NON-TREATY STORAGE AGREEMENT

"Non Treaty Storage – history and current project focus"

Presenter: Jim Gaspard

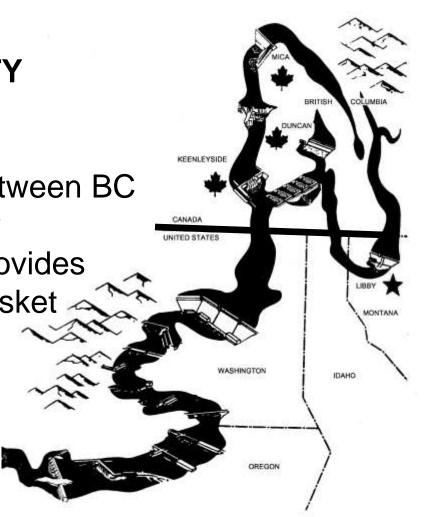


COLUMBIA RIVER AGREEMENTS

WHAT IS THE NON-TREATY STORAGE AGREEMENT?

A commercial agreement between BC Hydro and Bonneville Power Administration (BPA) that provides further coordination of Kinbasket and Arrow reservoir, beyond that which is provided by the Columbia River Treaty.





COLUMBIA RIVER TREATY NON-TREATY - THE DIFFERENCE

Treaty:

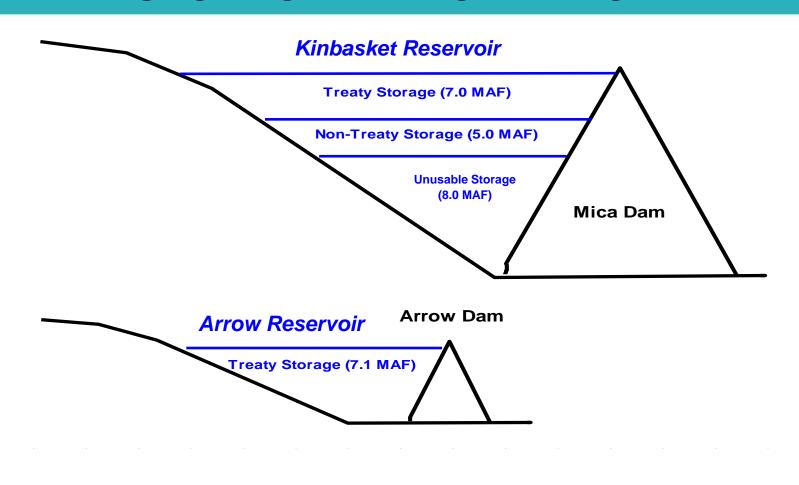
- International Treaty
- Entities: BC Hydro (BCH), Bonneville Power
 Administration (BPA) and the US Army Corp of Engineers (COE)
- 15.5 million acre feet (MAF) of storage operated under a set of rules (at Mica, Arrow, and Duncan)

Non-Treaty Storage Agreement:

- Bilateral agreement between BCH and BPA
- An enabling agreement that provides for up to 5 MAF of storage operated by mutual agreement (at Mica, but also impacts Arrow)



STORAGE AT MICA-ARROW





1 MAF = top 10 feet at Kinbasket 1 MAF = top 8 feet at Arrow

NTSA CHRONOLOGY

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1961-1964	Columbia River Treaty signed and ratified.
1969	Arrow Reservoir filled for first time
1973-76	Kinbasket (Mica) Reservoir filling
1984	Original NTSA signed: 2 MAF of storage release possible
1990	Expanded NTSA signed: 5 MAF included, with 4.5 MAF of storage release possible
2004	June 30 - Expiration of NTSA release provisions. Storage was 15% full. Refill requirements remained in effect for seven years
2010	NTSA storage refilled to 90% full
2011	June 30 - NTSA storage must be 100% full



1990 Non-Treaty Storage Agreement

- Mica Account Volume: 5 MAF
 - 0.5 MAF empty (could be filled by mutual agreement).
 - 4.5 MAF of Active Storage split between BPA and BCH
- Other Accounts:
 - 0.25 MAF at Arrow (used in early 1990's)
 - 1.0 MAF at Revelstoke (option for reliability)
- Restrictions on Activity:
 - Enabling Agreement (activity by mutual agreement), except
 - 2 kcfs release right for each party from September through April.



2003-2005 Operation of Kinbasket/Arrow

- 2003 2005 characterized by exceptionally low summer reservoir levels:
 - Kinbasket 2003: Max summer refill of 2442 feet
 - Arrow 2005: Max summer refill of 1426 feet
- Caused by combination of:
 - Proportional Draft in Treaty
 - End of life issue with 1990 NTSA



NTSA Renegotiation Objectives

Objectives: To secure an agreement with the US that will:

- Optimize additional power and non-power benefits for BC Hydro
- Improve control of Kinbasket/Arrow reservoir levels
- Support the system capability to meet existing Columbia Water Use Planning objectives.
- Extend to maximum of 2024, with short notice termination to protect from negative implications of sudden regulatory or other changes.

Renegotiations Status:

- Preliminary dialogue
- If agreement is reached, it will likely be in early 2011

