

4.4 ENVIRONMENTAL REVIEW MODEL: REQUIREMENTS OF THE RIVER VALLEY BYLAW #7188

Prior to construction of the projects within this plan, an Environmental Review is required under Bylaw #7188, the North Saskatchewan River Valley Area Redevelopment Plan. A major principle of the River Valley ARP is to insure the preservation of the natural character and environment of the North Saskatchewan River Valley and its ravine systems. The objectives which have specific application are:

- i) To control the construction of major facilities within the North Saskatchewan River Valley and its ravine systems;
- ii) To minimize the potential adverse environmental effects of all existing and future public works on the natural environment of the North Saskatchewan River Valley and its ravine systems; and
- iii) To control the design and construction of future public works in a manner which will enhance the natural environment of the North Saskatchewan River Valley and ravine systems.

It is therefore important that the development projects proposed within the Master Plan be carefully planned and implemented according to the objectives and policies in Bylaw #7188. To achieve these objectives, an environmental review is required which will incorporate the following:

- 1) An assessment of the potential impacts of development on the natural and man-made environments;
- 2) A review of construction methods, proposed alternatives and recommended development options;
- 3) Recommended measures, where appropriate and economically feasible, that mitigate or eliminate the potential adverse impact(s) on the environment resulting from this project.

Master Plan Resource Analysis and Land Management Units

The Master Plan bases future development according to the environmental sensitivity and resource constraints of an area; land areas have been screened for their recreation development potential, and identified according to land management units. The existing state of an area and the proposed developments have been described in the plan, which defines the anticipated impact of project construction.

Five types of projects, the potential impacts, and the need for further environmental review prior to construction are described in Figure 15. The Master Plan fulfils the environmental review requirements for projects in categories 1 and 2. Projects in categories 3, 4 and 5 will require a further environmental review prior to construction.

ENVIRONMENTAL REVIEW MODEL

Figure 15

TYPE OF PROJECT	PURPOSE	TYPE OF FACILITY	LEVEL OF IMPACT/REVIEW
Type #1 Upgrade of existing surface or facility which is currently in use	Purpose: to replace or improve amenities & surface materials to accommodate existing use, assist in maintenance, and reduce use impacts.	<ul style="list-style-type: none"> - granular trails - landscaping - boardwalks - signage - minor amenity replacement 	<ul style="list-style-type: none"> -minor construction impact -no change of existing use -environmental review completed
Type #2 New surface improvements which may or may not require grading	Purpose: to establish new facilities to accommodate existing public use of the river valley as approved through the master plan	<ul style="list-style-type: none"> - granular trails - paving existing heavily used trails - landscaping - boardwalks - signage - gravel parking 	<ul style="list-style-type: none"> -minor construction impact -minor change of existing use -environment review completed
Type #3 Projects requiring minor utilities/ foundations and resulting in major surface improvements	Purpose: to provide new facilities for trail continuity as approved through the master plan	<ul style="list-style-type: none"> - new paved trails - stairs/retaining walls - minor creek crossings (prefab bridges) - gravel roads/parking - minor buildings - telephones 	<ul style="list-style-type: none"> -moderate construction impact -some change of use -further environmental review/full EIA required
Type #4 Projects requiring major utilities, building and structural improvement	Purpose: minor facilities which provide comfort and security for public use of the river valley	<ul style="list-style-type: none"> - washrooms - shelters - drinking water - water/sewer lines 	<ul style="list-style-type: none"> -moderate construction impact -major change of use -full EIA required
Type #5 Projects requiring excavation, foundations, pipes/piers	Purpose: facilities which provide river crossings and major amenities for comfort and convenient public use of the river valley.	<ul style="list-style-type: none"> - Paved roads - paved parking - river bridges - major pavilions 	<ul style="list-style-type: none"> -major construction impact -major change of use -full EIA required

This matrix has been designed to be as comprehensive as possible. However if a project does not fit into any category a further environmental review of these other projects may be required.

Most trails projects are improvements to existing trails, and would therefore not result in substantial construction or use impacts. The Construction and Project Management Guidelines in Section 4.3 of the Master Plan outline the need to carefully consider environmental and community impacts in planning for construction. Other projects which involve more structural improvements, particularly the pedestrian bridges, will require further detailed design, or Provincial/Federal Approval would require a detailed Environmental Impact Assessment. This has been considered in the proposed timing for the bridge projects.

The short term impacts are anticipated disturbances to communities adjacent to the river valley, and to park users. Construction activities will create some noise, traffic and will limit public use and access to various trail areas to insure public safety and ease of construction activity. There will also be short term and long term impacts to the existing environment and biophysical characteristics present in the area of construction. Construction of bridges and trails will result in some short term and long term impacts to the natural environment. There will, however, be many long term benefits resulting from development of the Master Plan. The short term impacts are acceptable, given the implementation of identified mitigation measures.

SUMMARY STATEMENT

The upgraded trails, amenities and bridge crossings will increase the recreational use of the river valley by making it more accessible to the general user. More trail users will bring with them the possibility of increased adverse impacts on the environment.

The development of trails can also reduce negative impacts in a number of ways. Designated trails, improved amenity facilities, and river and creek crossings direct users. This will reduce the ongoing impact of users who are uncertain of their route. Designated trails make the policing and maintenance of the river valley and ravine system far easier. The existence of trails and recreation facilities, especially well used ones, tends to codify the recreational uses of the area. This will confirm in the public's mind that the river valley is a place for environmental appreciation and recreational pursuits.

The resource analysis completed through the Master Plan has fulfilled the environmental review requirements of the North Saskatchewan River Valley Bylaw #7188 for the projects in Category 1 and 2. Projects in Category 3, 4 and 5 will require a further environmental review.