

CHAPTER 2 - DATA ANALYSIS

This chapter describes the data used in preparation of the Master Plan. The Concept Plan established three streams of data collection which have been expanded in the Master Plan.

- an Environmental stream examining opportunities and constraints, characteristics and land uses. These are described in Sections 2.1 and 2.2.
- a Resource Management stream which is expanded in Section 2.3 and 2.4 and
- a Vision stream which addresses public issues and preferences and is expanded in Section 2.5.

2.1 DEVELOPMENT INVENTORY

Maps 2 to 6 show the existing development state of the Priority 1 areas.

2.1.1 Land Use in the River Valley

The lands within the river valley (with the exception of Rossdale, Cloverdale, Lavigne and Riverdale communities) have been designated for recreational use. This policy dates to the Todd and Morrell reports prior to 1914. The most recent statement of City policy on river valley land use is contained in the North Saskatchewan River Valley Bylaw #7188, (1985).

Land use districting for the river valley is established through the Land Use Bylaw #5996 (as amended). Several land use districts are relevant to river valley lands. The most common land use district in the river valley is "A-Metropolitan Recreation". The purpose of this district is: "To preserve natural areas and parkland along the river, creeks and ravines and other designated areas for active and passive recreational uses and environmental protection".

Other districts are applied in site specific situations. The "AP Public Parks District" is applied "to establish an area of public land for active and passive recreational uses and landscaped buffers". This district is usually applied to neighbourhood and district level parks, playing fields, schools and community league sites.

The "US Urban Services District" provides a district for "public and privately owned facilities of an institutional or community service nature". This includes community recreation services and cultural exhibits.

The "PU Public Utility District" provides a district for public utility installations, services and facilities", including major and minor impact utility services, protective and emergency services and public parks.

Roadways within the river valley are not districted. Residential areas within the river valley are districted in the appropriate residential categories.

2.1.2 Land Ownership

The City currently owns the majority of lands within the North Saskatchewan River Valley and Ravine system within the developed residential portions of the City. Some exceptions exist where development preceded Environmental Reserve provisions of the Planning Act or where specific policies were adopted (ie. for Central River Valley communities). In rural areas of the valley where subdivision has not occurred the majority of lands are privately owned. Where portions of the valley are privately owned some development restrictions are in place as a result of Bylaw #7188. The City cannot, however, control the actions of private land owners unless their proposals require development approval from the City.

In the long term, lands in the river valley and ravine system will come into municipal ownership at subdivision as Environmental Reserve or possibly as Municipal Reserve. The timing of acquisition through subdivision is dependent on the plans of the individual owners, which in turn depend on market forces and land development economics. The City projects that the greatest development will occur in the West Jasper Place and Riverbend areas, followed by Millwoods (Burnewood) and Castledowns Extension. The Riverbend area gives the greatest potential for municipal ownership of lands along the river south of 23 Avenue to the Outer Ring Road and along Whitemud Creek in the same area. Lands to the northeast of Clareview are anticipated as very long term acquisition through subdivision. The lands in Millwoods/The Meadows along Mill Creek east of 34 Street are expected to develop over the next ten years.

Isolated sites within the presently developed portion of the river valley which are privately owned are identified on Maps 2 through 6.

2.1.3 Cultural Resources

An inventory of historical and prehistoric resource sites in the North Saskatchewan River Valley Ravine System was completed in the 1980 Biophysical Study. The lists of sites located either through archival or field work is too extensive to identify in this Plan and includes known agricultural sites, churches and cemeteries, coal mines, fur trading posts, historic Indian camps, industrial sites, recreational areas, residential areas, steamboat and ferry landings, trails, road, fords, bridges, railroads and prehistoric sites. The conclusions of this inventory are: *"Almost all river terrace areas have high potential to contain both historic and prehistoric sites. The river banks have moderate potential because they were the locations of most early historic mining activity. The top of bank areas were determined to be of high potential, as they could contain both prehistoric and historic sites. In general, there are very few low potential areas where no sites exist."*

The inventory further notes: *"Activities normally associated with parks usage - walking, games and picnicking are compatible with historical resources preservation. However, any modification of the land surface -- natural erosion, trail construction, landscaping, gravel removal, vegetation clearing, road construction, building construction, affects the physical remains of archaeological or historical interest. These same agents can irreparably (sic) damage important contextual data that could be used for interpretative programmes".*

When the Master Plan is submitted to the Province areas requiring Historical Resources Impact Assessment (HRIA) will be identified by Alberta Culture.

2.1.4 Transportation Corridors

The river valley presents a significant impediment to the free movement of traffic through the City of Edmonton. A number of vehicular bridges have been developed along major movement corridors. Within the study area these include: Beverly Bridge (2 spans) and the CNR bridge on the Yellowhead Trail/Highway 16 corridor; the Groat Bridge on the Groat Road/St. Albert Trail corridor and the Quesnell Bridge on the Whitemud Drive corridor. Because of the sensitivity of the river valley system future transportation corridor development is restricted to direct crossings by policies of the River Valley Bylaw #7188. Two additional river crossings are proposed in development of the Outer Ring Road, one south of Terwillegar Park and the other northeast of Hermitage Park. The Outer Ring Road also is proposed to cross Whitemud and Blackmud Creeks south of 11 Avenue.

The existing and proposed river valley parks system is well served by major transportation corridors, providing easy automobile access to major parks areas.

2.1.5 Utility Corridors

For most of Edmonton's past the river valley was viewed as an appropriate and convenient corridor for a variety of utility and municipal infrastructure developments. Most commonly, storm sewer outfalls were designed to lead into ravines or the river. As a result many ravines have been disturbed by storm sewer construction (Mill Creek, Kennedale, McKenzie, Whitemud). Power duct lines, water mains, major power transmission lines, and pipelines commonly cross or follow the river valley. In addition to their construction, these utilities periodically require repair or upgrading, interrupting the restoration process. The undeveloped park areas most seriously affected by utility development are Hermitage, Buena Vista, and Terwillegar.

Among known future utility plans the most serious impact could come from the E.L. Smith to Rosedale Water Intake Project if a river valley route is chosen. A final selection of routes will not be made until 1993.