Planning and Designing for the Future

USDA Forest Service Perspective

Peter Bolander
- current FS management practices
- current barriers
- how overcome barriers
Forest Service

- 175 national forests and grasslands
- 43 states
- 193 million acres
- 375,000 miles road
- 6700 miles potentially dust abate
Current FS Dust Management Practices

guiding principles:
- maintain access in safe and efficient manner while protecting environment and adjacent resources

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Current FS Dust Management Practices

Guiding principles:
- > 100 vpd
- < 100 vpd

Decision at local level, case by case
- Past experience
- FS publication and/or studies
- Product toxicity tests
- Potential impacts to local environment
- FHWA dust palliative specs + Pacific Snowfighters Association specs

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Barriers

- **budget**
  - sign replacement, ditch cleanout, road grading, vegetation control

- **technology transfer**
  - economics
  - product selection
  - toxicity
  - potential impacts to local environment
  - quality and quality assurance
Resolve Barriers

- **budget**
  - ha...reduce road miles and/or reduce road standard

- **technology transfer**
  - aggregate road web links in FHWA and LTAP
  - good aggregate surfacing criteria
  - summary of past efforts, studies, and research
  - dust abatement economics
  - palliative properties
  - impacts of dust to user safety and environment
  - impacts of dust palliative to environment

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Resolve Barriers

- **manufacturers**
  - provide chemical properties and toxicity reports

- **researchers**
  - determine “when to dust abate” criteria
  - simple standard tests to verify application rate, quality, toxicity

- **users**
  - develop best management criteria
  - training in best management criteria and selection
  - implement aggregate management system
  - develop standard risk assessment protocol
  - work with Canadian users, deicer users, and EPA