Marsh Lake Fire Rescue Community Emergency Plan
October 2005

Prepared by: Marsh Lake Fire Rescue Society

October 31, 2005

Administration

1.1 Table of Contents

1.2 Introduction

The community of Marsh Lake Yukon was first recognized as an official Yukon community under the Municipal Act of the Yukon in 2000. It is represented by an elected Local Advisory Council (LAC). The Marsh Lake Fire Rescue Society has prepared this report under a funding agreement with the Community Development Fund (CDF) of the Economic Development of the Yukon Government.

This report includes all aspects of the recent planning that has been done to date in Marsh Lake, including those outside the funding agreement from CDF.

The intent of this report to layout:
- Who is involved in an emergency and how they will work together
- What are the high risks that need to be planned for
- What steps have been taken to Mitigate, Prepare, Respond to, and Recover from those risks
- What steps are still needed to be done
- What discrepancies are there

1.3 Signed Agreements

In support of this plan, the following agencies are aware of and have agreed to include this information in dealing with an emergency in Marsh Lake, Yukon

- Marsh Lake LAC
- Marsh Lake Fire Rescue
- Marsh Lake Community Society
- Yukon Protective Services
- Yukon Emergency Measures Organization

Agreements are in Appendix A.

1.4 Distribution List

Marsh Lake EMO Coordinator	Emergency Social Services Director
Marsh Lake LAC members (5)	Emergency Health Services Director
Southern Lake MLA	Yukon Energy
MLFR Fire Chief and Medical Officer	Yukon Electric
MLFR Dispatch team	NWTel
RCMP	Wildland Fire Management (Protective Services)
YTG EMO	Public Works & Government Services Canada

1.5 Implementation of the Emergency Plan

(This section is taken in principle from the City of Whitehorse EMO plan). The procedure for Marsh Lake emergency services (MLFR) to initiate the Emergency Plan will follow as close as possible, the initiation sequence.

a) If the size, potential hazard, or seriousness of the emergency or disaster appears beyond the capability or responsibility of MLFR emergency service at the scene, then they may implement the activation of the Emergency Plan.

b) The responsibility for the activation of the Emergency Plan will be with the Yukon EMO manager.

c) Upon activation of the Emergency Plan, the EMO Manager will immediately appoint an agency or individual to manage the Emergency Site(s), based on the agency that is most likely to have the greatest involvement or legal responsibility in the handling of the emergency or disaster.

d) If the magnitude of the emergency or disaster requires actions beyond the normal procedures and authorities of the Marsh Lake , the Marsh Lake LAC chair may request the Emergency Measures Commission to have a State of Local Emergency declared in accordance with Yukon Bylaws.

e) If the implementation of all actions contained in the Marsh Lake Emergency Plan are insufficient to control the emergency or disaster, assistance will be requested from the Yukon Territorial Government. The request is to be made through the Yukon Territorial Emergency Measures Organization.

1.6 Emergency Alerting System

1) On receipt of a warning of a real or potential emergency or disaster, the responding emergency service (MLFR) will contact the Yukon EMO Manager and the Marsh Lake LAC Chairperson.

2) On receipt of the warning from the first responding service, the EMO, will activate their Emergency Organization Alerting System and MLFR will initiate their resident notification system as detailed later in this report, in whole or in part.

3) Each member is responsible for alerting the members of their departments necessary to respond to the emergency or disaster.

2.0 General

2.1 Background to the project

In the summer of 2003, forest fires consuming several smaller communities seriously impacted the province of British Columbia. In the summer of 2004, Marsh Lake Fire Rescue was placed on "stand-by" role due to the high threat of forest fire in our community.

At the Fire Chief's conference, August 2004, the BC Fire Marshal spoke about the lessons they learned during the 2003 season and had suggestions on how to become better prepared. Marsh Lake is taking that advice. It is clear from all the experts that it is not a matter of if a fire will occur, it is a question of when.   Rather than waiting for a disaster, it is in the best interests of the community to plan ahead, to help protect the residents and the property of Marsh Lake.

In October 2004 Marsh Lake Fire Rescue applied to the Community Development Fund to create a disaster plan and planning tools to meet this goal. They were granted $49,860 for this project. Currently only $14,209.04 has been spent, however, not all tasks are finished completely.

The project was, in part, a training exercise for the members of the Fire Department. Active members were given the opportunity to work on the various aspects before other residents of the community. In total 12 members were involved in this project.

2.2 Marsh Lake Community Profile

The geography of Marsh Lake the community covers the area (land and water) north from the Yukon River Bridge south to the intersection of Judas Creek (the creek) and the Alaska Highway, about 43 kilometers of the Alaska Highway. It also includes the 11-12 kilometers of McClintock Valley Road.

There are 435 registered lots in this boundary. Those consist of full-time residents, part-time summer residents, weekend users, and YTG property. While no official census had been done, it is estimated that approximately 600 people live in Marsh Lake year round.

The community has changed dramatically over the past 10 – 15 years. With improved highways and communication services, the residents are now more likely to be full time residents rather then the cottage residents of 20 years ago.

2.3 Risk Review

At the start of the project a review was done to determine the risks facing the community. More details on this can be found in Section 5.3. The highest risks were determined to be:
1. Forest Fire
2. Ice/Wind storm
3. A Hazmat accident
4. Earthquake
5. Flood

While the local fire department practices for incidents such fire, preparedness for a major event had not been done before. A big component of this was identified as communications. Over the past several years, this has improved with other YTG departments such as Protective Services and internal communications within the MLFR had improved, however, coordination in the event of a mass emergency had not been thoroughly explored.

It was determined that there were two main areas to concentrate on:

Resident preparedness is to address the needs to support residents in the community. The basic premise being that the fire department will only be able to do so much during an emergency to save property. Their priority is to save lives first – leaving some responsibility on the residents to help protect themselves and their property.
Department preparedness is to improve the response information and training needed by the Department in order to respond quicker, with the right tools and the right information to mitigate the damage.

2.4 Definition of Emergency

The definitions used for this report all come out of the Basic Emergency Management Course textbook, prepared by Yukon EMO.

This plan focuses on dealing with emergency situations, vs. incidents. An incident is defined as "a response for which municipal services have standard operating procedures, sufficient resources, and expertise to react adequately." Marsh Lake Fire Rescue would handle an incident in Marsh Lake and this plan is not intended for use within their standard operations.

Emergencies "call for a response that exceeds standard municipal operating procedures, available resources and expertise, Emergencies require a multi-agency response, including the response of organizations that are not usually involved in day-to-day operations. When an emergency response is required, municipalities implement their emergency plan."

2.5 Types of emergencies covered

Emergency types include natural emergencies and human-induced. Natural emergencies, which may occur in Marsh Lake, would include fires, floods, and ice storms. Human-induced might include plane crashes, chemical spill or power outages.

Emergencies can be:
- Gradual or Progressive: Provides advance warning (e.g. floods)
- Sudden or Instantaneous: Provides no warning (e.g. chemical explosion)
- Predictable: Has conditions that are monitored and expects (e.g. tornadoes)
- Unpredictable or Unexpected: Can be due to an accident (e.g. plane crash)

2.6 Physical effects covered

"An emergency has the potential to have a significant physical impact on a community." The following types of impacts have been considered for this plan.

Essential Services	Electricity
	Communications
	Government
	Medical
	Transportation
Residential	Temporary evacuation or longer term relocation
	Houses, cabins
	Pets
Commercial Facilities	Post Office
Community Facilities	Community Centre
	Playground
Environmental	Pollution
	Loss of flora and fauna
Psychosocial	Post event impacts

Another possible situation considered for this plan was the use of Marsh Lake as a staging or evacuation area for an emergency located in Whitehorse. As the closest community to Whitehorse outside the city limits, there is the possibility that the resources in Marsh Lake would be called upon to assist by providing emergency services in this community.

3.0 Local/Territorial/Agencies Government

3.1 Contact list

The following list shows the current contact information for the various agencies that may be involved in an emergency situation. This information should be updated at least once a year.

Marsh Lake Fire Rescue	Dispatch: Donna Larsen 911 Fire Chief: Juergen Wilms 660-4121 Deputy Fire Chief: Mike Larsen 660-4600 Medical Officer: Irv Harper 660-4130 Deputy Medical Officer: Graham Gifford 660-4002
Marsh Lake LAC	Chair: Malcolm Taggart 660-5347 EMO Coordinator: Mike Larsen 660-4600
Marsh Lake Community Society	President: Judy Corley 660-4311 Vice President: Donna Larsen 660-4600
Yukon EMO	Ron Adams 667-5220
Yukon Protective Services	393-7415
Yukon Health and Human Services	Brian Kitchen 667-3673
RCMP	667-5555
Southern Lakes MLA	Patrick Rouble 667-8647

3.2 Responsibility Grid

In the event of an emergency each of the above agencies would have a vital role to play. Below is a summary of tasks and responsibilities each would take on.

Initial response	MLFR
Evacuation announcement for gradual or progressive or predictable emergencies	Minister of community services RCMP LAC
Recommended evacuation announcement for sudden or instantaneous emergencies	MLFR
Transportation for evacuees	EMO
Set up of EOC	EMO
Set up of evacuation centres	EMO, MLFR Dispatch
Public Education	LAC, MLFR
Resource Management	EMO, MLFR
Impact assessment	MLFR
Public Information	EMO, LAC, MLFR

This grid is merely a recommendation of which agencies would be involved in decisions related to each task. It is not a complete list of tasks.

4.0 Mitigation

4.1 Definition

"Mitigation is defined as a series of sustained actions to reduce or eliminate the long-term impact and risks associated with natural and human-induced emergencies. Mitigation reduces the risk, impact, size, and reoccurrence of emergencies. Effective mitigation minimizes the response and recovery activities required in the emergency management process. Mitigation efforts can be both short and long term.

Mitigation can save lives, minimize damage to property, and reduce disruption to economic activities and social institutions. By reducing the scope and impact of emergencies, mitigation activities enhance community's sustainability and resilience. Successful mitigation measures require both public awareness and political support."

This is the area in which most of the efforts in 2005 were focused.

4.2 Training

At the start of this process, seven members of the Marsh Lake Fire Rescue completed training provided by the EMO and passed the Basic Emergency Management Course. This course provided a basic understanding of the components of the emergency management and the outline for this plan.

Other training programs completed include: (including those not covered by CDF funding)

- ICS (Incident Command Structure) 100, 200, and 300 levels
- EMO Training
- Initial Fire Training/Orientation
- Urban Interface Training
- CBRN course

4.3 Communication Systems (Open house, newsletter)

Resident Preparedness begins with resident education. This can only be conducted with direct communication between the planners and the community. For this, two specific tools were used.

1. On May 7, 2005 an Open House was held at the Marsh Lake Fire Hall. Over 40 residents attended. MLFR, Protective Services and private vendors gave presentations. A local vendor gave a sprinkler demo. It included:

   • Sprinkler Systems

   • Fire Risk and Concepts

   • Evacuation

   • FireSmart your home and property

   • Fire Scenario

   One measure of the success of this Open House was the increase in pump sales at Yukon Honda the following week. Summaries of those presentations are included in this report and full copies of the presentations are included in the Appendix.

2. Special Newsletter. The editor (Rob Alexander) of the Marsh Lake News and Hose Lines Newsletters and a member of MLFR, created a 16 page special newsletter to educate residents on many aspects of emergency preparedness. Articles included:

   • Introduction by BC Fire Commissioner

   • Wildfire Season is Coming

   • Wildfire Fuel Definitions

   • Sprinkler Systems to Protect Your Home

   • Be Smart, Fire Smart

   • Home Insurance and Wildfire

   • Evacuation Information

   Newsletters were distributed by mail to 435 Marsh Lake addresses.

4.4 Evacuation Education

The evacuation (either declared or voluntary) will be a critical event. There is only one road connecting Marsh Lake either northbound or southbound, with all sub-divisions connecting to the Alaska Highway. While most sub-divisions have two exits, not all do. In addition, not all homes are able to receive radio signals, and not all households have telephones. It is important that residents are prepared and able to assist each other, rather than completely depending on emergency services.

At the open house and in the newsletter, residents were provided information on how and what to prepare for an evacuation. The primary focus was on evacuation in the event of a wild fire, a chemical spill or an extended power outage.

A list of provisions for a bug-out kit was given:
- ✓ First Aid Kit
- ✓ One week supply of all medications
- ✓ 10 liters (2.5 gallons) of water per person
- ✓ 2 days supply of dried or canned food.
- ✓ 1 change of practical clothing
- ✓ Toys and books
- ✓ Radio with back-up batteries
- ✓ Easy and simple access to important documents (passports, birth certificates, credit cards)
- ✓ Food/water for pets – a plan for where they might go

Other considerations they should do prior to an emergency:
- ➢ Know the school's protocol
- ➢ List contact people in and out of the area
- ➢ Identify meeting places in and out of the area
- ➢ Know escape routes from your home
- ➢ Know and teach family members how to shut off water, propane, oil, electric
- ➢ Take First Aid/CPR
- ➢ Consider how to help your neighbours
- ➢ Protect your property (sprinklers, etc)

Residents were also informed on how they may know when to evacuate:

- RCMP may come by
- MLFR may broadcast an evacuation alert by vehicle PA system, or door to door
- You may receive a phone call
- Listen to the radio

A list of tasks they should try to complete prior to leaving home, if time permits was presented:

1. Shut off oil, propane, electric, water
2. Cover freezer with blankets to keep contents frozen longer
3. Gather items in your bug-out kit
4. Wear protective clothing and sturdy shoes
5. Secure your home – lock doors, unplug appliances
6. Turn on sprinklers (if fire is the threat)
7. Leave early (don't wait until last minute)
8. Follow evacuation routes as directed
9. Go to the designated Evacuation Centre

Residents were encouraged to register at the Evacuation Centre even if they did not plan to stay there or use their services.

1. It lets other people know you are safe
2. It helps to reunite families
3. It assures you have access to all financial and other services – such as hotel room fees, food and clothing (vouchers and reimbursements)

Finally a list of sources for additional information was provided:

- http://www.fema.gov/areyouready/
- How to Prepare for Workplace Emergencies, U.S. Department of Labor, Occupational Safety and Health Administration, 1991-OSHA 3088 (Revised)On-site Emergency Response Planning Guide, National Safety Council #12212-0000 Principal Emergency Response and Preparedness Requirements in OSHA Standards and Guidance for Safety and Health Programs, OSHA Publication 3122http://info.louisiana.edu/mahler/oep/

- http://www.pep.bc.ca/management/Disaster_Recovery_Services_Plan-Draft_.pdf

4.5 Evacuation Notification System

"(There is) the growing acceptance of communities that they do have a responsibility for alerting their public to imminent or here and now dangers." (Emergency Management Canada March 2005)

A key to a successful notification system includes things like "pre-scripted messages or a system that prompts you for information so you're providing complete information, having it go out in a standard format, and avoiding conflicting messages" (Emergency Management Canada March 2005)

In Marsh Lake, the notification system will be semi-automated. While it still requires human support, it meets the needs listed above. This system is in the design stage. Its goal will be to get most residents to sign up this winter by registering on-line or by phone. It will assessable (password protected) via a website, therefore allowing it to be used from any location. This system will require constant updating over time and an annual test.

This can be used either a declared or voluntary evacuation, for instructions to remain indoors or for the delivery of other important information (sites for services, etc).

The Marsh Lake emergency notification system will:

1. Have a database back-end that has a list of working phone numbers in the community.

2. Invite residents to add to that any information, which may be needed in an event, especially an evacuation – such as additional, contact information, special mobility or health needs, etc.

3. Deliver information - in the case of an event occurring, a script will be added to the system, giving consistent information.

4. Have operators, located in and out of Marsh Lake who can be easily trained to dial the numbers and read the script.

5. Keep track of which numbers were contacted and which were no answers, busy etc.

6. Have a database that can be sorted by sub-division, special needs, etc.

7. Include a toll free phone number with a recorded message of instructions.

8. Additional funding and effort is required to implement this system's 3 components:
    1. Registration Page for residents,
    2. Script page for consistent delivery of information,
   3. Dialer system.

Once up and running it will be the responsibility of 911 Dispatch for Marsh Lake Fire Rescue to assure the system is being tested, and used in the event of an emergency –

4.6 FireSmart Education

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At the open house in May 2005, several presenters covered the basics of fire. This included a summary on:

- Fire breaks,
- Burnout,
- The fire triangle,
- Fuel types (ground, ladder, surface),
- Convection,
- Weather,
- Fire rankings,
- The boreal forest,
- Fire causes (man-made, nature)
- Fire dangers (fast moving crowns and embers creating a spot fire),
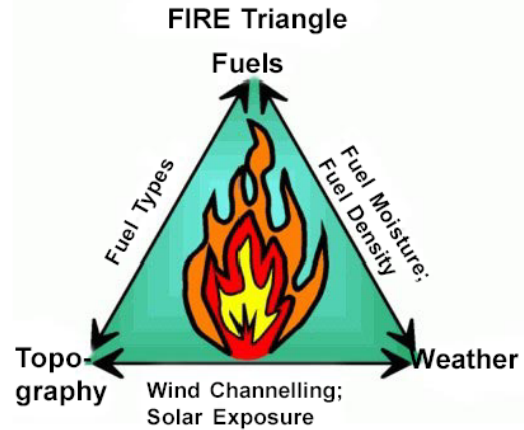
Specific issues related to the individual property assessment was also covered:

- Priority zones
- Roof and sliding material,
- Slope,
- Windows,
- Access for fire vehicles,
- Generators,
- Tools.
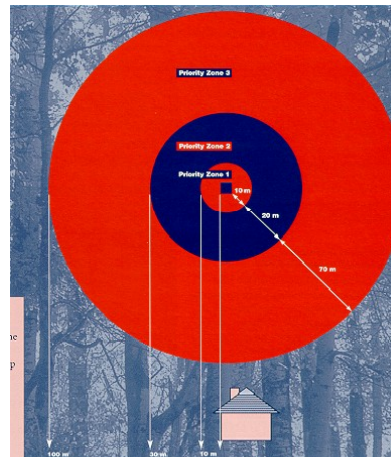
(The complete presentation is in Appendix)

The Priorities are:
1. Life safety
2. Property protection
3. Environment
The best defense is motivated and well educated citizens!!!

4.7 Fire Scenario

Also at the Open House in May, a presentation was given by Yukon Protective Services demonstrating the impact of a fire on Marsh Lake. The scenario depicted a fire starting on an average June day, in the Judas Creek subdivision. The fire was tracked over time, with the following results:

Start: Date: June 26, 2004
Time: 1300
Fire Size: Ignition
Date: June 26, 2004
Time: 1320
Fire Size: 2 ha
Distance: 250m

30 minutes:
Date: June 26, 2004
Time: 1330
Fire Size: 8 ha
Distance: 600m
60 minutes:
Date: June 26, 2004
Time: 1400
Fire Size: 32 ha
Distance: 1 km
Homes Lost: 9
2 hours
Date: June 26, 2004
Time: 1500
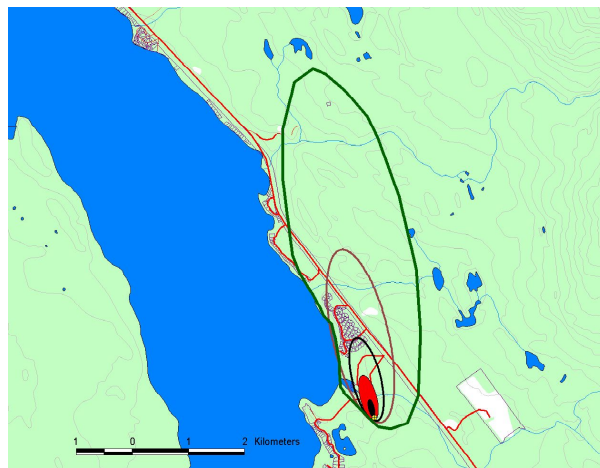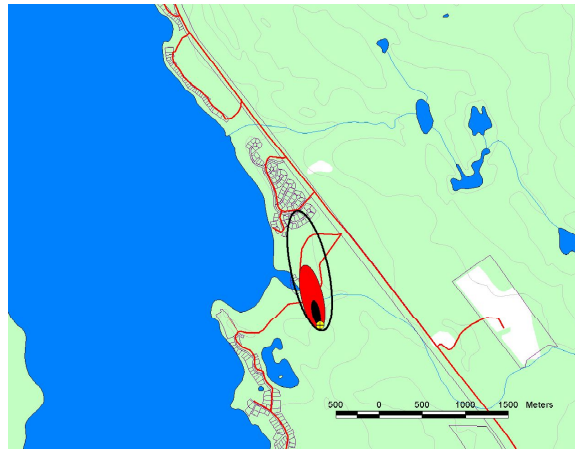Fire Size: 200 ha
Distance: 2.9 km
Homes Lost: 40
4 hours:
Date: June 26, 2004
Time: 1700
Fire Size: 850 ha
Distance: 6.4 km
Homes Lost: 50

4.8 FireSmart Evaluations

Three phases of work was done in this task:

- Locating interested homeowners
- Training of MLFR responders
- House/Property evaluations

Over the past year a list of home owners who were interested in have their property Fire Smart evaluated was generated. For this project, they were contacted by telephone and appointments were made.

Five MLFR responders were trained by Forestry members to conduct the evaluations. A form (paper and electronic) was created to record the information. A copy is attached in Appendix
Between May and October 2005, a total of 75 properties were evaluated. Data will be able to show:

- Overall ability to defend
- Structure and site hazard levels
- Area hazard levels
- Property survey (access to lake, etc.)
- Interior Sketch
- Values at risk ($)
- Household profile (adults, children)
- Early evacuation needs
- Sprinklers, generators in place
- House photos (sides A, B, C, D)

Residents were informed of high-risk hazards and hopefully have removed or reduced this risk.

4.9 Sprinkler System Education

We identified and tested several different methods to create sprinkler systems that could be installed on private property with the intent to reduce the risk of fire spreading to structure.
Several suppliers were contacted and attended the open house to demonstrate their products. Residents can obtain advice on options appropriate for their location from the vendors or MLFR.

4.10 Mapping software System

Simple Maps: A simple map of each sub-division was created with lot numbers. In addition, a mile-by-mile land marking of the highway and major side roads was done.

These maps are not adequate to respond to an emergency situation. One of the key lessons reported by the BC Fire Commissionaire was the lack of good maps. Therefore in order to be better prepared the MLFR has undertaken the following:

- Identifying (and GPSing) the highest treat areas
- Pre-plan fire lines for potential fire-line and Protective Services sprinkler locations
- Identify and map all water sources
- Community Database
- Creating a user-friendly interface map to retrieve information quickly (arial photo, using Ozi-Explorer and HTML)

The computerized Mapping system

Goal: to create a database of residential information that is linked directly to a mapping system.

Objectives: To create a system that is:
- User friendly
- Community supported
- Able to be updated and managed by the community
- Affordable
- Timely

Challenge – to keep the database updated over time

All the data gathered during the FireSmart evaluations, plus other information available from street observations has been input into a database. This database is linked with the mapping software – info on over 400 lots. New data can be added to the database – which will automatically update the information accessed through the mapping software.

This database is also useful for dispatch – as it provides information on households who require evacuation assistance, contact phone numbers and resident information.
A user-friendly interface to retrieve information quickly has been created linking Ozie-Explorer mapping software with the community FireSmart database - using HTML.

The system allows quick reference on data by lot number or GPS location.
Overlays can be created to display forest composition, trails/power lines and other structures.

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It can also be used to track locations of fires and personnel during an actual emergency.

- Links the map directly to lot information
- Links the map directly to water source information
- Can be used for planning line distances (how much hose would need to go from point A to B)
- Can monitor activity for staging an event (marking locations of fire, teams, etc.)
- Can be used for FireSmart funding (determine the hectares in the high risk area, showing neighbours the exact areas proposed in the program)

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Hardware Requirements:

- Newer laptop computer (minimum 40 gig hard drive)
- Graphic accelerator card

Software Requirements

- Mapping software (Ozie-Explorer)
- On-board server with FrontPage extensions
- XP Windows Professional
- Microsoft Access database
- Area Maps

Programmer Requirements

- HTML coding
- Database design and interaction
- JavaScript programming

Water sources.

The water sources in the community were GPSed and data was recorded on important assets, such as location, delivery options, tender, availability, heli-options, etc. The sources are marked on the map and each source icon links to the detailed information on that source.

Lot information

Each lot/homeowner who had a FireSmart evaluation conducted provided a great deal of information about their lot, home and area. This information is stored in a database, connected to the map. The lot boundaries can be displayed on the map, and each lot then links to the information in the database. This includes information on the house design, risk areas, fuel types, etc.

Marsh Lake Fire Rescue Lot Assessment

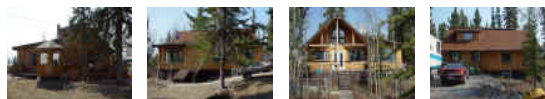Lot: Lot designation

owner: xxxxx   phone residence: **660-xxxx**   phone work:

Inspection date: 5/10/2005 9:55:32 PM   gps: N60/33.214

W134/27.624   ref: 2005XYMLFR007   Fire district: XY
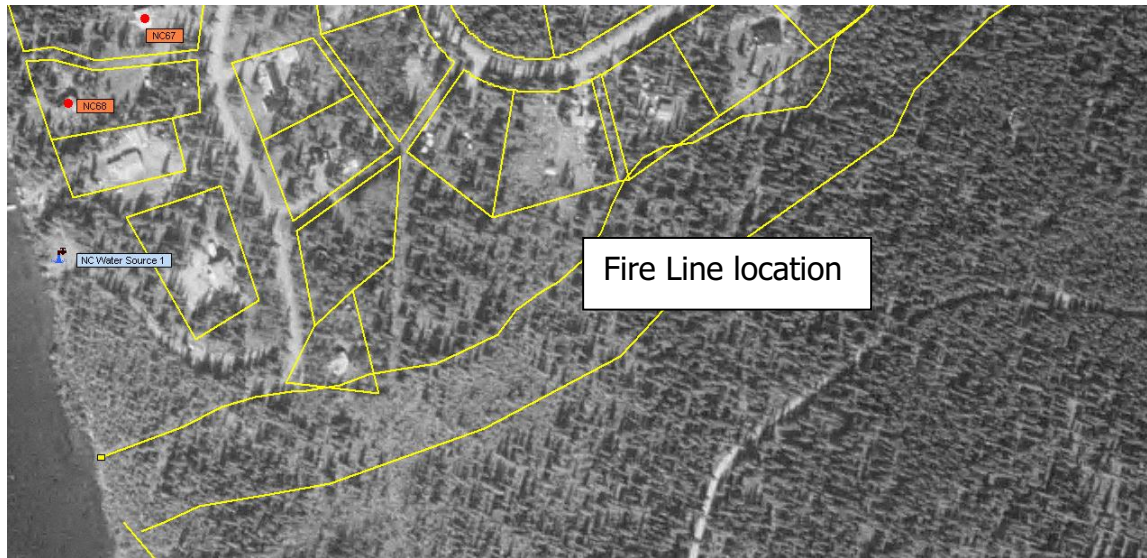
Overall ability to defend: EXCELLENT/GOOD

All pictures

side A   side B   side C   side D

Fire line locations

Fire Line location

The map has also been used to analyze the best locations for running fire lines to reduce the spread of fire. By using the map, it was easy to lay out a fireline trail between the subdivisions of Judas Creek and New Constabulary and know the exact length of hose required. Knowing this information in advance will save time when needed.

FireSmarting planning

The mapping software also helps in the FireSmarting plan. It can show high-risk areas, and their relationship to specific lots. It can generate distances and square hectare estimates for contracting. It is also useful to show homeowners how the FireSmarting will impact their lot.

4.11 Dispatch System

Dispatch Training: All three dispatchers completed training. Training included:

- All 3 dispatchers passing Standard First Aid

- Lead dispatcher is a Certified Emergency Medical Dispatcher (IAEMD)

- Training sessions were held with the members on dealing with suicide callers and radio protocol.

- Helped to set up a dispatch system with Tagish.

Dispatch has been a high priority for Marsh Lake Fire Rescue for the past several years. However, with this plan in mind, improvements to the system have been made with a menu driven website.

Roll Call: Each day at noon a roll call is done to record who is in the community and able to respond to a call. This quickens the response time and allows dispatch to know if additional resources are needed.

• Over the past 227 days, an average of 6.1 responders are available each day (higher on weekends and lower on weekdays)

4.12 Chemical hazards on-line search

Canutec: The website for Canutec is hyperlinked on the Dispatch website for quick assess to determine dangerous material information. This site allows the dispatcher to enter the plaque information and get detailed information on how to respond.

Link to Canutec: http://www.tc.gc.ca/canutec/erg_gmu/search/search.htm

4.13 Resource list

The need for knowing who has what type of equipment in a small community is extremely important. Currently, dispatch maintains a list of two heavy equipment operators who have agreed to help out if needed.

Next Steps: We are in the process of creating a web site where residents can go and update the type of equipment they have that may be needed in an emergency. This might include water trucks, bob-cats, boats, snowmobiles, etc.

In the event of an emergency Dispatch and EMO would access this list to gain the support of those people with equipment that might be useful in the response efforts.

Additional funding and effort is required to complete this website and get residents to register their information.

5.0 Preparedness

5.1 Definition

"Preparedness can be defined as the process of developing effective policies, procedures, and plans for how best to manage an emergency. Have a comprehensive program to deal with emergencies is the result of a complex process involving many considerations. A comprehensive preparedness program is more than simply having a plan, it is an on-going process."

"Some of the essential preparedness activities include:
- ➢ Developing a legislative framework
- ➢ Conducting a Hazard, Risk and Vulnerability Analysis
- ➢ Developing various preparedness plans
- ➢ Conducting education and training
- ➢ Exercising the plan
- ➢ Ensuring public awareness"

5.2 Hazard, Risk and Vulnerability Analysis

One of the first tasks was to determine the types of threats to Marsh Lake, the likelihood of occurrence and the damage they could cause. Meetings were held with the project team, EMO and Protective Services to review these.

A task outline was created, then modified to reach the overall objective of having a better-prepared community (residents and First Responders) for an emergency. Understanding the risks is one of the primary tasks needed in a successful plan.

A review was conducted by members of Marsh Lake Fire Rescue, Yukon EMO and Protective Services to rate like emergency types by:
- • The Magnitude of damage that the hazard will inflict
- • How likely that the event will happen
- • What priority given to hazardThis chart demonstrates the risks and rates them.

From this, the primary risk identified was Wildfire, followed by Ice/Wind storms and Hazmat accidents.

	Wildfire	Hazmat	Earthquake	Flood	Ice/Wind Storm	Unknown
Damage	10	6	6	3	8	?
Likely	10	7	4	2	8	10
Priority Ranking	1	3	4	5	2	6

1=low   10=high

5.3 Local by-laws/protocols

Because Marsh Lake is an LAC and not a municipality, it is not clear if the LAC can have a by-law to declare an emergency. This will be explored with the LAC and EMO.

5.4 Mutual aid agreements

The following mutual aid agreement will be set up.

1. Marsh Lake Community Society (MLCS) and YTG – for the emergency use of the Marsh Lake Community Centre. This building is owned by YTG but managed MLCS. Uses of the building might include temporary shelter, food service, space for medical needs, space for emergency responders (rest/sleep), meetings with insurance companies, etc.

2. Two sister communities (likely Tagish and one other community not bordering Marsh Lake) to provide support in the notification of residents (evacuation or other critical information), using the on-line notification system.

3. EMO – to understand their role in the emergency clearly.

6.0 Response

6.1 Definition

Response activities are actions taken immediately before, during or directly after an emergency occurs. Response actions are designed to reduce or eliminate the immediate and short-term social, human, environmental, or other effects of the emergency. Response involves a wide range of undertakings such as fire suppression, rescue, provision of emergency medical services (e.g. evacuation, temporary feeding, and housing of evacuees) and road closures."

6.2 Emergency Site Management System and team (ESM)

The ESM (Emergency Services Management) will work in conjunction with the Incident Command Systems used by MLFR and the team will be comprised of the EMO coordinator for the community and Yukon EMO, plus any other resources appropriate to the situation for the tactical needs of the situation. This team has the responsibilities for decisions made within the inner and outer perimeters of the emergency site. (i.e. they are located in or near the actual core site of the emergency.)

6.3 EOC team

The Emergency Operators Centre is considered the core of the emergency response team. This Centre will house the central communications operations and monitor all operations of the event. There are minimum requires set out for an EOC. They are:
- Run on a 24 hour basis
- Provides for basic human needs such as water, food, rest area and toilet
- Must be controllable and monitored for security purposes
- Must be safe from ill effects of the emergency
- Mush have adequate equipment and supplies such as paper, desks, etc
- Proves redundant backup communications systems
- Provides display boards
- Provides backup or auxiliary power
- Includes or has facilities for media briefing and news conferences

In Marsh Lake, it is likely that the EOC would be located in the Fire Hall – unless a temporary mobile unit is brought in by EMO. The Fire Hall has 4 bays, a training room, chief's office and washrooms each with a shower. One phone line services the Hall and this may be an issue to resolve in the next year. The fire hall does not meet all of the requirements listed above – hopefully some of these needs can be addressed with future funding to upgrade the communications and power requirements.

Communications
In the summer of 2005, as part of this plan, the amateur radio association donated a radio unit to MLFR. MLFR members are equipped with radio units, some of which include MDMRS frequencies, interagency frequencies and frequencies for neighboring fire departments.

6.4 Incident Command Systems (ICS)

MLFR has adopted and actively practices the ICS in responses to normal emergencies. There are five key components in the system – which will be relevant in response to a major event:

- Command
- Operations
- Planning
- Logistics
- Finance & Admin

Command

> In most situations, the incident commander will be the first responder on the scene from MLFR and that will be transferred to the Fire Chief upon his/her arrival. If the Fire Chief is not available, the IC will be Deputy Fire Chief, followed by Medical Officer, and Deputy Medical Officer.

Operations

> In a large event, operations will involve other departments. Initial coordination of this will fall with MLFR (mostly likely the dispatcher on call). In coordination with the IC they will primarily determine the resources that are needed, and direct tactical operations.

Planning, Logistics and Finance Admin

At this stage, it is likely MLFR will be working with Yukon EMO to set up these areas as needed. As a non-municipality, Marsh Lake has no authority for finance decisions.

6.5 Responsibilities

Marsh Lake Dispatch

The responsibilities of the Marsh Lake Dispatcher or alternate during an emergency are to:

a) Activate the Yukon EMO, and notify the Marsh Lake EMO coordinator

b) Upon warning of an emergency, contact the LAC Chairperson to consider requesting a declaration of an emergency,

c) Coordinates and directs the MLFR response as per the Plan,

d) Provide or request mutual aid when required,

e) Determine if municipal resources are adequate or if additional resources are needed,

f) Request assistance from the Yukon Territorial Government when required,

g) Work with the IC to manage and/or coordinate activities at the emergency site or sites,

h) Advise the EMO of any necessary actions that should be taken which are not covered in the Emergency Plan,

i) Provide a list of equipment, supplies pertinent to this area, private contractors and engineering resources as required,

j) Disconnect any municipal service (utilities) that represent a hazard,

k) Provide back-up communications,

l) Coordinate radio frequencies used,

m) Establish and supervise an Emergency Message Control Centre,

n) Liaise with Northwestel,

o) MAINTAIN A LOG OF ALL ACTIONS TAKEN, and

p) Make a full report on completion of the emergency.

E.O.C CO-ORDINATOR

2. The responsibilities of the Emergency Operations Centre Coordinator during an emergency are to:

      a. Act as liaison with the Yukon Emergency Measures Organization,

      b. Assist the IC in the coordination of the emergency response,

      c. Administer the internal communications system and information flow within the Emergency Operations Centre,

b) Set up the Emergency Operations Centre, provide EOC staff, ensure emergency power is set up, provide EOC security, ensure all materials are available in the EOC, ensure logs and records are accurately maintained,

c) Coordinate purchase of any supply requirements for the EOC,

d) Maintain records of all purchases for the EOC,

e) Provide assistance in clean-up operations and repair of damage where there is a municipal responsibility,

f) Advise the City Manager when sustained damages to buildings exceed safe limits,

g) Provide alternate supplies of water when required and liaison with the Public Health Office on matters concerning water quality and other health issues,

h) Provide assistance in search and rescue operations,

i) Restore essential services,

j) Act as liaison with Yukon Electric and Yukon Energy,

k) Coordinate public and freight transportation, and

l) MAINTAIN A LOG OF ALL ACTIONS TAKEN.

FIRE CHIEF- FIRE AND RESCUE

The responsibilities of the Fire Chief during an emergency are to:

a) Coordinate fire fighting operations,

b) Coordinate search and rescue operations where applicable,

c) Activate Fire Mutual Aid if required,

d) Ensure that dangerous goods support agencies are contacted if necessary, and

e) MAINTAIN A LOG OF ALL ACTIONS TAKEN.

PUBLIC INFORMATION COORDINATOR (Yukon Government)

The responsibilities of the Public Information Coordinator during an emergency are to:

a) Prepare self-help information for rapid distribution,

b) Keep the public informed of significant developments occurring during the emergency,

c) Arrange for media facilities at the Emergency Operations Centre,

d) Provide public information support and media control at the emergency site(s),

e) Gather, process and disseminate information from emergency services,

f) Coordinate the public inquiry centre, and

g) MAINTAIN A LOG OF ALL ACTIONS TAKEN.

EMERGENCY SOCIAL SERVICES DIRECTOR (Yukon Government)

The responsibilities of the Director of Emergency Social Services during an emergency or disaster are to:

a) Provide the following:
- (1)   emergency feeding
- (2)   emergency lodging
- (3)   emergency clothing
- (4)   emergency registration and inquiry and
- (5)   personal services.

b) Establish communication requirements,

c) Coordinate the response of volunteer organizations directly involved with Social Services,

d) Select the most appropriate site(s) for the coordination of Registration and Inquiry,

e) Alert and coordinate the response of all volunteer organizations involved in emergency social services, and
MAINTAIN A LOG OF ALL ACTIONS TAKEN.

R.C.M.P.

The responsibilities of the R.C.M.P. during an emergency are to:

a) Protect lives, public and private property,

b) Provide search and rescue services,

c) Coordinate evacuations,

d) Seal off (inner and outer perimeters) the emergency or disaster site(s),

e) Control and if necessary, disperse crowds within the emergency or disaster site(s),

f) Control traffic to facilitate the movement of emergency vehicles,

g) Provide security at the site (s),

h) Provide security and prevent looting of evacuated areas,

i) Provide assistance to the Coroner,

j) Provide investigative services where required, and

k) MAINTAIN A LOG OF ALL ACTIONS TAKEN

EMERGENCY HEALTH SERVICES DIRECTOR (Yukon Government)

The responsibilities of the Director of Emergency Health Services are:

a) Provide assets and resources as required for an effective emergency health service response,

b) Arrange and provide the ambulance services,

c) Care for the sick and injured and management of mass casualty incidents,

d) Provide information, advice and direction on emergency sanitation procedures including but not limited to water quality, sewage and solid waste disposal, food quality, institutional hygiene, field sanitation and communicable disease control though environmental health services,

e) Provide suitable protection for vital statistics information,

f) Liaise with hospital personnel, and

g) MAINTAIN A LOG OF ALL ACTIONS TAKEN.

7.0 Recovery

7.1 Definition

"Recovery consists of measure and actions taken to repair and restore communities after an emergency. Recovery may include some mitigative actions to reduce the hazards in the future… The purpose of recovery management is to assist a community affected by an emergency towards the management of its own recovery."

7.2 Liaison understanding

MLFR will work with the Yukon government to assure the appropriate departments are involved in the recovery management. This may include support in contacting contractors to clean up the affected sites, or bringing in mental health debriefings for both responders and residents, as needed. The primary points of contact will the MLFR dispatchers and the EMO coordinator.

7.3 Impact assessment

The Fire Chief will work with Protective Services and insurance companies to determine the impact of the emergency.

7.4 Public Information

Public notices will be placed on community boards, local radio and newspapers and the notification system will be used to keep residents informed for any services available after the emergency.

7.5 Check list/information guides

Any check lists or information guides will be distributed as needed.

8.0 On-going Plan needs

8.1 Training and education of local public officials

The LAC and MLFR need to work together to practice the implementation of this emergency plan. Training sessions will be created to cover this need.

8.2 Data base maintenance

The maintenance of key data bases (resident lot information, household information and notification information and resource lists) is key to the success of this plan over time. This will require time and resources each and every year.

8.3 FireSmart evaluations

At the completion of this report (October 30, 2005), 75 residents had had their lots complete the FireSmart evaluation. This is approximately one-quarter of occupied lots in the community. MLFR would like to continue this activity each year – including new lots as well as reviewing lots where improvements have been made over time.

8.4 Resource list

The resource list needs to be expanded as soon as possible. This will include contacting residents and asking them to participate in this list.

8.5 Notification list

The notification list also needs to be expanded as soon as possible. As well, supporting communities need to be contacted to support Marsh Lake during an emergency.

8.6 Public awareness of the plan

In addition to the distribution list of this plan, the residents of Marsh Lake need to be aware of the plan. Pubic meetings will be held (possibly during the AGM of the Marsh Lake Fire Rescue Society) to share the plan. (The Open house held in May 2005 covered most of the tactical and mitigation aspects of the plan)

9.0 Issues

9.1 EOC requirements are not met

No public building in Marsh Lake (neither the Fire Hall or the new community building) meet the minimum requirements of the EMS or EOC.   It is anticipated MLFRS will work with CDF to support the following improvements:

- A generator and isolation switch at both buildings
- Backup telephone services, either Internet with VoIp or another backup system.

9.2 Pets

One lesson of hurricane Katrina in the U.S. was that people are not willing to evacuate if they cannot bring their pets with them or to a safe location. As Yukon EMO currently has no provision for the transportation of, or care of pets, Marsh Lake is looking into possible options. This may include an agreement with local kennels and van companies.

9.3 Transportation

While most residents of Marsh Lake have their own private vehicles, some do not. There are also no public mass transit vehicles (vans or buses) in Marsh Lake. In the event of an emergency there needs to be agreements in place, and contact information for bus and van transportation – this may be with school bus companies or other buses in neighboring communities.

10.0 Conclusions

This report represents only the first stages of emergency planning and preparation in Marsh Lake. There is much more work to do to complete this plan, and much more work needed each year to keep it up to date.

That said, this report has been a very successful team and community effort. We feel it has provided education and plans that will indeed reduce both the threat of wildfire and will help provide better and faster response to nearly any emergency situation.

Appreciation is given to the Yukon government's Community Development Fund for their financial assistance, and to Yukon Protective Services and EMO for their support throughout this project.