



Tip Shop

Feasibility Study

justWASTE
CONSULTING

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SUMMARY

JustWaste Consulting was engaged by Glamorgan Spring Bay Council (GSBC) to conduct a study researching and evaluating the feasibility of introducing a tip shop in conjunction with one of Council's existing waste transfer stations. JustWaste has conducted site visits to the Council's transfer stations, met with Council staff and conducted research into tip shop best practices.

The aim of this study is to provide a practical analysis of a scenario where GSBC establishes a tip shop in the area. This feasibility study evaluated sites, management scenarios, markets for sourcing and selling material, as well as the costs and benefits of introducing a tip shop. The goal of the project is to provide a tip shop to satisfy the demand that has been expressed in the community, to divert material from landfill and to offer affordable goods to the public.

Key Findings:

- The most suitable site is the existing Orford waste transfer station based on its central location, close proximity to Hobart, existing level of customer usage and the site's cleared and available usable space. The site will require a shed for undercover shelter and basic shop fit-out.
- New name for the site to be the Orford Resource Recovery and Waste Centre. This promotes the full suite of services offered at this site, not simply waste transfer.
- Best management scenario is where the tip shop is managed by Council with some extended hours for existing staff to sort, price and arrange items in the shop. Additional staff might be required during busy times such as the weekends.
- Material will be sourced from diverted material from the Orford transfer station. Further material sourcing and selling potential exist in transporting material from the other waste transfer stations and by establishing connections with the construction/demolition industry and the tourism accommodation industry.
- The customer market includes users of the Orford transfer station, holiday home owners in the greater region, people on low income and state travellers sourcing material for their home in other council areas.
- The two major cost outlays will be the initial set up cost of the site approx (\$48,000) and the increased operational staffing costs (\$21,000/annum).
- Cost savings and income generated is likely to be uneven throughout the year and elevated in holiday season (\$27,896/annum).

CONTENT

| | |
|--|----------|
| SUMMARY | 2 |
| 1. INTRODUCTION | 4 |
| 2. COUNCIL PROFILE AND BACKGROUND | 5 |
| 3. FEASIBILITY STUDY..... | 6 |
| 3.1. Gap Analysis..... | 6 |
| 3.1.1. Current situation | 6 |
| 3.1.2. Desired position | 6 |
| 3.1.3. Key Performance indicators | 7 |
| 3.2. Site & infrastructure..... | 7 |
| 3.2.1. Orford suitability | 7 |
| 3.2.2. Naming of facility | 9 |
| 3.2.3. Second site | 9 |
| 3.2.4. Infrastructure needs..... | 9 |
| 3.2.5. Traffic management..... | 9 |
| 3.3. Operations | 10 |
| 3.3.1. Staffing and hours..... | 11 |
| 3.4. Management scenarios..... | 12 |
| 3.5. Markets and material..... | 13 |
| 3.6. Costs and benefits..... | 14 |

1. INTRODUCTION

JustWaste Consulting has been engaged by Glamorgan Spring Bay Council (GSBC) to conduct a study researching and evaluating the feasibility of introducing a tip shop in conjunction with one of the Council's existing waste transfer stations.

JustWaste has conducted site visits to Council's waste transfer stations, met with Council staff and conducted research into tip shop best practices. Further, JustWaste bring to the project knowledge of managing seven waste transfer stations in Tasmania with associated tip shops and extensive experience from consulting work where tip shops have been observed and assessed for Councils and regions throughout the nation.

The aim of this study is to provide a concrete and practical analysis of a scenario where GSBC establishes a tip shop in the area. This feasibility study will evaluate the sites, management scenarios, markets for sourcing and selling material as well as the cost and benefits of introducing a tip shop. This study will recommend the most suitable combination of evaluated aspects.

The goal of the project is to provide a tip shop to satisfy the demand that has been expressed in the community, to divert material that has not reached the end of its life and to offer affordable household items to the public.



Figure 1: Images of materials outside at a Southern Tasmanian tip shop

2. COUNCIL PROFILE AND BACKGROUND

GSBC is situated on the east coast of Tasmania covering 160km of coastline and encompassing an area of 2,522km². There are 4,521 people living in the Council area¹; with the largest population in Bicheno and Triabunna, closely followed by Swansea.

The general income is lower than average in Tasmania relative to Australia, but the Council area has low unemployment of 2%. In the workforce 13% are employed in the construction industry and 17.5% in the accommodation and food services sector.

During holiday times the population in the area doubles. Approximately 53% of the dwellings in the area are holiday homes, with hot spots in Coles Bay and Orford².

Holiday homes both generate and consume furniture and household items ideal for a tip shop. Often holiday makers will buy new items for their primary residence and then bring the old items to their holiday homes as replacements. Also, with spare time from work and the whole family around, people tend to peruse tip shops and be open to buying items to use in the holidays and utilise material that may require some time to restore.

¹ Australian Bureau of Statistics 2016,
http://stat.abs.gov.au/itt/r.jsp?RegionSummary®ion=62410&dataset=ABS_REGIONAL_LGA2016&geoconcept=LGA_2016&maplayerid=LGA2016&measure=MEASURE&datasetASGS=ABS_REGIONAL_ASGS_2016&datasetLGA=ABS_REGIONAL_LGA2016®ionLGA=LGA_2016®ionASGS=ASGS_2016.

² Glamorgan Spring Bay Council Annual Report 2016/17 Part A.

3. FEASIBILITY STUDY

3.1. GAP ANALYSIS

3.1.1. Current situation

There are four waste transfer stations in; Bicheno, Coles Bay, Swansea and Orford. All transfer stations have the same opening hours of 2.30pm-4.30pm Monday to Friday and 12.30pm-4.30pm on Sundays. The opening hours are more limited in the winter months. This employs a total of 4 people at part-time on 14 hours per week. One of the staff accrues around 6 additional hours by collecting and transporting recyclables from Bicheno, Coles Bay and Orford to sort at Swansea. Garbage from all waste transfer stations is transported to Copping landfill for disposal. Currently none of the transfer stations offer an option to sort and sell/buy salvaged material. All furniture, bikes, toys, clothes etc. is transported away to be disposed of as garbage. Throughout the year approximately 3000 tonnes of garbage is disposed of at Copping Landfill from GSBC. It is estimated that 1500 tonnes of this garbage is sourced from the transfer stations and an equal amount from the kerbside collections.

Kerbside rubbish and recycling services are offered throughout the municipal area. A total of 3,800 tenements with many holiday homes being a big customer group for the transfer stations.

Currently there is no data recording system for the type and amount of waste disposed of at the transfer stations. As such, it is hard to quantify the potential material for tip shop sales.

3.1.2. Desired position

Council has expressed the intention of introducing a tip shop. This comes from a push in the local community. This has the possibility to divert material being disposed of as waste which may decrease associated disposal and transport costs. Further, it can offer beneficial community aspects: engaging people with awareness of waste behaviours, encouraging the reuse of material and providing an affordable option for household items to people with low income.

The main goal of a tip shop is as a community service encouraging sustainable use of material. Any cost saving from decreasing transported material and income generated from product sold will be a beneficial side effect.

3.1.3. Key Performance indicators

Material breakdown of waste disposed at the council transfer stations is not available. Thus, the potential income and benefit of sold material is largely unknown. Council will need to establish a process of information gathering to track the introduction and running of the tip shop.

Indicators for how the tips shop will impact the community should consider both practical and social aspects such as:

- Amount of material sold (number of items per category or mass in volume or weight)
- Amount of waste transported away, as waste and as recycling (volume or weight)
- Number of persons purchasing material / number of sales from the tip shop
- Amount of income generated
- Increased running cost of the transfer stations including the tip shop
- Comments from the community (voluntary survey)

3.2. Site & infrastructure

3.2.1. Orford suitability

JustWaste conducted site inspections of the four existing Council sites with considerations for site layout and space. Further considerations have been given to the number of potential users and the amount of waste disposed. Although Bicheno and Swansea have marginally larger populations the Orford site had other comparable beneficial aspects.

Orford is one of the four largest townships in the Council area located in close proximity to Triabunna. The site is also located in close proximity to the transient population that travel to and from the Hobart region. The site is best set up for other diversion opportunities including metal, green waste, non-ferrous metal, cardboard and co-mingled containers.

Existing infrastructure at Orford is basic with bulk bin saw-tooth bays. However, the site has the potential to be a showcase for the region in respect to resource recovery and waste minimisation.

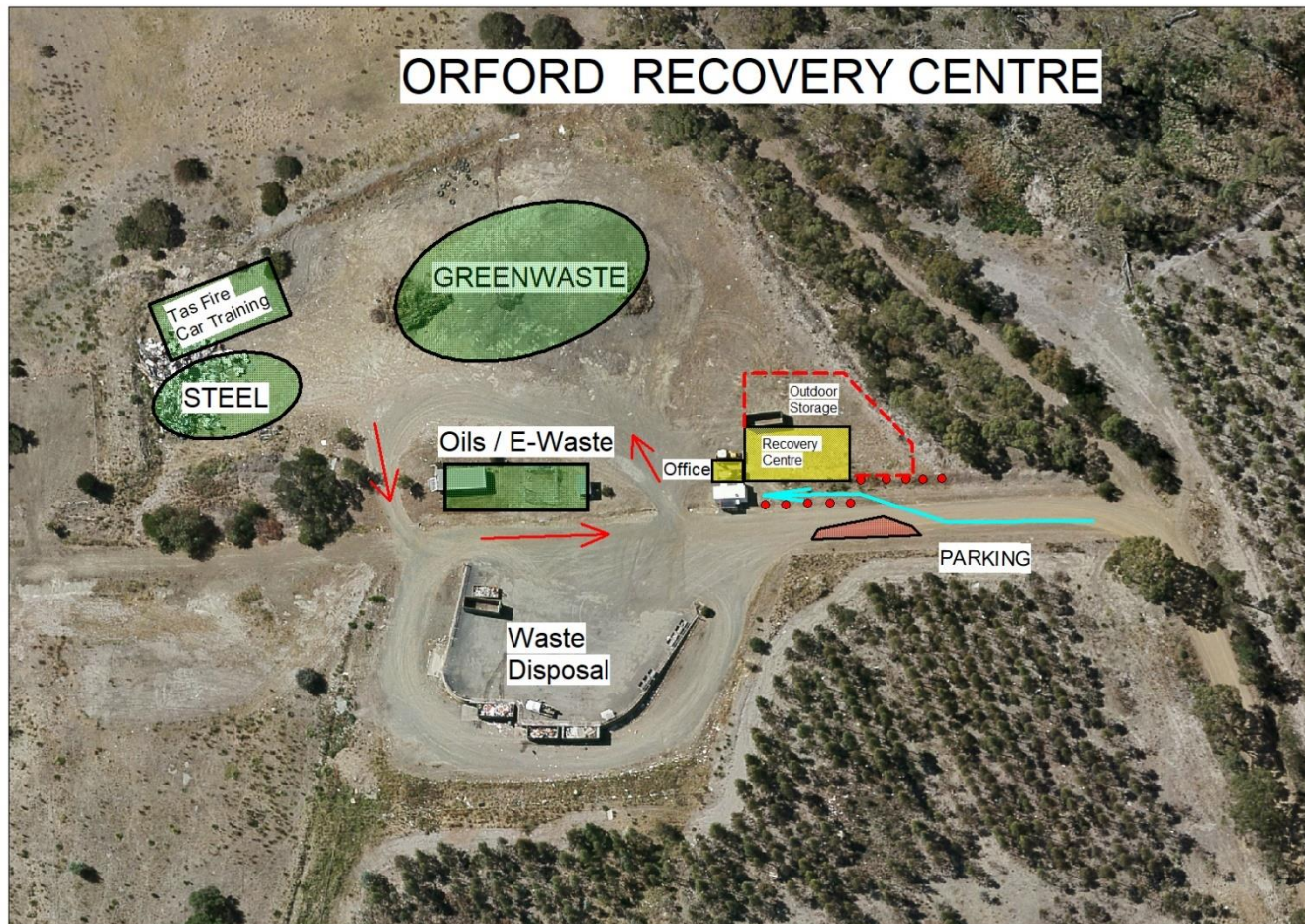


Figure 2: Orford site illustrating existing site access and recycling and waste disposal areas as well as proposed location for the Tip Shop Shed with associated parking.

3.2.2. Naming of facility

The site's name to be changed to the Orford Resource Recovery and Waste Centre. This name change highlights the vast and varied processes that are to be introduced. The opportunities for resource recovery, recycling and minimisation will ensure that the community understands the importance that these materials are a resource and not just simply waste that is transferred to landfill.

3.2.3. Second site

If a second Tip Shop was to be established Swansea would have the benefit of servicing the northern section of the municipality.

Swansea waste transfer station could be a satellite site operating on a much smaller scale however still achieving resource recovery and a service to the community.

3.2.4. Infrastructure needs

The Orford site would require a shed approximately 10 x 20 metres which could include a small staff office and a front undercover space for objects. This area could be used by staff to serve customers using the site, providing an undercover one-point place for interactions with customers.

The shed would require a concrete slab and basic furniture including shelving, tables and counter.

The area at the rear should be fenced to ensure larger items are secure.

It is estimated that the infrastructure upgrades would cost approximately \$48,000.

3.2.5. Traffic

Access to the current Orford site is off the Tasman Highway approximately 1 km north of Orford and 5 kms south of Triabunna and is surrounded by forestry and rural properties. It is possible that there might be some increase in traffic vehicles to and from the site.

The movement on site should be clockwise allowing customers to come in and stop at the tip shop for drop off first and then drive around to dispose of material at the recycling area and finally disposing of waste. There should be a couple of parking spots off the site's main access road to allow for movement through the site and provide parking for people visiting the shop.

3.3. Operations

It is important to establish a process for flow of material and operations of the tip shop and transfer station. It will be beneficial to include existing staff in the process of creating and implementing new management strategies.



The basic path for material for the tip shop will be to;

- 1) Intercept and divert usable material from each vehicle as the customer enters the site.
- 2) At a later stage inspect and evaluate the material for suitability looking for breakages or disfigurations. Each item should then be priced or discarded based on suitability.
- 3) Items should be sold within a certain timeframe or discarded to ensure the shop maintains good stock and a quality reputation in the area.

The ordering of the objects is essential including, shelving and boxes, arranging bulky items in groups with clear walkways.

Special inspection and cash handling procedures will need to be established. Inspection and selection of material will have to consider legislation and safety procedures. Also, deciding what types of items can be sold and at what price should be an adaptable process that can be tried and tested by the operational staff.

The tip shop will need to establish a pricing policy.

3.3.1. Staffing and hours

Existing staff at the Orford site would perform their current job of directing costumers to relevant disposal locations, note waste volumes and determine the charge from gate house. As such this will be the spot that a load is inspected and saleable material diverted. With the current volume of customers at Orford it is unlikely that additional staff would be required in the initial period.

Some extra work hours will be required for proper management of the site, shop and material processing.

Step 1 could be included in the normal working hours of Council staff. Objects and material are simply identified from incoming loads and customers asked to leave any saleable material by the side of the shed.

Step 2 of inspecting, evaluation and pricing the objects could either be performed within existing staff hours in quiet times or possibly as additional hours after the station closes. That way step 3 could be managed by the operational staff as additional transactions. It is possible that an additional staff in peak times such as weekends may be required.

In conclusion, some (1-5) extra hours for existing staff may be needed to maintain a tidy shop with clearly labelled objects and well rotated material.

If the shop proves successful and busy, thus also likely generating more income, additional staff on Saturdays and Sundays may be needed, adding approximately 7 hours of expenditure.

A review of the opening hours based upon other sites in Tasmania, weekends are by far the busiest days. The site is open Sunday afternoons to allow for the community to dispose of their materials as they leave the region. There should be an allowance for the site to be open on Saturday mornings, which will increase usage of the site and bring in more tip shop materials for sale.

It is proposed that the Orford site opening times be changed to:

Table 1- Proposed opening hours of the Orford Resource Recovery and Waste Centre

| Current | | Proposed | |
|-----------|-----------------|-----------|-------------------|
| Day | Hours | Day | Hours |
| Monday | 2.30 to 4.30pm | Monday | 2.30 to 4.30pm |
| Tuesday | 2.30 to 4.30pm | Tuesday | CLOSED |
| Wednesday | 2.30 to 4.30pm | Wednesday | 2.30 to 4.30pm |
| Thursday | 2.30 to 4.30pm | Thursday | 2.30 to 4.30pm |
| Friday | 2.30 to 4.30pm | Friday | 2.30 to 4.30pm |
| Saturday | CLOSED | Saturday | 9.00am to 12.00pm |
| Sunday | 12.30 to 4.30pm | Sunday | 12.30 to 4.30pm |

The proposed Tuesday closure falls in line with winter hour restrictions for all other sites and will assist in overall standardisation.

3.4. Management scenarios

There are three ways available to run and manage a tip shop.

1. Not for profit
2. Council
3. Private

The tip shop will be of small scale, considering amount of material, number of users and potential income generated. It is likely that a Council run management would be the most suitable. The running of the tip shop would then be added on to the work responsibilities of existing staff, with the option of extending hours or adding a part time position to assist during key times such as weekends and holiday times.

Considering all four transfer stations and staff, there are scenarios for a combined management regime. Such as having one staff operate two or more sites at different opening hours. This could also provide opportunity for the sourcing of saleable material and recyclables to be effectively transported to the site at Orford.

In other scenarios where the tip shop may be privately or charity run, Council would retain a role providing management support and ensuring that operations procedures were known and followed as well as ensuring that the saleable material adhered to applicable legislation and safety standards.

The benefits of not for profit or private management setups is that there is a financial ownership of the material sorting and sourcing which can encourage a well-functioning shop. Having a passionate worker in charge of the shop will be important in any scenario.

3.5. Markets and material

The main stream of saleable material would be sourced from diverting objects from incoming users of the tip. Further material could be sourced from other transfer stations in Bicheno, Coles Bay and Swansea. Tourism accommodation and holiday shacks could be a market both to source and sell material. Over time the tip shop can establish industry partners to source further material such as from the construction and demolition sector which seems to be thriving in the area.

The market to sell the material will primarily be existing users of the Orford waste transfer station. However, as the tip shop establishes it is likely that Council residents will make a visit when they travel within the area. Further, as the area is known as a holiday destination it is likely that shack owners and visitors from around the state will make a visit and buy objects both for their holiday residences and their home in other council areas. There is also an opportunity to have an online presence where the tip shop can establish a Facebook page or put items on Gumtree for sale. This may further develop the shop's reputation and sell more objects.

The type of material suitable for sale and often found in tip loads include furniture, toys, bikes, electrical items and building / garden material. Clothing may be included, especially if the transfer station established a clothing bin that can encourage users to dispose of their clothes at this location. If the tip shop becomes established there may be opportunity for staff to value-add to incoming material by repairing and mending objects or find alternative uses. For example, sinks and fridges can be used as planters or old barbecues as an outdoor table. There could also be an opportunity to sell material to the landscaping and construction industry such as bricks, concrete, rocks and fill material.



Figure 3: Images of material found at the site inspection of Swansea transfer station: chairs, bikes, stools, shutters, sofas and barbeques etc.

3.6. Costs and benefits

The two major financial outlays will be the initial set up cost of the site and the operational staffing costs. The income generated is likely to be uneven throughout the year and elevated in holiday seasons. By comparison, another small transfer station managed by JustWaste servicing a township of 1300 generates approximately \$300 per week. As there is currently no tip shop on the east coast there is great potential for the Orford site to source material from a greater area and become a destination for second-hand goods with associated financial benefits. The material is free to source and any income generated is straight profit.

| | Costs | Income |
|---|-----------------|-----------------|
| Establishing cost | \$48,000 | |
| Shed (incl. concrete slab, and shop fit-out) | \$43,000 | |
| Security upgrade | \$5,000 | |
| Operational costs | \$21,000 | |
| Additional 3 hours/week for existing staff (per annum) | \$7,000 | |
| Possible additional staff for Saturday / Sunday opening hours (per annum) | \$14,000 | |
| Cost Savings and income | | \$27,896 |
| Waste diverted, and disposal fee saved (Arbitrary figure of 5%) | | \$1,896 |
| Tip shop income (Arbitrary estimation of \$500/week) | | \$26,000 |

To track the success, adjust running costs and to work on increasing the benefits financial and social, it is important that the key performance indicators be tracked continually. Further, they need to be evaluated on a regular basis (6 monthly) to make timely adjustments.

Other benefits for Council and the local area in developing a tip shop include awareness building and waste/ recycle stream education within the community.

A well-managed tip shop makes the customer's stop more pleasurable and the reusability of theirs and other peoples recyclable waste provides a platform for site staff to interact in a valuable way. This then allows for conversation about further recycling opportunities and waste behaviour changes.

Finally, a tip shop can offer second-hand objects that are different to other charity shops with a larger focus on bulky items such as furniture, garden objects, tools, toys and white goods.

END