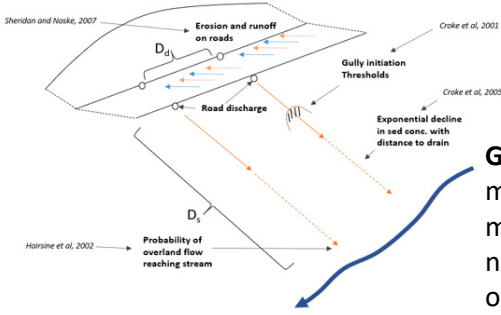


1 CONCEPTUAL MODEL OF FOREST ROAD SEDIMENT DELIVERY BASED ON PEER REVIEWED STUDIES



Goal: align the science with methods for state-wide monitoring of forest road network and effectiveness of water quality risk mitigation

2

GIS MODEL

Goal: an algorithm for estimating and mapping sediment delivery hazard from forest roads at regional scales across NSW

3

REGIONAL SEDIMENT DELIVERY HAZARD MAP

Goal: mapping tool to identify where sediment delivery may be an issue, and where to prioritise more detailed monitoring

4

FIELD PROTOCOL

Goal: data collection method to identify how road design or maintenance may trigger sediment delivery that is problematic for water quality

5

HAZARD SCORE

Goal: use a spatially aggregated hazard score to identify 9 catchment for piloting the field methodology

6 FIELD ASSESSMENT (LEAD: SOIL CON NSW)

Goal: test the field protocol and generate data to identify issues regarding WQ mitigation effectiveness, and shortcoming in the road design and/or maintenance. These data are collated into a score.

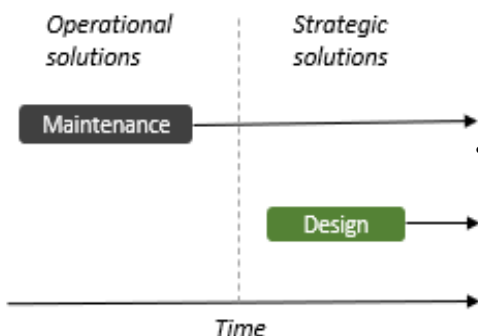


7

EVALUATION

Goal: evaluate field data to identify and prioritise solutions

FOREST ROAD IMPROVEMENT



Outputs:

- **State-wide sediment delivery map** that provides input for high-level WQ hazard assessment of the road network, and guides the prioritisation of field assessments
- **A tested field assessment methodology that identifies shortcomings in road maintenance and design** that lead to reduced effectiveness in mitigating against WQ impacts from road networks.

END USERS

NRC

NPWS, FCNSW, PRIVATE FORESTRY

EPA