

# **Non-Treaty Storage History and Current Status**

**Briefing for WDOE – Policy Advisory Group**

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September 9, 2009**

# Non-Treaty Storage Agreement



- Mica and Arrow were constructed with about 5 Maf and 0.25 Maf, respectively, of non-Treaty storage - more than Treaty required. One Maf is equal to one million acre-feet of water.
- Treaty Article IV(5) prohibits any operation of any Canadian non-Treaty storage that would degrade U.S. power and flood control benefits resulting from the operation of Treaty storage
- BC Hydro's 1984 threat to not compensate US power losses from initial filling of Revelstoke reservoir, and BPA counter threat to sue, led to negotiations for a long term solution
- April 1984 ten-year agreement between BPA , BC Hydro, and Canadian and US Entities, relating to: "Use of Non-Treaty storage in Mica & Arrow, Initial filling of non-Treaty storage at Revelstoke and 7-Mile, and refill enhancement at Mica" The BC Hydro and US accounts were 1 MAF each

# Non-Treaty Storage Agreement cont.

- Second agreement, signed July 1990, expanded the storage amount and extended the agreement through June 2003
- The agreement was further extended through June 2004
- Release provisions expired on 30 June 2004
- By 30 June 2011 all parties must refill their NTS account
- Account size for each party is 1134 ksfd = 2.25 MAF
- Current balances as of March 2009 are:
  - BC Hydro 1002 ksfd (2 Maf) @88% Full
  - BPA -1002 ksfd (2 Maf) @88% Full



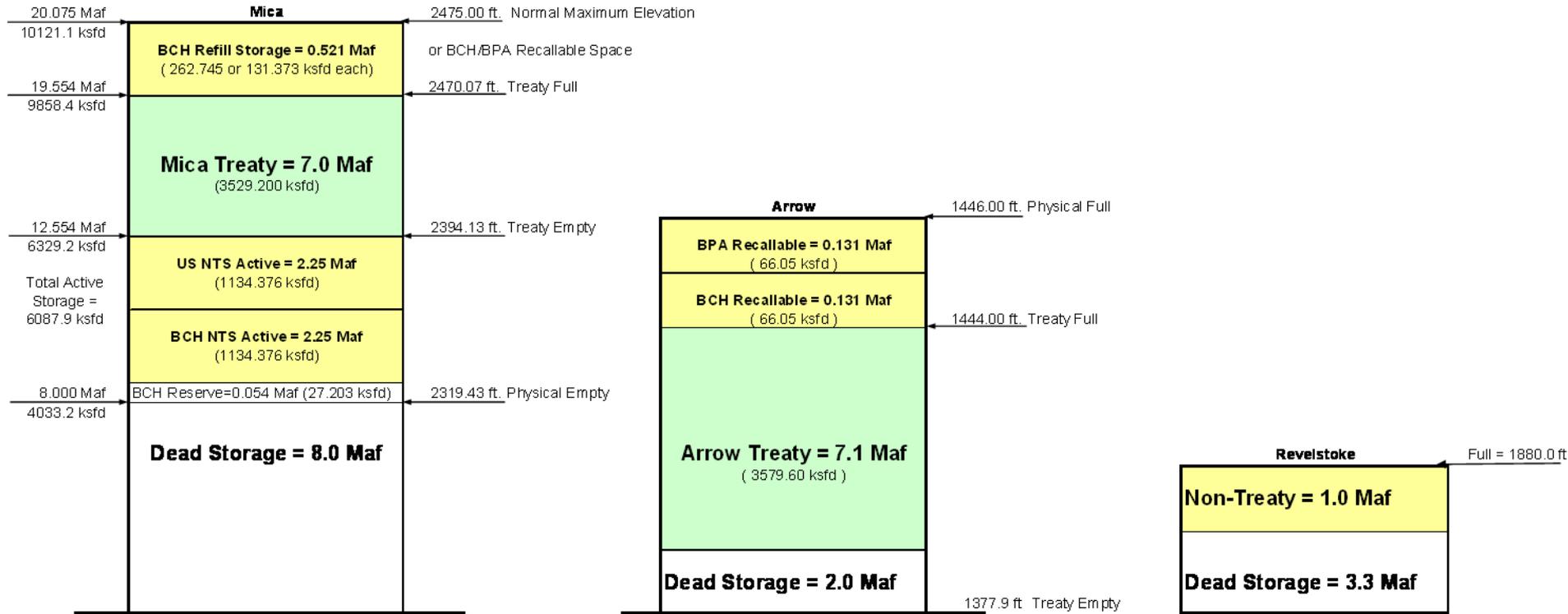
# Allocation of Storage in Mica

- The Columbia River Treaty required Canada to build and operate Mica with 7 Maf of storage for power and flood control benefits.
- Canada elected to install a generating plant and add 5 Maf of storage at the project (non-Treaty storage).
- Initial filling agreements covered fill of all 20 Maf, but gave preference to fill of Treaty and dead storage.
- No agreement was made regarding subsequent release and refill of water from non-Treaty space.
  - Treaty Storage – 7.0 Maf
  - Dead Storage – 8.0 Maf
  - Non-Treaty Storage – 5.0 Maf



# Allocation of Treaty and Non-Treaty Reservoir Space under the 1990 NTSA

(not to scale)



Note: NTSA states that Mica Refill Storage = 0.521 Maf & 262.745 ksf/d, so we use 262.745, even though  $0.521 / 1.983471 = 262.671$

# ***1990 Non-Treaty Storage Agreement***

## ***Current Status***

- The Parties have an obligation to refill their Mica active accounts by 30 June 2011
- Refill has been more difficult than expected due to:
  - Ongoing fisheries concerns limiting fill April-August
  - Previous imbalance in BPA and BC Hydro accounts
  - Transmission limitations on energy deliveries S to N
- Negotiation of a new long-term agreement was initiated in 2003, but the Parties were far apart in their assessments of relative benefits of the current agreement structure.
- Both BPA and BC Hydro have had increasing interest from outside parties in any new agreement and have promised a coordination role for some outside interests.

# ***Past Non-Treaty Storage and Fisheries Requirements***

- Biological Opinions have included an objective for BPA to negotiate an agreement with BC Hydro to use non-Treaty storage space to shape water from spring into summer (July/August)
- These agreements provided both power and non-power benefits and were initially negotiated under the umbrella of the 1990 NTSA.
- The agreements allowed BPA and BC Hydro to store water in May/June for release in July/August. BPA would release all of its stored water in the summer, but BC Hydro was only required to release ½ of its storage.
- Following expiry of release terms in the 1990 Agreement there was no mechanism for these short-term agreements.

# ***Provisions for NTS in the 2008 Biological Opinion & Fish Accords***

- BPA will seek to negotiate a new long-term agreement with BC Hydro to enable use of non-Treaty storage space in Canada once (a) BPA and BC Hydro have made substantial progress in refilling non-Treaty storage space, and (b) the collective U.S. interests in terms of such a new agreement are established.
- A new long-term agreement utilizing non-Treaty storage space is viable only if it provides power and non-power benefits for B.C. Hydro, BPA, and Canadian and U.S. interests.
- If a new long-term agreement is not in place, or does not address flows for fisheries purposes, BPA will approach BC Hydro about possibly negotiating an annual/seasonal agreement to provide U.S. fisheries benefits consistent with the Treaty.
- In accordance with Treaty requirements, non-Treaty storage may not be operated under any new agreement to reduce Treaty power and flood control benefits.
- BPA will attempt to achieve opportunities to provide benefits for ESA-listed ESUs by using the storage to shape water releases within the year and between years to improve flows in the lowest 20th percentile water years to the benefit of the ESA-listed ESUs, considering ESU status.
- Coordination and information sharing among federal agencies, states and tribes is also required.

# Could Any US Party Negotiate a NTS Agreement with Canada?

- Technically yes, however:
- Treaty Article IV(5) prohibits any operation of any Canadian non-Treaty storage that would degrade U.S. power and flood control benefits resulting from the operation of Treaty storage.
- This determination has historically been made by the Canadian and U.S. Entity (Corps and BPA) for approval to use non-Treaty storage.
- Secondly,
- BPA has indemnified BC Hydro from U.S. lawsuits in past Non-Treaty agreements and likely would want the same protection in future agreements.