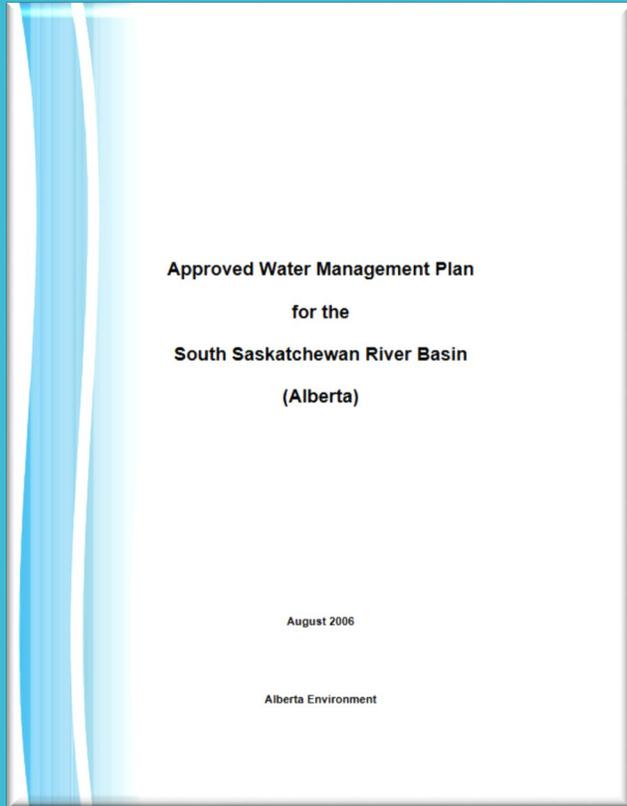


# Implementation of the Approved Water Management Plan for the South Saskatchewan River Basin - A Southern Alberta WPAC Review Project -

Erwin Braun, Chair  
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Bow River Basin Council



# Approved Water Management Plan for the SSRB (2006)

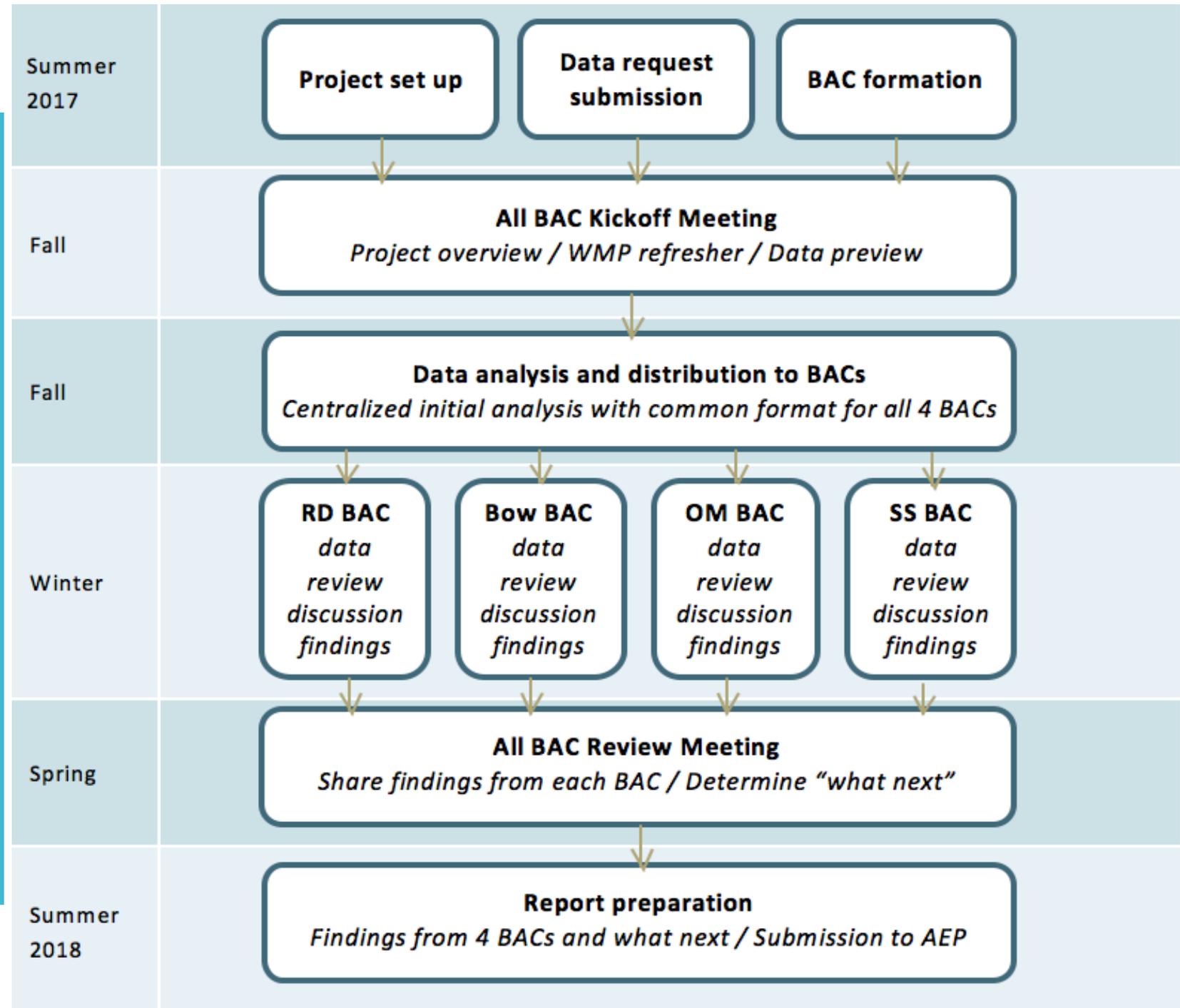


- Intended to address water allocation issues in the basin
- Acknowledged that detrimental effects on the aquatic environment were evident
- Recognized the need to move towards a more sustainable environment and economy
- Incorporated stakeholder feedback from an extensive public consultation process



- The Plan directed that as new information comes to light or situations sufficiently change, WPACs can review any aspect of the Plan.
- Why this review?
  - 10+ years have passed
  - growing need to establish a baseline understanding of current conditions
  - many issues impacted by the allocation limit are of increasing importance
  - interested and knowledgeable volunteers!

# PROJECT TIMELINE



# PROJECT APPROACH



Similar to consultation approach in original SSRB WMP planning process:

- Participation from Basin Advisory Committees (BACs) from the four sub-basins
- BACs met individually and in plenary
- Multi-sectoral representation
- Each BAC used a common background information package to inform their discussions

# PROJECT SCOPE



- The limit on water allocations from the Bow, Oldman and South Saskatchewan sub-basins
- Future water allocation limit in the Red Deer River sub-basin
- Recommended Water Conservation Objectives (WCOs)
- Use of water allocation transfers, water conservation holdbacks, and Matters and Factors that must be considered when making decisions
- Water management strategies

# Out-of-Scope TOPICS



- Water quality
- Groundwater
- *Master Agreement on Apportionment (1969)*
- Repeal of the South Saskatchewan Basin Water Allocation Regulation (1991)
- Suggested changes to the *Water Act*
- Climate change

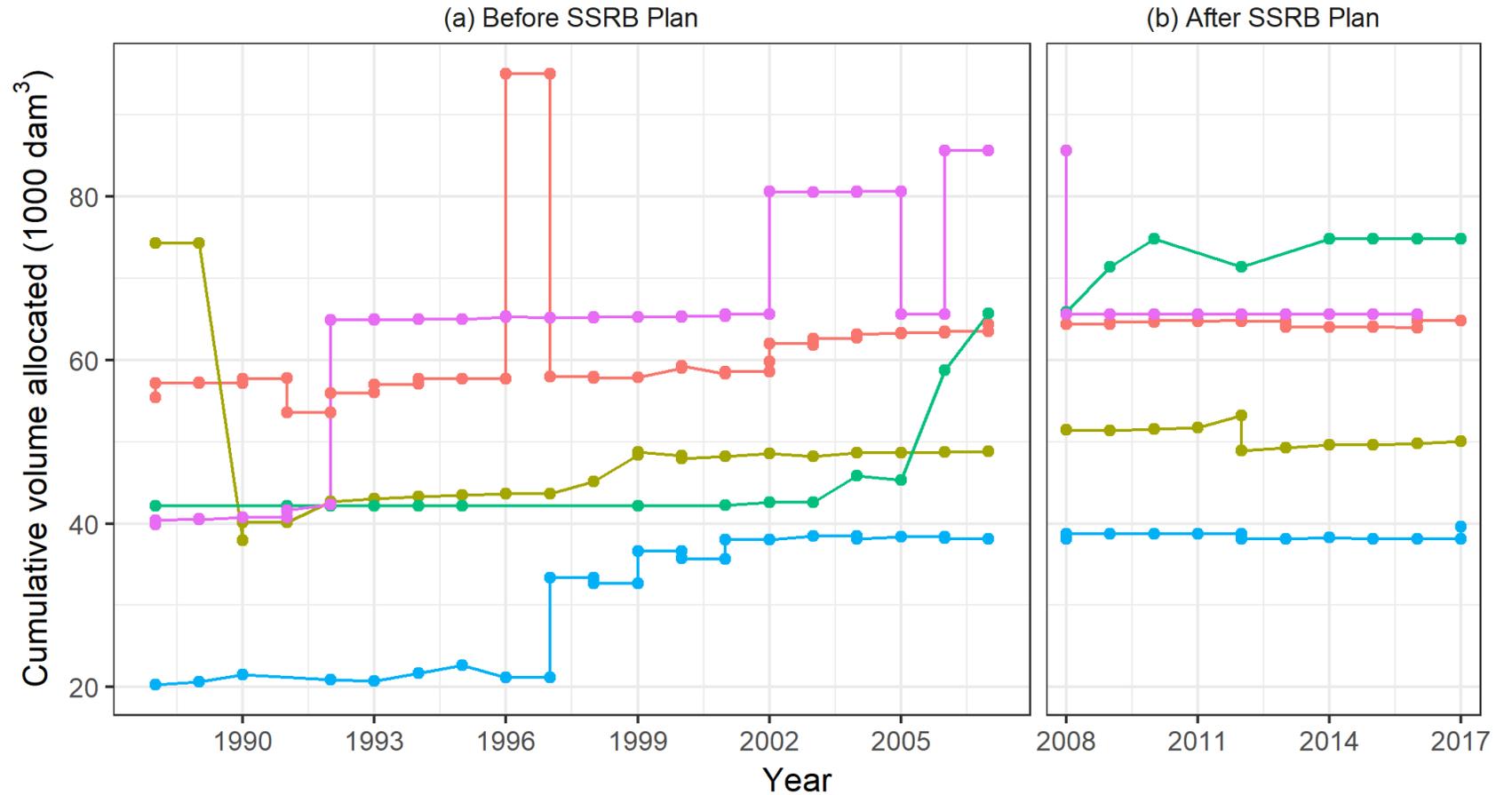
# DATA



- Surface water allocations (interim/full and temporary): number, volume and purpose
- Recorded flow data
- Groundwater allocations (interim/full and temporary): number, volume and purpose
- WCOs: locations and values
- Transfers: number, volume and volume held back
- Existing reports (e.g., Alberta Water Council reports)

How have trends in surface water allocation and/or use changed in the years before and since implementation?

# VISUAL DATA



- Agriculture and irrigation
- Municipal
- WCOs, holdbacks, recreation & ecosystems
- Commercial and industrial
- Other

## KEY FINDINGS

### Plan Recommendations



The review confirmed that many of the Plan's recommendations have been implemented:

- Limit on water allocation from Bow, Oldman and South Saskatchewan sub-basins
- Future water allocation limit in the Red Deer sub-basin
- Water Conservation Objectives
- Inter-Basin Water Coordinating Committee
- A water market, created through licence transfers
- Many water strategies undertaken with WPAC involvement

## KEY FINDINGS

### Sub-basins

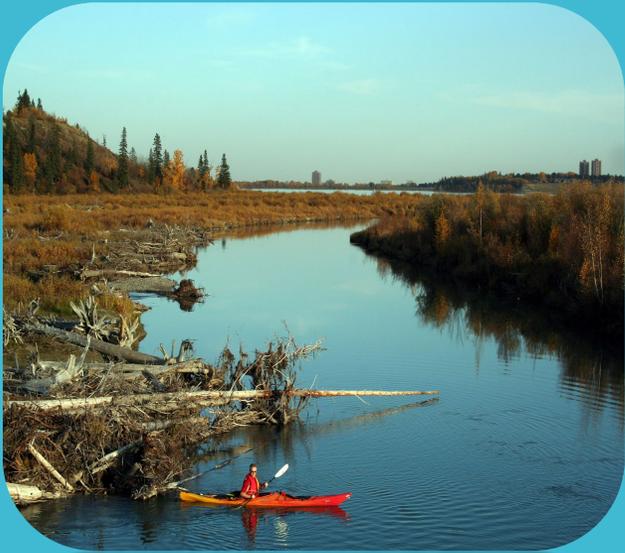


Example: Number and volume of transfers completed in each sub-basin since 2007

	Red Deer	Bow	Oldman	South Sask Sub-Basin	South Sask Basin
Number of transfers in each basin, from Plan implementation to June 2017	2	57	131	20	210
Volume (M m <sup>3</sup> ) transferred, from implementation to June 2017	0.4	12.5	22.8	3.5	39.2

Source: Data provided by AEP and the analysis conducted for this review.

# KEY FINDINGS



- Some of the Plan's more complex and open-ended aspects require a more in-depth review.
- BAC discussion of these aspects led to the identification of emerging themes, challenges and opportunities.

# EMERGING THEME



**Theme:** Improving aquatic and riparian health through watershed management



**Challenge:** Matching economic growth, municipal growth and other needs with water supply and meeting aquatic environment requirements

**Challenge:** Protecting the long-term health of the aquatic environment



**Opportunity 1:** Continue to involve collaborative groups in watershed management

**Opportunity 2:** Provide clarity, transparency and information on the decision-making processes implemented through the Plan

**Opportunity 3:** Implement programs and actions beyond the Plan that will not only prevent further degradation, but improve the long-term health of the aquatic environment

# EMERGING THEME



*Theme:* Measuring, monitoring and managing the watershed system



*Challenge:* Identifying and understanding the critical linkages between watershed outcomes/objectives, information/data, and monitoring/modeling



*Opportunity 1:* Provide the resources necessary to continually work towards filling critical gaps in information about water and watershed management

*Opportunity 2:* Provide the resources necessary to continually develop the monitoring and modeling capability and capacity in the SSRB

*Opportunity 3:* Clearly define specific watershed outcomes to enable more effective performance assessment

# KEY OUTCOMES



This project resulted in two important outcomes:

- A comprehensive discussion and a fuller understanding of the successes that have been achieved through the Plan's implementation to date.
- Significant players in Alberta's water management regime came together to build relationships and capacity for future initiatives in the SSRB.

## NEXT STEPS



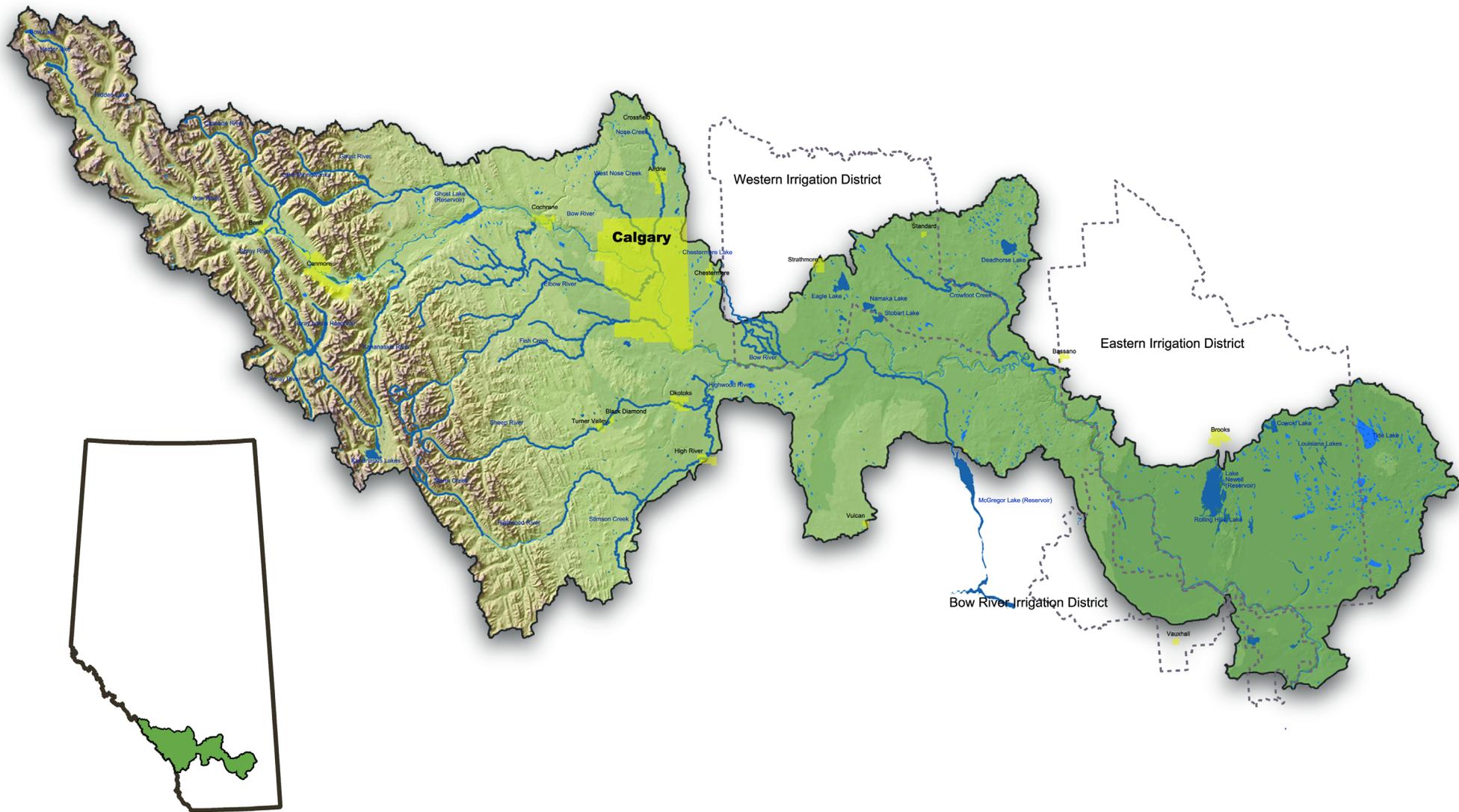
### Several next steps are identified, including:

- Hold a joint AEP - WPAC workshop to prioritize opportunities to improve aquatic and riparian health.
- Revitalize existing advisory groups (e.g., IWCC).
- Continue to involve collaborative groups in watershed planning!
- Convene a workshop with AEP staff in Approvals to work through a case study of a water license transfer from beginning to end

# This is the start of the discussion

WPACs may find areas of focus that they will work on in future







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FIRST NATIONS**



- **Strategic v.s. Tactical**
- **“Heads On” v.s. “Hands On”**
- **Inclusive v.s. Exclusive**
- **Collaborative v.s. Confrontational**
- **Focus on process not projects**



- Collaborative process can achieve quick results
- Voluntary and ambitious targets can get accepted quickly
- Role of Council is to educate, facilitate, support and build on capacity
- Strive to have good science informing decision-making

# QUESTIONS?

Final Report and Appendices  
available at: [www.brbc.ab.ca](http://www.brbc.ab.ca)

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