

Current WCF Data Collection

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WCF

- System for
 - assessing watershed condition
 - monitoring and tracking conditions over time

Step A:
Classify
Watershed
Condition

Step B:
Prioritize
Watersheds for
Restoration

Step C:
Develop
Watershed
Restoration
Action Plans

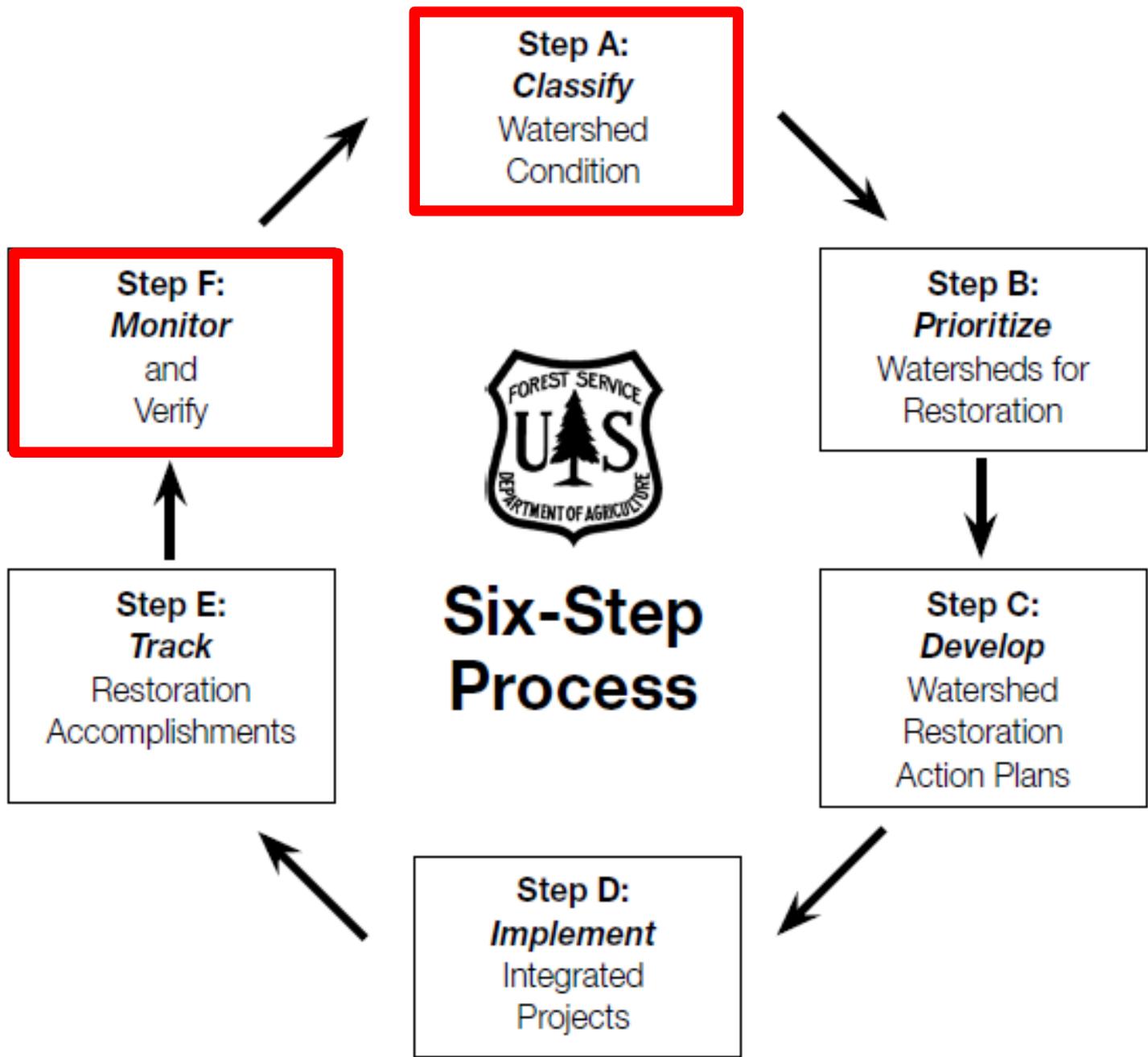
Step D:
Implement
Integrated
Projects

Step E:
Track
Restoration
Accomplishments

Step F:
Monitor
and
Verify



Six-Step Process



Some Notions

- Assessment & Monitoring are distinctly different.
 - ‘Assess’
evaluate **existing information** to make a **judgement** about something
 - ‘Monitor’
collect information to **evaluate effects** of actions or **changes** in conditions

Some Notions

- Assessment & Monitoring
 - Need not (often cannot) use same
 - indicators, data, evaluation methods
 - Difficult to link explicitly.
 - scale, resolution
 - Can be (must be) linked conceptually.
 - New technologies are creating new opportunities.

Step A

Watershed Condition

Water Quality

Aquatic Biota

Roads and Trails

Fire Regime

Water Quantity

Riparian &
Wetland
Vegetation

Soils

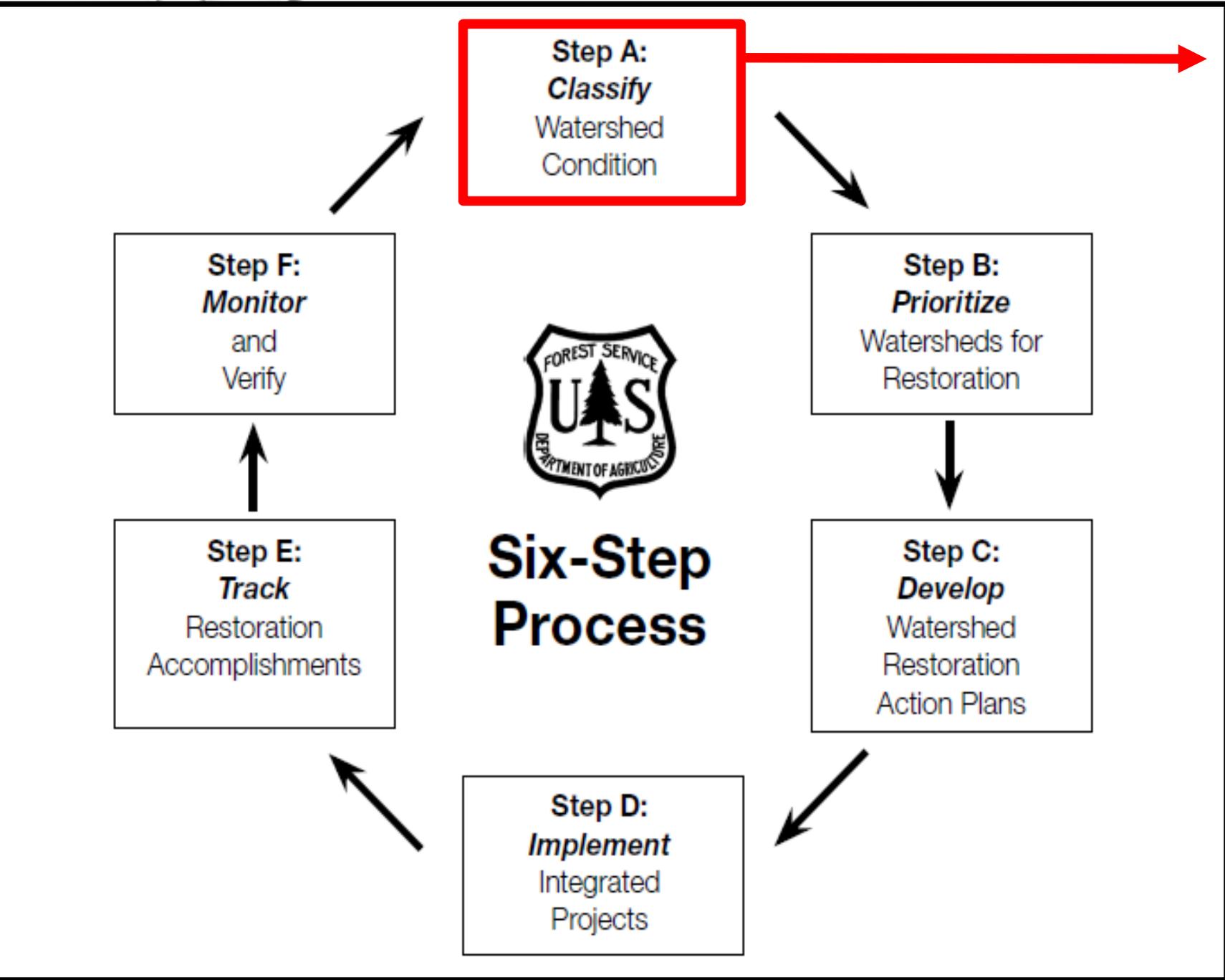
Forest Cover

Terrestrial
Invasives

Aquatic Habitat

Rangeland
Vegetation

Forest Health

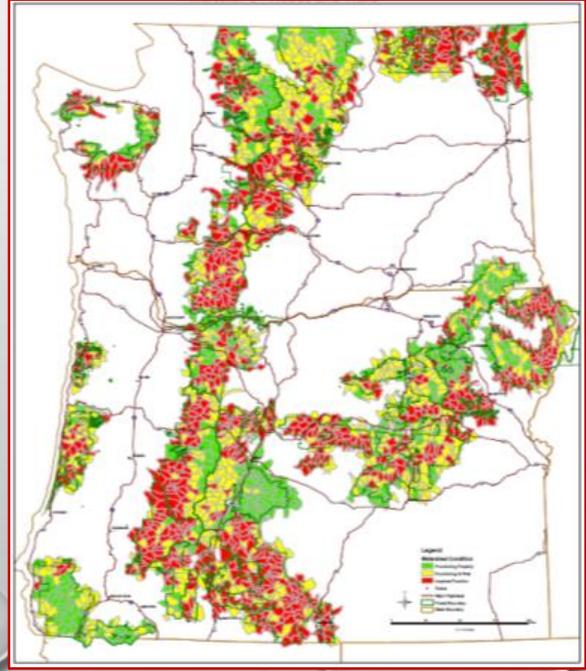


To assess WC, **probabilities** matter.

- ↑ roads = ↑ risk of ↑
 - surface erosion
 - mass wasting
 - etc.

Road Density, based on:

- existing digital road maps



To treat roads, **realities** matter.

Fine sediment delivery, mass wasting risk, etc.

based on:

- field inventories
- models

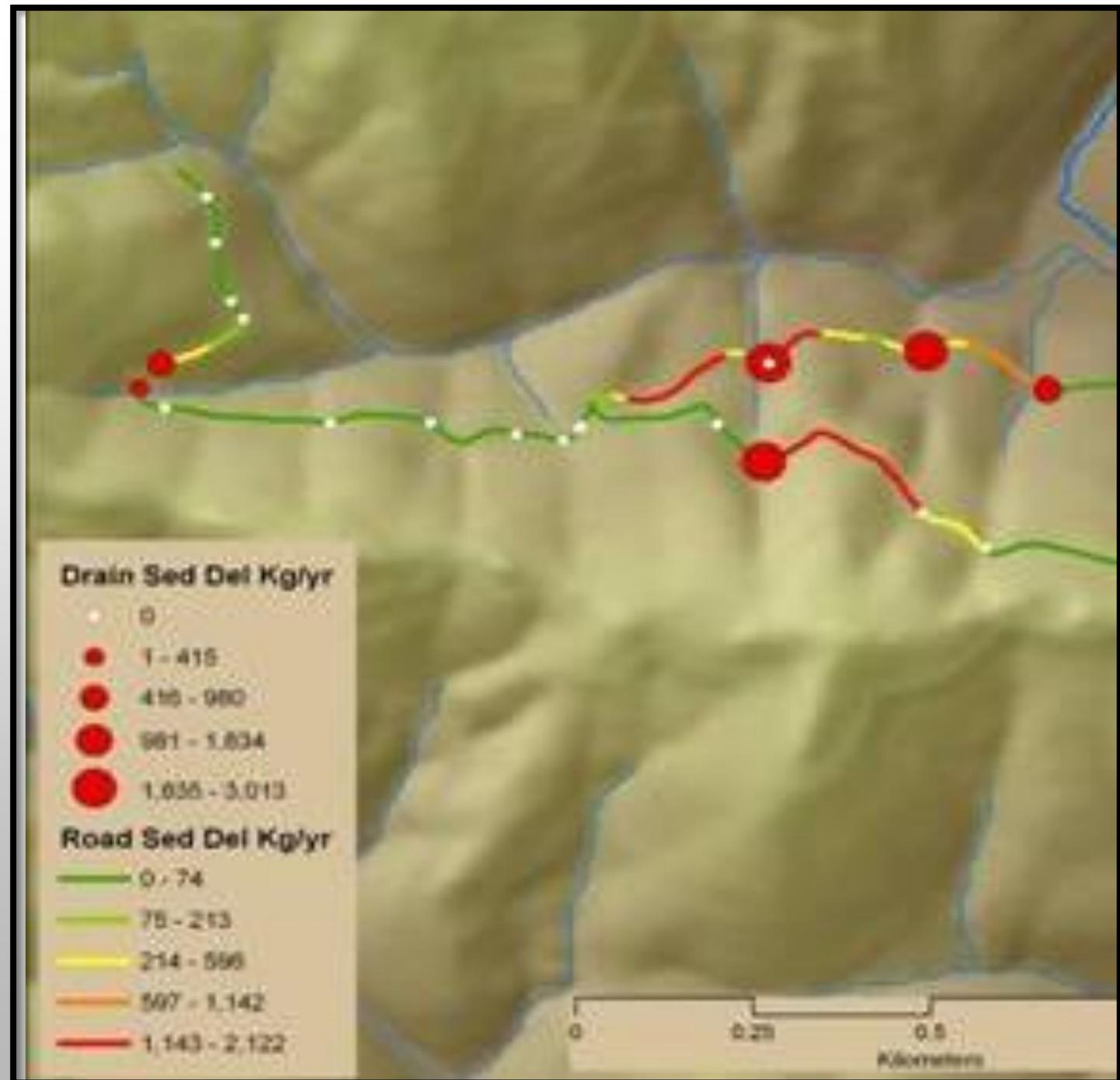


Step B:
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Wall Creek Watershed GRAIP Roads Assessment

12% of roads deliver
90% of fine sediment.



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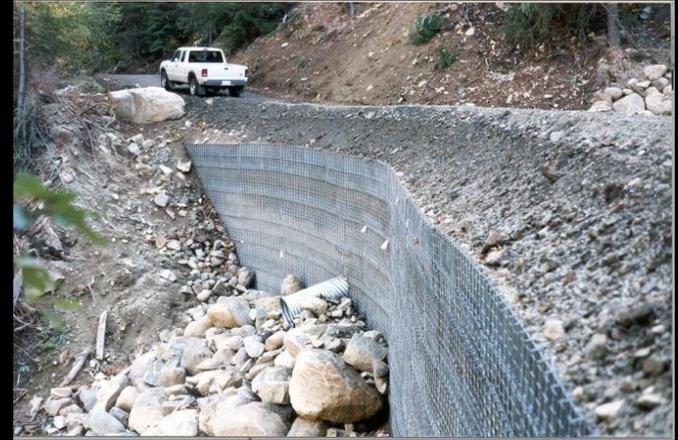
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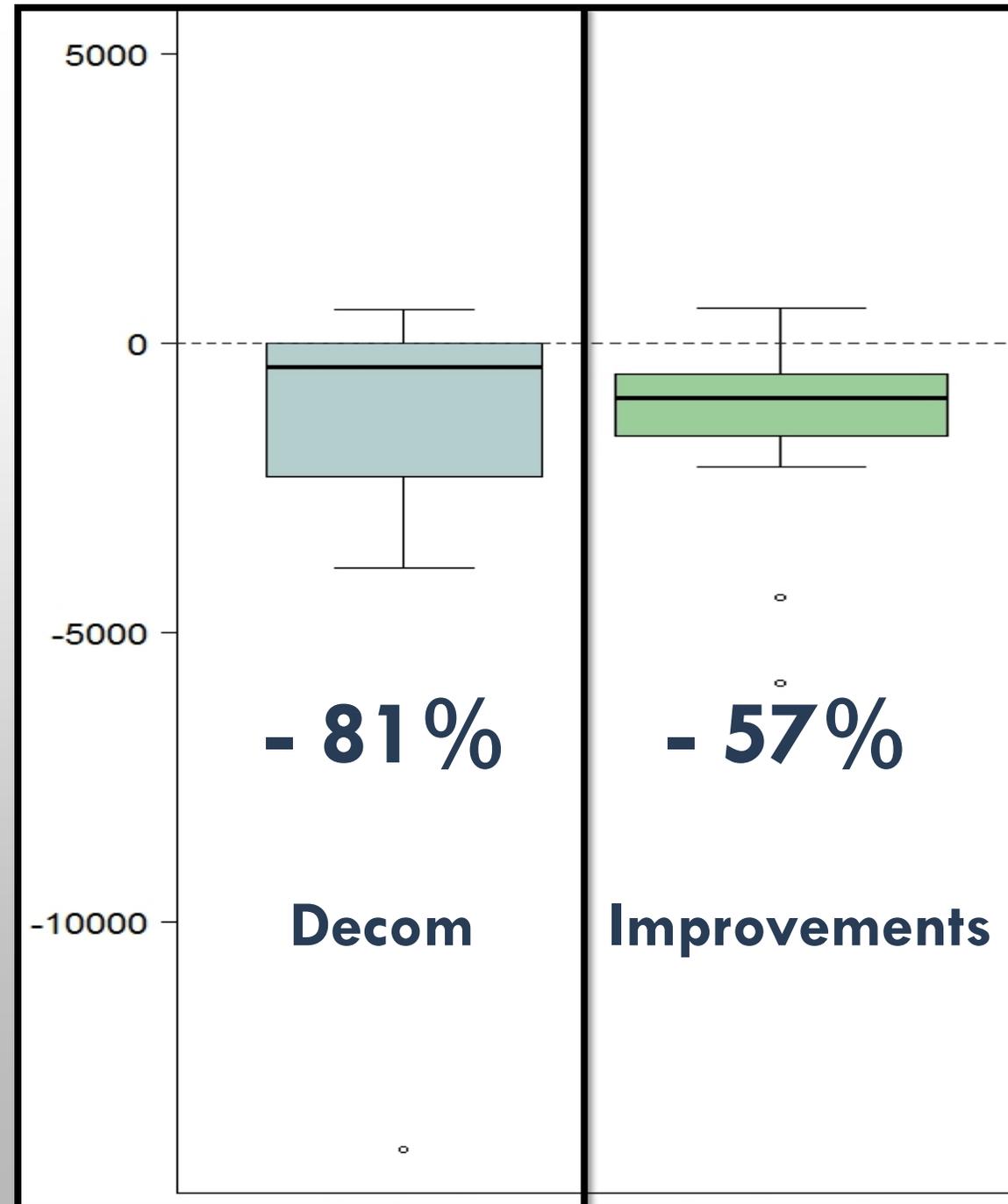
Step F:
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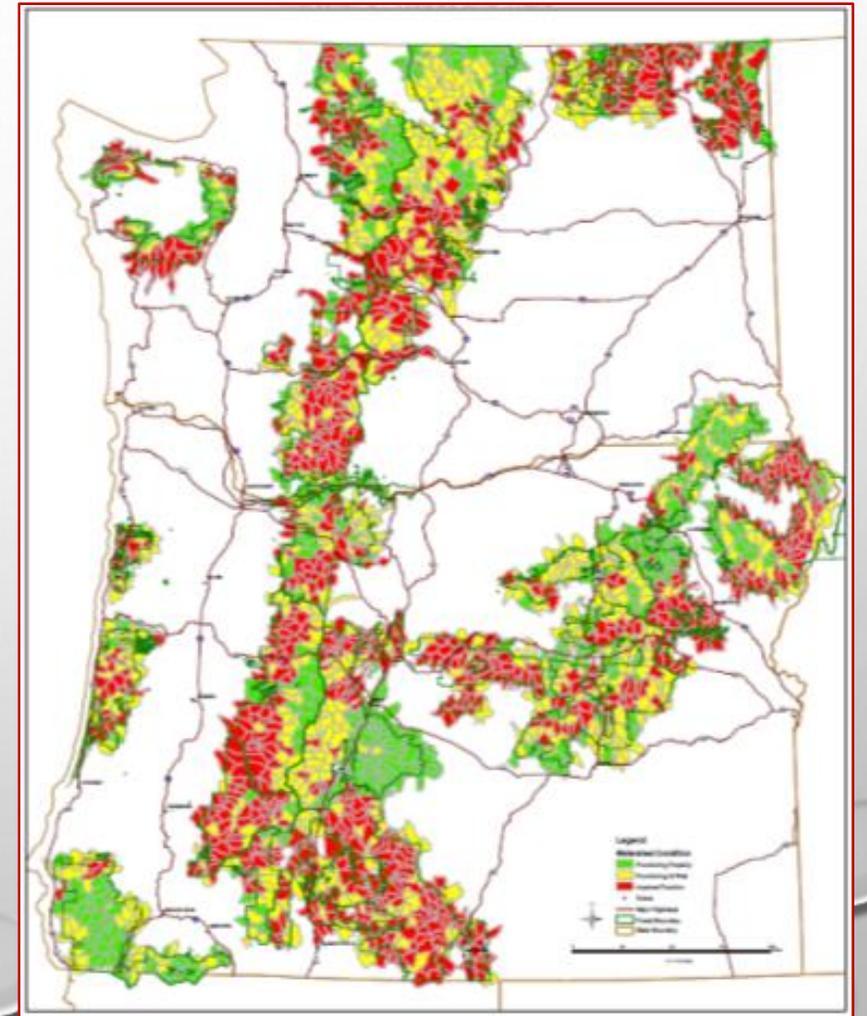
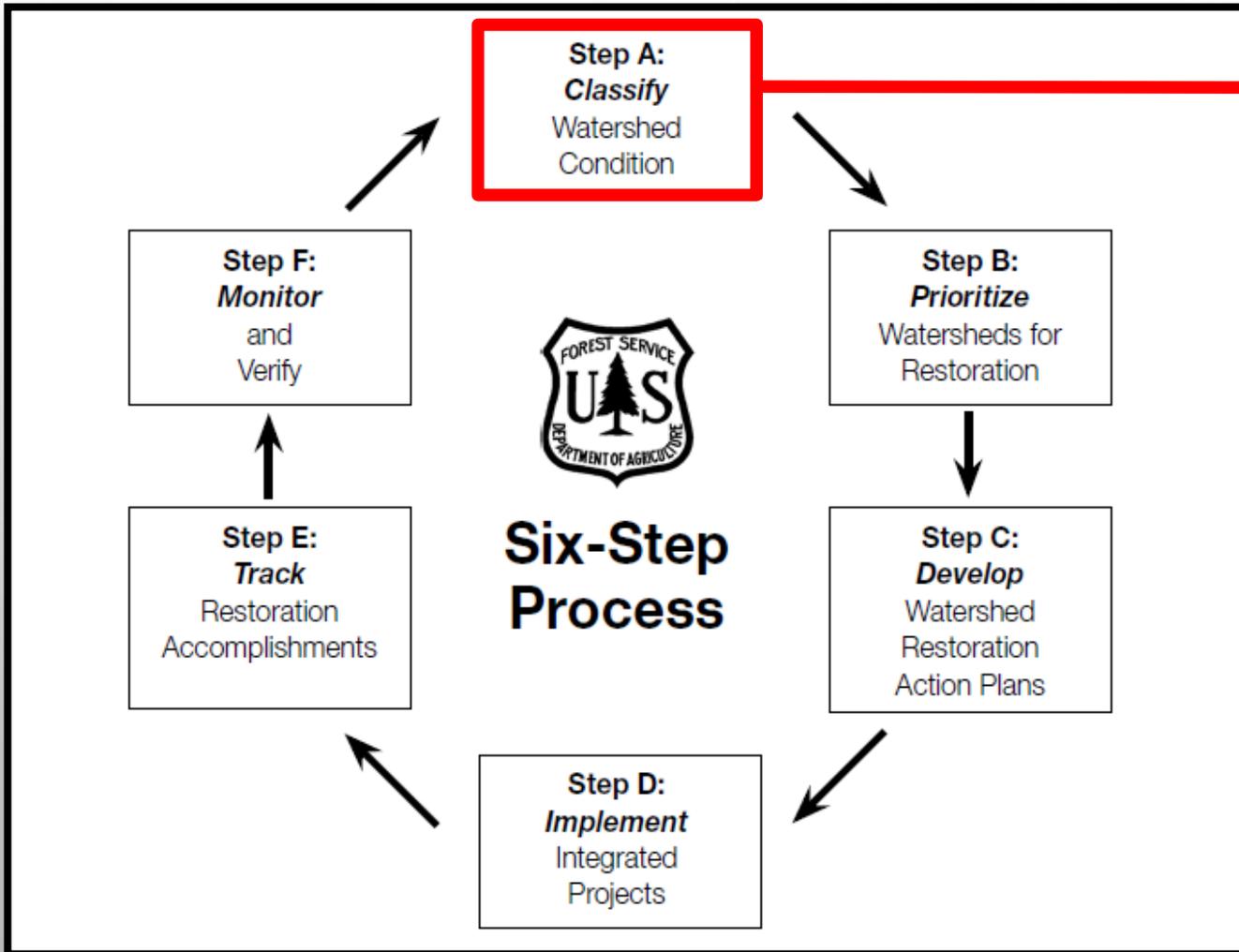
Six-Step Process



Fine Sediment Delivery (kg/yr/km)



Improved Watershed Condition?



Conclusions

- WCF needs all 6 steps.
- Assessment and Monitoring often need different
 - indicators, data, evaluation methods
- Linkages
 - more conceptual than explicit

Conclusions

- Data-driven, DSM approach has some potential to improve linkages.
- Need
 - sensitive indicators
 - common meaning
 - consistent data
- New technologies may help.

