



**I.R. #10 Water System Okanagan Lake Intake**  
Westbank First Nation

**PERSONNEL**

B. deWynter, P. Gigliotti

**APPROXIMATE VALUE: \$600,000**

The Westbank First Nation completed the first phase of the expansion of the water supply system to I.R. #10. The first phase of the water supply system expansion consisted of a new 760 mm diameter and 710 m long intake pipe into Okanagan Lake. The inlet to the intake is a minimum of 30 m below the lake surface. The intake pipe has been sized to pass 410 l/s (6500 USgpm), to provide sufficient water to service the projected development on I.R. #10.

Urban Systems Ltd. of Kelowna was retained by the Westbank First Nation to provide planning and engineering services from conception to the completion of this project. Prior to undertaking any engineering work a planning process to determine the potential future development on I.R. #10 was completed. The projected development was then used as the basis to establish the future water system requirements. Based on the requirements design flows were generated for the lake intake.

For a year prior to commencing the intake system design, periodic water quality monitoring and related marine investigations were completed to verify the suitability of the lake intake location. Once this work was complete the design, tendering, and contract administration work was then finalized.

**client**  
West Bank First Nation

**project**  
I.R. #10 Water System  
Okanagan lake Intake

**services**  
Planning and Engineering  
Services

**year**  
2001

**file**  
1.0704.0021.10

