

Introduction to Infrastructural Engineering

Water supply

by

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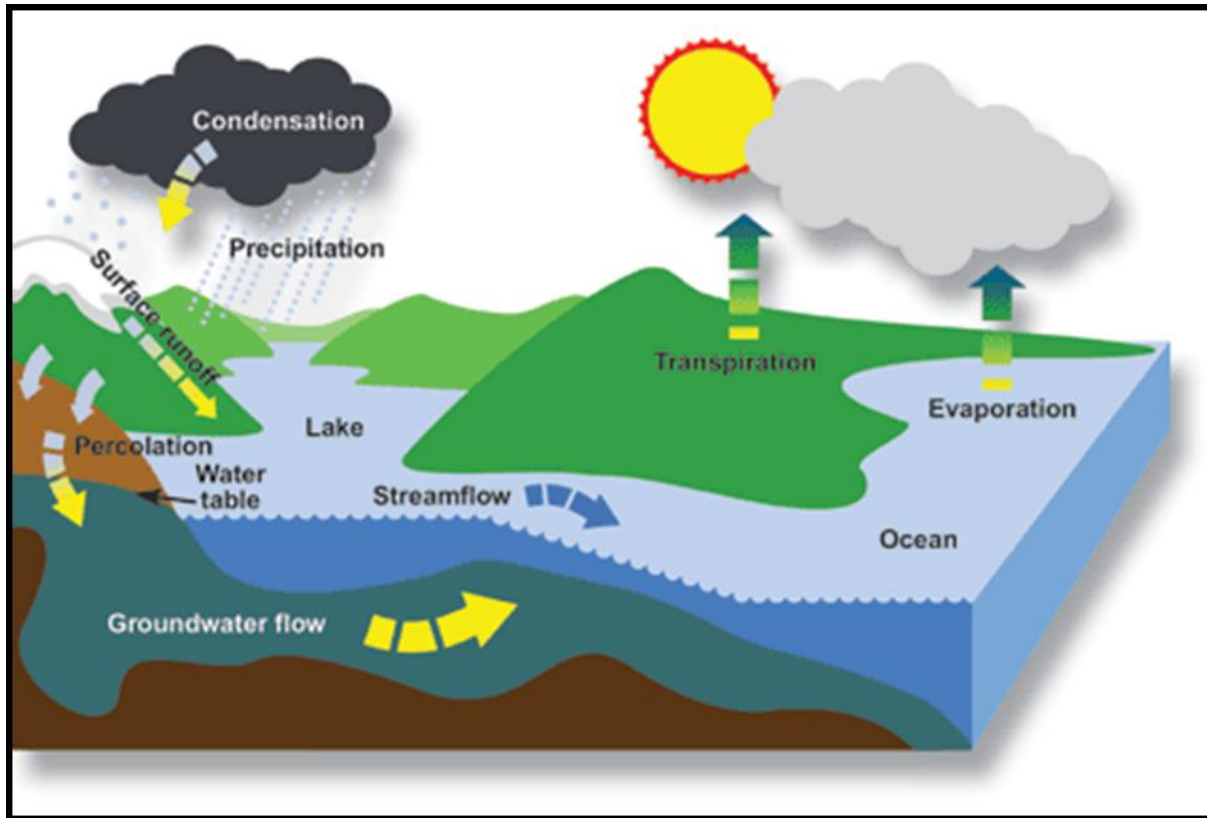
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Freshwater Cycle



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Water Table

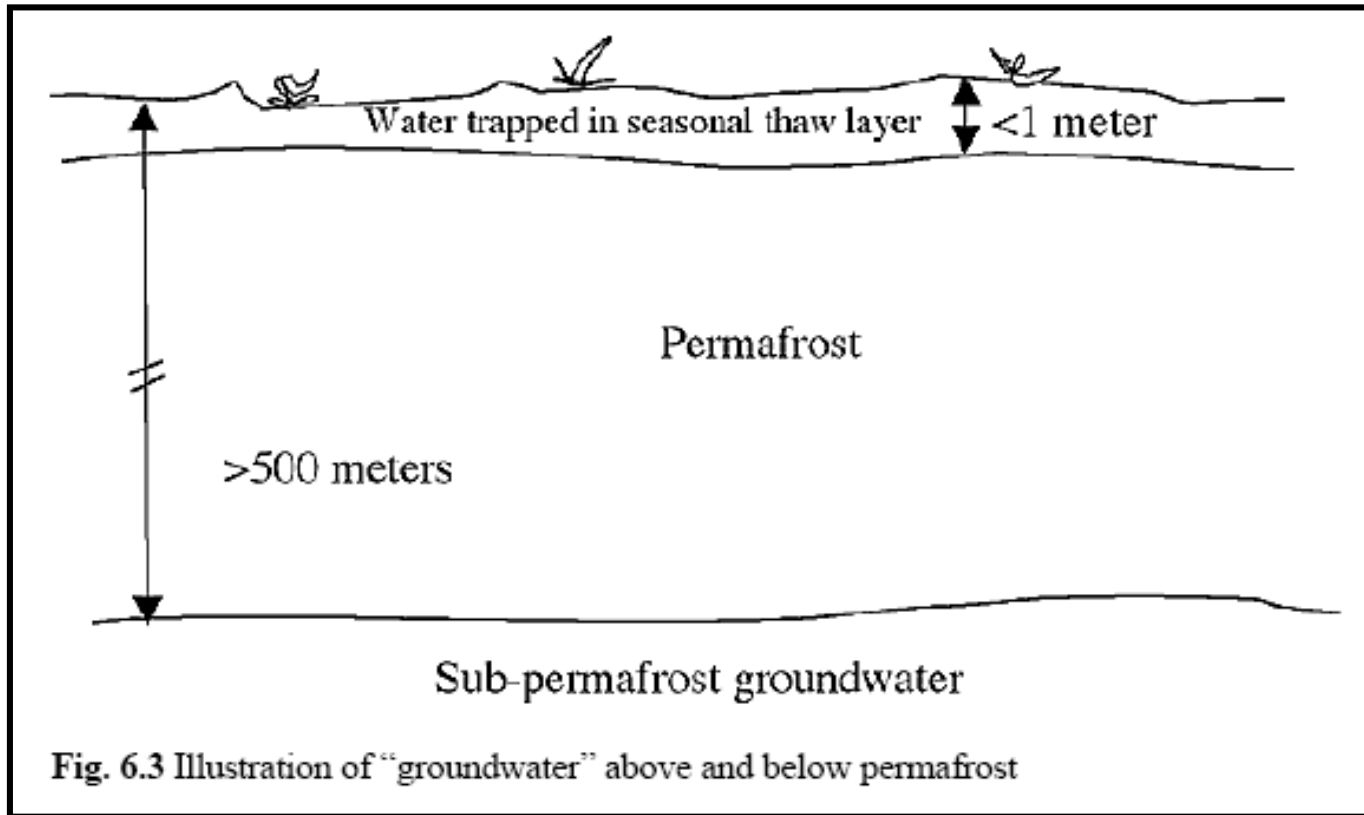


Fig. 6.3 Illustration of “groundwater” above and below permafrost

Water Table (Cont)

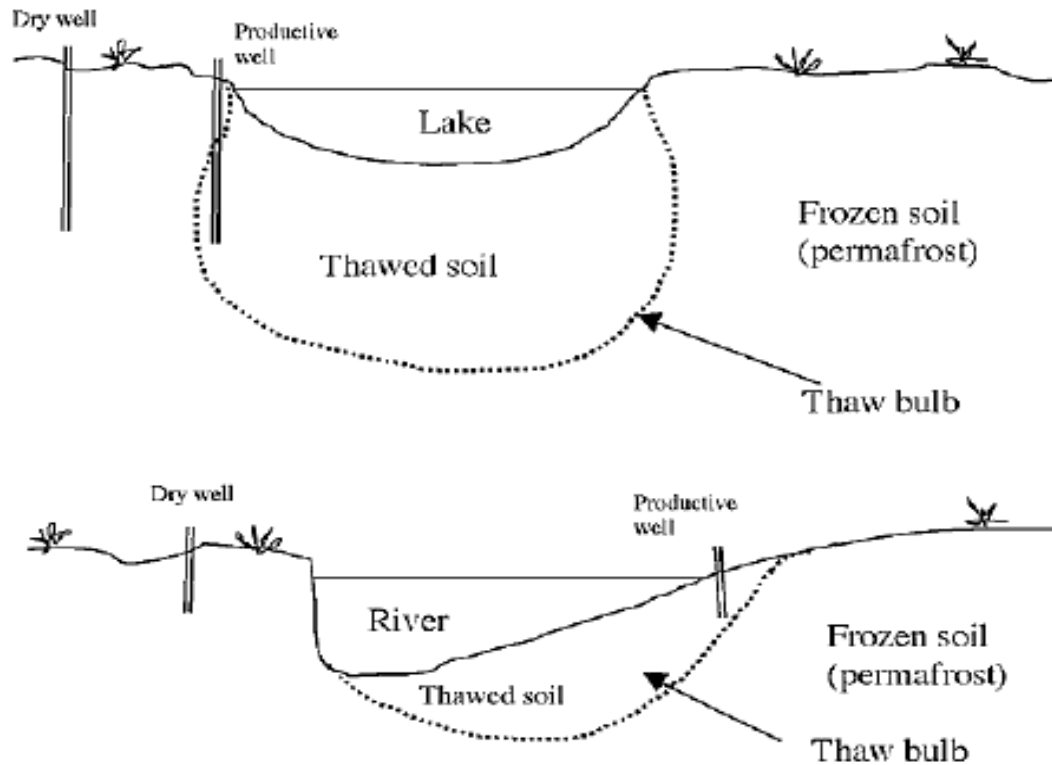
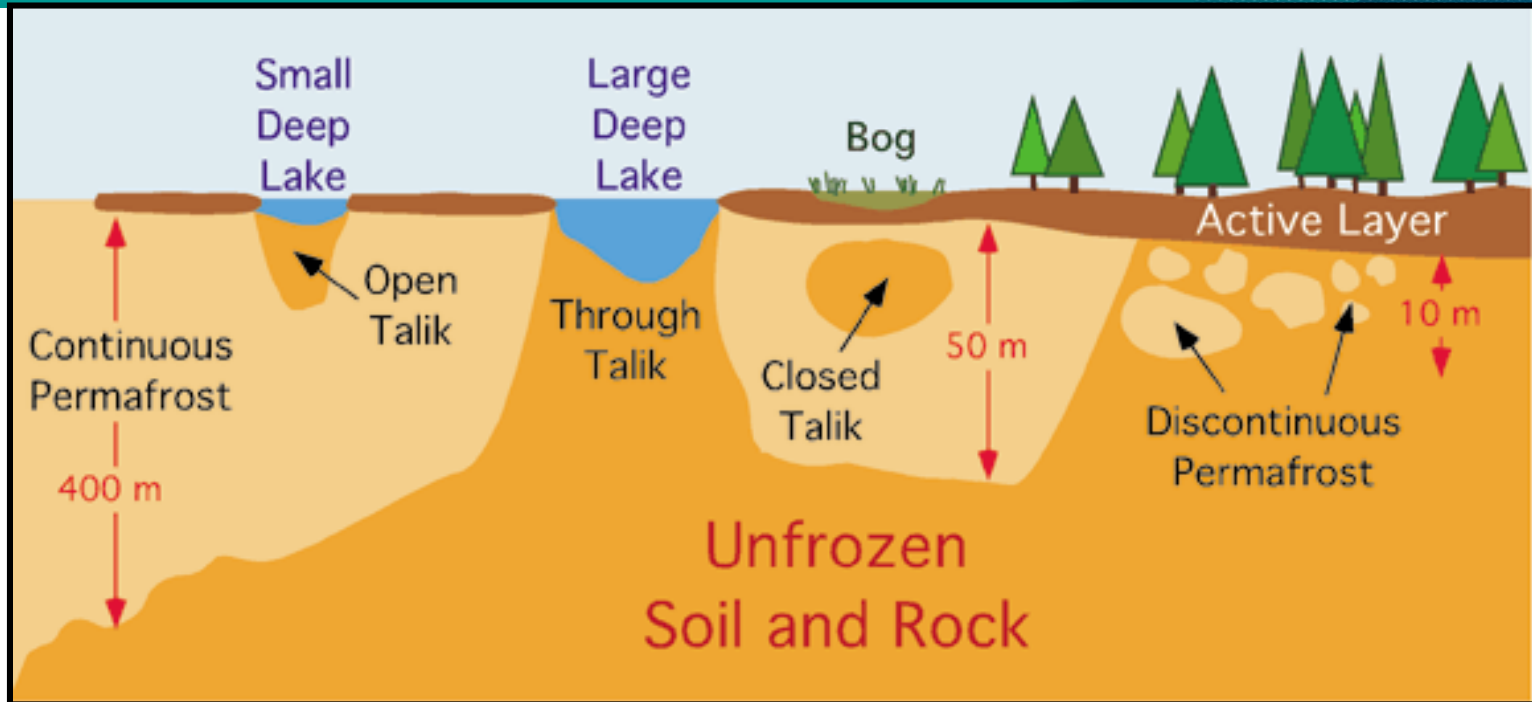


Fig. 6.2 Illustration of a thaw bulb beneath a lake and river. A thaw bulb such as these ones may be valuable sources of fresh, unfrozen water.

Layers



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Concepts

Effluents

- The sewage or industrial liquid waste that is released into natural water by sewage treatment plants or structures to treat industrial water (including mine water)

Receiving waters

- A river, lake, ocean, etc., into which waste water or treated effluent is discharged



Concepts

Drinking Water:

- Water intended for human consumption but which has other household uses



Best Practices

- Prevention of the contamination of water sources (lakes, rivers, streams, and groundwater sources)
- Treatment of water
- Proper maintenance of water distribution systems
- Regular monitoring of drinking water
- Public education and awareness (especially for “in house” water distribution)



Drinking water



Source to tap

DRINKING WATER QUALITY MANAGEMENT FROM "SOURCE TO TAP"



source



water
treatment



truck
distribution



pipe
distribution

photo: City of Yellowknife



Keeping NWT Water Clean



Making Drinking Water Safe



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