

BLM O&C WOPR EIS  
Solving a Few  
Direct Effects  
Problems

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# FEI Impact Analysis Examined...

Direct Effects—me

Industrial activity calibration

Payments to Counties

The missing logger problem

Indirect Effects—Dan Green

Employment and Income

County level resolution

We had to solve a lot of problems first

# Pre-analysis Sector Conditions

Direct Effect base year numbers	2005	Units
Payment to Counties: (BLM + USFS)	237	\$ millions
Timber Harvest	117	MMBF/yr
BLM Expenditures	141	\$ millions
Lumber Production	6,084	MMBF/yr
Plywood Production	2,838	MMSF/yr
Board Mill Output	26	\$ millions
Pulp Mill Output	18	\$ millions

# Initial Direct Jobs and Income

(base year 2005)

- Wood products sector:
  - Primary sector:
    - 52,000 workers,
    - 3.2% of Oregon wages,
    - \$1.9 billion in sales
  - With secondary sectors:
    - 64,500 jobs
- BLM contribution to W. Oregon's economy :
  - 0.71% of total jobs and income (statewide)
  - Large county variability from:
    - Urban counties close to 0
    - Douglas County
      - 4.18% of jobs
      - 4.70% of income

# First Question--Analytical Focus?

Classic with & without approach... or  
Related Simultaneous Permutations?

We changed 3 at once—for context effects

1. BLM WOPR alternatives could increase regional timber harvests
2. Secure Rural Schools funding was scheduled to terminate in all counties
3. Regional plywood sector compression continues regardless of new BLM log supplies

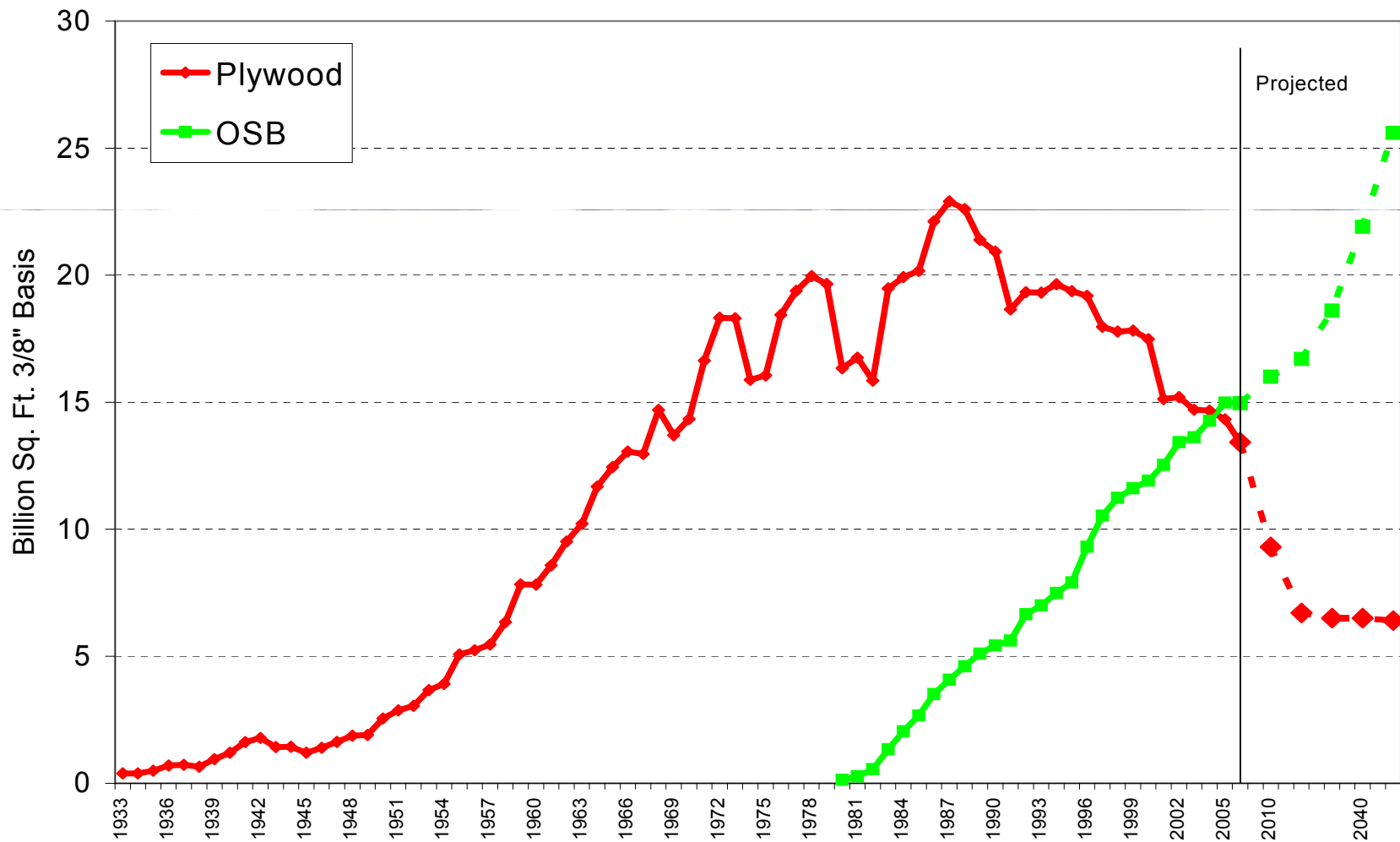
To Test:

BLM harvest compensation potential hypothesis

# Regional Plywood Decline

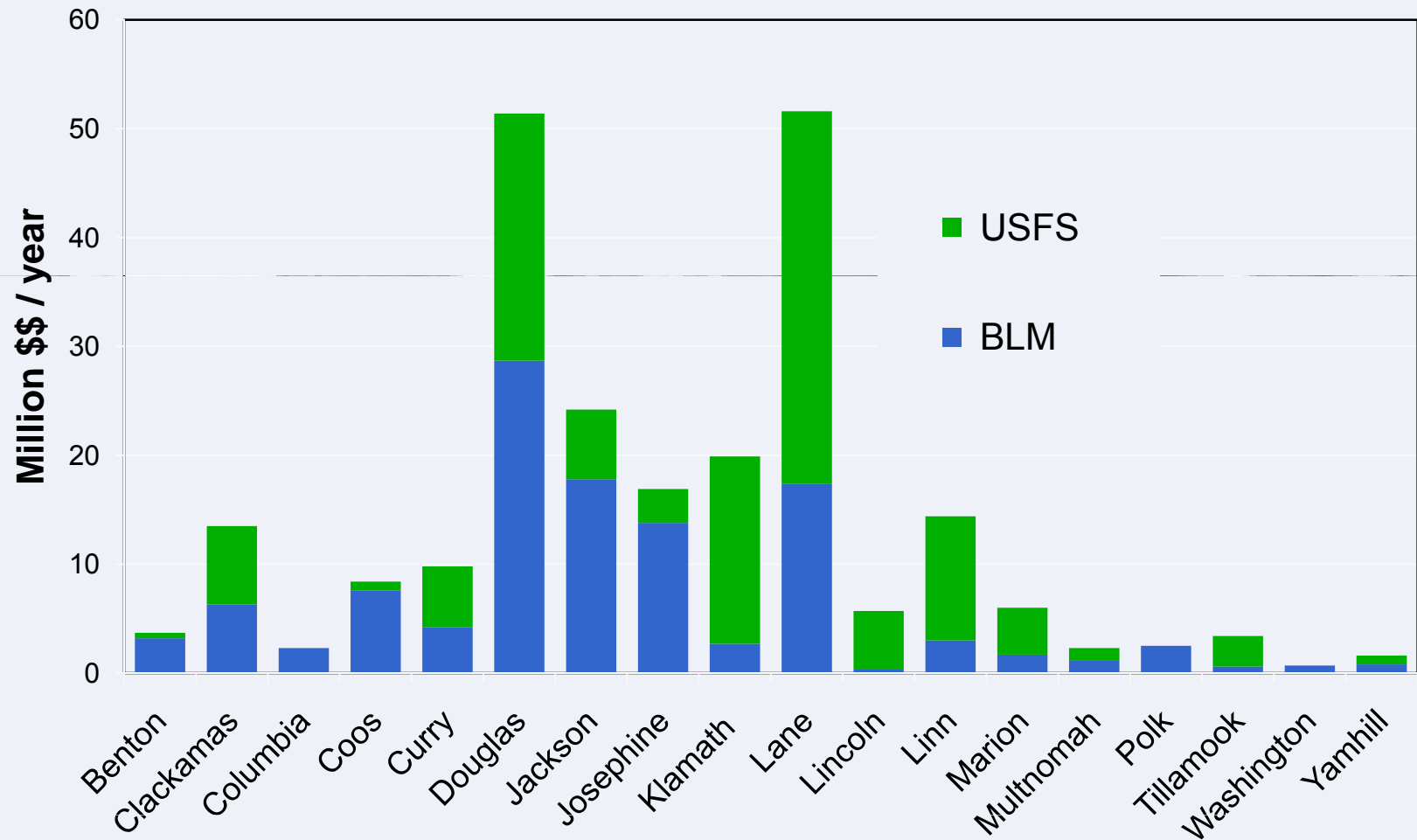
Adams 2005 graphics by Rassmussen

## US Plywood and OSB Production



# USFS + O&C County Payments

W. Oregon 2005 SRS Payments to Counties



# Federal Payments to Counties

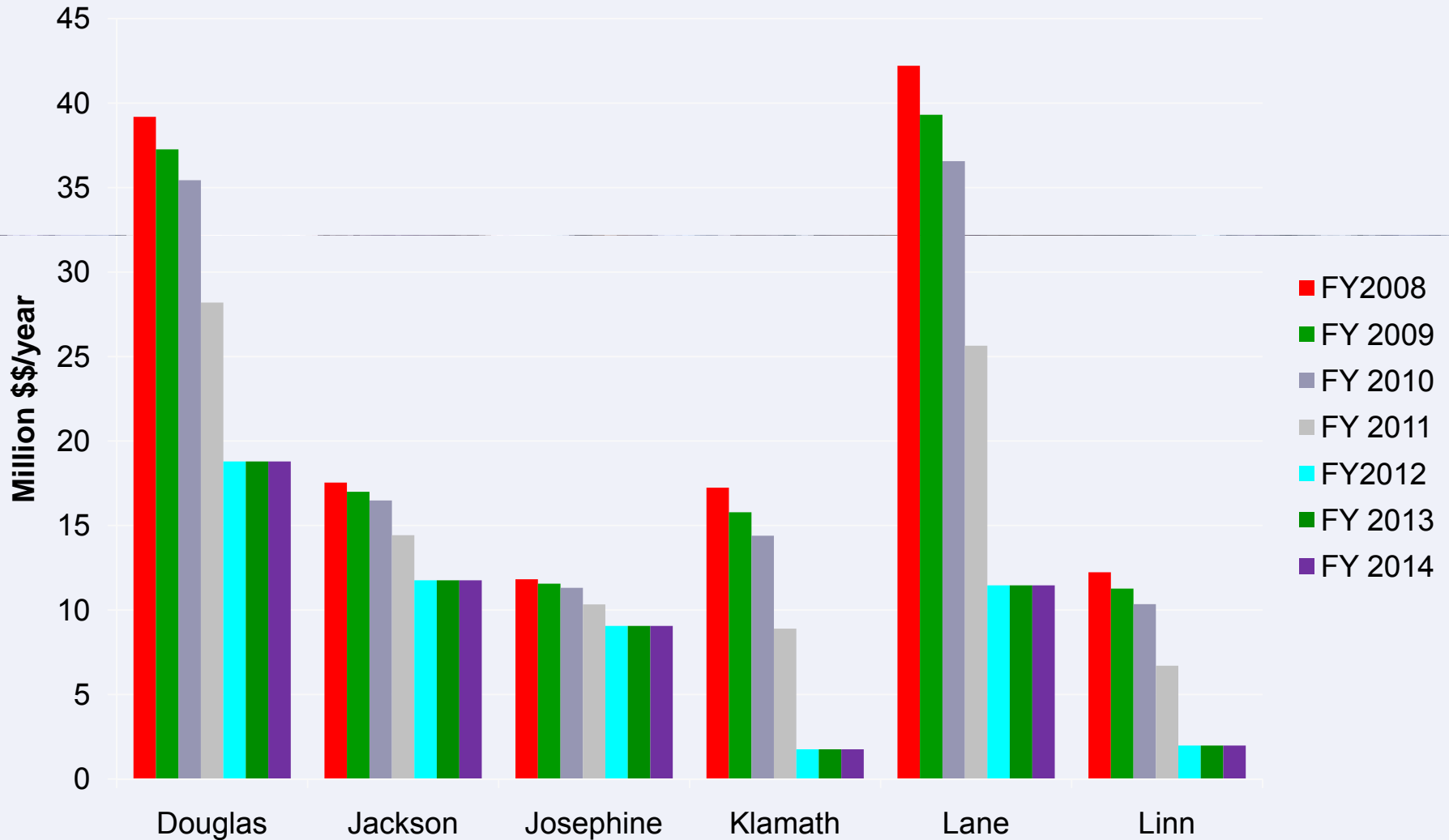
- Current BLM payments account for:
  - 2.7% of total county budgets
  - 9.2% of total discretionary budgets
- Wide range by county
  - 0.1% to 20.5% of total budget
  - 0.2% to 70.4% of discretionary budget
- Current USFS payments similarly concentrated
- Oregon did not have the schools problem found in other SRS states



# Post Analysis County Payments

## Future Payments to O&C Counties

USFS 2/09 & MBG 4/06



# Logger Numbers Problems

1. Place of work  $\neq$  place of residence
2. Secondary statistics understate loggers

## Why?

- Loggers are highly mobile
- Labor data is for covered employment
- Loggers frequently uncovered
- Unstable market for logs & loggers
- Labor shifts in & out of logging
- Grey market & illegal loggers

# Logger Numbers Solution

- Incorporate REIS (BEA) proprietors lists
- Calculate from known production rates
  - Large technological & site variability
  - Place of residence reapportionment
- Surveys of:
  - Mill supplier lists
  - Agency timber sale purchaser lists
  - Logging associations
  - Logger safety numbers
- Decadal census recalibrations

# How Much Distortion ?

- Place of work distortion example
  - SE Washington fire salvage study
    - Helicopters from W. Oregon
    - Machines & operators from Montana
    - Labor from SW US
    - Local effects of project minor
- Gross numbers undercount examples
  - W. Oregon WOPR study
    - Jobs & earnings undercounted 80%
    - Extreme spatial distortions
  - SW Idaho 3 National Forest study
    - Base year jobs undercounted 69%
    - Base year selection critical

# W. Oregon WOPR Logger Undercount

## Employment Undercount

Area	Covered Loggers	Total Loggers	Undercount Percent
Coos County	648	985	52.0%
Douglas County	1,021	1,671	63.7%
Jackson County	773	1,214	57.1%
Lane County	782	1,512	93.4%
Linn County	481	630	31.0%
Polk County	229	247	7.9%
<b>All W. Oregon</b>	<b>6,152</b>	<b>11,073</b>	<b>80.0%</b>

## Earnings Undercount

Area	Covered Payroll \$ millions	Total Earnings \$ millions	Undercount Percent
Coos County	\$26.82	\$ 40.77	52.0%
Douglas County	\$35.04	\$ 60.16	71.7%
Jackson County	\$34.19	\$ 53.69	57.0%
Lane County	\$26.24	\$ 50.74	93.4%
Linn County	\$18.47	\$ 24.19	31.0%
Polk County	\$8.37	\$ 9.02	7.9%
<b>All W. Oregon</b>	<b>\$233.99</b>	<b>\$ 420.29</b>	<b>79.6%</b>

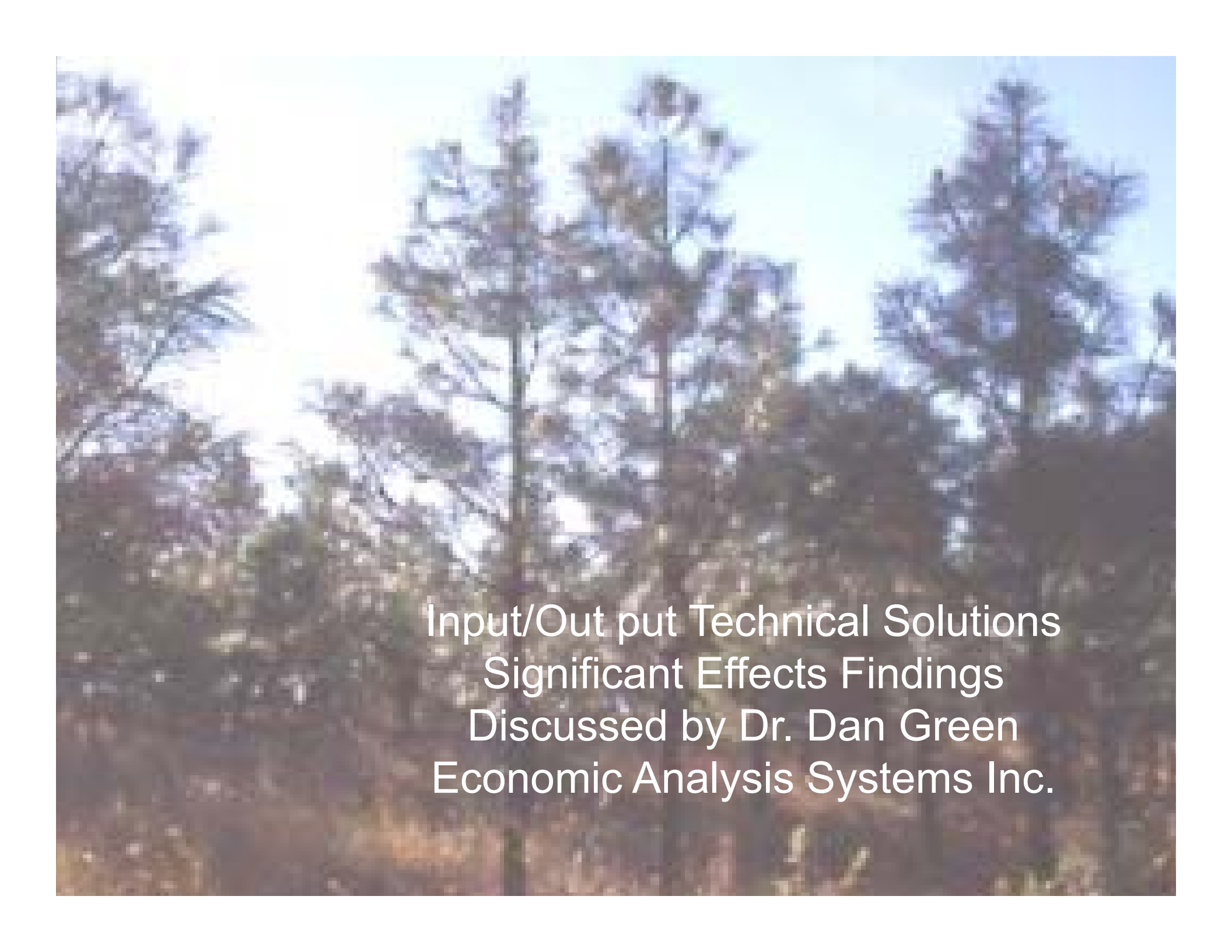
# SW Idaho Logger Undercount

## Employment Undercount

Area	Covered Loggers	Total Loggers	Undercount %
Idaho, ID	37	82	121.6%
Adams, ID	58	78	34.5%
Gem, ID	26	31	19.2%
Valley, ID	10	14	40.0%
All SW Idaho	143	242	69.2%

## Employment Dynamics

SOC Code	Log Job Type	2005 Jobs	2009 Jobs	% Change
45-4022	Log equip operators	146	72	-51%
53-3032	Truck drivers,	63	30	-52%
45-4021	Fallers & setters	42	24	-43%
45-1099	forestry workers	41	25	-39%
45-4023	Log graders and scalers	40	24	-40%
45-4029	Other Logging	33	21	-36%
43-3031	admin & clerks	10	5	-51%



Input/Output Technical Solutions  
Significant Effects Findings  
Discussed by Dr. Dan Green  
Economic Analysis Systems Inc.