Bob Heinith

Columbia River Intertribal Fish Commission

Energy Vision for the Columbia River

Presented at
The Aspen Global Change Institute

June 5 - 10, 2003 Summer Science Session I

"Learning from Regions: A Comparative Appraisal of Climate, Water, and Human Interactions in the Colorado and Columbia River Systems"

- Energy Vision for the Columbia River

CRITFC Energy Vision for the Columbia River

- GOAL:

  Reduce the Pressure of Energy Demands on the Columbia River Basin's Fish and Wildlife Resources.

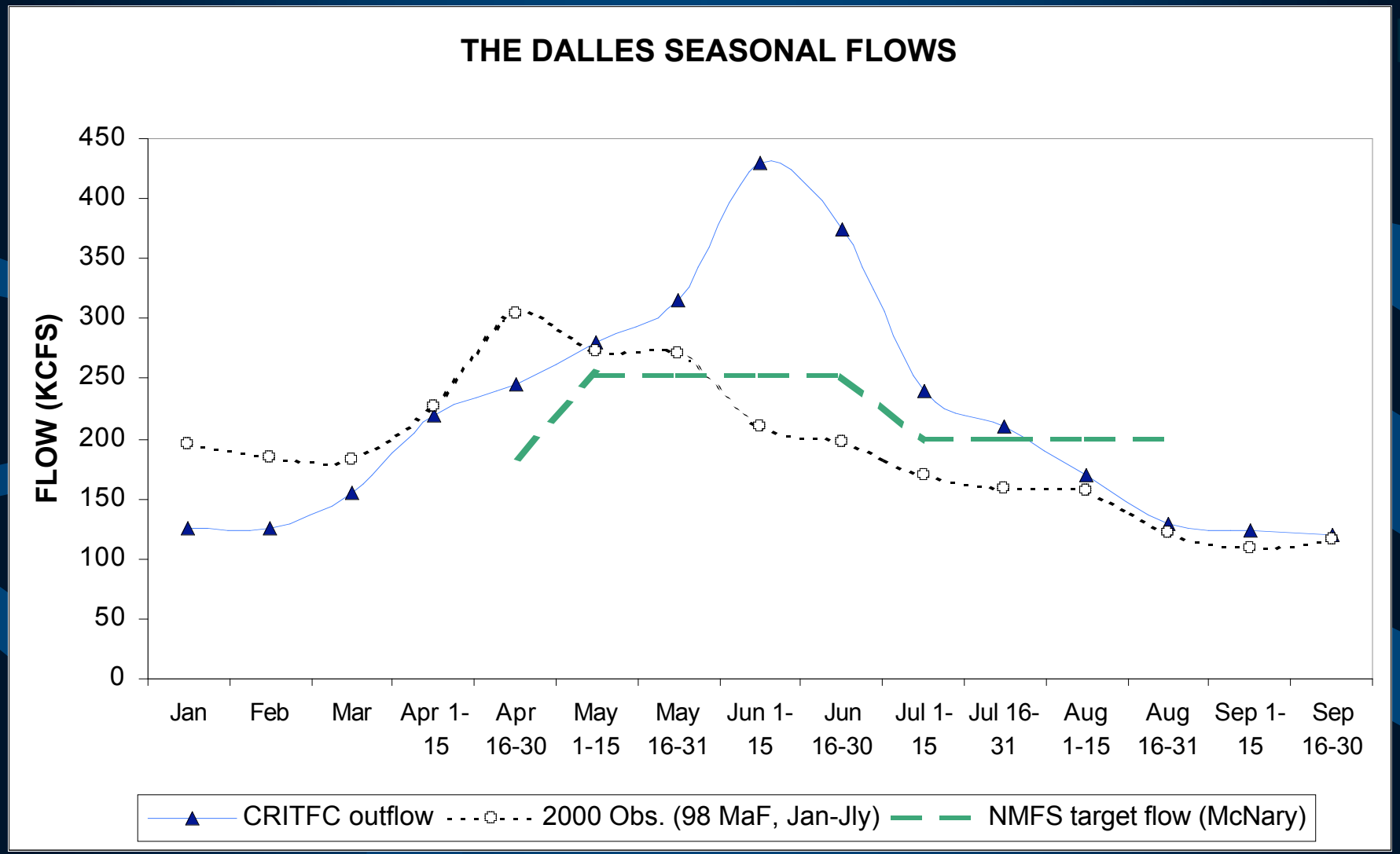
CRITFC Energy Vision for the Columbia River

- BASIC PRINCIPLES:
  - Serve loads more cheaply than they are served today.
  - Provide better protection against unforeseen events.
  - Create a healthier Columbia River Basin for fish and wildlife resources.

Normative River Concept: "Normative conditions, which provide critical habitat functions in the natural landscape, must be restored, not mitigated." ISAB 1998

- Return Columbia & Snake River flows to a more naturally shaped hydrograph.
- Reduce daily flow fluctuations associated with power peaking operations.
- Utilize spill as an effective means of passing juvenile salmon by dams.
- Breach the Snake River dams.

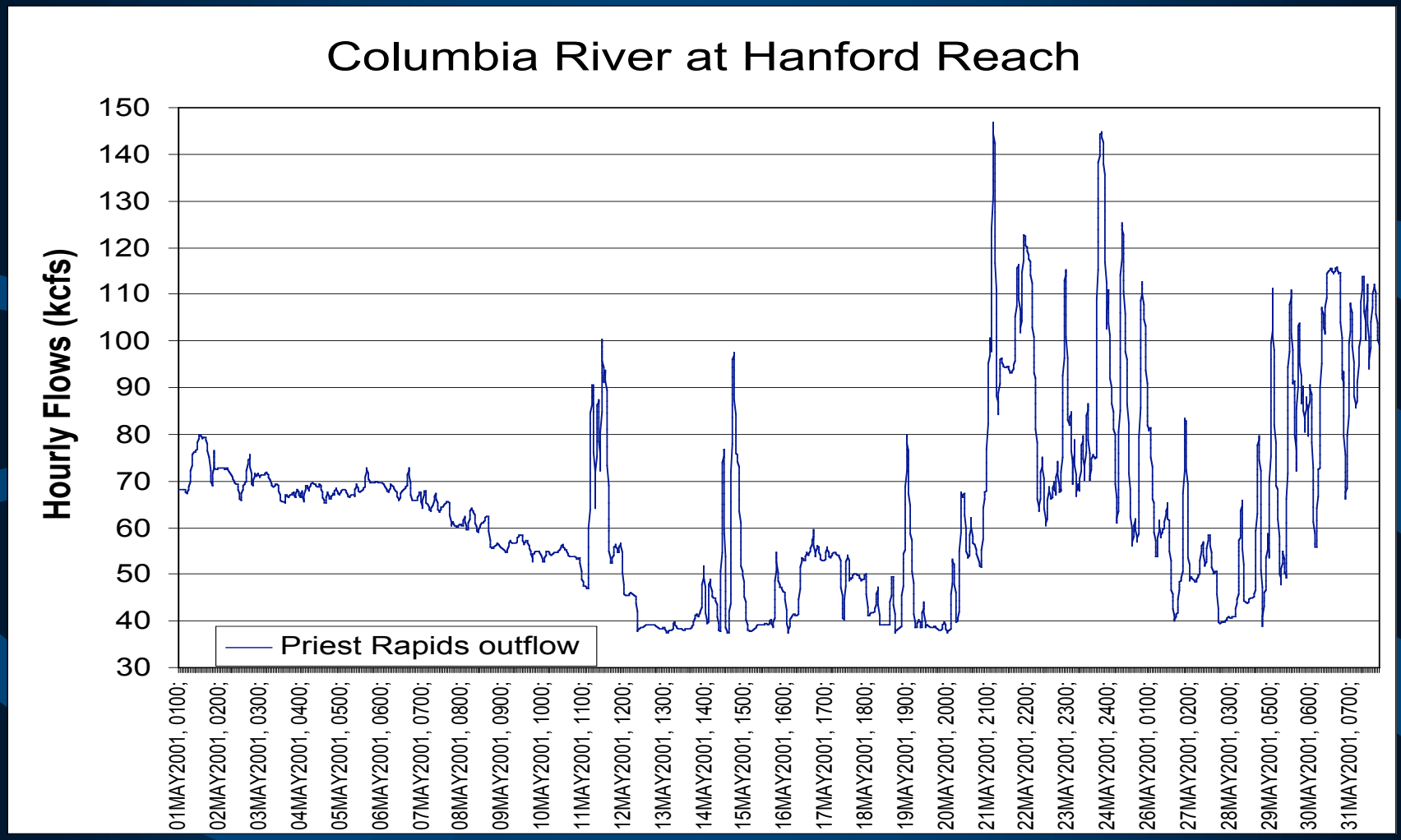
Normative Seasonal Flows



Hanford Reach Power Peaking

- Hanford Reach is the last free-flowing section of the Columbia River.
- Prime fall chinook spawning habitat.
- Subject to extreme flow fluctuation due to power peaking operations.

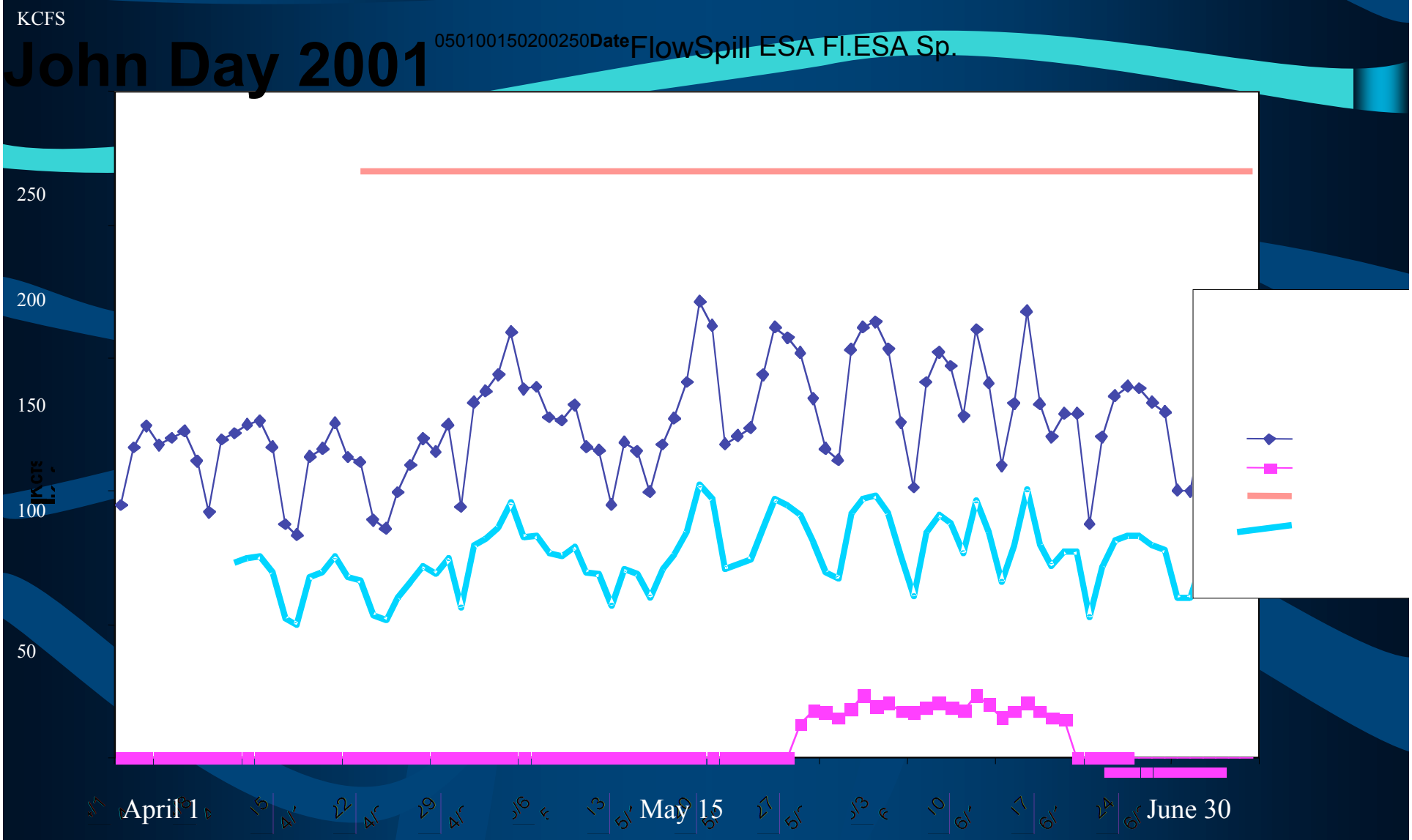
Daily River Peaking



2001 River Operations Abandoned ESA Flow and Spill Requirements

- Flow targets were not met at any time during the juvenile migration.
- Spill was eliminated during most of the spring and summer migration.

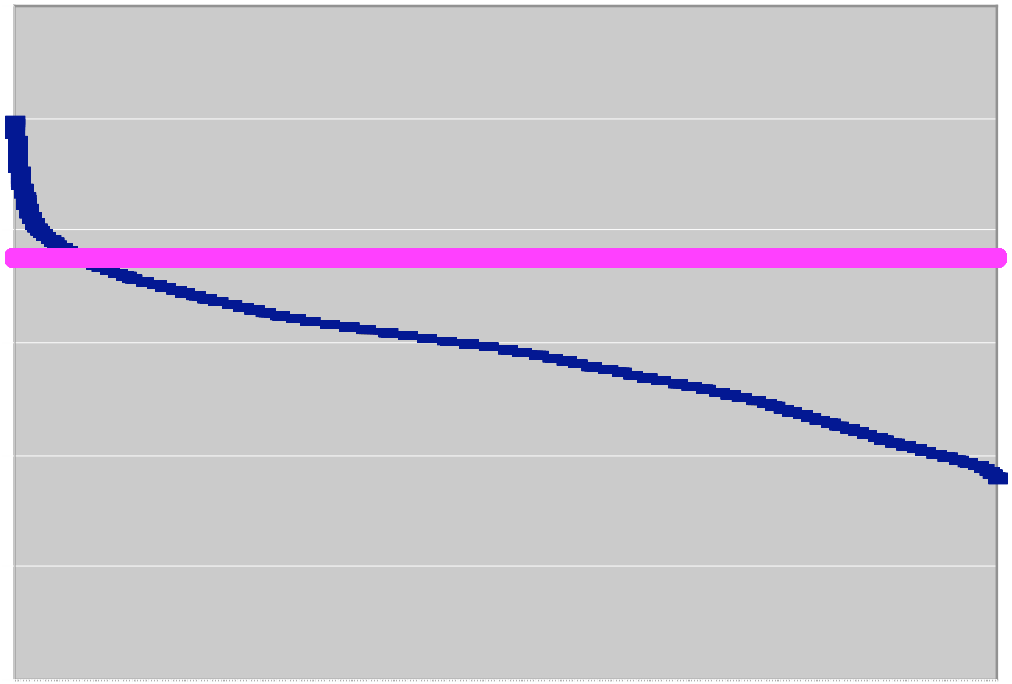
2001 ESA River Operations (Flow & Spill)



Reducing Regional Energy Dependence on the Columbia River: Economic Considerations

- The electric energy industry has the highest investment in physical plant of any U.S. industry. Thirty-five percent of all capital in place (generation, transmission, & distribution) is there to serve loads that occur less than 5% of the time.
- Using the River to serve distant peak loads is costly.

CRITFC Energy Vision for the Columbia River



CRITFC Energy Vision for the Columbia River

- BPA has scheduled $2 billion in new transmission investment in the next 4 years.
- The debt service on new transmission investment planned in the region is more than the cost of replacing the energy lost by breaching the Snake Dams.
- In 2000, BPA signed contracts for 11,000 megawatts of power sales, with only 8,000 megawatts of power resources available.

CRITFC Energy Vision for the Columbia River

- Energy Resources Portfolio
  - Strategically placed gas-fired generation
  - Strategic pricing of retail power
  - Efficiency improvements
  - Load management
  - Distributed generation (DG)
  - Wind generators

- "Perma-Slice"
  - The government should not relinquish operational control of the River to slice customers.
  - Slice customers must meet their own load growth.

- BPA's Financial Choices
  - Implement rate increases
  - Reduce agency overhead
  - Do Not sacrifice fish or energy resource acquisitions