Successful 2014 - 2015 SoilCare Small Project Grants Funded Projects

Organisation	Project Name	Project Brief
Australian Processing Tomato Research Council Inc.	Cover crops on permanent beds irrigated via sub-surface drip irrigation	The aim of this project is develop a sustainable commercial permanent bed cropping and on-farm management systems for paddocks that are left bare during the tomato productive season. A commercial size trial site will be established with 5 different cover crop species varying from grasses, legumes and bio fumigate crops sown in autumn. At the start of the tomato season the cover crops will be sprayed and some will be incorporated into the bed and the remained will stay on the surface. Measurements will be focused on soil properties such as carbon, biology and physical across the plot over 3 years. Information gathered from the trial will be presented at fields where results will be provided to tomato growers about yield and quality and cover crop residue. Results will be compared to a control area.
Gecko CLaN	Agricultural residues for soil erosion control	Water erosion associated with agricultural production continues to impact on farming profitability and sustainability. This project demonstrates various erosion control techniques on an eroded soil at a farm in Wirrate using agricultural residues. Multiple farmer attempts with support from agencies at rehabilitation over decades have had limited success. Soil condition at the site now has limitations for plant growth and long term stability. This project will focus on improving soil function at the site as a precursor to plant growth and soil health. The project will use composted poultry manure and agricultural plant residues (straw, etc) to demonstrate practical steps that farmers can employ to address similar soil erosion problems. These amendments will be applied on the site surface in various quantities that allow evaluation of costs and benefits. Treatments will also contain sowing of various pasture and plant species based on their restorative potential and agricultural suitability. Results of the demonstration site will be promoted and distributed via the Gecko Clan which has a proven record in community engagement The project will be a partnership of the farm business (Melrose Park Pastoral), DEPI and the Gecko Clan.
Gecko CLaN	Sustainable Futures in Agriculture	This project aims to create interest from young people in the agriculture and the environmental sectors with a focus on sustainable agriculture practices. It aims to inspire students through highlighting possibilities and opportunities within these industries. The project will involve exposing secondary school students to a variety of sustainable agricultural systems and perspectives. This includes running a field trip for each school to the National Environment Centre. The National Environment Centre includes a 190 hectare certified organic farm, which is run on agro-ecology principles. The centre specialises in developing systems of food production that are suitable in times of change and uncertainty in weather, social structure, politics and environmental awareness and responsibility. The National Environment Centre is a specialist TAFE College, part of the Riverina Institute of TAFE. The project will also include a field trip to

		a local sustainable farm, or other Landcare activities/trial sites as directed by the schools. The project will also include having guest speakers come into the schools and deliver sessions. Activities would be focussed on bringing an environmental and sustainable perspective to agricultural situations. The program will be delivered to senior students studying agriculture at FCJ College, Euroa Secondary and year 9 students at Benalla Secondary.
Goulburn Murray Landcare Network	Soil Health Forum	Information presented to attendees at the soil health forum will help them to manage their farming systems to be viable in a changing farming landscape and gain the benefits of sustainably managing the land. It provides an easily accessible mechanism for increasing knowledge about new techniques & knowledge as well as practical skills they can start using at home. The forum would include presentations and hands on experiences of soil tests that can be done in the paddock to re-engage the farmer with their most valuable resource- soil. Professionals & consultants would present up to date information on topics such as composting, organic matter, soil biology, paddock soil tests and fertiliser options. It is an opportunity for farmers to gather information and use it to make positive changes on farm to improve productivity, sustainability and the viability of their business and the community. The forum is organised and run with help from a number of partners including the GBCMA and DEPI.
Goulburn Murray Landcare Network	Wagga Wagga Wander	This project aims to give new life and ideas to participants who will come away with ideas for change on their own properties and within their own Landcare groups and it will also provide a networking opportunity to be able to talk to people in a different region trying to improve their local environment and implement sustainable farming practices. About 40 participants from various Landcare groups particularly from the Agricultural Floodplains but also from the wider Goulburn Broken Catchment pay for their own food and accommodation. The grant is for the cost of the bus and driver.
Maize Association of Australia	Stubble management options in a continuous maize system	This project will aim to develop a sustainable continuous maize cropping system in the region. A commercial size trial site will be established whereby 3 -4 different treatments are compared on one block. These treatments will include: 1. Conventional grower treatment (disc tillage prior to winter) 2. Strip tillage, including ripping to 30cm depth 3. Zero tillage 4. Possibility of including a burn or full tillage option Maize will be planted across each of the strips, with yields obtained from the harvester. Measurements will be focused on soil properties such as carbon, biology and physical across the plot over 3 years. Information gathered from the trial will be presented at fields where other growers in the areas can inspect the trial site and see how the maize stubble is management. Yield of the maize crop will be accessed from each of the

		treatments each year, and publicized to the wider maize industry.
Molyullah & Tatong Tree and Land Protection Group	Soil carbon: Supporting grass roots innovation	The project aim is to determine if soil carbon is increased through the application of various sustainable land management techniques including alternative fertilisers. The project involves education field days and guest speakers to ensure the broader community benefits from the project. 8 trial sites have been set up at various locations within the Molyullah and Tatong areas. This allows for differing soil types and paddocks histories to be included in the project. Several land management techniques are being trialled including growing deep rooted perennials, deep ripping and the application of Charlie Carp, humates, composted hay, composted animal manure and Seasol. Each site uses on technique and includes a control area. This funding will form the second phase of the project as initial baseline soil tests have been completed and 2 applications of the techniques. The project sites will continue to be monitored and education forums will be conducted through farm walks, guest speakers and the demonstrate site.
Strathbogie Ranges Conservation Management Network	Landscape discovery tour; Upper Broken Catchment – tablelands, volcanoes, river capture, granite intrusions and floodplains	Community participation in natural resource management is reliant on an understanding of and familiarity with the landscape – knowledge underpins action. Increasing numbers of land-holders are new to the region, with limited natural resource management experience. The field day aims to improve local landholder understanding of the history of the landscape and some of the underlying reasons for the land management issues they deal with by: • Increasing awareness of the relationship between geology, landscape, native vegetation, fauna, soil, rainfall and erosion. • Contrasting the higher rainfall Strathbogies & Mt Samaria Ranges, with the lower rainfall foothills and riverine environments in between. • Engaging new landholders in natural resource management by addressing land management issues in novel ways and with excellent catering (not to be underestimated). • Contrast the varying impacts of geology, land use and landscape history on salt mobilization and dryland salinity in the Swanpool and Molyullah - Tatong districts.
Strathbogie Tableland Landcare Group	Strathbogie Alternative Fertilizer Trail Stage II	The group aims are to provide more information/education field days and expand their current demonstration sites through engagement with private companies supplying e.g. seed and fertilizer. This would be done with trailing new pastures and the benefits of spreading lime on hill country. There is also a need for ongoing soil testing to continue to build on what data has already been collected, most trial sites only have 2 years data and this project has the opportunity to be a leader in long term results. The issues facing farmers in the district are listed below: • Acidity • Pastures Species persistence

		• Fertility • Palatability of feed for stock and nutrient value • Grazing management • Set stocking vs Rotational • Old mindset and cash flow of businesses • Return on investment • Farmer Knowledge and Education • Kg of produce per Ha and DSE Ratings
Up2Us Landcare Alliance on behalf of Upper Broken River Catchment Landcare Group	Inspiring small farms to grow big ideas	In the effort to engage a wider community in small acreage farming practices such as soil health and property adaption and planning, they will provide a series of quarterly educational sessions over a period of two years which will focus on: • Climate and the future; • Soils in this region, improvement, management; • Treatment approaches for soil improvement; • Market opportunities i.e. what could grow where and why; and from "*Planning to Paddock"* paddock plans (whole farm planning). Financial assistance will speed the delivery of their plan, engage inspiring speakers, tackle the science of sustainable land management and support a movement of resilient landowners who are willing to work the land in a new direction. The group would also gain valuable insight to sustainable farming systems via visiting current practices elsewhere in the landscape. A yearly bus tour to share community insights and develop theory from practical situations would accelerate the uptake of farm health activities within the Shire.
Victorian No-Till Farmers Association	Cover cropping Yarrawonga demonstration trials	Every summer around 22 million hectares of wheat belt soils lie bare across eastern, southern and western Australia. Herbicides are commonly used to maintain the soil in a plant-free state. Bare ground and low levels of biological activity result in reduced infiltration, poor moisture retention, inadequately buffered pH and an open invitation to weeds. If there is sufficient moisture to support summer weeds there is sufficient moisture to support a summer cover crop. The purpose of a multi-species cover crop is to restore below-ground diversity which will in turn restore biological function (natural N-fixation and P-solubilisation) and plant productivity. The nutrient sourcing and moisture retention benefits of diverse cover crops will continue to build in successive years as soil health improves. The project will use in its trial: 1. Minimise soil disturbance 2. Provide soil cover

		3. Always have live roots growing in the soil 4. Diverse plants and rotations
Warby Ranges Landcare Group	Developing and caring for a healthy soil	Soil is the foundation of sustainable farming systems and its care is essential for sustained productivity. A healthy soil is a living, renewable resource and has the ability to increasingly reproduce itself in the form of topsoil in a sustainable manner. The problem is that many soils have got the "Sadss" (Salinity, acidity, declining soil structure). There is a need to engage the community in management methodology designed to reverse the challenges of "Sadss" and develop practical caring strategies that lead to healthy soil structures, composition and gain & maintain sustainable farming outcomes. We have chosen to use a program of six "on-farm workshops" over a twelve month period, allowing and encouraging time for a series of action learning cycles to occur. The workshop discussions will be: • Soil Conservation {vital for cropping & pasture} • Soil Aggregation {essential cropping requirement} • Soil Regeneration {cropping, pasture production/health and horticulture} • Soil Energisation {utilization of current composition/structure and forward planning for carbon related change} • Taking the soil health journey – utilizing "*Soil Health the Journey*" regional book. • Better Farming for 2015—"*Better Farming"* regional book The farm workshops will be facilitated by Mr Gwyn Jones [independent agronomist] and include "best practice' on-farm walks and will be held in the Warby Ranges group area.