

southern chain of lakes

The digging of the Peace Creek Canal and the subsequent draining of wetlands and the surficial aquifer resulted in a decrease of wetland area of nearly 9,000 acres (a reduction of over 30%) in the storage/conveyance areas of the Polk Uplands. *Appendix B* lists estimates of wetland losses in the Peace Creek watershed, from its natural state to the hydrologically altered condition today. This has led to the loss of about 6 billion gallons of wetland storage and the loss of about 21 billion gallons of surficial aquifer storage, for a total storage loss of about 27 billion gallons.

The loss of storage, combined with the ditching and draining, has increased peak surface water runoff by almost 75% and increased the cumulative discharge from Peace Creek by about 28% (*Appendix C*). Much of the additional discharge comes during the wet season, when Peace Creek and the Peace River need it the least. Conversely, flow is reduced during the dry months, when the Peace River needs it the most.

