
Volume 2, Section 1 Snake Lake Reservoir Expansion Environmental Impact Assessment Introduction

Submitted to:



a division of Englobe

MPE

A division of Englobe,
Lethbridge, Alberta

On Behalf of:



Eastern Irrigation District
Brooks, Alberta

Submitted by:



AAR Environmental Services
Calgary, Alberta



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Abbreviations

Alberta EPA	Alberta Environment and Protected Areas
CEA	Cumulative Effects Assessment
EIA	Environmental Impact Assessment
EID	Eastern Irrigation District
EPEA	<i>Environmental Protection and Enhancement Act</i>
FTOR	Final Terms of Reference
GOA	Government of Alberta
NRCB	Natural Resources Conservation Board
SLR	Snake Lake Reservoir
SIR	Supplemental Information Requests

i. INTRODUCTION AND CONTENTS

The Eastern Irrigation District (EID) is applying for approval under the *Environmental Protection and Enhancement Act* (EPEA) (Government of Alberta [GOA], 2000) to construct the proposed Snake Lake Reservoir (SLR) Expansion Project (the Project), located 22 km southeast of Bassano and 19 km northwest of Brooks in Alberta. The Project involves the construction of a roughly 8 km long, up to 20 m high dam to increase the storage capacity of the reservoir system from 19.25 million³ (15,600 ac-ft) to 87.4 million³ (70,900 ac-ft). The Environmental Impact Assessment (EIA) Report as a whole includes Volume 1 (Project Description) and Volume 2 (the EIA, including a baseline and residual impact assessment for each discipline). Volume 1 may have information, such as figures, photographs, etc., supplied in a numbered Attachment. In Volume 2, this information will be supplied in a lettered Appendix. Below is a list of sections by volume.

Volume 1: Project Description

Section	Title
i	Preface
1	Background and Introduction
2	Overview
3	Constraints
4	Regional and Cooperative Initiatives
5	Transportation Infrastructure and Traffic Impact Assessment
6	Dam Safety
7	Water Management
8	Wastewater Management
9	Waste Management
10	Conceptual Conservation and Reclamation Plan
11	Mitigation Measures, Management Practices, and Monitoring Plans
12	Public and Indigenous Engagement

Volume 2: Environmental Impact Assessment

Section	Title
1	Environmental Impact Assessment Introduction
2	Environmental Impact Assessment Approach
3	Environmental Impact Assessment Summary
4	Air Quality
5	Noise
6	Hydrogeology
7	Surface Waterbodies
8	Aquatic Resources
9	Soil and Terrain
10	Vegetation and Wetlands
11	Wildlife and Wildlife Habitat
12	Climate Change
13	Land Use and Management
14	Historic Resources
15	Traditional Ecological Knowledge and Traditional Land Use
16	Public Health
17	Socio-economic Assessment
18	Public Safety

Volume 2 provides the discipline-specific baseline studies, residual impact assessments, and Cumulative Effects Assessments (CEA), where warranted. Disciplines addressed in this EIA include air quality, noise, hydrogeology, surface waterbodies (surface water quantity and quality), aquatic resources, soil and terrain, vegetation and wetlands, wildlife and wildlife habitat, climate change, land use and management, historic resources, traditional ecological knowledge and traditional land use, public health, socio-economic assessment, and public safety.

All sections of the report were prepared to meet the requirements outlined in the the Final Terms of Reference (FTOR; Volume 2, Appendix A) for the Project, which were issued by Alberta Environment and Protected Areas (Alberta EPA) on July 24, 2024. The *Guide to Preparing Environmental Impact Assessments in Alberta* (GOA, 2013) was also followed.

The EIA will be submitted to Alberta EPA to determine completeness. If information provided in the EIA is insufficient to address each requirement in the FTOR, Alberta EPA may issue Supplemental Information Requests (SIRs), which would then need to be addressed. Once the EIA is deemed complete, the Natural Resources Conservation Board (NRCB) will evaluate whether the Project is in the best interest of the Province and will either reject, approve, or approve with conditions. The NRCB will determine if a hearing is required to obtain additional information on the Project from the Proponent.

ii. ASSESSMENT REQUIREMENTS

In Alberta, Sections 47(d) and (e) of the *Environmental Protection and Enhancement Act* states that EIAs must include:

- (a) A description of the potential positive and negative environmental, social, economic and cultural impacts of a proposed activity, including cumulative, regional, temporal and spatial considerations; and
- (b) An analysis of the “significance” of the potential impacts.

Completion of Project-specific assessments provides regulators and stakeholders with information on potential effects that warrant mitigation and management.

The EIA has been prepared in compliance with the requirements set out in:

- The *Environmental Protection and Enhancement Act* (Government of Alberta [GOA], 2000);
- Guide to Preparing Environmental Impact Assessment Reports in Alberta (GOA, 2013);
- The FTOR for the Project (GOA, 2024); and
- Cumulative Effects Assessment in Environmental Impact Assessment Reports Required under the *Alberta Environmental Protection and Enhancement Act* (GOA, 2010).

1.1 REFERENCES

- Government of Alberta (GOA). (2000). Environmental Protection and Enhancement Act (RSA 2000 c E-12). *Current as of June 21, 2024*. Edmonton: Alberta King's Printer. Retrieved August 28, 2024, from <https://kings-printer.alberta.ca/documents/Acts/E12.pdf>.
- GOA. (2010). Cumulative Effects Assessment in Environmental Impact Assessment Reports Required under the Alberta Environmental. Alberta Energy and Utilities Board, Natural Resources Conservation Board and Alberta Environment.
- GOA. (2013). Guide to Preparing Environmental Impact Assessment Reports in Alberta. Edmonton, AB: Environment and Sustainable Resource Development.
- GOA. (2024). Final Terms of Reference Environmental Impact Assessment Report For Eastern Irrigation District's Proposed Snake Lake Reservoir Expansion Project. Environment and Protected Areas. Retrieved from https://open.alberta.ca/dataset/44e51af1-a2e8-4d40-8231-62d77852ebf3/resource/4eefc5de-c2cd-4b9f-a334-54fec2bb175d/download/final-terms-of-reference_snake-lake-reservoir-expansion-project_july-2024_1.pdf