

## Environmental Sustainability Strategy 2012 Achievements Report March 2017



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This report highlights the significant achievements resulting from the Moira Shire Council Environment Sustainability Strategy (ESS), 2012. It has been produced as part of the four yearly review of the ESS. A revised ESS will be released mid 2017. The key purpose of the 2012 ESS was to provide strategic direction and guidance to Council in its:

- efforts to reduce its own environmental footprint;
- legislative and regulatory responsibilities;
- role as a leader, partner, advocate and educator;
- delivery of services to the community (residents, households, groups, schools, businesses, organisations, landowners and industry).

This report provides examples of the range of achievements made between 2012-2016.

The achievements cover a range of priority issues and highlight the importance of partnerships in the implementation of the ESS.

Progress has been made with 67 of the 80 objectives in the 2012 ESS.

### Climate Variability and Energy Efficiency



### Watts Working Better

Since the project began in 2013, over 1,700 lights have been upgraded to highly efficient LED's. We saved more than \$150,000 in electricity costs in the first year and reduced greenhouse gas emissions by more than 750 tonnes.

A unique project that achieved substantial economic and environmental benefits and delivered an important community partnership with Foott Waste and Connect Goulburn Valley.

The old lights were dismantled and recycled providing workplace opportunities for those involved.

#### Achievements in Moira included:

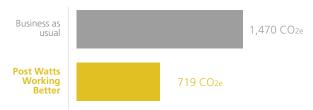
- 1,708 18watt LED street lights installed over two years
- Approximate annual savings on electricity = \$150,000
- Approximate reduction in annual greenhouse gas emissions = 750 tonnes
- That's 264 cars off the road!

#### For more information go to: www.gbga.com.au/watts-working-better

#### Award:

2015 Premier's Sustainability Award

#### **Annual Emissions of Street Lights**



#### **Annual Cost of Street Lights**



#### Funding:

Community Energy Efficiency Program, Australian Government

#### Partners:

Goulburn Broken Greenhouse Alliance and 11 member Councils, lead council was Greater Shepparton City Council

### Climate Variability and Energy Efficiency



### **Climate Smart Agricultural Development Project**

A collaborative project across the Goulburn Broken Region with the aim of generating and communicating long term data and information to help Councils, land managers and the agricultural sector adapt to climate change. The project developed a mapping tool which considers topography, climate data (temperature and rain fall), soils (ph and texture) and crop requirements for seventeen different commodities. Maps produced will be useful for planning future agricultural activities.

For more information go to www.gbga.com.au/ climate-smart-agriculture-development



climate smart agricultural development project

#### Funding:

Victorian Adaptation and Sustainability Partnership, Victorian Government

#### Partners:

- Moira Shire Council (lead Council)
- Goulburn Broken Greenhouse Alliance
- Benalla Rural City Council
- Greater Shepparton City Council
- Campaspe Shire Council
- Strathbogie Shire Council
- Mansfield Shire Council
- Murrindindi Shire Council
- Goulburn Broken Catchment Management Authority
- Department of Environment, Land, Water and Planning



Photos: Goulburn Broken Catchment Management Authority

### Fruit Industry Employment Program

#### Award:

Finalist 2015 Premier's Sustainability Awards

Former fruit industry workers participated in this program created in response to SPC Ardmona's 2013 cuts to fruit intake. Initiated by the Goulburn Broken Catchment Management Authority, Moira Shire joined project partners Greater Shepparton City Council, Parks Victoria and Goulburn-Murray Water.

The project was able to get started quickly due to well established relationships between these organisations.

The participants received training and developed new skills through their involvement in the project, creating new employment opportunities.

## Works achieved by the team hosted by Moira Shire:

- 300ha weeds controlled
- 30km roadside weeds controlled
- 6km environmental assets fenced
- 3000 native seedlings planted
- 70 nest boxes constructed
- 30kg seed collected
- 200 hollow logs replaced
- Six tonnes of rubbish removed from environmentally significant areas

Additional work was achieved in Moira Shire by teams hosted by other partners.

#### Funding:

Department of Environment and Primary Industries, Victorian Government through Goulburn Broken Catchment Management Authority

#### Partners:

Goulburn Broken Catchment Management Authority, Goulburn-Murray Water, Parks Victoria, Greater Shepparton City Council





### Goulburn Broken Local Government Biodiversity Reference Group

The group's purpose is to foster greater collaboration between Local Government and other agencies across the Goulburn Broken Catchment. The focus is on biodiversity conservation issues relevant to Local Government.

The group, initiated by Moira Shire ten years ago, has a strong focus on knowledge sharing, staff training and improving practices.

Coordinated by Moira Shire Council, there are eight Local Governments and four agency partners involved.

#### Funding:

National Landcare Program, Australian Government through the Goulburn Broken Catchment Management Authority

#### Partners:

Goulburn Broken Catchment Management Authority, eight Councils, Department of Environment, Land, Water and Planning, Country Fire Authority and VicRoads

### **Kinnairds Wetland**

Kinnairds Wetland is a 93 hectare wetland of significance two kilometres north-east of Numurkah. It is managed by partners according to an Environmental Management Plan which was reviewed and substantially updated in 2014.

More than 150 species of birds have been recorded at the site and it is a known breeding ground for Royal Spoonbills and Australasian Shovelers.

Since 2014, 876ML of environmental water has been delivered to the wetland to encourage breeding, roosting and feeding of fauna.

Following floods in 2012 and fire in 2014, significant recovery works including revegetation, weed management, rebuilding tracks, boardwalks, bird hides and bollards have occurred.

#### Funding and Partners:

Goulburn Broken Catchment Management Authority, Goulburn-Murray Water





### Roadside weed and pest animal management program

Council has developed and adopted a 5 year roadside weed and pest animal control strategy (2015-2020).

This strategy is managing to address Council's responsibilities for weeds and pest animals on roadsides across the Shire. This is to done to improve native vegetation quality, farm productivity, landscape values, biodiversity and waterway habitats.

**Funding:** Victorian Government



### Strathmerton Habitat Project

Threatened species habitat on roadsides and private land is being protected and improved to mitigate the impacts of the proposed Strathmerton highway deviation.

#### Achievements so far include:

- 70 hectares of revegetation to provide linking corridors
- 240 hectares of new conservation covenants
- Two year benchmarking program across 21 sites assessing flora and fauna values.

#### Partners:

Vic Roads, Goulburn Broken Catchment Management Authority, Trust for Nature, Landholders



Photos (L-R): Orlando Taloma, Whroo Conservation Management Network and Janice Mentiplay-Smith, Goulburn Broken Catchment Management Authority

### **Broken Boosey Conservation Management Network**

Since it began in 2003, Moira Shire Council has actively supported the Broken Boosey Conservation Management Network (BBCMN). The BBCMN consists of a small committee and 644 members, around 300 of these are residents or landholders in the Moira Shire.

The BBCMN provides community based biodiversity events, presentations, workshops and field days in Moira Shire. The BBCMN produces information materials, environmental roadside signage, distributes a newsletter and manages a facebook profile.

A very professional and popular calendar is produced each year highlighting the significant native fauna and flora in the area. Photos for the calendar are obtained through a competition. Around 250 entries from local community members are received each year.

With support from the Moira Shire, the BBCMN began the 'Operation Dunnart' project in the Katamatite-Tungamah region, based on native grasslands and the native marsupial, the Fat-tailed Dunnart, which lives amongst this habitat. Grassland preservation, ecological burning and community field days are a strong focus of this exciting new project.

#### Award:

2013 Moira Shire Australia Day Environment Project of the Year – Woodland Bird Project

#### In Moira Shire activities have included:

- 200 nest boxes installed on public and private land
- In 2015-16 alone:
  - 27 hectares of revegetation
  - 2.4kms of fencing for remnant vegetation protection in Moira Shire.
  - numerous community information sessions including field trips and walks.

#### Partners:

Goulburn Broken Catchment Management Authority, ParksVic, landholders



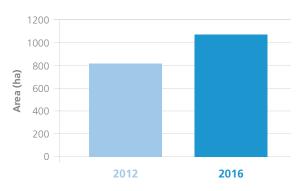
### **Rates Rebates for Conservation Covenants**

A Conservation Covenant is a voluntary agreement between Trust for Nature and a Landowner. The Covenant is placed on the title of the land to ensure natural bushland is permanently protected.

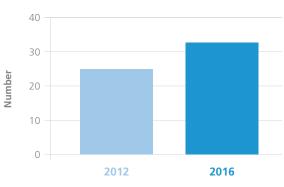
Council provides a rate rebate to landholders with a Conservation Covenant.

From August 2012 to April 2016 the number of covenants has increased by 28%, from 25 to 32. The area under covenant has also increased by 32% during this time, from 814ha-1074ha.

## Area under Conservation Covenant in Moira Shire



## Number of Conservation Covenants in Moira Shire





## Managing Council's native vegetation 'Net Gain' program

"We are encouraged by the initiative of one of our local Shires (Moira) which has bundled up its own calculated offsets from local road maintenance into strategic offsets resulting in enhancement of native vegetation on a large property being managed for nature conservation. This approach should be adopted across the State to maximize biodiversity outcomes"

- Goulburn Valley Environment Group

Council actively manages areas established as offsets for permitted native vegetation removal and other incremental losses from Council operations.

Three main sites being actively managed are Station Street Wetland in Numurkah, a Trust for Nature covenanted site near Naring and Kinnaird's Wetland, Numurkah. Redundant stack sites, a gravel quarry and various wetlands have also been rehabilitated and revegetated.

To date around 30,000 plants have been established, all in high priority conservation areas.

### Incorporating ecologically sustainable development principles into land use and planning

The provision of a broad range of environment sustainability expertise is an important and valued Council service. For example, in the period from July 2012 to July 2016, advice, assistance and recommendations were provided to over 1,200 natural resources related enquiries, requests and formal referrals.

### Sustainable Water Use, Stormwater and Water Quality



Photo: Lanie Pearce

### Goulburn Broken Stormwater Education Project

A Stormwater Education Officer, employed by Goulburn Valley Water and co-funded by partners, shares information with the community about stormwater contamination and how to prevent it.

Since 2012 more than 3,500 people in Moira Shire have been involved in the project, many of these were school children. Education activities included:

- Story of a river
- Biodiversity Twister
- Drain stencilling
- Bird and Frog calls
- Water quality testing
- Pirate trail
- Nature treasure hunt
- Recycle race

#### **Funding and Partners:**

Moira Shire Council, Greater Shepparton City Council, Goulburn Broken Catchment Management Authority and Goulburn Valley Water.

# Cobram Wetland – taking a different approach

During a clean out of a stormwater retardation basin in Cobram, the Operations Team noticed it had developed into a wetland.

Plans were then modified to take advantage of the natural bio-remediation capacity of the wetland.

Working closely with the earthmoving contractor, a wildlife island refuge was created along with two reed filter beds to assist in the bio-filtration of Cobram's storm water before it discharges to the Murray River.

This project is an example of seeing opportunities to modify existing plans for little cost to achieve environmental, social, infrastructure and economic outcomes.



### Facilitating Environmental Stewardship





### **Community Education**

The Moira Environment team continued to share environmental sustainability knowledge and information with community groups including schools (from pre-school to secondary) and adult interest groups (e.g. Rotary, Landcare).

Sessions have covered a range of topics including waste management, National Tree Day (including planting session), natural resource management and climate change.

Informative signage has been erected in parks throughout the Shire to explain the role composting plays in creating healthy soils.



### Environment Sustainability Advisory Committee (ESAC)

This committee's role is to act as an advisory and liaison forum between Council, expert stakeholders, industry, business and the community.

ESAC contributes advice and guidance towards the development, implementation, monitoring and review of environmental sustainability strategies and plans adopted by Council.

Members include:

- Broken Creek Field Naturalists
- Department of Environment, Land, Water and Planning
- Yorta Yorta Nation Aboriginal Corporation
- Goulburn Valley Waste and Resource Recovery Group
- Trust for Nature
- Bega Cheese
- Goulburn-Murray Water
- Goulburn Valley Water
- GrainCorp Limited
- Goulburn Broken Greenhouse Alliance
- Goulburn Broken Catchment Management
  Authority
- Broken Boosey Conservation Management
  Network
- Community

### Purchasing, Consumption and Waste





# Putting the Poly in your pocket

#### Award:

Nominated for Australia Waste and Recycling Expo (AWRE) Award 2013, Innovation category

Expanded polystyrene represents a problematic litter item as it does not decompose and often becomes water and air borne during the operation of a landfill. It is very bulky by nature and removing it extends the effective life of our landfill.

You can now deposit polystyrene at any of our transfer stations.

Polystyrene is 98% air. To help reduce costs and make it easier to transport, we've invested in a mobile compaction unit. This unit achieves a compression ratio of 40:1.

The compacted bricks produced are re-processed into new products such as plastic photo frames and coat hangers.

#### Funding:

Victorian Adaptation and Sustainability Partnership, Victorian Government

## Cobram Landfill rehabilitation

We needed to rehabilitate a large old fill area of our landfill on a site prone to flooding and with cultural heritage overlays.

We used a cutting edge design with 17 bio-filters over vertical gas wells to tackle gas emissions and installed a geosynthetic liner to provide a barrier to prevent leakage of unwanted substances into the ground.

We turned the borrow pit into a catch and release water storage for all surface water discharged from the site. This dam also provides a water landing strip for the Cobram model aero club.

**Funding:** Sustainability Victoria

### Purchasing, Consumption and Waste



### **Kerbside Organics Service**

The kerbside organics service has been a major success since it began in Cobram, Yarrawonga, Nathalia and Numurkah in 2014.

Almost 2,500 tonnes of organic waste is being turned into compost for reuse on gardens throughout the region.

The average contamination rate is around 0.4% which is significantly lower than the state average.

It is estimated this initiative will reduce Council greenhouse gas emissions by up to 825tonnes  $CO_2$ -e per year.

#### Awards:

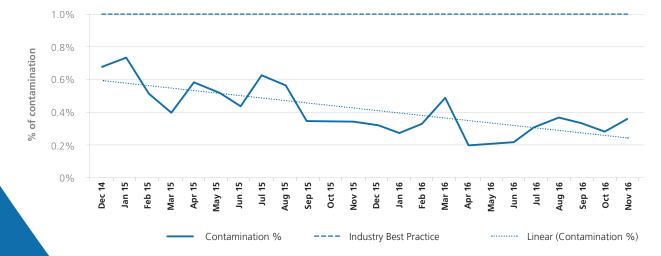
Winner 2015 Premier's Sustainability Award Finalist 2015 Banksia Awards

#### Funding:

Victorian Government

#### Partners:

Goulburn Valley Waste and Resource Recovery Group and member Councils



#### **Moira Shire Kerbside Organic Service Contamination**





Council has expanded the coverage of public place recycling throughout streetscapes including Yarrawonga foreshore and recreation reserves such as Scott Reserve in Cobram.

#### **Public Place Recycling Trailer**

A mobile waste, recycling and organic disposal service which offers up to 15 bins has been made available to assist community groups with event waste management.

The trailer has been used to support community events such as agriculture shows, cultural festivals and sporting finals.



### **Free Mulch**

Moira Shire Council offers free mulch to residents as part of our commitment to responsible waste management.

The mulch has been produced from green waste deposited at our transfer stations by the public and is available 2-3 times a year from three locations.

Approximately 1,300m<sup>3</sup> of mulch was supplied and loaded free of charge in a 12 month period for use by residents.

#### Funding:

Public Place Recycling Grants, Sustainability Victoria





### Waste Management App

The Waste Management in Moira App was launched on 1 December 2016 to help celebrate the two year anniversary of the Kerbside Organic Service.

The Waste Management in Moira app is free and available for Android and iOS.

It provides waste service information to residents and tourists such as:

- A calendar detailing bin collection days to all addresses within Moira Shire;
- Suitable and non-suitable items for each of the three kerbside bins;
- A report function for kerbside inquiries, illegal dumping etc;
- Location, distance and travel time to Moira's transfer stations; and
- Notifications to residents regarding important information (change of collection schedule due to public holidays etc).



# Council use of recycled products

Council has used the following products:

- Road seal containing recycled rubber and plastics;
- Park benches made from recycled plastic bags;
- Recycled paper;
- Mulch on garden beds; and
- Recycled concrete.

We also work with contractors to encourage recycling from demolition projects.

