

## WATERfacts 5

### Spring Development

An often overlooked farm water supply is the spring. Springs, when developed, can provide an excellent and plentiful source of clean water.

Spring development costs are relatively cheap compared to water wells or dugouts. Pumps and electricity are not required unless you have to pump uphill. Excavation is at a minimum, and landscaping is inexpensive.

Materials required to develop springs are usually on the farmsite. A culvert, some PVC pipe, concrete mix, local rock and gravel, and an old tractor tire, along with the availability of a small backhoe are all that's needed for spring development in most cases.

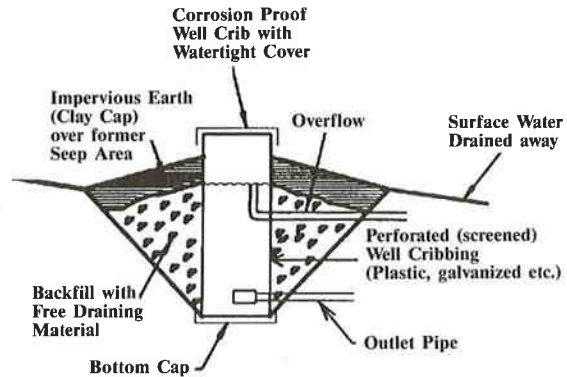
#### Development Steps

- 1) Monitor the flow of the spring to determine the flow rate, the length of time the spring flows (annually, seasonally) and to note any problems that might arise during the year. Measure the flow rate during the period of intended use. Determine if the flow rate will meet daily requirements and provide for peak use periods.
- 2) Contact your local PFRA office for technical advice about spring development, and possible financial assistance.

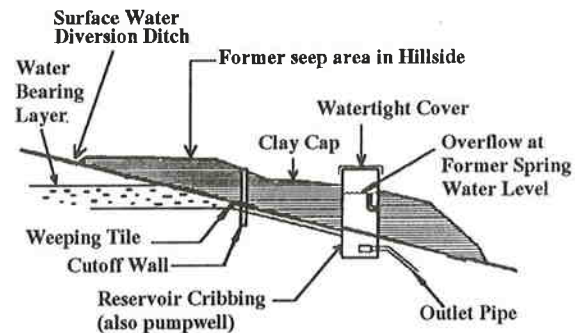
The simplest form of spring development would be to put a fence around the spring and pipe the water to a nearby water trough. This keeps livestock away and reduces contamination of the spring water. It also stops cattle from trampling the soil around the water source.

A more complex development, such as a concrete, galvanized steel or fibreglass enclosure, should be used to prevent contamination of water for household use.

#### Low Area Spring Development



#### Hillside Seep Development



## Managing Spring Resources

While nature determines the spring flow, it is possible to increase available water by managing the resource. Over thousands of years nature has found ways to spill all the water flow available and so development at a spring site will not increase the total water flow available. However, useable spring flows can be increased by reducing water used in other discharge areas such as nearby cattails, bull rushes, trees and shrubs.

Small flows can be effectively developed. For example, a seep of one litre every minute will water 21 beef cattle if storage is used.

Properly developed, a spring will have a long, low maintenance life, and be a valuable asset.

*PFRA provides technical assistance to farmers for planning the most suitable water supply for their farms.*

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## PFRA OFFICE LOCATIONS

### MANITOBA

Brandon (204) 726-7584  
Dauphin (204) 638-6108  
Morden (204) 822-4078  
Winnipeg (204) 983-3116

### ALBERTA

Calgary (403) 292-5641  
Edmonton (403) 495-3307  
Hanna (403) 854-4448  
Lethbridge (403) 327-4340  
Medicine Hat (403) 526-2429  
Peace River (403) 624-3386  
Red Deer (403) 346-9060  
Vegreville (403) 632-2919  
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### SASKATCHEWAN

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Maple Creek (306) 662-2637  
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North Battleford (306) 445-6217  
Regina (306) 780-5110  
Rosetown (306) 882-4272  
Saskatoon (306) 975-5220  
Swift Current (306) 778-4200  
Watrous (306) 946-3303  
Weyburn (306) 842-4624

### BRITISH COLUMBIA

Dawson Creek (604) 782-3116

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