

## **IR3-45**

### **Topic: Alternative Means**

#### **Sources:**

EIS Guidelines Part 2, Section 2.2

EIS Volume 1, Section 1.0; 2.2.1.1; 2.2.1.3,

Rocky View County – Comments on the EIS, June 15, 2018 (CEAR #571)

#### **Context and Rationale:**

The EIS Guidelines require the proponent to identify and consider the effects of alternative means of carrying out the project, and to provide an analysis of alternative means of meeting the project purposes or objectives that considers environmental effects as per CEAA 2012. The Agency's Operational Policy Statement on *Addressing "Purpose of" and "Alternative Means" under CEAA 2012* states that the first step in considering alternative means of carrying out the designated project is to identify technically and economically feasible alternative means. To do this the proponent should include economic criteria such as a comparison of cost estimation.

#### *Cost Estimates*

The EIS states that the initial cost estimates are susceptible to change, but the cost-escalation risk for the McLean Creek (MC1) option is higher than for the Springbank Off-Stream Reservoir Project (the Project) based on the Deltares 2015 report. This may no longer provide an accurate comparison due to Alberta Transportation's Project updates since 2015. Updated comparisons of estimated costs and benefits for MC1 and the Project are needed to assess the potential socio-economic effects to the surrounding communities.

#### *Environmental Effects*

The EIS compares some of the environmental effects of two options, the Springbank Off-Stream Reservoir Project and the MC1 option. The evaluation of environmental effects from MC1 in the EIS does not describe how the potential changes to the environment could affect Indigenous health and socio-economic conditions, physical and cultural heritage, the current use of lands and resources for traditional purposes, or any structure, site or thing that is of historical, archaeological, paleontological or architectural significance.

#### *Alternatives Considered*

The EIS notes the Project's purpose is to help reduce the effects of future extreme floods on infrastructure, water courses and people in the City of Calgary and downstream communities. The Agency's Operational Policy Statement on *Addressing "Purpose of" and "Alternative*

*Means” under CEAA 2012* states that the approach and level of effort applied to addressing alternative means is established on a project-by-project basis taking into consideration the level of concern expressed by Indigenous groups or the public.

The EIS identified five potential locations for flood mitigation measures on the Elbow River. Public comments received during technical review of the EIS indicate interest in specific alternative means of reducing effects of future extreme floods on infrastructure, water courses and people, such as the Tri-River Joint Reservoir of Alberta and the Micro-Watershed Impounding Concept (for example, CEAR 1152 and CEAR #1037).

**Information Requests:**

- a) Given any Project updates, provide information on the comparison of MC1 and the Project, including costs/benefits.
- b) Describe how changes to the environment from the MC1 option would affect Indigenous health and socio-economic conditions, physical and cultural heritage, the current use of lands and resources for traditional purposes, or any structure, site or thing that is of historical, archaeological, paleontological or architectural significance.
- c) Evaluate whether the Tri-River Joint Reservoir of Alberta and the Micro-Watershed Impounding Concept are feasible alternative means of meeting the Project’s purpose. Consider potential environmental effects of each alternative in this evaluation.