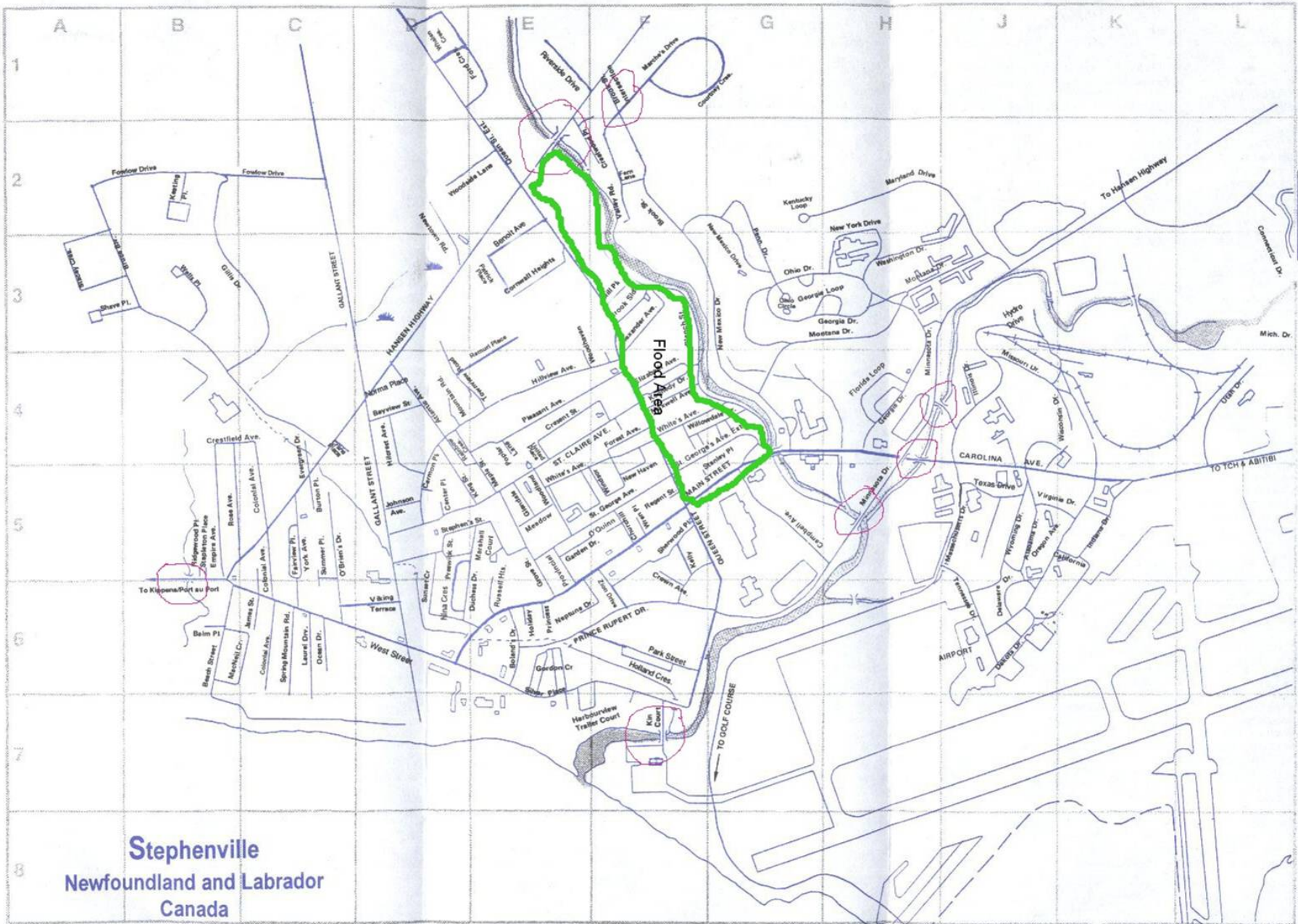
Role of the Environmental Health Officer

Introduction

- Flooding occurred Sept. 27, 2005
- Flooding in all Bay St. George region, Stephenville, Kippens, Port Au Port, Noels Pond, Black Duck Siding
- Other areas of Humber Valley also affected
- Stephenville was hardest hit
- Town of Stephenville declared a "State of Emergency" ~ 8am

Issues / Problems

- Highway leading through Noels Pond into Stephenville closed
- Bridges closed
 - ❖ Blanche Brook (Hansen Highway)
 - ❖ Warm Brook (S'ville)
 - ❖ Gaudon's Brook (between S'ville/Kippens)
 - ❖ Bridge to Port Harmon destroyed
 - ❖ Kippens/Port Au Port – isolated from S'ville
 - ❖ Major portion of S'ville isolated from emergency services



Stephenville
Newfoundland and Labrador
Canada

- Old Water Supply – Ned's Pond in danger of collapsing
- Blanche Brook flooded up to Queen St.
- Residents rescued in front end loaders
- About 150-160 homes directly impacted
- Salvage Yard had several wrecks go into Blanche Brook
- About 3:00 pm – waterline serving Area 13 & High School broke
- About 5:30 pm – watermain serving S'ville (except base) broke.
- All S'ville except base housing & Hospital without water
- Late that night – tree took out phone lines under bridge on Warm brook – leaving lower base without phones















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ROCK





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2005/09/27

















After the Flood



2005 9 29
RIDE THE ROCK



RIDE THE ROCK
2005 9 29



2005 10 1
DIVERSIFIED
CONSTRUCTION
ROCK







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PRIDE
IN THE
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2005 9 28



2005 9 28
RIDE THE ROCK





RIDE THE LOG ROPE
2006 9 23







2005 9 28

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PRIDE
2005 TO THE
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GSC Involvement

- Electrical – Services to homes – hazards
- Environment – Oil and other contaminants
- Health – Water/Sewer
 - ❖ Public services/Buildings
 - ❖ Damage to homes/health hazards

EHO Involvement

- Initial disaster – none – Rescue & Protect bridges
- Ordered lab supplies for water testing
- That afternoon – collected water samples & chlorine residuals – until we lost water
- Put Base/Hospital on boil advisory
- Assisted Boyd Wright – oil contamination
- Visited Food premises to assess temp. handwashing facilities

Day 2 – Sept. 28

- Teleconference with MOH / Regional Director
- Advised them of Boil advisory for base
- All schools closed
- Discussed Food Facilities / Hotels / Lounges
- Decided food premises – Take out only
- Lounges had to close
- Dept. Store could remain open
- HRE providing bottled water
- Businesses getting potable water from Kippens

Rest of Week

- Wholesome Dairy provided tanker truck with potable water from Kippens
- Brian Moores with Health Unit agreed to check with other Towns RE: flood related issues
- All lounges were visited & closed
- All Food Preparation premises were visited daily
- Water samples were collected (boil order remains)
- Assisted Environment in Flood area
- Updated EOC daily on issues we encountered

- Town installed Taps outside of S'ville Dome to obtain water
- Temp. waterlines Fri., Sept 30 to S'ville
- Oct 1 Boil advisory removed for Hospital and Dome only (separate feed)
- Temp. Waterline for area 13 installed over weekend.
- As week went on....houses with minimal damage were re-occupied
- EOC was advised by consultants that water/sewer services were not intact in flood area
- Houses were starting to smell and show mold.
- MOH made decision that houses had to be vacated. (Sat. Oct. 1)
- Order applied to all dwellings – ie. Sewer services

- Search & Rescue delivered notices
- HRE would assist in Temp housing
- EHO's would have to assess dwellings
- All EHO's & Environment Officers in Region assisted.
- Took best part of a week to assess homes.
- Houses were starting to smell by Oct 1 (Sat)









Additional Points

- Know your role
- Have a general idea of roles of other agencies
- EOC coordinates everything.
- Rely on your co-workers
- Request resources you need
- Keep management informed/briefed at all times
- Be prepared for the unexpected.
- Be honest....don't mislead people.
- Dept. must have a representative to coordinate with EOC

Challenges

- Communications
- Issues that aren't our responsibility
- 2 lounges weren't fully cooperative (at first)
- GSC had other ongoing issues in region
- Stress

House Damages

- Category 1

- Evacuated because of Compromised sewer system
- No Health Concerns
- May be possible to obtain Municipal sewer from another route/service line

- Category 2

- Evacuated because of Compromised sewer system
- No Health Concerns
- Not possible to obtain Municipal sewer from another route/service line

- Category 3

- Evacuated because of Compromised sewer system
- Minor flooding....thought to be water...no sewer contamination
- No immediate health concerns
- No fix available for sewer

- Category 4

- Evacuated because of Compromised sewer system
- Moderate to severe flooding water/sewer/oil
- Advised to remove belongings ASAP from unaffected rooms and leave house
- Advised to avoid flooded areas
- Further advised that conditions could deteriorate with time
- No fix available for sewer

- Category 5

- Evacuated because of Compromised sewer system
- Severe flooding water/sewer/oil
- Conditions severe
- Possible Health Concerns
- Advised **Not to Enter House**
- No fix available for sewer

- Category 6

- Area outside of Main flood area
- May or May not have had flooding
- No mandatory evacuation

- Category 7

- Have private water well/private Septic
- No mandatory evacuation

- Category 8

- Residents say connected to Trunk sewer on Main St.....Town will need to confirm

Conclusions

- Boil order removed Oct.13.....still have temporary waterlines serving majority of Town
- 5 months later....residents still displaced with no concrete answers re: relocation or repairs (as of March 2, 2006)
- Preferred option is to relocate majority of residents.....restore services to fringe areas
- Total cost.....18-20 million.

Update March 3, 2006

- Province announced plan for remediation
- New Floodplain established
- Everything within floodplain will be relocated
- Estimated total cost of program 21 million (including infrastructure repairs)
- Based on replacement costs.

