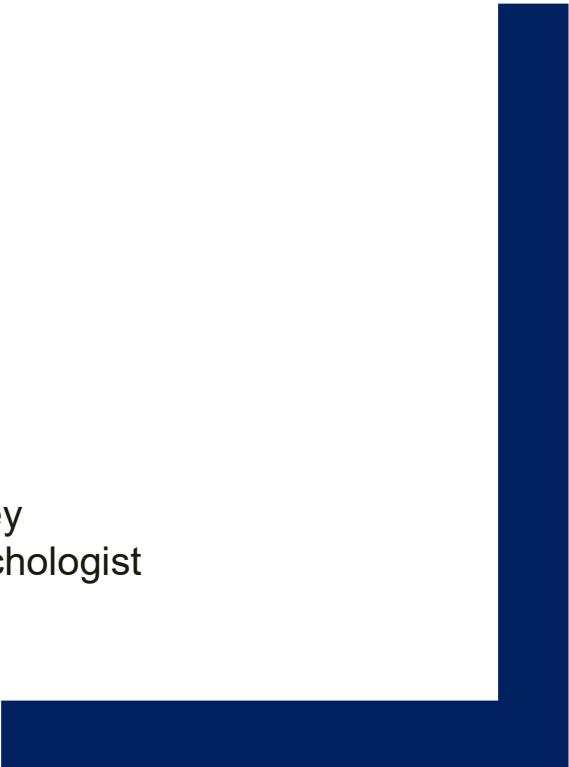




Springbank Off-stream Reservoir (SR1)

NRCB Hearing: Topic 1

Dr Karen Massey
Registered Psychologist



Topic 1: Project Need & Justification

Project Need Introduction

**What is the TRUTH re SR1 Causing
Environmental
Economic
Social
Problems for the Public**

Topic 1

Truth of need and justification

Truth is defined by the Oxford Dictionary in Lexico as:

<https://www.lexico.com/en/definition/truth>

*the **quality or state** of being TRUE, the example is “He had to accept the truth of her accusations.”

-*that which is true or in accordance with **FACT OR REALITY** and their example is “Tell me the Truth;”

* **a fact or belief** that is accepted as true, and their example is “The emergence of scientific truths.”

We ask NRCB to incorporate **all aspects of truth** in their decision: **FACTS, REALITIES, BELIEFS, STATE of being True**

Topic 1

SCLG is in TOTAL AGREEMENT

Flood Control is Needed on the Elbow River

Flood Management is needed even MORE

Topic 1

NRCB Vision: exemplifying integrity and FORESIGHT

continue to be a respected decision-maker in the BEST INTERESTS of ALBERTA

<https://www.nrcb.ca/about/mandate-and-governance>

Topic 1

FORESIGHT is defined by the Oxford Dictionary in Lexico as :

the ability to predict what will happen or be needed in the future.

<https://www.lexico.com/definition/foresight>

Topic 1

Project / PUBLIC Needs Not Met. Ex. 133, p. 21, 25, 30,13 31

1. **Redwood Meadows and Bragg Creek were forgotten** IN the Proponent's initial decision making process. Clearly just the 17 Ranchers were the focus of the decision.
2. **Still NEED Protection from Alluvial Aquifers that floods basements, higher spring run offs, as well as floods**
3. the limited benefit and extreme dangers of **SR1 does not make Common Sense**
4. **Forecast of the Public's Social need for Recreation & Environmental need for Fire Suppression.**
5. With upcoming lessening of the flow of the Elbow River, our **towns will need a water storage capacity** like Calgary needs. Are we forgotten again?
6. **Rumors over the 7 years have continued that Developers are waiting for SR1 approval** so that they can build around a lake formed by SR1. This plan has **no foresight** developed before the 2019 water specialists meeting in Calgary Ex. 151, p.13, now that we know how much the flow of the Elbow River is decreasing, and even putting our towns at risk.

Topic 1

Muck 7 years later in Redwood
Meadows Forest



Topic 1

Short History of SR1

August 26, 2014: Announced SR1 because "**Faster, Cheaper, Easier, _____ Only 17 ranchers** Ex. 151, p. 25

others in the area become more aware of the enormity of the problem. Opposition grows see Ex. 133, p. 22,
1,027 petitions in Parliament, 175 residents in Redwood Meadows sign Ex. 133 about Redwood Meadows Problems with SR1

Proponent buys out the **leader of the Don't Dam Springbank Group**, unclosed amount

Proponent buys out **Tsuut'ina Nation** \$32 and letter written they no longer object to SR1.

Proponent buys out **Rocky View County** \$29.9 & additional undisclosed amount for Roundabout in Bragg Creek due high

volume traffic

Sept 15, 2020

i submit Exhibit 151, describing multitude of problems on behalf of the Redwood Meadows residents, 175 resident adults sign.

Sept 16, 2020

i get a telephone call from our Townsite stating that Alberta Transportation (AT) is furious and their lawyers are threatening to
takeaway the \$32 MM given to Tsuut'ina if I don't stop speaking against SR1.

Sept. 18, 2020

A virtual meeting is held with Townsite representative & others with AT .More threats are made. I decide to stop speaking against SR1

February 2021

Things change and I can now become active with SCLG again

March 12, 2021

AT negotiates/pays? **Blood Tribe, Kainai Ex. 323**, and **Ermineskin Cree Naitons** Ex. 322, withdraw objections to SR1

SR1 cannot stand on it's own Merits, Proponent uses buy-outs.

This a Bullying situation where the bully has unlimited access to the Public's tax money, no budget restrictions. Perhaps the NRCB will see through the smoke screen with Foresight about \$MM of buy outs that is the Government's pattern if they are not getting their way. Instead, consider the TRUTH of Public Concerns for Social, Environmental, and Economic Effects. Thankfully Canada has FREEDOM of Speech. i suggest in the future government buyouts are stopped and there be full disclosure to the PUBLIC about how taxpayers' money is spent.

Topic 5 Human Mental Health, Ex. 250

Natural disasters produce chronic and disabling psychological injuries leading to PTSD, depression, anxiety that up to @ 60% of people still have **symptoms after 2 or more years.**

Here's the important part:

OF ALL THE SOCIAL, ENVIRONMENTAL, AND ECONOMIC ASPECTS OF NATURAL DISASTERS PSYCHOLOGICAL DIMENSION IS ARGUABLY THE MOST IMPORTANT TO HUMANS. (p.145, Massacre, Earth, Flood)

Trauma seriously impacts mental health, causing us to have emotional reactions to upsetting situations.

Emotions override Logic.

Trauma can cause parts of the brain not to function properly, this impact on the brain increases the risk of mental health disorders.

People become vulnerable to problems later in life. (Trauma induced brain changes can be detected decades later, p. 183).

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Topic 5 Human Mental Health Ex. 250

In the **Bragg Creek Hamlet survey** (p. 149) it is noted that residents TOP priority was to **enhance the real and perceived safety** of individuals, families, and property. **Feeling safe is paramount**, (p. 176)

Premier Kenny said with the all the stress Albertans experience, we are on the verge of a **SOCIAL Crisis**, so he recently announced \$21.6M **for mental health**. (p. 184.)

We ask NRCB to have the Foresight to Prevent more Social Crisis.

Prevent future trauma due to floods.

We need to ensure SAFETY for all people along the Elbow River. We are the Public together.

SCLG supports SAFETY for ALL the Public.

Topic 1

Sunk Cost Fallacy. Planned Continuation Bias Ex. 151. p.27

Also consider the concept of **Sunk Cost Fallacy**

The concept of Sunk Cost Fallacy suggests that people believe that an investment (i.e., sunk costs) justifies further expenditures. People demonstrate "a greater tendency to continue an endeavor once an investment in money, effort, or time has been made.

"throwing good money after bad, while refusing to succumb to what may be described as "cutting one's losses."

Eg. England & France Concorde plane building disaster "Concorde Fallacy"

Does the Public want an SR1 FALLACY?

Does the Public want a Planned Continuation Bias?

Topic 3, Risk Management

Berms do not Protect Upstream Towns, Amec. Ex.133 . p. 31, Ex. 151

BERMS do not protect Redwood Meadows/Bragg Creek in Floods

Truth is seen from the **unbiased** early information from **Amec, Proponent's consultant,**
“Berms are an incomplete solution,” as explained in a presentation by Amec to the
City of Calgary in 2015. <https://drive.google.com/file/d/1QLjd-pmUyJC1yvt6cL8UqmMKmY2sqTsN/view>

**“RESIDUAL FLOOD RISK: why we shouldn't consider ourselves safe from flooding with just one line of defense eg: dykes?
Amec states “Without the defences Carlisle (City in England) was at risk of flooding when the gauge was above 3.45 m.”
Unfortunately, “The river reached 7.81 m. Just above the defences.”**

AMEC goes on to ask “why does this matter? Their answer is:

“There is always a risk that the design standard for any flood defence can be exceeded.

Layers of flood defences, resilient construction, and emergency management provides mitigation.”

Topic 3

Amec Ex. 151. p. Deltares ex. 151 p. Bowness Ex. 133 p.32

2015 Deltares report is similar to Amec, that: “The province should continue to pursue the multiple layers approach to flood mitigation as outlined in previous work on Room for the River, structural mitigation is only one element.

Bowness residents are also researching the lack of protection from berms. see Ex. 133 p.32 .

We ask the Board to Consider **AMEC’s and Deltares TRUTHFUL statements, and Bowness residents.**

This is the TRUTH. The truth according to Amec “that there is always a risk that one flood defence, such as berms, can be exceeded.”

Berms are useful for Annual Erosion protection. The money is well spent for that.

Topic 3

Elbow River Bank Annual and Flood Erosion, Ex. 133, p. 31, 32

Berms protect Redwood Meadows for annual erosion.

Since there is **no upstream flood velocity and volume control** there will still be catastrophic erosion during floods.

Tamminga et al (2015) paper, ex. stated that in 2013 “up to 5m of bank erosion occurred just 3.8km upstream” and Dr. Klepecki added this is upstream from the Diversion Channel.” The location they refer to is the riverbanks of Redwood Meadows.

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Continued erosion results in the River moving closer to the berms, and also eroding 70’ trees, diminishing our protective forest, and lessening protection for our town.

The **strip of Forest between the Elbow River and the berms is a major protector** of our town.

Elbow River Bank Annual and Flood Erosion, Ex. 133, p. 31, 32

We are losing Berm protection every year due to erosion, and no upstream velocity and volume control during Spring Runoff.

slide 14 pic shows about 4m of height erosion and 5m wide according to Tamminga et al. of riverbank erosion. Easy to tell distance of loss because no longer 7th hole for Disc Golf, 100 yards gone in one flood!

Mary Robinson reports hundred of meters of her ancestral land eroded due to annual erosion and floods since the 1880s.

We urge **FORESIGHT** in protecting the upstream towns from further erosion, as well as Floods. This is a **broader Environmental problem.**

Topic 3

Redwood Town's forest river bank Catastrophic erosion 2013

Notice the 70' high trees fallen due to erosion, and due to the earlier impact of the 2013 flood which cut it back 5m.



Topic 3 Risk

One hour till lost Redwood Meadows
Mandatory evacuation, Gone 6 days

The Mayor of Redwood Meadows “woke up then heard the river roaring past at nearly 700 cubic metres per second. And the berms — the only structures protecting the townsite from catastrophic flooding — were barely holding. “If it had breached at that point, it would have taken out the entire community. I’d say **we were within an hour of losing all of it,**” said Mayor John Welsh. “We would have been gone. And I don’t mean gone to the point that we lose a couple of homes. The river would have come through and taken the community away with it.”

Mayor John Walsh Ex. 151, p. 77

Topic 3

Catastrophic Insurance Losses

Using Insurance Pay Out data for Catastrophic Losses over almost 20 years, there were 3 major floods that caused significantly increasing damage. In 1995 the flood affected Calgary area. In 2013 the flooding affected Southern Albertans.

CATASTROPHIC LOSSES by event 1983-2017 Loss in adjusted 2017 dollars

Date & Place	Event Type	
1995		
June 6-9, Calgary AB	Flooding	30,909
2005		
June 6-8 & June 17-19	Flooding	\$365,607
In Alberta		
2013		
June 19-24	Flooding in S. Alberta	1,698,311

March 20, 2021 GoA newspaper: put cap on disaster coverages. most of Redwood Meadows homes valued over \$500,000. some insurance providers no longer cover overland flooded, **Ex. 346**.

Us, the Public, need flood protection more than ever because of Insurance reduction coverage..

Topic 4

Costs of Alluvial Aquifer flooding basements, EX. 133 CEEA Report p.53

Springbank and also Redwood Meadows Residents are Concerned

that for approximately 30 days our aquifers might be affected as well, resulting in more basement flooding and higher insurance rates.

Paucity of research on aquifers and springs..

Redwood Meadows should also benefit from the Proponent finalizing a Groundwater Monitoring and Mitigation Plan

because of the unknown Risk of the weight of SR1 on the aquifers and springs that are interconnected throughout the areas along the Elbow River, including to our town.

Topic 4

Drinking water concerns Ex. 133

Redwood Meadows Residents' Concerns about water quality during and for about one month after a flood storm ends.

The Proponent needs to plan for the coordination of water quality monitoring during and after a big flood with Tsuut'ina/Redwood Meadows.

Topic 5

SR1 wildlife, Ex. 151 p. 139 Elk Herd

Can you imagine the joy and wonder of watching the over 200 Sibbald Creek Elk herd thundering past while you drive on Springbank Road? Here's what my grandson and I experienced last year en route to hockey at Springbank Arenas early Saturday morning. There's won't be many, if any left after SR1 construction and floods. Keep in mind the muck that's left behind as well. minimal food..



Topic 5

Wildlife in SR1

Let's be TRUTHFUL Proponent. It seems you may have a very different plan for "Removal." SR1 is a death sentence for wildlife and bird nests and other habitats in the area. **All that really needs to be REMOVED will likely be carcasses, especially of the Elk Herd.**

SCLG comes from a place of valuing all living creatures, all life, be it wild or human. We hope you will do the same in your Forecast NRCB.

here's another little friend....

compliments of Sharon Pegg
a few weeks ago in the area

