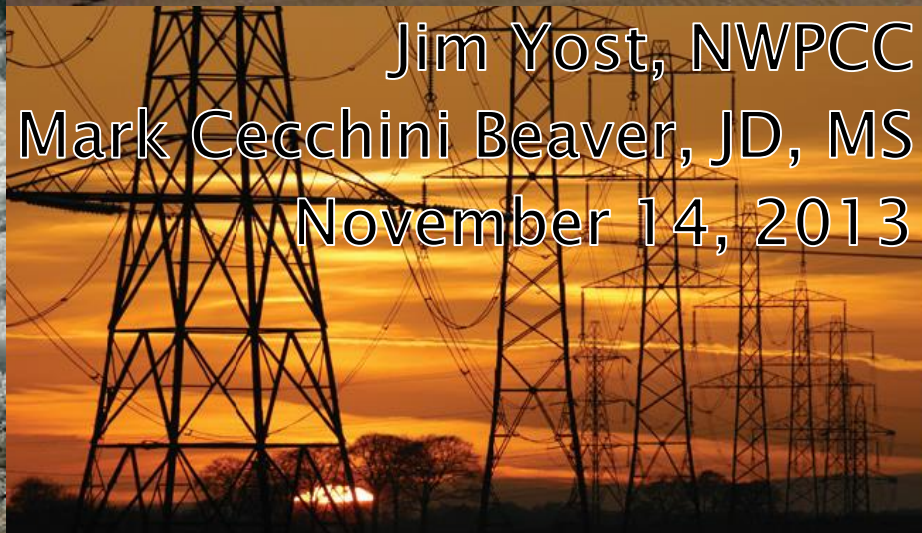
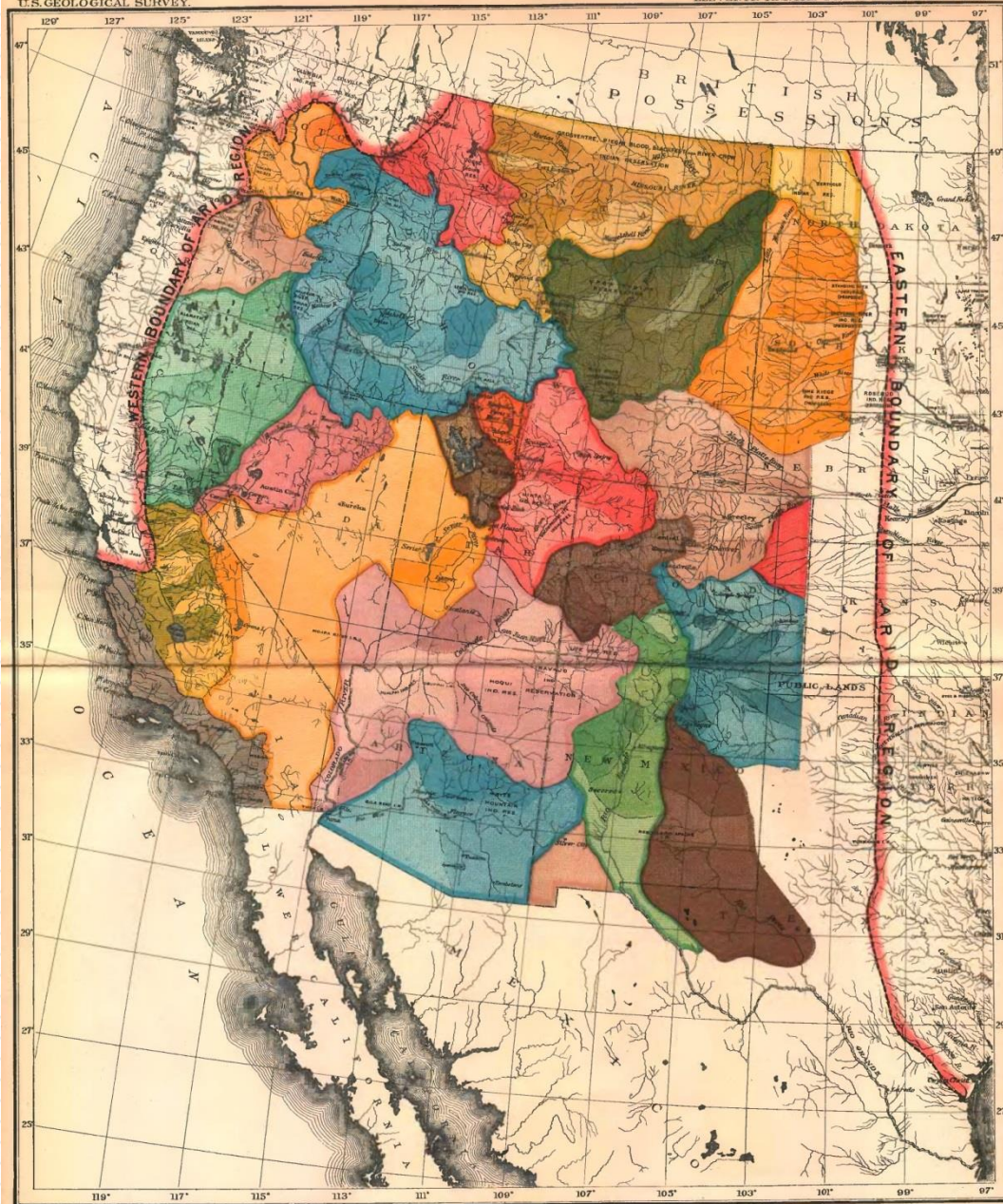


The Columbia River Treaty Past, Present, and Future



Jim Yost, NWPCC
Mark Cecchini Beaver, JD, MS
November 14, 2013



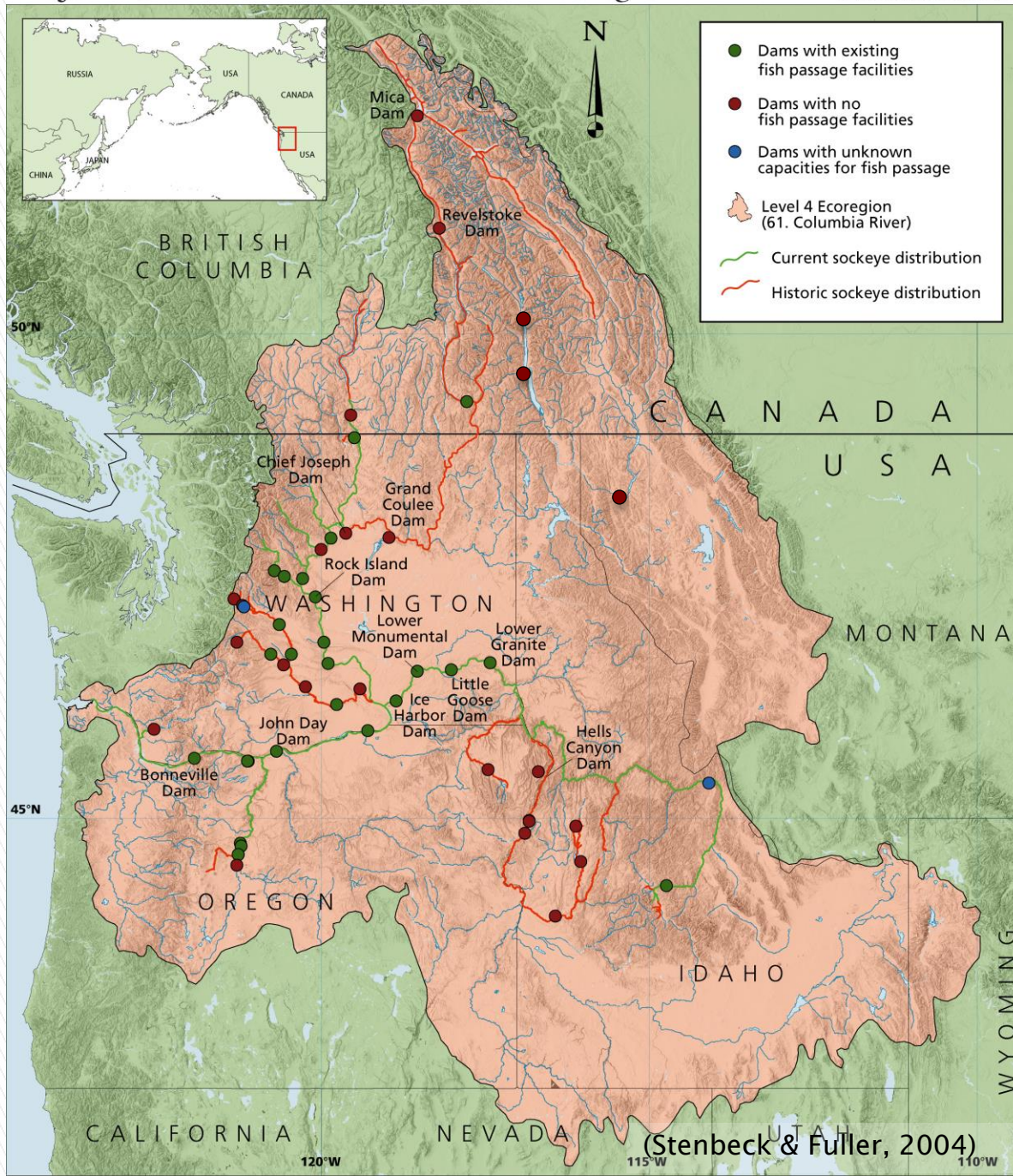
ARID REGION
OF THE
UNITED STATES
Showing Drainage Districts.

Scale 100 200 300 400 500 STAT. MILES.

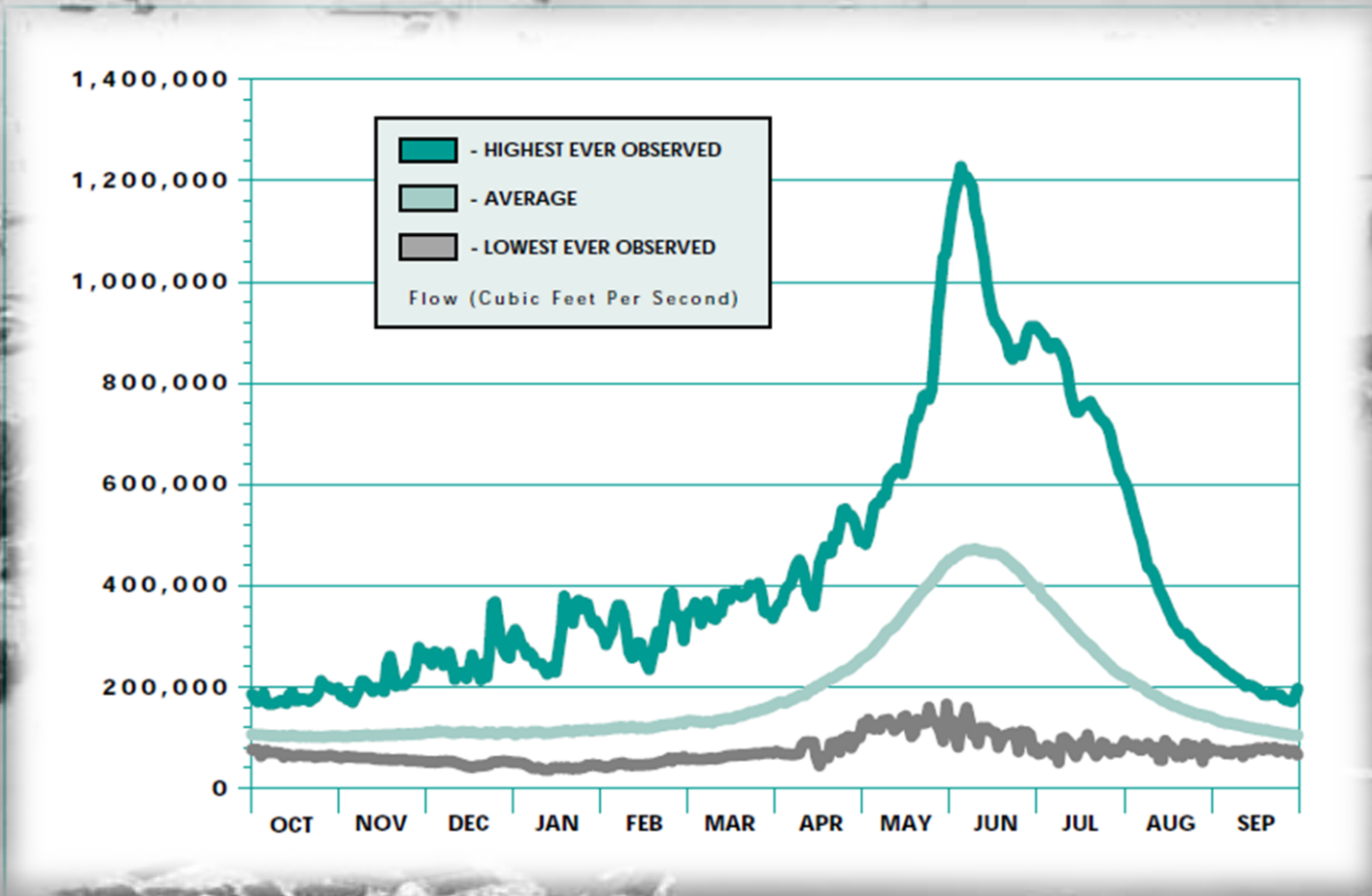
(Powell, 1891 at <http://pubs.usgs.gov/ar/11-1/report.pdf>)

Major Dams of the Columbia River Ecoregion

© 2005 State of the Salmon, a joint program of Wild Salmon Center and Ecotrust



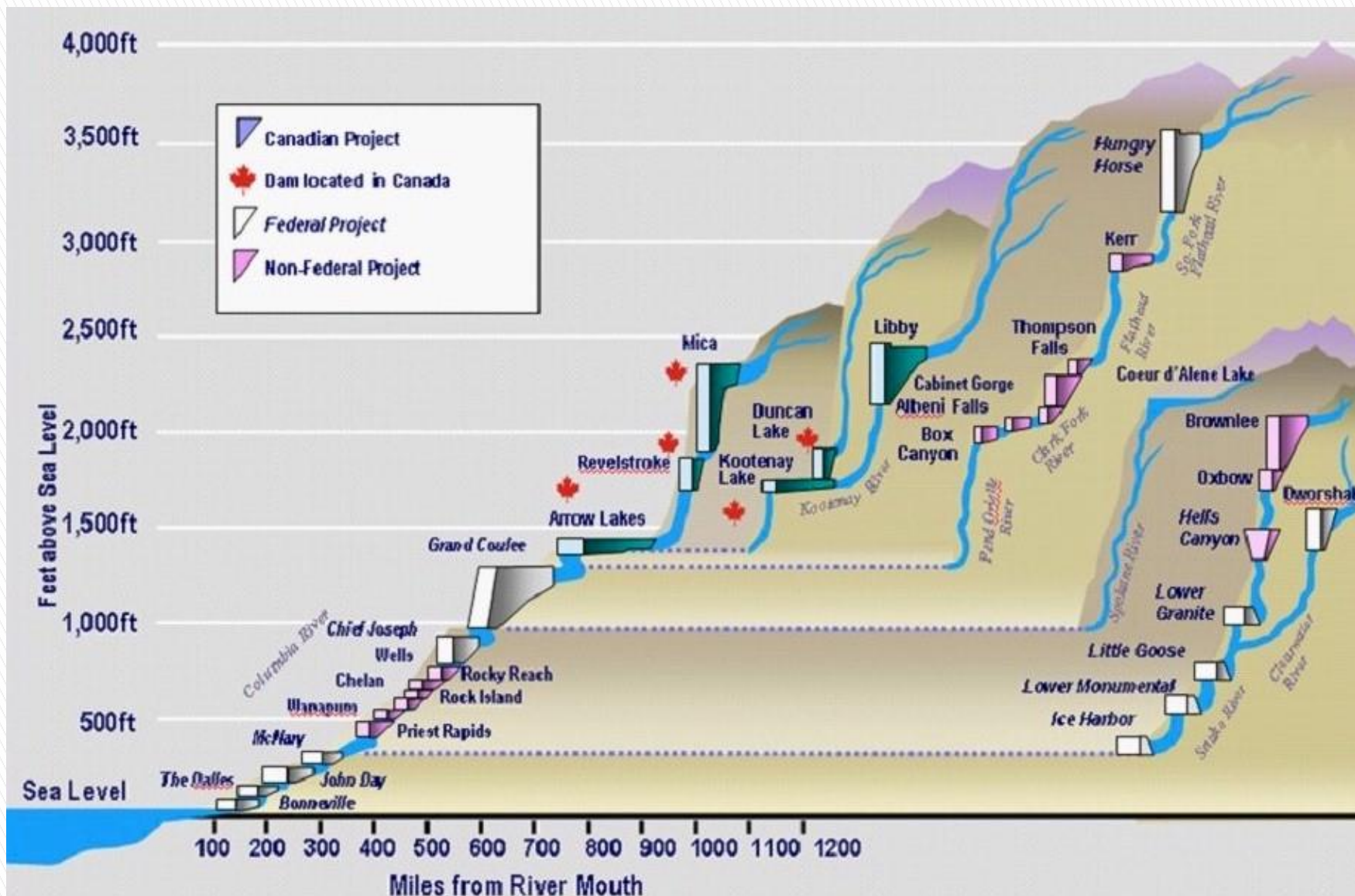
Highly Variable Flow



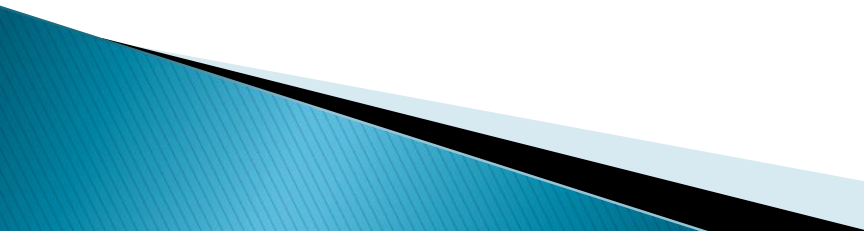
(Photo: NWPCC, www.nwcouncil.org)

(Graph: FCRPS, 2001, www.bpa.gov/power/pg/columbia_river_inside_story.pdf)

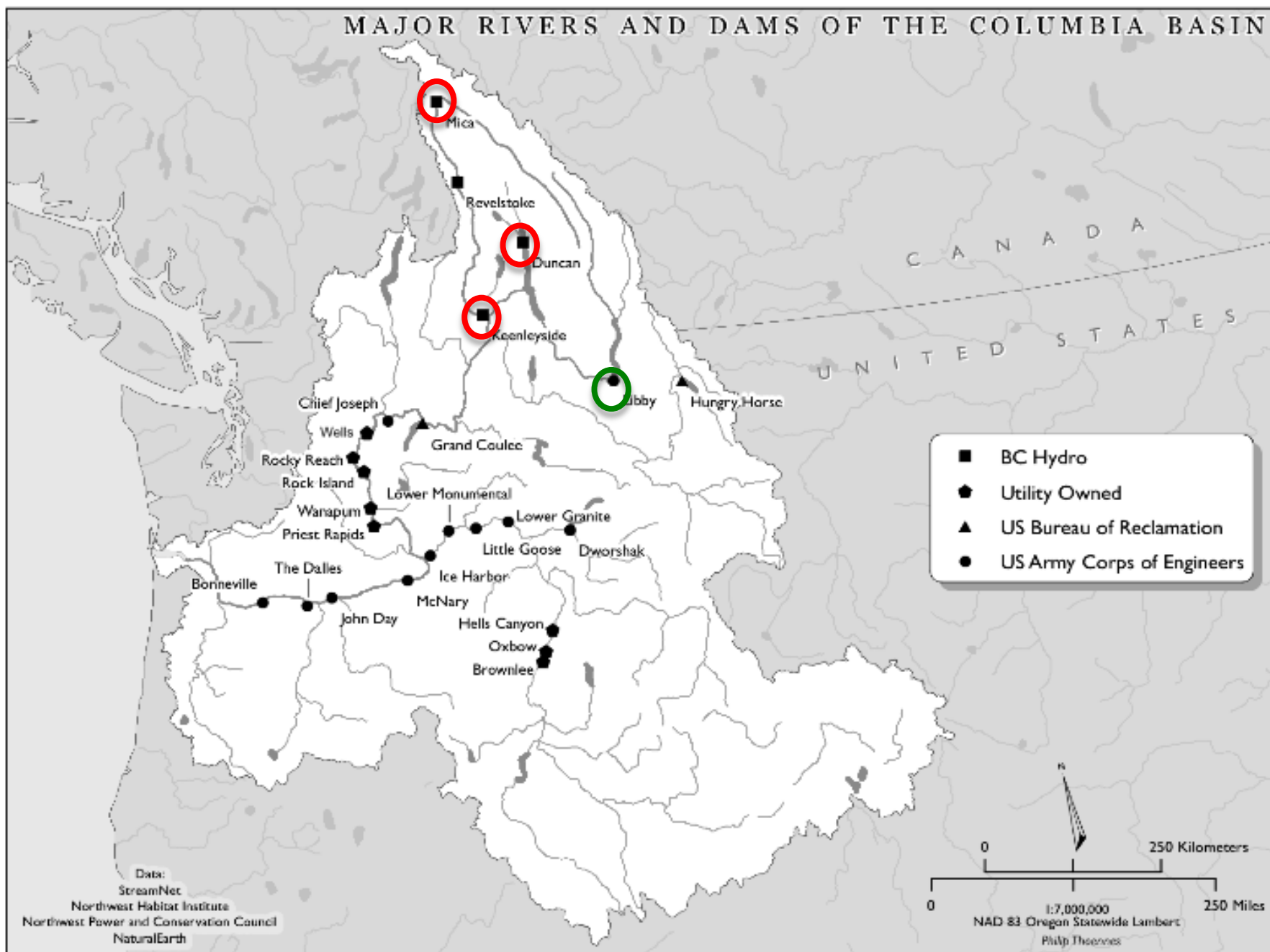
Gradient



The Treaty

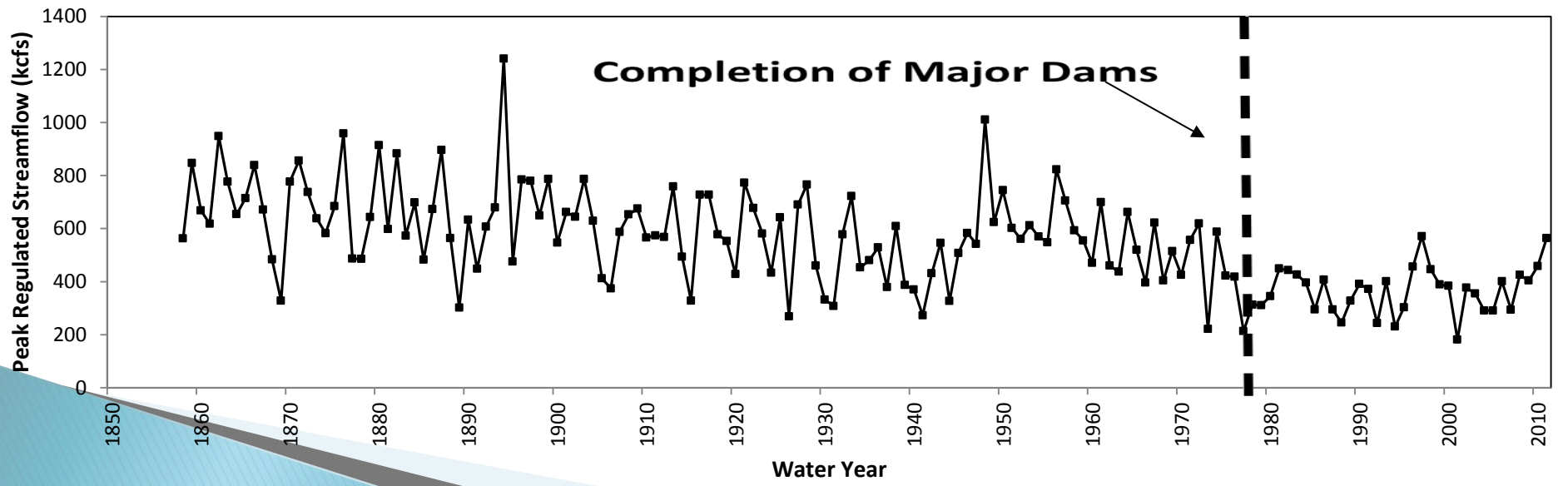
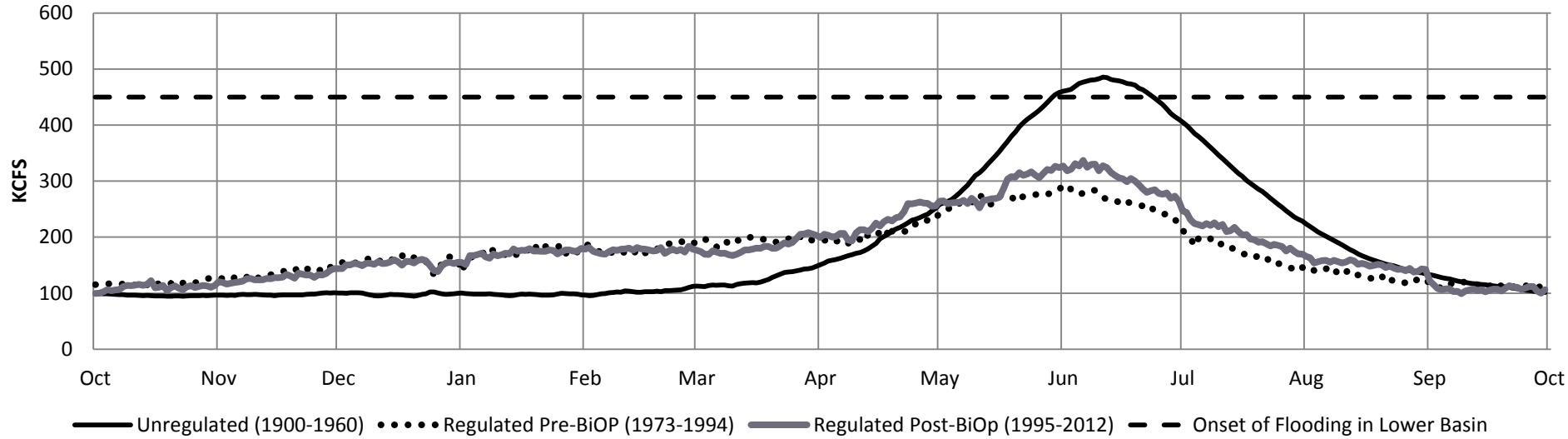
1. 15.5 MAF of “Treaty storage” at three Canadian dams
 - Authorized construction of Libby Dam in Montana
 2. \$65 million for 60 years of coordinated flood control (expires 2024)
 3. “Canadian Entitlement” to “one half of downstream power benefits” (~\$300 million/yr)
 4. Created “Entities”
- 

MAJOR RIVERS AND DAMS OF THE COLUMBIA BASIN



Data:
StreamNec
Northwest Habitat Institute
Northwest Power and Conservation Council
NaturalEarth

Flattening the Hydrograph



Ecological Decline

- Historically: 6 to 16 million spawners
- ~55% of original habitat now blocked
- < 1 million adults returned in 2012
- Majority of returning adults hatchery-bred



Fifty Years Later

What has changed?

- ▶ Environmental/Ecological considerations
- ▶ Public participation
- ▶ Tribal/First Nation Empowerment
- ▶ Regional Climate

What hasn't changed?

- ▶ Flood risk
- ▶ Hydropower still a critical resource
- ▶ Can't store power at grid scale
- ▶ Limited long-term forecasting capability

The 2014/2024 CRT Review

- ▶ Terminate/Continue/Modify notice by Sept.2014
 - ▶ Uncertainty over post-2024 flood control
 - ▶ Changes to Canadian Entitlement?
 - ▶ Mutual desire for more operational flexibility
 - ▶ Expand the pie?
- 