



South West NRM

On-Ground Project Fact Sheet

WALLEN WATER SPREADING

Landholder Name: Andrew Schmidt

Property Location & Lot on Plan: L6/BAN80GHPL213382

(Property & project location maps attached at the end of the document)

Property Outline:

(E.g. Property description, size in hectares, enterprise, annual rainfall, and current management practice)

Wallen is 31280ha with approximately sixty percent Mulga, twenty five percent Mitchell grass and the last fifteen percent a bundle of mixed species. The average annual rainfall recorded for Wallen is around 378mm. Enterprises we operate on Wallen included a Merino sheep breeding sector, harvesting of the wool and turning out the weathers. We also run a cattle enterprise, breeding and fattening (400kg feed on). You will find free range goats roaming the property which we also resource. The livestock on Wallen are run on a rotational grazing basis, this provides the country the best chance to respond throughout seasonal changes. Stock numbers are adjusted accordingly to the seasons and land condition. Actively controlling degradation on property by blocking off water ways and diverting the water back on to the flats. We are endeavouring to fence all our country to landtype to alleviate grazing pressure off the sweeter pastures. We're about sixty percent through fencing off all our creeks and waterways to help prevent degradation ie Erosion, Siltation and flogging out of the pastures. Future plan is to cut more paddocks up to utilise the pastures better and add more waters.



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Project Description

Water spreading involves creating low bunding rills that follow the contour of the ground. The water collects against the bunding and then fills into the borrow pit from which the dirt is taken to make the rill. The water is then delivered further on in a slower and even sheet. To select areas effected by previous overgrazing and erosion and turkey bush infestation. We aim to develop and improve an area of around 500 to 600ha. We will seek advice from the Manns family, "Dijoe" Bourke (Water Spreading Field day at Rangelands Conference 2010). We will utilise hand held lazer levels to maintain accuracy amongst rills for even water spreading. One of the project sites will be located in the North East corner of Wallen and the other in the middle of the place concentrating on the eastern side. Will hire machinery and construct project myself. Total funds South West NRM is contributing to this water spreading project is \$10,890.

Project Aim

Ground preparation to spread water to increase water infiltration. By using methods known as water spreading, we are hoping to effectively slow down the run off of rain water to infiltrate the hard ground that has become unproductive and overgrown by Turkeybush.

The area selected is in paddocks that we are currently hoping to "fence waters to control grazing pressure", and aim to be able to control the grazing pressure on water spreading project sites. By doing this it should make the water spreading project more succesful with less sheep/cattle and ferals watering near or adjacent to water spreading areas particularly in the early stages.

The effects of water spreading is aiming to provide a greater growing capacity for native grasses to compete with the infestation of Turkeybush.

Project Outcomes

Reduce turkey bush and increase grass ground cover. This in turn has a follow on effect resulting in a more productive grazing enterprise with environmental benefits being at the forefront of the project with less erosion and a healthier topsoil profile. As water spreading does not reduce total runoff greatly, waterways will not suffer from such activity.

Outputs

14.5 Groundcover Management. An area of 600ha of land where improved groundcover management practices have been adopted through this project of water spreading.

OG9.1 Soil erosion control through engineering works. An area of 600ha of land treated and protected from soil erosion by engineering works through this project.

P5.1 Biophysical, economic or social plans. Monitoring & Evaluation plan developed

CB1.2 Publications. Project Fact Sheet developed for Wallen Water Spreading application.

Project Monitoring:

Objectives:

Monitoring to evaluate the effectiveness and outcomes of water spreading. This will determine ground cover response, presence of pasture species, biodiversity and production benefits found on the project site.

Methodology & Indicators:

Indicators: 3P pasture species, percentage groundcover, pasture quantity, rainfall, grazing days, and land condition.

Methodology: Transects and photo points, standing dry mass, use of grazing charts, Stocktake monitoring.

Grazing days will be calculated according to number of stock utilising pastures on project site and availability of pastures.

Monitoring Schedule:

Establish Baseline data before commencement of the project.

Biophysical monitoring every six months in which South West NRM will be responsible for collecting, collating, interpreting and reporting data.

Pasture monitoring transects and Photo monitoring sites will be established within the project area to evaluate pasture species and ground cover percentage.

Monitoring will also be set up external to the project site to give comparable data across the property.

Develop a case study comparing return on investment of water spreading as developed under this project, and comparing the economic return on investment to the project comparison site.