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Oregon's Tracking of Emissions Reduction Techniques

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National Fire Emissions Technical Workshop

New Orleans

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- Oregon's Smoke Management Program has been collecting prescribed fire data since 1969 to support the burning program on all state, private and federal forest land
- Data to help identify emissions reduction techniques has been collected since 1987
 - ➔ Many of the techniques described in the 2001 Edition of the *Smoke Management Guide For Prescribed and Wildland Fire* have been addressed
- Emissions reduction goals were established as part of Oregon's Class I Area Visibility Protection Plan



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- Reduce the Area Burned
 - Mosaic burning - primarily a federal land activity
 - Data Reporting - only acres blackened
- Reduce Fuel Load
 - Mechanical Removal
 - Data Reporting - harvest specifications
- Reduce Fuel Production
 - Chemical Treatment - primarily private/state land activity
 - Data Reporting - part of Forest Practices notifications



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- Reduce Fuel Consumed
 - High moisture in large woody fuels
 - Data Reporting - fuel moistures reported
 - Moist litter and/or duff
 - Data Reporting - days since significant precipitation
 - Burn before large fuels cure
 - Data Reporting - months since harvest and snow off date
- ➡ ACOST spreadsheet available based on CONSUME equations



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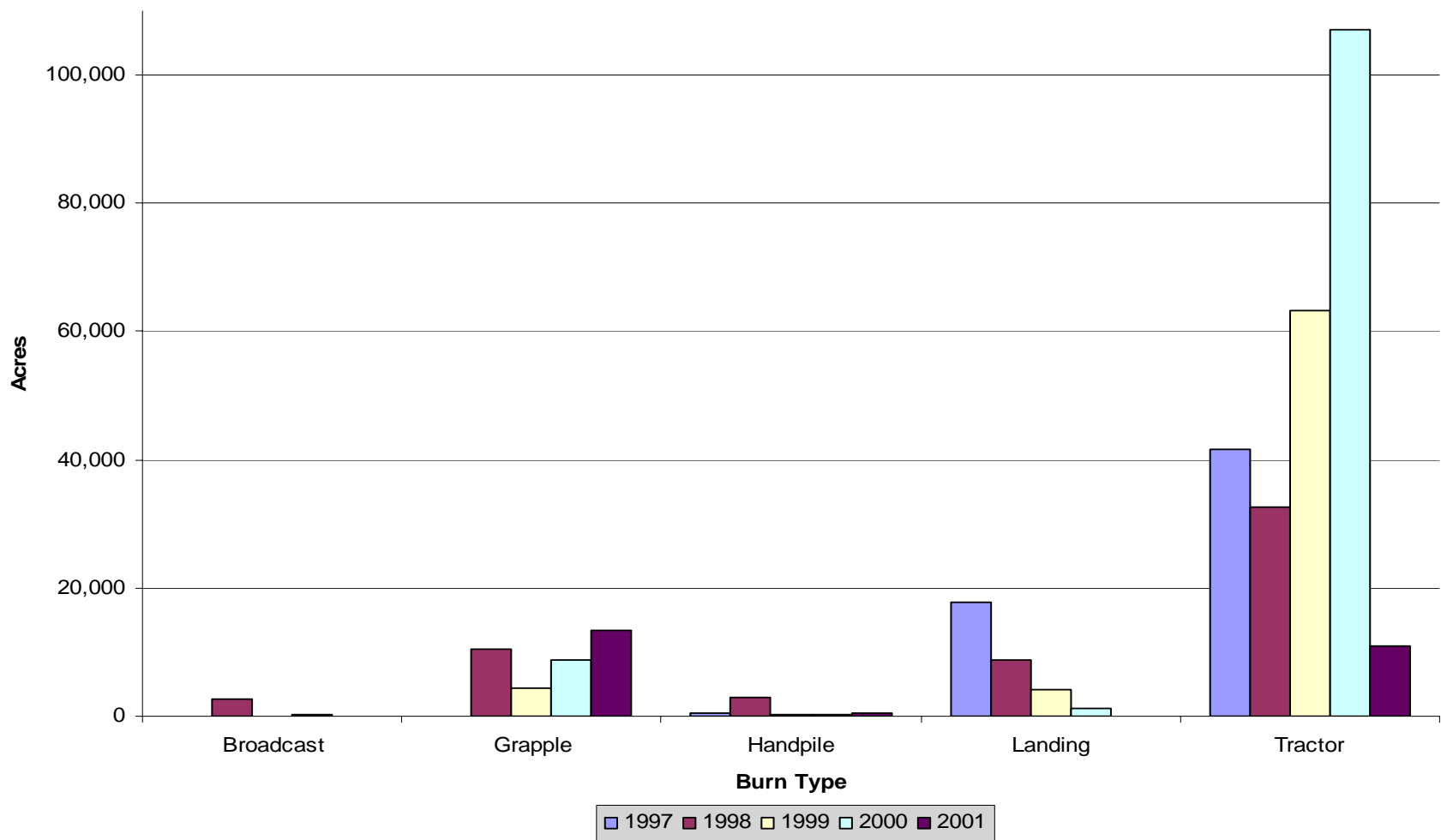
- Increase Combustion Efficiency
 - Burn piles or windrows
 - Data Reporting - type of pile (tractor, grapple etc)
➔ PCOST spreadsheet available based on CONSUME equations
 - Rapid mop-up
 - Data Reporting - none, but may be a permit requirement
 - Aerial ignition/mass ignition
 - Data Reporting - ignition method, ignition duration, whether or not mass ignition was achieved



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Acres Burned by Burn Type on State and Private Land (E. of Cascades)

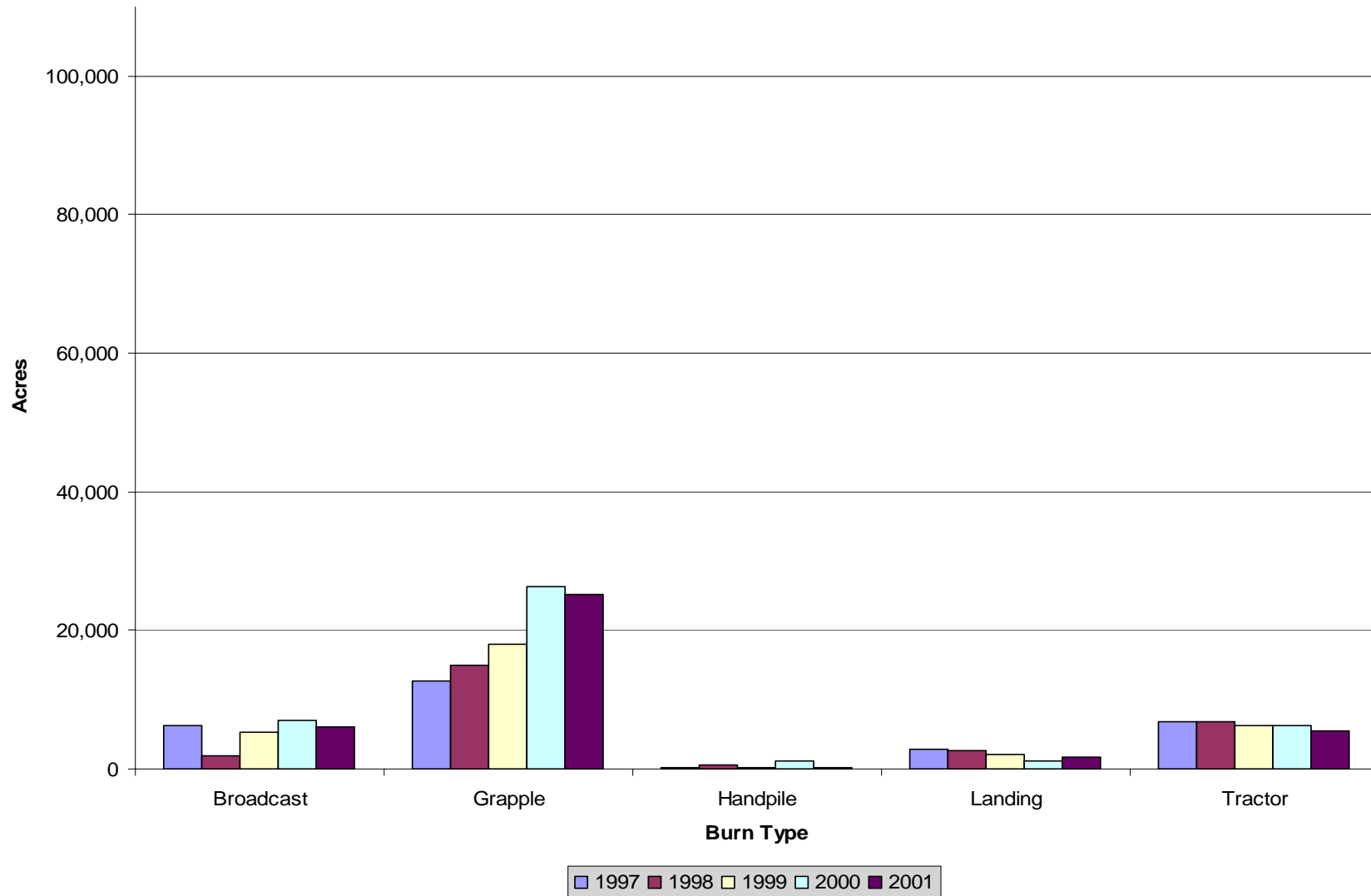




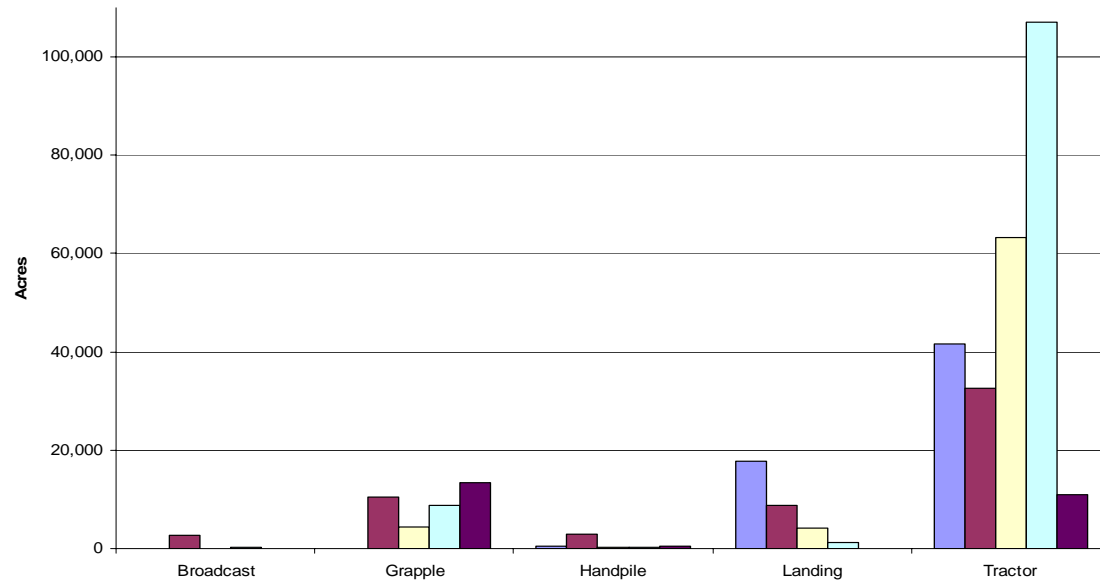
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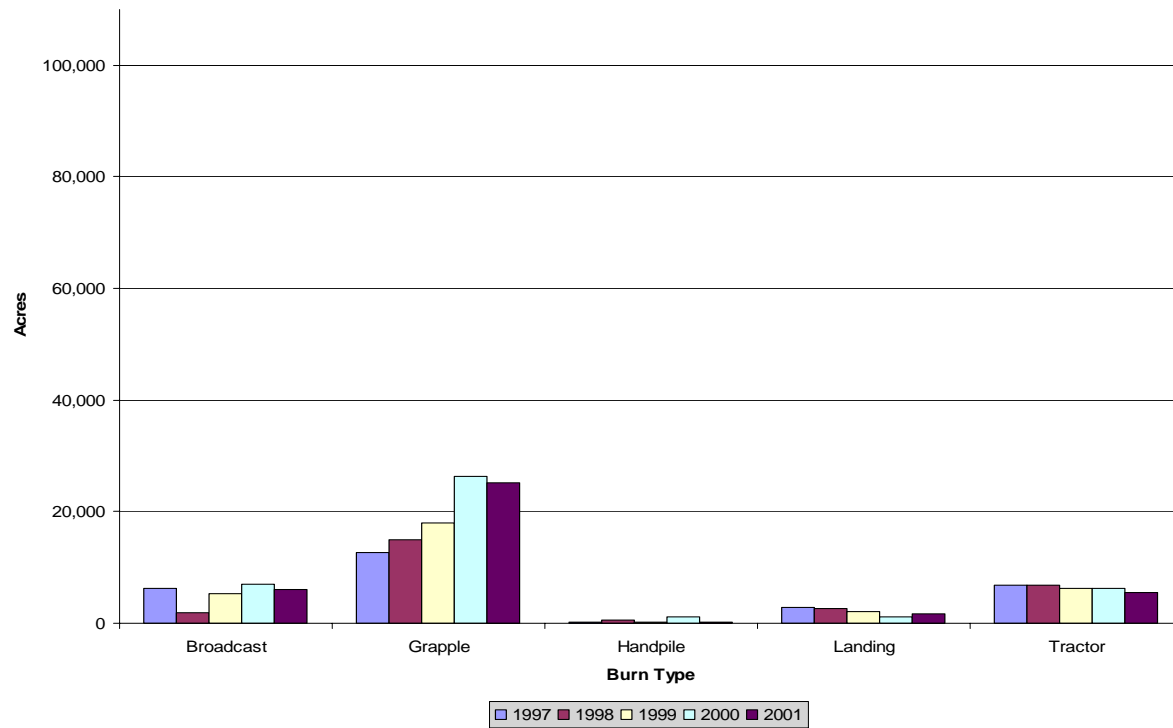
Acres Burned by Burn Type on State and Private Land (W. of Cascades)



Acres Burned by Burn Type on State and Private Land (E. of Cascades)



Acres Burned by Burn Type on State and Private Land (W. of Cascades)

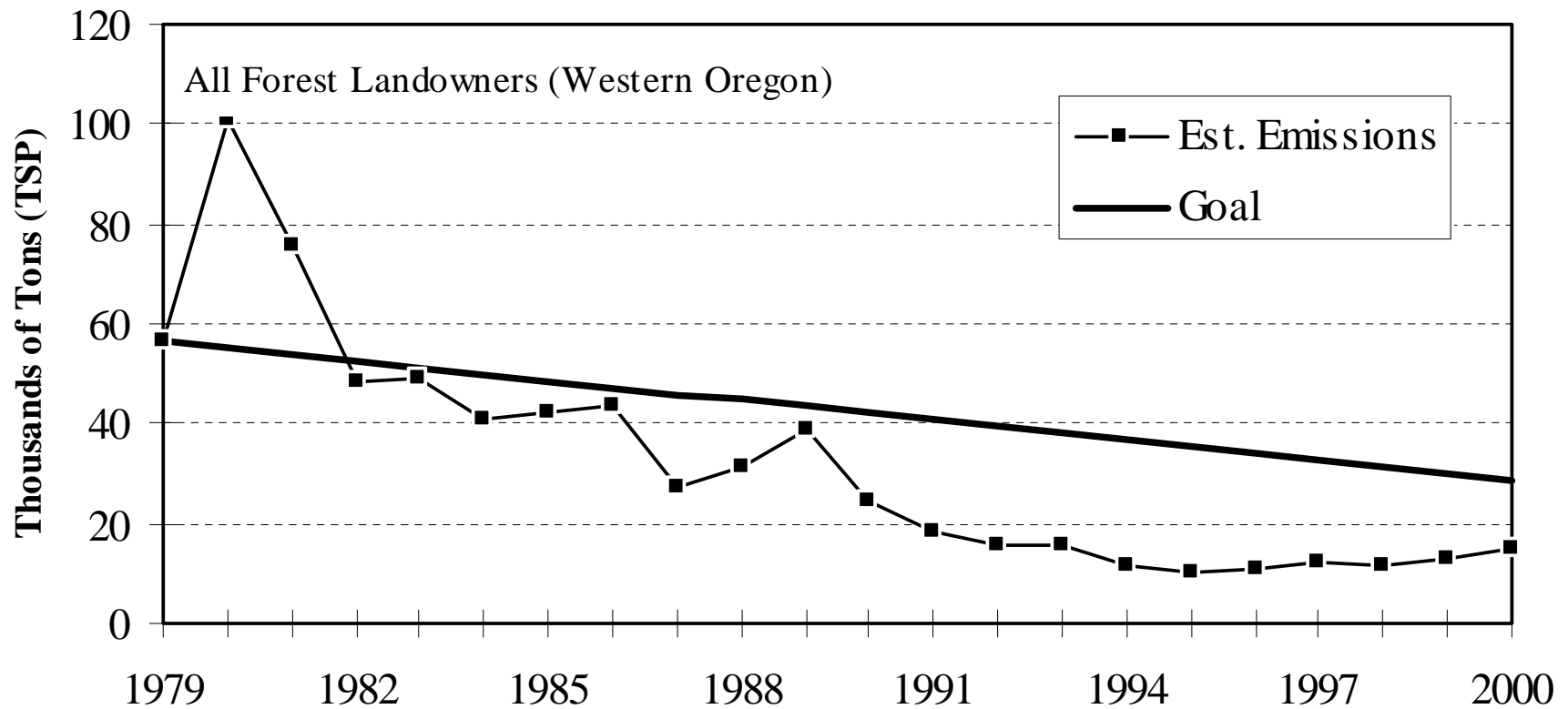




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Forest Land Burning Emissions Reductions From 1976-1979 Baseline





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Issues

- We have collected the data, but how do we show how specific ERTs are benefiting air quality?
 - Measure against a standard baseline and get credits?
- How would Oregon data mesh with data from other states where data collection doesn't exist or is significantly different?
 - Consistency *and* transparency?
 - Equity within and between sources has been a FEJF discussion and part of WRAP policies



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Issues

- What are air quality trade-off issues?
 - Burning plastic covered piles - burn dry fuels with less smoldering, but are there toxics? PR issues?
 - Woodstoves - transport wildland fuel into cities and then burn?
 - Chemicals - not a popular alternative
- How should alternatives to burning be addressed?
 - WRAP document



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Thank you