



# Tri-River Joint Reservoir (TRJR) of Alberta

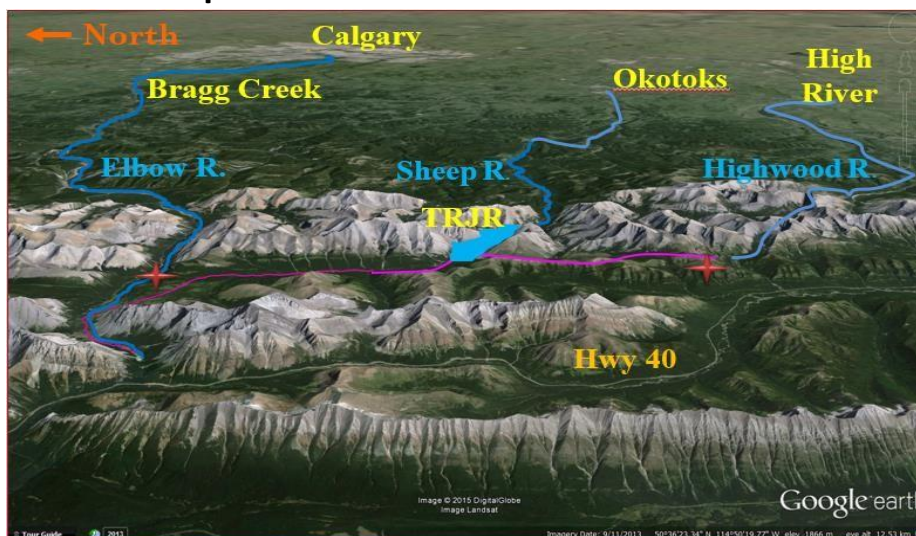
## Background:

- Developed by Dr. Emile Gabriel, founder of the Comprehensive Flood & Water Management Council (CFWMC), based in Calgary
- Dr. Gabriel graduated from faculty of Engineering U.O. Alexandria (PhD in project management) with over 20 years' experience on projects in Canada and overseas
- His white paper on the TRJR has been recognized by the UNESCO-IHE (United Nations Educational, Scientific and Cultural Organization - International Institute of Hydrology and Environmental Engineering), where he has been invited to continue his research on TRJR

## Flood Facts:

- The catastrophic 2013 flood caused over \$6 billion in damages; 5 people lost their lives
- 4 rivers that have historically caused severe and dangerous flooding in southern Alberta:
  - Bow River, Elbow River, Sheep River and Highwood River
  - 80% of the water volume originates in the mountains, far upstream of our communities
- According to the 2014 Provincial Advisory Panel, **100 MILLION CUBIC METERS** of water would need to be stored or retained in order to mitigate the flooding we experienced in 2013. The current projects undergoing environmental assessment *both* fall drastically short of the anticipated requirement:
  - Springbank Dry Dam is designed to contain **70 MILLION CUBIC METERS** of water
  - Alternative: McLean Creek Dam has a design capacity of only **56 MILLION CUBIC METERS**
  - Both projects are dangerously close to communities in the event of a failure; many communities are still left unprotected

**The Tri-River Joint Reservoir manages ALL 3 Rivers, upstream – it is a comprehensive and robust solution!**





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- Tunnel and flow-through reservoir are the main components for phase I
- The reservoir is actually a natural valley 30km long and 1km wide, which encompasses the headwaters of the Elbow, Sheep and Highwood rivers, at a specific, strategic location
- This valley can safely hold 10x the potential volume of the current Springbank Dry Dam proposal

### Benefits of TRJR:

- Manages all 3 rivers from one central location; contributes to the management of the Bow River
  - Protects the majority of river communities
- Mitigates both flood and water shortage conditions: water can be stored or diverted as needed
- Located on Crown land: only one private holding has been identified; no other landowners would be displaced; no utilities to relocate
- Can be built in stages, with immediate pay-off in terms of risk mitigation: building the tunnel first instantly mitigates flooding of the Elbow River
- Tunnel could be in place and useable very quickly (estimated 3-6 months)
- Potential for clean, renewable hydro-electric power, infrastructure employment, and recreational opportunities
- Investment for the future

### Why haven't you heard of the Tri-River proposal before?

Unfortunately, this proposal hasn't yet been given a diligent and thorough review by the current government. TRJR is represented by a group of dedicated volunteers, passionate about finding a real solution to the flooding and water shortage issues experienced in southern Alberta. Government representatives have advised us that we need the power of the people to push this project forward to have it assessed further.

### How you can help:

- We invite you to contact us with your feedback, questions or concerns (go to the "Contact Us" section of our website) – YOU are a stakeholder in this!
- Tell your friends, family and colleagues; find us on Facebook and share our page (<https://www.facebook.com/preventingalbertafloods/>)
- Book a presentation for your group
- Volunteer
- **Contact your municipal, provincial and federal representatives to bring attention to this project and put the pressure on for further assessment** (go to the "How to help?" section of our website for the links to identify who the elected officials are, for your area)

Thank you!

**Website:** [www.preventingalbertafloods.ca](http://www.preventingalbertafloods.ca) **Petition:** <http://chn.ge/2xgnsyH>