

Nagambie Tunnel Erosion Project

Brad Costin



Location

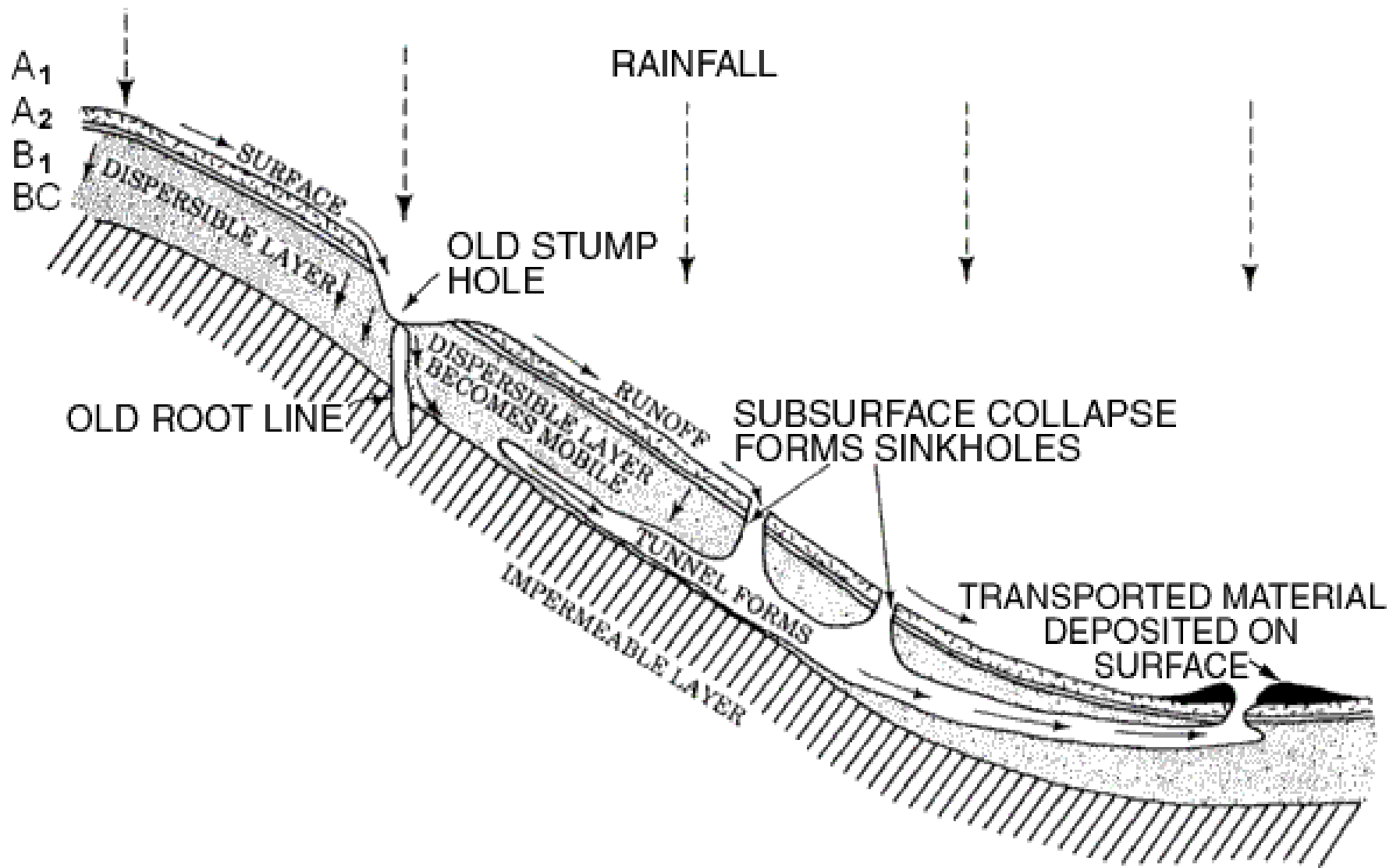


Project background

- Tunnel erosion affected paddock
- Had been a historical on going issue
- Assistance from government agencies at times
- Keen farmer with a drive to show positive action and willingness to try something new
- Gecko Clan sought funding from Beyond SoilCare small project grants 2014/15
- Assistance from Agriculture Victoria









Site details

- 4 hectares erosion within a 40 ha paddock
- Tunnel erosion, sheet erosion, small gullies and rills

pH	Phosphorus Olsen	Exch Sodium %	Organic carbon %
4.5 / 5.3	3.3	18.6	1.6

- Ground cover 0-1%
- Sedimentary soils

Approach

- Goal to reduce impact of tunnel erosion on the farm.
Through
 - 1) targeting erosion processes
 - 2) improving soil quality
 - 3) allow ground cover establishment

Project plan

- Deep rip tunnels – address physical threats
- Spread chicken manure / gypsum / lime
- Sow annual pasture to get quick ground cover
- Spread cereal straw mulch to protect soil

11.39 25/MAY/2016

UNCLASSIFIED



12:40 6/MAR/2015







Annual Rye
Oats
Rye Corn
Balansa Clover
Persian Clover
Arrow Leaf Clover

10.24 11/AUG/2015

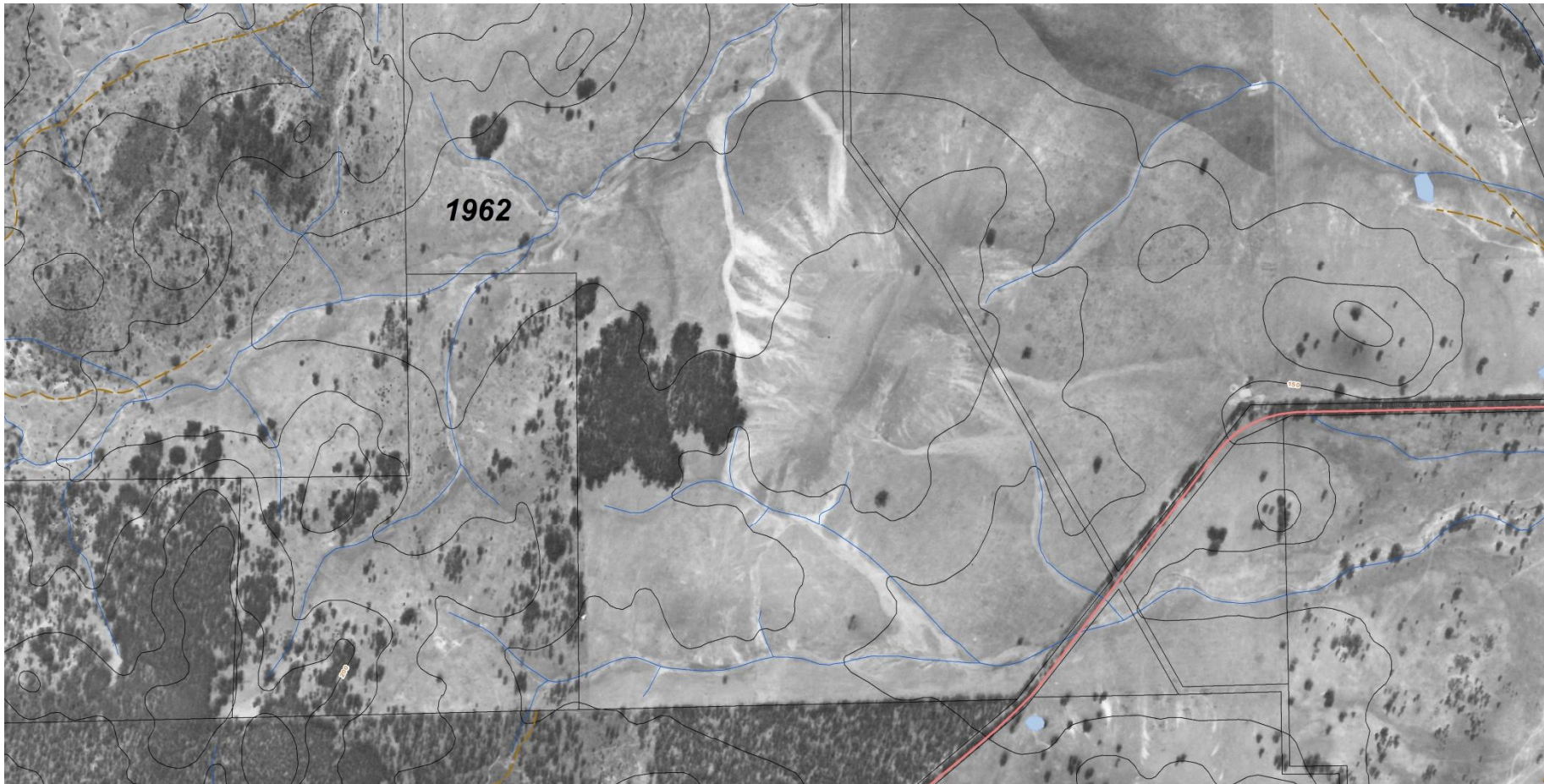
Cost breakdown

Challenges

- Dry seasonal conditions August 2015
- Low pasture establishment
- Stalled spreading treatments

- Second attempt in favourable conditions 2016
- High germination rate















UNCLASSIFIED













11:03 2/JUN/2017

However

- Second sowing attempt a great success
- Lucky we didn't spread mulch
- Landholder spread super and gypsum again
- Remaining issues:
 - Chicken manure spreading
 - What to do with the mulch