



Western Economic
Diversification Canada

Diversification de l'économie
de l'Ouest Canada



Lessons Learned in EA and Infrastructure Development in Western Canada (2000-2004)

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Overview of Infrastructure Program In Alberta



Western Economic Diversification is responsible for the implementation of the Infrastructure Canada Program in Western Canada.

Framework through which the Government of Canada can make investments in urban and rural communities in order to enhance the quality of our environment, support long-term economic growth, and enhance community infrastructure.

Current Program is a 6 years (2002 –2006) \$508 million program for municipal infrastructure.



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Purpose

Improve urban and rural municipal infrastructure.

Enhance the quality of Canada's environment.

Support long-term economic growth.

Improve community infrastructure.

Build 21st century infrastructure through best technologies,
new approaches and best practices.

Overview of Infrastructure Program In Alberta



Priorities

Green Municipal Infrastructure.

Infrastructure supporting local transportation, culture and recreation, tourism, rural and remote telecommunications, high-speed internet access for local public institutions, and affordable housing.

EA REVIEW



Lessons learned in the EA of infrastructure Projects

- Innovative methods for addressing environmental effects.
- Unique challenges associated with individual communities, their abilities, their infrastructure needs and their ability to address mitigation.
- Institutional arrangements that supported good EA (multi-agency coordination)

Southeast Alberta Rural Trunk Waterline



Overview of project

- The total length of pipe on the Project is 984 km.
- 250 shareholders
- The Project was conceived by a small group of area residents needing a good quality, reliable source of raw water for domestic and livestock purposes.

Issues



- Native upland grasslands and wetlands, rare plant species, and special plant communities of concern,
- The most arid wildlife habitats in the province.
- Biogeographic range of six amphibian, eight reptile, 143 bird, and 42 mammal species. Ten of these have been declared either “threatened” or “endangered”.
- One hundred and ten heritage resource sites were recorded.
- Various Palaeontological resources
- Water includes seasonally flowing streams, lakes, and reservoirs.



Plate 25 Pakowki Lake, Site 30 (14 June 2003). View looking west towards the dry lake bed. Water was observed in the northwest arm only which is located further north (to the right of the photo).

Permits and Authorizations



- Water License
- Use of Works Agreement
- Code of Practice Notification for Pipelines and Telecommunication Lines crossing a Water body
- archaeological, palaeontological resources) permit and approval.
- Fish Research License for fish sampling activities
- Wildlife Collection License
- Highway Crossings
- License of Occupation
- Letter of advice or authorization for watercourse crossings and intake
- Migratory Birds Convention Act, Species at Risk Act, Fisheries Act,
- Federal Wetlands, Wildlife reviews.
- Potential for deposit or release of deleterious substances
- Local Road Crossing Approvals
- Railway Crossing Approvals
- Shallow utilities such as oil, gas, telephone, fiber optic, cable, etc approvals.



Plate 26 Milk River Ridge Reservoir, Site 158 (13 June 2003). View south showing area of proposed intake and pipe.



Figure 40: View of DjOr 14, looking southeast over stone circle no.3.

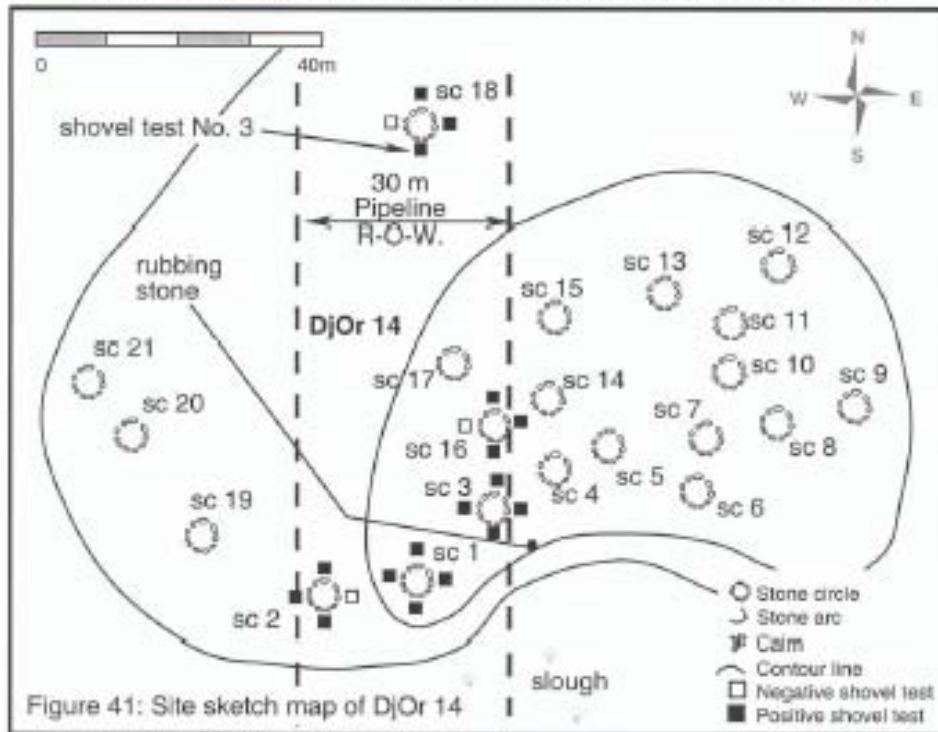


Figure 41: Site sketch map of DjOr 14

Issues/Challenges



- Third party – limited funding
- Inter-basin transfer issue (Government of Canada and Government of Alberta).
- Federal, Provincial and Municipal involvement.
- Sensitive areas (historical, aquatic, vegetation, paleontology, wildlife)
- Water issues (availability, allocation, licence).
- Timing

Mitigation Approach



- Project amended to minimize or avoid environmental issues and national policies.
- Coordination and agreement between all three levels of government was key.

Lesson Learned



- Federal and provincial coordination
- Being able to work with the proponents to identify the project

City of Edmonton – Gold bar Wastewater Treatment Plant



Overview of the project

Enhanced Primary Treatment (ETP) facility.

Chemical Storage building

Screening Facility

ETP effluent outflow

UV Diversion Chamber

Order Control

Bypass Conduits







Issues/Challenges



- North Saskatchewan River Valley Area Redevelopment Plan
- Water Act (outflow)
- Public Lands Act (License of Occupation)
- Canadian Environmental Assessment Act
- Fisheries Act (Fish habitat concerns)
- Navigable Waters Protection Act

Mitigation Approach



- Creative compensation with Fish Habitat (DFO and the City of Edmonton)
- Protecting trees and nesting area versus window of opportunity for outfall construction
- Connecting all three levels of government (multi/cross jurisdictions)

Lesson Learned



- Connecting all three levels of government early in the process
- Being able to work with the proponents to identify the project