

1.0 PURPOSE OF THE MANAGEMENT PLAN

It is the intent of the Sheep River Valley Management Plan to provide comprehensive direction for the protection, maintenance and rehabilitation of river valley lands in Okotoks including escarpment hillsides and tributary ravines. The Management Plan focuses on publicly owned natural environments along the river, but also recognizes privately-owned lands, the river itself, and existing developed park space within the river valley.

1.1 *Management Plan Objectives*

The Sheep River Valley Management Plan will achieve the following:

- Provide an overview of the Management Plan's origin and significance;
- Describe the planning and policy framework for the Management Plan and its relationship to other Town policy documents;
- Identify perceived issues, concerns, opportunities and threats to the river valley system in Okotoks;
- Provide an overview of public and stakeholder consultation undertaken in support of the Management Plan and feedback received;
- Provide a series of global and site-specific management objectives based on public and stakeholder feedback, and research by the River Valley Committee;
- Provide guidelines for the preservation, rehabilitation, and recreational development of river valley, escarpment and ravine lands;
- Provide guidelines for heritage and nature appreciation, wildlife management, environmental education, and other activities in the river valley;
- Provide guidelines for urban development within – and immediately adjacent to – the river valley in Okotoks;
- Identify distinct management zones within the river valley in Okotoks, and on the boundaries of the Town;
- Establish management guidelines for each zone within the river valley; and
- Describe further studies and/or analyses that should be undertaken in support of the Management Plan.

1.2 *Inception of the Management Plan*

The Sheep River Valley within Okotoks has experienced significant pressure in recent years from explosive urban growth and increase in public use. River valley areas have become a key attraction for the community, offering a wide variety of active and passive recreational opportunities ranging from pathway usage to camping, fishing, playgrounds and river tubing. Urban development activities on the periphery, and scarce natural environment areas outside of the river valley, also have contributed to public awareness

of the need for protection measures to ensure long-term preservation of this invaluable resource.

At the regular meeting on July 16, 2001 the Council of the Town of Okotoks passed the following motion:

"That the Administration present a Terms of Reference document for Council approval before the end of the year to develop an open spaces management plan along the Sheep River which includes the Sheep River Valley within municipal limits and makes reference to the river as a living entity."

The Terms of Reference document was presented to Council for adoption on January 28, 2002. Wayne Meikle, former Councillor and a planner with Fish Creek Provincial Park, was seconded as the Chair of a Public Advisory Committee charged with preparing the Management Plan. A timeline for convening a citizen's Advisory Committee, undertaking public and stakeholder consultation, supplementary research, Plan preparation, and presentation of a Plan to Council was established through the Terms of Reference. It is the intent of the Management Plan preparation process to have a draft version of the Plan available for public and Council review in early 2003. The draft Plan will be presented in a series of public open house meetings to solicit comment prior to finalizing the Management Plan document.



West well field park and natural area.

1.3 ***Public and Stakeholder Consultation***

Public involvement in the preparation of the Management Plan has been encouraged throughout the entire Plan development process. At the outset, volunteer members of the Advisory Committee were solicited from community groups including the Sheep River Valley Preservation Society; Culture, Parks and Recreation Committee; Healthy Okotoks Coalition; and the Town as a whole. In addition to the seconded Chair, five citizens serve on the Advisory Committee and have brought a range of experiences and interests to the table.

The primary method for receiving feedback from the community is a questionnaire that was formulated by the Advisory Committee and distributed in the June, 2002 utility bill. Questionnaires also were available for pick-up at Town Hall, the Rec Center and Development Services. Committee volunteers and Town staff also distributed some surveys along the pathway system over the course of the summer (May – September, 2002). Approximately 3500 questionnaires were produced and 487 completed responses were returned – a rate of approximately 14% which is considered very good for this type of survey. Survey responses were tabulated in a series of graphs and a selection of written comments also were provided to the Committee members and Council. A summary of the survey results is found in Appendix 1.

Special meetings were set up to promote the plan, including an informal discussion at “Spoiler’s Field” in Sheep River Park on October 20, 2002. The Advisory Committee contacted approximately 20 community groups and organizations and were able to meet directly with 18 of them over the course of four months (September – December, 2002). These groups ranged from service organizations such as Rotary, Lions Club and Kinsmen to the Fish & Game Association, Downtown Okotoks Business Association, and MD of Foothills Environment Committee, among others. Presentations also were made to key Town Boards and Committees including the Library Board, Municipal Planning Commission, Economic Development Committee, Policing Committee, and Culture, Parks & Recreation Committee.

Discussions with Town staff were undertaken to encourage information sharing and receive feedback. Face to face meetings with Development Services, Operations, Protective Services and Open Spaces were held and a wide variety of topics were discussed. The Committee made special note of certain key issues that should be incorporated into the Management Plan.

At the conclusion of the information-gathering period (mid-December, 2002), the Chair and the Administrative Liaison began writing the Management Plan with the intent to bring forward a draft Plan for Council and public review in early 2003. Council, public, stakeholders, and Administration were provided opportunities to comment on the draft Plan prior to finalization and endorsement by Council.

1.4 **Overview of the Plan Area**

The River Valley Management Plan encompasses the river watercourse itself as well as riparian woodland, escarpment hillsides, and tributary ravines within Okotoks. Interface areas on the eastern and western boundaries of the Town (including areas identified for future annexation) also comprised part of the study area. The Plan Area is shown on Map 1.

2.0 **PLANNING AND POLICY FRAMEWORK**

The Sheep River Valley Management Plan is designed as a policy document of the Town of Okotoks, and has been designed to work in concert with existing and future municipal policy documents, primarily including: applicable government Acts and Regulations, the Town's *Municipal Development Plan*, the Okotoks *Land Use Bylaw*, the Town's *Floodplain Policy*, the Parks Bylaw, Okotoks Animal Control Bylaw, the Town's Urban Forest Management Policy, and other statutory planning documents (such as approved Area Structure Plans). Other related documents include the Okotoks-MD of Foothills *Intermunicipal Development Plan*, the *Open Space Master Plan* and local or site-specific development guidelines such as the *Railway Area Analysis and Policy Report*.

3.0 **ISSUES AND CONCERNS**

Due to the pressures of accelerated urban growth and increasingly intensive use of the river valley system within Okotoks, a number of key issues of concern have been identified through the plan preparation process and are listed below:

- Protection of the aquatic habitat for fish and invertebrates;
- Water quality and stormwater management;
- "Appropriate use" for parks, pathways, and natural areas;
- Conflicts between different open space user groups;
- Animal control (wild and domestic);
- Connectivity and extension of pathway system;
- Existing and future pedestrian bridges;
- Vandalism, graffiti and public safety;
- Ownership and management of river valley lands;
- Urban development and redevelopment of declining light industrial lands;
- Aesthetic and architectural guidelines for existing and future river valley development; and
- Determining appropriate management guidelines to encourage or discourage certain activities.

Map 1

The Sheep River Valley within Okotoks has a variety of natural environments ranging from relatively undisturbed escarpment hillsides, ravines and riparian woodland to formally landscaped playfields, manicured parks and utility installations. Although it is the objective of the Town to bring river valley natural environments into the public domain, there are still private landholdings within the Town that may face some development pressure. Elsewhere, urban development encroaching into certain areas of the river valley will introduce new points of disturbance and activity foci requiring special management considerations.

Current development practices in the province of Alberta, and especially the Town of Okotoks, require on-site detention and treatment of stormwater prior to discharge into natural watercourses or through constructed outfalls. Although this improves the water quality entering the Sheep River from newer neighborhoods, there are still several stormwater outfalls discharging directly into the river without any form of pre-treatment. Retrofit measures or alternative treatment methods will be sought for these locations to ensure continued water quality protection and improvement.



Rotary Park winter scene.

4.0 FACILITIES

Major facility developments within the study area include:

- Two developed community recreation areas (Sheep River Park & Riverside Community Park)
- Sports fields (including baseball diamonds, BMX track and soccer pitch)
- Approximately 10km of paved pathways and over 5km of unpaved pathways and informal trails
- Park “Furniture” – including garbage receptacles, benches, picnic tables, etc.
- Children’s Playgrounds
- Parking Lots
- Lion’s Park Campground
- Day Use Facilities
- Kinsmen Park and Community Garden
- Public Buildings – including the wastewater treatment plant, water treatment plant, Lion’s Park campground office, and Library
- Water wells

5.0 GENERAL MANAGEMENT GUIDELINES

General management guidelines provide direction on common issues found throughout the river valley and natural areas. The general guidelines will be applied for all lands subject to the Management Plan.

5.1 ***Environmental Protection, Education & Heritage Preservation***

Environmental protection, education and preservation of the history in the river valley and natural areas was identified as a major objective in this Plan. The opportunity for environmental education programs also was strongly supported by respondents to the Management Plan survey.

5.1.1 *Environmental Protection, Education & Heritage Preservation Objectives*

- a) To carefully manage and protect the Sheep River ecosystem within Town to ensure its long-term viability and integrity.
- b) To ensure wildlife habitat and species within the Town are managed and protected on a sustainable basis.
- c) To manage and protect the natural vegetation of the valley and other natural areas within the Town.

- d) To identify and maintain historically significant sites such as the Lineham sawmill site, etc.
- e) To identify and protect culturally significant features such as archaeological sites, tipi rings, cairns, historical trails, etc.
- f) To identify and protect special areas including native vegetation, geological features, native grasslands, etc.
- g) To ensure the integrity of natural watercourses, springs, seeps, and other waterbodies are maintained.
- h) To enhance understanding, use and enjoyment of the river valley and natural areas.
- i) To provide environmental education opportunities for youth and other user groups in the river valley.
- j) To develop public understanding of environmental education and ecosystem management.
- k) To develop community environmental programs on the river valley and natural areas.



Lineham lumber mill interpretive site.

5.2 ***Vegetation Management Objectives***

The overall guideline for vegetation management is to allow natural processes to occur with a minimum of interference. Vegetation management will be required in facility areas and to address public safety concerns (eg. snags and deadfall). Vegetation management includes maintenance of natural vegetation, fire management, weed control, and tree planting.

5.2.1 *Forest Management Guidelines*

The forest areas mostly occur within the river valley and tributary ravines. This vegetation provides protection for wildlife, erosion control and recreational/aesthetic opportunities for public enjoyment. The management guidelines for forested areas are as follows:

- a) Areas outside of facility zones will be left alone with no specific management actions unless public safety is compromised.
- b) Dead or damaged trees that present a safety hazard to the public may be removed or pruned according to the Town's Urban Forest Management Policy.
- c) Dead trees may be left in facility areas if they provide nesting or feeding sites for birds, or are a significant aesthetic feature.
- d) Tree planting will occur in facility zones only, or other suitable areas identified through the Management Plan. Only appropriate native species will be selected for planting.

5.2.2 *Grassland Management Guidelines*

The majority of escarpments and facility areas are open grassland that have been disturbed by agriculture and/or human activities over the past century. The native grassland in most areas has been replaced by non-native brome grass. Due to the absence of fire and grazing, shrubs have taken over a number of areas that were previously grassland. The management guidelines for grasslands are as follows:

- a) The brome grasslands will not be restored to native grassland due to extreme costs, limited success rate and limited benefit to the river valley system.
- b) Native shrub encroachment is a natural process and will be allowed to continue.
- c) Tree planting will not be allowed in areas of grasslands due to high maintenance costs and desire to maintain grasslands for flora and fauna species that naturally thrive in these environments.

5.2.3 *Fire Management Guidelines*

Fire maintains a healthy ecosystem for most vegetation, but uncontrolled fires pose an unacceptable risk to the public and the urban fabric. The vegetation of natural areas within the Town must be managed to control fire as uncontrolled burns can have catastrophic impact on urban development. The fire management guidelines are as follows:

- a) Natural area fires will be suppressed in all areas of the Town.
- b) Grass cutting by manual or mechanical methods will continue in certain areas to reduce fuels.
- c) Small controlled fires will be permitted, where appropriate, to reduce fuels.
- d) Fire breaks will be installed and/or maintained in public open space areas to act as a safety measure for homeowners and also to provide emergency access for personnel.
- e) A fire break will be maintained by the Town and/or the homeowner in areas where grasslands are the adjacent natural vegetation feature.
- f) Fire breaks will not contain landscaping or improvements of any type.
- g) Planting of ornamental trees and shrubs in maintained fire breaks shall be prohibited.

5.2.4 *Weed Control Guidelines*

There are a number of introduced weeds within the Town, and the associated natural areas, that are subject to control methods. Weed management guidelines are as follows:

- a) Control of noxious and restricted weeds (as defined in the *Weed Control Act*) will remain a priority in accordance with Provincial and Town regulations.
- b) Spraying will be done responsibly with sensitivity to other native flora and fauna.
- c) Chemical controls will not be employed in sensitive areas and alternate methods such as manual or biological control will be encouraged.

5.3 ***Wildlife and Fisheries Management Objectives***

Wildlife and fisheries health and well-being is a paramount concern of the residents of Okotoks, both for viewing and maintaining a healthy ecosystem. Management of wildlife is a cooperative balance between control measures and maintenance of a healthy habitat. This will involve working with other government agencies, private groups, and the public to ensure that wildlife will remain due to sound ecosystem management.



Spring waterfowl migration, Riverside Community Park.

5.3.1 *Wildlife and Fisheries Management Guidelines*

The management guidelines for wildlife and fisheries are as follows:

- a) Beavers should be removed only when their dams and activities (including flooding) are endangering facilities and trees within facility areas. Installing protective wiring on trees should continue in areas where it is required.
- b) Ground squirrels will be controlled only within facility zones. Ground squirrels should be maintained within some grassland areas to ensure a healthy population of raptors and other predators is preserved.
- c) Wildlife movement along the Sheep River is critical to maintaining a healthy local and regional ungulate population. A good corridor must be maintained to allow for wildlife passage through the Town. Appropriate wildlife fencing should be installed at all critical crossings within the valley to protect wildlife movement.
- d) The riverine corridor must be maintained for wildlife movement. All future bridge crossings shall provide suitable measures for wildlife passage.
- e) Harassment of wildlife and birds by loose pets causes undue stress on the wildlife and can lead to death or injury of both wildlife and domestic animals. The area of the river valley and escarpments will be maintained as a leashed area for pets.

- f) Regulations controlling pets off leash will be strictly enforced in all public areas of the river valley and escarpments.
- g) It is proposed that an off-leash area be created on the upper lands within Area 5 as shown on Map 3 (Page 24).
- h) A public awareness program on pet – wildlife interface should be created and implemented.
- i) Partnerships should be developed with other levels of government and other agencies to maintain and improve fisheries habitat within the Sheep River.
- j) Education programs will be developed to address how residents can live with and enjoy wildlife in their backyards and adjacent natural areas.
- k) Animals that pose a public safety hazard should be removed in coordination with other government agencies.
- l) Feral domestic animals (e.g. stray or abandoned pets) will be removed from the river valley and natural areas.

5.4 ***Water Resources Management Objectives***

Water management within Okotoks natural areas will focus on water quality and quantity, while preserving aesthetic value of the waterway. The Town shall examine opportunities to work with other agencies and upstream users to ensure appropriate water quantity/quality standards are maintained.

5.4.1 ***Water Resources Management Guidelines***

- a) The Sheep River must be protected to ensure the highest possible water quality with a healthy riparian ecosystem.
- b) The Town will work with other agencies and conservation partners to maintain and enhance fisheries habitat.
- c) Streambanks will be stabilized or reinforced only to protect bridges, underground utilities, facilities, private dwellings, or public buildings.
- d) Stormwater flowing into the Sheep River should be maintained at the highest possible quality to ensure the watercourse is not receiving excessive urban pollution.
- e) The Town will review its existing stormwater system with the goal to reducing peak flows and improving runoff water quality.
- f) All storm outfalls must be screened and/or appropriately integrated into the natural environment to improve aesthetics.
- g) All construction in Okotoks must adhere to sediment and erosion control standards as approved by the Town.
- h) Motorized vehicles and snowmobiles will not be allowed on, or in, the river system within Okotoks.



Summer activities at Sheep River Park.

5.5 Cultural Resources Management Objectives

The natural areas of Okotoks, especially the river valley, have a long history dating back to prehistoric presence in the area. There are sites that document the history of the river valley from early pioneering times, through agriculture, mining, resource extraction, ranching, and lumbering to modern urbanization of the Town.

5.5.1 Cultural Resources Management Guidelines

- a) Significant cultural, historical and archaeological resources will be monitored and protected within the river valley and natural areas.
- b) Environmental education and interpretive programs should be developed and presented to the public.
- c) Cooperative research efforts with university, college or other appropriate groups should be encouraged and developed.
- d) Signage and other information sources will be developed to explain history, significant features, flora and fauna of the river valley and natural areas.

5.6 ***Transportation and Utility Corridor Management Objectives***

Several major existing and future transportation corridors will cross the river valley and escarpment lands. These corridors shall be developed and/or improved with regard to the ecosystem and aesthetic value of the lands they are crossing.

5.6.1 *Transportation and Utility Corridor Management Guidelines*

- a) Any bridge developments must provide for wildlife movement and to protect the riparian area along the river.
- b) Recreational trail access must be provided through these transportation corridors.
- c) A pathway connection under the existing CP bridge should be upgraded and have a lease to ensure its long-term viability and integrity.
- d) Utility corridors will be aligned and developed such that environmental features are preserved and there is minimal impact to the river valley and natural areas.
- e) All new utility distribution lines shall be placed underground.
- f) All natural areas within the river valley and escarpments that are disturbed by utility installations will be restored to at least original pre-construction condition or better.

5.7 ***Recreational Pathway Management Objectives***

Pathways are the areas that experience the most usage and attract both residents and non-residents into the river valley and other natural areas. Presently there are about 10km of paved pathways and 5km of gravel pathways formally developed. Pathway users have different needs when using the system, but all look for the existing system to provide opportunity for their specific needs. The Town has a good pathway system within each neighborhood and in the river valley itself. However, poor interconnectivity from neighborhoods outside the river valley (primarily from the north) into the river valley pathway system remains a significant issue. There are also areas such as the pathway bridge across the river and areas with narrow trails that lead to user conflicts and congestion. Shared use of trails should be emphasized through a program of trail etiquette and education. The goal is to reduce trail use conflicts as well as environmental impacts through signs and education. To enhance the public requirements and experience on the pathway system there needs to be a two-trail system: one a regional paved system complemented by a second with local gravel or grass-surfaced paths. This informal system allows the users to enjoy nature without the congestion of the regional system.

5.7.1 *Recreational Pathway Management Guidelines*

- a) People will be encouraged to remain on pathways thus reducing impacts on flora and fauna when people venture off-path.



Courtesy of Sean Rebar, Artist

- b) People must keep all pets on a leash at all times when using pathways and the natural open space system within the community.
- c) Rules and regulations must be developed and implemented for the pathways system in Town (e.g. speed limits, signaling with bells, appropriate equipment, no motorized vehicles, etc.).
- d) All regional paved pathways should be plowed in winter to safely accommodate public use.
- e) All regional paved pathways will be accessible for all pathway users, including wheelchairs, etc.
- f) Horses will not be allowed on any pathways within Town except by special permission.
- g) All cyclists, including mountain bikers and other riders, will be encouraged to remain on the formal pathway system and to share the pathways with other users.

5.7.2 Pathway and Trail Maintenance and Upgrading Guidelines

Trail maintenance and upgrading guidelines include the following:



Recreational pathway system at Sheep River Park.

- a) Completion of the paved regional pathway along both sides of the river throughout the length of the river valley within Okotoks.
- b) Paved or hard surface regional pathway connectors between neighborhoods on the north and south sides of the Town shall be provided into the river valley system. Potential connection points are shown on Map 2.
- c) A new pathway bridge replacing the existing bridge will be implemented to allow for all types of user access (including emergency vehicle access).
- d) Bridges shall be developed at the east and west ends of the river valley system when there is sufficient user demand.
- e) When re-paving or repair of existing regional pathways is required, these pathways shall be upgraded to a minimum width of 3m.
- f) Signs with maps and interpretive information, education and proper trail etiquette messages will be provided to encourage appropriate use of the pathway system.
- g) All trails and bridges must be designed to accommodate emergency and maintenance vehicles.
- h) Clear lines of vision must be provided to address existing pathway safety concerns.

Map 2

- i) Existing trails which are not paved will be evaluated as to whether they are required and/or appropriate, and removed if deemed necessary.
- j) A network of interconnected informal trails should be developed in areas that are large enough to accommodate them and where there is an appropriate purpose for the trail (e.g. nature viewing, cross-country skiing, etc.). Unpaved trails and pathways should be designed to loop or branch off from the primary pathway system.
- k) Bike parking shall be provided at key access points and other significant areas in the river valley system.

5.8 ***Municipal Development Management Objectives***

Municipal facility/building development within and around the river valley and natural areas in the Town must be done in a manner that both protects the area and allows for public use. Any Town-sponsored development should appear to be part of the natural area but also must be functional for all users. Within the Town of Okotoks, development is within the river valley and completely surrounds all the natural areas. The public has indicated a willingness to allow limited development to proceed with the provision that natural lands are protected. The following objectives are general for the river valley and natural areas, but more specific requirements are in each Management Zone.

5.8.1 *Escarpment and Natural Area Management Guidelines*

- a) Existing trees and vegetation planted by adjacent residents shall be allowed to stay, with maintenance of the vegetation being the responsibility of the adjacent landowner.
- b) Any new vegetation planted must have the approval of the Town and a written agreement to maintain it.
- c) All structures and improvements encroaching within Town lands (such as sheds, play structures, fences, etc.) must be removed from public property.

5.8.2 *Municipal Development Within the River Valley and Natural Areas Management Guidelines*

- a) All municipal development within the river valley natural areas shall be appropriate for the specific Management Zone that it falls within and must be sensitive to its environment.
- b) Standards will be developed and implemented for municipal buildings, structures and furniture within the river valley and natural areas so that these facilities fit into the area. Among other things, these standards will address appropriate exterior color, landscaping, building style, architectural detailing, etc.
- c) If Public Library expansion proceeds the building should be re-oriented to reflect its entrance point into the river valley. Parking for both the library building and other

river valley users should be developed concurrently with the expansion.

- d) Screening shall be employed for each municipal facility to make it part of the landscape and may include fencing or strategic vegetation plantings.
- e) All municipal facilities shall be constructed with a standard to make them vandal- and graffiti-resistant.
- f) Maintenance access to municipal facilities and buildings within the river valley will be along pathways or narrow roads.
- g) All facility designs must meet urban/forest fire requirements to ensure the protection of the building.
- h) Regional paved pathways will be a minimum of 3m width and be able to accommodate maintenance and emergency equipment.

5.9 *Private Development Next to the River Valley and Natural Areas Management Objectives*

Development presently in Okotoks along the river valley consists of everything from open pasture land to industrial facilities. Development is presently governed by the Okotoks Flood Plain Policy which restricts new growth in certain areas, and a number of different land use designations which range from light industrial to residential. The following are objectives for development next to the river valley.

5.9.1 *Private Development Next to the River Valley and Natural Areas Management Guidelines*

- a) As the Sheep River floodway line has evolved over time, the Town will encourage regular review and update of the floodway / floodfringe delineation by provincial agencies to ensure the most up-to-date information is available for decision-making.
- b) The floodway / flood fringe line will be confirmed with relevant provincial authorities in each location along the river valley subject to development.
- c) Private development in the floodway will be prohibited and the Town shall either actively pursue purchasing privately-held floodway lands or have agreements in place (such as conservation easements) to keep this land natural.
- d) Industrial facilities shall be discouraged immediately adjacent to the river valley.
- e) Land use along the river valley should be either residential, commercial or public service or a combination of these.
- f) Existing industrial users should be allowed to remain but should be encouraged to install screening fences or vegetation plantings to screen off storage areas and work yards, etc.
- g) Existing industrial users should be encouraged to relocate to more appropriate locations over time.



Okotoks Public Library and Rotary Park.

- h) New development along the valley and natural areas should be screened or buffered from the natural areas by vegetation.
- i) Drainage that is presently occurring from adjoining land next to natural areas must continue to allow for vegetation to grow. Subdivisions and residential lots should be graded to maintain water flow into natural areas.
- j) Multi-level buildings will be discouraged along river valley lands so as to not affect sunlight and views from the natural area.
- k) Commercial and public buildings next to, and within, river valley natural areas will have adequate bike parking.
- l) Public parking will be included in any future development plans for the river valley.
- m) Public access to the river valley will be maintained with any development.
- n) Areas within the river valley experiencing more intensive development include the campgrounds outside the eastern town limits and the area of houses south of South Railway Street (Riverside neighborhood). The campgrounds have had a significant adverse impact on the river valley system, and if these lands are annexed into the Town in the future these lands should be redeveloped to allow for both campground use and protection of sensitive natural areas.

- o) The Riverside community south of the railway line (South Railway Street) should have its own redevelopment plan to reflect the unique characteristics of the area. This would include new environmental standards such as overland drainage, no curbs or gutters, narrow streets, etc. This plan should be done with the residents and the Town Administration to both improve and showcase a special area in Okotoks.
- p) A Standing Policy Committee ("River Valley Committee") that deals directly with any development issues that affect the river valley and natural areas should be established to make its recommendations to the various approving authorities.

5.10 River Valley Land Expansion Management Objectives

To protect some of the natural areas in the Town and river valley, land must be acquired by the Town. This land could be purchased, placed under a conservation easement, or received as a bequeathal or donation.

5.10.1 River Valley Land Expansion Management Guidelines

- a) The River Valley Committee shall identify all the land required for natural open space at build-out so as to ensure future planning can occur with all stakeholders and interested parties knowing the Town's requirements.
- b) Escarpment lands that are privately-owned and in a natural state should be a high priority for acquisition.
- c) Land that is acquired for natural parkland either in the river valley or elsewhere must have existing natural vegetation and not need to be reclaimed at high cost.
- d) A reserve fund to purchase river valley land should be developed by having cash- in-lieu of Municipal Reserve taken in areas of the community where green space is not required (eg. Industrial park) and/or through other Municipal initiatives.

6.0 SECURITY AND POLICING

Due to its isolated location and attraction, the river valley has been a place where vandalism and uncontrolled deleterious activities have taken place. Enforcement of regulations should protect the public using the park system and also the flora and fauna of the river valley.

6.1 Security and Policing Management Guidelines

The management objectives are as follows:

- a) Police/Bylaw will patrol the river valley on a daily basis.
- b) Emphasis will be placed on personal public contact when on patrol.

- c) Equipment such as bicycles, etc. will be supplied to enforcement staff for patrolling the valley.
- d) All facilities/furniture must be vandal-proof with a view towards crime prevention through environmental design (ie. sightlines, exposure, lighting, etc.).
- e) Regulations shall be updated for pathway use, hours of use, etiquette, prohibiting use of motorized vehicles, etc.
- f) All vandalism will be repaired or removed immediately to discourage further damage (e.g. party sites, spray painting, tree damage, etc.)
- g) A Park Watch program shall be developed and implemented immediately. This program shall encourage users and neighbors to report incidents directly to the Town.

7.0 VOLUNTEERS AND PARTNERSHIPS

Volunteer participation in our natural areas in the river valley is well established in Okotoks. Volunteer stewardship will be encouraged along with the participation of local businesses and other community groups.

7.1 *Volunteers and Partnerships Management Guidelines*

The management guidelines are as follows:

- a) The Town shall actively encourage volunteer activities and promote partnerships through identified worthy projects.
- b) A volunteer strategy must be prepared to determine activities, develop a contact list, and set guidelines for agreements and recognition.
- c) Written agreements will be done between volunteers and the Town to establish standards (eg. tree planting, etc.).
- d) Partnerships will continue to be encouraged with the private sector.
- e) Partnerships also will be developed with universities, colleges and other research groups to undertake special projects such as developing flora and fauna checklists, etc.
- f) Formal agreements shall be drawn up between groups looking after public land in the river valley.

8.0 REGIONAL COORDINATION

To minimize negative impacts on the river valley lands and the Sheep River itself the Town must work with its neighbors and surrounding landowners.

8.1 *Regional Coordination Management Guidelines*

The management guidelines are as follows:

- a) The Town shall work with the MD of Foothills to ensure that the Sheep River corridor is maintained for wildlife and public access.
- b) The Town shall work with upstream users and landowners to ensure that the Sheep River water is of the highest possible quality.
- c) The Town shall maintain good working relationships with other partners both within and outside of Okotoks to properly manage the river valley and natural areas.

9.0 **DETAILED MANAGEMENT ZONE GUIDELINES**

The Town has been partitioned into six management zones with detailed guidelines as set out below (Map 3). The following Management Zone descriptions have been applied to lands within the study area inside the Town limits.

9.1 *Preservation Zone*

Preservation zones encompass lands or features that require special protection because of unique landscapes, rare or endangered species, or because they are particularly sensitive and fragile areas. This area provides the highest degree of protection to preserve the features within the Preservation Zone. Lands shall be managed to ensure that natural processes take place unimpeded and not altered by human activity. Use shall be controlled and in some cases will be restricted. Visitor activity shall be oriented to appreciation of the features being protected. No vegetation planting shall be allowed and weed control shall be limited to manual or biological controls (ie. no spraying). Beaver and wildlife control will be permitted where natural features are being altered or where other natural processes are adversely impacted. Development, if any, shall be limited to informal trails, signs or viewing platforms. Scientific research shall be permitted and encouraged if it does not adversely impact the feature being protected. No bridges should be extended to islands identified as Preservation Zone.

9.2 *Natural Parkland Zone*

Natural parkland zone is a natural landscape that provides opportunities for passive recreation and cultural activities. This area promotes passive recreation opportunities such as walking, cycling, nature viewing, birdwatching, etc. while bringing the public into close contact with nature. Development within these areas shall be limited to trails, pathways, signs, viewing platforms and/or furniture with no major facilities contemplated.

Map 3

9.3 *Future Parkland Zone*

This area will be managed as natural parkland at such time as it falls under Town ownership.

9.4 *Town Utility Area Zone*

These zones include the facilities that the Town requires for the operation of the municipal utility systems, roadways and infrastructure. As these facilities are part of the aesthetics of the river valley, architecture and landscaping standards shall be employed to fit these facilities appropriately within the river valley. The existing facilities and buildings shall have plans developed to retrofit them into the aesthetics of the valley. Access to Town utility areas shall be along established recreational pathways or narrow roads.

9.5 *Future Transportation Corridor*

Please refer to section on Transportation and Utility Corridors.

9.6 *Facility Area Zone*

Facility areas provide a range of intensive recreational opportunities. These include campgrounds, playfields, playgrounds, parking lots, washrooms, and other outdoor recreation facilities. The greatest intensity and highest level of visitor use will occur in these areas. These areas also serve as entry points into the natural parkland area with trail signs, pathway junctions, parking areas, and direct access to the river itself.

9.7 *Reclamation Area Zone*

These areas will revert to either Natural Parkland or Facility Areas upon completion of the reclamation activities.

10.0 **TOWN MANAGEMENT ZONES BY AREA**

10.1 ***Area 1***

This is a predominately forested area in the river valley stretching from the Northridge/ Southridge Drive road bridges westward to the Town limits. There is limited disturbance in much of this area, excepting localized impacts in the Town's water wellfield and other isolated locations.

10.1.1 *Area 1 Preservation Zone*

The Preservation Zones in this management area consist of a steeply-sloping hillside supporting a white spruce stand with other uncommon vegetation, and a river island. This area is somewhat isolated at present and appears to have been largely untouched

Map 4

by human activities. For these reasons there is potential for rare or unique flora and fauna in this area. The intent is to sustain natural processes with minimal human disturbance. Detailed management guidelines are as follows:

- a) Access to this area will be controlled.
- b) No trails will built in this area.
- c) Tree planting or vegetation management activities will be prohibited.
- d) Further research studies in these areas to determine the presence of rare or unusual flora/fauna shall be encouraged

10.1.2 *Area 1 Natural Parkland Zone*

The management intent is to provide passive recreational opportunities primarily through the pathway and trail system. The management guidelines are as follows:

- a) Trail expansion or connections as identified on the Trail Map (Map 3) shall be permitted and encouraged.
- b) Major facility development will not be permitted.
- c) A pathway bridge shall be installed at an appropriate location at the west end of Town when warranted by user demand and the availability of pathway connections on the north side of the river.
- d) Vegetation planting shall be discouraged.
- e) Furniture will be installed at appropriate locations.
- f) Signs and other interpretive information will be installed at appropriate locations.

10.1.3 *Area 1 Town Utility Zone*

The management intent is to provide and maintain wellfields for the Town's water system. The management guidelines are as follows:

- (a) Trails shall be permitted and joint recreational pathway/access road systems shall be encouraged.
- (b) Appropriate native vegetation planting will be permitted only in disturbed areas.

10.1.4 *Area 1 Future Municipal Lands (Annexation Areas)*

Any natural environments annexed into the Town in the future will be placed into the appropriate management category based on the Management Plan criteria.



River pathway system near Hunter's Glen neighborhood.

10.2 **Area 2**

The subject area lies between the roadway bridge on Northridge Drive and the pedestrian bridge by the library. The area on the south side of the river has been largely disturbed and vegetation has been manicured for a number of years. There are a number of intensively developed recreational facilities in this area.

10.2.1 *Area 2 Natural Parkland Zone*

The management intent is to provide passive recreational opportunities primarily through the pathway and trail system. The management guidelines are as follows:

- a) Appropriate trail expansion and/or connections as identified on the Trail Map (Map 3) shall be permitted and encouraged.
- b) Major facility development will not be permitted.
- c) Vegetation planting will not be permitted.
- d) Furniture will be installed at appropriate locations.
- e) Signs and other interpretive information will be installed at appropriate locations.

Map 5

10.2.2 *Area 2 Facility Zone*

This is the most developed area in the river valley within Okotoks and includes campgrounds, day use areas, playfield, playgrounds, parking lots and access points. The management intent of this area is to provide opportunities for camping, day use and other intensive recreational opportunities. The management guidelines are as follows:

- a) Intensive landscape maintenance shall be provided to support areas suitable for recreational activities.
- b) The campground shall continue to operate in its present location but expansion will be limited to walk-in tenting sites only.
- c) A review of the Lions Park campground operation should be conducted periodically to ensure it is an appropriate use of public land, as it is expected the demand for more river valley day use areas will increase as Okotoks grows.
- d) Improvements may be done to existing facilities if demand warrants.
- e) The pathway bridge will be replaced with a bridge of suitable dimensions that is accessible by all user groups.
- f) Disturbed sites such as old trails, campsites, former roads, etc. will be reclaimed.
- g) Areas between the campground and the water plant will be cleaned of debris, dumped materials, compost and rip-rap materials; additionally, ongoing mowing activities should be curtailed.
- h) Parking lot expansion will not be permitted in this area but shall be part of any future development adjacent to this area.
- i) The Spoilers Field may continue to be used and maintained in its present location; however, the only improvements permitted would be the expansion of the field to meet appropriate softball field dimensions and requirements.
- j) Ethel Tucker Community Park will continue to be used and maintained in its present location with no improvements permitted except for a pathway and replacement of existing facilities as required.

10.2.3 *Area 2 Town Utility Zone*

The management intent is to provide and maintain wellfields, reservoir and water treatment plant for the Town's water system. The management guidelines are as follows:

- a) The water treatment plant will be painted in earth tone colors to blend in with its environment and to discourage graffiti.
- b) Screening will be placed around the treatment plant through either vegetation plantings or appropriate fencing.

- c) All yard lights on the treatment plant shall be shielded in accordance with the Land Use Bylaw.
- d) Re-landscaping around manholes and wellheads to improve aesthetics will be done.

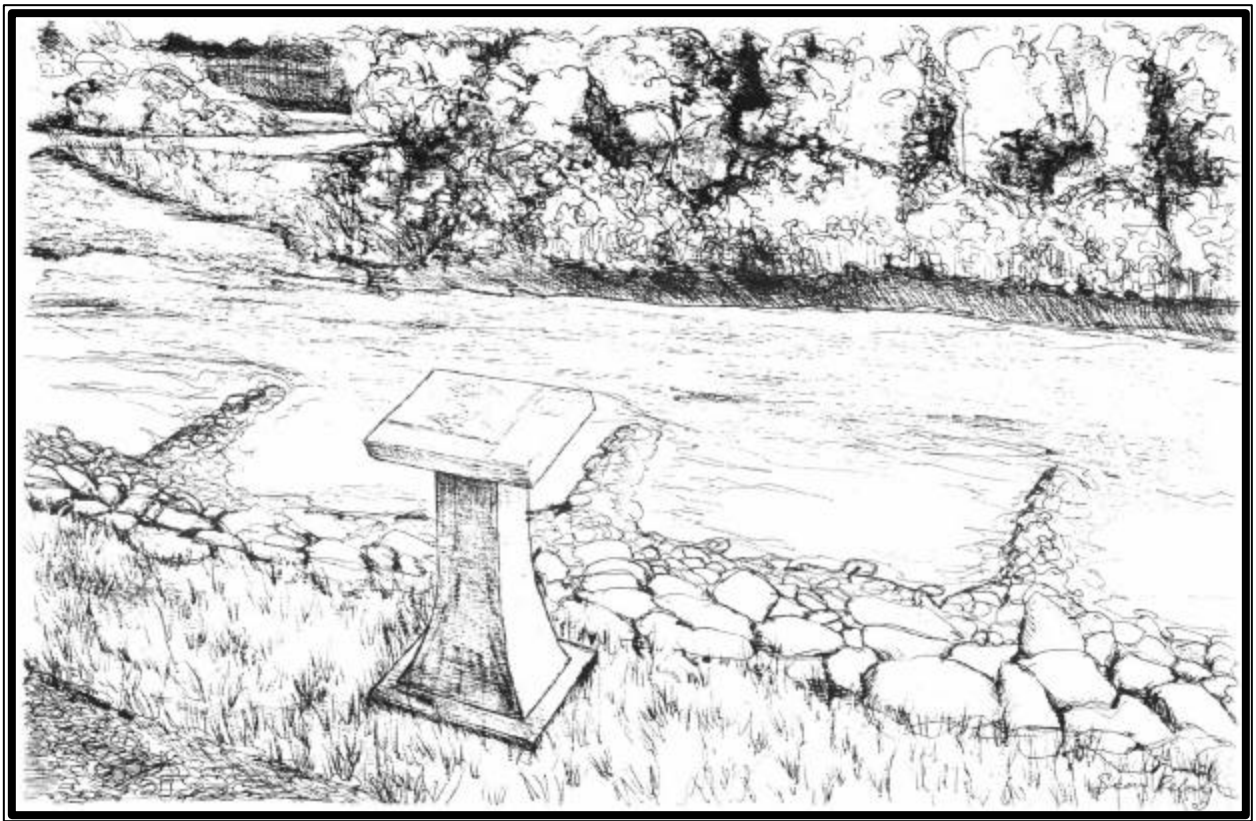
10.3 **Area 3**

This area lies on both sides of the river between the pedestrian bridge and the CP Rail bridge south of the Town shops. This area is a mixture of trees, shrubs and some open grassland.

10.3.1 *Area 3 Preservation Zone*

The preservation zone in this area is a river island recently cut off from the mainland due to channel migration. The intent is to sustain natural processes on the island with minimal human disturbance. Detailed management guidelines for this zone are as follows:

- a) Access to this area will be controlled.
- b) Regional trail building will not be permitted in this area, but small local trails could be built.



Courtesy of Sean Rebar, Artist

Map 6

- c) Tree planting or vegetation management will be permitted only to reclaim disturbed areas.
- d) Pedestrian bridges will not be extended to the island.

10.3.2 *Area 3 Natural Parkland Zone*

The management intent is to provide passive recreational opportunities primarily through the pathway and trail system. The management guidelines are as follows:

- a) Appropriate trail expansion and/or connections as identified on the Trail Map (Map 3) shall be permitted and encouraged.
- b) Major facility development will not be permitted.
- c) Vegetation planting will be permitted only in disturbed areas.
- d) Furniture will be installed at appropriate locations.
- e) Signs and other interpretive information will be installed at appropriate locations.
- f) A pathway connection under the rail bridge shall be installed.

10.3.3 *Area 3 Reclamation Zone*

This area is a former gravel pit that will be reclaimed back to natural parkland status.

10.4 **Area 4**

This area lies between the CP Rail bridge and the ultimate eastern Town limits. The area comprises primarily grassland, riverine woodland and disturbed areas.

10.4.1 *Area 4 Natural Parkland Zone*

The management intent is to provide passive recreational opportunities primarily through the pathway and trail system. The management guidelines are as follows:

- a) Appropriate trail expansion and/or connections as identified on the Trail Map (Map 3) shall be permitted and encouraged.
- b) Major facility development will not be permitted.
- c) Vegetation planting will be permitted only in disturbed areas.
- d) Furniture will be installed at appropriate locations.
- e) Signs and other interpretive information will be installed at appropriate locations.
- f) A pathway connection under the rail bridge will be installed.

Map 7

10.4.2 *Area 4 Facility Zone*

This is the among the most developed recreational area in the river valley and includes day use areas, playfields, playgrounds, BMX track, parking lots and access points. The management intent of this area is to provide opportunities for day use and other intensive recreational opportunities. The management guidelines are as follows:

- a) Intensive landscape maintenance shall be provided to support areas suitable for recreational activities.
- b) Improvements may be done to existing facilities if demand warrants.
- c) A pathway bridge across the river shall be installed when demand warrants and suitable pathway connections are extended on the south side of the river.
- d) Disturbed sites such as old trails, campsites, off-road vehicle damage, former roads, etc. will be reclaimed.
- e) Parking lot expansion shall be discouraged.
- f) The baseball diamond may continue in its present location, however any future development or improvement in this area should be reviewed by the River Valley Committee before it proceeds.
- g) The BMX track will not be relocated within this area when 32nd Street is built.

10.4.3 *Area 4 Town Utility Zone*

The management intent is to supply wastewater treatment and discharge, and materials recycling for the Town. The management objectives are as follows:

- a) Screening will be placed around the wastewater treatment plant through either vegetation plantings or appropriate fencing.
- b) A future emergency boat launch will be installed adjacent to the rail bridge.
- c) The wastewater outfall will be screened through planting or other means.
- d) All yard lights shall be shielded in accordance with the Land Use Bylaw.

10.4.4 *Area 4 Future Municipal Lands (Annexation Areas)*

These areas will fall under Facility Zone or Natural Parkland Zone at such time as they become part of the Town.

10.5 **Area 5**

This area consists of the former Okotoks Gas Plant site, escarpment and ravine, and a tributary ravine leading to the Air Ranch wildlife preserve.

Map 8

10.5.1 *Area 5 Natural Parkland Zone*

The management intent is to provide passive recreational opportunities primarily through the pathway and trail system. The management guidelines are as follows:

- a) Appropriate trail expansion and/or connections as identified on the Trail Map (Map 3) shall be permitted and encouraged.
- b) Major facility development will not be permitted.
- c) Vegetation planting will not be permitted.
- d) Furniture will be installed at appropriate locations.
- e) Signs and other interpretive information will be installed at appropriate locations.
- f) Viewing platforms may be installed.

10.5.2 *Area 5 Reclamation Zone*

This area will be converted to a Facility Zone upon completion of reclamation activities. The management guidelines are as follows:

- a) A fenced area for off-leash activities should be developed.
- b) Furniture will be installed at appropriate locations.
- c) Signs and other interpretive information will be installed at appropriate locations .
- d) A parking lot to serve this area will be developed on-site.
- e) Certain facilities, including activities that do not lead to ground disturbance, may be permitted (e.g. BMX track, etc.).
- f) Overplanting of native grasses and shrubs to increase vegetation diversity may be considered in appropriate areas and where not precluded by ground contamination.

10.6 **Area 6**

This area consists of the escarpments and ravine lands on the north side of the river from the west end of Town to the 32nd Street alignment. The vegetation is primarily grassland with some shrubs and isolated pockets of trees.

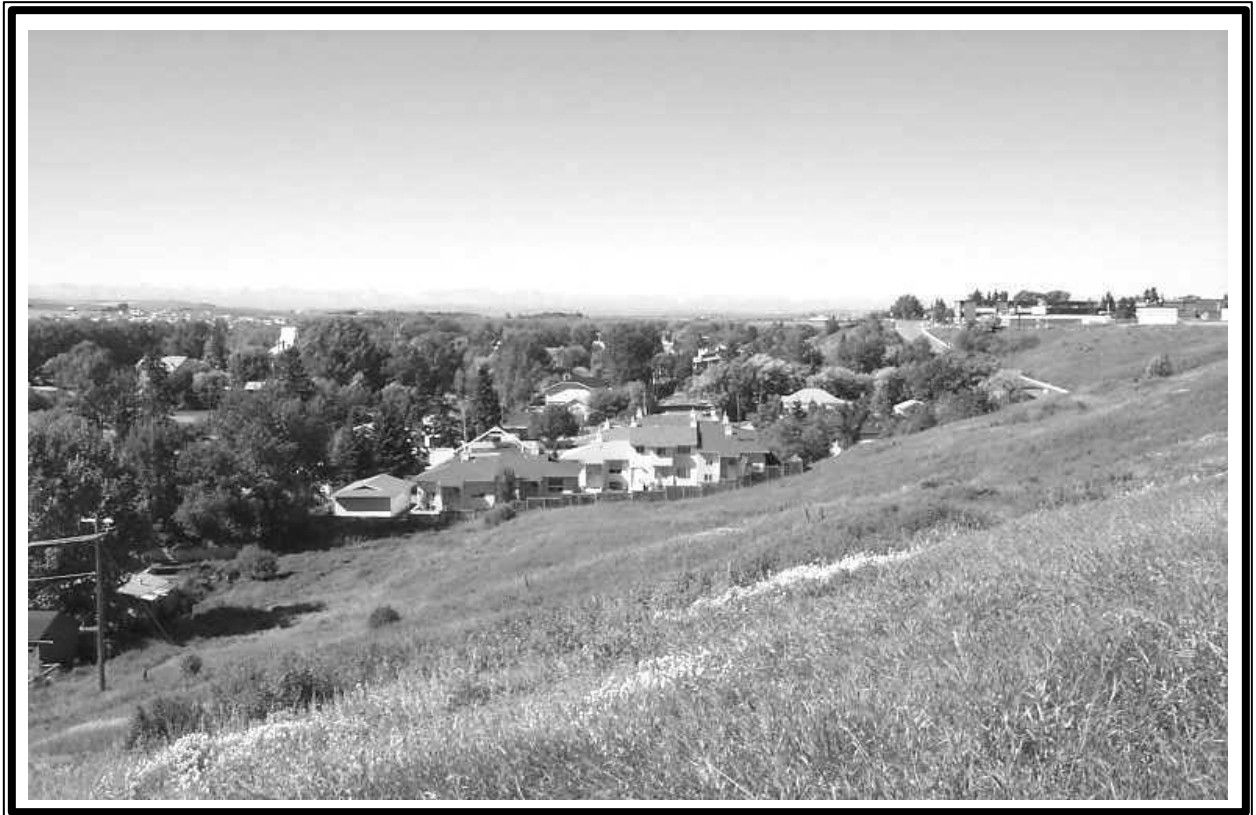
10.6.1 *Area 6 Natural Parkland*

The management intent is to provide passive recreational opportunities primarily through the pathway and trail system. The management guidelines are as follows:

- a) Appropriate trail expansion and/or connections as identified on the Trail Map (Map 3) shall be permitted and encouraged.
- b) Major facility development will not be permitted.

Map 9

- c) Vegetation planting will not be permitted.
- d) Furniture will be installed at appropriate locations.
- e) Signs and other interpretive information will be installed at appropriate locations.
- f) Escarpment areas will be maintained as grassland and/or shrubland.



Looking west along the river valley escarpment above downtown Okotoks.

11.0 PLAN IMPLEMENTATION AND REVIEW

It is recommended that a River Valley Committee be established to work with this Management Plan and ensure that the voice of the river valley continues to be heard. The Plan implementation objectives are:

1. The River Valley Committee shall be a Standing Policy Committee of Council with a member of Council delegated to sit on the Committee. A Terms of Reference outlining the composition and mandate of the Committee shall be drawn up for approval by Council.
2. A public open house should be held on an annual basis hosted by the River Valley Committee to review what has happened in the natural areas and river valley and to receive input from the public.
3. The Committee should review and provide comments on all proposed development in and adjacent to the river valley and natural areas.
4. The Committee should work with groups and partners to implement the Management Plan.
5. Additional research, such as biophysical and historical site inventories, should be undertaken to complement the management plan and provide baseline information for future studies.
6. Responses and comments on the Draft Management Plan have been provided by Council, Administration, stakeholders and citizens. The written comments have been considered by the Committee in preparation of the final Management Plan document and are included in Appendix 2. The Committee recommends that detailed responses may be reviewed as tactical plans and budget proposals are prepared in the future to implement goals and objectives of the Management Plan.