



INTERNAL GUIDE WHEN CONSIDERING FUTURE WASTE OPTIONS

December, 2011

ACKNOWLEDGMENTS

The following officers of Council assisted in the preparation of the Bland Shire Council Waste Management Strategy:

Anthony Daintith (Manager Development Services)

Guy Marchant (Building & Environmental Health Surveyor)

Wayne Broad (Assets, Facilities & Projects Coordinator)

Paul Glennon (Workshop & Plant Supervisor)

Phil Marshall (General Manager)

CONTENTS

1.	BACKGROUND.....	6
2.	GENERAL OVERVIEW OF OPERATIONS.....	7
2.1	POPULATION AND HOUSING.....	7
2.2	COLLECTION SERVICES.....	8
2.3	WASTE DISPOSAL.....	10
2.4	RESOURCE RECOVERY.....	30
2.5	ASSOCIATED SERVICE COSTS.....	31
2.6	ASSOCIATED SERVICE REVENUE.....	31
3.	REVIEW OF EXISTING SERVICES AND FUTURE MANAGEMENT OPTIONS.....	32
3.1	INTRODUCTION.....	32
3.2	COLLECTION SERVICES.....	32
3.3	WASTE DISPOSAL.....	38
3.3.1	Generally.....	38
3.3.2	West Wyalong Landfill.....	41
3.3.3	Ungarie Landfill.....	43
3.3.4	Barmedman Landfill.....	44
3.3.4	Weethalle Landfill.....	45
3.3.6	Tallimba Landfill.....	46
3.3.7	Mirrool Landfill.....	47
3.3.8	Naradhan Landfill.....	47
3.3.9	Kikoira landfill.....	48
3.4	RESOURCE RECOVERY.....	49
3.5	EDUCATION.....	51

List of Tables

Table 1: Bland LGA Population Characteristics	7
Table 2: Kerbside Collection Days – Domestic Service	8
Table 3: Current Street Cleaning Regime	10
Table 4: Bland LGA Waste Infrastructure.....	10
Table 5: Bland LGA Landfill Opening Hours	11
Table 6: Wastes accepted and excluded at Landfills	11
Table 7: Fees and Charges (2008-2009) - West Wyalong Landfill	14
Table 8: Material Generation – West Wyalong Landfill	15
Table 9: Bland Annual Waste Management Costs.....	31
Table 10: Bland Annual Waste Management Revenue	31
Table 11: Operating Costs for the Waste Collection service to be provided by Council.....	33
Table 12: Costs for the purchase of new bins	34
Table 13: Recommendations – Domestic Collection Services.....	35
Table 14: Recommendations – Trade Waste Collection Services	35
Table 15: Recommendations – Park/Street (Collection Services)	36
Table 16: Recommendations – Special Events (Collection Services)	36
Table 17: Proposed Street Cleaning Regime.....	37
Table 18: Projections for Contracting the Street Sweeping Service	37
Table 19: Recommendations – Street Cleaning.....	38
Table 20: Recommendations- Waste Disposal (Generally)	40
Table 21: Recommended Opening Hours (West Wyalong Landfill).....	42
Table 22: Recommendations - Waste Disposal (West Wyalong Landfill)	43
Table 23: Recommended Opening Hours (Ungarie Landfill)	43
Table 24: Recommendations - Waste Disposal (Ungarie Landfill).....	44
Table 25: Recommended Opening Hours (Barmedman Landfill)	44
Table 26: Recommendations - Waste Disposal (Barmedman Landfill).....	45
Table 27: Recommended hours of operation (Weethalle Landfill)	46
Table 28: Recommendations - Waste Disposal (Weethalle Landfill)	46
Table 29: Recommendations - Waste Disposal (Tallimba Landfill).....	47
Table 30: Recommendations - Waste Disposal (Mirrool Landfill)	47
Table 31: Recommendations - Waste Disposal (Naradhan Landfill)	48
Table 32: Actions - Waste Disposal (Kikiora Landfill).....	49
Table 33: Recommendations - Resource Recovery.....	50
Table 34: Recommendations - Community Involvement and Education	52

List of Maps

Map 1: Map of Bland Local Government Area	7
Map 2: West Wyalong Landfill Locality Map.....	12
Map 3: Aerial view of West Wyalong Landfill	13
Map 4: Ungarie Landfill Locality Plan	16
Map 5: Aerial view of Ungarie Landfill	16
Map 6: Barmedman Landfill Locality Map	18
Map 7: Aerial view of Barmedman Landfill	18
Map 8: Weethalle Landfill Location Map	20
Map 9: Aerial view of Weethalle Landfill.....	20
Map 10: Tallimba Landfill Location Map.....	22
Map 11: Aerial view of Tallimba Landfill	22
Map 12: Kikiora Landfill Location Map	24
Map 13: Aerial view of Kikiora Landfill.....	24
Map 14: Naradhan Landfill Location Map.....	26
Map 15: Aerial view of Naradhan Landfill.....	26
Map 16: Mirrool Landfill Location Map	28
Map 17: Aerial view of Mirrool Landfill.....	28

List of Photos

Photo 1: Current Street Sweeper 10
Photo 2: West Wyalong Landfill..... 15
Photo 3: Ungarie Landfill 17
Photo 4: Barmedman Landfill 19
Photo 5: Weethalle Landfill 21
Photo 6: Tallimba Landfill 23
Photo 7: Kikoira Landfill..... 25
Photo 8: Naradhan Landfill 27
Photo 9: Mirrool Landfill..... 29
Photo 10: Cootamundra Waste Compactor 42

1. BACKGROUND

The purpose of the Bland Shire Waste Management Strategy is to assist Council to:

- Manage wastes in an environmentally sustainable manner;
- Manage wastes in the most cost effective way possible;
- Improve the effectiveness of current waste and recycling services;
- Explore potential waste & resource management opportunities, including recycling; and
- Investigate rehabilitation options for existing sites.

Section 2 briefly examines the population and housing data for the LGA as well as providing a detailed analysis of current waste services and infrastructure.

Section 3 presents an analysis of the existing waste management services and infrastructure throughout the Bland LGA and outlines opportunities for improvement and potential constraints identified.

While Council will have the ability to readily implement a number of these options, other options will require careful consideration and planning on the part of Council, particularly in terms of availability of staff and resources.

Many of the strategies outlined in this strategy will be influenced by the decision whether to retain the services of the existing contractor following the expiry of existing contracts at the end of June 2009. Or alternatively, whether a contractor will be used for various components of the collection and management across the LGA.

Council will need to prioritise its actions according to its resource constraints and existing commitments/contracts whilst considering Council's medium to long term plans. Notwithstanding this, suggestions are presented regarding the potential timing of waste/resource management options.

It is important to note that the suggested strategies have been predicated on management of wastes within the LGA rather than the transportation and disposal/treatment of wastes externally.

2. GENERAL OVERVIEW OF OPERATIONS

The following section details the demographic and waste management characteristics of the Bland Local Government Area (LGA). The information provided is taken to represent a typical year and it is recognised that values may vary from year to year.

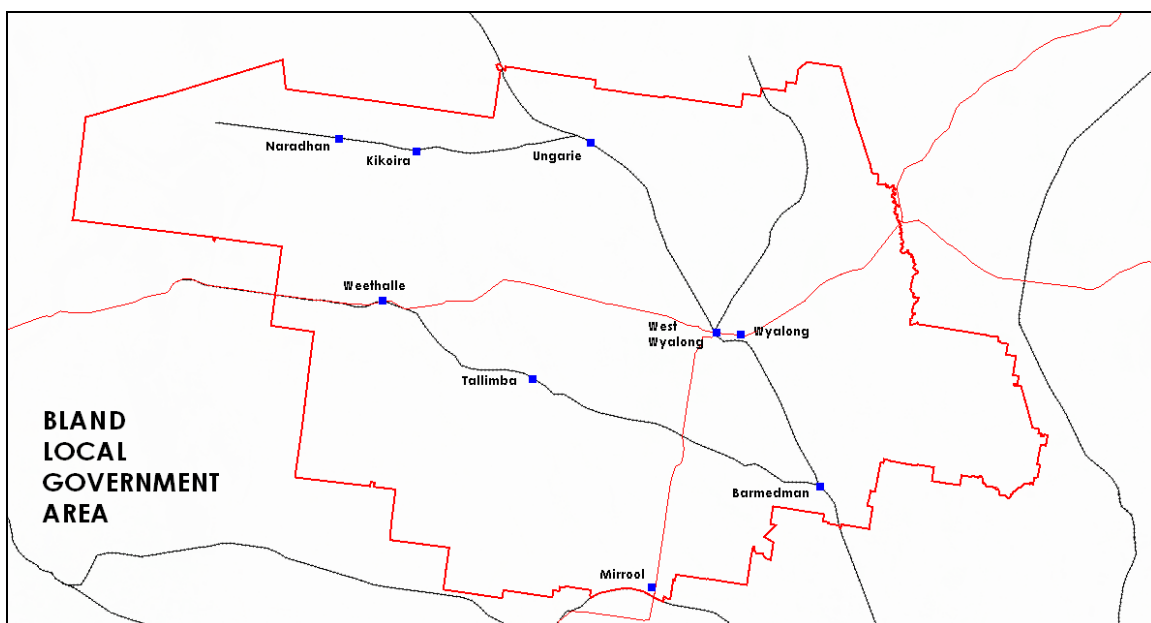
2.1 POPULATION AND HOUSING

The Bland LGA covers an area of 8,482 km² within the northern fringes of the Riverina, New South Wales and has a stable population of approximately 6,102 (ABS Census 2006). The population characteristics of the LGA are presented in **Table 1**. This table also includes an estimate of the number of dwellings in the LGA.

Table 1: Bland LGA Population Characteristics

Township / Centre	Population	% Pop	Estimated Dwellings
West Wyalong / Wyalong	3,191	52.29	1,511
Ungarie	335	5.49	171
Barmedman	227	3.72	116
Rural Areas	2,349	38.5	1109
TOTAL	6,102	100	2,907

Map 1: Map of Bland Local Government Area



2.2 COLLECTION SERVICES

Domestic

Currently, Council provides a kerbside domestic waste collection service to its main population centres of West Wyalong, Wyalong, Ungarie, Barmedman and Weethalle. This service consists of a 240 litre mobile garbage bin (MGB) and is collected on a weekly basis. The waste collection service is carried out under contract by JR Richards & Sons, which is due to expire at the end of June, 2009.

There is no current kerbside recycling collection service offered within the LGA.

Collections are carried out on the following days as per **Table 2**:

Table 2: Kerbside Collection Days – Domestic Service

Locality	Collection Day/s
West Wyalong	Monday, Tuesday and Wednesday
Wyalong	Tuesday and Wednesday
Ungarie	Monday
Barmedman	Wednesday
Weethalle	Monday

Wastes are collected from 240L MGBs by an automated side-lift compaction truck and delivered to the West Wyalong landfill. The compaction truck has a capacity of approximately 18 m³ and is based in the JR Richards' depot in West Wyalong.

Council administers residential collection fees and charges with a charge of **\$230.00** per MGB per annum for the weekly residential collection service provided in West Wyalong, Wyalong, Ungarie, Barmedman and Weethalle.

For vacant land within the service area, an access fee of **\$20.00** per annum is charged. Although no collection service is provided in these areas, the access fee encompasses costs related to the operation of the waste depots. It is understood that the residential waste management charges are separately identified on Council rates notices. It is noted that rural ratepayers currently do not pay any waste related charges.

It is noted that there are **1,792** garbage bins collected weekly under the domestic waste contract.

Trade Waste

Existing trade waste collection services for general solid waste are provided through a kerbside collection and pick-up service managed by JR Richards within West Wyalong and Wyalong.

Council administers trade waste collection fees and charges with a charge of **\$240.00** per MGB per annum for the weekly commercial collection service (additional collection services can be arranged with an additional cost involved).

Services such as collection of grease trap waste are currently not provided by Council.

Trade waste solid wastes are collected on a weekly basis each Friday.

Kerbside collections are undertaken using 240L MGBs, whilst the pick-up service utilises 1.5m³ and 3m³ skip bins (via private contractor). A compaction truck is used for the kerbside trade waste collection, and a front-lift truck for the pick-up service. All collected wastes are delivered to the West Wyalong Landfill.

It is noted that there are **442** garbage bins collected weekly under the trade waste contract.

The contract for trade waste collections is incorporated within the domestic collection contract.

Parks/Streets

Park and street general solid waste collection services are provided through Council-owned 240L MGBs within West Wyalong, Wyalong, Weethalle, Barmedman and Ungarie and is managed by JR Richards. Parks and street collection are undertaken on Mondays and Fridays with all waste collected delivered to the West Wyalong Landfill for disposal.

The contract for park/street collection is incorporated within the domestic/trade waste collection contract.

It is noted that there are **221** garbage bins collected weekly under the park/street waste contract.

Special Events

JR Richards provides special events services when sufficient notification is provided. Appropriate waste collection bins are delivered to the relevant venue(s) and collected by JR Richards following the event.

Costing per event is based on the number of bins provided.

Street Cleaning

The street cleaning service is provided by Council using a “Road Sweeper” machine similar to the photo below. The machine is coming to the end of its working life and is due for replacement in the 2009/10 financial year.

Photo 1: Current Street Sweeper



The street sweeper operates 7 days a week, with the following regime:

Table 3: Current Street Cleaning Regime

Location	Frequency
Main Street (West Wyalong)	Everyday
Ungarie	Fortnightly
Barmedman	Fortnightly
West Wyalong Streets	Constant
Wyalong Streets	Constant

Traditionally this service has operated over time without change.

2.3 WASTE DISPOSAL

Within the Bland LGA, there are currently eight (8) landfill facilities available for the treatment and disposal of waste. There are currently no transfer stations operational in the LGA. A summary of infrastructure within the LGA is given in **Table 4**.

Table 4: Bland LGA Waste Infrastructure

Location	Annual Throughput	Comments
West Wyalong	~ 10,596 tpa	Disposal & recycling
Ungarie	Not monitored	Disposal & recycling
Barmedman	Not monitored	Disposal & recycling
Naradhan	Not monitored	Disposal & recycling
Kikiora	Not monitored	Disposal & recycling
Tallimba	Not monitored	Disposal & recycling
Mirrool	Not monitored	Disposal & recycling
Weethalle	Not monitored	Disposal & recycling

It is noted that approximately 6 years ago Council unsuccessfully attempted to convert landfills to transfer stations (use of large skip bins), however landfill operations have continued.

Wastes accepted at these facilities include domestic (household), commercial & industrial, and construction & demolition as well as greenwaste.

As can be seen from **Table 4**, Council does not have figures on the exact throughput within the LGA on an annual basis.

The West Wyalong Landfill has restricted opening hours, whilst the other landfills remain unrestricted (details of which are given in **Table 5**).

Table 5: Bland LGA Landfill Opening Hours

Landfill Facility Opening Hours	
West Wyalong	Monday to Friday (8am to 5pm) Saturday to Sunday (11am to 4pm)
Ungarie	Unrestricted
Barmedman	Unrestricted
Naradhan	Unrestricted
Kikiora	Unrestricted
Tallimba	Unrestricted
Mirrool	Unrestricted
Weethalle	Unrestricted

The types of wastes accepted and excluded at each of the landfills are outlined in Table 6 below.

Table 6: Wastes accepted and excluded at Landfills

Accepted Wastes	
Asbestos (by appointment only)	Greenwaste
Batteries	Paper
Building & Demolition Material	Dead Animals
Plastic Waste including farm drums (DrumMuster)	Domestic Waste
Scrap Steel	Virgin Excavated Materials
Timber	Whitegoods
Waste Oil	Tractor/Machinery & Other Plant
Tyres	Drained Oil Filters & Oily Rags

Excluded Wastes	
Acids or Alkalis (soluble)	Pesticides and Herbicides
Cytotoxic Waste	Sharps
Liquid Wastes (Including Grease Trap Waste)	Sludge
Materials Containing Arsenic, Cyanide or Sulphide	Toxic Soluble Salt
Radioactive Wastes	

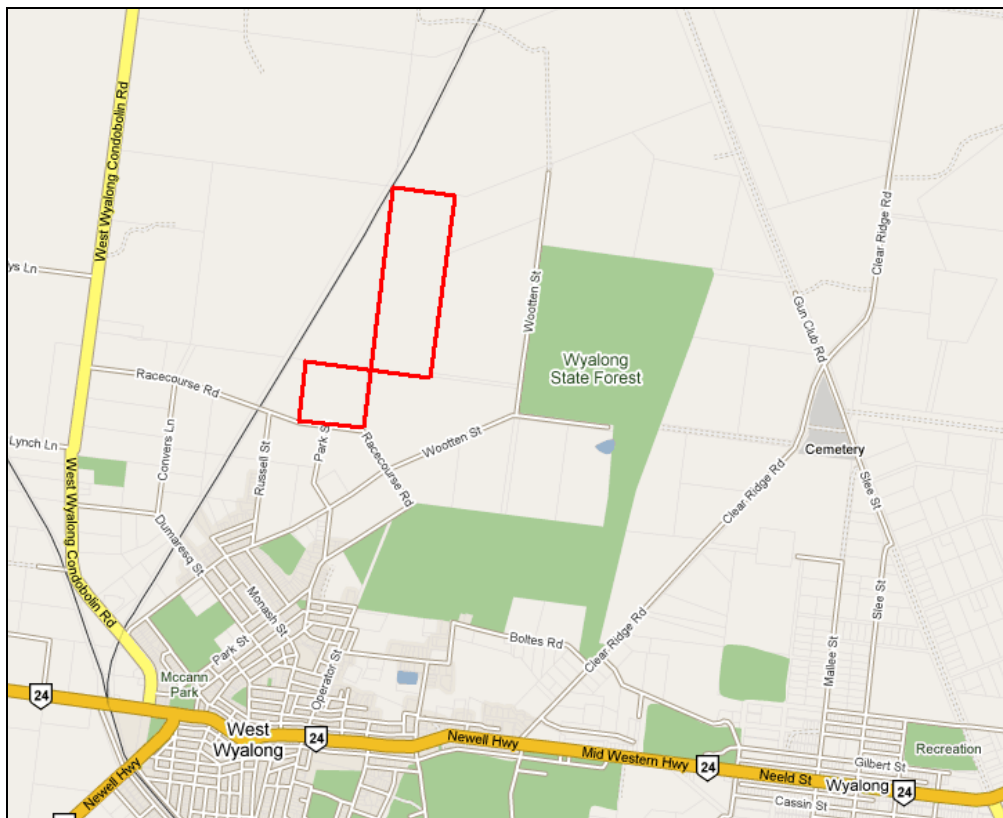
Due to landfills being unregulated, extra unbudgeted costs associated with regular clean ups have occurred.

With eight (8) existing landfills in operation throughout the LGA, waste disposal is a significant issue. Following is a review of each individual landfill.

West Wyalong

The West Wyalong Landfill is located on Racecourse Road, approximately 3 km north of the West Wyalong CBD. The land title description of the site is Lot 2 Deposited Plan 730909 & Lot 581 Deposited Plan 753135. The following maps depict the site within the locality.

Map 2: West Wyalong Landfill Locality Map



Map 3: Aerial view of West Wyalong Landfill



The facility has the following operating hours:

- Monday to Friday (8am to 5pm)
- Saturday to Sunday (11am to 4pm)

This facility is open to the public for a total of **55** hours per week.

The Landfill is the only EPA licensed landfill in the Bland LGA and is managed by the Council. Only residents/businesses of Bland Shire are able to deliver wastes to the Landfill.

It is estimated that the landfill component of the site has a life of approximately fifty (50) years (following the undertaking of a survey).

Currently, general solid wastes are normally disposed of at the face of the active landfill though a separate disposal area is provided for bulky general solid waste. Tyres are stockpiled separately. Areas are also set aside for greenwaste and scrap metal. Every 3 days, a thin layer of cover material is spread across the surface of the waste and compacted using a traxcavator. Landfilling is currently occurring on the southern boundary of the site and is progressing to the north. The finalised area of the landfill is planned to be covered with a minimum of 1.4m of capping material and soil.

Council currently spends approximately **\$363,060** per annum (as per 2008/09 budget) to operate the landfill.

The Tip Maintenance Contract for the West Wyalong Landfill is carried out by private contractor BJ & VM Keys Earthworks (all machinery and equipment is owned and operated by the contractor) at a rate of **\$6,435.00 per month**. Any additional earthworks (including the digging of trenches are undertaken at an additional cost). The current contract (3 year term) expires at the end of June 2009.

Residents of Bland Shire are able to drop off general solid waste at the West Wyalong Landfill Waste Depot at a cost. The following is the Schedule of Fees as per the 2008/2009 Management Plan:

Table 7: Fees and Charges (2008-2009) - West Wyalong Landfill

Activity	Fee/Charge
Sorted car boot or wagon	\$4.40
Mixed waste car boot/station wagon	\$6.60
Sorted utility/small trailer (up to 1.8m x 1.2m)	\$7.70
Mixed waste utility/small trailer (up to 1.8m x 1.2m)	\$9.90
Sorted large trailer/1 tonne truck	\$11.00
Mixed waste large trailer/1 tonne truck	\$13.00
Sorted large vehicles (per cubic metre)	\$25.00
Mixed waste large vehicles (per cubic metre)	\$40.00
Car bodies	Free
Metal waste	Free
White goods (de-gassed)	\$10.00
Green waste (sorted and cleaned)	\$4.40
Paper and cardboard	As per the above scale
Glass (colour sorted)	As per the above scale
Cans (steel and aluminium)	As per the above scale
Clean fill	As per the above scale
DrumMuster containers	Free
Asbestos	\$150 per m ³ + burial fee
Asbestos burial fee	\$120
Polystyrene & other lightweight material (per m ³)	\$100
Small (dog/cat)	\$10.00
Medium (sheep, goats)	\$30.00
Large (cattle, horses)	\$50.00
Tyres (each)	\$20.00
Plastic sheeting/tarpauline/bale covers (per m ³)	\$80.00 (minimum fee \$50.00)
Non-approved chemical drums/containers	\$1.65

The following figures are taken from the Yearly Local Government Waste and Resource Recovery Data Return (year ending 30 June 2008).

Table 8: Material Generation – West Wyalong Landfill

Item	Tonnes
Domestic kerbside collection	2,991.2
Self haul and other residential and community waste dropped off for disposal to landfill	1,847.52
Commercial kerbside collection	2,147.4
Other Council waste	3,610
TOTAL	10,592.12

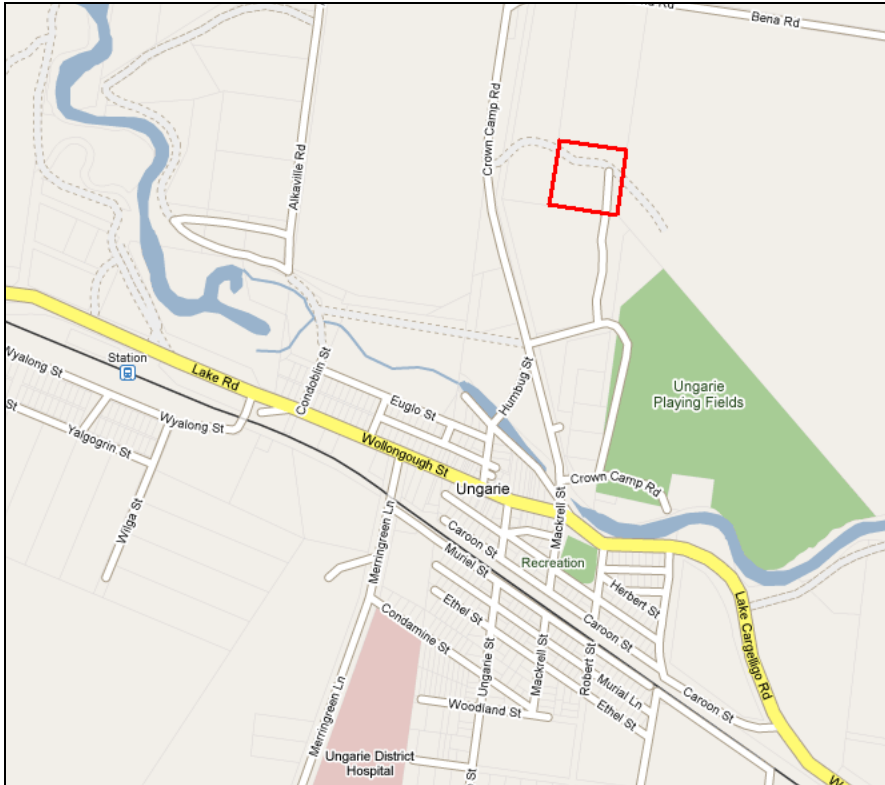
Photo 2: West Wyalong Landfill



Ungarie

The Ungarie Landfill is located on Crown Camp Road on the northern boundary of the village adjacent to the Recreation Ground and Showground. The land title description is Lot 59 in Deposited Plan 753122. The following maps depict the site within the locality.

Map 4: Ungarie Landfill Locality Plan



Map 5: Aerial view of Ungarie Landfill



The site is currently unrestricted and accordingly does not have any defined opening hours. The landfill is not EPA licensed due to the volume of material being less than the legislated threshold. The life of the landfill is currently unknown (recently the contractor uncovered existing unknown trenches).

It is noted that there has been large deposits of waste generated from outside of the LGA (including government departments and businesses) that have been dumped at this landfill. It is widely known that this landfill (and others in the LGA) are unrestricted and are ultimately seen as a target for this type of disposal.

Customers using the facility are directed by signage to the open trench facility for disposal of their waste. Scrap metal, greenwaste and dead animal areas are also sign posted.

As per the 2008/09 budget, \$15,000 has been allocated to operate this landfill. However, due to a number of unscheduled cleanups as a result of the unrestricted nature of the facility, additional funds (estimate of \$20,000) outside of this budgeted figure will be required to make up the shortfall.

BJ & VM Keys Earthworks undertakes earthmoving services at the landfill on an adhoc basis, based on necessity. The current contract (3 year term) expires at the end of June 2009.

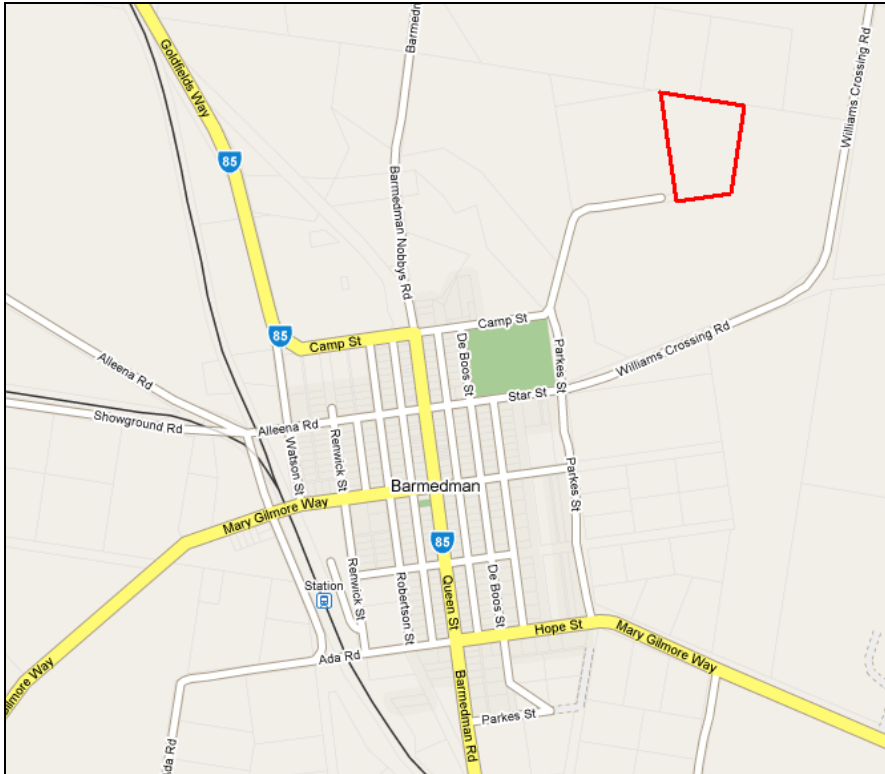
Photo 3: Ungarie Landfill



Barmedman

The Barmedman Landfill is located at the end of Camp Street, approximately 2km from the centre of the village. The land title description is Lot 228 in Deposited Plan 750607. The following maps depict the site within the locality.

Map 6: Barmedman Landfill Locality Map



Map 7: Aerial view of Barmedman Landfill



The site is currently unrestricted and accordingly does not have any defined opening hours. The landfill is not EPA licensed due to the volume of material being less than the legislated threshold. The life of the landfill is currently unknown.

It is noted that there has been large deposits of waste generated from outside of the LGA (including government departments and businesses) that have been dumped at this

landfill. It is widely known that this landfill (and others in the LGA) are unrestricted and are ultimately seen as a target for this type of disposal.

Customers using the facility are directed by signage to the open trench facility for disposal of their waste. Areas for scrap metal, greenwaste and dead animals are also allocated.

As per the 2008/09 budget, \$15,000 has been allocated to operate the landfill. However, due to a number of unscheduled cleanups as a result of the unrestricted nature of the facility, additional funds (estimate of \$25,000) outside of this budgeted figure will be required.

BJ & VM Keys Earthworks undertakes earthmoving services at the landfill on an adhoc basis, based on necessity. The current contract (3 year term) expires at the end of June 2009.

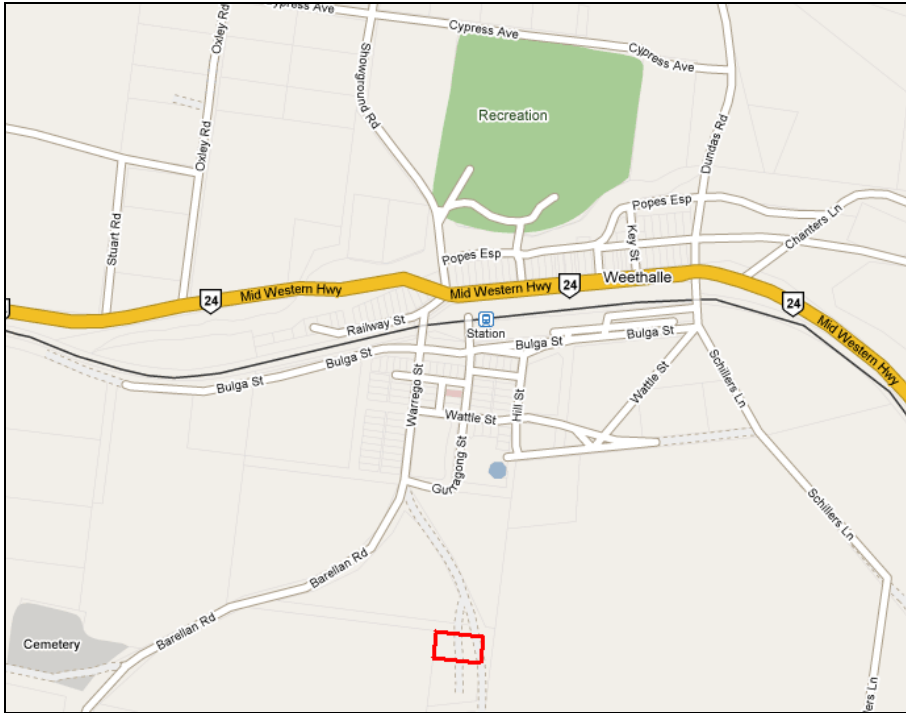
Photo 4: Barmedman Landfill



Weethalle

The Weethalle Landfill is located approximately 2.5km south of the Weethalle CBD. The land title description is Lot 91 in Deposited Plan 859198. The following maps depict the site within the locality.

Map 8: Weethalle Landfill Location Map



Map 9: Aerial view of Weethalle Landfill



The site is currently unrestricted and accordingly does not have any defined opening hours. The landfill is not EPA licensed due to the volume of material being less than the legislated threshold. The landfill area has reached its capacity and waste is currently being transferred to the Kikoira Landfill for disposal.

As per the 2008/09 budget, \$15,000 has been allocated to operate the landfill. However, due to a number of unscheduled cleanups as a result of the unrestricted nature of the facility and the current transfer of waste to the Kikoira landfill, additional funds (estimate of \$15,000) outside of this budgeted figure will be required.

BJ & VM Keys Earthworks undertakes earthmoving services at the landfill on an adhoc basis, based on necessity. The current contract (3 year term) expires at the end of June 2009.

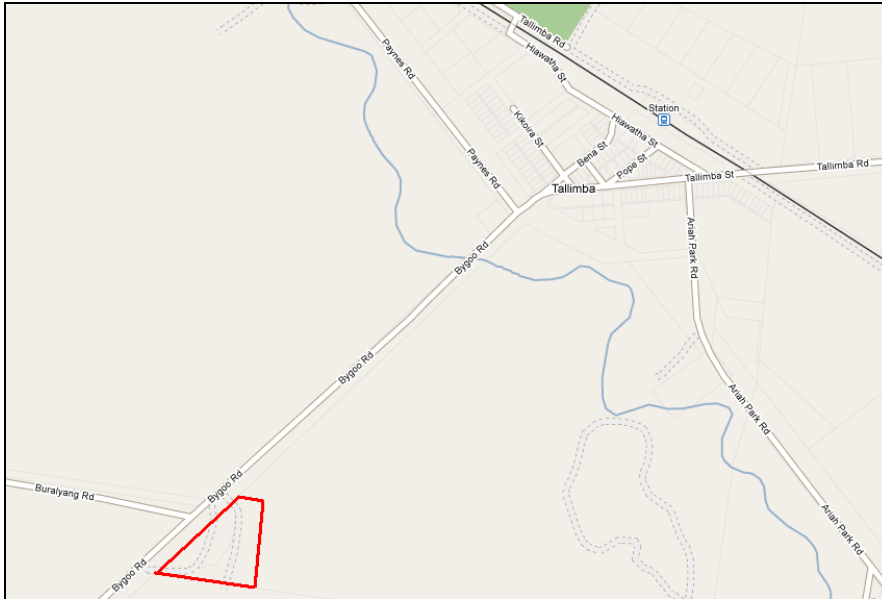
Photo 5: Weethalle Landfill



Tallimba

The Tallimba Landfill is located on the Bygoo Road, approximately 3km from the centre of the village. The land title description is Lot 7004 in Deposited Plan 1020986. The following maps depict the site within the locality.

Map 10: Tallimba Landfill Location Map



Map 11: Aerial view of Tallimba Landfill



The site is currently unrestricted and accordingly does not have any defined opening hours. The landfill is not EPA licensed due to the volume of material being less than the legislated threshold. The life of the landfill is currently unknown.

Customers using the facility are directed by signage to the open trench facility for disposal of their waste. Scrap metal, greenwaste and dead animal areas are also sign posted.

As per the 2008/09 budget, \$15,000 has been allocated to operate the landfill. However, due to a number of unscheduled cleanups as a result of the unrestricted nature of the facility, additional funds (estimate of \$18,000) outside of this budgeted figure will be required.

BJ & VM Keys Earthworks undertakes earthmoving services at the landfill on an adhoc basis, based on necessity. The current contract (3 year term) expires at the end of June 2009.

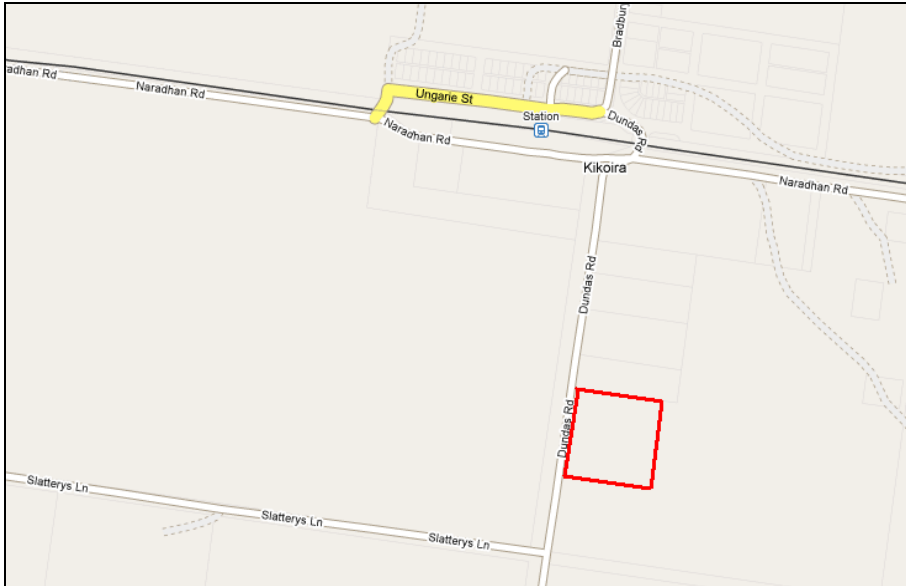
Photo 6: Tallimba Landfill



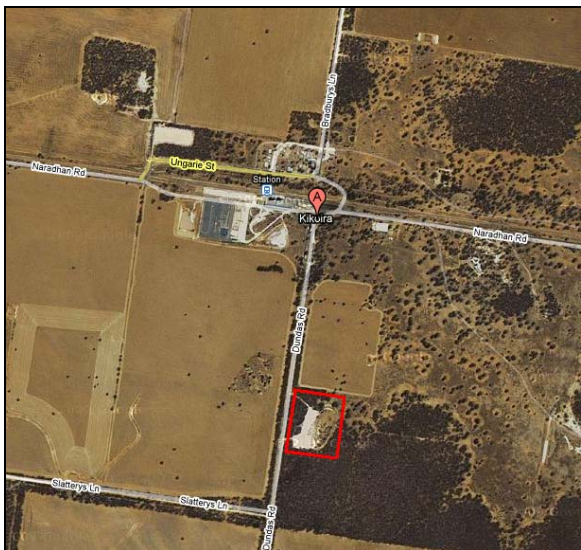
Kikoira

The Kikoira Landfill is located on the Dundas Road, approximately 1.5km from the centre of the village. The land title description is Lot 18 in Deposited Plan 752331. The following maps depict the site within the locality.

Map 12: Kikoira Landfill Location Map



Map 13: Aerial view of Kikoira Landfill



The site is currently unrestricted and accordingly does not have any defined opening hours. The landfill is not EPA licensed due to the volume of material being less than the legislated threshold. The life of the landfill is currently unknown.

Customers using the facility are directed by signage to the open trench facility for disposal of their waste. Scrap metal, greenwaste and dead animal areas are also sign posted.

As per the 2008/09 budget, \$15,000 has been allocated to operate the landfill. However, due to a number of unscheduled cleanups as a result of the unrestricted nature of the facility, additional funds (estimate of \$18,000) outside of this budgeted figure will be required.

BJ & VM Keys Earthworks undertakes earthmoving services at the landfill on an adhoc basis, based on necessity. The current contract (3 year term) expires at the end of June 2009.

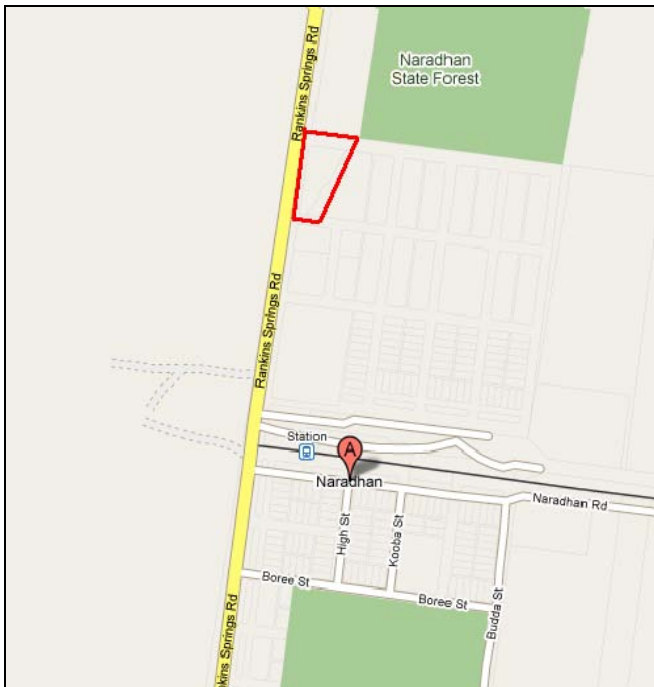
Photo 7: Kikiora Landfill



Naradhan

The Naradhan Landfill is located on the Rankin Springs Road approximately 1km from the centre of the village. The land title description is Lot 48 in Deposited Plan 752319. The following maps depict the site within the locality.

Map 14: Naradhan Landfill Location Map



Map 15: Aerial view of Naradhan Landfill



The site is currently unrestricted and accordingly does not have any defined opening hours. The landfill is not EPA licensed due to the volume of material being less than the legislated threshold. The life of the landfill is currently unknown.

Customers using the facility are directed by signage to the open trench facility for disposal of their waste. Scrap metal, greenwaste and dead animal areas are also sign posted.

As per the 2008/09 budget, \$15,000 has been allocated to operate the landfill. However, due to a number of unscheduled cleanups as a result of the unrestricted nature of the facility, additional funds (estimate of \$10,000) outside of this budgeted figure will be required.

BJ & VM Keys Earthworks undertakes earthmoving services at the landfill on an adhoc basis, based on necessity. The current contract (3 year term) expires at the end of June 2009.

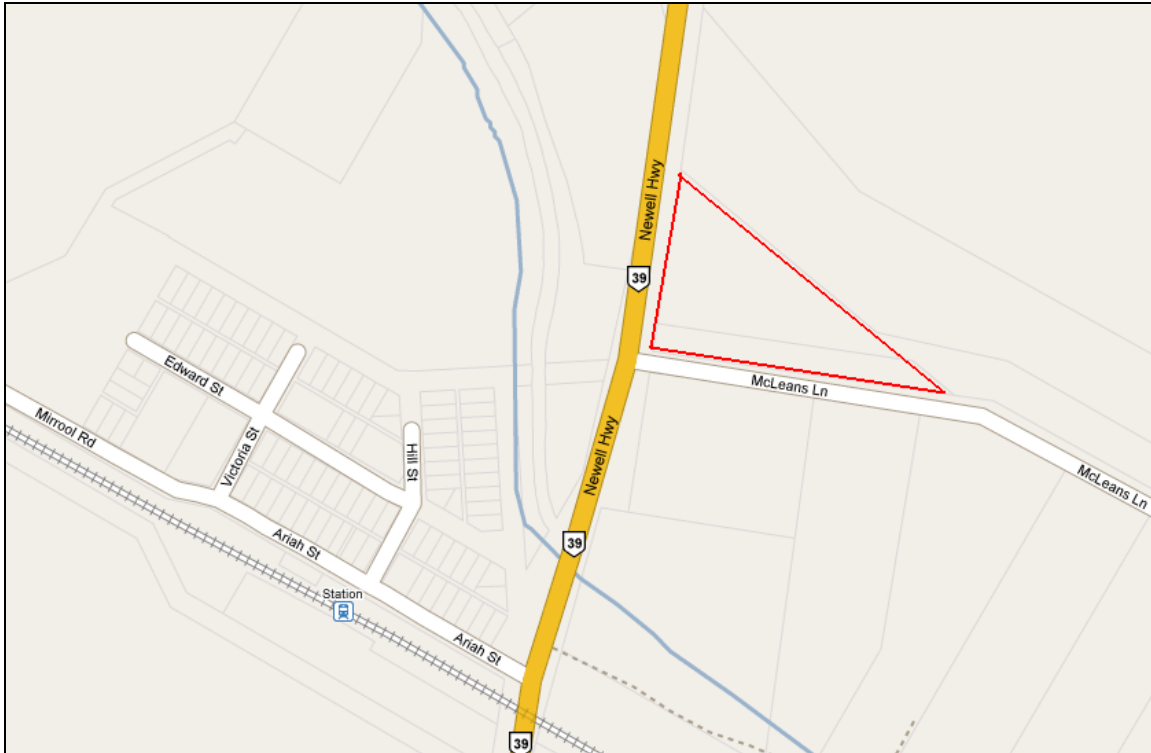
Photo 8: Naradhan Landfill



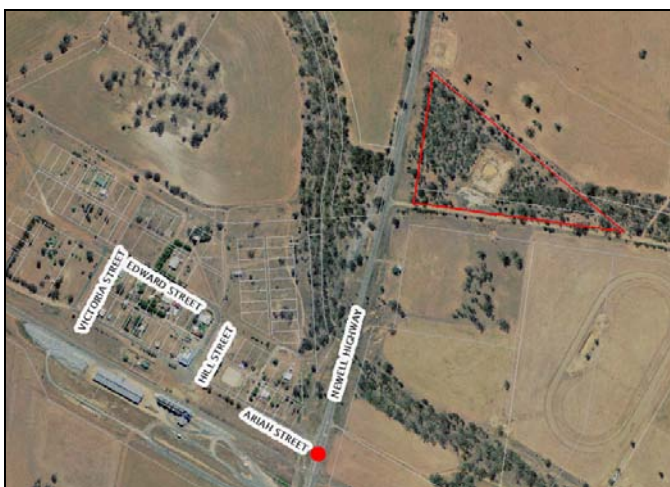
Mirrool

The Mirrool Landfill is located on the McLeans Lane approximately 1km from the centre of the village. The land title description is Lot 7008 in Deposited Plan 94469. The following maps depict the site within the locality.

Map 16: Mirrool Landfill Location Map



Map 17: Aerial view of Mirrool Landfill



The site is currently unrestricted and accordingly does not have any defined opening hours. The landfill is not EPA licensed due to the volume of material being less than the legislated threshold. The life of the landfill is currently unknown.

Customers using the facility are directed by signage to the open trench facility for disposal of their waste. Scrap metal, greenwaste and dead animal areas are also sign posted.

As per the 2008/09 budget, \$15,000 has been allocated to operate the landfill. However, due to a number of unscheduled cleanups as a result of the unrestricted nature of the facility, additional funds (estimate of \$22,000) outside of this budgeted figure will be required.

BJ & VM Keys Earthworks undertakes earthmoving services at the landfill on an adhoc basis, based on necessity. The current contract (3 year term) expires at the end of June 2009.

Photo 9: Mirrool Landfill



2.4 RESOURCE RECOVERY

Whilst Council does not provide a kerbside recycling collection service, it still provides recycling opportunities at its landfill facilities. These are summarised below:

Scrap Metal

At each landfill, a designated scrap metal area is provided. The scrap metal is currently collected by a Victorian company – Metals Trading for recycling off site. Metals Trading conduct all scrap metal recycling for each of the REROC Councils. The current contract finishes at the end of February 2009. Council have indicated to REROC that it will consider its future options in relation to scrap metal.

It is noted that scrap aluminium and copper are separated and sold.

DrumMuster

There is a permanent facility at the West Wyalong Landfill for the receipt of chemical drums throughout the year. Chemical drums can also be received at the village landfills by appointment or at designated times throughout the year.

Oil

Netwaste have provided a receptacle at the West Wyalong Landfill for the receipt of oil.

Batteries

Used batteries are collected at each facility for reuse.

Greenwaste

Minimal mulching undertaken due to contamination in the product.

2.5 ASSOCIATED SERVICE COSTS

Each year, Council spends in the order of **\$970,000** (based on actual figures during the 2008/2009 financial year to date and forward estimates) on waste-related services, including collection and disposal activities. A breakdown of service costs is given in **Table 9**.

Table 9: Bland Annual Waste Management Costs

Service Description	Annual Service Cost
Collection	\$420,000
Treatment & Disposal	\$550,000
TOTAL	\$970,000

As per Councils 2008/2009 budget, the Street Cleaning Service costs Council **\$142,000** each year. It is noted that the 2007/08 budget was for **\$250,000**.

2.6 ASSOCIATED SERVICE REVENUE

Each year, Council receives in the order of **\$698,100** on waste-related services. A breakdown of revenue is given in **Table 10**.

Table 10: Bland Annual Waste Management Revenue

Service Description	Annual Service Cost
Income from rates expected	\$547,960
Investment Interest	\$7,500
Sundry Income	\$500.00
Waste Fees and Charges	\$111,240
Recycling and Second hand shop	\$30,900
TOTAL	\$698,100

3. REVIEW OF EXISTING SERVICES AND FUTURE MANAGEMENT OPTIONS

3.1 INTRODUCTION

The following section provides an analysis of the existing waste management services throughout the Bland LGA and outlines options for improvement and potential constraints.

The following waste management options are presented for Council's consideration. While Council will have the ability to readily implement a number of these options, other options will require careful consideration and planning on the part of Council, particularly in terms of availability of staff and resources.

Many of the options outlined in this strategy will be influenced by the decision whether to retain the services of the existing contractor following the expiry of existing contracts at the end of June 2009. Or alternatively, whether a contractor is used for various components of the collection and management across the Shire.

Council will need to prioritise its actions according to its resource constraints and existing commitments/contracts whilst considering Council's medium to long term plans. Notwithstanding this, suggestions are presented regarding the potential timing of waste/resource management options.

It is important to note that the suggested options have been predicated on management of wastes within the Shire rather than the transportation and disposal/treatment of wastes externally (other than recyclables).

3.2 COLLECTION SERVICES

Domestic Collection

- Collection Service to be provided by Council

The main identified opportunity for improvement is that following completion of the current contract with JR Richards and Sons at the end of June 2009, is for the service to be provided by Council itself. There would be significant cost savings to Council over time as well as greater flexibility in the delivery of the service. This would also involve either the purchasing of existing bins off the current contractor (including replacement of existing bins) or the purchase of new bins.

Table 11 below provides financial information regarding the operation of the service (including trade waste and park street collection) by Council:

Table 11: Operating Costs for the Waste Collection service to be provided by Council

Description	Projections	Projections	Projections	Projections	Projections	Projections	Projections
	2009-10	2010..11	2011..12	2012..13	2013..14	2014..15	2015..16
GARBAGE TRUCK							
Maintenance Costs - Compactor							
<i>Paddle assembly</i>				4,500.00			
Wages on Paddle Assembly				1,206.00			
<i>Grab Kits</i>			1,500.00			1,500.00	
Wages on Grab Kit			122.00			133.00	
<i>Lift Overhaul Kit</i>					6,000.00		
Wages on Lift Overhaul Kit					621.00		
Hopper Repair Kit			2,000.00				
Wages on Hopper Repair Kit			586.00				
Slide Overhaul Kit					2,500.00		
Wages on Slide Overhaul Kit					621.00		
General Maintenance costs	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
TOTAL COSTS	1,500.00	1,500.00	5,708.00	7,206.00	11,242.00	3,133.00	1,500.00
Operating Cost of Truck							
Depreciation @ 10%	26,000.00	26,000.00	26,000.00	26,000.00	26,000.00	26,000.00	26,000.00
Fuel	20,000.00	20,600.00	21,218.00	21,854.54	22,510.18	23,185.48	23,881.05
Tyres	1,500.00	1,545.00	1,591.35	1,639.09	1,688.26	1,738.91	1,791.08
Maintenance Insurance & Registration	10,000.00	10,300.00	10,609.00	10,927.27	11,255.09	11,592.74	11,940.52
	4,500.00	4,635.00	4,774.05	4,917.27	5,064.79	5,216.73	5,373.24
	62,000.00	63,080.00	64,192.40	65,338.17	66,518.32	67,733.87	68,985.88
Operator Costs							
Grade 7 Step 3	29,228.00	30,250.00	31,309.00	32,405.00	33,539.00	34,713.00	35,928.00
Total Cost Per annum	92,728.00	94,830.00	101,209.40	104,949.17	111,299.32	105,579.87	106,413.88

Should Council choose to undertake this service, a suitable collection vehicle (in the order of \$260,000) would need to be ordered at the earliest convenience. There may be the possibility of leasing a vehicle in the interim if required.

As can be seen from **Table 11**, it is projected that Council can operate the collection service at a cost of **\$92,728.00** per annum in the first year. Currently Council pays the contractor in the order of **\$420,000** per annum to provide the same service. This would represent the saving of **\$327,272** per annum.

As JR Richards currently owns all of the garbage bins, Council would need to either:

- Purchase new bins; or
- Negotiate to purchase the existing bins.

Table 12 indicates the likely costs for the purchase of new bins:

Table 12: Costs for the purchase of new bins

Type	No. of Bins	Cost/bin	Total (ex. GST)
240L	1700	\$43.14	\$73,338
120L	200	\$35.69	\$7,138
TOTAL			\$80,476

It is recommended that Council negotiate with JR Richards to purchase the existing bins prior to considering the purchase of new bins.

- Transition to Smaller Bins

Council may wish to transition to smaller bins (ie. 120L bins) or a combination of large and small bins (depending on household size and disposal requirements). Such a scheme has already been implemented within other Council areas, where residents opting for a smaller bin are charged a reduced annual waste service fee. Such a scheme could also be considered by Bland Shire Council as part of a gradual transition to smaller bins and modified recycling services.

This option would be particularly attractive to small family units and pensioners.

The garbage truck to be purchased will need to have the ability to lift both the 240L and 120L MGBs.

The current residential waste charge is **\$230** per annum per service. It is recommended that the waste charge be reduced to **\$180** per annum per service for the 120 litre bin.

- Review of collection days and routes taken

Another initiative would be to review the collection days and routes taken to improve efficiency of the service. This would be particularly relevant should Council decide to undertake the service itself. There may be operational benefits to Council with intergration of various staff and work areas to cover this service. This review would need to be undertaken in conjunction with the feasibility for the garbage collection service.

There are considerably service efficiencies by the reduction of collections days from the current five (5) back to the proposed three (3) days. There is also the potential for outsourcing of equipment to other Shires and the like during the two (2) remaining days.

Table 13: Recommendations – Domestic Collection Services

No.	Description	Timeframe
1	That Council terminate the existing waste collection contract with JR Richards and immediately implement actions in order for Council itself to conduct the kerbside collection service	Now
2	That Council negotiate with JR Richards to purchase of existing MGB or alternatively purchase new MGBs.	Now
3	That Council make an initial purchase of a number of 120 litre MGB (initial purchase of 200 bins and undertake further purchases based on demand) to facilitate the transition to smaller bins.	Now
4	That Council reduce the annual waste charge per annum to \$180 for those services that have a 120 litre MGB.	Now
5	That Council staff prepare a plan for the collection of waste that includes the proposed routes and days of collection.	Now

Trade Waste Collection

Should any of the initiatives identified for the domestic collection be implemented by Council, these would filter through to the commercial collection service (ie. Inhouse collection service, review of collection times and transition to smaller bins).

There may be options to expand the commercial collection service to include the servicing of existing businesses within the LGA as well as those outside of the LGA (including potential contracts with other Councils). This option would only be considered following the successful commencement of collection services by Council itself and any potential contract would need to be fully investigated to ensure that existing service levels are not compromised.

Council may wish to consider skip bin services in the future, however, this would need to be thoroughly investigated especially considering there are a number of existing local contractors providing this service.

Table 14: Recommendations – Trade Waste Collection Services

No.	Description	Timeframe
6	That Council conduct investigations into the expansion of commercial collection services both within and outside of the LGA.	0-2 years
7	That Council review the annual trade waste collection charge during budget deliberations	Now

Parks/Street Collection

Should Council decide to provide waste collection services itself, this would extend to include the parks/street collection service currently being provided by the contractor.

- Audit of bins

It is recommended that an audit of the existing 221 bins be undertaken to determine their condition which may necessitate the replacement or repair of these items.

- Visual survey of problem place areas

A review of the current positioning and quantity of bins would be considered beneficial to inform Council of any problem areas that require attention. Parks and Gardens staff would be involved in such a review.

Table 15: Recommendations – Park/Street (Collection Services)

No.	Description	Timeframe
8	That Council staff conduct an audit of the condition of existing bins to determine requirements as to repair or replacement.	Now
9	That Council staff conduct a review to determine requirements as to the positioning and quantity of bins throughout the parks and streets.	Now

Special Events

There is an opportunity for Council to consider supplying bins for these events at an appropriate rate.

Table 16: Recommendations – Special Events (Collection Services)

No.	Description	Timeframe
10	That Council have a reasonable amount of MGB's available to service special events in the LGA	Now

Street Cleaning

The following options are available for Councils consideration in relation to street cleaning:

- Review of Service Levels

It is considered that a rationalisation of the amount of street cleaning currently conducted is required. Currently, the street sweeper operates 42 hours per week. The current machine is nearing the end of its working life and is due for replacement in the 2009/10 financial year.

Following a review of other Council's regimes it was revealed that there are vast differences in the level of service provision. Some Councils only cleaned on an adhoc basis (ie. when required), whilst others may only clean streets once or twice per year. None of the Councils contacted indicated that they cleaned anywhere near the frequency currently provided by Bland Shire Council.

The following regime is proposed:

Table 17: Proposed Street Cleaning Regime

Location	Frequency	Hours (per year)
Main Street (West Wyalong)	3 times a week	312
Ungarie	4 times a year	24
Barmedman	4 times a year	24
Weethalle	4 times a year	24
West Wyalong Streets	4 times a year	128
Wyalong Streets	4 times a year	32
	TOTAL	544

There a couple of options available to Council to provide this proposed service. These options are summarised as follows:

1. That Council purchase a suitably sized machine (approximate purchase price of \$180,000) to undertake all street cleaning operations as outlined in **Table 17**.
2. That Council purchase a smaller machine (approximate purchase price of \$80,000) to undertake the main street cleaning only and contract out the remaining cleaning.
3. That Council seeks the services of a private contractor to undertake all of the street cleaning for the LGA.

The recommended option would be to seek the services of a private contractor to undertake all of the street cleaning. The reasons for this option are as follows:

- No requirement to purchase a new machine (which has now become necessary).
- No staffing requirement.
- No maintenance and associated running costs.

Table 18: Projections for Contracting the Street Sweeping Service

	Projections	Projections	Projections	Projections	Projections	Projections	Projections
Description	2009-10	2010..11	2011..12	2012..13	2013..14	2014..15	2015..16
STREET SWEEPER							
Contractor	51,680.00	53,230.40	54,827.31	56,472.13	58,166.30	59,911.28	61,708.62
Overseer	2,226.00	2,292.78	2,361.56	2,432.41	2,505.38	2,580.54	2,657.96
TOTAL COSTS	53,906.00	55,523.18	57,188.88	58,904.54	60,671.68	62,491.83	64,366.58

As can be seen from **Table 18**, it is projected that if Option 3 above would cost Council in the order of **\$53,906** per annum in the first year. Based on the current allocation of **\$142,000** in the 2008/09 budget, this would represent a saving of **\$88,094** per annum.

Table 19: Recommendations – Street Cleaning

No.	Description	Timeframe
11	That Council seek the services of a private contractor to undertake all of the street cleaning within the LGA for a minimum of 544 hours per annum as per Table 17. It is recommended that the contract be for a total of 3 years.	Now

3.3 WASTE DISPOSAL

3.3.1 *Generally*

When Council intends to implement new service options or introduce significant changes, it will be necessary to develop a greater understanding of the both the quantity and types of waste materials being generated. As such, Council is likely to require one or more waste audits of the household and commercial & industrial waste streams.

Such an exercise will enable Council to gauge the likely success of the intended service change by providing updated information on generation profiles and likely capture rates.

Conversion of landfills to transfer stations

Due to environmental, financial and resource factors it is recommended that Council work towards the conversion of each of their current landfills (with the exception of West Wyalong) to transfer stations. Some sites should be converted at the earliest opportunity whilst others will require additional time to implement this change.

Restriction of access and operating hours of each site

As stated previously with the exception of the West Wyalong Landfill, each landfill is unrestricted which has lead to a number of problems. The implementation of restricted access and opening hours will ensure that control of each site remains with Council and will lead to the alleviation of some of these problems.

To facilitate these proposed control changes it is recommended that each site be supervised and that patrons be charged as per the current fees and charges of the West Wyalong Landfill.

Introduction of a Non-Serviced Area access charge

It is recommended that Council investigate the introduction of a Non-Serviced Area access charge as rural rate payers also patronise Councils Landfill facilities. This would be in line with most rural councils. It is recommended that the reate be **\$50** per annum in the first year.

Preparation of Landfill Environmental Management Plans

Such plans will help to formalise landfill operational systems with a view to:

- ensuring that management systems and service standards are documented and maintained;
- documented operational systems are in place for the recovery of resources and disposal of waste;
- ensuring that planning for the life of the landfill and final rehabilitation has been adequately undertaken and documented (including availability of cover, final landform and drainage etc);
- identifying areas of potential service and operational improvement;
- identifying the level of impact from the operation upon the surrounding environment (including surface and groundwater, air, noise, ecology and soils) and that the facilities satisfy the benchmark techniques nominated by the Department of Environment and Climate Change;
- minimising Council's exposure to environmental risk by establishing the necessary monitoring systems, particularly in the case where environmentally sensitivities are identified. This will include such issues as ensuring adequate site drainage, particularly at Council's landfill sites;
- minimising Council's exposure to public liability by establishing adequate security and safety plans; and
- establishing a basis for training of landfill staff.

Where the preparation of the Landfill Environmental Management Plans identify deficiencies, further studies and or design/planning should be undertaken to ensure that the ongoing operations do not cause further environmental impacts and liability beyond acceptable levels and criteria. In the event that the landfill operations cannot be operated economically without causing unacceptable impacts, consideration would need to be given to the disposal of waste at a new site within the Shire or at a site external to the Shire.

Minimising the amount of material that is landfilled

There are two main options available to Council to reduce the amount of material that is landfilled:

- Compact waste prior to landfill
- Direct more material to resource recovery

The use of a dedicated compactor would prove more efficient at compacting waste and hence increase the lifespan of the landfill. However, it is recognised that this would result in additional cost imposts and additional investigations would be required.

The conversion of village landfills to transfer stations would also assist this cause by directing waste to appropriate transfers containers prior to transfer back to West Wyalong.

Standardised Signage

Clear, consistent and easily interpreted signage is essential to maintaining operational systems, promoting customer safety, providing clear direction and generally promoting the effective functioning of waste facilities.

It is recommended that a standardised signage regime be implemented across each site, both at the entrance and within the site itself. The signage should identify revised opening hours, waste accepted and provide clear direction to patrons once within the facility.

Review of Equipment Requirements

As part of ongoing landfill operations, the selection of appropriate landfill equipment is important for maximising landfill void space. In addition, the adequate compaction and covering of waste will serve to minimise rainfall infiltration, deter vermin, promote user safety and maintain site amenity. Notwithstanding this, it is recognised that the selection of appropriate equipment is likely to require a long term timeframe due to a number of service planning and financial constraints.

Waste Generation

To enable Council to plan for future waste management arrangements, improved details of the type and volumes of waste generated in the LGA is required. This will be assisted by the regulation of each of the landfills (and future transfer stations). Such details will assist in completing returns to the Department of Environment and Climate Change as well as determine opportunities for resource recovery.

Bulk disposal by residents

It is recommended that ratepayers be issued tickets per year to allow them to dispose of their bulky goods for no cost twice a year. This type of service is preferred to the bulk collection service that was offered by Council previously. Tickets or the like could be provided with the rates notice and would allow residents throughout the year to dispose of their bulky items at their leisure.

Table 20: Recommendations- Waste Disposal (Generally)

No.	Description	Timeframe
12	That Council commence the progressive conversion of existing landfill sites to transfer stations with the exception of the West Wyalong Landfill	0-2 years
13	That Council prepare a Landfill Environmental Management Plans for each landfill	1 year

14	That Council staff develop and implement standardised signage for all waste management facilities	1 year
15	That Council reduce the opening hours of each of the landfills	Now
16	That Council provide staff supervision and recommence charging of fees at each landfill site	0-1 year
17	That Council conduct regular inspections of each site to ensure that the measures recommended in the Landfill Environmental Management Plans are being implemented.	Ongoing
18	That Council undertake an audit of major waste streams to assist Council with future waste management decisions	1-2 years
19	That Council investigate the introduction of a Non-Serviced Area access charge	1 year
20	That Council initiate a ticket system that is issued with the annual rates notice to enable ratepayers to dispose of waste up to twice a year without charge	1 year

3.3.2 West Wyalong Landfill

In addition to the points made generally across the LGA, the following specific options are identified for the West Wyalong Landfill facility:

Investigate the installation of a waste compactor

Several Councils have installed a waste compactor as part of their landfill operations. The main benefits of such an installation would include the increase lifespan of the landfill and the decrease in costs of earthmoving contractors. Such a compactor would be installed within a shed and would have certain cost implications.

It is recommended that Council consult with other Councils that have installed a waste compactor and prepare a full feasibility to enable an informed decision to be made.

Following is a series of photos of the Cootamundra facility.

Photo 10: Cootamundra Waste Compactor



Reviewing opening hours

The recommended opening hours are as follows (this equates to a reduction from 55 hours to 27 hours):

Table 21: Recommended Opening Hours (West Wyalong Landfill)

Day	Hours
Monday	Closed
Tuesday	12:00 pm to 5:00 pm
Wednesday	12:00 pm to 5:00 pm
Thursday	Closed
Friday	8:00 am to 5:00 pm
Saturday	8:00 am to 12:00 pm
Sunday	12:00 pm to 4:00 pm

However in changing facility opening hours, consideration of the impact upon site security and unauthorised access, particularly at landfills, will be required.

Table 22: Recommendations - Waste Disposal (West Wyalong Landfill)

No.	Description	Timeframe
21	That Council investigate the feasibility for the installation of a waste compactor at the West Wyalong Landfill	1 year
22	That Council change the opening hours of the Landfill as proposed in Table 21	Now

3.3.3 Ungarie Landfill

In addition to the points made generally across the LGA, the following specific options are identified for the Ungarie Landfill facility:

Conversion from Landfill to Transfer Station

It is recommended that the Ungarie Landfill be converted to a Transfer Station within 12 months. During this time an appropriate facility can be designed to be user friendly and for the practical collection of the bins for transfer to the West Wyalong Landfill.

A full feasibility would need to be undertaken to gain an understanding of cost implications. The services of a private contractor would be required for the development of the transfer station along with the transfer of the waste back to West Wyalong (Council does not currently have the ability to undertake this transfer).

Operating Hours

The implementation of restricted access and opening hours will ensure that control of the landfill remains with Council and will lead to the alleviation of some of the problems that have been highlighted in this Strategy.

To facilitate these proposed control changes it is recommended that site be supervised and that users be charged as per the current fees and charges of the West Wyalong Landfill.

Table 23: Recommended Opening Hours (Ungarie Landfill)

Day	Hours
Monday	Closed
Tuesday	1:00 pm to 4:00 pm
Wednesday	Closed
Thursday	Closed
Friday	Closed
Saturday	1:00 pm to 4:00 pm
Sunday	Closed

Table 24: Recommendations - Waste Disposal (Ungarie Landfill)

No.	Description	Timeframe
23	That Council convert the Ungarie Landfill to a transfer station.	1 year
24	That Council change the opening hours of the Landfill as proposed in Table 23, provide supervision and that users be charged as per the current fees and charges of the West Wyalong Landfill	Now

3.3.4 Barmedman Landfill

In addition to the points made generally across the LGA, the following specific options are identified for the Barmedman Landfill facility:

Conversion from Landfill to Transfer Station

It is recommended that the Barmedman Landfill be converted to a Transfer Station within 12 months. During this time an appropriate facility can be designed to be user friendly and for the practical collection of the bins for transfer to the West Wyalong Landfill.

A full feasibility would need to be undertaken to gain an understanding of cost implications. The services of a private contractor would be required for the development of the transfer station along with the transfer of the waste back to West Wyalong (Council does not currently have the ability to undertake this transfer).

Operating Hours

The implementation of restricted access and opening hours will ensure that control of the landfill remains with Council and will lead to the alleviation of some of the problems that have been highlighted in this Strategy.

To facilitate these proposed control changes it is recommended that site be supervised and that users be charged as per the current fees and charges of the West Wyalong Landfill.

Table 25: Recommended Opening Hours (Barmedman Landfill)

Day	Hours
Monday	Closed
Tuesday	Closed
Wednesday	1:00 pm to 4:00 pm
Thursday	Closed
Friday	Closed
Saturday	Closed
Sunday	1:00 pm to 4:00pm

Table 26: Recommendations - Waste Disposal (Barmedman Landfill)

No.	Description	Timeframe
25	That Council convert the Barmedman Landfill to a transfer station.	1 year
26	That Council change the opening hours of the Landfill as proposed in Table 25, provide supervision and that users be charged as per the current fees and charges of the West Wyalong Landfill	Now

3.3.4 Weethalle Landfill

In addition to the points made generally across the LGA, the following specific options are identified for the Weethalle Landfill facility:

Conversion to Transfer Station

The Weethalle Landfill is currently at capacity and has no area available to accept any further waste. Waste is currently transferred to the Kikiora Landfill (approximately 25 kilometres to the north). This transportation is provided by Council or contractor.

Accordingly, it is considered the the conversion of the landfill to a transfer station be commenced immediately. An appropriate facility will need be designed to be user friendly and for the practical collection of the bins for transfer to the West Wyalong Landfill.

A full feasibility would need to be undertaken to gain an understanding of cost implications. The services of a private contractor would be required for the development of the transfer station along with the transfer of the waste back to West Wyalong (Council does not currently have the ability to undertake this transfer).

Operating Hours

The implementation of restricted access and opening hours will ensure that control of the landfill remains with Council and will lead to the alleviation of some of the problems that have been highlighted in this Strategy.

To facilitate these proposed control changes it is recommended that site be supervised and that users be charged as per the current fees and charges of the West Wyalong Landfill.

Table 27: Recommended hours of operation (Weethalle Landfill)

Day	Hours
Monday	Closed
Tuesday	1:00 pm to 4:00 pm
Wednesday	Closed
Thursday	Closed
Friday	Closed
Saturday	1:00 pm to 4:00 pm
Sunday	Closed

Table 28: Recommendations - Waste Disposal (Weethalle Landfill)

No.	Description	Timeframe
27	That Council convert the Weethalle Landfill to a transfer station.	Now
28	That Council change the opening hours of the Landfill as proposed in Table 27, provide supervision and that users be charged as per the current fees and charges of the West Wyalong Landfill	Now

3.3.6 Tallimba Landfill

In addition to the points made generally across the LGA, the following specific options are identified for the Tallimba Landfill facility:

Closure

It is recommended that this landfill facility be closed within 12 months. Economically and environmentally it is not viable for Council to continue to have the Tallimba landfill facility open.

Closure is not to occur until a new alternative disposal facility is provided.

Provision of an Alternate Disposal Facility

Prior to closure, an alternate facility for the disposal of domestic waste will be required to be provided within the village area to enable residents to dispose of their waste. A survey of the village and consultation with the community to determine an appropriate site is recommended. The type of facility would also need to be determined.

Council could provide the collection services for such a facility.

Table 29: Recommendations - Waste Disposal (Tallimba Landfill)

No.	Description	Timeframe
29	That Council close the Tallimba landfill	1 year
30	That Council provide an alternative disposal facility for domestic waste within the Tallimba village following a survey of the village and consultation with the residents as to the most appropriate site	1 year

3.3.7 Mirrool Landfill

Closure

It is recommended that this landfill facility be closed within 12 months. Economically and environmentally it is not viable for Council to continue to have the Mirrool landfill facility open.

Closure is not to occur until a new alternative disposal facility is provided.

Provision of an Alternate Disposal Facility

Prior to closure, an alternate facility for the disposal of domestic waste will be required to be provided within the village area to enable residents to dispose of their waste. A survey of the village and consultation with the community to determine an appropriate site is recommended. The type of facility would also need to be determined.

Council could provide the collection services for such a facility.

Table 30: Recommendations - Waste Disposal (Mirrool Landfill)

No.	Description	Timeframe
31	That Council close the Mirrool landfill	1 year
32	That Council provide an alternative disposal facility for domestic waste within the Mirrool village following a survey of the village and consultation with the residents as to the most appropriate site	1 year

3.3.8 Naradhan Landfill

Closure

It is recommended that this landfill facility be closed within 12 months. Economically and environmentally it is not viable for Council to continue to have the Naradhan landfill facility open.

Closure is not to occur until a new alternative disposal facility is provided.

Provision of an Alternate Disposal Facility

Prior to closure, an alternate facility for the disposal of domestic waste will be required to be provided within the village area to enable residents to dispose of their waste. A survey of the village and consultation with the community to determine an appropriate site is recommended. The type of facility would also need to be determined.

Council could provide the collection services for such a facility.

Table 31: Recommendations - Waste Disposal (Naradhan Landfill)

No.	Description	Timeframe
33	That Council close the Naradhan landfill	1 year
34	That Council provide an alternative disposal facility for domestic waste within the Naradhan village following a survey of the village and consultation with the residents as to the most appropriate site	1 year

3.3.9 Kikoira landfill

Closure

It is recommended that this landfill facility be closed within 12 months. Economically and environmentally it is not viable for Council to continue to have the Kikoira landfill facility open.

Closure is not to occur until a new alternative disposal facility is provided.

Provision of an Alternate Disposal Facility

Prior to closure, an alternate facility for the disposal of domestic waste will be required to be provided within the village area to enable residents to dispose of their waste. A survey of the village and consultation with the community to determine an appropriate site is recommended. The type of facility would also need to be determined.

Council could provide the collection services for such a facility.

Table 32: Actions - Waste Disposal (Kikiora Landfill)

No.	Description	Timeframe
35	That Council close the Kikiora landfill	1 year
36	That Council provide an alternative disposal facility for domestic waste within the Kikiora village following a survey of the village and consultation with the residents as to the most appropriate site	1 year

3.4 RESOURCE RECOVERY

Generally

There are many opportunities to divert waste streams away from disposal to landfill for Bland Shire. However, the following points need to be taken into consideration when considering any form of resource recovery:

- Cost
- Machinery
- Logistics

The following options review potential opportunities for resource recovery in the LGA:

Kerbside collection

Currently, there is no kerbside recycling collection service in operation in the LGA. Should such a service be considered, carefully planning to account for the following issues would need to be undertaken:

- The requirement for increased processing capacity at the relevant landfills;
- Modified collection contracts, equipment and practices;
- Significant capital investment in new bins; and
- Intensive public education to ensure correct use of the new recycling system.

In the current market place it would not be appropriate to instigate a kerbside collection service due to returns diminishing.

At this stage it is recommended that Council do not consider the implementation of a kerbside recycling collection. There is not sufficient volumes of material to be collected to make it financially viable, contamination is a significant issue and transport costs are prohibitive.

Public Place Recycling

Public place recycling can yield poor results, particularly in terms of contamination. Accordingly, it is recommended that Council do not offer any public place recycling.

Drop off Recycling

As stated previously in the Strategy, Council offers limited recycling opportunities at each of the landfill sites within the LGA. There are no further opportunities recommended at this stage to increase this service.

However, further diversion of existing recyclable waste streams would occur through the conversion of landfills to transfer stations, the direction provided by landfill staff and greater education in the community.

Scrap Metal

It is recommended that Council continue to recycle any scrap metal that it collects.

Organics

Council has previously endeavoured to recycle organics, particularly greenwaste. This has proven to be unsuccessful in the past due to the contamination within the material and the subsequent breakdowns with the mulcher. Accordingly it is not recommended to recommence processing of greenwaste.

Other recycling contractors

A number of external waste contractors collect materials for recycling. A dialog should be established with these contractors to encourage periodic waste collection trips to West Wyalong and other landfills. Details of these collection trips could then be made available to both residents and businesses. Agreements may also be made for waste contractors to collect wastes not currently recycled by Council, eg. thinners, radiator coolant etc, from the waste depots.

Tyres

Tyres could be used for retaining wall purposes.

Table 33: Recommendations - Resource Recovery

No.	Description	Timeframe
37	That Council continue to strengthen existing recycling services via the conversion of landfill sites to transfer stations, greater staff direction and improved education of ratepayers	Ongoing
38	That Council consult with external waste contractors to encourage periodic waste collection trips to West Wyalong and other landfills.	1 year

3.5 EDUCATION

General

An important part to any strategy for the improvement of the waste management within the Bland Shire will be the education of the local community.

The community requires education ranging from the opening hours of the various management and disposal facilities, the type of wastes accepted at the facilities, the types of waste acceptable for recycling, collection days and to be generally informed of any changes to waste management in the Shire.

Engaging the community and industry in waste management and ongoing education will both improve the “on ground” management of waste and community support of waste management initiatives. Therefore, the development of a framework providing for the two-way flow of information will be essential in successfully implementing any waste management initiatives or plans resulting from this strategy. This will also be important for assisting Council to maintain safety and security measures at each of its sites, through the provision of feedback, personal observations and incident reporting.

Following is a number of opportunities to improve the education of the local community in relation to waste management:

- Provide information notices on the bottom of rate notices or similar.
- Mail out complimentary fridge magnets or calanders displaying waste management information.
- Set up an information stand at a local business which is frequented by most residents (eg. local supermarket).
- Stamp on the bin lid or provide labels with information on materials which may be placed within MGBs.
- Place information advertisements in the local paper or on local radio.
- Promote the tidy town initiative and set a competitor town.
- Organise information days and tours of local waste management facilities (particully targeting schools).

In order to most effectively educate the community a combination of these used regularly over a period of time could be used.

Table 34: Recommendations - Community Involvement and Education

No.	Description	Timeframe
39	<p>That Council investigate the following options to educate the local community in relation to waste management:</p> <ul style="list-style-type: none"> ○ Provide information notices on the bottom of rate notices or similar. ○ Mail out complimentary fridge magnets or calanders displaying waste management information. ○ Set up an information stand at a local business which is frequented by most residents (eg. local supermarket). ○ Stamp on the bin lid or provide labels with information on materials which may be placed within MGBs. ○ Place information advertisements in the local paper or on local radio. ○ Promote the tidy town initiative and set a competitor town. ○ Organise information days and tours of local waste management facilities (particully targeting schools). 	1 year