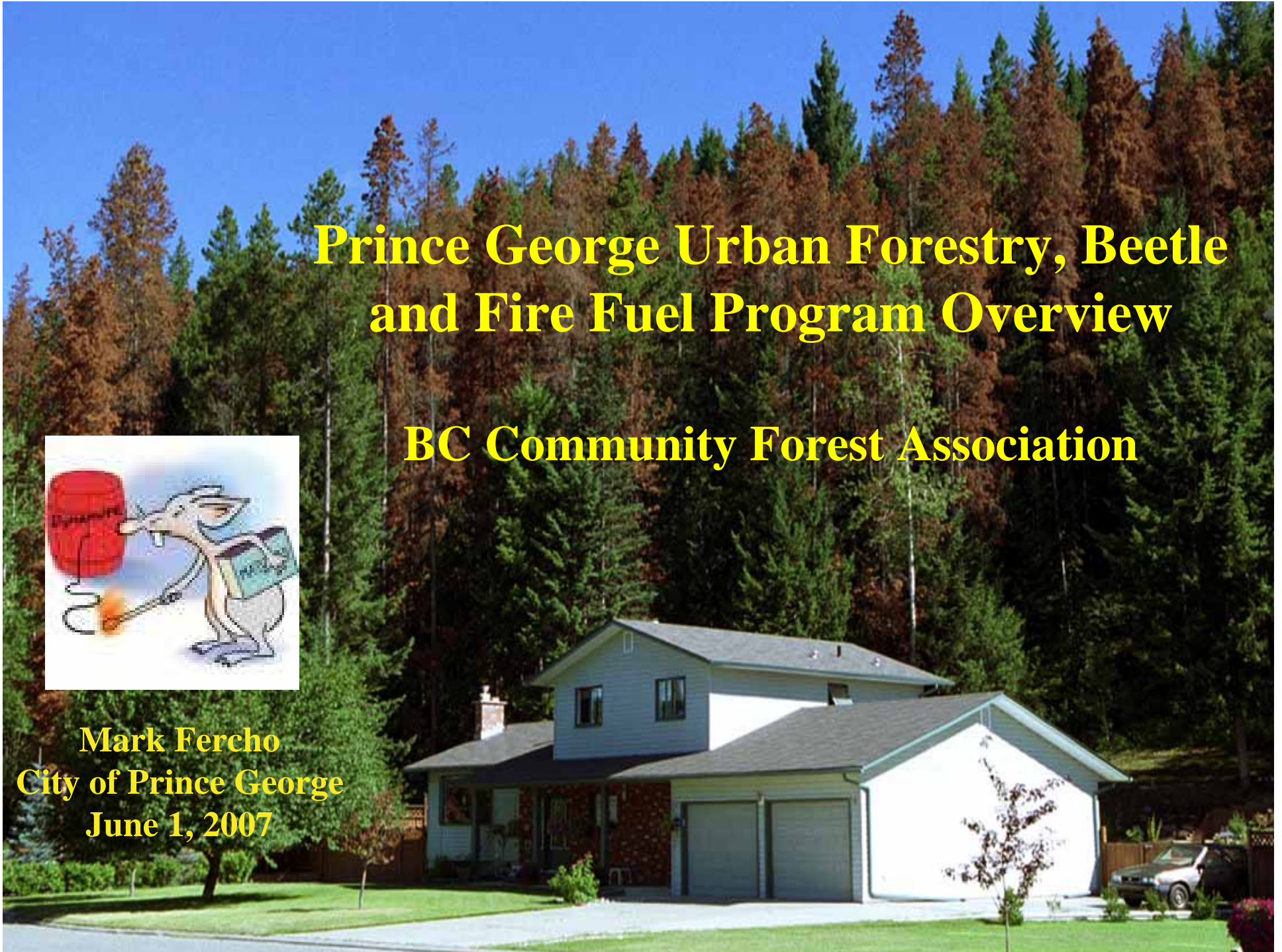


Prince George Urban Forestry, Beetle and Fire Fuel Program Overview

BC Community Forest Association



Mark Fercho
City of Prince George
June 1, 2007



Prince George Urban Forest Overview

+

Climate Change.....?

PG is not a Fire Dependant Ecosystem,

But.....

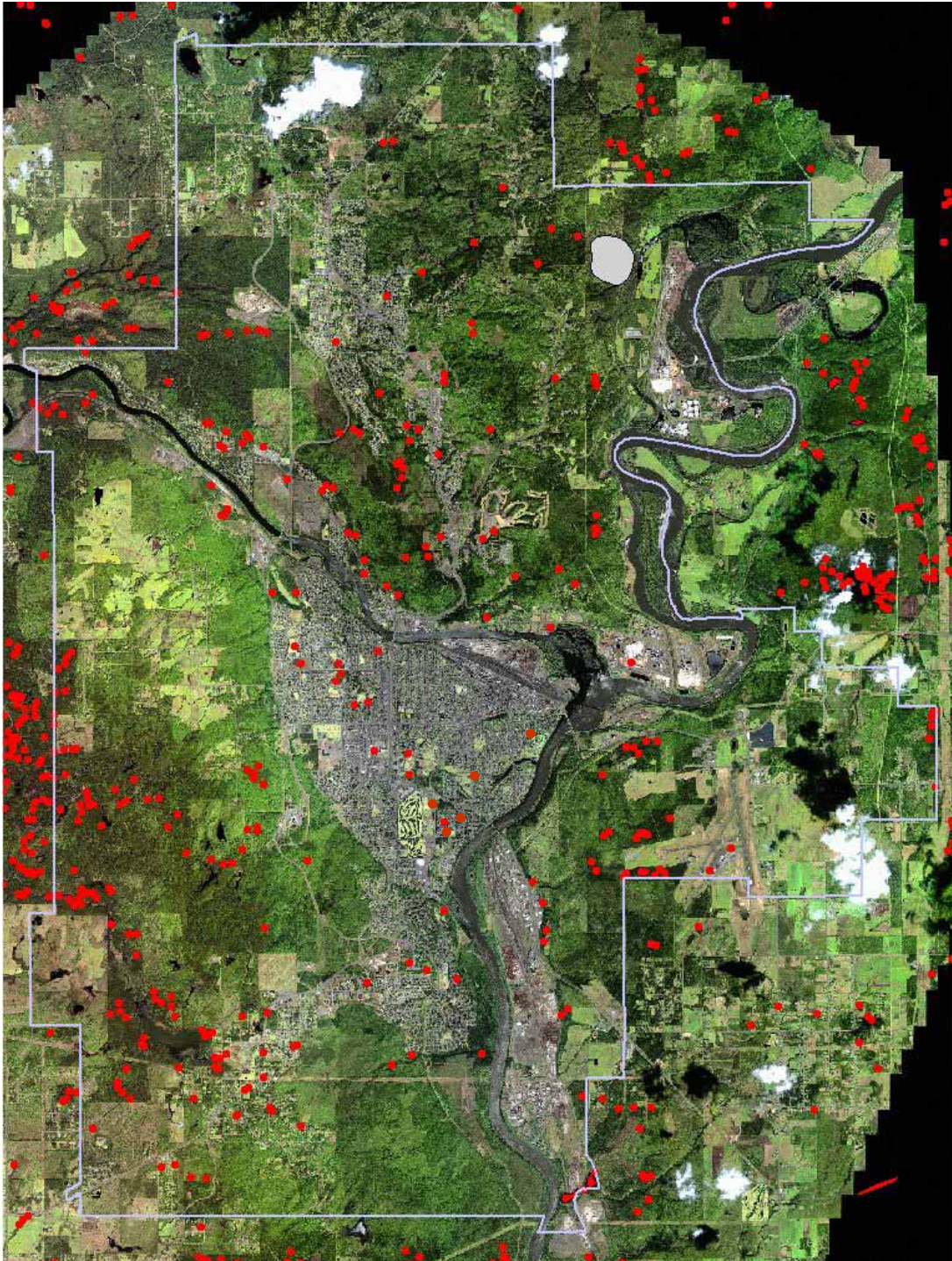
Beetles infestation arrived,

- **from sanitation harvesting,**
- **to interface fire fuel interface management,**

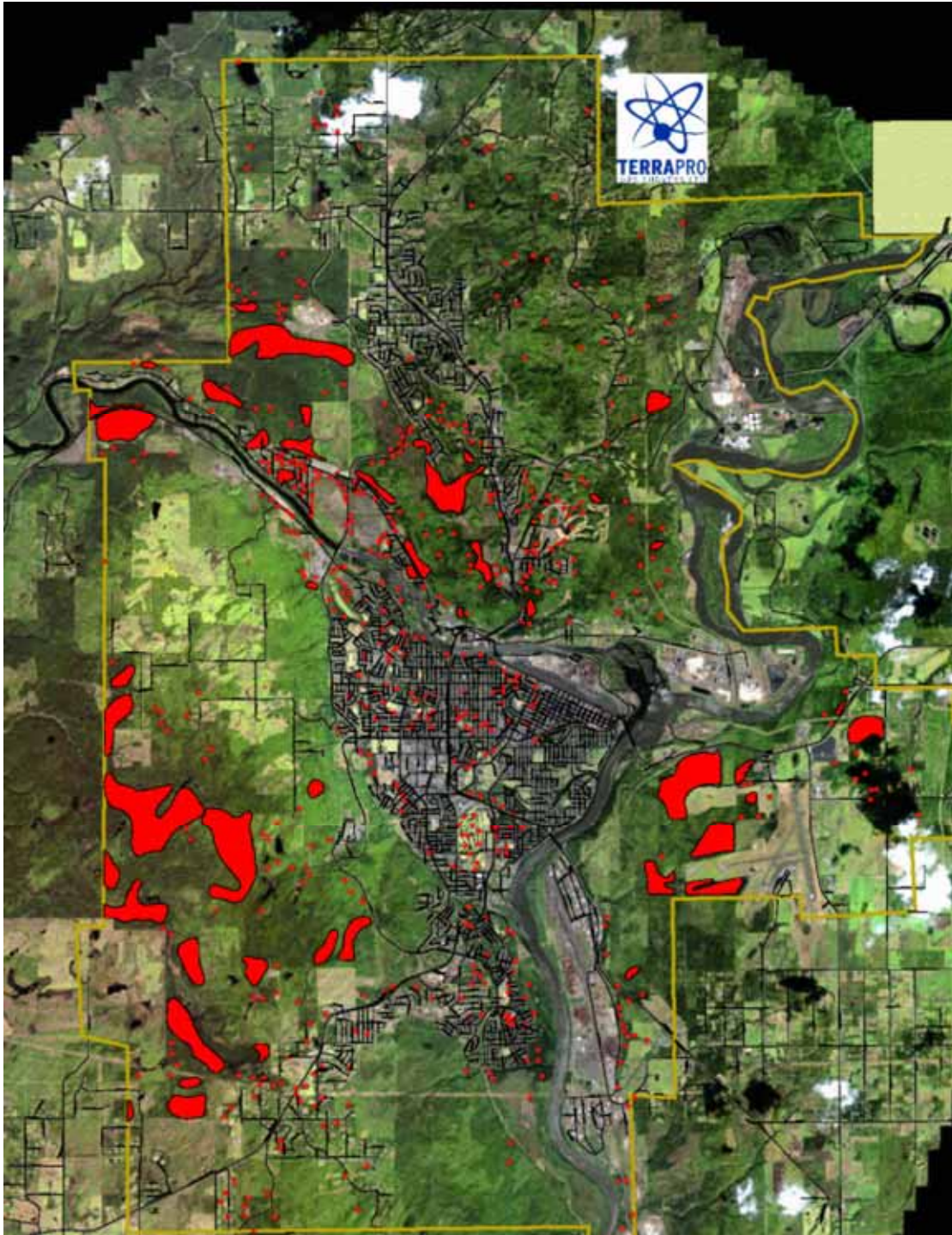
Fire will become part of the picture for a short term



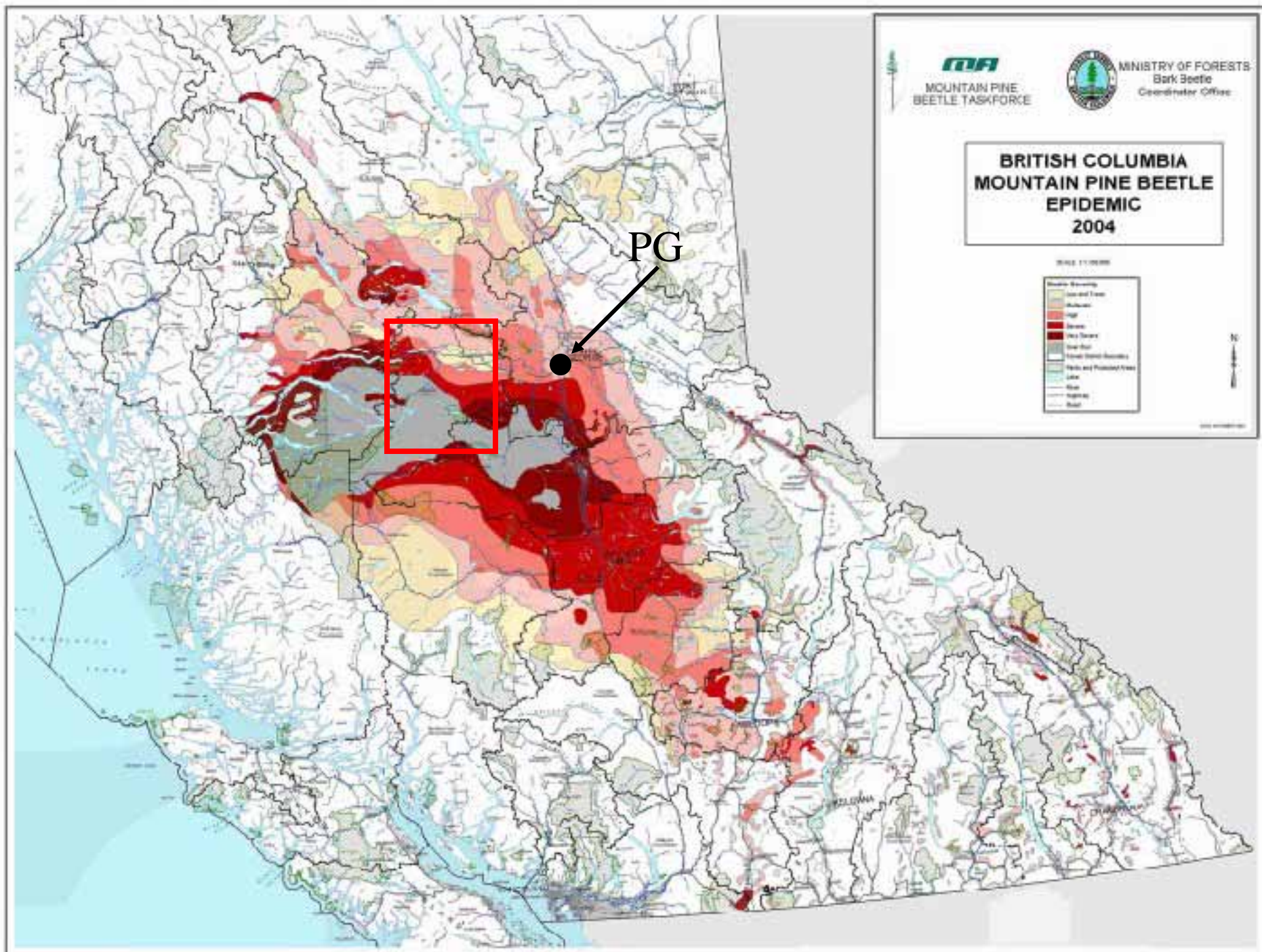
City of Prince George
Mountain Pine Beetle Sites
2000



City of Prince George
Mountain Pine Beetle Sites
2002



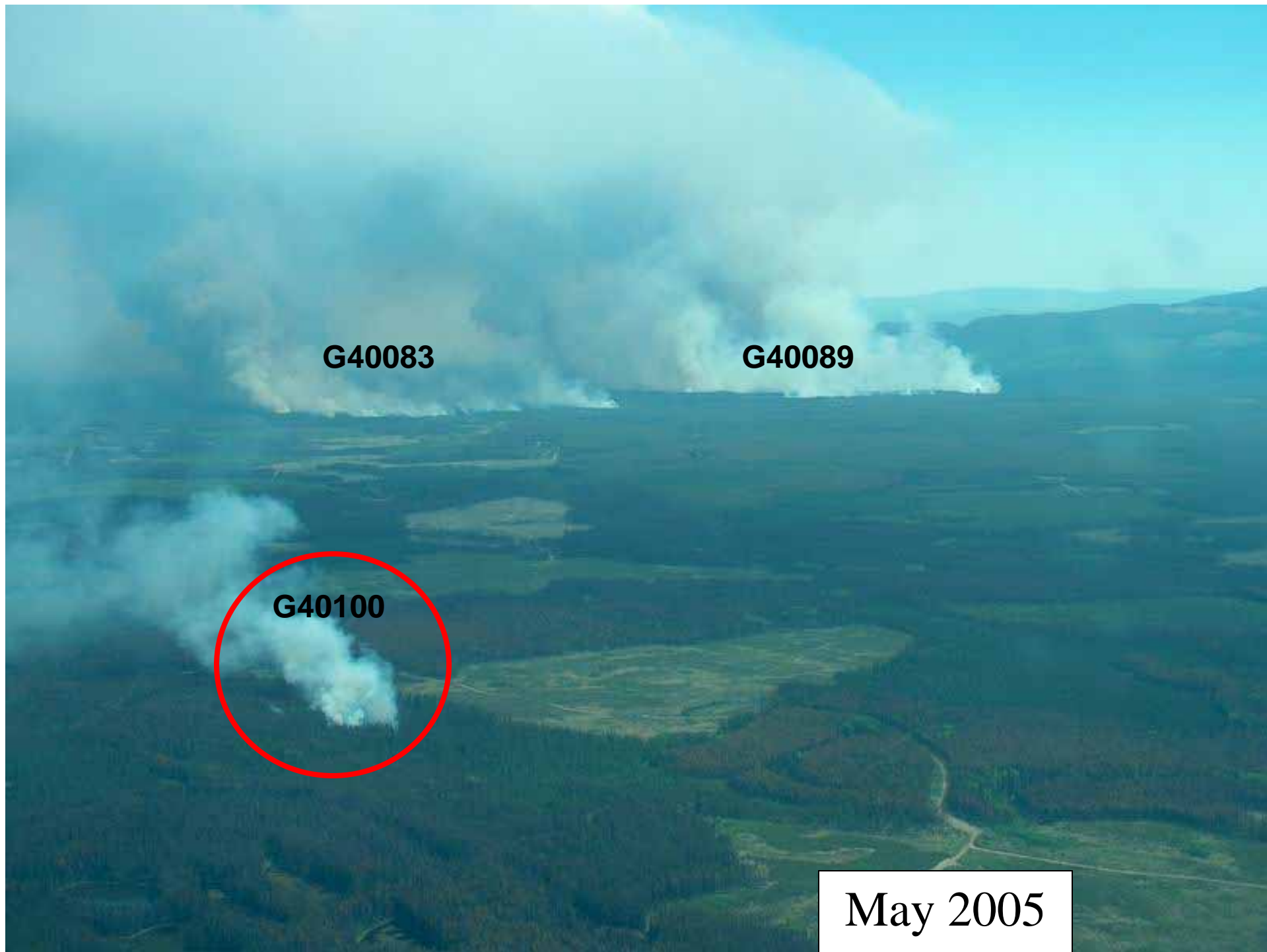
City of Prince George
Mountain Pine Beetle Sites
2004





- Fire C50422
- Aug 15, 2003



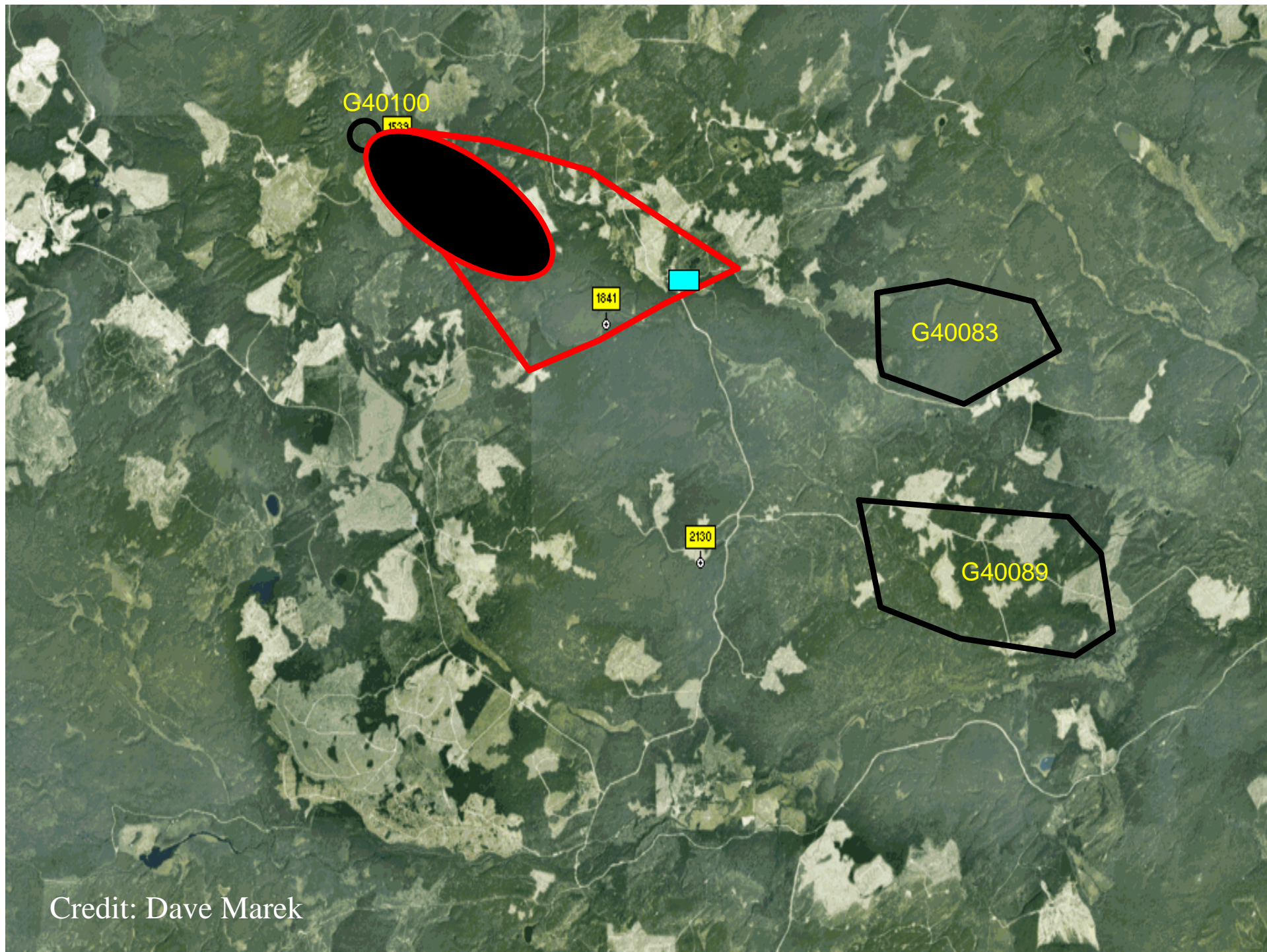


G40083

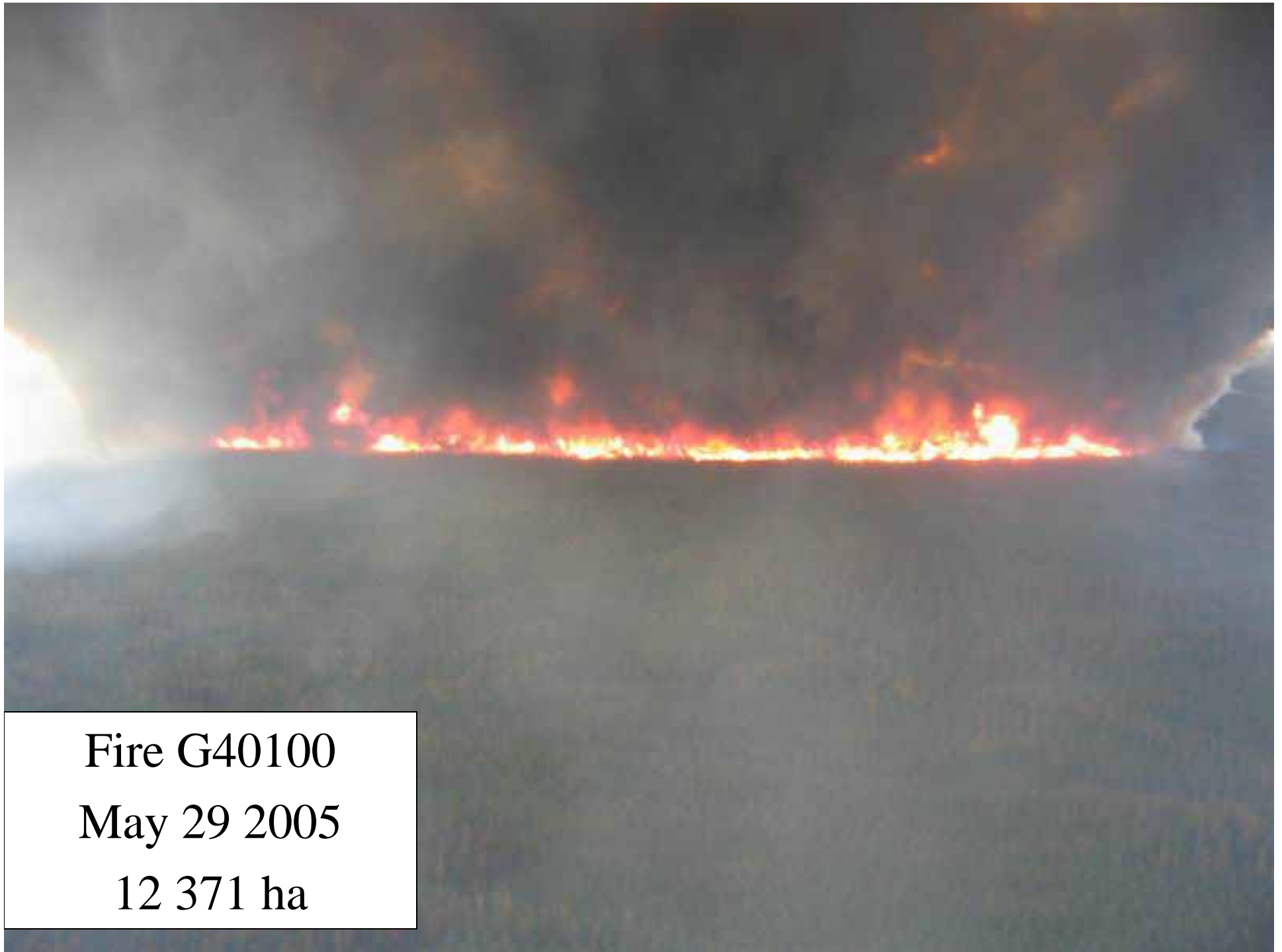
G40089

G40100

May 2005



Credit: Dave Marek



Fire G40100

May 29 2005

12 371 ha

In Perspective Vanderhoof Forest District

- 1970-2003: 5,155 ha burnt in 33 seasons
- 2003-2005: 25,764 ha burnt in 7 days

Detailed CWPP Planning



Interface Values



Suppression Constraints



Fire Behavior



Plan completed, and
Posted on City Website

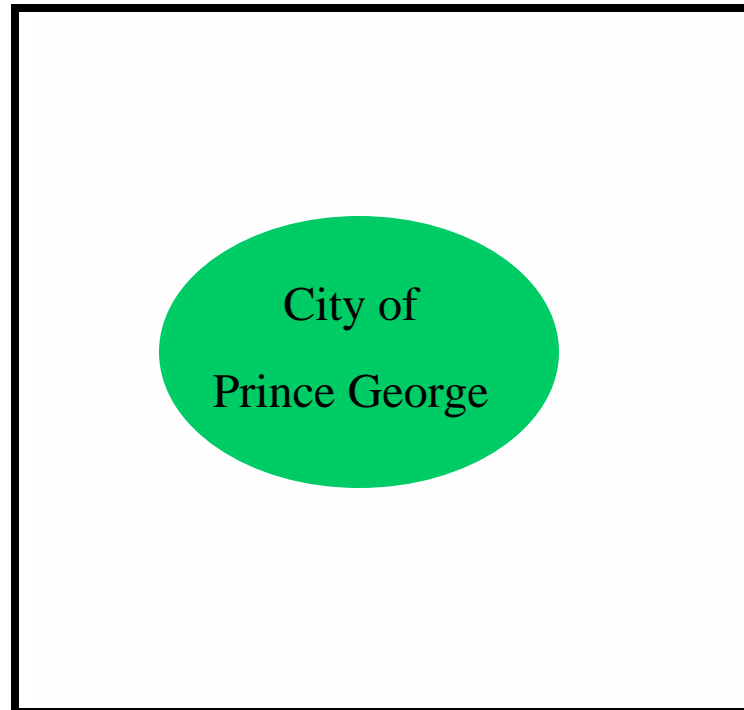


DIAMOND HEAD CONSULTING LTD.
ECOSYSTEM MANAGEMENT



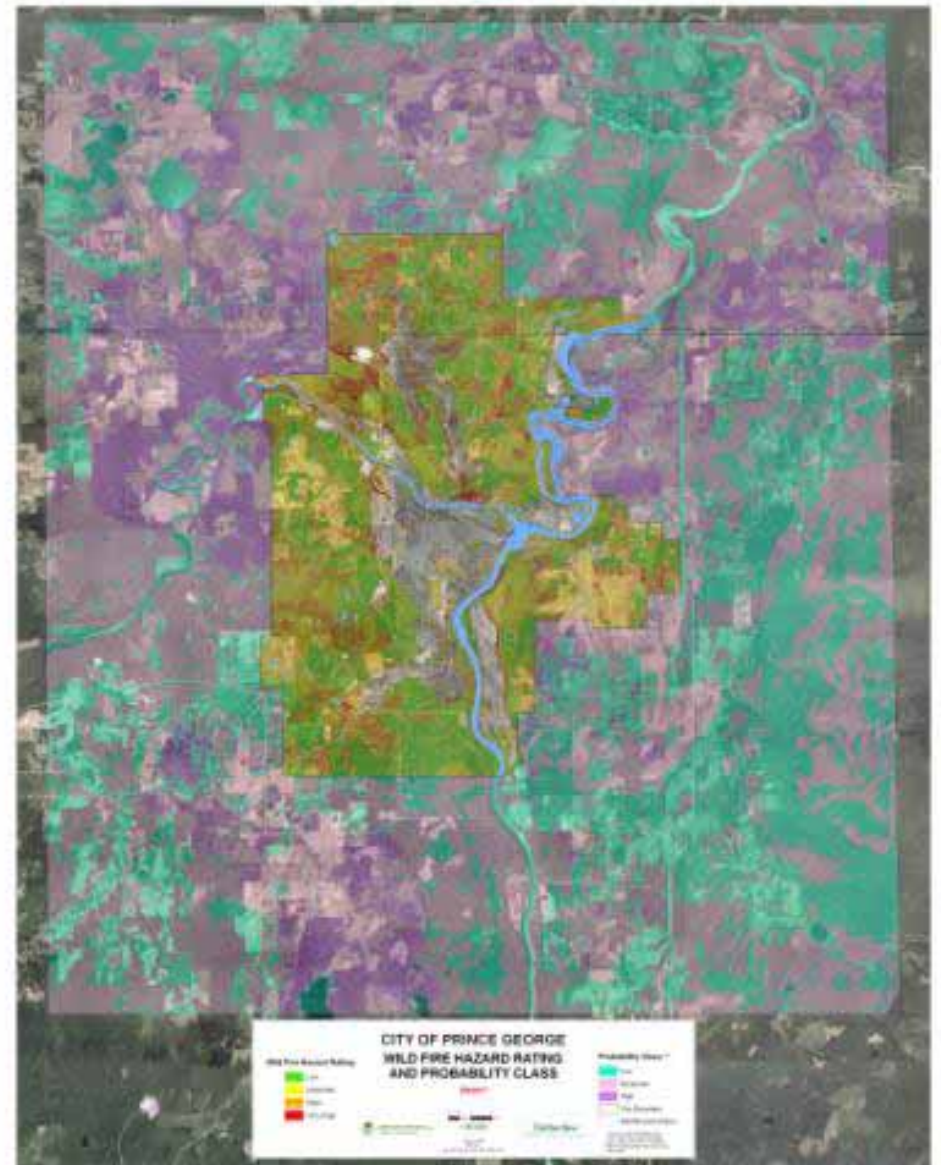


Macro CWPP Planning



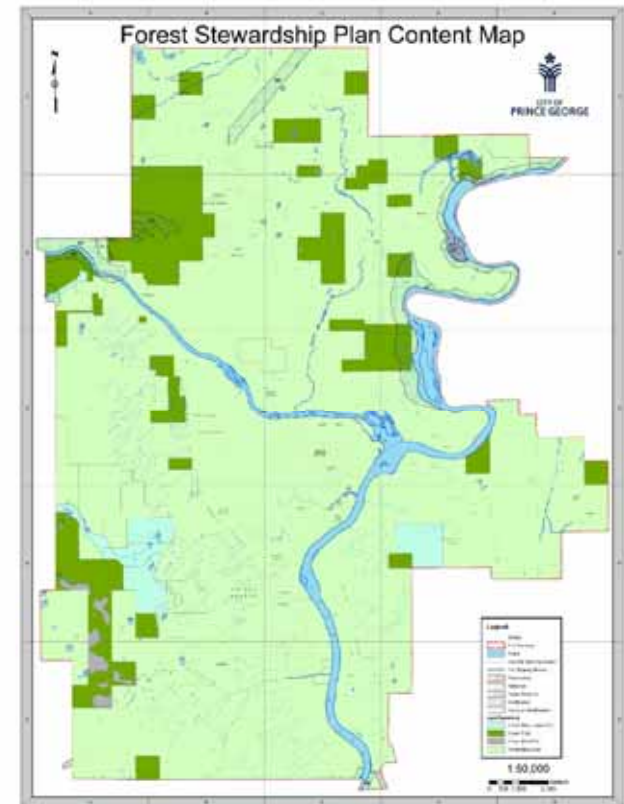
10 km surrounding

Work with partners outside City limits
On areas identified as issue

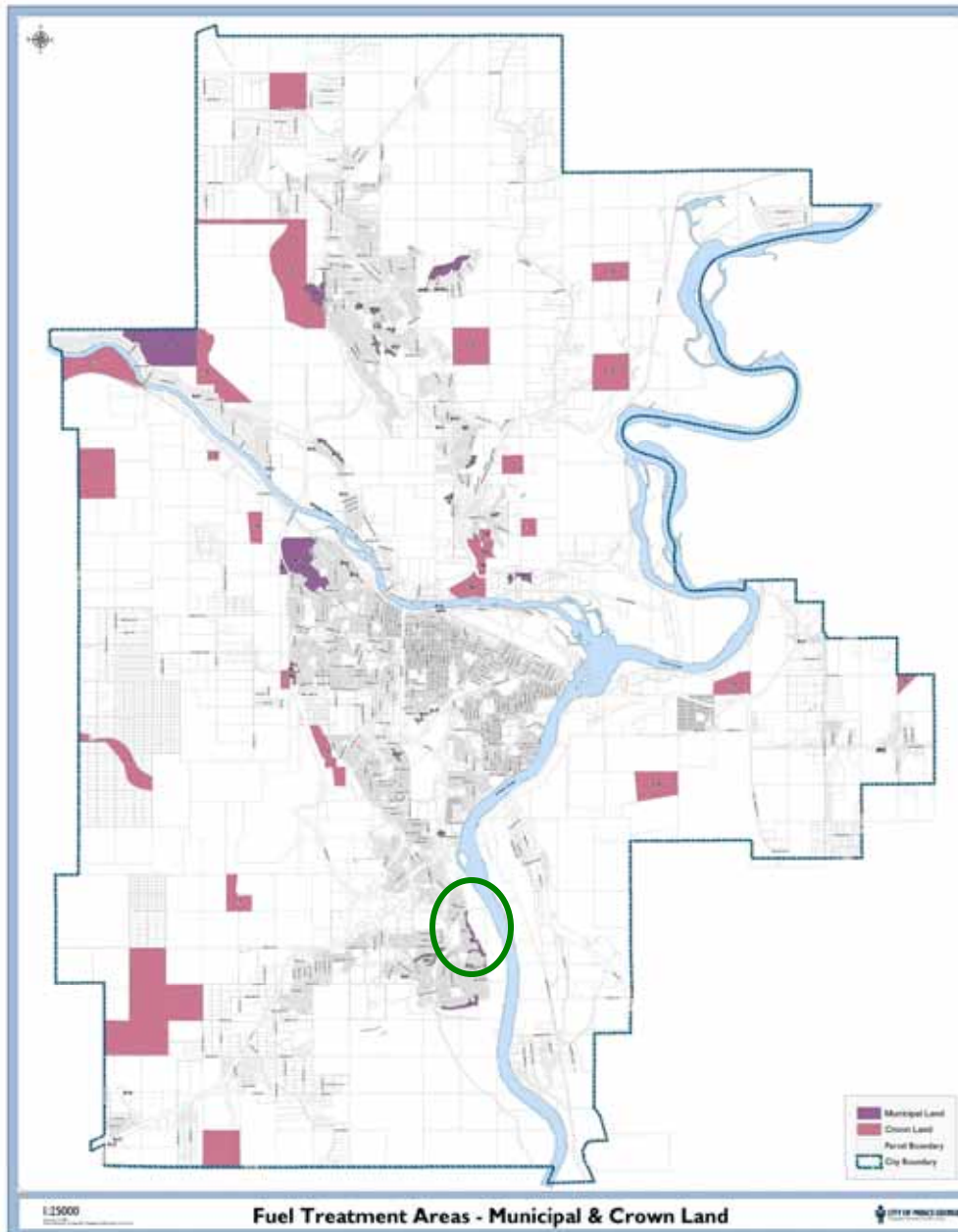


Probationary Community Forest Agreement

- 5-year, non-replaceable license to manage Crown land within City limits
- Reduce interface fire hazards
- Close to 4500ha
- 60,000m³ over 5 years
- 12,000m³ per year
- Assessment at 2-year mark
- First harvest started February 2007



Prescription Area Maps, Posted on Website:



Beetle sites

Fire sites (shown)

Community forest

Prescriptions for City
and Crown (via CFA)

Prescription Treatment Maps:



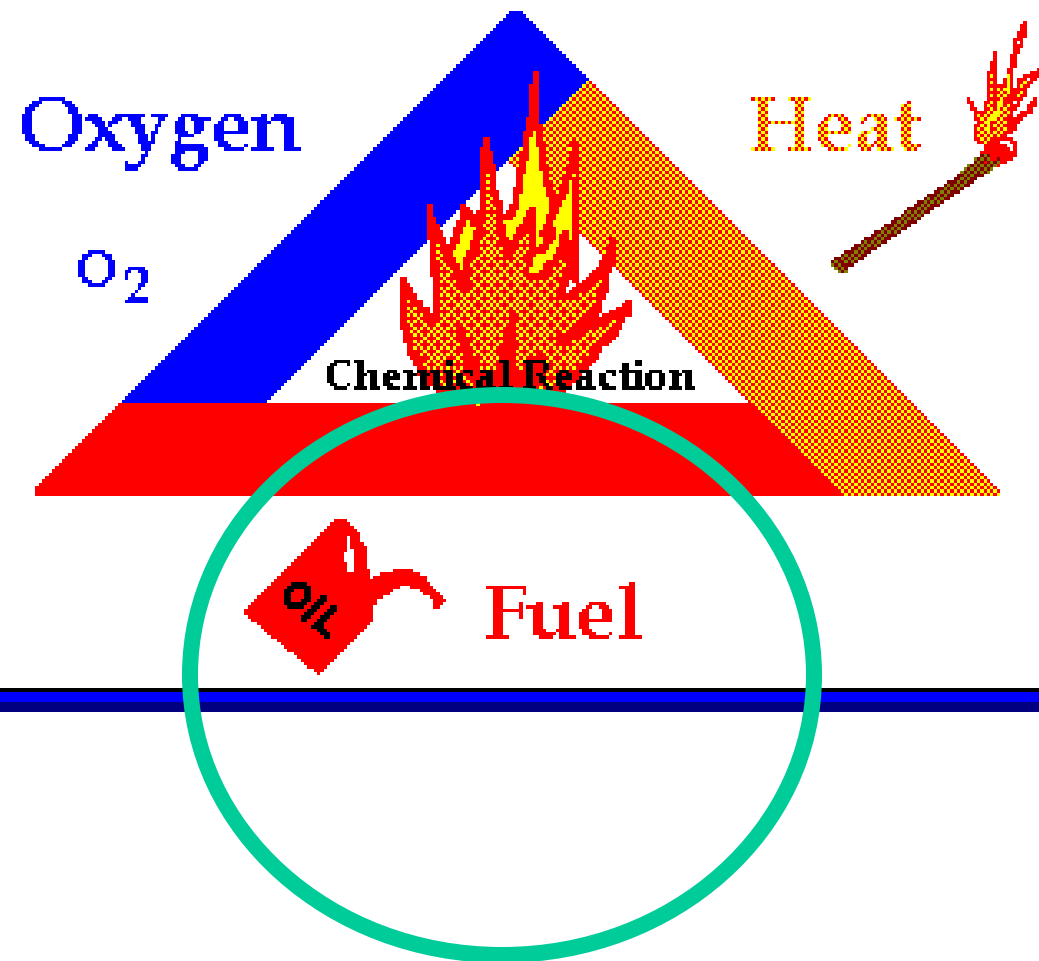
Beetle sites

Fire sites (shown)

Community forest

Prescriptions for City
and Crown (via CFA)

Fire Triangle





Clapperton Park
2002





Clapperton Park 2003

Logging Truck Loads of Infested Pine Removed From City Parks, Greenbelts, and Schools:

Winter 2001 - 02



30 loads

Winter 2002 - 03



80 loads

Winter 2003 - 04



120 loads

Winter 2004 - 05



220 loads

Winter 2005 - 06



107 loads

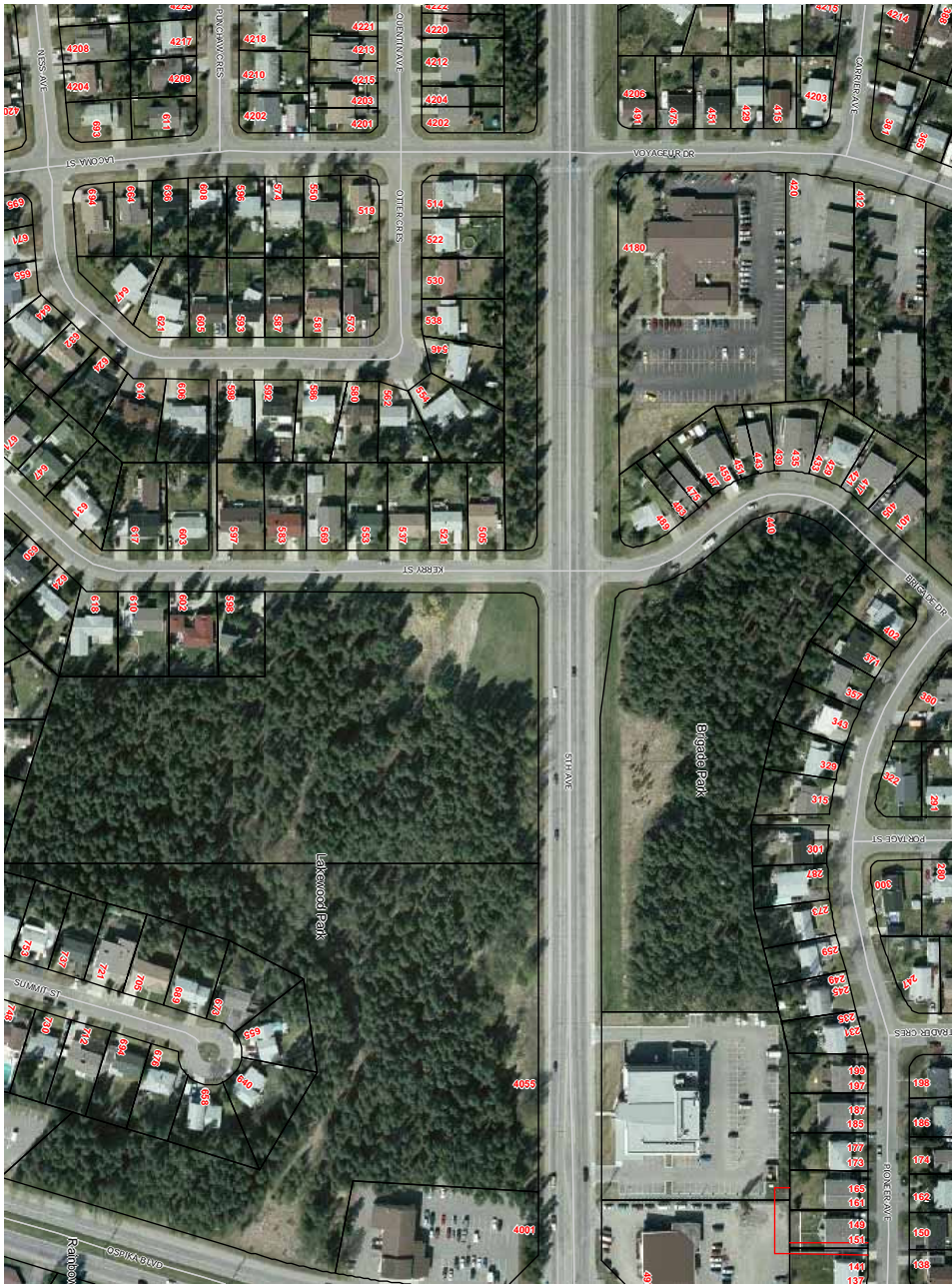
Winter 2006 - 07



56 loads City,
120 loads PGCF



**Prince George
Community Forest
First Harvest Winter 2007**
City and Cranbrook Hill Greenway Society Project



2003



2006



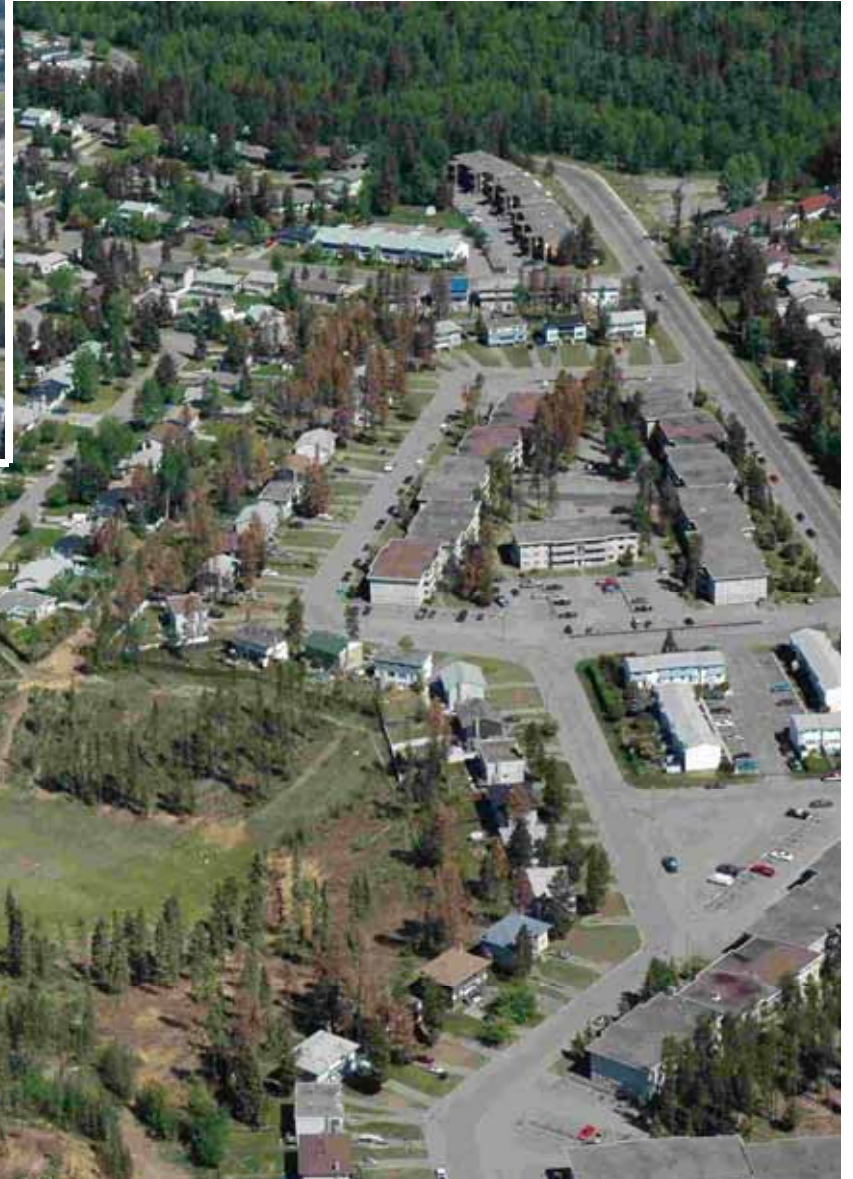
2003

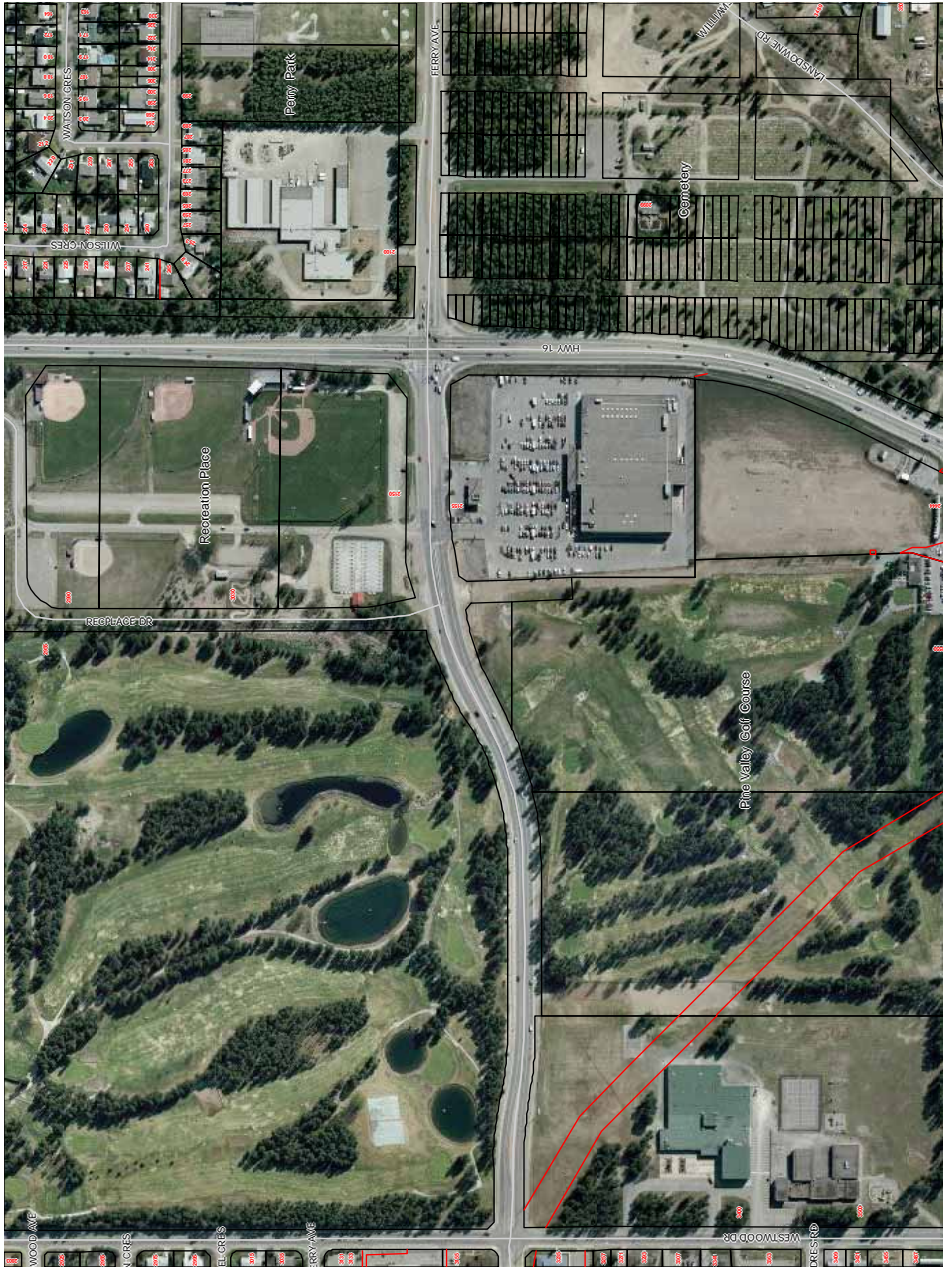


2006



City and Private Land 2005

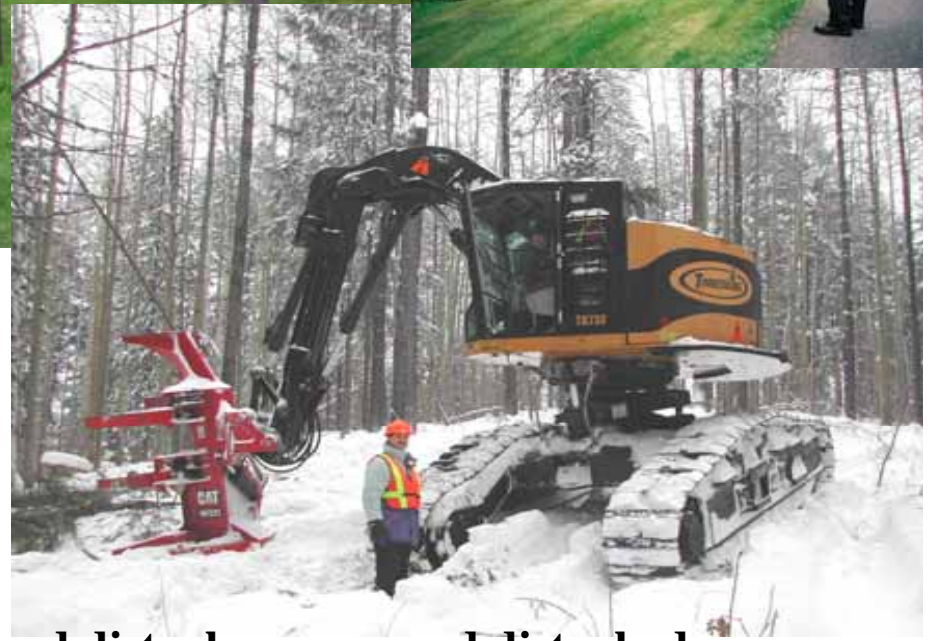




2003



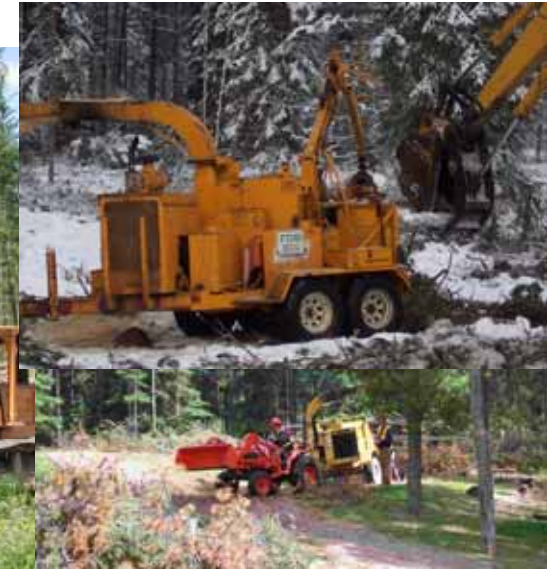
2006



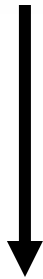
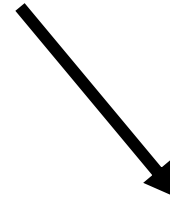
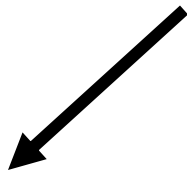
Select cut, winter harvest target, minimal ground disturbance, reseed disturbed areas

Urban Logging, Considerations:

- Communications program, visual changes, humans
- Public Safety; site closures, ribbons, signs, security staff, traffic control
- Slope stability, Geo-technical
- Power lines, Gas lines
- Streams, DFO
- Archeology, local FN
- Timber sales, metal
- Site disturbance, invasives
- Wind Firm after removal
- Access management
- Debris, Debris, Debris



Urban Forestry Operations

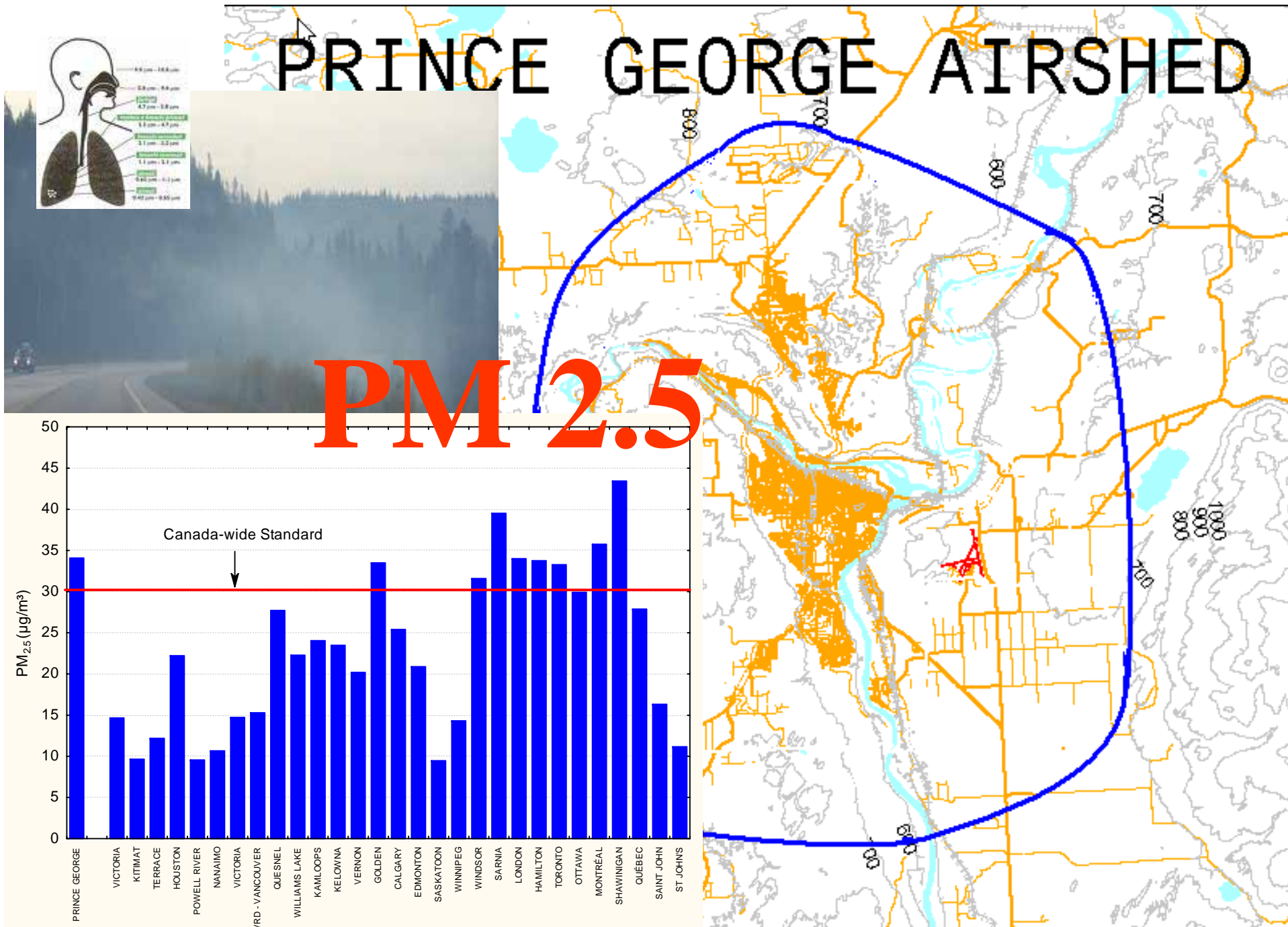


\$\$\$\$\$

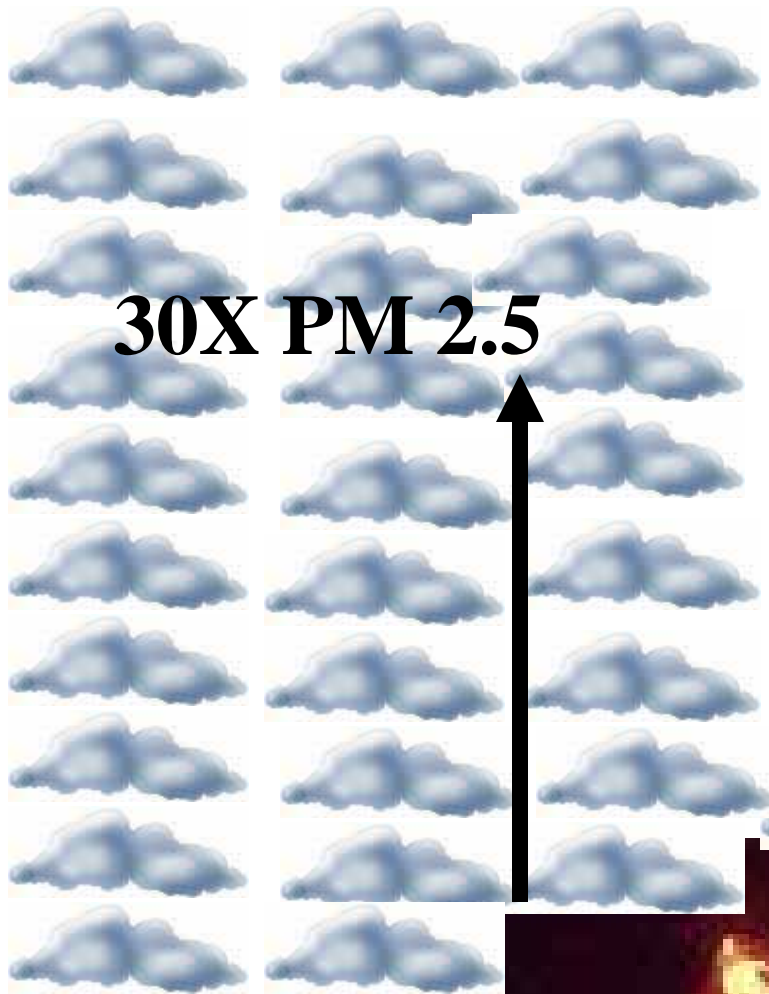


????

(Historically Burned)



Three Year Average (2003 - 2005) of the 98th percentile of Daily Mean PM_{2.5} (µg/m³)



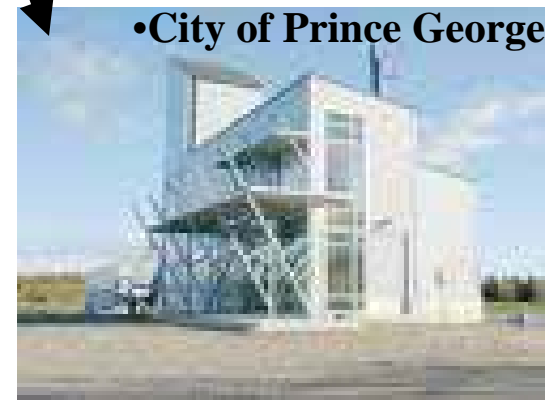
30X PM 2.5



**Chip and Compost
Limited Capacity**



**Burn or
Chip and Burn**



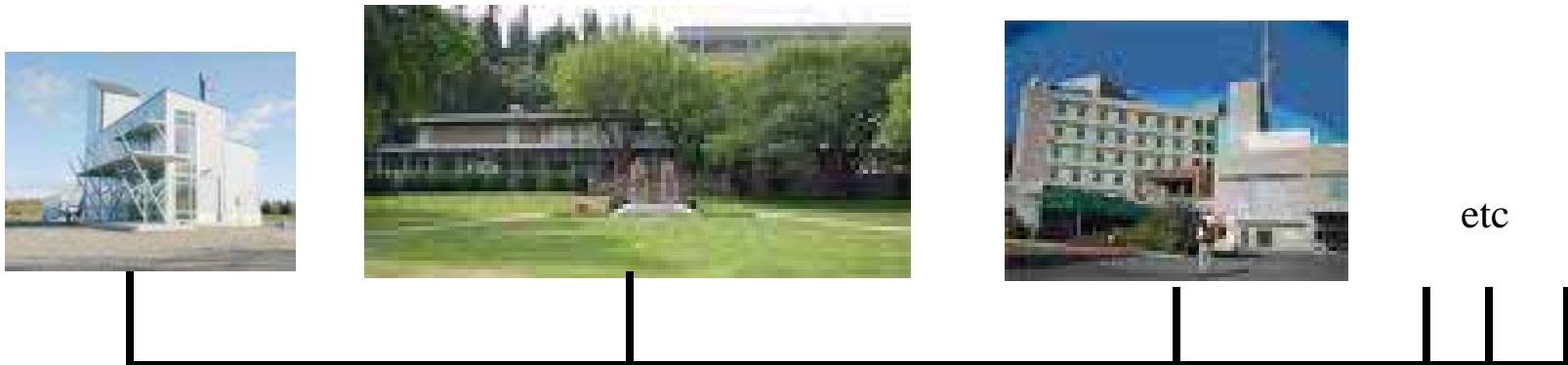
PM 2.5



- Canfor and (one day)
- City of Prince George

City of PG Community Energy System

- Biomass produced heat replaces burning of natural gas
- Reduction of 2275 tonnes of greenhouse gases annually
- Will meet 45% of corporate targets for GHG reduction; 950 tonnes city owned buildings. (Partners for Climate Protection)



Will provide hot water to heat downtown buildings, eg City Hall, Hospital



CES PM 2.5 emissions = 4 pre 1990 woodstoves, 2.4 kgs per day, less than 1 tonne yr

Reforestation – ForesTree Fest Organizing for the Event



Refine overview plan into areas for individual RP Foresters to implement

Decide on rally location, first aid, parking, outhouse, entrances

Sponsorship logo onto media, site plan map, schedule on reverse



Reforestation – ForesTree Fest Organizing at the Event Site



At the site requires many services for residents, distributing the planting event to the local area through AimHi, to Guides and Scouts at the site entrances handing out the planting guides. Services include tent, signs for sponsor and event, water, snacks, outhouse, first aid, shovels, trees, sometimes traffic control, garbage containers, and tree water with buckets and sometimes the Fire Department.



Reforestation – ForesTree Fest The Event



Reforestation – ForesTree Fest The Event



STOCKING STANDARDS

Interface areas in Crown forests

FRPA standards not appropriate

Alternates needed

Reduce future fire hazard

Increase biodiversity, mixed forests

Encourage/Discourage wildlife by area

Tree species, crown openings,
understory species and maintenance,
invasive species, landscape
requirements,

Stocking Standards Rationale for the Prince George Community Forest

*Considerations for Wildland Urban Interface
Management in the Prince George Community Forest
British Columbia*

DRAFT

Submitted by

B.A. Blackwell and Associates Ltd.
3087 Hoskins Road
North Vancouver, B.C.
V7J 3B5

Submitted to

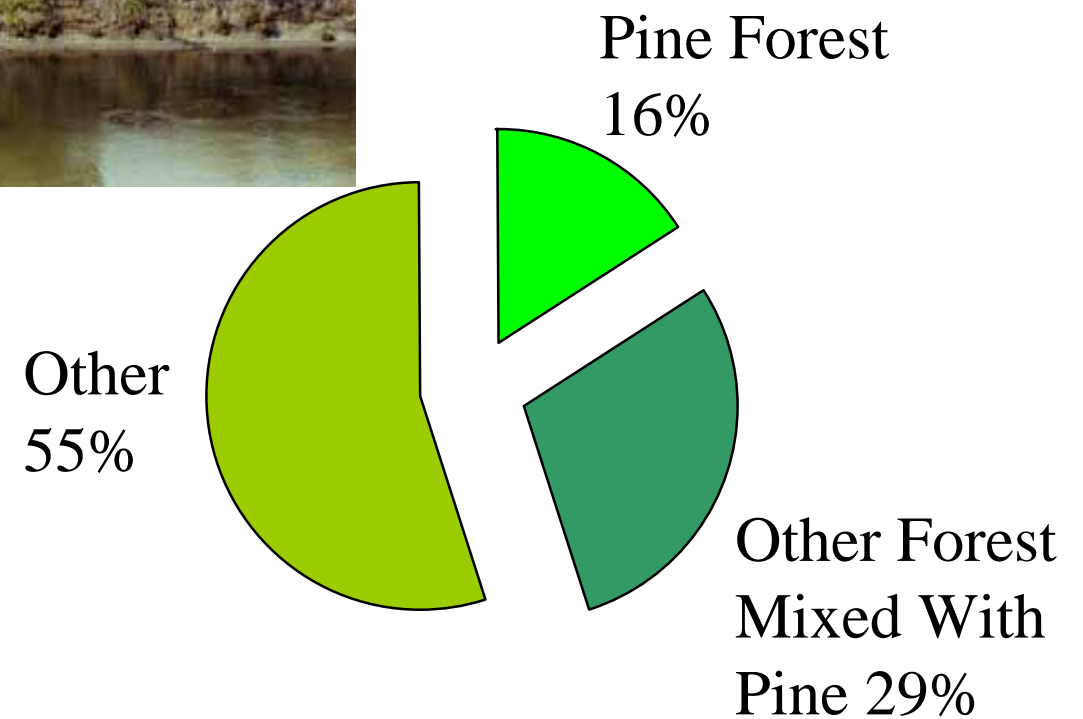
Janine Larmand, RPF
Forestry Supervisor
Canfor, PG Woodlands

May, 2006





Natural Forest Cover in Prince George



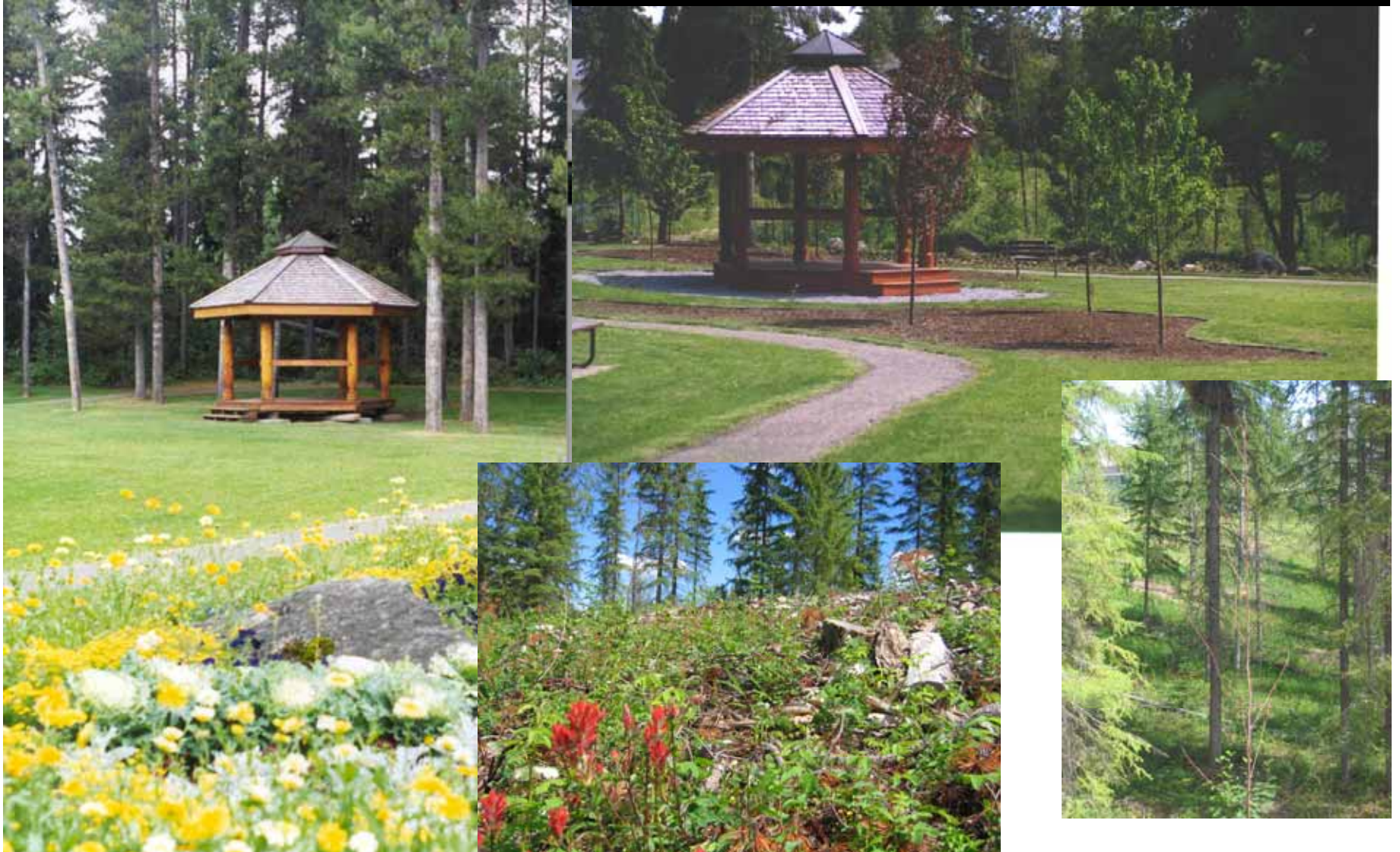


2003



2006

Reforestation – Restoration



Community Forest Biosolid-Biomass-Bioenergy Loop

- City's community forest: 12,000m³ annual timber volume to start.
- Community forest harvesting residuals, biomass trading (merchantable fibre for feedstock fibre), and interface fire fuel reduction biomass will provide a small secure feedstock supply.
- Future plans include use of Class A biosolid to enhance growth on certain plantations to produce fibre for the community energy system.



What is going on next?

- Beetle tree removal continuing,
- Community Forest cut-blocks
- CWPP, Prescription to treatment being implemented, 54 more planned to do.
- Restoration and spring planting,
- 2007-2008 season operational season planning
- Moving on after the beetle, removals 2/3 completed, 3 years of replanting completed, 8000 trees by Citizens in City parks in public events, many 1000's more operationally.

