Lesser Slave Lake Fire Disaster Recovery



Town of Slave Lake and Municipal District of Lesser Slave River





Alberta Fire Situation



- May 14
 - 140 fires
 - 70 out of control

What Happened



Next to Lesser Slave Lake



Next to Lesser Slave River



Some Dignitaries







A house burnt to ashes in 10 – 30 minutes!



Slave Lake Fire – May 2011





Slave Lake Fire – May 2011





Vehicles, ATV'S, Boats, Etc.



May 15, 2011

- 524 Homes
 - 374 properties in Town destroyed & 52 damaged
 - 59 destroyed in the MD & 39 damaged
- Several Businesses

• New government building, including Provincial Offices,

Town Offices and Library

- One fire truck
- One fire station
- One Helicopter
- No Lives from Fire
- One Pilots Life



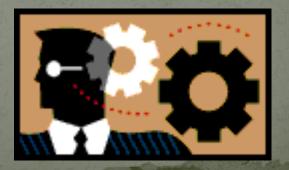
Flooding

- Added to the already taxing challenges was flooding over the next couple of months, with two major floods and numerous homes and businesses flooded
- Trying to keep the landfill and facility dry enough to receive waste
- Maintaining other receiving sites dry enough. Metal and Concrete sites were large pools of water



Waste List

- Concrete, large volumes
- Refrigerators and Freezers, plus the food inside
- Burnt Wood, Class III materials
- Metal, Cars
- Ash
- Partially burnt materials, "Unknown"
- Hazardous Waste, particularly in the businesses



Waste Volumes

- First five days of receiving waste, we received the equivalence of 4 months of waste, after diverting metals and concrete, primarily ash and some class III materials. By two weeks we received a half years of waste.
- Received 1000 refrigerator units in one day, received a total of 3500 units in two weeks. Total closer to 4500 estimated.
- Received one years worth of waste from the fire and flooding alone in two and a half months, not to include the regular waste received during this time

Refrigerators and Freezers





Did I say Refrigerators?





Challanges

- Politics
- Financing
- Contractors
- Staffing
- Equipment
- Rain, Rain, Rain, and did I say, RAIN?
 - Pumped 5 times volume for leachate as the previous two years, combined

Plan

- Local Resources
 - Put Town people to work
 - Local contractors
- Recover & Recycle
 - Metals
 - Concrete
 - refrigerators/freezers
- Wood Debris
 - Separate
 - Grind
 - Utilize if practical
- Hazardous Materials
 - Identify
 - Recover
- Staging areas
 - Lagoon Property for Town & East
 - Regional Landfill
 - Lakeshore communities
- Landfill
 - Class II
 - Class III
 - Airspace issues

Handling Metal





Metal Recycling





Metal Recycling





Metal Recycling





Concrete





Concrete





Concrete





Concrete Recycling





Wood Recycle





Wood Recycle





Wood Recycle





Handling Ash





Ash at Landfill





Preparedness

- Emergency Response Plan, nothing to prepare for this
- Alberta Response Team, took landfill into consideration and included in talks and meetings, but nothing on long term impact
- Look at alternatives for disasters, estimated that we diverted about 85% to 90% of demolition materials from landfill with concrete, metals, and brush/trees alone
- Find alternative areas to be used for temporary landfills as required, fire was very close to current landfill, where to put the waste should it have been burnt

Preparedness

- Think outside the box, we used a log loader and metal bailer to unload refrigerators hauled in by gravel trucks and roll offs
- Start planning immediately, what will need to be done, who do you talk to for what you need, ie road development, equipment rentals, etc.
- What do you do when things are not available? We were without power for three days when we opened, had already put in a generator backup system for the scale last year

Politics

- Politicians need to include those on the ground in discussions, find out what is available, what is practical, what needs to be contracted out.
- Remember that there is a long term cleanup after recovery has left. Once the "professionals" leave, there is a lot to do and sometimes the resources are not available.
- Be prepared for the aftermath, long term impact to your region, not just months but years afterwards.

Anyone Ready for This? Not Really



Orthis? High River Flood-2013



Guidelines

- Use resources, I utilized members from SWANA and Alberta Care for advice and consultation and had DBS Environmental, one of my contractors, come in to do hazardous waste cleanup.
- Remember your environment, our goals were to move waste in an efficient and environmentally safe manner, ensuring everyone was on the same page.
- Watch out for everyone who wants to make a quick buck and over charge, or promise things that can not be done without large amounts of money. People like to take advantage at times of disasters.

My House, how close it came



Questions???

- Learn From Our Experience
- Tom Moore tommooreconsulting@gmail.com
- Westlock Regional Waste Management Commission, Commission Manager

