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March 31, 2025

Alison Watson
Environmental Assessment Coordinator
Regulatory Programs Branch
Alberta Environment and Protected Areas
2nd floor, 9915 – 108 Street
Petroleum Plaza, South Tower
Edmonton, AB T5K 2G8

Dear Ms. Watson,

RE: Snake Lake Reservoir Expansion Project

The Eastern Irrigation District (EID) is seeking regulatory approval for the Snake Lake Reservoir (SLR) Expansion Project. The EID is one of Canada's oldest and largest irrigation systems servicing over 310,000 acres of irrigated land centered around Brooks, Alberta. The existing SLR is located approximately 18 km southeast of Bassano and 23 km northwest of Brooks. The reservoir is an off-stream irrigation storage facility originally constructed from 1995 to 1997 and is owned and operated by the EID.

Proposed Project

The EID proposes to expand the reservoir to the south and east by constructing an 8 km long earthen berm in Sections 29, 30, 31, and 32 in Township 19, Range 16, W4M. This will increase the reservoir area 764 ha, to a total of about 1,070 ha. The land required for this project is owned by the EID. All water will continue to be diverted from the Bow River at the Bassano Dam.

The Bow River receives most of its water from annual snowpack in the Rocky Mountains. In years with low snow accumulation or early snow melt there is reduced water directly available for irrigation. Off-stream reservoirs allow the source of water or early snowmelt to be shifted in time, filling the reservoir when water levels are high in spring, thus reducing direct demand on the river during peak irrigation times throughout the summer.

This project will increase the volume of this water that can be stored for later use. The additional supply would provide up to an entire year's worth of irrigation water for 50,000 acres of land downstream of the reservoir. This project therefore provides additional resiliency from climate change, which is expected to increase the frequency and severity of droughts. This increased water is necessary to fill the reservoir will not require any new allocation of water under the EID's existing water licence.



Project Proponent

The Eastern Irrigation District (EID) is the proponent of the SLR Expansion Project. The head office is located:

Eastern Irrigation District (EID) 550 Industrial Road West, Brooks, Alberta T1R 1B2

The EID contact for the Project is Mr. Ryan Gagley.

Regulatory Framework

The SLR Expansion Project has been exempted from Federal EIA requirements by the Minister of the Environment, however, the Project falls under the activities designation regulation of the provincial *Environmental Protection and Enhancement Act* (EPEA). As per Schedule 1 – Mandatory Activities of the Environmental Assessment (Mandatory and Exempted Activities) Regulation: construction of a dam >15 m high or reservoir capacity >30 million m³ requires an EIA. The EIA preparations followed the *Guide to Preparing Environmental Assessment Reports in Alberta*.

Environmental Impact Assessment

On March 31, 2025, an EIA containing a description and evaluation of the social, economic, and environmental effects was submitted to Alberta Environment and Protected Areas and to the Natural Resources Conservation Board. Contained within the EIA are technical reports for a variety of disciplines to address the effects of the Project over time.

EID Representing Agent

Wayne Bessie
AAR Environmental Services (AARES)
1929 10 Ave SW,
Calgary, Alberta T3C 0K3

The EIA has been prepared by AARES and submitted on behalf of the EID.

The EID awaits your response to move the Project forward. If you have any questions regarding this application, please contact the undersigned.

Sincerely,

AAR Environmental Services



Wayne Bessie, M.Sc., P. Biol. Senior Terrestrial Ecologist Phone: 403-294-0488

Email: wbessie@aares.ca