

Towards 250k
Envision
Wood Buffalo



REGIONAL MUNICIPALITY
OF **WOOD BUFFALO**

Fort McMurray
Where We Are Today



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1. Introduction

This report provides an inventory and assessment of current community assets within the Urban Service Area (Fort McMurray). The community assets inventory and assessment has been organized by theme areas. The thirteen theme areas include:

1. Population and Demographic Trends
2. Economy, Employment and Tourism
3. Housing
4. Land Use Pattern, Design and Sustainable Energy
5. Municipal Infrastructure
6. Regional Transportation
7. Government and Partnerships
8. Health and Safety
9. Education
10. Communication and Technology
11. Natural Areas
12. Recreation, Parks and Culture
13. Finance

In addition, key issues and opportunities have been identified for each theme area.



Source: <http://mymcmurray.com/>

2. Population and Demographic Trends

The Urban Service Area (Fort McMurray) is experiencing modest growth rates

Between 1999 and 2006, population growth in the Urban Service Area (Fort McMurray) nearly doubled from 36,452 to 61,366ⁱ (see **Table 1** in the Appendix, p. 21). In the same time period, population growth in the Regional Municipality of Wood Buffalo (RMWB), inclusive of shadow population, has increased from 42,847 to 76,735. Sustained population growth in the Region, including the Urban Service Area (Fort McMurray), has largely been the result of interest in oil sands investment. Growth in the oil sands industry has created a strong demand for jobs, resulting in an increase in migration. This trend will continue through the operation and maintenance of existing projects and as new sites are developed and constructed.

Historical population in the Urban Service Area (Fort McMurray) by area from 1999 – 2006 (see **Table 2** in the Appendix, p. 21) shows that considerable growth has been concentrated in Gregoire, Lower Townsite, Thickwood Heights, and Timberlea. In contrast, Beacon Hill and Waterways has experienced very little growth.

The Urban Service Area (Fort McMurray) will continue to experience modest growth

The RMWB has forecasted growth to 244,971 residents in the next 25 year period in the Urban Service Area (Fort McMurray) by the year 2030 (see **Table 3** in the Appendix, p. 21). Based upon the forecasted growth of 244,971, this would require a 9% growth rate from 2007 to 2013, a 6% growth rate from 2013 to 2019, and a 4% growth rate from 2019 to 2030 (see **Table 3** in the Appendix, p. 21).

The population is young

A review of the age distribution in the Urban Service Area (Fort McMurray) shows that it is comparable to the Region as a whole. The population of the Urban Service Area (Fort McMurray) includes 27% under the age of nineteen, 71% between the ages of 20 and 64 and 2% over 65ⁱⁱ. The Urban Service Area (Fort McMurray) population under the age of 19 is equal to the average for Wood Buffalo as a whole, where 28% of the population is under 19. The percentage of adults in the Urban Service Area (Fort McMurray) between the ages of 20 and 64 is higher than the average for the Region (70%). However the proportion of seniors is equal to the average for Wood Buffalo where 2% are over 65ⁱⁱ. The ratio between males and females in the Urban Service Area (Fort McMurray) has changed slightly since 2000.

In 2000, 54% were male and 46% were female, compared to 2006 where males accounted for 55% and females 45%. This ratio includes all the areas within the Urban Service Area (Fort McMurray), (see **Table 4** in the Appendix, p. 22). Waterways and the Lower Townsite represent the areas that have the largest difference between the male and female populations. This could be attributed to the fact that these are the older areas within the Urban Service Area (Fort McMurray), whereas much of the new construction has taken place in Timberlea. In addition, the Lower Townsite has the largest number of apartments, so the percentage of males may be higher as many single males live in Fort McMurray.

3.

Economy, Employment and Tourism

The oil sands industry dominates the local economy

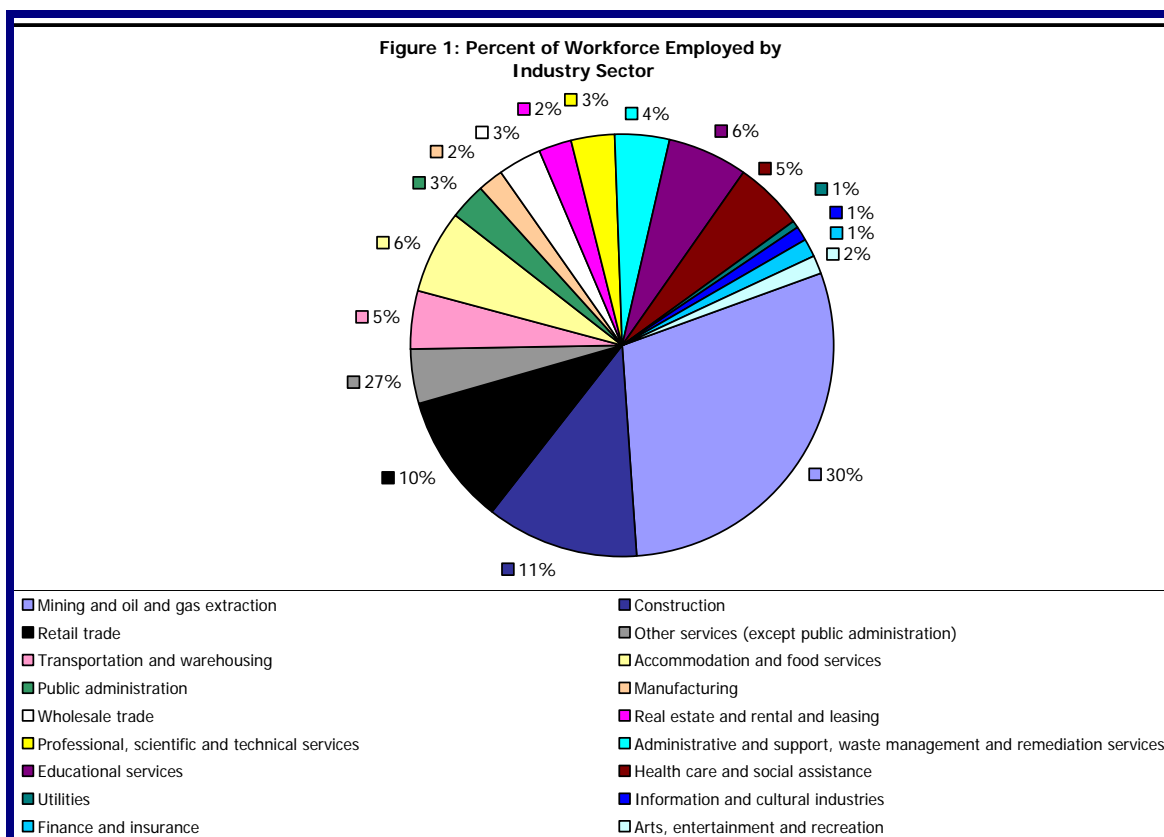
In the Urban Service Area (Fort McMurray), oil sands dominate the local economy; employing 30% (7,210 persons) of the total labour force population (see **Figure 1**, p. 3). Construction comprises 11% of the labour force (2,805 persons), while retail trade accounts for 10% (2,485 persons). Figure 1, on p. 3 illustrates the remaining industry presences.

In Alberta, 2,700, or 4.3% of Aboriginal population living off the reserve, are employed in processing, manufacturing, and utilities industries. This proportion is significantly higher in Fort McMurray, where 46% of the aboriginal population are employed in the oil sands and related industriesⁱⁱⁱ.

Employment will remain strong

Availability of labour will be critical to meet the demand as the pace of development in the oil sands will continue to accelerate. The pace of growth will require the Urban Service Area (Fort McMurray) to keep up with the growing demands for housing, health care, education, service and hospitality. Based upon the Urban Service Area's forecasted population of 244,971, there will be a demand for 91,583 jobs^{iv}. Nearly 27,007 jobs will be in mining and oil and gas extraction, while 10,500 is in construction and 9,300 is in retail trade (**Table 5** in the Appendix, p. 22 presents the forecasted labour force demands by industry).

In addition, the construction industry in the Region (including residential, business and commercial, industrial, engineering works, and subdivision and development of land) is expected to create over 3,668 new jobs, averaging 11% growth between 2006 and 2011^v.



Fort McMurray attracts many tourists

There are a number of different tourist attractions in the Urban Service Area (Fort McMurray). Fort McMurray Tourism Association is a registered non-profit organization with a mandate to promote the region, attract visitors and provide local, provincial, and national information services^{vi}. The Association provides information about a number of different tourism activities throughout the Region. The tourist association supports the Oil Sands Tours which run every year from Victoria Day weekend (May) until September. Other facilities within Fort McMurray include the Oil Sands Discovery Center, with interactive computer exhibits, an award winning exhibit gallery and a hands-on oil sands extraction activity^{vii} (see **Table 8** in the Appendix, p. 29).

A major local event is held in Fort McMurray each year. The Interplay Festival, a visual and performing arts festival, is held each August.

It includes plays, street performers, music, food, visual arts, stand-up comedy, and improv^{viii}.

4. Housing

Housing type, size and ownership

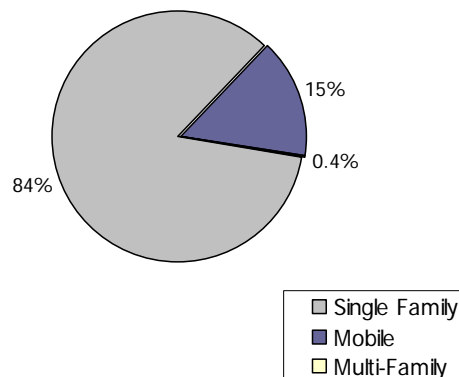
The majority of the population lives in single family dwellings, which accounts for 84% of the housing mix (refer to **Figure 2**, p. 4). Mobile homes account for 15% and a small proportion of the population resides in multi-family housing types (0.4%), which include apartments, hotel units, senior housing, and college residences.

The Urban Service Area (Fort McMurray) has either an equal or higher than average number of people per housing unit when compared to the rest of Wood Buffalo^{ix}. The average number of people per housing unit in Wood Buffalo varies depending on the housing type. There is an average of 3.3 persons per unit in a single family dwelling compared to 2.8 in a townhouse and 2.3 in an apartment (see **Table 9** in the Appendix, p. 29). Comparatively, the average persons per household in Alberta are 2.6, and 2.5 in Canada^x.

In the Urban Service Area (Fort McMurray), 76% of housing units are owned and 24% are rented, which is lower than the Regional averages^{xi}. Homeownership in Fort McMurray has been increasing since 1999, where 64% of units were owned as illustrated in **Figure 3**, p. 5. In comparison to the Regional average, home ownership has been increasing since 1999, but at a faster pace than in the Urban Service Area (Fort McMurray). Rental accommodation within the Urban Service Area (Fort McMurray) is offered in all housing types. The housing situation is somewhat unique within Fort McMurray, as there are a large number of people who are considered “shadow population”. Shadow population is defined as any person who is present in the community but has a permanent residence elsewhere. This person resides in the community for a minimum of



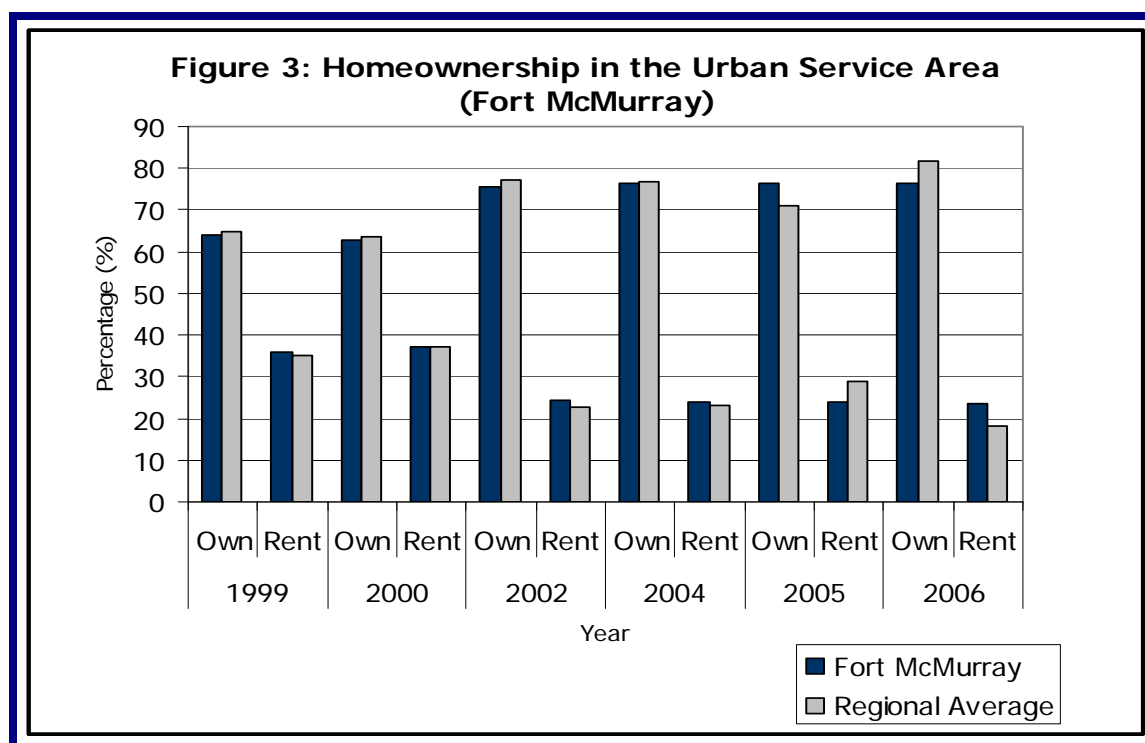
Figure 2: Housing by Dwelling Type, 2006



30 days or on a seasonal basis and is employed or has been employed by an industrial or commercial establishment in the municipality^{xii}. In addition to the individuals that reside within rental accommodations, 1,778 individuals reside within hotels or motels, and 523 individuals live in campgrounds.

Housing prices continue to rise

House prices have been growing at a pace well above incomes, creating stressed affordability conditions. According to the Canadian Mortgage and Housing Corporation (CMHC), housing costs should not exceed 30% of before-tax household income. In Wood Buffalo, where the average salary is \$27/hour, housing affordability is concerning for many families. People who do not work in the petroleum industry may have even greater difficulties finding affordable housing^{xiii}. Strong employment and population growth in the region, along with development constraints and low vacancy rates, has made housing within the Urban Service Area (Fort McMurray) one of the most expensive in the province. As of November 2007, the average price of a single family home was \$582,012, a multi-family home was \$362,021, a duplex \$435,314 and a mobile home on an owned lot averaged \$362,235. These housing prices represent a significant rise in housing prices since 1995.



The price of a single family home has risen 461% since 1995. Multi-family homes have risen 620%, where duplexes have increased in value by 595%. The largest change can be seen from mobile homes. These prices have changed from \$30,125 in 1995, representing an 1102% increase.

Fort McMurray needs more affordable housing

Within the RMWB, affordable housing units are provided and maintained by the Wood Buffalo Housing & Development Corporation (WBHDC). Unit type can include shelters, apartments, townhouses, duplexes, and senior housing. During the writing this report, no information was available regarding availability of future units. There is a potential for future units to be developed; however, current costs prohibit further development in proposed and developing subdivisions. The following table identifies affordable housing in the Urban Service Area (Fort McMurray).

Affordable Housing in the Urban Service Area (Fort McMurray)

Affordable Housing Buildings	Capacity
Evergreen Village	50 - single family dwelling units
Marshall House	Shelter for 108 individuals
Horizon View	110 - apartments 20 - townhouses 25 - townhouses (3-4 bedroom)
Edgewater Court	55 - apartment units
Prairie View	12 - townhouses
Venture Terrace	40 - duplex homes (3 bedroom)
Meadow Creek Village	Building A - 52 unit apartment, Building B- 53 unit apartment
Delta	57 townhouses
Creekside	36 townhouses
Prospect View	50 apartment units 40 townhouses

<http://www.wbbadc.ca/home.php?id=ourprojects>

Homelessness in the Urban Service Area (Fort McMurray)

Homelessness will be an increasing concern in the region as housing prices continue to escalate. In 2006, the homeless population had increased by 24% since 2004. Fort McMurray has the highest number of homeless people (441) per 65,000 (population) compared with the five major Alberta cities^{xiv}. Homelessness is a particular concern to the First Nation community^{xv}.

Current reality of housing in Fort McMurray

There is significant pressure to keep up with the demand for housing to accommodate the growing population which will include permanent long-term employees, temporary workers, and the local population. This is particularly important as housing prices rise. Affordability is of concern and as such, construction is starting to focus on multi-family dwellings. Based upon the Urban Service Area (Fort McMurray) target population of 244,971 and the average persons per household (single family dwellings), 74,378 homes (3,234 per year) would be needed to meet the housing demand. The following identifies the number of homes that would be required based on the average persons per household in varying housing types. This projection embodies several assumptions: (1) The population will grow by 9% until 2012, 6% from 2012 to 2018 and 4% between 2018 and 2030; (2) Fort McMurray's average household size would remain constant at 3.3 persons per household for Single Family Dwelling, 2.8 persons per household for Townhouses, 2.3 persons per household for Apartments, 2.9 persons per household for Manufactured Homes, 2.7 persons per household for duplexes, and 3.0 persons per household for semi-detached homes; and (3) a 0% vacancy rate is applied.

Additional housing units to meet the target population

Housing Type	Number of Homes	Homes per Year
Single Family Dwelling	54,850	2,385
Townhouse	95,266	4,142
Apartment	78,698	3,422
Manufactured Homes	62,416	2,713
Duplex	72,402	3,148
Semi-Detached	60,335	2,623

5. Land Use Pattern, Design and Sustainable Energy

The Urban Service Area (Fort McMurray) experiences constant development

Land use and development in the Urban Service Area (Fort McMurray) is guided by a number of Area Structure Plans (ASP), Area Redevelopment Plans (ARP), and the Municipal Development Plan (MDP). The MDP sets out a clear collective vision for Wood Buffalo as a whole while ASP's provide for orderly growth within the Urban Service Area (Fort McMurray). ASP's in the Urban Service Area (Fort McMurray) include, but are not limited to Timberlea ASP (2001) and Real Martin West ASP (2005). The ARP's for the Urban Service Area (Fort McMurray) include the Lower Townsite ARP (2001) and the Waterways ARP (1986).



Source: <http://mymcmurray.com/home/>

The growth pattern for the Urban Service Area (Fort McMurray) has been limited by physical constraints such as the Athabasca River, Snyc, Clearwater River, and Hangingstone River. In addition, natural features, such as the escarpment in Timberlea, have limited physical growth (see Map F Natural and Man-Made Constraints Map in the Appendix, p. 49).

Fort McMurray developed continuously throughout the twentieth century. In the 1930s, Fort McMurray was composed largely of single-family houses and low-rise buildings. It was not until the middle of the century that multiple story buildings started to develop in the Lower Townsite. With the construction of the Grant MacEwan Bridge in 1967, the north side of the Athabasca became accessible to residents. No more than a decade later, the bridge was twinned to provide for two lanes of traffic in both directions. By 1977, Macdonald Island was connected to Fort McMurray via a land bridge upholding MacDonald Drive. With the necessary infrastructure in place, and a shortage of land in the Lower Townsite, Fort McMurray continued to grow on the north side of the Athabasca River through the development of Thickwood and Timberlea neighbourhoods.

Existing Land Use and Approach to Growth

Land uses throughout the Urban Service Area (Fort McMurray) consist of low density residential (duplexes, semi-detached and single family homes), medium density developments (cluster housing, townhouses, and low rise apartments), parks and recreational areas, and institutional uses. There are approximately 34 different zones located in the Fort McMurray Area. The types of zones vary between industrial, commercial, residential, environmental preservation, public services district and direct control districts. Of these zones, there are a total of 18,489 lots, 225 of which are industrial, approximately 691 are commercial, 16,893 are residential, 494 lots are environmental protection/public services

or parks and recreation, and 186 lots are designated direct control (Refer to **Table 6**¹: Existing Land Use Inventory in Appendix, p. 22). Residential, commercial, and business industrial and some direct control development in Fort McMurray exceed the minimum lot size requirements permitted by the Land Use Bylaw (LUB) (see **Table 7**² in Appendix, p. 24). The minimum lot size requirements for residential, commercial, industrial, and some direct control land uses in the LUB allows a considerable number of lots in existing areas. The following table uses the number of vacant lots within existing areas and illustrates a comparison between future development occurring on traditional large lots vs. lots that meet the Municipality's minimum lot size requirements based on the requirements as of January 21, 2008.

¹ Land use information was determined by plotting the centre of each parcel to determine zoning.

² LUB information obtained January 31, 2008.
Information is subject to change without notice.

Number of Infill Lots			<i>Land Uses</i>	<i>Traditional Large Lots</i>	<i>Min. Lot Size Requirements</i>
<i>Land Uses</i>	<i>Traditional Large Lots</i>	<i>Min. Lot Size Requirements</i>			
Business	24	120	Low Density Residential:	69	360
Industrial (BI)			Semi-Detached (R2)		
Highway Commercial (C4)	20	200	Low Density Residential:	69	285
Direct Control High Density Residential:			Triplex/Fourplex (R2)		
Street Oriented Townhousing (interior lot) (DC-R4)	14	124	Low Density Residential:	69	41
Townhousing (interior lot) (DC-R4)			Cluster Housing (R2)		
Direct Control High Density Residential:	14	77	Low Density Residential: All other uses (R2)	69	223
Street Oriented Townhousing (corner lot/ end unit) (DC-R4)			Modified Medium Density Residential:		
Direct Control High Density Residential:	14	16	Cluster Townhouse (R2-1)	1	6
Apartment Building (DC-R4)			Modified Medium Density Residential: Low Rise Apartment (R2-1)		
Single Detached Residential (R1)	1202	3012	Medium Density Residential	1	8
Mixed Form Single Detached Residential (R1M)			District: Triplex/Fourplex (R3)		
Planned Unit Residential (R1P)	1	2	Medium Density Residential	30	796
Single Family Small Lot Residential:			District: Street oriented townhousing (interior lot) (R3)		
Semi-Detached Dwelling (R1S)	632	1478	Medium Density Residential	30	1215
Single Family Small Lot Residential:			District: Street oriented townhousing (corner lot) (R3)		
Duplex Dwelling (R1S)	632	739	Medium Density Residential	30	76
Single Family Small Lot Residential:			District: Street oriented townhousing (corner lot) (R3)		
Single Family Small Lot Residential: All other uses (R1S)	632	1259			

<i>Land Uses</i>	<i>Traditional Large Lots</i>	<i>Min. Lot Size Requirements</i>
Medium Density Residential		
District: Non-street oriented townhousing (R3)	30	115
Medium Density Residential		
District: Cluster Housing (R3)	30	115
Medium Density Residential		
District:	30	165
Apartment Building (R3)		
Apartment Density Residential	3	102
District (R5) Modified		
Manufactured Home District (RMH-1)	43	58

The following describes land uses by neighbourhood.

Prairie Creek

Prairie Creek is the most southern community within the Urban Service Area (Fort McMurray) and consists of single family homes, medium density homes, and manufactured homes.

Mackenzie Industrial Park

North of the Prairie Creek area is the main business industrial area, referred to as Mackenzie Industrial Park. This industrial park is dominated by business industrial uses with two public service areas for Keyano College and the Oil Sands Discovery Centre. Commercial areas are located adjacent to Highway 63 from Mackenzie Industrial Park to Beacon Hill. Within this commercial area, hotels, service stations, and restaurants are available for the residents and tourists.

Beacon Hill

Beacon Hill is located west of Highway 63. This area is comprised of low density, medium density, and single family residential areas. This area also includes community commercial land uses and institutional uses.

Waterways

This is the oldest neighbourhood in the Urban Service Area (Fort McMurray). This area features low density residential areas, including single family and manufactured homes. In addition, there are four parks, recreational land uses and two retail commercial areas.

Lower Townsite

Lower Townsite is a combination of different lands uses. It includes low and medium density residential, retail commercial, business industrial, and institutional uses. The Central Business District is located west of Franklin Avenue. High density residential land uses are located adjacent to the Central Business district at the north end of Franklin Avenue. A large parks and recreational area encompasses the northern extent of Lower Townsite. This area includes MacDonald Island and is adjacent to the Snyc, Clearwater, and Athabasca River.



Source: <http://www.woodbuffalo.ab.ca/visitors/>

Abasand

Abasand consists of single family residential units, medium density units, small commercial areas, and a planned unit development at the

most northern point in Abasand. The area also features two institutional areas as well as a large park and recreation area.

Thickwood Heights

Thickwood Heights is one of Fort McMurray's more recent developments. Thickwood is a combination of densities and land uses including single family residential, low and medium density residential. Institutional uses and parks and recreational areas are dispersed throughout the community. There is one shopping district in addition to the number of neighbourhood commercial areas located throughout Thickwood.

Timberlea

Timberlea is separated by one major roadway: Confederation Way. To the south of Confederation are single family residential areas, low and medium density districts, and apartment density residential areas. As in most communities, Timberlea includes institutional uses and parks and recreational areas. The north side of Confederation Way includes manufactured homes which are separated by single family, low density and medium density residential.

Environmental Protection Areas surround all the above identified communities within the Urban Service Area (Fort McMurray) (see Map E Community Context Map in the Appendix, p. 48). There are parcels of land throughout the Urban Service Area (Fort McMurray) owned by the RMWB and the Government of Alberta. Some of these lands are undevelopable due to physical constraints such as slope and muskeg.

Urban Expansion Areas

Urban Expansion areas have been identified in the Timberlea ASP, the Real Martin West ASP and the Fringe Area Development Assessment (refer to Map G Potential Future Development Map in Appendix, p. 52, Urban Service Area [Fort McMurray]). The ASP for

Timberlea proposes a development concept for a residentially oriented community comprised predominantly of low density residential and manufactured housing interspersed with strategically located medium density apartment developments. The apartments, commercial activity and high school will be oriented to Confederation Way for convenience and accessibility while defining a Community Centre. The ASP for Real Martin West identifies a future growth concept comprised of institutional and public service land uses adjacent to Thickwood Boulevard with the remaining areas being devoted to open space.

In addition to the future development areas identified through the ASP's, the RMWB has completed a Fringe Area Development Assessment Study. Potential Urban Growth Areas that were studied in the Assessment Study include Saline Creek Plateau, Parsons Creek, West Growth Area, North of Horse River, Between the Hangingstone and Horse Rivers and Forest Heights. As a result of the preliminary geotechnical assessment, areas that appeared to be unsuitable for urban development were eliminated (Refer to Map G in Appendix, p. 52)

Based on the LUB, the total urban expansion area in Fort McMurray is equal to 877.37 ha³. The amount of residential land in Fort McMurray's urban expansion areas will occupy 438.69 ha. This estimate is based on the subtraction of 50% from the total urban expansion area for transportation, parks and recreation, public service and environmentally protected areas, commercial land requirements and industrial land requirements.

Projections for employment lands, including business industrial and commercial land uses, are based on policies in the Fringe Area Development Assessment. Using a ratio of 4.3 ha of industrial land per 1,000

³ LUB information obtained January 31, 2008.
Information is subject to change without notice.

(population), 1055 ha of land is projected for business industrial use, while 410 ha is projected for commercial development using a standard of 180 square feet per person. The table below represents the number of potential lots by zone within the urban expansion area based on the minimum lot size requirements (Refer to **Table 7** in Appendix, p. 24).

Number of Lot in Urban Expansion Area

<i>Land Uses</i>	<i>Min. Lot Size Requirements</i>
Business Industrial (BI)	5275
Community Commercial District (C1)	342
Shopping Centre Commercial District (C3)	410
Timberlea Shopping Centre Commercial District (C3A)	410
Highway Commercial District (C4)	4,556
Direct Control Low Density Residential: Semi-Detached (DC-R2)	19,073
Direct Control Low Density Residential: All uses (DC-R2)	12,186
Direct Control High Density Residential District: Street Oriented Townhousing (interior lot) (DC-R4)	24,372
Direct Control High Density Residential District: Street Oriented Townhousing (corner lot or end unit) (DC-R4)	15,127
Direct Control High Density Residential District: Non-street oriented townhousing or cluster housing (DC-R4)	2,193
Direct Control High Density Residential District: Apartment Building	3,134

<i>Land Uses</i>	<i>Min. Lot Size Requirements</i>
Direct Control Manufactured Home District (DC-RMH)	12,186
Single Detached Residential District (R1)	10,967
Single Family Estate Residential District (R1E)	3,882
Mixed Form Single Detached Residential District (R1M)	11,856
Planned Unit Residential Development: manufactured homes with a rear lane (R1P)	24,372
Planned Unit Residential Development: manufactured homes without a rear lane (R1P)	21,935
Planned Unit Residential Development: single detached duplexes and semi detached dwellings (R1P)	19,073
Single Family Small Lot Residential District: Semi-Detached Dwelling (R1S)	19,073
Single Family Small Lot Residential District: Duplex Dwelling (R1S)	9,537
Single Family Small Lot Residential District: All other uses (R1S)	16,248
Low Density Residential District: Semi-Detached (R2)	19,073
Low Density Residential District: Triplex/Fourplex (R2)	15,127
Low Density Residential District: Cluster Housing (R2)	2,193
Low Density Residential District: All other uses (R2)	11,856
Modified Medium Density Residential: Cluster Townhouse (R2-1)	2,193
Modified Medium Density Residential: Low Rise	3,134

<i>Apartment (R2-1)</i> <i>Land Uses</i>	<i>Min. Lot Size</i> <i>Requirements</i>
Medium Density Residential: Triplex/Fourplex (R3)	15,127
Medium Density Residential: Street-oriented townhousing (interior lot) (R3)	23,089
Medium Density Residential: Street oriented townhousing (corner lot) (R3)	15,127
Medium Density Residential: Non-street oriented townhousing OR cluster housing (R3)	2,193
Medium Density Residential: Apartment Building (R3)	3,134
Special Medium Density Residential (R3-2)	3,134
Apartment Density Residential District (R5)	3,134
Apartment and Commercial Mixed Use (R5-MU)	3,134
Manufactured Home Residential District (RMH)	16,873
Modified Manufactured Home District (RMH-1)	11,856
Small Zero Lot Line Manufactured Home Residential District (RMH-2)	16,873

6. Municipal Infrastructure

The Urban Service Area (Fort McMurray) is currently serviced by an existing water treatment plant that is undergoing a \$24.8 million upgrade that will serve a population of 85,000. A new wastewater treatment plant is also under construction and will be completed in 2009. This plant will service a population of 85,000, but is capable of expanding up to 133,000. According to our population forecasts, a review will be required by the year

2016 when the wastewater treatment plant reaches capacity.

Waste is picked up on weekly basis, and taken to the regional landfill located south of Fort McMurray. Recycling is also processed within the Urban Service Area (Fort McMurray). Three drop off bins are located in the neighbourhoods of Thickwood, Lower Townsite, and Timberlea.

Area Structure Plans for the Urban Service Area (Fort McMurray) have identified a number of infrastructure alignments. The 2001 Timberlea ASP indicates that there are seven tentative locations for storm water management facilities. The ASP states that planning for these facilities should be undertaken in conjunction with an overall storm water management plan. Furthermore, each facility should be landscaped according to the Park Development Standards.

The Real Martin West ASP indicates that urban development in the institutional policy area could be connected to the Thickwood sanitary trunk. There is limited capacity available in local water mains to supply additional urban development in the Plan study area. Based on upgrades that are currently planned, the existing water system will support phased development within the institutional area. If development in this area proceeds ahead of planned upgrades to the water system, a local storage tank may be required to supplement water flows for peak demand and fire protection.

The Lower Townsite ARP indicates that most of the existing infrastructure is adequate to accommodate growth; however, some upgrading to the sanitary sewer is required.

7. Regional Transportation

The Urban Service Area (Fort McMurray) is accessible by Highway 63, which runs north-south. Public Transit is operated in the Urban Service Area (Fort McMurray) and operates

eight regular routes, five days a week, with a reduced schedule on the weekend. This service carries 900,000 riders annually^{xvi}. In addition, diversified motorcoachs provide transportation to work sites for individuals that are employed in the Oil Sands areas. Taxicab services are another means of transportation.

The existing road network within the Lower Townsite was reviewed as part of the 2000 Lower Townsite Transportation Plan; specific roadway related issues were identified, including a continuous roadway link to connect Keyano College, Prairie Industrial, and Midtown Commercial Area Districts with continuous collector roadway links.

8. Government and Partnerships

The Urban Service Area (Fort McMurray) is located in Ward 1 within the Regional Municipality of Wood Buffalo. Ward 1 includes 6 councillors; Mike Allen, Mila Byron, Sharon Clarkson, Sheldon Germain, Phil Meagher, and John Vyboh.

One partnership currently existing is through the Oil Sands Secretariat of the Government of Alberta. The Secretariat works with other ministries and stakeholders to support the Committee's expanded role in the management of growth and development in oil sands areas and in the implementation of the government's response to the Oil Sands Ministerial Strategy Report.



Source: <http://mymcmurray.com/home/>

Services in the Urban Service Area

Services in the Urban Service Area (Fort McMurray) are provided by multiple agencies, including the RMWB, which provides fire protection; the Northern Lights Health Region provides health care; the RCMP provide policing; and Keyano College and the Fort McMurray Public and Catholic School Districts provide education (see **Table 10** in the Appendix, p. 29). In addition, social services are provided by the Family and Community Support Services. At the time of writing this report, there was no information regarding existing partnerships between service providers in the Urban Service Area (Fort McMurray).

9. Health and Safety

Health care in the Urban Service Area (Fort McMurray) is provided by the Northern Lights Health Region (NLHR). Two facilities are located in the Urban Service Area (Fort McMurray); the Northern Lights Regional Health Centre and the Regional Municipality of Wood Buffalo Primary Care Network. The Northern Lights Regional Health Centre provides acute, ambulatory, continuing care, and community health. The Regional Municipality of Wood Buffalo offers a primary care network managed in partnership with physicians^{xvii}.

Police services are provided by 78 RCMP members with a support staff of

approximately twenty-six^{xviii}. There are three fire halls within the Urban Service Area (Fort McMurray) located in Timberlea, Thickwood, and the Lower Townsite. A fire hall is also proposed near the Mackenzie Industrial Park. There is no standard per-capita for firefighters; however, the Fire Department follows standards for safety code officers and utilizes a response time/zone standard of 8 minutes for medical calls and 10 minutes for fire response^{xix}.

Social services located in the Urban Service Area (Fort McMurray) include counseling, youth programs, and the HUB program. Family and Community Support Services (FCSS) strive to enhance, strengthen and stabilize individual, family and community life by assisting persons to identify and act on their own social needs. FCSS is a partnership between the province, municipalities and Métis settlements that develops locally-driven preventative social initiatives to enhance the well-being of individuals, families and communities. Specifically, in the Urban Service Area (Fort McMurray), FCSS provides confidential, professional counseling to individuals, couples and families^{xx}.

The HUB Family Resource Centre is located in the Lower Townsite and allows families to access community resources and available supports. The HUB works to strengthen the natural supports that exist at the family, community and regional levels. A number of programs are also offered at the HUB including family support, information and referrals, child safety information, community resources, guest speakers and activities regarding recreation^{xxi}.

10. Education

Elementary and Secondary Schools Serving the Urban Service Area (Fort McMurray)

The Urban Service Area (Fort McMurray) is made up of two school districts: Fort

McMurray Public School District and Fort McMurray Catholic School District. The Public District is made up of 12 schools, two of which are high schools. The Catholic School District has 4,200 students in 8 schools, one of which is a high school (**Tables 10 and 11** in the Appendix, p. 29 show the programs and the enrolment at all the schools within the Urban Service Area [Fort McMurray]).

The high school completion rate tracks first-time grade 10 students for three and five years (**Table 13** in the Appendix, p. 30 compares high school completion rates within the Fort McMurray Public School District to the Provincial rates). Compared to the Province, when graduating within three years of entering grade 10, the Public School District's completion rates in Fort McMurray (58%) are lower than that of the Province (65%). Within five years of entering grade 10, the completion rates are fairly equal to those of the Province (73%).

Community Colleges and Libraries

Keyano College has two locations within Fort McMurray; the main campus (Clearwater) and the Suncor Energy Industrial Campus. The Fort McMurray Public Library is located in Lower Townsite.

11. Communication and Technology

Communications infrastructure and access to services and information is readily available in the Urban Service Area (Fort McMurray). Mail is delivered daily to residents in the Urban Service Area. Depending on the subdivision, mail is either delivered directly to the home or to a community mailbox. Cable television and satellite television connection is available throughout the Urban Service Area. All residents have access to landline and cellular telephone service provided by Telus, Bell, Shaw, or Rogers. The Urban Service Area has witnessed, and will continue to experience, rapid population growth over the next twenty years, and that growth will increase demands for telecommunications technologies and related infrastructure. Careful planning is required to ensure adequate services are available.

12. Natural Areas

The Urban Service Area (Fort McMurray) is rich in natural areas

The natural landscape of the Lower Townsite is dominated by the influence of the Athabasca, Clearwater, and Hangingstone Rivers. The Lower Townsite is located amidst a relatively undisturbed boreal landscape, where the shores of the Athabasca, the Syne, Clearwater and Hangingstone are designated environmentally sensitive areas (ESAs). A number of mixed deciduous and conifer forest stands are located here.



Source: <http://mymcmurray.com/home/>

Historical, Archaeological, and Paleontological Resources Inventory

The RMWB has recognized the importance of its heritage and has developed a number of policies in the MDP to ensure the preservation of historically significant sites, places and artifacts. The MDP states that it is the goal of the Municipality to assist in the preservation of historical buildings and sites, archaeologically significant sites and paleontological deposits to encourage an interest in the history of the region.

Man-Made Disturbances

The Alberta Energy and Utilities Board (AEUB) has a duty to ensure that oil sands developments are carried out in an orderly and efficient manner that protects the public interest. The RMWB has participated in 3 AEUB hearings to present evidence on the social and economic impacts of oil sands projects together with the cumulative impact of all other oil sands development in the region^{xxii}. It is undetermined if future interventions by the RMWB will be held.

Effects of Climate on Infrastructure

Construction began in June, 2007 on twinning the first 240 km section of Highway 63 south of Fort McMurray from Highway 69 to south of Highway 881^{xxiii}. In addition, planning has

commenced on the Athabasca River Bridge to improve traffic flows^{xxiv}. Both projects will assist in the efficient and improved safe travel of motorists to and from the Urban Service Area (Fort McMurray).

Existing Environmental Management Systems and Policies

Environmental Management System (EMS) is based on land-use policies aimed at the protection and conservation of environmentally sensitive areas. The Timberlea ASP indicates that the area has adequate soils, slopes and the overall drainage conditions suitable for urban development. A 100 metre setback has been used to establish the top-of-bank to protect the creeks from development.

The Real Martin West ASP identifies the riparian wetland areas associated with two major drainage channels as environmentally sensitive. These channels are wet throughout the year as a result of beaver ponding and annual spring melts and/or intermittent storm flow that supports riparian vegetation adjacent to these channels. In particular, the tree riparian areas adjacent to the drainage channels are among the most ecologically productive vegetation and habitat in the region.

13. Recreation, Parks and Culture

Recreation, Parks and Culture

There are a total of 43 playgrounds, 2 baseball diamonds, 17 outdoor hockey rinks, 3 indoor arenas, 2 community halls, 16 km of asphalt walking trails, 19km of natural trails, 59 playfields, 37 parks and 7 tennis courts in the Urban Service Area (Fort McMurray).

14. Finance

The main sources of revenue for the Urban Service Area (Fort McMurray) are property taxes, including residential, commercial, and

business industrial. Funding for projects and services is also financed through grants and loans to the Municipality by the provincial and federal government. Revenues from property taxes includes: \$38,281,893 from commercial and residential property taxes, which increased from \$31,186,106 from the previous year^{xxv}. Expenditures from operations and maintenance projects for the Urban Service Area (Fort McMurray) will cost the Municipality over \$427 million between 2007 and 2011 (see **Table 14**, p. 30 in the Appendix). This will include over \$194 million in 2007, over \$42 million in 2008, over \$40 million in 2009, \$75 million in 2010, and \$75 million in 2011.

People and Culture

The RWMB encompasses the reserves and traditional lands of five Treaty 8 First Nations and six Métis locals. The Metis Fort McMurray Local #1935 is located in the urban community of Fort McMurray. The Fort McMurray First Nation traced their history back to the Cree and Chipewyan Indians of Alberta. The Fort McMurray First Nation signed to Treaty #8 in 1899. In the Urban Service area, 10% of the population are of Aboriginal heritage.

15. Economy, Employment and Tourism Issues and Opportunities

Key Issues

- With the oil sands dominating the labour force, many people working in the oil sands do not permanently reside in Fort McMurray. This increases the shadow population and the demand for housing and rental accommodations.
- The increase in population will require an increase in health professionals, education professionals, and labour force requirements in the service industry.
- With the increasing housing costs and lack of rental availability, it becomes difficult to attract trained professionals.

Key Opportunities

- The Urban Service Area (Fort McMurray) has the opportunity to expand its tourism industry.

16. Population Growth, Housing, and Land Use Issues and Opportunities

Key issues:

- There may be challenges to release land and approve plans in the fringe areas. The majority of the neighbourhoods within the Urban Service Area (Fort McMurray) do not have area structure plans or area redevelopment plans. Area Structure Plans are required to guide development and understand the needs of the community.
- The expected growth in Fort McMurray will dramatically increase the need for housing. However, housing prices are rising significantly, which will increase the need for more affordable or subsidized housing.

17. Infrastructure and Regional Transportation Issues and Opportunities

Key Issues

- Highway 63 is the only route that individuals can travel to and from the Region. With the increase in population, the bridge traversing the Athabasca River may be over capacity.
- The transit system consists of eight routes. With an increase in population the number of routes may need to be increased to make the Urban Service Area (Fort McMurray) more accessible.

Key Opportunities

- The Alberta Energy and Utilities Board hearing will help the Municipality determine how the oil sands companies

can help the RMWB to ensure a high standard of life.

- At the time of writing this report, information regarding servicing capacity for the Urban Service Area (Fort McMurray) is mostly unavailable; however, the RMWB has dedicated a significant amount for capital infrastructure projects, which will expand some of the services that are nearing capacity.

18. Government and Partnerships, Health and Safety, and Education Issues and Opportunities

Key Issues

- High housing prices are a major issue in the Fort McMurray area and are affecting the Health Authority's ability to recruit and retain staff, including physicians. If housing pressures are not alleviated, Northern Lights is at risk of losing health services due to staff shortages. Data from 2003 from the College of Physicians and Surgeons of Alberta shows the Northern Lights Health Region has the lowest number of physicians per 100,000 population of Alberta's nine health regions^{xxvi}.

Key Opportunities

- There are many opportunities for partnerships to be developed between the Provincial government and the Municipality due to the unique nature of Fort McMurray. One partnership currently existing is through the Oil Sands Secretariat of the Government of Alberta.

19. Finance Issues and Opportunities

Key Issues

- The RMWB has the highest level of property taxation in Alberta, and debt levels that were projected in 2005 exceed 85% of the allowed levels recommended by the Alberta Municipal Affairs. The municipal sector infrastructure capital requirements exceed the RMWB's ability to responsibly take on further debt. The problem is one of the inadequate funding formulas plus cash flow amounts and timing. The RMWB cannot address the added infrastructure needs as they occur.

Key Opportunities

- According to Section 291 of the Municipal Government Act, legislation prevents municipalities from assessing and taxing new plant construction until the facility is complete or in operation. The Oil Sands Ministerial Strategy should review these provisions in the context of additional revenues.

Appendix

TABLES

Table 1: Historical Population from 1999-2006

Year	Population	Percentage Change
2006	61,366	0.6%
2005	60,983	8.7%
2004	56,111	18.8%
2002	47,240	12.0%
2000	42,156	15.6%
1999	36,452	

Table 2: Historical Population by Area from 1999-2006

Area	1999	2000	2002	2004	2005	2006
Abasand Heights	3,942	4,649	4,061	4,442	5,860	5,608
Beacon Hill	2,253	2,336	2,480	2,604	2,461	2,518
Gregoire	2,859	3,188	3,856	4,117	4,358	4,658
Lower Townsite	8,191	9,561	11,831	13,652	12,260	11,300
Thickwood Heights	14,307	15,995	17,015	18,229	18,087	18,247
Timberlea	4,292	5,748	7,336	11,605	14,406	15,579
Waterways	608	679	661	472	718	750

Table 3: Forecasted Population Growth

Year	Projected Population
2007	66,889
2008	72,909
2010	86,623
2012	102,917
2014	118,910
2016	133,608
2018	150,121
2020	165,494
2022	178,998
2024	193,604
2026	209,403
2028	226,490
2030	244,971

Table 4: Percent Population by Area and Gender

Area	Male	Female
Abasand Heights	55%	44%
Beacon Hill	52%	48%
Gregoire	55%	45%
Lower Townsite	58%	42%
Thickwood Heights	55%	45%
Timberlea	54%	46%
Waterways	61%	39%
Average	55%	45%

Table 5: Existing vs. Forecasted Labour Force, Males and Females

Industry	Existing Labour Force	Projected Labour Force
Mining and oil and gas extraction	7,210	27,007
Construction	2,805	10,507
Retail Trade	2,485	9,308
Other Services (except public administration)	965	3,615
Transportation and warehousing	1,135	4,251
Accommodation and food services	1,530	5,731
Public administration	675	2,528
Manufacturing	470	1,760
Wholesale trade	830	3,109
Real estate and rental and leasing	575	2,154
Professional, scientific and technical services	845	3,165
Administrative and support, waste management and remediation services	1,030	3,858
Educational services	1,450	5,431
Health care and social assistance	1,280	4,795
Agriculture, forestry, fishing and hunting	50	187
Utilities	185	693
Information and cultural industries	250	936
Finance and insurance	310	1,161
Arts, entertainment and recreation	370	1,386

Table 6: Existing Land Use Inventory

Land Uses	Number of Lots	% of Lot Count	Area	% of Area	Average Lot Size
Business Industrial (BI)	225	1.22%	315.34 ha (779.23 ac)	7.20%	1.4 ha (3.45ac)
Community Commercial District (C1)	23	0.12%	6.35ha (15.70 ac)	0.15%	0.28 ha (0.69 ac)
Mixed/Transitional Commercial District (C2)	243	1.31%	15.72ha (38.85 ac)	0.36%	0.06ha (0.15ac)
Shopping Centre Commercial District (C3)	43	0.23%	38.23ha (94.48 ac)	0.87%	0.89ha (2.20 ac)
Timberlea Shopping Centre Commercial District (C3A)	3	0.02%	9.27 ha (22.93 ac)	0.21%	3.09ha (7.64 ac)
Highway Commercial District (C4)	50	0.27%	53 ha (130.98 ac)	1.21%	1.06ha (2.62ac)

Arterial Commercial District (C4A)	27	0.15%	5.93ha (14.67 ac)	0.14%	0.22ha (0.54 ac)
Central Business District (C5)	302	1.63%	27.59ha (68.18 ac)	0.63%	0.09 ha (0.22 ac)
Direct Control District (DC)	127	0.69%	317.59ha (784.78 ac)	7.16%	2.5ha (6.18 ac)
Direct Control Central Business District (DC-C5)	8	0.04%	0.33ha (0.81 ac)	1.00%	0.04ha (0.10 ac)
Direct Control Low Density Residential (DC-R2)	3	0.02%	0.09 ha (0.21 ac)	0.00%	0.03ha (0.07 ac)
Direct Control Medium Density Residential (DC-R3)	1	0.01%	0.46ha (1.15 ac)	0.01%	0.46ha (1.14 ac)
Direct Control High Density Residential District (DC-R4)	21	0.11%	50.01ha (123.59 ac)	1.14%	2.38ha (5.88 ac)
Direct Control Manufactured Home District (DC-RMH)	18	0.10%	0.73ha (1.82ac)	0.02%	0.04ha (0.10 ac)
Direct Control - Urban Estate Residential District (DC-EUR)	8	0.04%	2.33ha (5.77ac)	0.05%	0.29ha (0.72 ac)
Environmental Preservation District (EP)	173	0.94%	1243.49ha (3072.75 ac)	28.02%	7.19 ha (17.77 ac)
Parks and Recreation District (PR)	237	1.28%	854.15ha (2110.66 ac)	19.02%	3.6ha (8.90 ac)
Public Services District (PS)	84	0.45%	241.88ha (597.69 ac)	5.53%	2.88ha (7.12 ac)
Single Detached Residential District (R1)	7515	40.65%	525.27ha (1297.97 ac)	12.00%	0.07ha (0.71 ac)
Single Family Estate Residential District (R1E)	104	0.56%	24.44ha (60.39ac)	0.56%	0.24ha (0.59 ac)
Mixed Form Single Detached Residential District (R1M)	122	0.66%	17.84ha (44.08ac)	0.41%	0.15ha (0.37 ac)
Planned Unit Residential District (R1P)	399	2.16%	14.47ha (35.77 ac)	0.33%	0.04 ha (0.10 ha)
Single Family Small Lot Residential District (R1S)	3874	20.95%	175.89ha (434.66 ac)	4.02%	0.05 ha (0.12 ac)
Low Density Residential District (R2)	1097	5.93%	57.77ha (142.76 ac)	1.32%	0.05 ha (0.12 ac)
Modified Medium Density Residential District (R2-1)	11	0.06%	14.35ha (35.46 ac)	0.33%	1.3ha (3.21 ac)
Medium Density Residential District (R3)	670	3.62%	160.13ha (395.69 ac)	3.66%	0.24ha (0.59 ac)
Medium Density Residential District (R3-1)	1	0.01%	0.74ha (1.83 ac)	0.02%	0.74ha (1.83 ac)
Special Medium Density Residential District (R3-2)	2	0.01%	0.14ha (0.34 ac)	0.00%	0.07ha (0.71 ac)
High Density Residential District (R4)	56	0.30%	11.23ha (27.76 ac)	0.26%	0.2ha (0.49 ac)
Apartment Density Residential District (R5)	5	0.03%	27.88ha (68.89 ac)	0.64%	5.58ha (13.79 ac)
Apartment and Commercial Mixed Use District (R5-MU)	0	0.00%	0	0.00%	0.00
Manufactured Home Residential District (RMH)	1024	5.54%	57.4ha (141.84 ac)	1.31%	0.06ha (0.15ac)
Modified Manufactured Home District	852	4.61%	44.55ha	1.02%	0.05ha

(RMH-1)			(110.11 ac)		(0.12 ha)
Small Zero Lot Line Manufactured Home Residential District (RMH-2)	1161	6.28%	61.05 ha (150.85 ac)	1.40%	0.05ha (0.12 ha)

Table 7: Forecasted Development Potential

Land Uses	Minimum Lot Size Requirements	Current Vacant Lots	Avg Size of Current Vacant Lots	Forecasted Vacant Lots	Urban Expansion* (ha)	Forecasted Urban Expansion Lots	Total Forecasted Lots
Business Industrial (BI)	0.2 ha	24	1.0 ha (2.47 ac)	120	1055 ha (2606.8 ac)***	5275	5395
Community Commercial District (C1)	1.2 ha	2	0.22 ha (0.54ac)	0.4	410 ha (1013 ac) **	342	342
Mixed/Transitional Commercial District (C2)	None	18	0.039ha (0.096ac)		410 ha (1013 ac) **		0
Shopping Centre Commercial District (C3)	1.0ha	0			410 ha (1013 ac) **	410	410
Timberlea Shopping Centre Commercial District (C3A)	1.0ha	1	0.8ha (1.98 ac)	0.8	410 ha (1013 ac) **	410	411
Highway Commercial District (C4)	929 m2 = 0.09ha	20	0.9ha (2.22 ac)	200	410 ha (1013 ac) **	4556	4756
Arterial Commercial District (C4A)	None	0			410 ha (1013 ac) **		0
Central Business District (C5)	None	4	0.049ha (0.12ac)		410 ha (1013 ac) **		0
Direct Control District (DC)	None	11	1.36ha (3.36ac)				0
Direct Control Central Business District (DC-C5)	None	0			410 ha (1013 ac) **		0
Direct Control Low Density Residential (DC-R2)	Semi Detached = 228 m2/unit = 0.023 ha	0			438.69 ha (1083ac)^	19073	19073

	All uses= 360 m2 = 0.036 ha				438.69 ha (1083ac)^	12186	12186
Direct Control Medium Density Residential (DC-R3)	None	0			438.69 ha (1083ac)^		0
Direct Control High Density Residential District (DC- R4)	Street Oriented Townhousing (interior lot) = 185.8m2/unit = 0.018 ha	14	0.16ha (0.39ac)	124	438.69 ha (1083ac)^	24372	24496
	Street Oriented Townhousing (corner lot or end unit) = 297.0 m2/unit = 0.029 ha			77	438.69 ha (1083ac)^	15127	15204
	Non-Street Oriented Townhousing = 0.2ha			11	438.69 ha (1083ac)^	2193	2204
	Cluster Housing = 0.2 ha			11	438.69 ha (1083ac)^	2193	2204
	Apartment Building = 0.14 ha			16	438.69 ha (1083ac)^	3134	3150
Direct Control Manufactured Home District (DC-RMH)	366 m2 = 0.036 ha	0			438.69 ha (1083ac)^	12186	12186
Direct Control - Urban Estate Residential District (DC- EUR)	None	0			438.69 ha (1083ac)^		0
Environmenta l Preservation District (EP)	None	19	0.052ha (0.13ac)				0
Parks and Recreation District (PR)	None	93	0.62ha (1.53ac)				0

Public Services District (PS)	None	3	1.03ha (2.55ac)				0
Single Detached Residential District (R1)	400m2 = 0.040 ha	1202	0.067ha (0.17ac)	3013	438.69 ha (1083ac)^	10967	13980
Single Family Estate Residential District (R1E)	1133 m2 = 0.113 ha	1	0.22ha (0.54ac)	1	438.69 ha (1083ac)^	3882	3883
Mixed Form Single Detached Residential District (R1M)	372 m2 = 0.037 ha	14	0.05ha (0.12ac)	18	438.69 ha (1083ac)^	11856	11874
Planned Unit Residential District (R1P)	184 m2 (0.018ha) / dwelling unit for manufactured homes with a rear lane	1	0.047ha (0.12ac)	2	438.69 ha (1083ac)^	24372	24374
	200 m2 (0.020 ha)/dwelling unit for manufactured homes without a rear lane			2	438.69 ha (1083ac)^	21935	21937
	235.6m2 (0.023 ha) for single detached duplexes and semi-detached dwellings			2	438.69 ha (1083ac)^	19073	19075
Single Family Small Lot Residential District (R1S)	Semi- Detached Dwelling = 228m2 = 0.023 ha)	632	0.054ha (0.13ac)	1478	438.69 ha (1083ac)^	19073	20551
	Duplex Dwellings 456.0m2 = 0.046 ha)			739	438.69 ha (1083ac)^	9537	10276
	All other uses = 270.0m2 = 0.027 ha			1259	438.69 ha (1083ac)^	16248	17507

Low Density Residential District (R2)	Semi Detached = 228 m2/unit = 0.023 ha	69	0.12ha (0.27ac)	360	438.69 ha (1083ac)^	19073	19433
	Triplex/Four plex = 297.0m2 (0.029 ha)/unit			285	438.69 ha (1083ac)^	15127	15412
	Cluster Housing = 0.2 ha			41	438.69 ha (1083ac)^	2193	2234
	All other uses = 366m2 = 0.037 ha			223	438.69 ha (1083ac)^	11856	12079
Modified Medium Density Residential District (R2-1)	Cluster Townhouse = 0.2ha	1	1.21ha (2.71ac)	6	438.69 ha (1083ac)^	2193	2199
	Low Rise Apartment = 0.14ha			8	438.69 ha (1083ac)^	3134	3142
Medium Density Residential District (R3)	Triplex/Four plex = 297.0m2 (0.029 ha)/unit	30	0.77ha (1.90ac)	796	438.69 ha (1083ac)^	15127	15923
	Street-oriented Townhousing (interior lot) = 185.5m2 = 0.019 ha)			1215	438.69 ha (1083ac)^	23089	24304
	Street-oriented Townhousing (corner lot) = 297.0m2 = 0.029 ha)			796	438.69 ha (1083ac)^	15127	15923
	Non-Street Oriented Townhousing = 0.2ha			115	438.69 ha (1083ac)^	2193	2308
	Cluster Housing = 0.2 ha			115	438.69 ha (1083ac)^	2193	2308
	Apartment Building = 0.14 ha			165	438.69 ha (1083ac)^	3134	3299

Special Medium Density Residential District (R3-2)	0.14ha	0			438.69 ha (1083ac)^	3134	3134
High Density Residential District (R4)	None	0			438.69 ha (1083ac)^		0
Apartment Density Residential District (R5)	0.14ha	3	4.8ha (11.9ac)	102	438.69 ha (1083ac)^	3134	3236
Apartment and Commercial Mixed Use District (R5- MU)	0.14ha	0			438.69 ha (1083ac)^	3134	3134
Manufactured Home Residential District (RMH)	260m2 =0.026 ha	0			438.69 ha (1083ac)^	16873	16873
Modified Manufactured Home District (RMH-1)	366m2 = 0.037ha	43	0.05ha (0.12ac)	58	438.69 ha (1083ac)^	11856	11914
Small Zero Lot Line Manufactured Home Residential District (RMH-2)	260 m2 = 0.026 ha	0			438.69 ha (1083ac)^	16873	16873

* Total Urban Expansion in Fort McMurray is 877.37 hectares. (This number is based on the Land Use by-law, however the by-law has yet to be updated, please use this number with caution). 50% was taken from the total hectares for transportation, parks and recreation, public service, and environmentally protected areas.

** Based on the Fringe Area Development Assessment, in order to determine future commercial land requirements, experience from other cities suggests that a factor of 180 square feet per person is applicable for areas with populations over 25,000. This figure represents total commercial land requirements based on forecasted population and includes parking, landscaping, setbacks and other requirements.

***Based on the Fringe Area Development Assessment, a ratio of 4.3 hectares of industrial land per 1,000 population is illustrated in Fort McMurray. This total represents the total number of hectares the forecasted population would require in Fort McMurray.

^After the subtraction of 50% from the total urban expansion for transportation, parks and recreation, public service and environmentally protected areas, commercial land requirements and industrial land requirements, 438.69 hectares is remaining for residential development

Table 8: Tourism Facilities and Events^{xxvii}

Facility	Activities	Target market
Oil Sands Discovery Centre	<ul style="list-style-type: none"> Interactive oil sands exhibits 	Regional

Events	Activities	Target Market
Interplay Festival	<ul style="list-style-type: none"> Street Performers Plays Music and Food Stand-up Comedy and Improv 	Regional

Table 9: Number of People Residing in a Housing Unit, 2005-2006

2006 Housing Type	SFD	Townhouse	Apartment	Manufactured Home	Duplex	Semi-Detached
Fort McMurray	3.3	2.8	2.3	2.9	2.7	3.0
Average for the Region (including Urban Service Area)	3.3	1.9	2.3	2.9	2.5	3.0

Table 10: Services and Service Providers

Service	Provider
Education (K to Grade 6)	Fort McMurray Public School District Fort McMurray Catholic School District
Post Secondary Education	Keyano College
Police	RCMP (Province of Alberta)
Fire	Regional Municipality of Wood Buffalo
Health Care	Northern Lights Health Region
Social services	Family & Community Support Services

Table 11: Fort McMurray Public School Listing

Fort McMurray Public School District ^{xxviii}		
School	Programs	Enrolment
Beacon Hill School	ECS – 8	
Dr. K.A. Clark School	ECS – 8	540 students
Ecole Dickinsfield School	ECS – 8	505 students
Fort McMurray Christian School	ECS – 9	
Fort McMurray Islamic School	ECS – 5	
Greely Road School	ECS – 8	420 students
Thickwood Heights School	ECS – 8	329 students
Timberlea School	ECS – 8	650 students
Westview School	ECS – 8	346 students
Composite High School	9 – 12	
Frank Spragins High School	Alternate Programming	
Westwood Community High School	9 - 12	905 students

Table 12: Fort McMurray Catholic School Listing

Fort McMurray Catholic School District ^{xxix}		
School	Programs	Enrolment
Father Beauregard School	Early Entry, K to 8, Independent Living	362 students

	Programs – Primary and Junior	
Ecole St. Paul School	Pre-School, Early Entry, K-8	400 students
Father J.A. Turcotte School	Early Entry, K-8	
Good Shepherd School	Early Entry, K-8	304 students
St. Anne School	Early Entry Program , K-8	525 students
St. Gabriel School	Early Entry, K-8	410 students
St. Martha School	Early Entry, K-8	
Sister Mary Phillips School	Early Entry Program, K-8	332 students
Father Patrick Mercredi Community High School	Grade 9 to 12	1200 students

Table 13: Public School District High School Completion Rates

		1998-1999	1999-2000	2000-2001	2001-2002
Within 3 years of entering Grade 10	Province	62.7%	65.0%	64.6%	65.3%
	District	50.6%	54.4%	54.8%	58.1%
Within 5 years of entering Grade 10	Province	NA	72.0%	73.0%	74.4%
	District	NA	77.1%	69.5%	72.9%

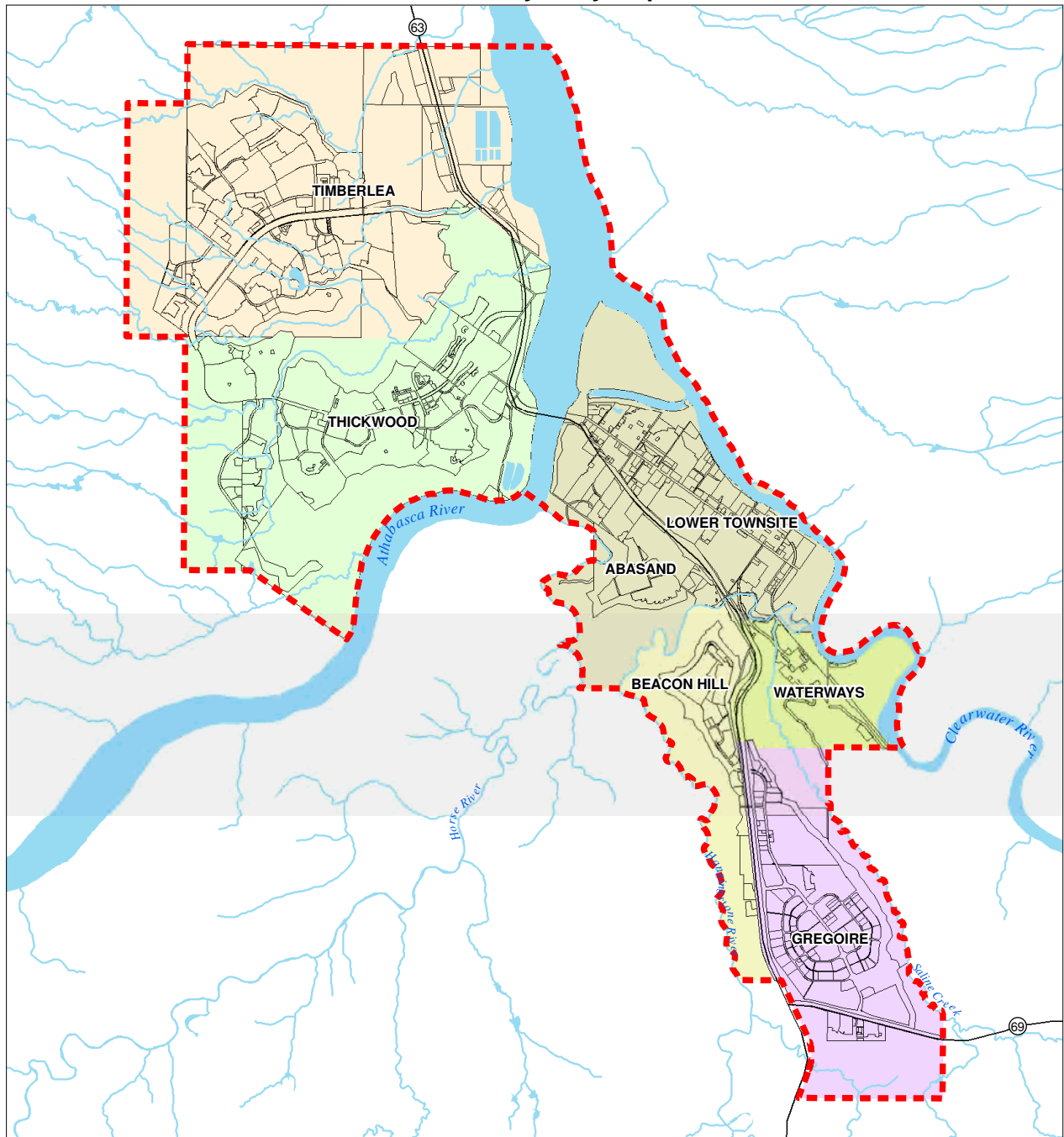
Table 14: Urban Service Area (Fort McMurray) Expenditures 2007-2011

Year	Expenditure	Cost
2007	Waste Water Treatment Plant	\$7,446,862
	Keyano Area Roads	\$4,000,000
	Keyano Area Water and Sewer Trunks	\$3,687,000
	2007 Water Main Replacement	\$1,600,000
	Thickwood Heights Water Supply	\$926,475
	Franklin/Riedel Upgrade and Rehabilitation	\$2,00,000
	Clearwater Drive	\$3,782,000
	Paquette Drive Oversizing – Phase 2	\$2,000,000
	Tolen Drive Bridge Rehabilitation	\$1,500,000
	Confederation Way – Third East Bound Lane	\$5,000,000
	RCMP Facility	\$39,799,163
	Regional Landfill	\$13,632,500
	Keyano Area Access – Clearwater Drive	\$14,837,000
	Lower Townsite East End Infrastructure Improvements – Phase I	\$2,100,000
	Storm Water Mgmt Facility Timberlea Pond 2B	\$500,000
	Haningsstone Bridge Rehabilitation	\$2,000,000
	MacDonald Island Redevelopment	\$74,713,758
	2007 Sanitary Sewer Main Replacement	\$800,000
	Thickwood Trunk Sewer Upgrading	\$700,000
	Urban Roadway Rehabilitation 2007	\$6,500,000
	MacDonald Island Facility Rehabilitation 2007	\$400,000
	Beacon Hill Pump House Reservoir	\$600,000
	Thickwood Boulevard Retaining Wall & Sidewalk Replacement	\$1,000,000
	Beacon Hill/Good Shepherd Community Park Upgrades	\$600,000
	2007 Storm Main Replacement	\$800,000
	Thickwood Park/Outdoor Rink Development	\$600,000
	Miskanaw Golf Course Rehabilitation	\$600,000
	Real Martin Drive Regional Park	\$1,000,000
	Thickwood Heights/Timberlea – Multiuse Facility	\$500,000

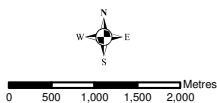
Year	Expenditure	Cost
	Syncrude Timberlea Athletic Park – Phase 3	\$1,100,000
	Civic Centre	\$2,000,000
2008	Keyano Area Roads	\$500,000
	Keyano Area Water and Sewer Trunks	\$2,477,500
	Franklin/Riedel Upgrade and Rehabilitation	\$1,537,298
	Clearwater Drive	\$3,550,000
	RCMP Facility	\$2,323,902
	Regional Landfill	\$3,247,500
	MacDonald Island Redevelopment	\$14,774,374
	Miskanaw Golf Course Rehabilitation	\$600,000
	Real Martin Drive Regional Park	\$2,000,000
	Thickwood Heights/Timberlea – Multiuse Facility	\$8,300,000
	Civic Centre	\$3,000,000
2009	Clearwater Drive	\$2,329,000
	Regional Landfill	\$1,000,000
	Miskanaw Golf Course Rehabilitation	\$600,000
	Thickwood Heights/Timberlea – Multiuse Facility	\$26,500,000
	Civic Centre	\$10,000,000
2010	Civic Centre	\$75,000,000
2011	Civic Centre	\$75,000,000
	Total	\$427,464,332

MAPS

Fort McMurray - Key Map



MAP 1 MAY, 2008

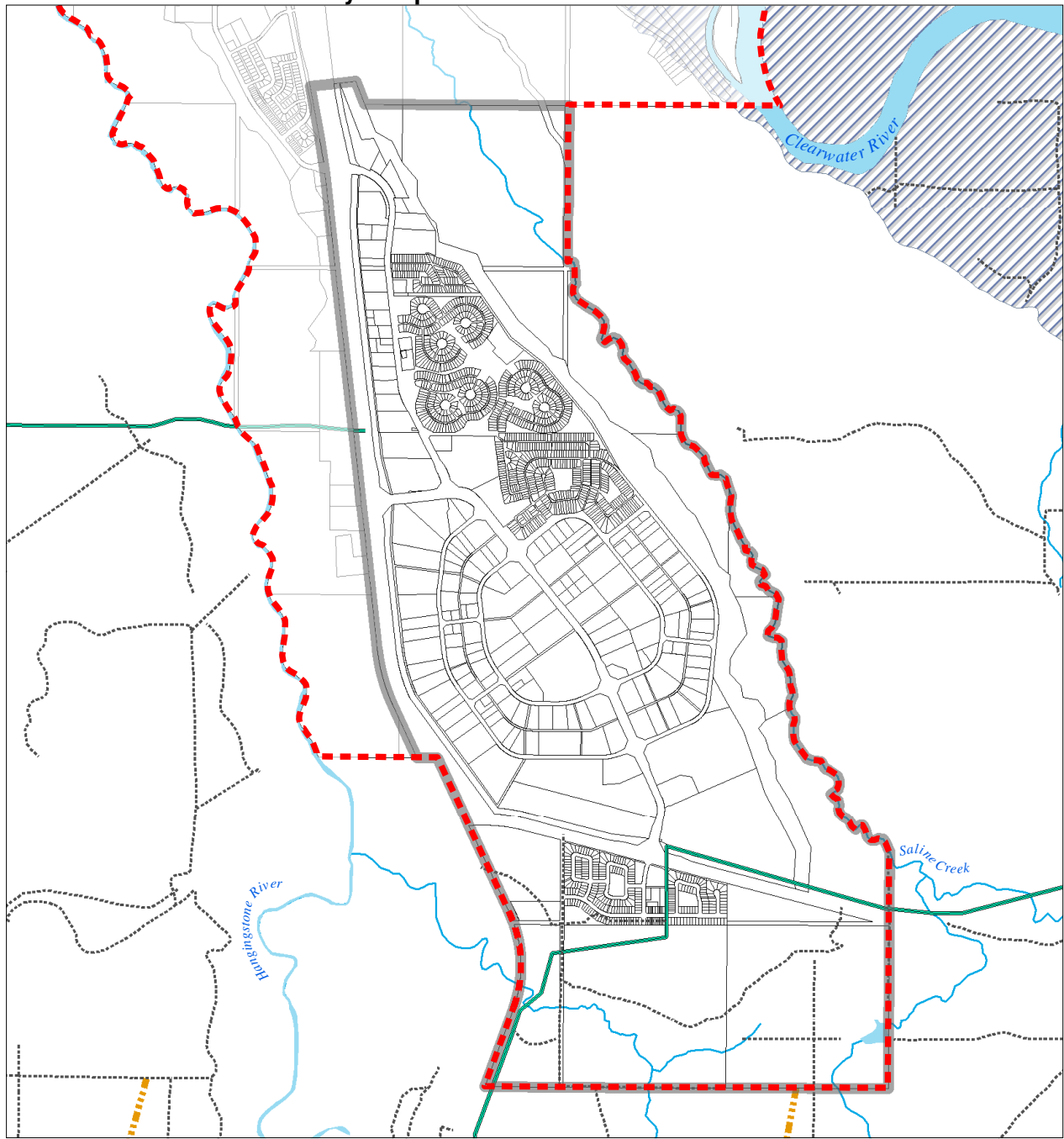


LEGEND

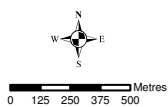
- Urban Service Area Boundary
- Map A
- Map B
- Map C
- Map D
- Map E
- Map F



Fort McMurray - Map A Natural and Manmade Constraints



MAP 2
MAY, 2008



LEGEND

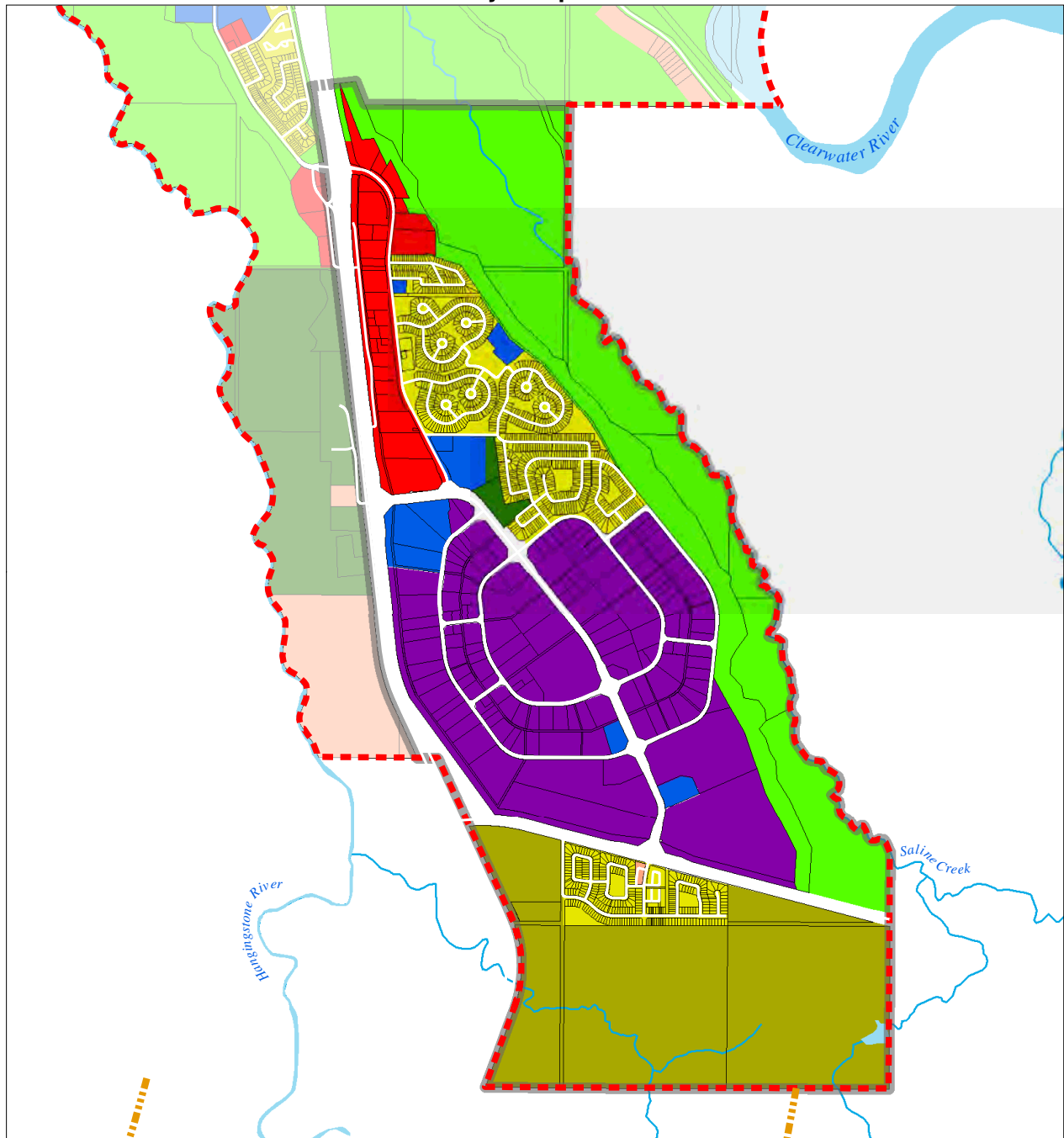
- Urban Service Area Boundary
- Highway 63/881 Area
- Structure Plan Boundary
- Community Boundary
- Water
- Rivers/Streams

Constraints

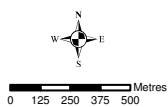
- Cut Trail
- Floodplain
- Pipelines



Fort McMurray - Map A Land Use



MAP 3 MAY, 2008



- Urban Service Area Boundary
- Highway 63/881 Area Structure Plan Boundary
- Community Boundary
- Water
- Rivers/Streams

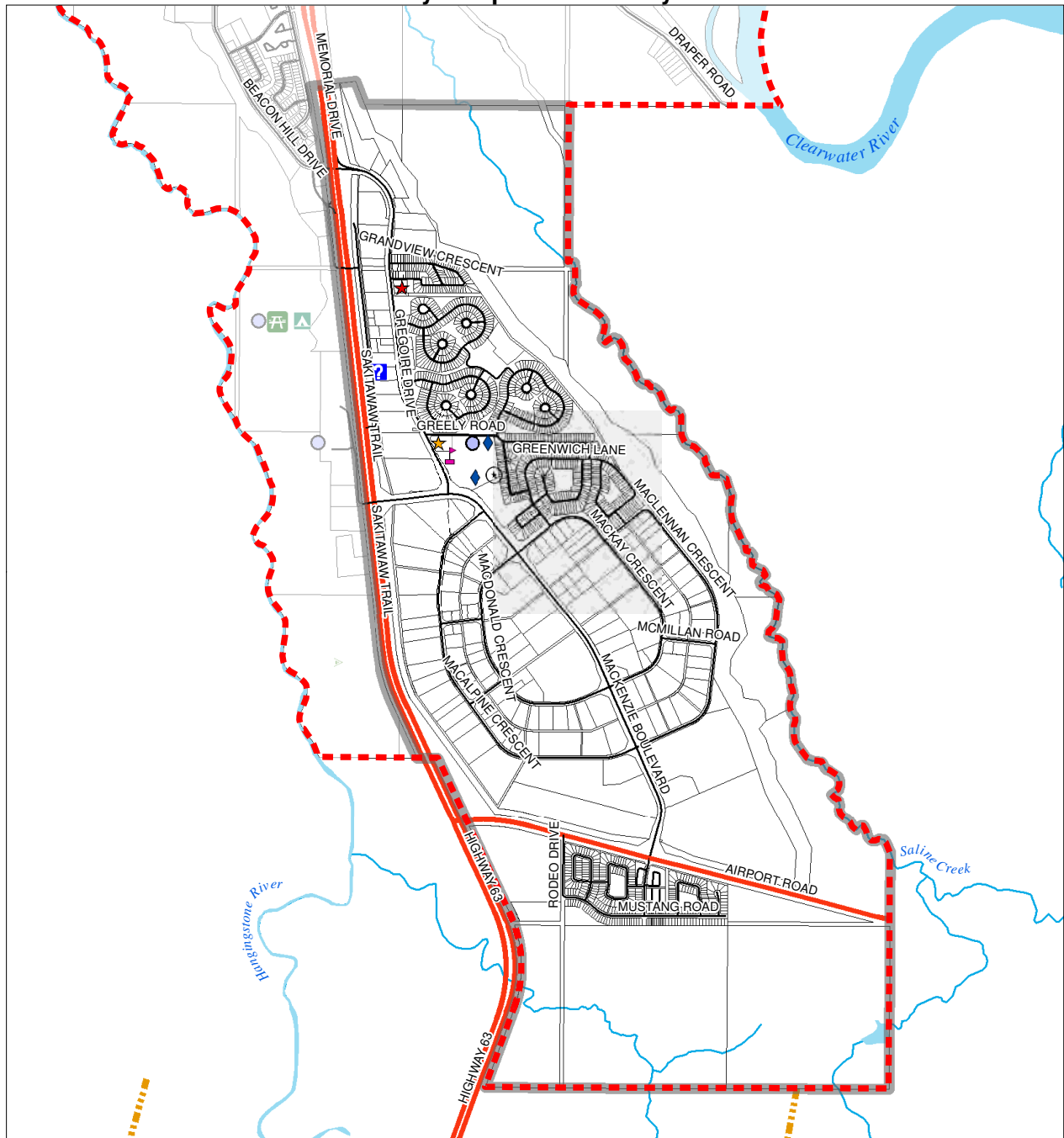
LEGEND

- Business/Industrial
- Commercial
- Direct Control
- Environmentally Protected Area
- Parks

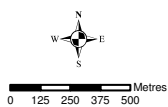
- Public Space
- Residential
- Urban Expansion



Fort McMurray - Map A Community Context



MAP 4 MAY, 2008



LEGEND

- Urban Service Area Boundary
- Highway 63/881 Area Structure Plan Boundary
- Community Boundary
- Water
- Rivers/Streams
- Road Network**
 - Highway

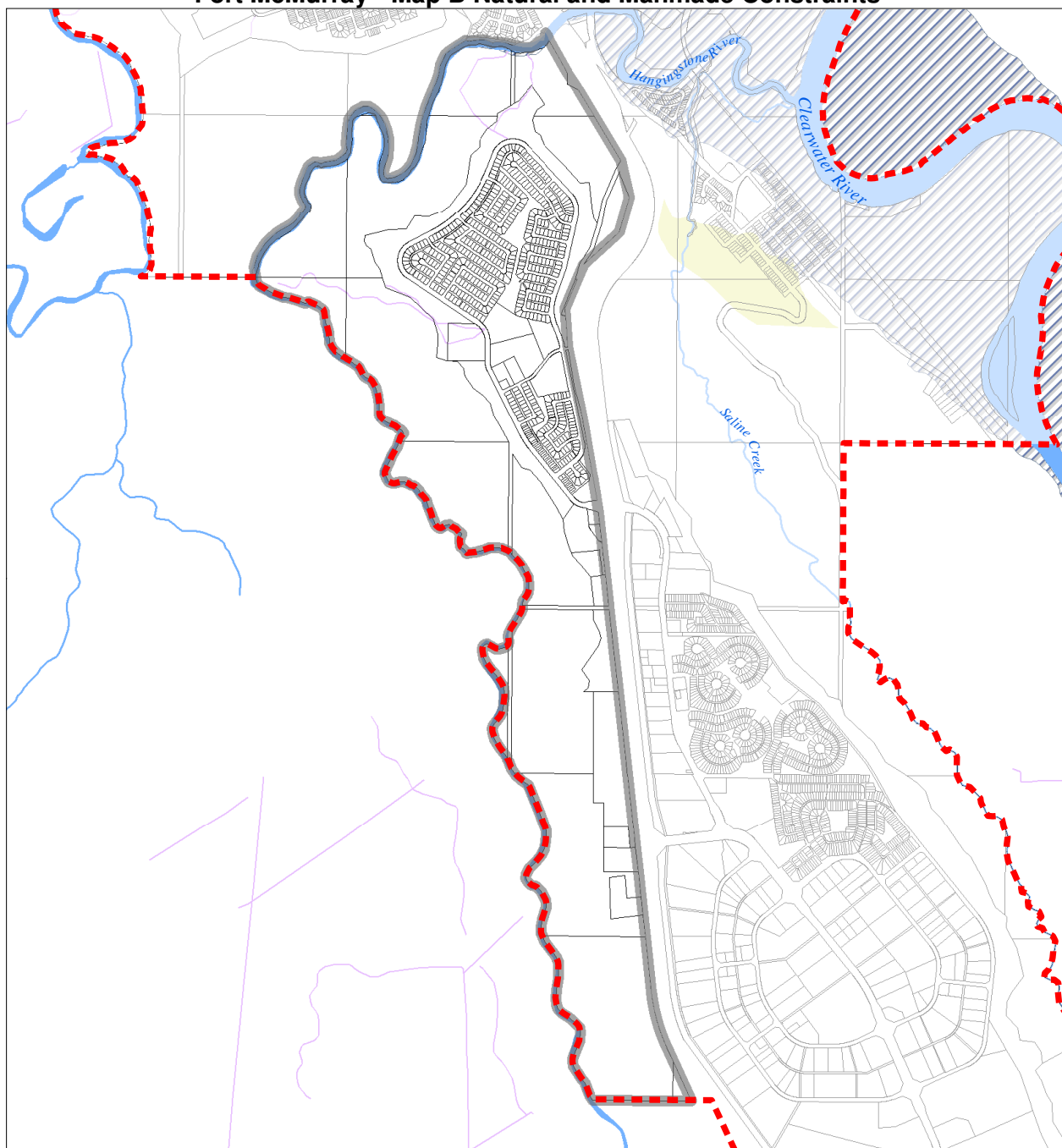
Facilities

- ◆ Ball Diamond
- ▲ Campground
- ★ Church
- ★ Firehall
- P Fort McMurray Tourism/Information

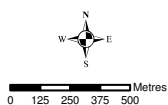
- ⛳ Golf Course
- ⛶ Picnic Area
- Playground
- ✎ School
- ⊙ Soccer Field



Fort McMurray - Map B Natural and Manmade Constraints



MAP 5
MAY, 2008



LEGEND

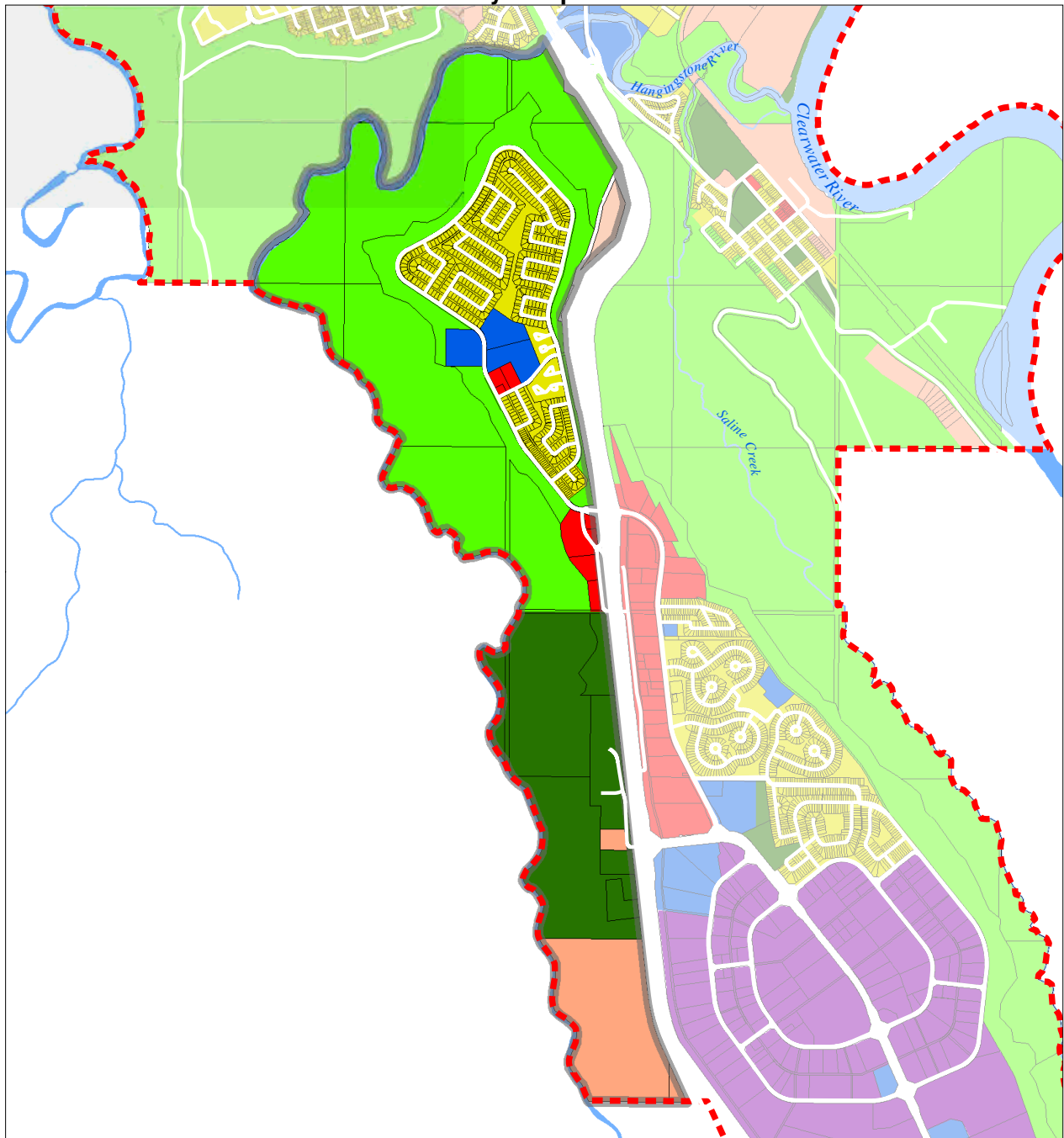
- Urban Service Area Boundary
- Community Boundary
- Water
- Rivers/Streams

Constraints

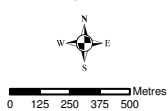
- Easements
- Floodplain
- Geotechnically Sensitive Area



Fort McMurray - Map B Land Use



MAP 6
MAY, 2008

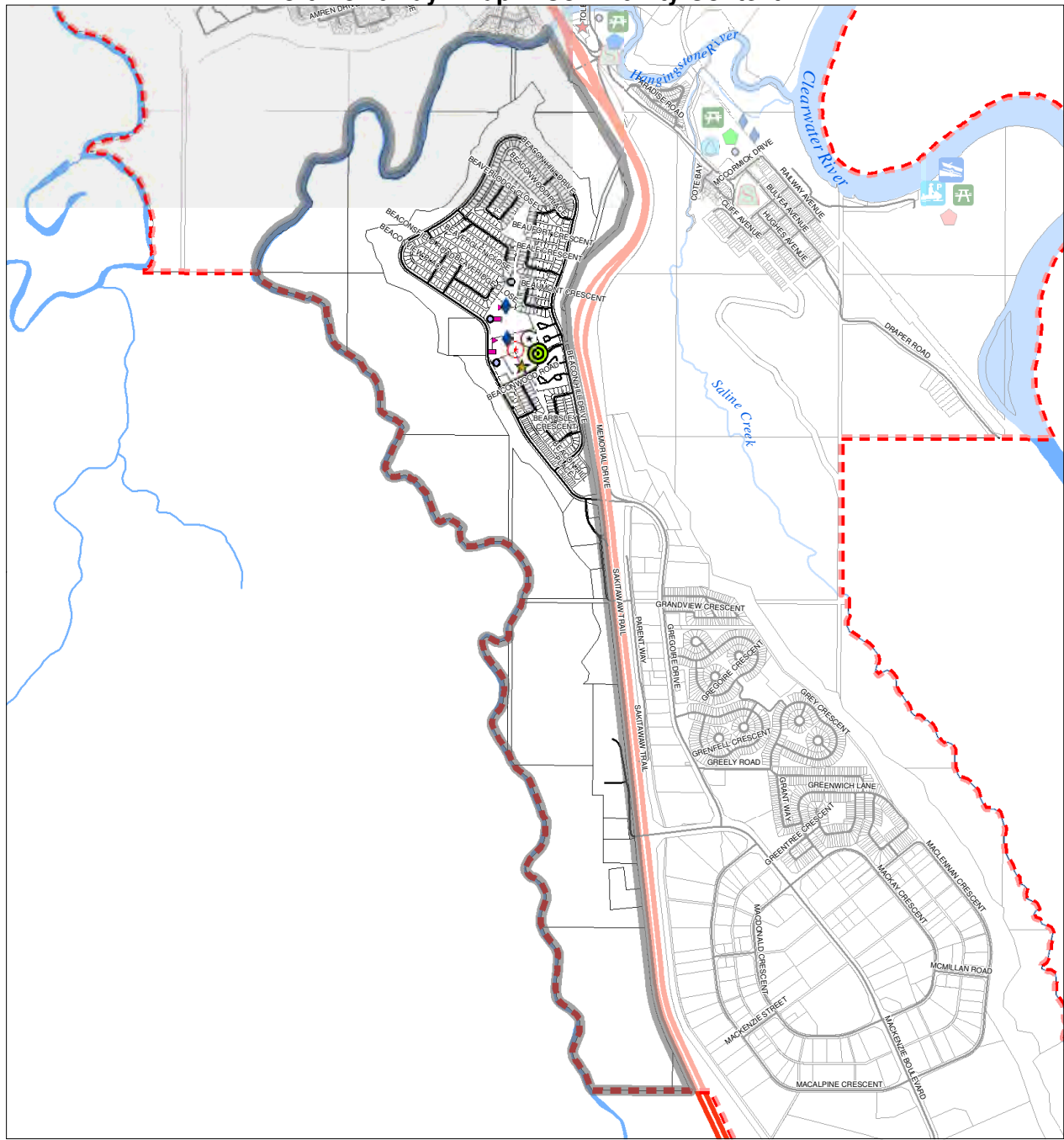


LEGEND

Urban Service Area Boundary	Land Use	Public Space
Community Boundary	Commercial	Residential
Water	Direct Control	
Rivers/Streams	Environmentally Protected Area	
	Parks	



Fort McMurray - Map B Community Context



MAP 7
MAY, 2008



0 125 250 375 500 Metres

Urban Service Area Boundary

Community Boundary

Water

Rivers/Streams

Road Network

Highway

Local

LEGEND

Facilities

Ball Diamond

Boat Launch

Church

Firehall

Indoor Arena

J. Howard Pew Memorial Park

Lions Park

Picnic Area

Playground

Rugby Field

School

Sitskaw Park

Skating

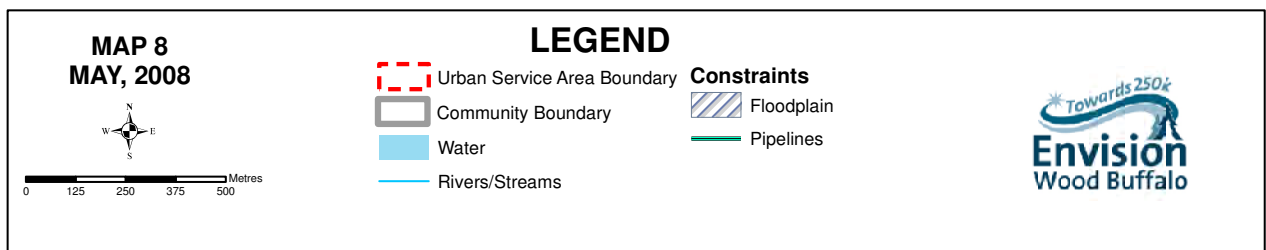
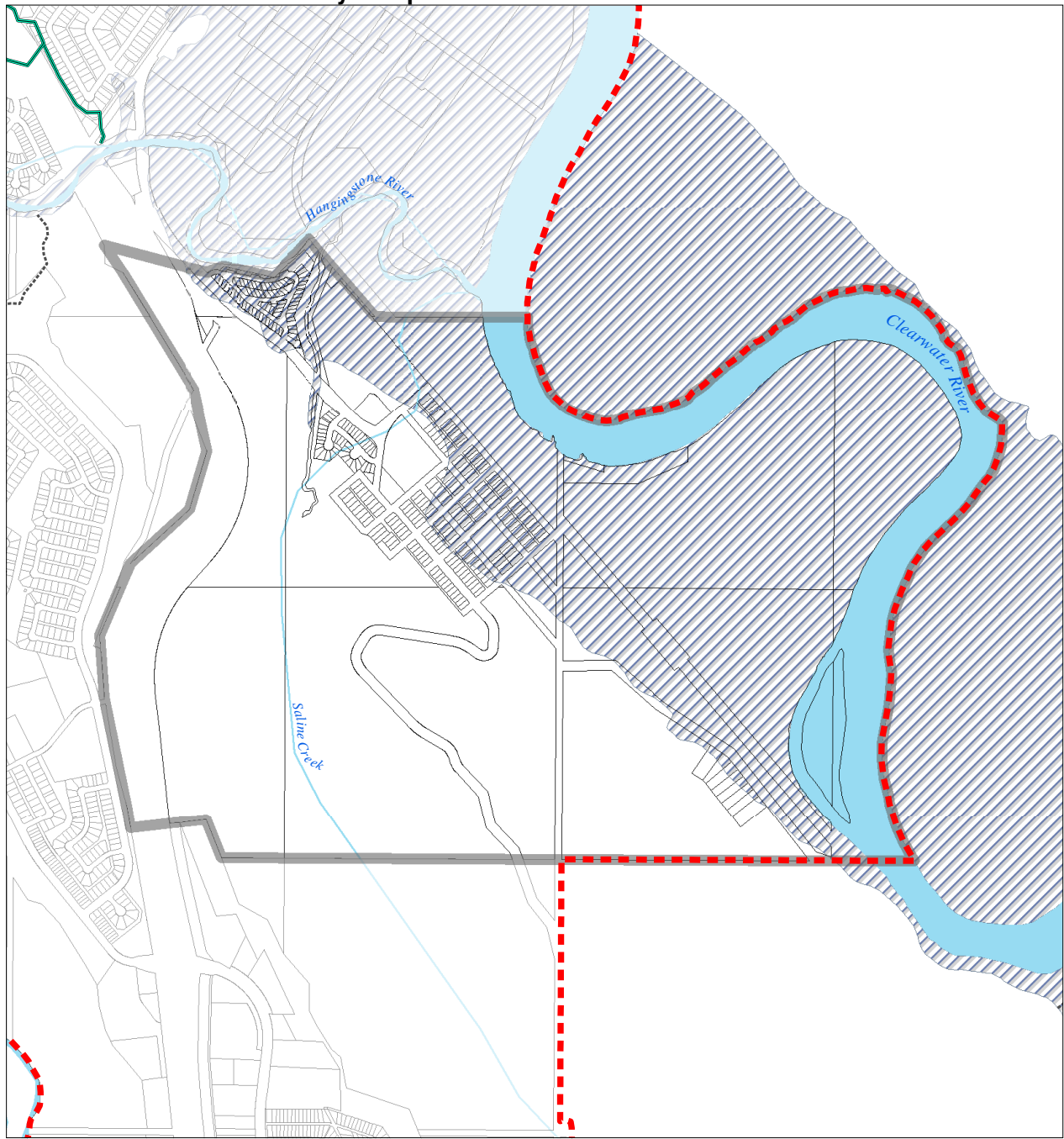
Snowmobile Staging Area

Soccer Field

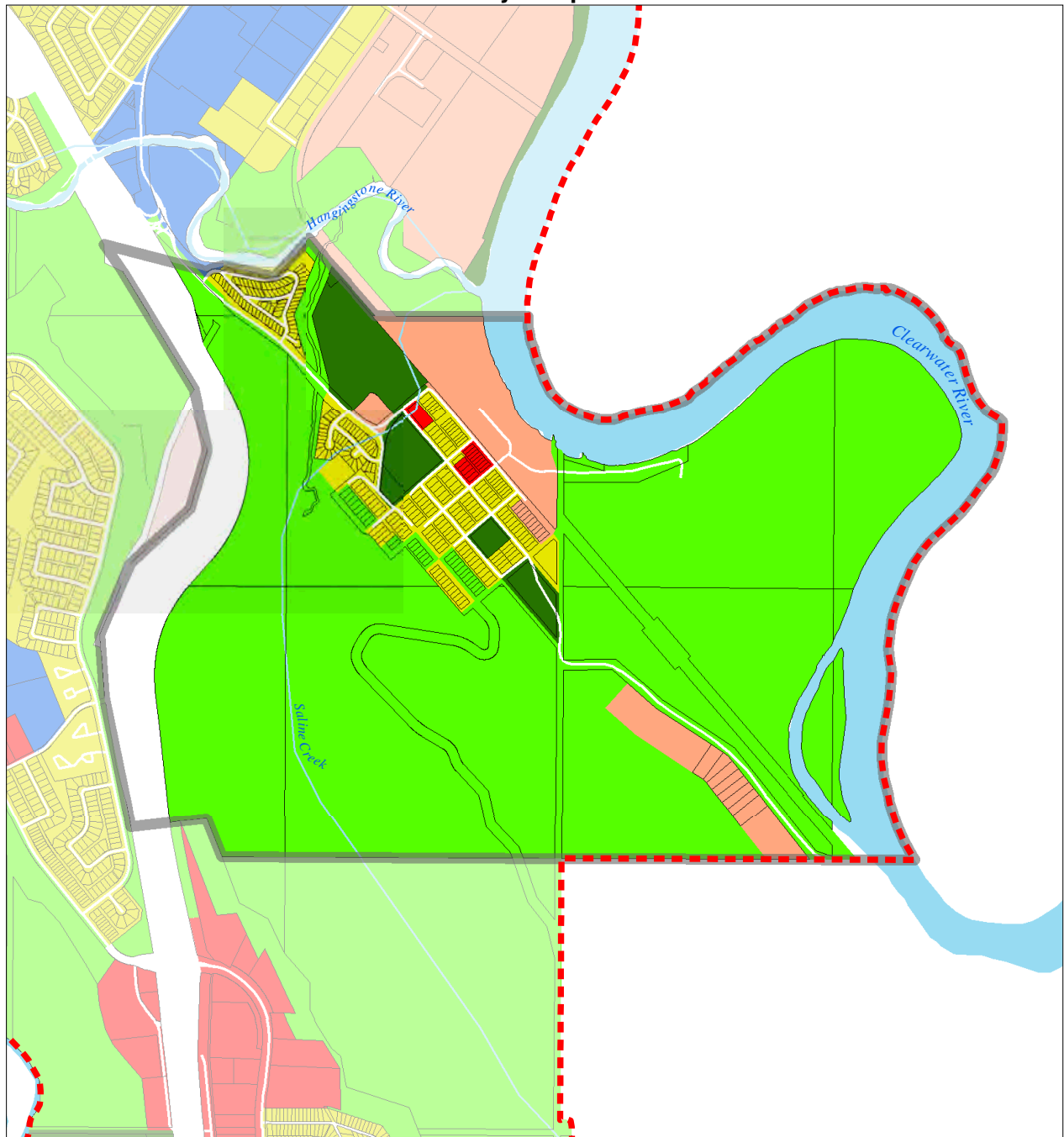
Water Park

Towards 250k
Envision
Wood Buffalo

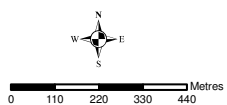
Fort McMurray - Map C Natural and Manmade Constraints



Fort McMurray - Map C Land Use



MAP 9
MAY, 2008



- Urban Service Area Boundary
- Community Boundary
- Water
- Rivers/Streams

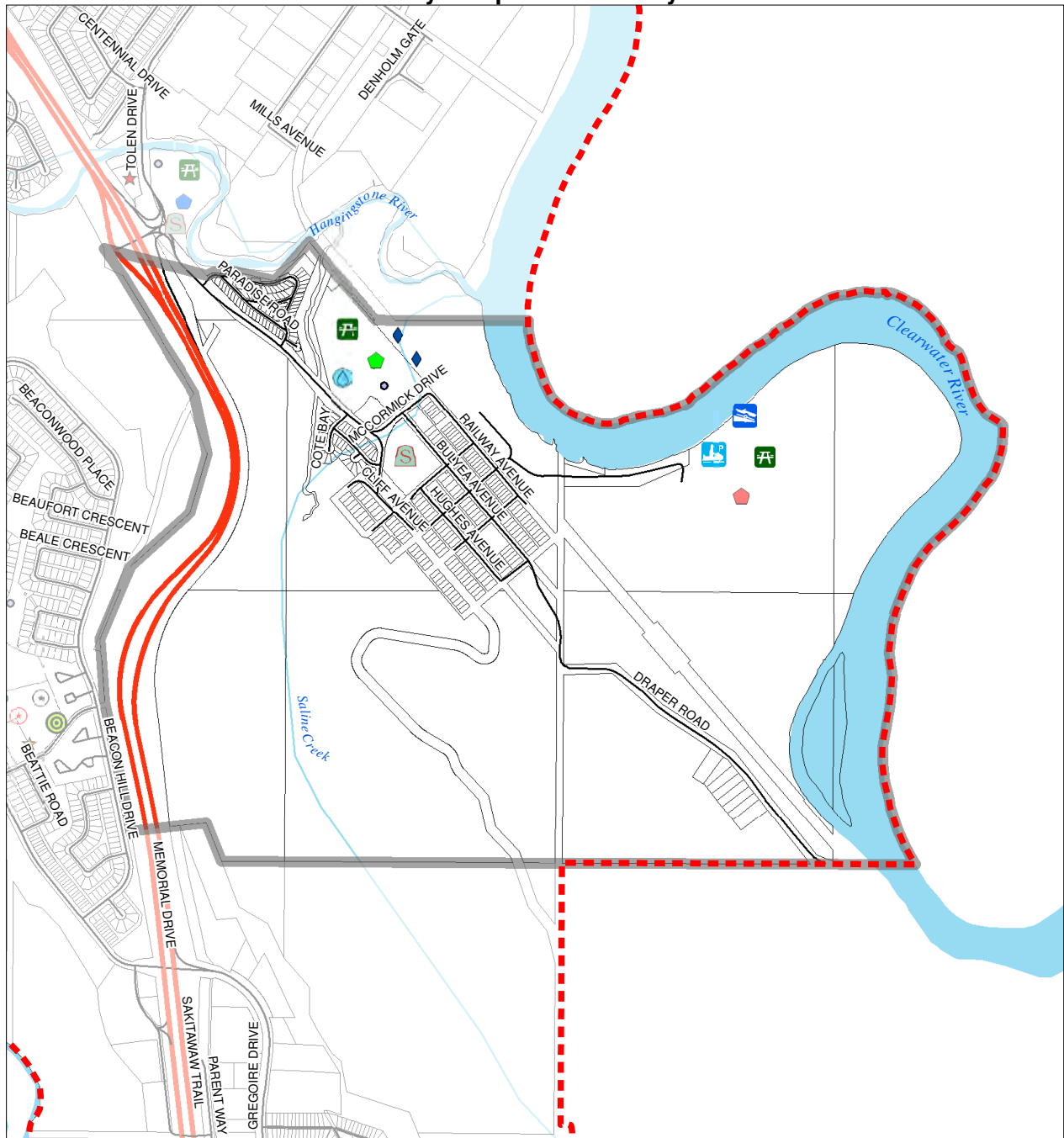
LEGEND

- Land Use**
- Business/Industrial
 - Commercial
 - Direct Control
 - Environmentally Protected Area

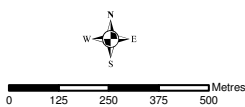
- Parks
- Public Space
- Residential



Fort McMurray - Map C Community Context



MAP 10
MAY, 2008



Urban Service Area Boundary

Community Boundary

Water

Rivers/Streams

Road Network

Highway

Local

LEGEND

Facilities

Ball Diamond

Boat Launch

Church

Firehall

Indoor Arena

J. Howard Pew Memorial Park

Lions Park

Picnic Area

Playground

Rugby Field

Sitskaw Park

Skating

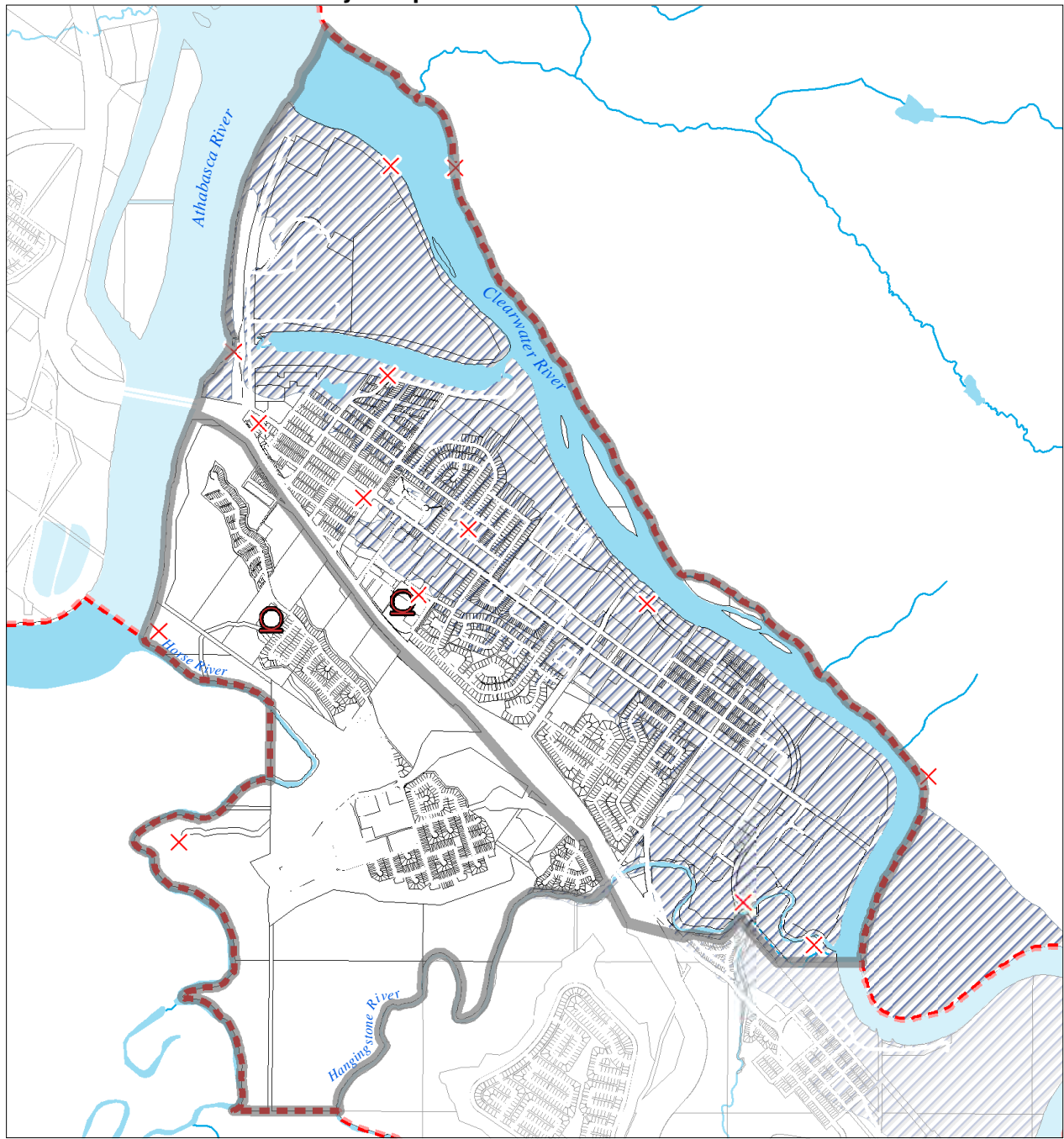
Snowmobile Staging Area

Soccer Field

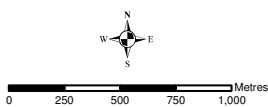
Water Park

Towards 250k
Envision
Wood Buffalo

Fort McMurray - Map D Natural and Manmade Constraints



MAP 11
MAY, 2008



LEGEND

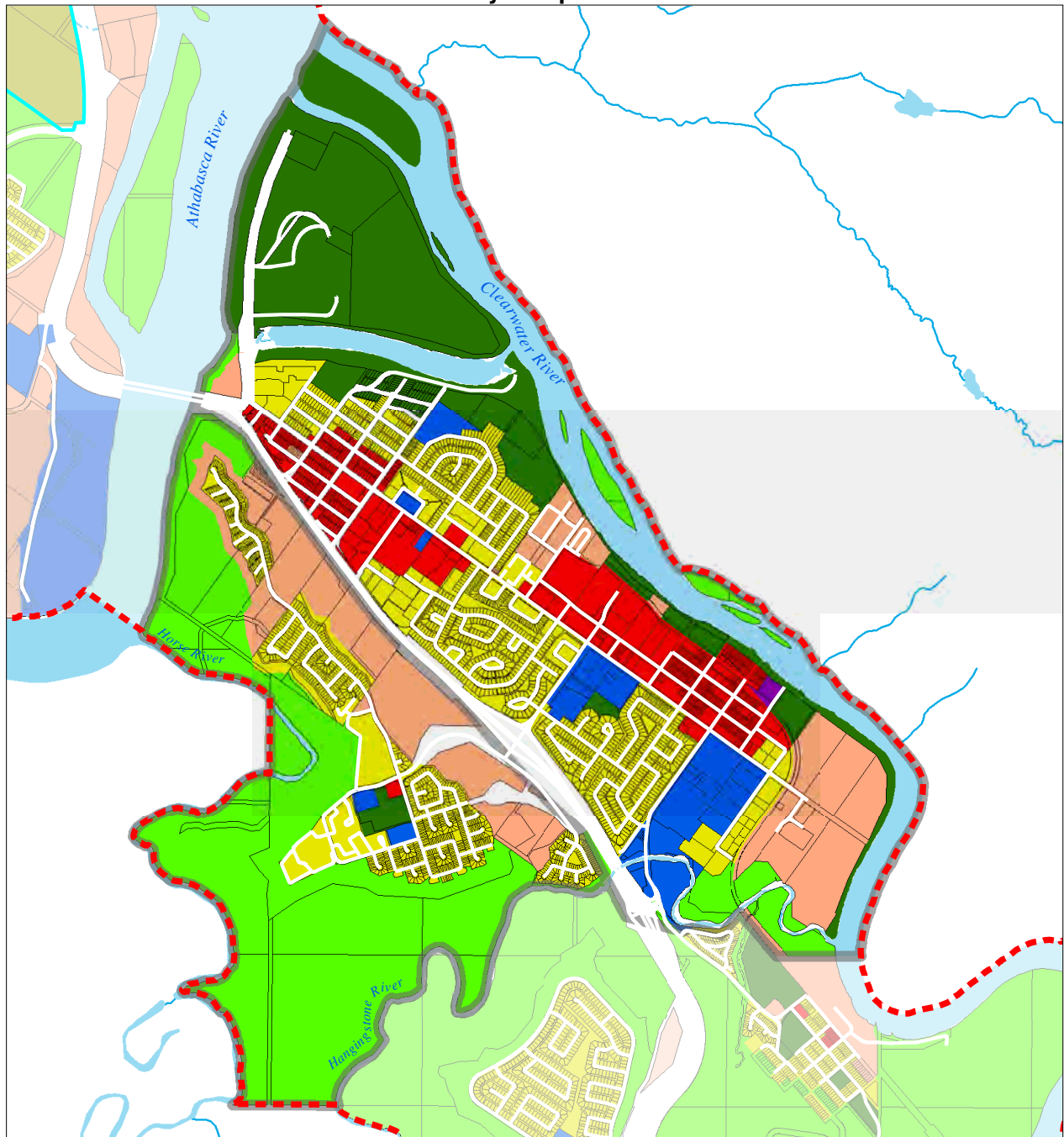
- Urban Service Area Boundary
- Community Boundary
- Rivers/Streams
- Water

Constraints

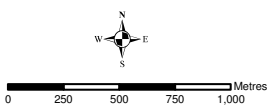
- Cemetery
- Floodplain
- X Historical Site



Fort McMurray - Map D Land Use



MAP 12
MAY, 2008

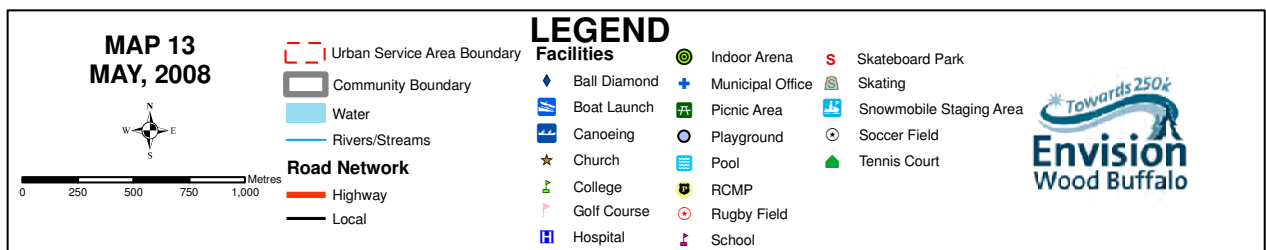
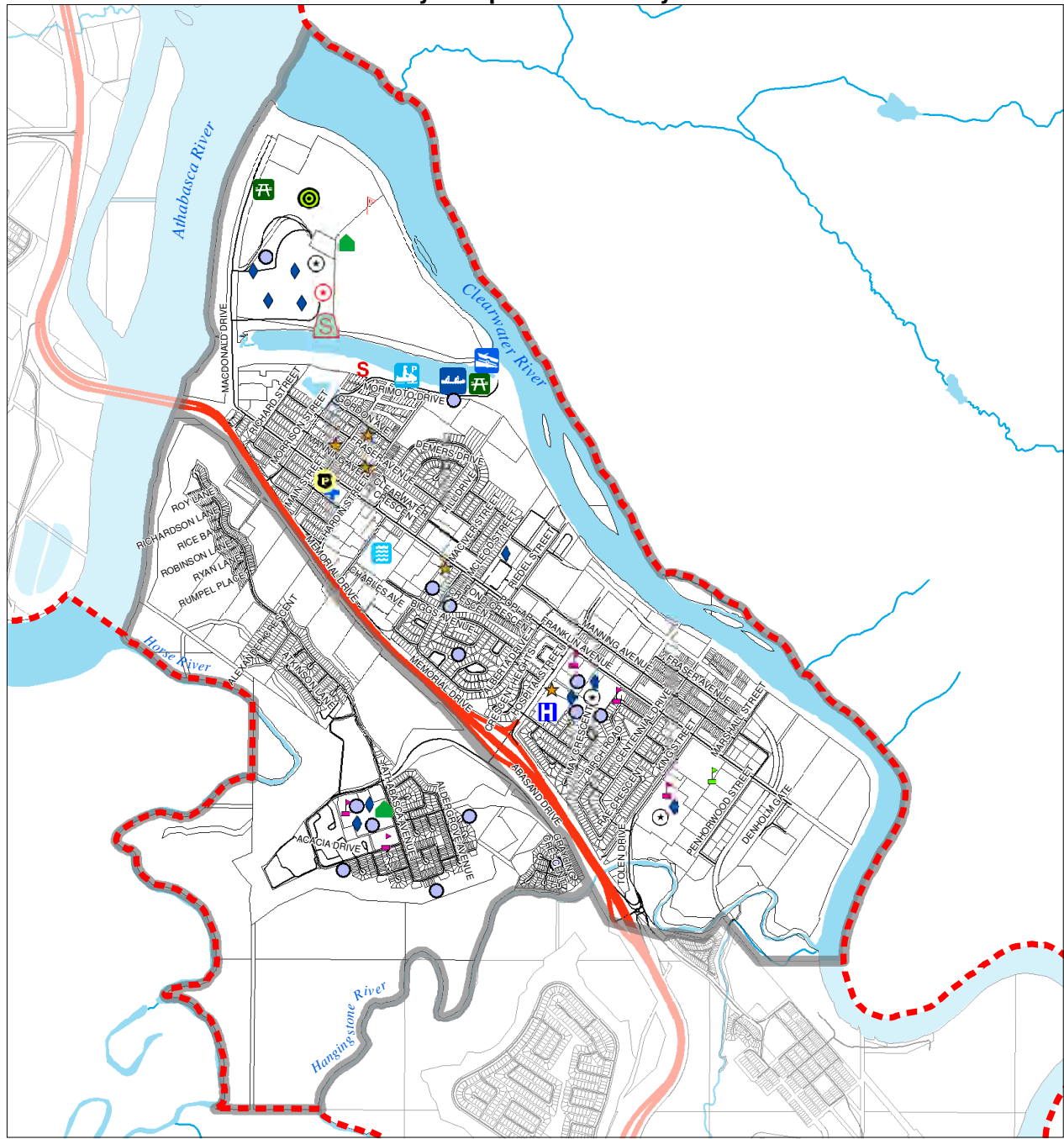


LEGEND

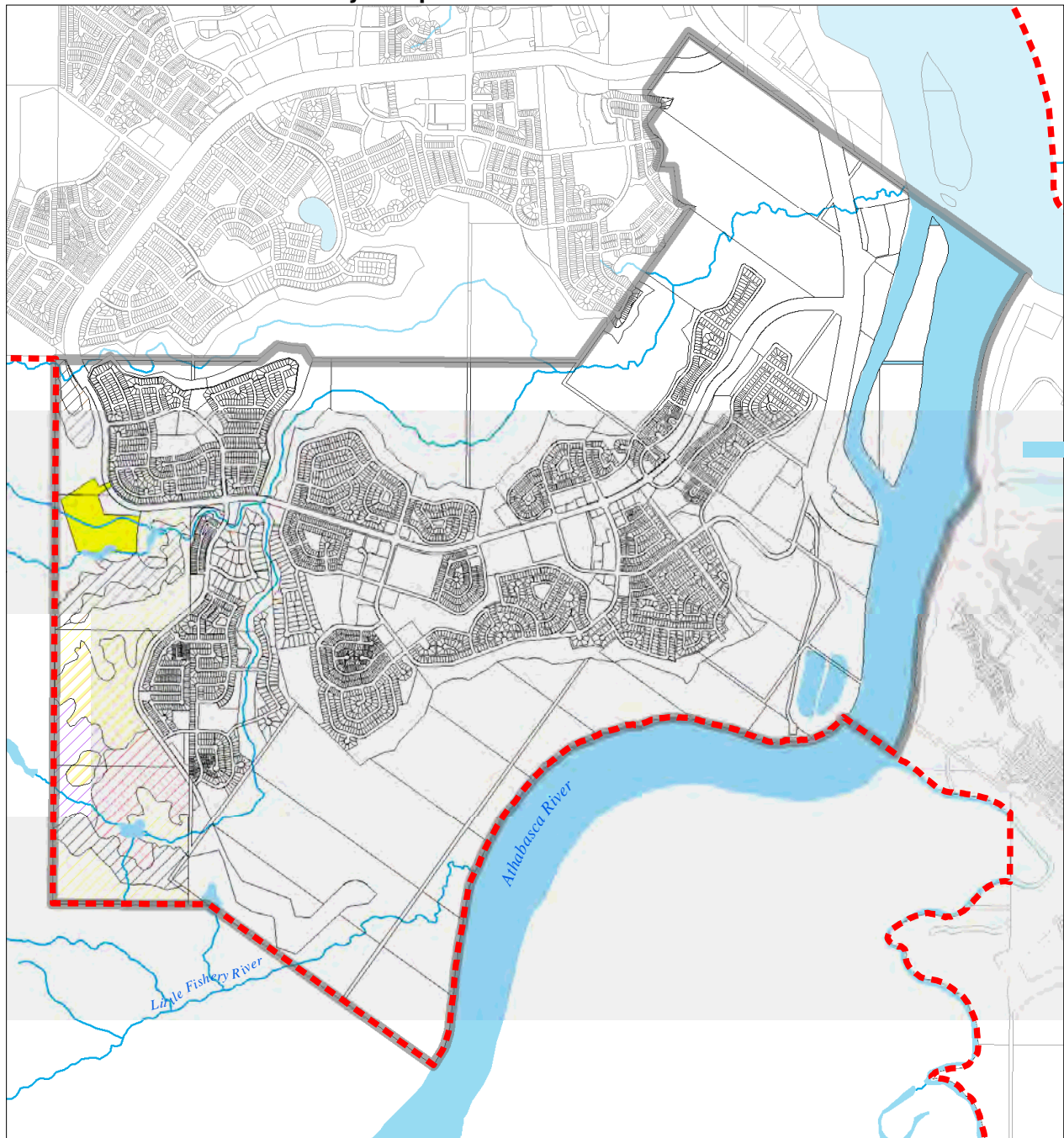
- | | | |
|-----------------------------|--------------------------------|--------------|
| Urban Service Area Boundary | Business/Industrial | Public Space |
| Community Boundary | Commercial | Residential |
| Water | Direct Control | |
| Rivers/Streams | Environmentally Protected Area | |
| | Parks | |

Towards 250k
Envision
Wood Buffalo

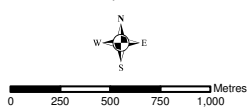
Fort McMurray - Map D Community Context



Fort McMurray - Map E Natural and Manmade Constraints



MAP 14
MAY, 2008



LEGEND

- Urban Service Area Boundary
- Community Boundary
- Water
- Rivers/Streams

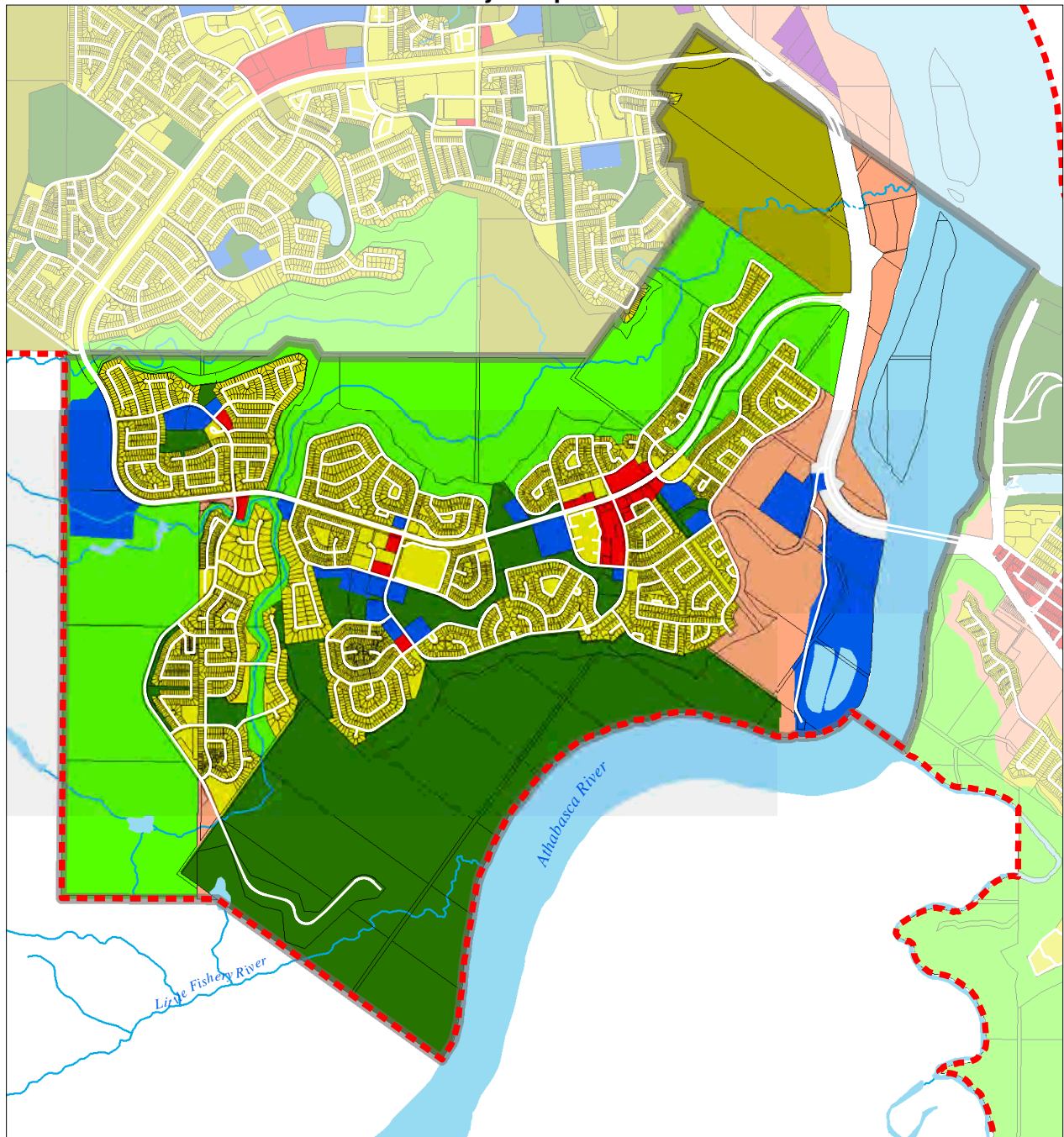
Constraints

- Conifer Dominated Mixed Forest
- Deciduous Dominated Mixed Forest
- Municipal Snow Storage Site

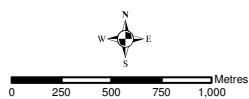
- Riparian Wetland
- Treed Lowland
- Treed Riparian
- Upland Aspen



Fort McMurray - Map E Land Use



MAP 15
MAY, 2008



LEGEND

- - - Urban Service Area Boundary
- Community Boundary
- Water
- Rivers/Streams

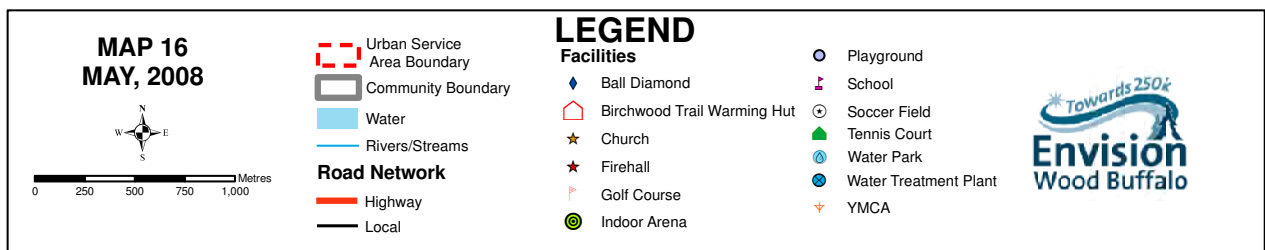
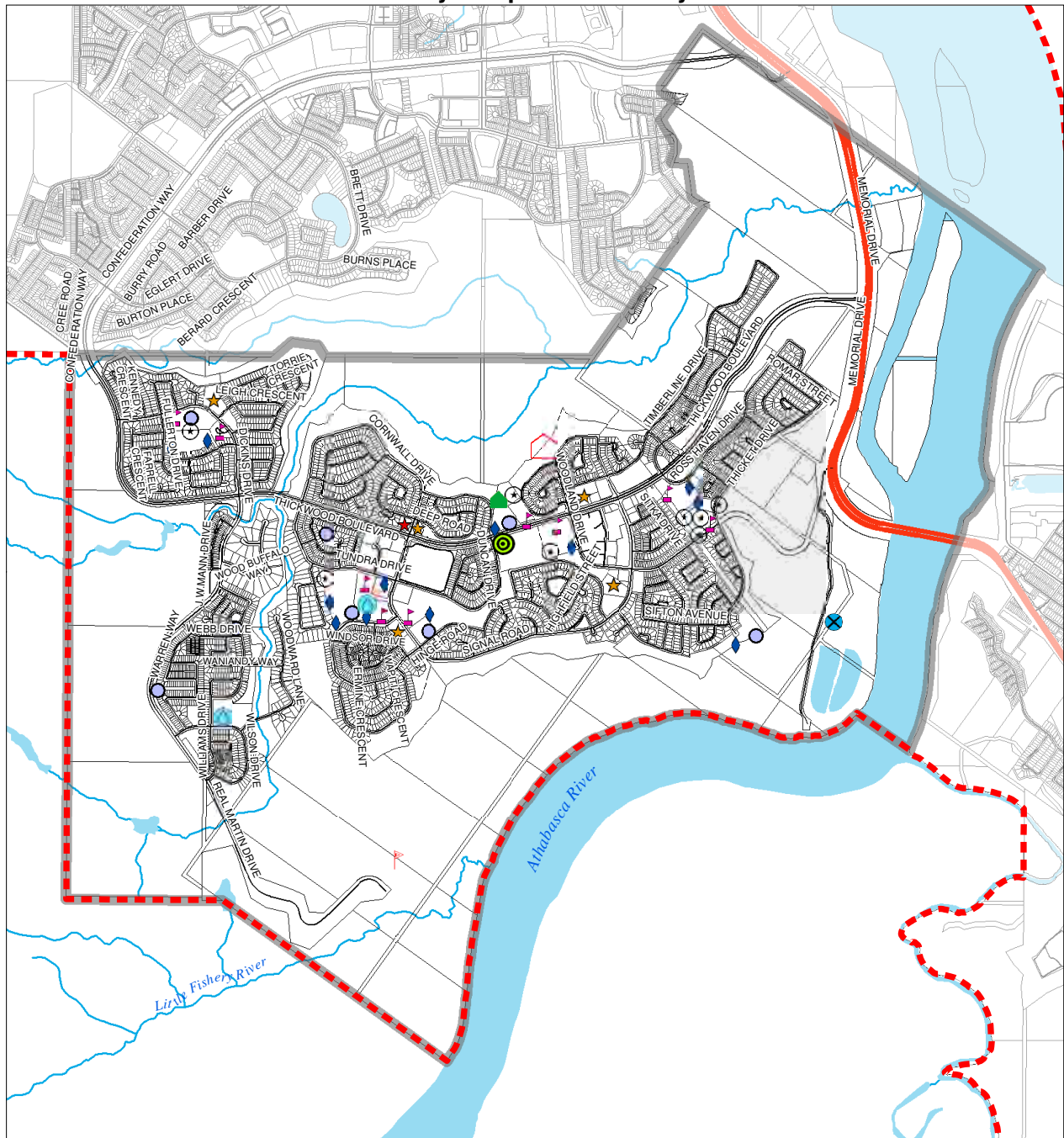
Land Use

- Commercial
- Direct Control
- Environmentally Protected Area
- Parks
- Public Space

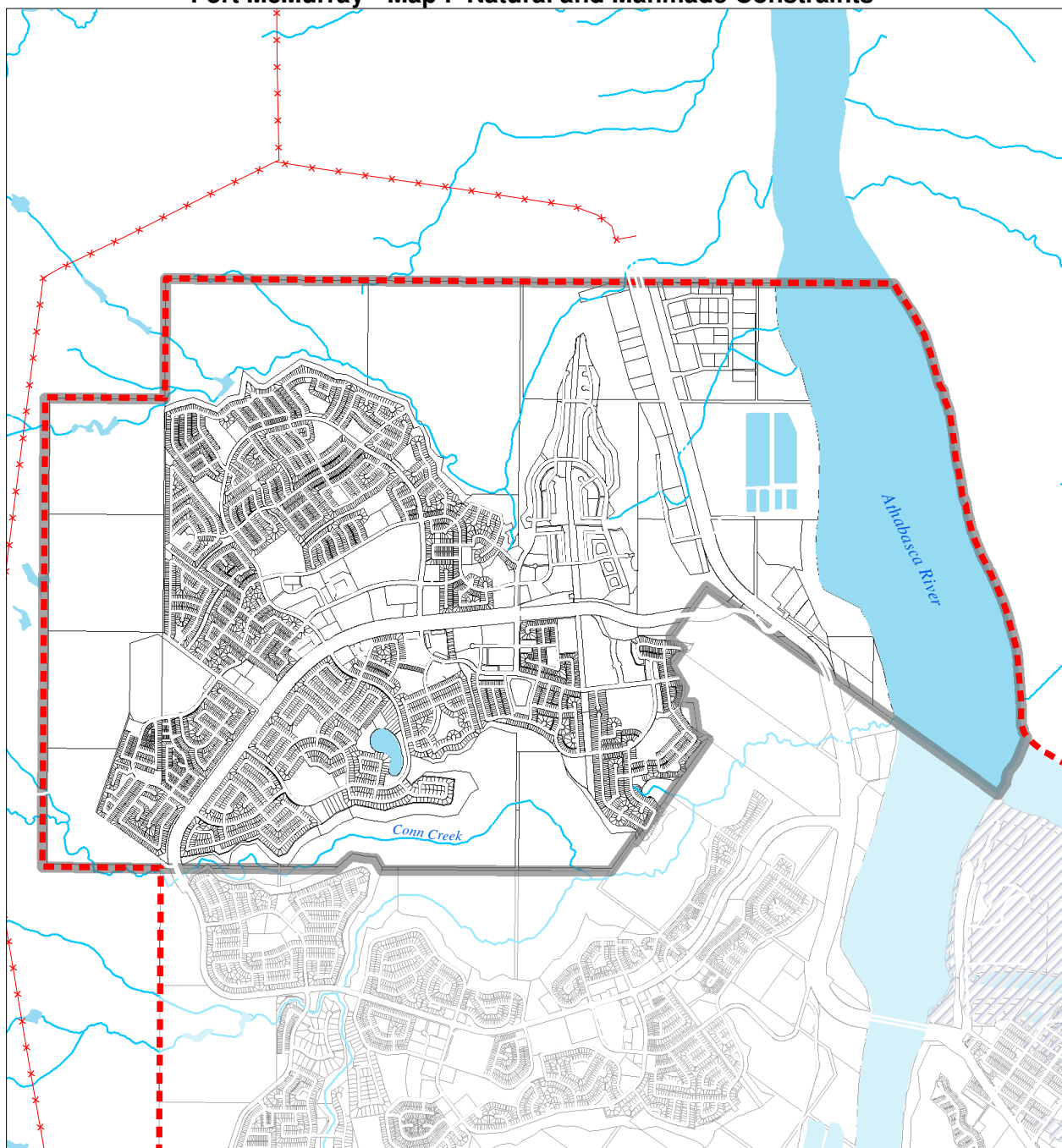
- Residential
- Urban Expansion



Fort McMurray - Map E Community Context



Fort McMurray - Map F Natural and Manmade Constraints



MAP 17
MAY, 2008



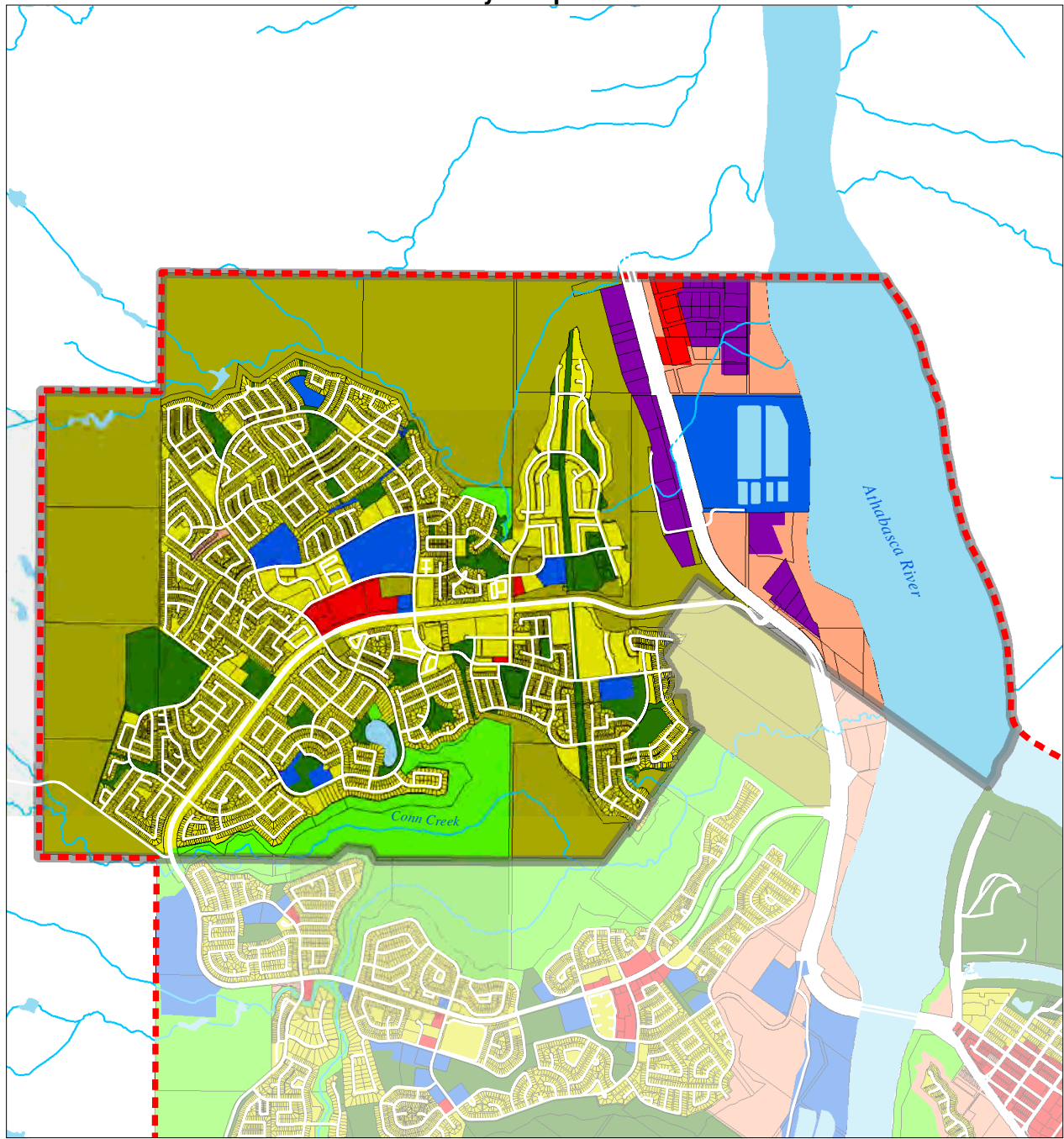
0 250 500 750 1,000 Metres

LEGEND

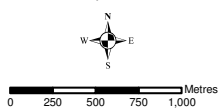
- Urban Service Area Boundary
- Community Boundary
- Water
- Rivers/Streams
- Constraints**
- x x x Powerline



Fort McMurray - Map F Land Use



MAP 18
MAY, 2008



LEGEND

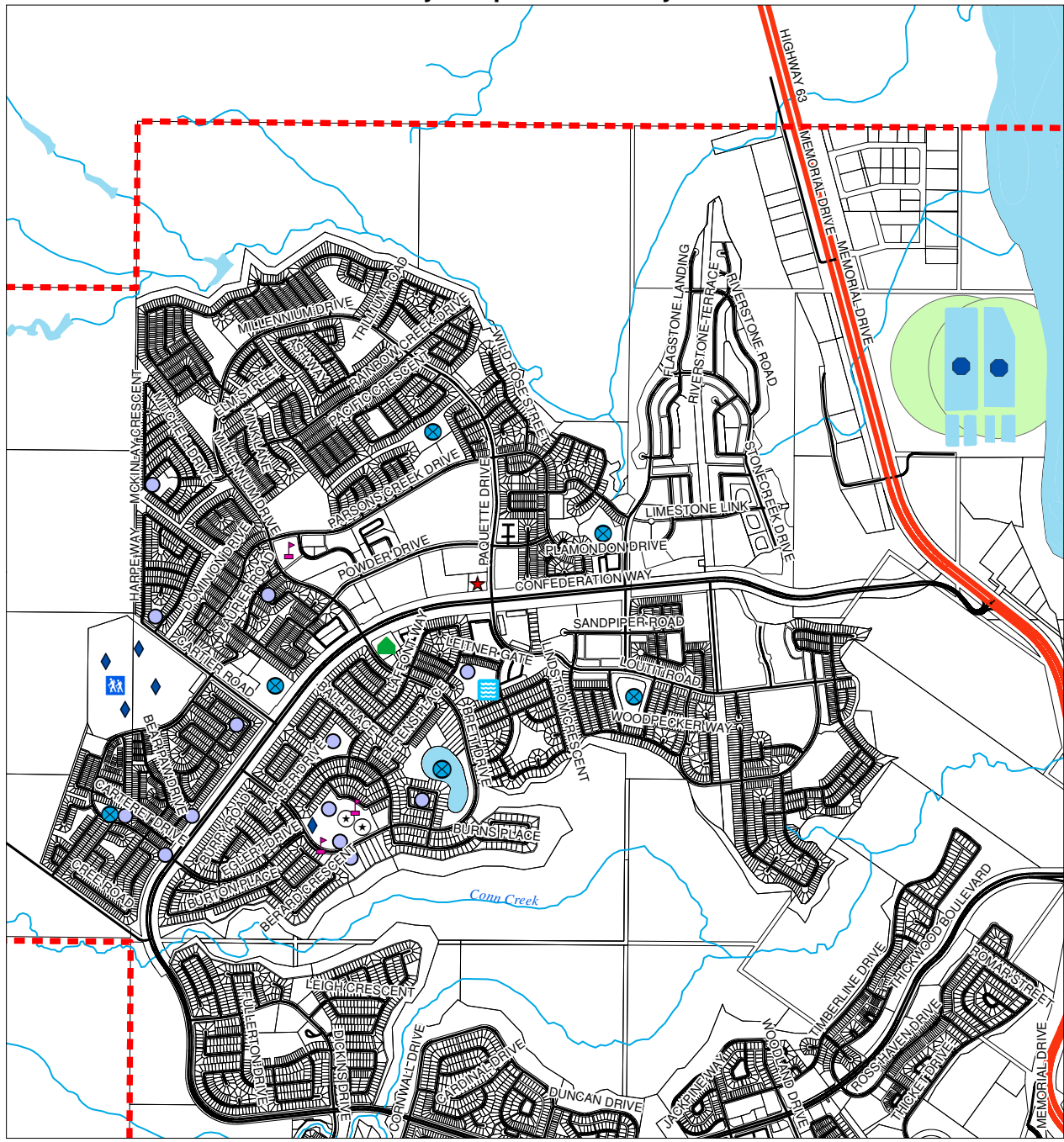
- Urban Service Area Boundary
- Community Boundary
- Water
- Rivers/Streams

Land Use

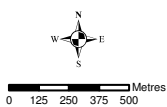
- Business/Industrial
- Commercial
- Direct Control
- Environmentally Protected Area
- Parks
- Public Space
- Residential
- Urban Expansion



Fort McMurray - Map F Community Context



MAP 19
MAY, 2008



LEGEND

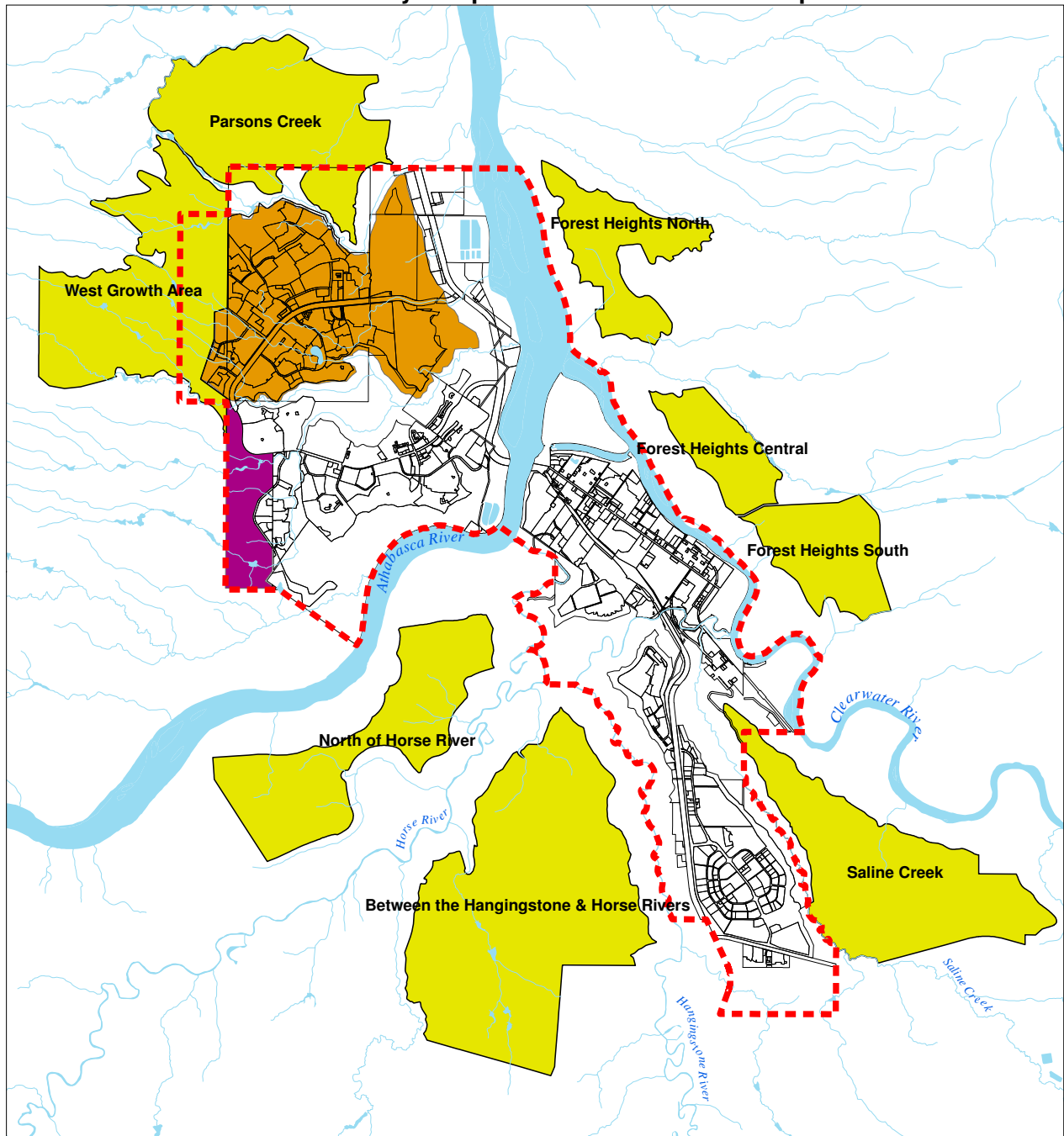
- - - Urban Boundary
- Water
- Rivers/Streams

Facilities

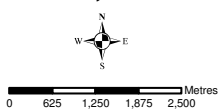
- ◆ Ball Diamond
- ★ Firehall
- Sewage Lagoon
- Sewage Lagoon Buffer
- Playground
- + School
- ⊙ Soccer Field
- Splash Pool
- Stormwater Management Facility
- Tennis Court
- Timberlea Athletic Park

Towards 250k
Envision
Wood Buffalo

Fort McMurray - Map G Potential Future Development



MAP 20
MAY, 2008



LEGEND

- Urban Service Area Boundary
- Fringe Area Developments
- Real Martin West Area Structure Plan Boundary
- Timberlea Area Structure Plan Boundary



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ⁱ Population does not include workers in work camps or the population in First Nations Reserves

ⁱⁱ Hotels/motels, homeless and campground populations are not included as there was no gender data collected. This is applicable to all table and graphs reporting age and gender data within the report.

ⁱⁱⁱ RMWB Census 2006

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- iv Projected labour force assumes that the number of persons employed in each industry sector remains constant over the next 25 years. The projected labour force was determined by multiplying the existing labour force with the projected population of Anzac (4,000) and dividing it by the current population (711)
- v RMWB *Labour Market News* April 2007
- vi Fort McMurray Tourism <http://www.fortmcmurraytourism.com/>
- vii Fort McMurray Visitor's Guide http://www.fortmcmurraytourism.com/index.php?area_id=10
- viii Interplay <http://www.interplay.ca/>
- ix RMWB Census 2006
- x Statistics Canada www.statcan.ca
- xi RMWB Census 2006
- xii RMWB Census 2006
- xiii Based on wages from: <http://www.alis.gov.ab.ca/wageinfo/>
- xiv Investing in Our Future
- xv www.metismatters.com
- xvi RMWB, 2007 http://www.woodbuffalo.ab.ca/residents/getting_around/index.asp?subnav=4
- xvii Northern Lights Health Region Facilities http://www.nlrhs.ca/Hospitals_Facilities/default.aspx
- xviii RWMB, 2007 http://www.woodbuffalo.ab.ca/residents/emergency_services/rcmp.asp?subnav=3
- xix Interview with Kim Howell
- xx FCSS http://www.woodbuffalo.ab.ca/residents/social_support_services/family_service_agency.asp?subnav=7
- xxi The Hub <http://www.thehubfrc.ca/>
- xxii Brownlee LLP. Submission of Intervention of Regional Municipality of Wood Buffalo
- xxiii Government of Alberta. (June, 2007). Work Starts on the Twinning of Highway 63. Available online: <http://www.gov.ab.ca/acn/200706/21694452454AA-FBA9-8341-23787E8B79452945.html>. Accessed on: January 24, 2008.
- xxiv Government of Alberta. (June, 2007). Work Starts on the Twinning of Highway 63. Available online: <http://www.gov.ab.ca/acn/200706/21694452454AA-FBA9-8341-23787E8B79452945.html>. Accessed on: January 24, 2008.
- xxv Source: Anzac Summary 2004-2007
- xxvi Wood Buffalo Business Case 2005 Regional Issues Working Group March 2005
- xxvii Pindog, Seguin, 2007
- xxviii Fort McMurray Public School District, 2006 (<http://www.fmpsd.ab.ca/>)
- xxix Fort McMurray Catholic School District, 2006 (<http://www.fmcscd.ab.ca/>)