

### **Outline:**

- Quantifying economic effects
- Policy responses to timber supply shocks
  - Northwest Forest Plan
  - 2003 British Columbia fire season
- Effective use of economic information
- Applications to mountain pine beetle epidemic in British Columbia



## **Analytical approaches:**

- Computable general equilibrium modeling
- Shadow prices from timber supply modeling
- Combined simulation and equilibrium analysis
- Monitoring of specific indicators
- Input-output modeling



## **Hypothesis:**

Legislated timber supply withdrawals can serve as a well-structured reference framework for policy responses to natural disturbances.

#### **Case Studies:**

Northwest Forest Plan - Supply shock due to legislation

2003 BC Fire Season - Supply shock due to natural disturbance



# Comparison of Northwest Forest Plan & 2003 BC Fire Season:

- Different objectives (impact mitigation vs. risk mitigation)
- Similar policy formulation process
- Prominent role of public consultation
- Different use of economic information
- Central role of monitoring



## Implications for mountain pine beetle epidemic:

- Economic impact assessments should have consistent methodology and data format
- Economic analysis and policy decisions should be linked more closely
- Monitoring may be too slow for self-contained adaptive management
- Potential for knowledge transfer



## **Questions?**

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