

Rangelands Conference:

Our story
Our projects

Our successes

Rod Chisholm
CEO



To feed the people we must save our soil and we must save our soil to save the planet





"the history of every nation is eventually written in the way in which it cares for its soil"

"the nation that destroys its soil, destroys itself."

Franklin Roosevelt US President 1933 - 1945.

Global context

- Arable land is being lost at 1% per year
- 5 kg of soil lost for every meal served
- Soil carbon levels degraded to non productive levels
- Aquifer water depleted or greatly reduced
- Ground water depleted, rivers heavily polluted and dammed
- Climate variability with major impacts

Australia



- Around 60% of landscape degraded
- Loss of nutrients
- Only 4/39 soil types with adequate soil carbon to hold water
- Soil erosion exceeds soil formation
- Salinity
- Erosion and excision of streams and rivers
- More urban growth and larger cities
- Erratic rainfall, floods, extreme temperatures, droughts, wildfires







ON AVERAGE, OF EACH 100 DROPS OF RAIN THAT FALL IN AUSTRALIA...

2 DROPS FALL ON HARD SURFACES

stormwater/evaporation

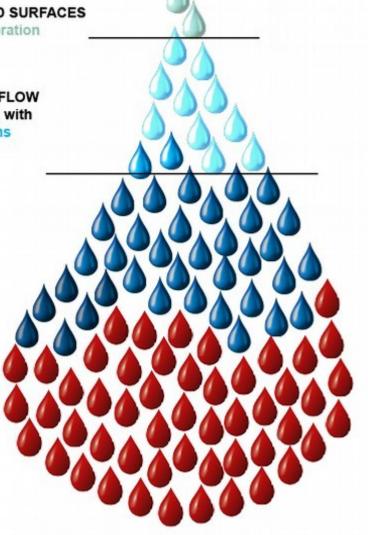
12 DROPS JOIN OVERLAND FLOW

falling into rivers & streams, with 2 drops ending up in dams

86 DROPS LAND ON SOILS 6 drops infiltrate to groundwater 30 drops are used by vegetation

50 drops are lost to evaporation

BY INCREASING THE CARBON CONTENT OF OUR SOIL, MORE RAIN WILL BE ABLE TO INFILTRATE FOR USE BY VEGETATION AND TO RECHARGE AQUIFERS - RATHER THAN BEING LOST TO EVAPORATION



Solutions...



Increasing the natural capital value of the landscape

 Regenerating our degraded landscapes

Ensuring resilience



World Soil Charter 2015

9 Actions for governments (summarised)

- 1. Promote Sustainable Soil Management (SSM)
- Create favourable conditions for SSM
- Multi level, interdisciplinary educational and capacity building initiatives
- 4. Support research programs relevant to end users (farmers)
- 5. National soil policy
- 6. Soil practices to mitigate climate change
- 7. Regulate, limit contaminants accumulation, facilitate remediation of land
- 8. Develop national soil information system
- 9. Nationally monitor implementation of SSM & resources

World Soil Charter 2015 www.fao.org



Our Strategies

define the global imperative and the national

opportunity this creates

• fix the paddock, and

fix the policy





Gunningrah, Charlie Maslin



A National Soils Policy

"to restore and maintain the health of all agricultural landscapes so that the soil, water and vegetation are managed in an integrated and sustainable manner."



National Soil Policy Components

- Recognise farmers as stewards of the landscape
- Reconnect urban and rural communities school gardens
- Stocktake, refocus and share our knowledge
- Reduce regulatory overburden



Case Studies tell the story



- 26 Soils For Life case studies of leading agricultural best practice published
- Another 45 in the queue
- 100 case studies over by 2022



Bokhara Plains (Round 1 Case Study)



- Soil
- Water
- Plants
- Mentoring
- Leading practices
- Long term research base







On farm evaluations:

- Soil carbon and nitrogen
- Water retention
- Innovations
- Triple bottom line
- Natural capital assessment



- Measuring soil carbon a priority
- Soil carbon = balance of nutrients, minerals, soil microbial, fungal ecologies
- Most farmed soils have 1.5% carbon content
- Soil carbon levels should be 3% 5%



Looking after our soil and water is a strategic imperative for the global population's future wellbeing.

To save the planet, first save the soil.



- 100 Case Studies by 2020
- Find us at <u>www.soilsforlife.org.au</u>
- Our Facebook Page facebook.com/SoilsforLife/
- Get in touch