

# Montana – Alberta St. Mary & Milk Rivers Water Management Initiative



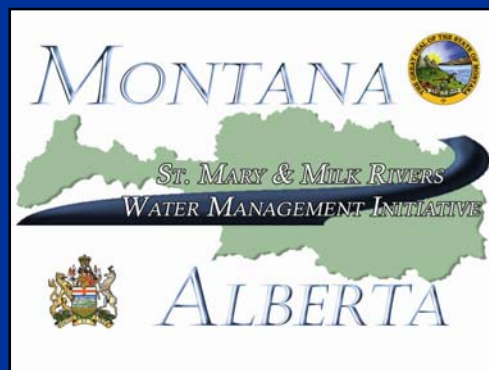
Presentation  
to  
Milk River Watershed Council Canada  
January 28, 2010

## St. Mary – Milk River System



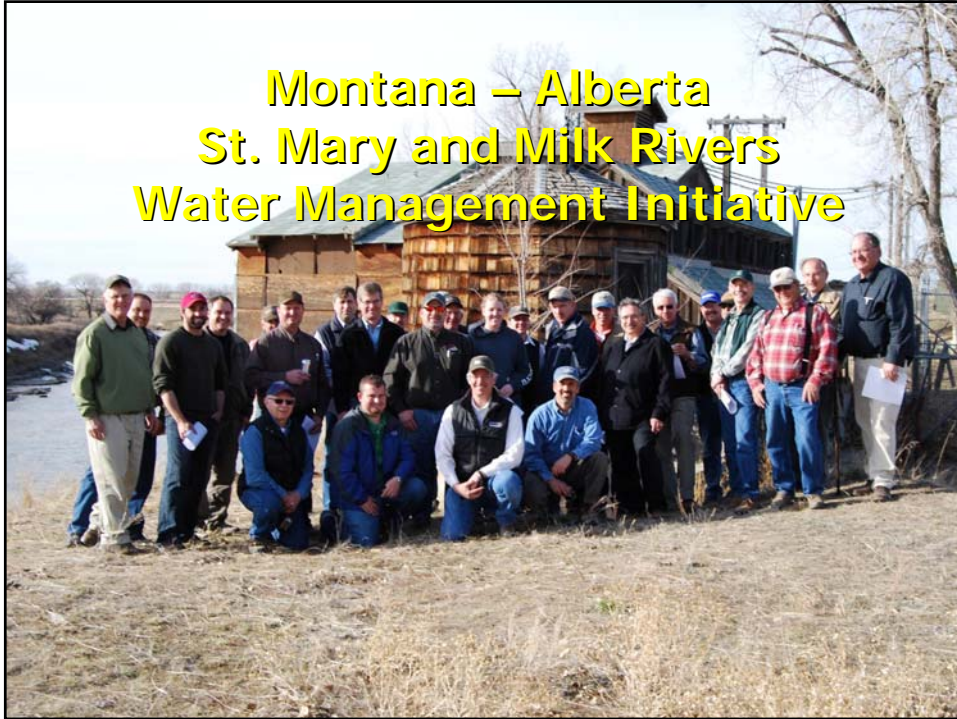
## 2004 IJC Investigation

- In 2003 Montana made its third request to the IJC for a review of the 1921 Order.
- In December, 2004 the IJC established the “**International St. Mary-Milk Rivers Administrative Measures Task Force**” to review existing administrative procedures used to share waters of the St. Mary and Milk Rivers between the U.S. and Canada.
- The Administrative Measures Task Force was unable to achieve consensus.
- The IJC approached the Governor of Montana and the Premier of Alberta and requested the two jurisdictions work together to resolve this issue.



**In January 2009, Governor Schweitzer and Premier Stelmach approved a Terms of Reference for the *Montana – Alberta St. Mary and Milk Rivers Water Management Initiative.***

## Montana – Alberta St. Mary and Milk Rivers Water Management Initiative



### Timeline

- Terms of Reference  
January 2009.
- Learning  
January to May 2009.
- Options development and evaluation  
June to December 2009.
- Recommendations  
January to April 2010.

## Initiative Purpose

- Explore & evaluate options for improving Alberta's and Montana's access to the shared water of the St. Mary and Milk Rivers.
- Make joint recommendation(s) on preferred options to both governments for their consideration and approval by April 2010.

## Common Understanding

- **Jointly reviewed all relevant information**
  - (e.g., geography, hydrology, irrigation infrastructure, system of water allocation and use).
  - Goal – to have a common information base and a common interpretation of that information
- **Tour of irrigation and municipal systems in the Milk River Basin (MT) and southern Alberta.**



## Common Interests

- Access to entitlement (% of share)
- Irrigation Reliability (number of deficits)
- Municipal water supplies
- Sediment and erosion
- In-stream flow / aquatic ecosystem health
- Recreational opportunities

## Options Explored

- The JIT has discussed and evaluated over 70 different options
- Any options that the members heard from their stakeholders or previous investigations were looked at
- The JIT has removed some options from further consideration
- The JIT is evaluating a few options and combinations of options in detail

## Base Case

- Current infrastructure and operations
- 650 cfs diversion
- 66,147 ac-ft storage in Lake Sherburne
- 83,000 ac-ft storage in Fresno Reservoir
- Existing Alberta infrastructure
- No Letter of Intent

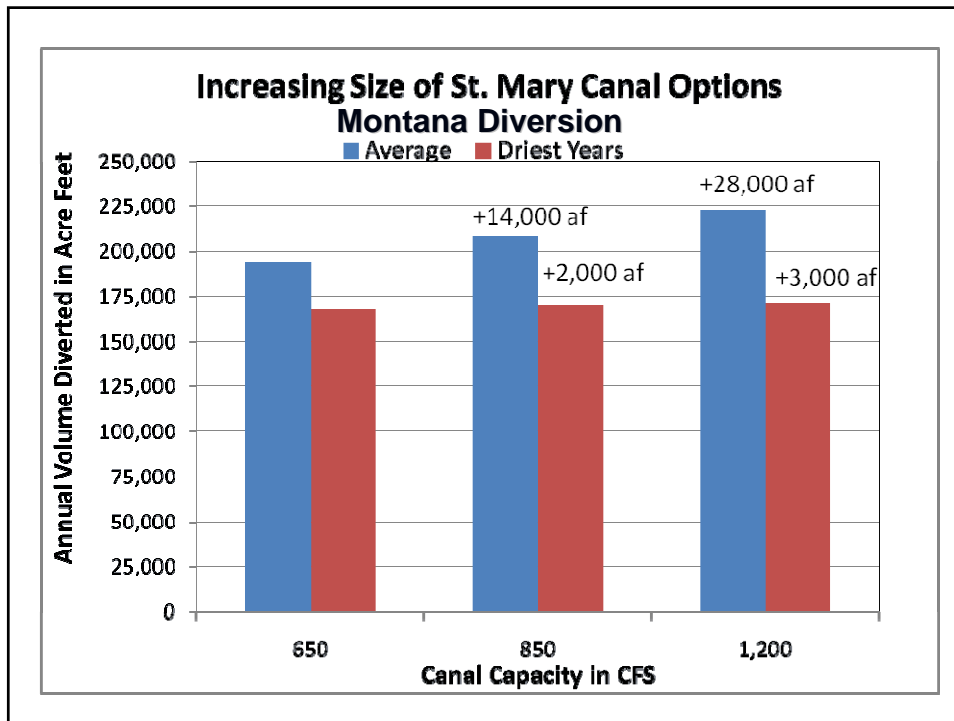






## **Base Case**

<b>St. Mary River</b>	<b>Montana</b> – % (ac.ft.)	<b>Alberta</b> – % (ac.ft.)
Average year	77% (194,000 ac.ft.)	116% (446,000 ac.ft.)
Dry year	93% (168,000 ac.ft.)	105% (305,000 ac.ft.)
<b>Milk River</b>		
Average year	144% (119,000 ac.ft.)	15% (5000 ac.ft.)
Dry year	138% (41,000 ac.ft.)	25% (4000 ac.ft.)
<i>Total Average</i>	314,000 ac.ft.	451,000 ac.ft.



## Montana - Key Findings For Increased St. Mary Canal Options

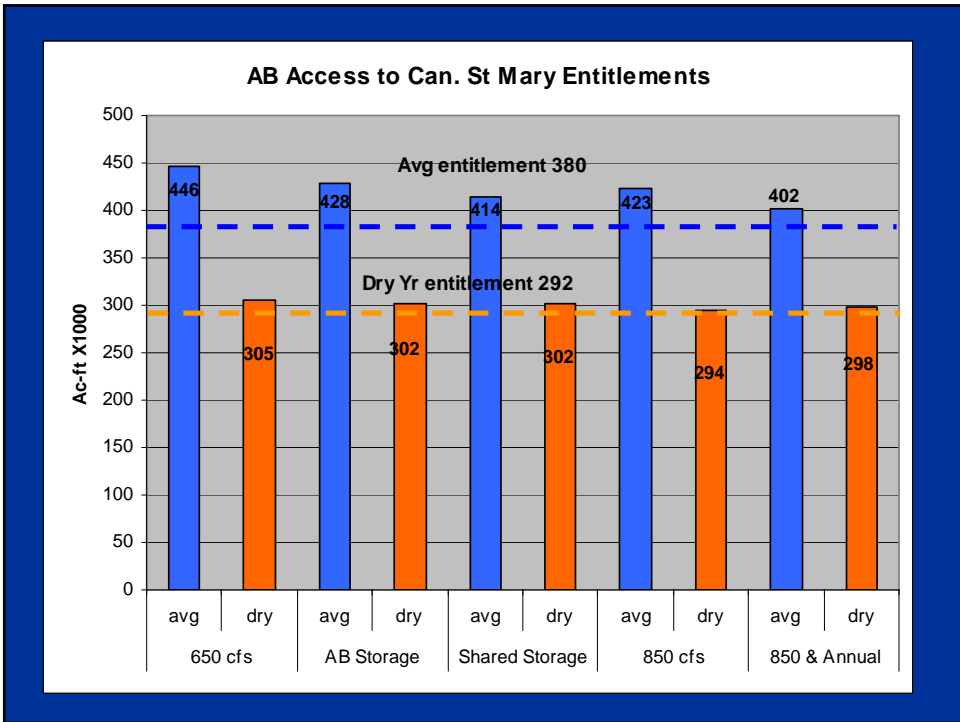
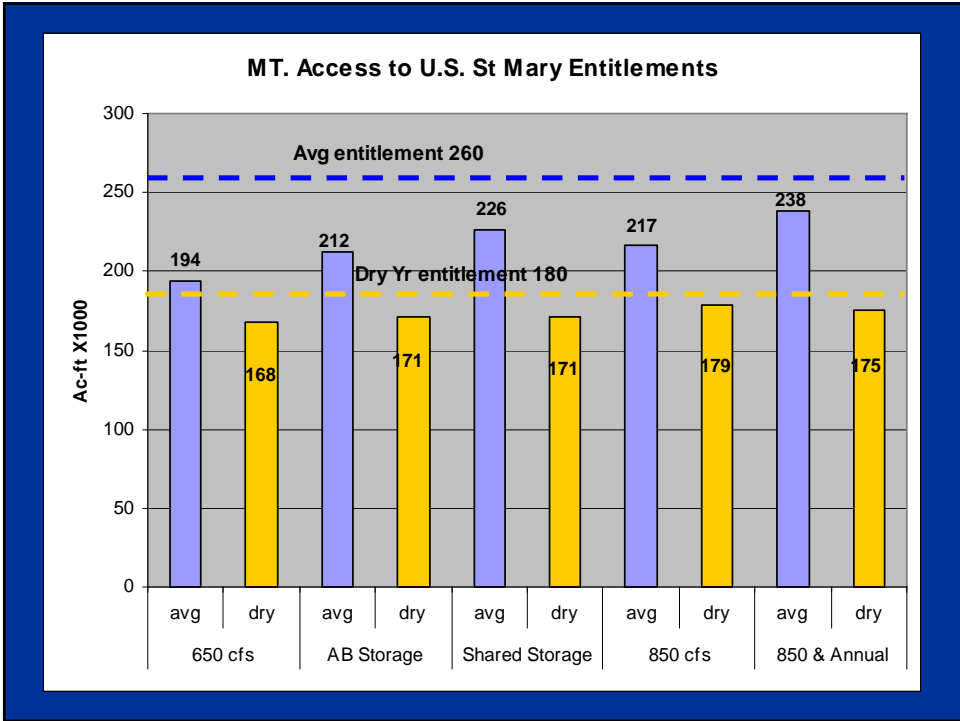
- Montana could access a larger percentage of its share of St. Mary water with larger capacities
- In drier years increases would be relatively small
- 850 cfs increases Montana's access to its share by up to 20,000 acre-feet but irrigation deliveries not increased
- Downstream infrastructure improvements and increased Milk River storage would allow Montana irrigators to more effectively use improved water supplies

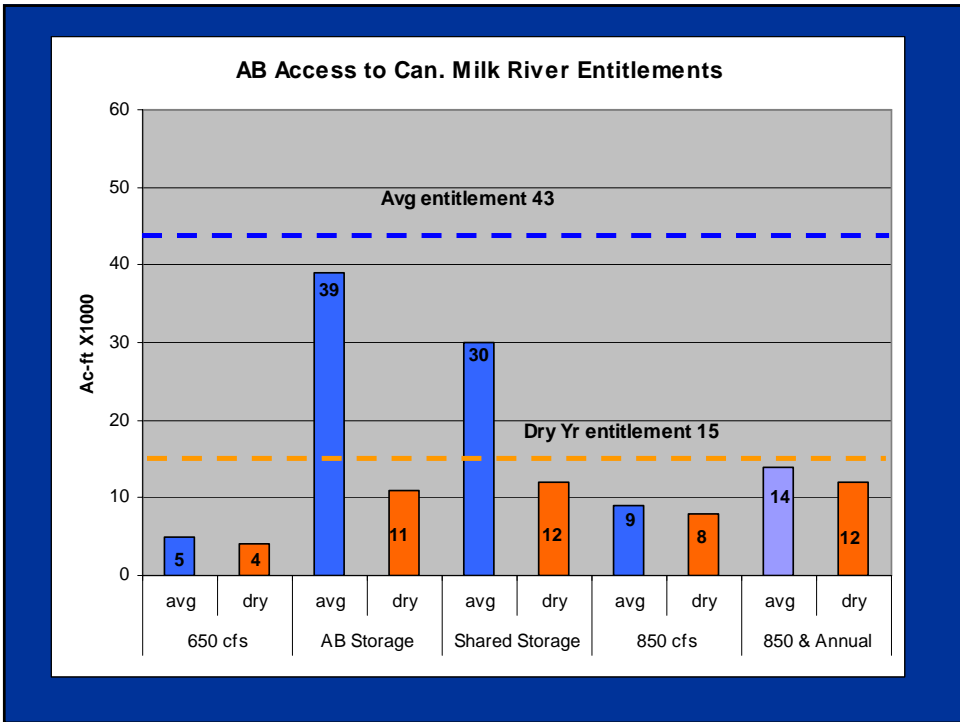
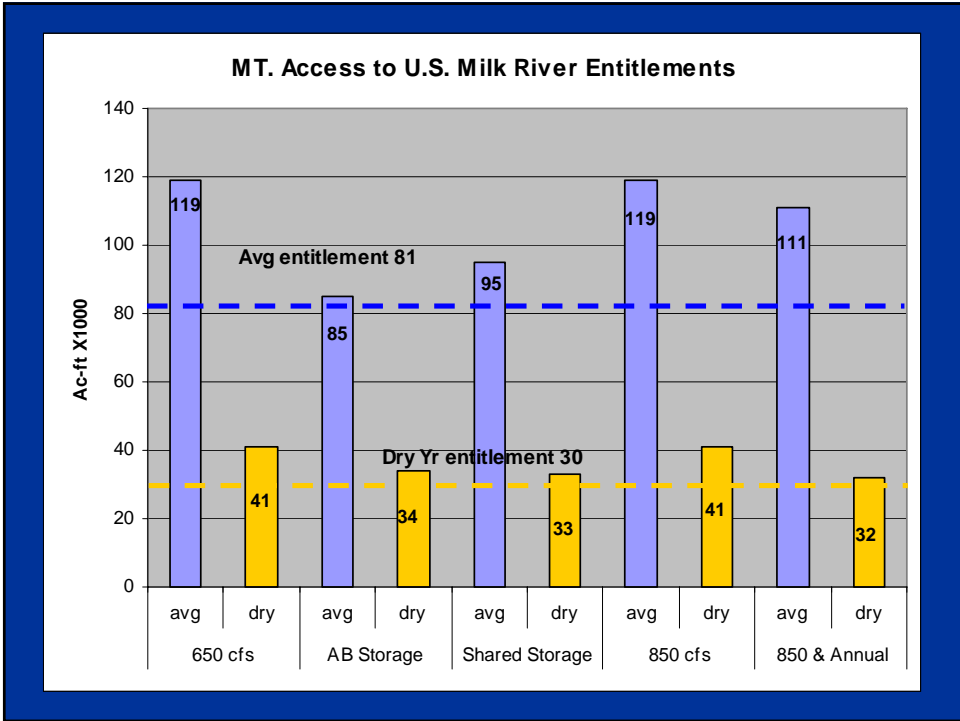


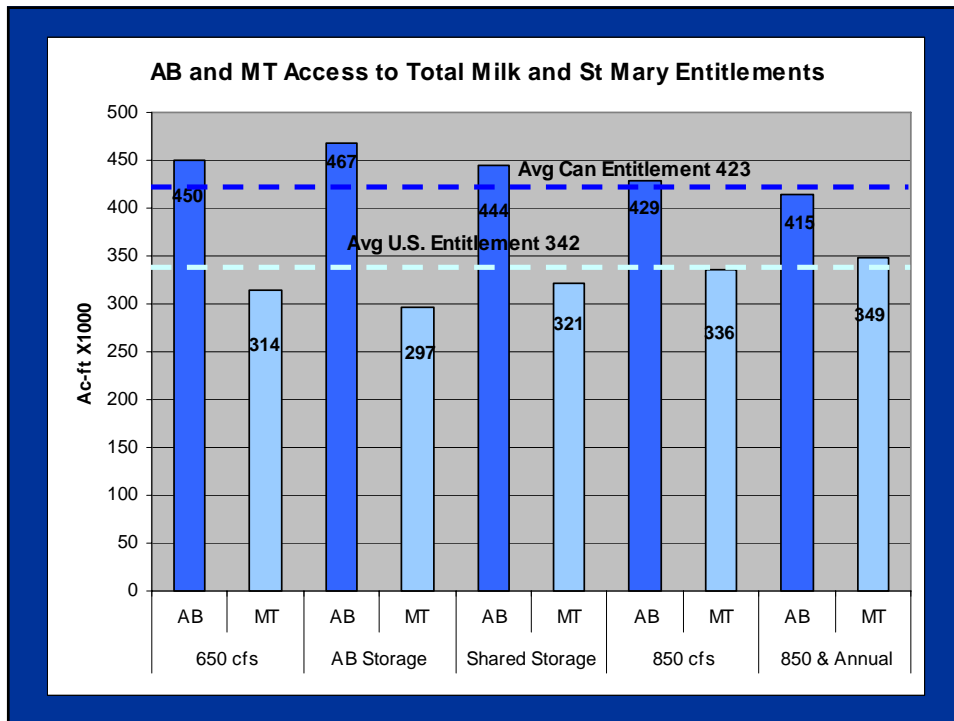


## Promising Options

- 850 cfs diversion from the St. Mary River
- Lower St. Mary Lake Storage
- Annual Balance Period
- Alberta Storage on the Milk River
- Shared Storage on the Milk River







## Next Steps

- The JIT is discussing 3 options that cover the short, medium and long term.
- Short Term – current diversion with an Annual Balance Period
- Medium Term – Shared 850 cfs diversion with an Annual Balance Period
- Long Term – Shared Storage on the Milk River in Alberta, 850 cfs diversion with an Annual Balance Period

## Partnership in Montana's St. Mary Diversion

- Alberta would purchase capacity in Montana's St. Mary Diversion
- Milk River Irrigation Options
  - Existing 8,000 acres
  - Total 13,000 acres
  - Total 18,000 acres
- Trade Milk River surplus for Montana St. Mary
- Divert Alberta St. Mary water to Milk River

## Partnership in Alberta's Milk River Storage

- Montana would purchase storage in Alberta's Milk River reservoir
- Total Milk River Irrigation ~ 25,000 acres
- Replacement for lost Fresno storage
- Controls floods and reduces erosion
- Reduces sediment to Fresno
  
- Is probably a very long term option for Montana 20 yrs +

## **Extended Balance Periods**

- Balance period is currently every 15 days
- One and two month and seasonal balance periods do not provide any advantage
- Annual (water year) balance period is being evaluated
- Only a benefit to Alberta if Milk River irrigators are allowed to trade surpluses for Montana's diverted St. Mary water

## **Alberta St. Mary Conclusions**

- The Southern Tributaries (Waterton, Belly, St. Mary), Oldman and Bow river basins have been closed to new allocations.
- The South Saskatchewan River Basin Plan that authorizes this closure was approved by The Lieutenant Governor in Council.



## **Alberta St. Mary Conclusions**

- When Montana rehabilitates their St. Mary diversion canal, there will be only minor surplus deliveries to Alberta other than in wet years.
- This will decrease irrigation reliability in the St. Mary River Irrigation Project and for junior licenses.
- This will reduce the St. Mary River contribution to Saskatchewan apportionment and will increase the quantity of water having to be made up from other parts of the South Saskatchewan River Basin.

## **Alberta St. Mary Conclusions**

- Under current conditions Alberta's entire St. Mary River entitlement is either allocated or required to meet apportionment with Saskatchewan during below average years.
- In the future when Montana accesses its full entitlement of the St. Mary River Alberta's entire St. Mary River entitlement will be required during average and below average years.

## **Alberta Milk River Conclusions**

- Alberta's share of the natural flow of the Milk River (without storage or a Letter of Intent) is not able to provide a reliable water supply for irrigation. In 25% of the years even a few acres of irrigation would experience deficits.

## **Alberta Milk River Conclusions**

- Alberta's Milk River entitlement is sufficient to meet current Milk River Basin irrigation requirements, and expansion requirements. However without storage this water runs off before it is needed in the irrigation season.

## Final Steps

- JIT reach consensus on options and opportunities.
- Provide recommendations to Montana Governor and Alberta Premier.
- Montana and Alberta provide recommendations to IJC.





## Contact Information

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