

An ENGO perspective  
on Phase 1 results of the  
Western Renewable Energy Zones  
(WREZ) Initiative

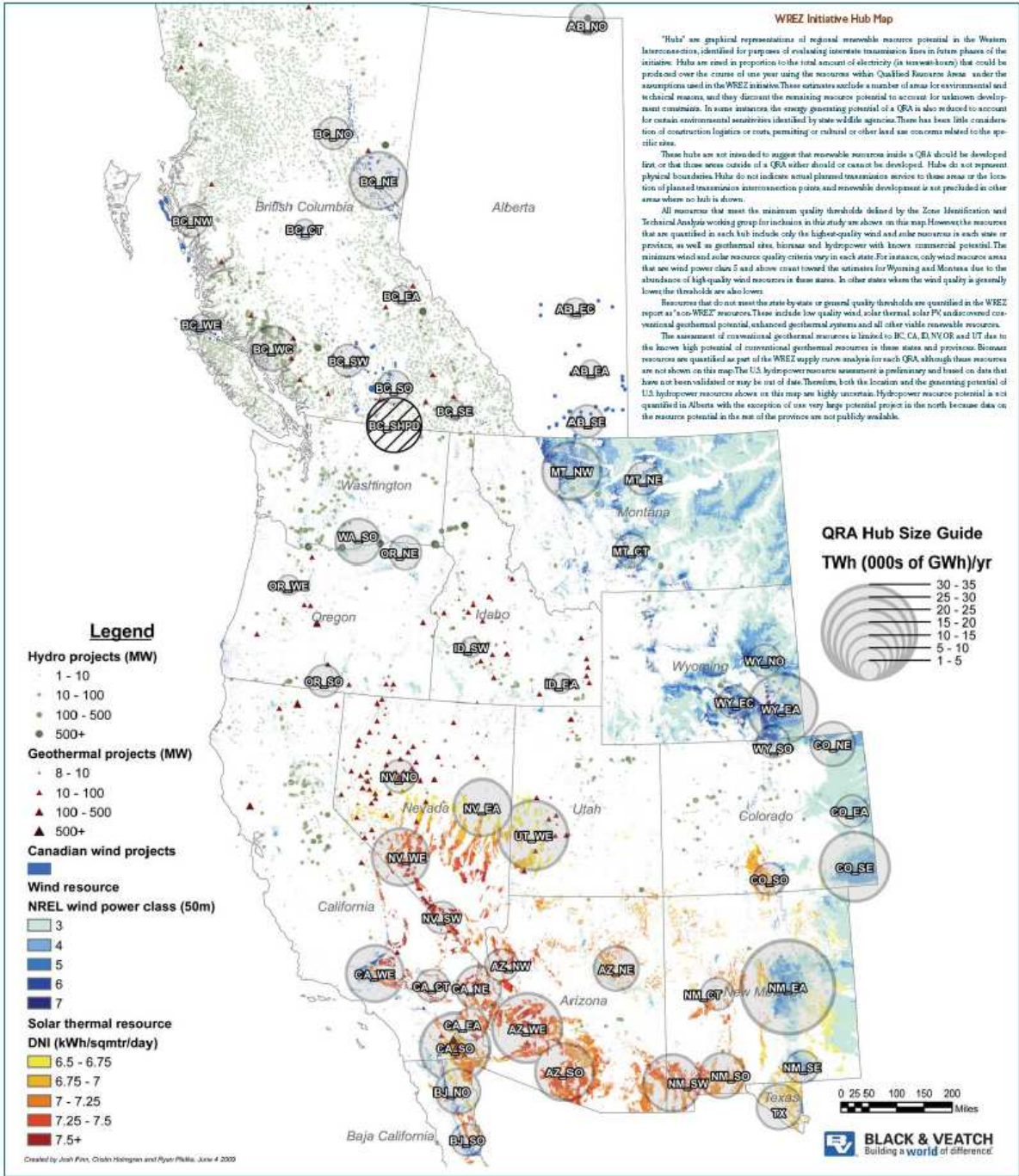
Nicholas Heap  
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MEMPR – ENGO Forum  
June 10, 2009

# Renewable Energy Zones

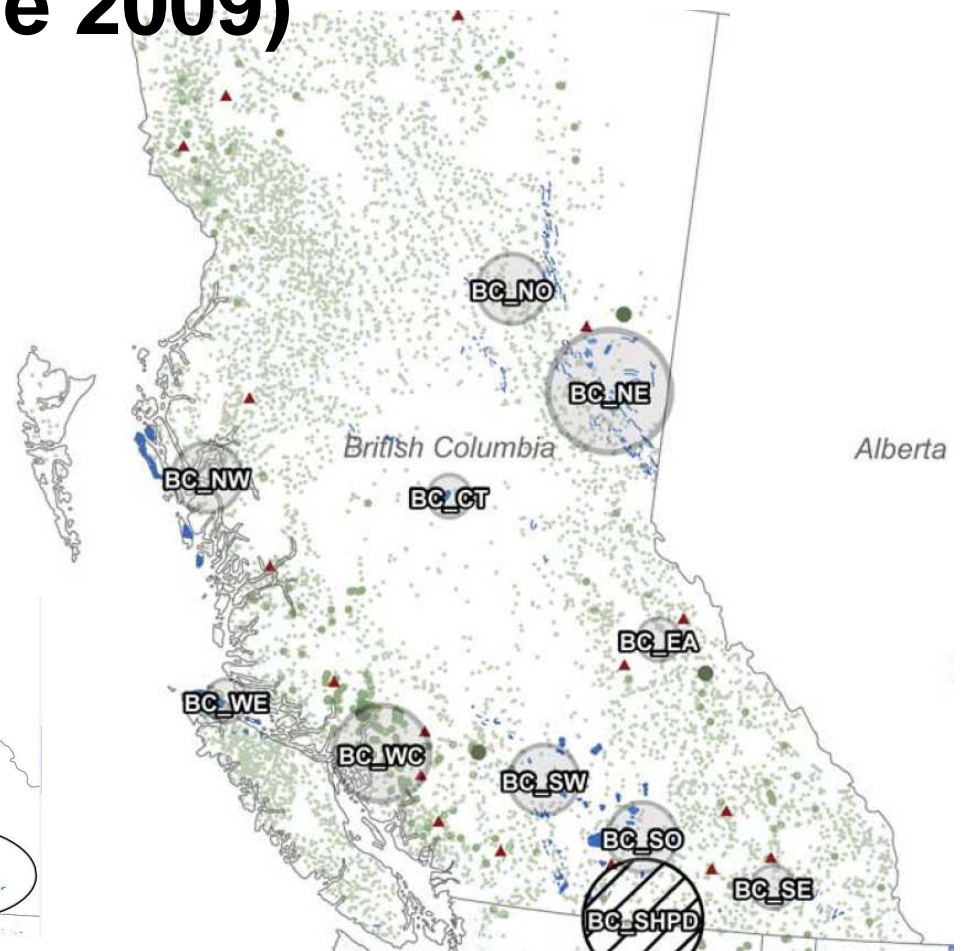
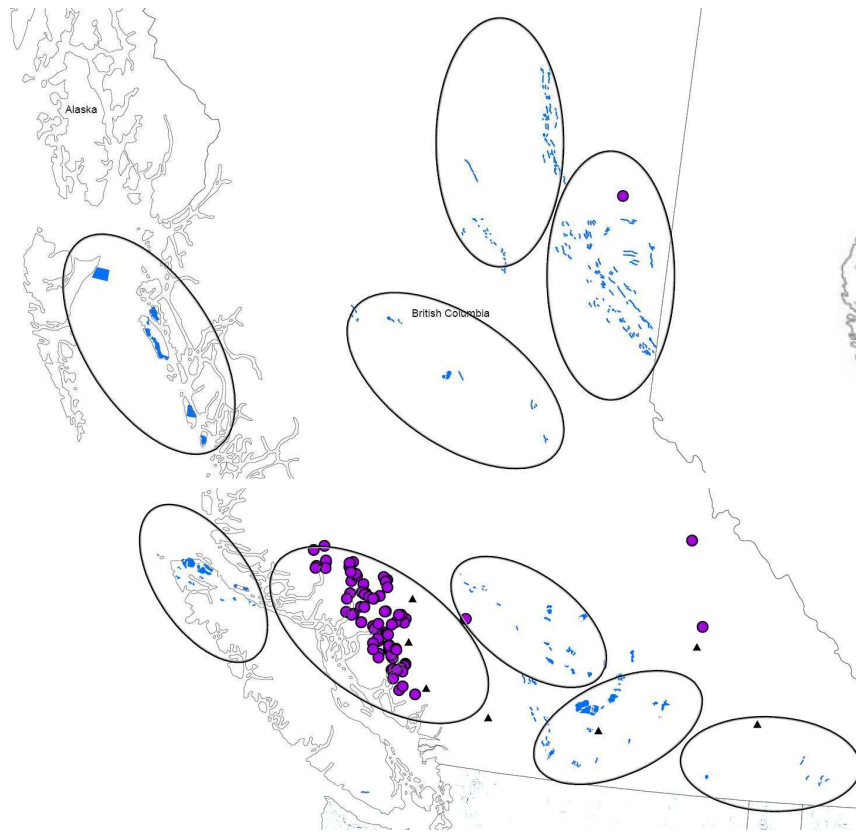
- REZ is an innovation from Southwest U.S. states in response to Renewable Portfolio Standards.
- RE generation must be sited where the resource is.
- It takes longer to build transmission than to build power plants.
- “You have to know where the puck is going to be.”
- US REZ methodology: identify and prioritize high-energy, low-environmental-impact areas for staged development, in order to make efficient investments in transmission infrastructure.

# WREZ Methodology

- Identify all lands with high RE potential
- Identify all environmentally sensitive lands (e.g. parks, critical endangered species habitat, roadless area)
- Lands with high RE potential not excluded from development (e.g. parks) are potential REZ areas
- Calculate electricity production from each REZ, excluding or discounting production within environmentally sensitive areas
- Evaluate the total per MWh cost of generating power from each REZ, and prioritize development accordingly



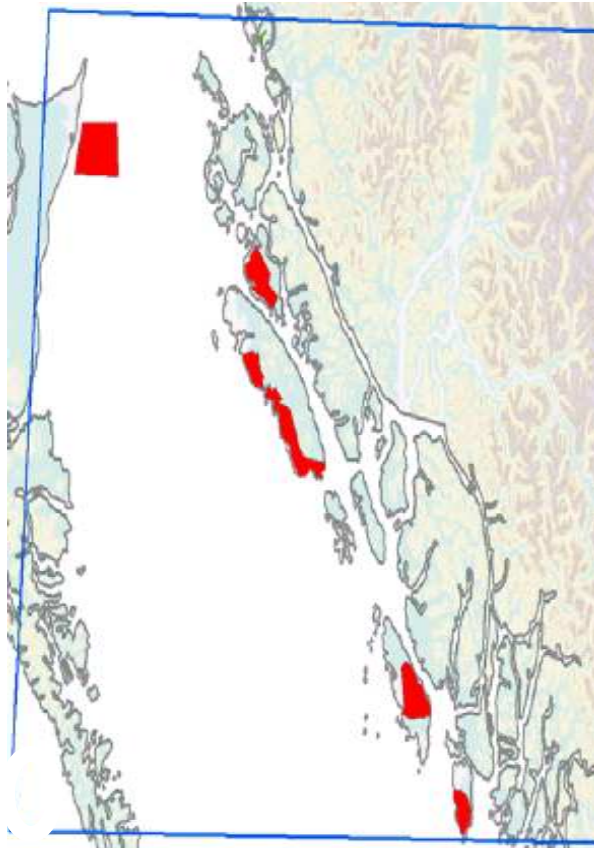
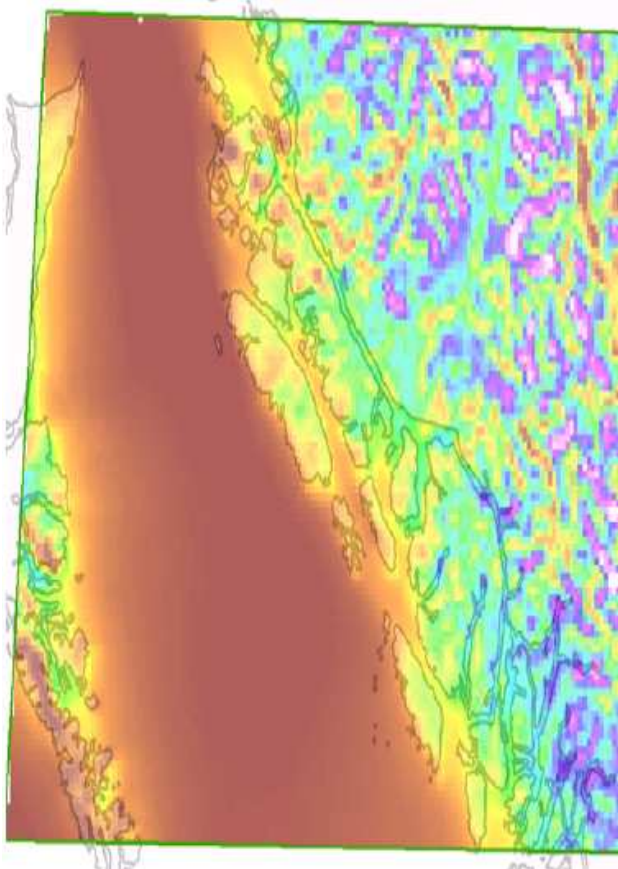
# Comparison of draft “QRA” Map (February 2009) and Phase 1 WREZ Map (June 2009)



# Concerns with B.C. Renewable Energy resource assessment:

- The sources of datasets on renewable energy resources potential have not been sufficiently transparent;
- The analysis of these datasets is **not compatible with the stated WREZ Methodology, and differs from that used in other WREZ jurisdictions;**
- The resulting **renewable energy resources** shown on the Draft QRA Map **are underrepresented** relative to other jurisdictions; and
- The renewable energy resources that are displayed are **strongly biased towards already-proposed energy developments.**

# The WREZ map identifies wind developers, not wind resources



# **Other problems with the WREZ B.C. Renewable Energy assessment**

- Hydro: Data on QRA map restricted to cost-effective resources
- Geothermal: data used came from California consultant, not CanGEA
- Biomass: sustainable resources are limited (not shown on map)

# Environmental lands assessment for B.C.

## **Avoidance Areas:**

- Wildlife Habitat Areas
- Ungulate Winter Range
- Endangered Species and Ecosystems – mapped occurrences
- Old Growth Management Areas - Legal – Current

## **High Sensitivity:**

- Fisheries Sensitive Watersheds
- Species Inventory Wildlife Observations
- BC Community Watersheds
- Grasslands data
- Roadless Areas
- Pacific Salmon Conservation Unit data

# Concerns with environmental lands assessment

- Virtually no resources provided from MoE, ILMB, MoF, DFO, etc.
- Crucial data sets that were to be included in the environmental lands screen were left out because of lack of resources (i.e. LRMP land use areas)
- **BC elected not to include “high sensitivity” and “inadequate information” areas (a.k.a. “significant areas of consideration”) when calculating energy generation from REZ areas**
- **WREZ Environment and Lands Task Group backed down on reducing power production estimates for “high sensitivity” or “inadequate information” areas.**

# Recommendation

- **Use summer 2009 to re-do WREZ work for submission to BCUC process in September 2009**
- Use / adapt existing information to re-do the B.C. energy resource assessment
- Complete work on the B.C. environmental screen
- Discount energy production in “high sensitivity” portions of REZ areas
- Follow REZ methodology per U.S. best practices and WREZ Charter

- Any questions?

# **ENGO goals for an environmental lands screen:**

- Protect the habitats of species at risk
- Protect ecosystems at risk and BEC zones of conservation concern
- Protect areas of high biodiversity value
- Protect wilderness values
- Protect remaining intact and primary forest
- Protect habitat requirements for wide-ranging species
- Protect areas for climate-change induced species range shifts and wilderness migration corridors
- Maintain ecological processes and avoid placing further pressures on species and ecosystems in areas of permitted human use

**Government and ENGO representatives agreed that the following land areas can serve as **useful interim proxies** for multiple environmental goals, given time/resource constraints:**

- LRMP land use areas that prohibit resource development / protect wilderness values
- Roadless areas (data from Hectares BC website)