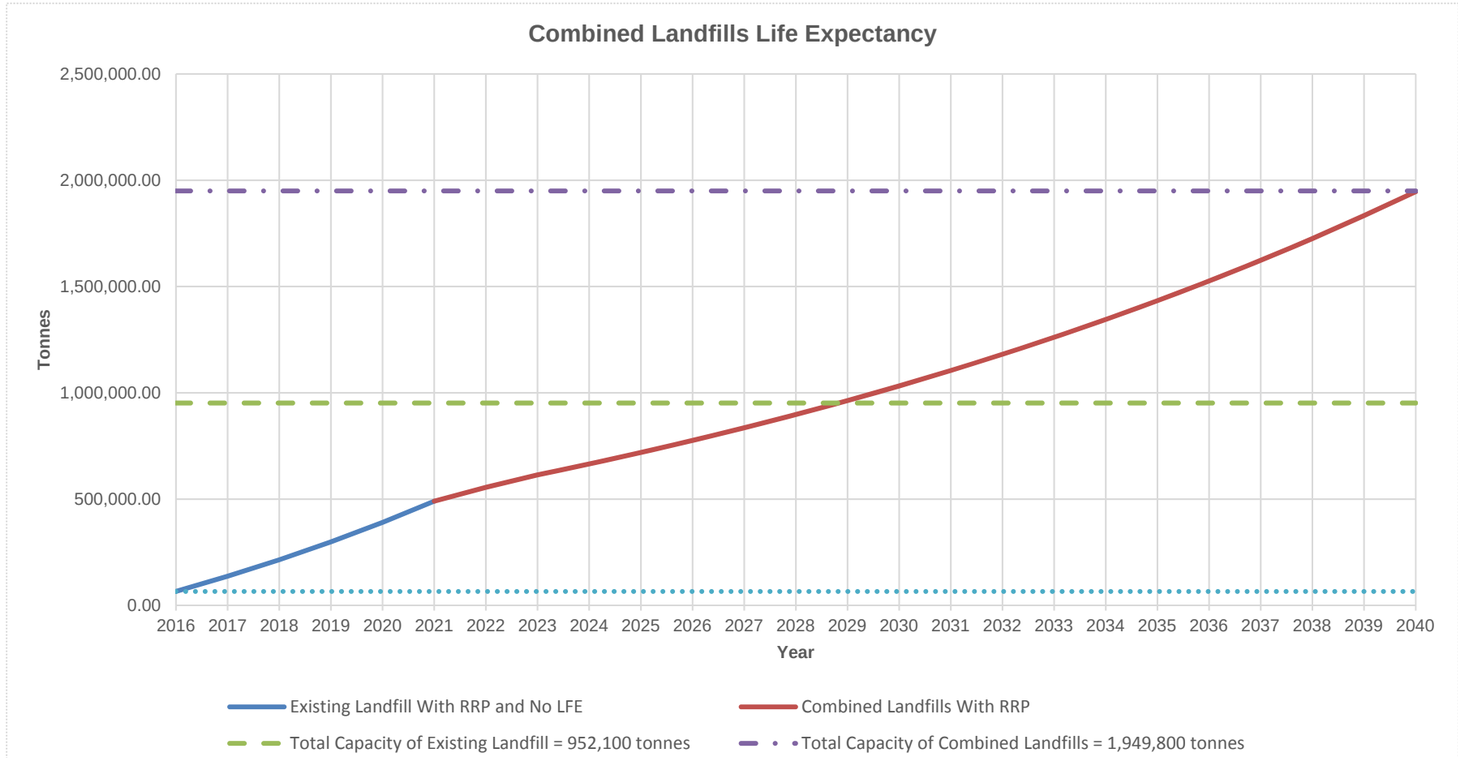
## Existing and Proposed Landfills and RRP

| Description | Value | Unit |
|---|---|---|
| Remaining area - existing landfill (ha) | 7.96 | ha |
| Area - proposed landfill extension (ha) | 8.34 | ha |
| Combined landfill areas (m2) | 163,000.00 | m2 |
| Approx avg height - existing landfill (m) | 16.61 | m |
| Approx avg height - proposed landfill extension (m) | 16.61 | m |
| Remaining existing landfill volume (m3) | 1,322,467.15 | m3 |
| Proposedlandfill extension volume (m3) | 1,385,600.00 | m3 |
| Estimated total volume (m3) | 2,708,067.15 | m3 |
| Actual landfill efficiency multiplier | 90.00 | % |
| Volume efficiency | 2,437,260.43 | m3 |
| Density compacted waste | 0.80 | t/m3 |
| Estimated combined waste tonnages | 1,949,808.35 | t |
| Average combined landfills waste (with RRP) | 81,102.05 | t/yr |
| Combined landfills life expectancy (with RRP) | 24 | yr |

LFE = Landfill Extension
RRP = Resource Recovery Park




**Notes:**

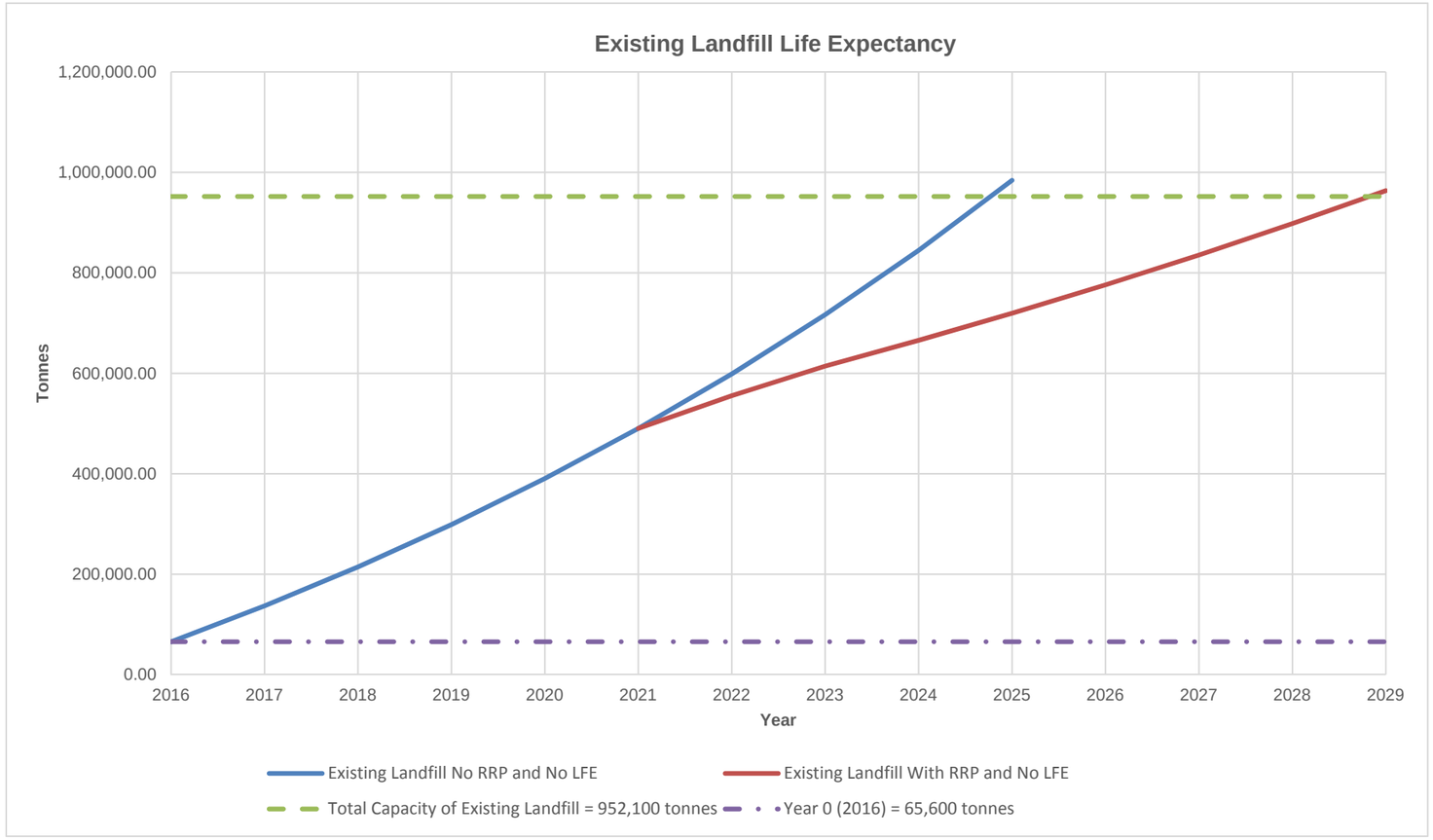
1. Volume efficiency multiplier based on daily, intermediate and final covers.
2. Existing landfill remaining area is assumed to be 7.96 ha (from December 2016 volumetric survey).
3. Proposed landfill extension area is assumed to be 8.34 ha (Arcadis - SLR Figure 20).
4. RRP assumed to commence operation in 2021.
5. From 2021 it is assumed efficiency resource recovery rate of diverted waste to RRP is 40%. Therefore, 60% of residual waste to landfill.
6. From 2021 it is assumed efficiency resource recovery rate of diverted waste to RRP is 50%. Therefore, 50% of residual waste to landfill.
7. From 2021 it is assumed efficiency resource recovery rate of diverted waste to RRP is 60%. Therefore, 40% of residual waste to landfill.
8. Assumed population growth rate of 2% ha been included in calculations (Source: '*SCC Waste Stratgey, 2014 / 2015*').
9. Assumed annual waste genreration medium-growth rate of 3% ha been included in calculations (Source: '*National Waste Report 2010*').
10. Assumed disaster waste contingency rate of 3.5% has been included in calculations (Source: '*Arcadis*').
11. Year 0 is 2016 - approximately 65,600 tonnes per annum.
12. Year 24 is by the end of 2039 - approximate average 81,100 tonnes per annum.
13. Revisions made are; 'Actual landfill efficiency muliplier', 'Density compacted waste', 'Population growth rate' and inclusion of 'Waste generation growth rate' and 'disaster waste contingency'.

## Existing Landfill and RRP

| Description | Value | Unit |
|---|---|---|
| Remaining area - existing landfill (ha) | 7.96 | ha |
| Area - proposed landfill extension (ha) | 0.00 | ha |
| Combined landfill areas (m2) | 79,600.00 | m2 |
| Approx avg height - existing landfill (m) | 16.61 | m |
| Approx avg height - proposed landfill extension (m) | 0.00 | m |
| Remaining existing landfill volume (m3) | 1,322,467.15 | m3 |
| Proposedlandfill extension volume (m3) | 0.00 | m3 |
| Estimated total volume (m3) | 1,322,467.15 | m3 |
| Actual landfill efficiency multiplier | 90.00 | % |
| Volume efficiency | 1,190,220.43 | m3 |
| Density compacted waste | 0.80 | t/m3 |
| Estimated waste tonnages | 952,176.35 | t |
| Average existing landfill waste (no RRP and LFE) | 109,359.64 | t/yr |
| Average existing landfill waste (with RRP and no LFE | 74,126.41 | t/yr |
| Existing landfill life expectancy (no RRP and no LFE) | 9 | yr |
| Existing lanfill life expectancy (with RRP and no LFE) | 13 | yr |

LFE = Landfill Extension

RRP = Resource Recovery Park



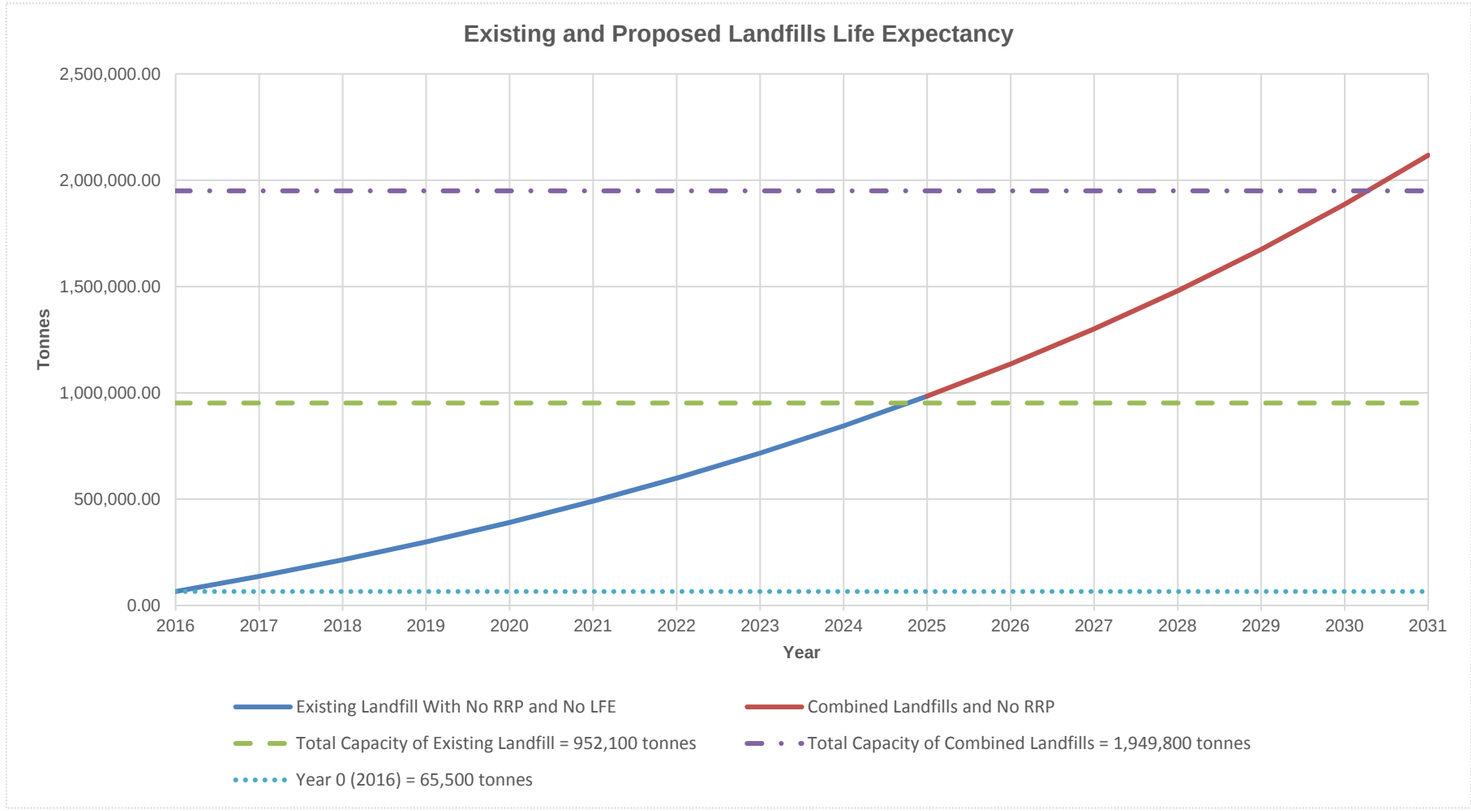

**Notes:**

1. Volume efficiency multiplier based on daily, intermediate and final covers.
2. Existing landfill remaining area is assumed to be 7.96 ha (from December 2016 volumetric survey).
3. RRP assumed to commence operation in 2021.
4. From 2021 it is assumed efficiency resource recovery rate of diverted waste to RRP is 40%. Therefore, 60% of residual waste to landfill.
5. From 2021 it is assumed efficiency resource recovery rate of diverted waste to RRP is 50%. Therefore, 50% of residual waste to landfill.
6. From 2021 it is assumed efficiency resource recovery rate of diverted waste to RRP is 60%. Therefore, 40% of residual waste to landfill.
7. Assumed population growth rate of 2% ha been included in calculations (Source: '*SCC Waste Stratgey, 2014 / 2015*').
8. Assumed annual waste genreration medium-growth rate of 3% ha been included in calculations (Source: '*National Waste Report 2010*').
9. Assumed disaster waste contingency rate of 3.5% has been included in calculations (Source: '*Arcadis*').
10. Year 0 is 2016 - approximately 65,600 tonnes per annum.
11. Year 9 is toward the end of 2024 - approximate average 109,400 tonnes per annum.
12. Year 13 is by the start of 2029 - approximate average 74,100 tonnes per annum.
13. Revisions made are; 'Actual landfill efficiency muliplier', 'Density compacted waste', 'Population growth rate' and inclusion of 'Waste generation growth rate' and 'disaster waste contingency'.

## Existing and Proposed Landfills

| Description | Value | Unit |
|---|---|---|
| Remaining area - existing landfill (ha) | 7.96 | ha |
| Area - proposed landfill extension (ha) | 8.34 | ha |
| Combined landfill areas (m2) | 163,000.00 | m2 |
| Approx avg height - existing landfill (m) | 16.61 | m |
| Approx avg height - proposed landfill extension (m) | 16.61 | m |
| Remaining existing landfill volume (m3) | 1,322,467.15 | m3 |
| Proposedlandfill extension volume (m3) | 1,385,600.00 | m3 |
| Estimated total volume (m3) | 2,708,067.15 | m3 |
| Actual landfill efficiency multiplier | 90.00 | % |
| Volume efficiency | 2,437,260.43 | m3 |
| Density compacted waste | 0.80 | t/m3 |
| Estimated combined waste tonnages | 1,949,808.35 | t |
| Average combined landfills waste (with No RRP) | 141,145.84 | t/yr |
| Combined landfills life expectancy (with No RRP) | 14 | yr |

LFE = Landfill Extension
RRP = Resource Recovery Park




**Notes:**

1. Volume efficiency multiplier based on daily, intermediate and final covers.
2. Existing landfill remaining area is assumed to be 7.96 ha (from December 2016 volumetric survey).
3. Proposed landfill extension area is assumed to be 8.34 ha (Arcadis - SLR Figure 20).
4. Assumed population growth rate of 2% ha been included in calculations (Source: '*SCC Waste Stratgey, 2014 / 2015*').
5. Assumed annual waste genreration medium-growth rate of 3% ha been included in calculations (Source: '*National Waste Report 2010*').
6. Assumed disaster waste contingency rate of 3.5% has been included in calculations (Source: '*Arcadis*').
7. Year 0 is 2016 - approximately 65,600 tonnes per annum.
8. Year 14 is by the early 2030 - approximate average 114,100 tonnes per annum.
9. Revisions made are; 'Actual landfill efficiency muliplier', 'Density compacted waste', 'Population growth rate' and inclusion of 'Waste generation growth rate' and 'disaster waste contingency'.