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List of Acronyms

<table>
<thead>
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<th>Acronym</th>
<th>Definition</th>
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<tr>
<td>HPE</td>
<td>Healthcare Planning and Evaluation Pty Ltd</td>
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<tr>
<td>APY</td>
<td>Anangu Pitjantjatjara Yankunytjatjara</td>
</tr>
<tr>
<td>SA</td>
<td>South Australia</td>
</tr>
<tr>
<td>DECS</td>
<td>Department of Education and Children’s Services</td>
</tr>
<tr>
<td>SRA</td>
<td>Shared Responsibility Agreement</td>
</tr>
<tr>
<td>CPC</td>
<td>Child and Parent Centre</td>
</tr>
<tr>
<td>WA</td>
<td>Western Australia</td>
</tr>
<tr>
<td>OIPC</td>
<td>Office of Indigenous Policy Coordination</td>
</tr>
</tbody>
</table>
Executive summary

The Department of Health and Ageing (the Department), retained Healthcare Planning and Evaluation (HPE) to undertake an evaluation of the sustainability and benefits of swimming pools on the Anangu Pitjan’tjara Yankunytjatjara (APY) Lands in SA. The project involved the collection of data from communities on four occasions at six monthly intervals.

Initially swimming pools were planned for four communities, though the small population and requirement for the community to contribute significant funding to the project saw this project cease. As a result pools were only established in three communities.

A key consideration for the evaluation was to understand the health benefits of swimming pools on the APY Lands. The high levels of mobility between communities on the APY Lands presented methodological challenges with only 4% of the 262 children examined being present in communities on all four occasions when data was collected.

We examined children in all three communities with swimming pools on four occasions, and in the fourth community on three occasions over a two year period. We examined children’s ears, eyes, skin and noses to determine the extent to which the establishment of a swimming pool had a positive effect on children’s health and used data collection tools the same as those used in an earlier Western Australian Study (Lehmann et al. 2002).

A wide range of environmental, domestic and social factors contribute to children’s health. The prevalence of ear disease amongst children on the APY Lands has historically been high with approximately 45% of children having a perforation of one or more eardrums, while the World Health Organisation suggests that a rate above 4% represents a major public health issue (cited in Morris et al. 2005). The capacity of a swimming pool to impact on ear health in a short period of time, and in isolation of responses to issues such as overcrowding, access to washing machines, diet, paternal smoking and the like is limited.

Our results suggest that the swimming pools have not had an impact on the ear health at this stage. However the initiation of a further study funded through the Department that commenced in March 2009 provides an opportunity to monitor changes over the longer term.

Swimming pools did appear to have a positive impact on children’s skin with a significant reduction in pyoderma noted across all communities over the life of the project.

As the swimming pools were established, members of communities identified a series of expected benefits associated with the swimming pools, namely:

• employment opportunities for Anangu;
• improved health amongst children;
• improved school attendance with the No School, No Pool Policy;
• a health activity in a safe environment for children on hot days; and
• a resource for communities.

Although the No School, No Pool Policy operated consistently across the three communities, there was no evidence that this improved attendance rates. It appeared a range of factors well beyond the presence of a swimming pool impact on school attendance. However, discussions with parents and grandparents suggested that the No School, No Pool Policy was gradually influencing their children’s and grand children’s behaviour and there was considerable support for its maintenance.

Each swimming pool represents a significant investment in community infrastructure, and the sustainability of the pools is therefore crucial. Although it was envisaged that communities would take over management of the swimming pools in four years from their completion, it is clear that none of the communities have the organisational infrastructure or expertise to take on management of the pools at this stage. Indeed, management of the swimming pools through the Department of Education and Children’s Services is one of the key factors supporting their sustainability.

Potential barriers to sustainability included lack of housing for pool managers, and remuneration at the same level as provided in metropolitan regions, which affected recruitment of pool managers. Recruiting assistant pool managers and lifeguards was an ongoing challenge and any solution will rely on the development of an adequate pool of trained Anangu and local community members.

The establishment of the Regional Pool Manager position enhanced sustainability, particularly where there were short term vacancies for pool managers in individual communities.

The AP Lands Swimming Pool Committee provided an effective mechanism for drawing together the skills and resources across departments to support the operation of each swimming pool. The shortcomings in the original water treatment plants at each swimming pool, although addressed, highlight the importance of access to key departmental officers to quickly and effectively respond to and resolve issues related to the operation of the swimming pools.

**Recommendation 1.**

It is recommended that the No School, No Pool Policy be retained as there was strong support for this in communities and it provided a potential incentive for all children to attend school.

**Recommendation 2**

It is recommended decisions to provide swimming pools not be predicated on their impact on ear health in isolation, but that pools be viewed as a component of a broader response to health in remote Indigenous communities.

**Recommendation 3.**

It is recommended that housing be identified or developed for the Pool Manager position each of the APY Lands communities with a swimming pool. Given the shortage of housing in communities, where the incumbent is related to another...
member of the community who also has access to housing, the designated house would be available for alternative use.

**Recommendation 4.**

It is recommended that the capacity be maintained in the budget of each swimming pool to support an ongoing training program for Pool Managers and Life Guards to ensure the pool of people able to support the operation of each swimming pool is maintained and expanded.

**Recommendation 5.**

It is recommended that support for the recently initiated monitoring of the ear health of children in APY Land communities be maintained.

**Recommendation 6.**

It is recommended that a small amount of funding be provided to establish a computer based system for determining children who have attend school and are permitted to use the swimming pool so that data about children’s daily use of the swimming pools, at least on school days, can be readily collected, collated and cross referenced with health and hearing data.

**Recommendation 7.**

It is recommended that development of pools in remote Indigenous communities occur under the auspices of the local school to ensure that the ongoing operation and maintenance of the pool benefits from the administrative and technical capacity of the relevant Department of Education.

**Recommendation 8.**

It is recommended that where governments seek to establish swimming pools in remote Indigenous communities, and particularly where more than one community is involved, that a formal mechanism to bring the range of affected departments together be established at least for the first five years of the pools operation to ensure that their operation is supported by all agencies.

**Recommendation 9.**

It is recommended that the operation of the swimming pools on the APY Lands remain within the responsibility of DECS and that the funding to support the ongoing operation of the pools through DECS be maintained with indexation to ensure the capacity to effectively administer the pools is retained.
Introduction

The Department of Health and Ageing (the Department), through the Office for Aboriginal and Torres Strait Islander Health engaged Healthcare Planning and Evaluation (HPE) to undertake a two year evaluation of the sustainability and benefits of swimming pools for four communities on the Anangu Pitjantjatjara Yunkunytjatjara (APY) Lands of South Australia, referred to as Community A, B, C and D.

1.1 OBJECTIVES OF THE EVALUATION

The evaluation was designed to:

- assess the health and social benefits of the swimming pools, including the extent to which the health improvements found in the Telethon Institute for Child Health Research study (Lehmann et al 2003) have been replicated in the APY Lands communities;
- identify what community members value about having a local swimming pool and the extent to which these hopes have been realised;
- identify the factors that enable the provision and maintenance of safe, usable and financially viable swimming pools in remote communities;
- identify the factors or conditions (other than the availability of a functional swimming pool and its physical plant) that need to be in place so that the health and social benefits of the swimming pool can be realised and any problems avoided; and
- identify any unintended consequences (positive or negative) that might arise from the introduction of the swimming pool and related initiatives.

1.2 METHODOLOGY

Between September 2007 and April 2009, we undertook four six-monthly visits to the four, at the start and conclusion of the swimming season; that is, in spring (September) and autumn (March/April).

All children on the school roll were eligible for inclusion in the study if informed consent was obtained. We employed community interpreters and engaged local school staff to assist us in recruiting children at each visit. A doctor performed a skin and otoscopic examination of all children enrolled in the study who attended school on the day(s) of our visit. Children who had not been seen at initial visits were given the opportunity to enrol and be reviewed at subsequent visits.

Prior to our first visit we worked with a small group of Anangu interpreters over a two day period to develop an oral survey or interview tool in Pitjantjatjara, along with an information sheet and consent form.
On our first visit (September to November 2007) to collect data in each community we undertook the oral survey with small groups of residents in each community to gain an understanding of the range of benefits expected from the swimming pools and also determine how effective the governance of the swimming pools had been at engaging the community. This oral survey was repeated again on our final data collection visit (March and April 2009).

We conducted regular interviews with adults in the communities to gauge their impressions of the pool and any perceived benefits and concerns they may have had regarding the pools. We also carried out regular interviews with staff responsible for the operation and oversight of the pools to find out their views on the pool and what issues impacted on pool maintenance and supervision.

Throughout the project a member of the HPE team also participated in meetings of the APY Lands Swimming Pools Committee chaired by the Department of Education and Children’s Services (DECS). This ensured that we remained abreast of developments related to the swimming pools and also had opportunities to provide feedback to the departments represented at these meetings about issues arising in the course of our visits.

In addition to data collected during site visits we also sought attendance data for the school in each community that was collected annually in the final term of the year. Data regarding clinic attendances was sought but was not available until July 2009. As a result a supplementary report will be submitted when this data becomes available.

1.2 PURPOSE AND STRUCTURE OF THIS DOCUMENT

This document is the final report for the project. The remainder of the document incorporates:

Chapter 2 the results of the qualitative and quantitative information collected.

Chapter 3 the feedback from the community regarding the swimming pools.

Chapter 4 our conclusions regarding the health and social benefits of the swimming pools in the four communities.

Chapter 5 our conclusions regarding the factors that impact on the sustainability of the swimming pools in the four communities.

Chapter 6 recommendations regarding factors to be considered in the future development of swimming pools in remote Aboriginal communities.
Summary of information collected

This Chapter provides a summary of the information collected over the life of the evaluation:

2.1 SCHOOL PARTICIPATION

2.1.1 The ‘No School, No Pool’ Policy

A key objective for establishing the swimming pools in all four APY Lands communities was to increase school participation by children. Through the Shared Responsibility Agreements (SRAs), the communities agreed to implement ‘no school, no pool’ policies to support improved attendance as part of their commitment to better educational outcomes for their children.

The ‘no school, no pool’ policy involved the implementation of a simple but effective school attendance registration system. At the end of each school day, students in Community B received a medallion with their name on it as proof of attendance. In Community A they were given a wrist band and in Community C they were marked on a roll that was then given to the pool manager. At the pool only children with the correct identification were allowed to use the pool.

2.1.2 School attendance

Unfortunately the Department of Education and Children Services school attendance data was of marginal value as it only provided annual attendance rates. Attendance rates by term would have allowed us to examine school participation in those school terms when the pools were open (e.g. Terms 1 and 4).

Figures 2.1, 2.2, 2.3 and 2.4 present annual school attendance rates for primary and secondary school children at each of the four schools. Based on the available information there is no evidence to suggest there has been improved seasonal school attendance because of the pools.

School attendance at Community A School had gradually improved between 1999 and 2005 for both primary and secondary school students but slowly decreased from 2006 onwards. The decline began prior to the pool being built and has continued since.
School attendance at Community B school had been improving over the period for which data was available. Of interest the improvement in attendance appeared to be for both primary and secondary school children and preceded establishment of the swimming pool. However, it appeared that the attendance of secondary students showed a more steady improvement following the establishment of the swimming pool.

School attendance at Community C School had gradually improved between 1999 and 2004 for both primary and secondary school students but similarly to Community A School has declined from then onwards. While the decrease has been a gradual one for primary school students the reduction is more marked for secondary school students, with attendance dropping from an 85% high to a 30% low. As was the case with the Community A School the decline predates the building of the swimming pool.
School attendance at Community D School has remained relatively constant for primary school students but participation by secondary students has declined over the past three years. Although data for 2009 was not available, the decline in the overall population and instability in the community, observed during our last visit, were expected to have a negative impact on attendance.

Note: Prior to 2002 Community D School was amalgamated with Community C School
2.1.3 Community views regarding the No School No Pool Policy

In the course of discussions with community members, including parents and grandparents, the operation of the No School, No Pool policy was consistently supported. It was suggested by grandparents that the children were learning how the policy worked, and that it was becoming an incentive to go to school during the summer months.

The only concerns about the No School, No Pool policy identified across the life of the project related to:

1) Where children had not attended school it was often noted that adults felt sorry for the children, particularly on very hot days. Nevertheless, even this group noted that getting children to go to school was important and that it was unfortunate for children who did not attend.

2) At one school it was noted an attempt had been made to also include a behavioural requirement for access to the swimming pool. This was in part a response to children who attended school simply to gain access to the swimming pool but did not participate or were disruptive. The community refused to accept this change as establishing a criterion for behaviour was too difficult and left room for children to be treated differently by different teachers.

2.1.3 Findings

The attendance rates at each of the four schools appeared to be unrelated to the operation of the swimming pool. However, the operation of a swimming training program and opportunities to attend swimming carnivals in communities outside the APY Lands appeared to have increased the involvement of secondary school children, and potentially contributed to the increased attendance of this group.

The strong support for the No School, No Pool policy in communities reflected the desire to encourage children to attend school.

Recommendation 1.

It is recommended that the No School, No Pool Policy be retained as there was strong support for this in communities and it provided a potential incentive for all children to attend school.

2.2 CHILD HEALTH

Across the evaluation we examined children in all four communities every six months. Children were aged from under one year old to 19 years old as summarised in Figure 2.5 (below). A date of birth, and therefore age was not established for 48 of the children examined and age was calculated on the basis of the date of the first time the a child was examined.

Children under school age were examined with their mother or guardian when attending the Child and Parent Centre (CPC) or opportunistically where mothers
visited the school for other reasons and had a child with them that they were happy to have examined.

![Figure 2.5 Age distribution for children examined](image)

**2.2.1 Population mobility**

As part of the evaluation we examined children four times at approximately six months intervals. Across the four communities we checked a total of 262 children. We saw 145 (55%) children at least once, 81 (31%) twice, 26 (10%) three times and 10 (4%) four times.

<table>
<thead>
<tr>
<th>Number of 6 monthly checks per child:</th>
<th>Number of children in WA study</th>
<th>Number of children in APY Lands evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>One check</td>
<td>162 (45%)</td>
<td>145 (55%)</td>
</tr>
<tr>
<td>Two checks</td>
<td>99 (27%)</td>
<td>81 (31%)</td>
</tr>
<tr>
<td>Three checks</td>
<td>66 (18%)</td>
<td>26 (10%)</td>
</tr>
<tr>
<td>Four checks</td>
<td>35 (10%)</td>
<td>10 (4%)</td>
</tr>
<tr>
<td>All checks</td>
<td>362 (100%)</td>
<td>262 (100%)</td>
</tr>
</tbody>
</table>

Table 2.1 provides a comparison with the findings of the Western Australian study. When we compared the evaluation findings with the Western Australian study we noted that during this evaluation we saw 14% of the children on at least three occasions while in the earlier study they examined 28% of children at least three times. This demonstrated that the APY Lands population was even more mobile than that of the Lehmann (2003) study and is a significant finding given the Lehmann study noted that high population mobility was a limitation in their study.
We were told the high mobility of the childhood population is the result of families moving between communities on the APY Lands as well as travelling to centres such as Port Augusta, Adelaide and Alice Springs. This has several implications, namely:

- the pools may be used only intermittently, which could potentially decrease the impact the pools might have as a health intervention; and
- it supports initial concerns about the robustness of this and the WA study, and therefore the transferability of an evaluation based purely on the Western Australian methodology to other settings.

### 2.2.2 Ear Disease

Table 2.2 (below) provides a summary of the results of the otoscopic findings across the four communities for the four visits. Where the tympanic membranes could not be seen due to wax or other obstruction, children have been excluded leaving respective samples of 96, 100, 102 and 89 children.

<table>
<thead>
<tr>
<th>Otoscopic Result</th>
<th>First visit</th>
<th>Second Visit</th>
<th>Third Visit</th>
<th>Fourth result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=96 Number (%)</td>
<td>N=100 Number (%)</td>
<td>N=102 Number (%)</td>
<td>N=89 Number (%)</td>
</tr>
<tr>
<td>Bilateral normal tympanic membrane</td>
<td>16 (16.7)</td>
<td>27 (27.0)</td>
<td>19 (18.6)</td>
<td>12 (13.5)</td>
</tr>
<tr>
<td>Abnormal signs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Unilateral or bilateral dry perforation of tympanic membrane</td>
<td>30 (31.3)</td>
<td>14 (14.0)</td>
<td>16 (15.7)</td>
<td>13 (14.6)</td>
</tr>
<tr>
<td>- Otorrhoea through a tympanic membrane perforation with or without contralateral dry perforation</td>
<td>12 (12.5)</td>
<td>30 (30.0)</td>
<td>29 (28.4)</td>
<td>27 (30.3)</td>
</tr>
<tr>
<td>- Bulging tympanic membrane with no contralateral perforation</td>
<td>10 (10.4)</td>
<td>2 (2.0)</td>
<td>2 (2.0)</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>- Healed tympanic membrane with none of the above</td>
<td>4 (4.2)</td>
<td>6 (6.0)</td>
<td>5 (4.9)</td>
<td>8 (9.0)</td>
</tr>
<tr>
<td>- Retracted tympanic membrane with none of the above</td>
<td>24 (25.0)</td>
<td>21 (21.0)</td>
<td>31 (30.4)</td>
<td>27 (30.3)</td>
</tr>
<tr>
<td>Total abnormal tympanic membranes</td>
<td>80 (83.4)</td>
<td>73 (73.0)</td>
<td>83 (81.4)</td>
<td>77 (86.4)</td>
</tr>
</tbody>
</table>

Figure 2.6 shows the percentage of children screened with perforations of the tympanic membrane (dry perforation) and otorrhoea through tympanic membrane perforations (moist or wet perforation) across all four communities for the four surveys. We note there is a difference in the distribution of wet and dry perforations between the first visit and subsequent visits. This is most likely due to the fact that a different team of doctors was used to do the otoscopic examinations for the first visit compared with the second, third and fourth visits (where the same team was utilised). This may have lead to a misclassification in the type of perforation given the combined rate of wet and dry perforations was the about the same for the four visits.
Based on the data in Figure 2.6, and assuming the results from the first check were aberrant due to delays in checking children in Community B until early November, we concluded that:

- about 45% of children checked had eardrum perforations with about two-thirds of these having otorrhoea through tympanic membrane perforations;
- there has been no decline in the percentage of children with wet and dry perforations over the four surveys; and
- there has been no decline in the percentage of children with wet (about 30%) or dry (about 15%) perforations over the last three surveys.

These results reflect previous ear health findings with respect to the level of underlying middle ear disease in the population. The Flinders University’s School of Medicine in association with the DECS Anangu Educations Services collected otoscopic data for school aged children across the APY Lands between 2003 and 2006. Information relating to the four communities included in this evaluation is summarised in Table 2.3 (below). About 40% of children screened had eardrum perforations, about half of which had active disease with discharging ears.

In comparison, baseline otoscopic findings from the first survey of the Western Australian study found that just over 30% of children screened had eardrum perforations, about one third (9%) of which had active disease in community A and a half (17%) in community B.

Both this evaluation and the Flinders University work confirm a high level of middle ear disease has existed in school-age children in the APY Lands for many years. In contrast, chronic suppurative otitis media is very uncommon in first world countries and a prevalence of over 4% in children is considered to be a massive public health problem.
This then begs the question as to whether it is unrealistic to expect that the establishment of a community swimming pool will have a significant impact on children’s ear disease in what is a relatively short period of time and that we should be surprised that the success of the Western Australian study has not been replicated on this occasion. Indeed, Lehmann (2003) herself acknowledges that their study was the first documented successful preventive intervention in otitis media in the last 15 years.

Table 2.3 Otoscopic data collected by Flinders University 2003-2006.

<table>
<thead>
<tr>
<th>Community</th>
<th>Children assessed 2003-2006</th>
<th>Otoscopically observed ears</th>
<th>Number of children with any perforation² (% of children)</th>
<th>Number of perforations and perforation rate³ (%</th>
<th>Wet perforations (number observed)</th>
<th>Dry perforations (number observed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community B</td>
<td>139</td>
<td>247</td>
<td>37 (26.6%)</td>
<td>53 (21.5%)</td>
<td>33</td>
<td>20</td>
</tr>
<tr>
<td>Community A</td>
<td>44</td>
<td>68</td>
<td>14 (31.8%)</td>
<td>17 (25.0%)</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Community C</td>
<td>58</td>
<td>90</td>
<td>28 (48.3%)</td>
<td>41 (45.6%)</td>
<td>26</td>
<td>15</td>
</tr>
<tr>
<td>Community D⁴</td>
<td>18</td>
<td>33</td>
<td>6 (33.3%)</td>
<td>8 (24.2%)</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>APY Lands⁵</td>
<td>613</td>
<td>1071</td>
<td>237 (38.6%)</td>
<td>352 (32.8%)</td>
<td>187</td>
<td>165</td>
</tr>
</tbody>
</table>

1. In each community some children have been assessed more than once
2. Unilateral or bilateral, wet or dry
3. Expressed as a percentage of observable ears
4. Caution: statistically small sample
5. These data are not independent, that is the communities (Community B, Community A, Community C and Community D) are included in the APY Lands-wide data.

2.2.3 Skin Infections

During the checks we examined the children’s skin for pyoderma (skin sores) and classified those children with skin sores as non-severe if they had 1-4 lesions and severe if they had 5 or more. Table 2.4 and Figure 2.7 (below) provide a summary of the results of the skin health findings across the four communities for the four visits.

Table 2.4 Overall skin health screening results for the four visits.

<table>
<thead>
<tr>
<th>Number of skin sores present</th>
<th>Check 1 N=107 Number (%)</th>
<th>Check 2 N=109 Number (%)</th>
<th>Check 3 N=115 Number (%)</th>
<th>Check 4 N=94 Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>47 (44)</td>
<td>75 (69)</td>
<td>88 (77)</td>
<td>69 (73)</td>
</tr>
<tr>
<td>1-4 (non-severe)</td>
<td>42 (39)</td>
<td>24 (22)</td>
<td>24 (21)</td>
<td>22 (23)</td>
</tr>
<tr>
<td>5+ (severe)</td>
<td>18 (17)</td>
<td>10 (9)</td>
<td>3 (3)</td>
<td>3 (3)</td>
</tr>
</tbody>
</table>
The summary information demonstrates a decline in the number of children with pyoderma over the course of the evaluation. This reduction is most marked between the first and second visits and resulted in children having significantly less pyoderma: On the second visit to communities, 69% of children seen had no sores compared with 44% at the first visit (Z=-3.688, p<0.001), 22% had non-severe pyoderma compared to 39% (Z=2.749, p=0.001), and 9% had severe pyoderma compared with 17% (Z=1.673, p=0.094).

This is a significant finding given that the first check occurred before the installation of two of the pools (i.e. Community A and Community C) and the second check occurred after two of the three pools had opened. Indeed, if we look only at screening results from Community A and Community C (Table 2.5) the change between the first and second visits is even more marked. Children seen at the second the second visit had significantly less pyoderma: 78% had no sores compare with 32% (Z=-5.318, p<0.001), 16% had non-severe pyoderma compared with 43% (Z=3.362, p=0.001), and 6% had severe pyoderma compared with 25% (Z=3.103, p=0.002). This suggests the establishment of the pool could have been a key reason for the reduction in skin infections in these two communities.

Table 2.5: Skin health screening results for Community A & Community C over the four visits.

<table>
<thead>
<tr>
<th>Number of skin sores present</th>
<th>Check 1</th>
<th>Check 2</th>
<th>Check 3</th>
<th>Check 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=63 Number (%)</td>
<td>N=68 Number (%)</td>
<td>N=65 Number (%)</td>
<td>N=39 Number (%)</td>
</tr>
<tr>
<td>0</td>
<td>20 (32)</td>
<td>53 (78)</td>
<td>46 (71)</td>
<td>31 (79)</td>
</tr>
<tr>
<td>1-4 (non-severe)</td>
<td>27 (43)</td>
<td>11 (16)</td>
<td>17 (26)</td>
<td>7 (18)</td>
</tr>
<tr>
<td>5+ (severe)</td>
<td>16 (25)</td>
<td>4 (6)</td>
<td>2 (3)</td>
<td>1 (3)</td>
</tr>
</tbody>
</table>

As part of the examinations, we looked for other skin conditions such as scabies, fungal infections and abscesses, however the numbers were low and sporadic, and largely unhelpful with respect to the overall analysis.
Recommendation 2.

It is recommended decisions to provide swimming pools not be predicated on their impact on ear health in isolation, but that pools be viewed as a component of a broader response to health in remote Indigenous communities.

2.3 SWIMMING POOL OPERATING TIMES

2.3.1 Community A

At the time of the first site visit, in September 2007, the swimming pool was not operating, having been closed since February due to repairs and the unavailability of a pool manager. At our second visit, in April 2008, the pool was operating and had been open for most of the summer. At our third visit, in September 2008, the pool had not yet opened for the summer season due to a technical problem with the Community C Swimming Pool that resulted in all the pools on the APY Lands being temporarily closed. The pool re-commenced operations in early October and was open when we visited in late March 2009.

The operating hours for the Community A swimming pool are summarised in Table 2.6 (below) and it was indicated that no changes had occurred for the 2008-09 season unless there was a full complement of lifeguards to support extended operation.

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday-Friday</th>
<th>Weekend</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00-11:00</td>
<td>Set up, maintenance and testing</td>
<td></td>
</tr>
<tr>
<td>11:00-11:30</td>
<td>CPC mums and infants use the pool between 11:00 and 11:30</td>
<td></td>
</tr>
<tr>
<td>12:00-14:00</td>
<td></td>
<td>Community*</td>
</tr>
<tr>
<td>13:00 – 15:00</td>
<td>Swimming lessons for Community A school students.</td>
<td></td>
</tr>
<tr>
<td>15:00 – 17:00</td>
<td>Community</td>
<td></td>
</tr>
</tbody>
</table>

* It was noted the weekend hours vary depending on the availability of staff, demand in the community and the weather.

Advice provided during the March 2009 site visit and a subsequent discussion with the Pool Manager indicated that:

- CPC use was variable and Ausswim was developing;
- the mothers and baby service had been using the swimming pool, but this had ceased as it was difficult to ensure adequate supervision;
- there was broad utilisation of the swimming pool after school hours.
2.3.2 Community B

The swimming pool at Community B commenced operation prior to our first visit to promote the evaluation in August 2007.

The operating hours for the Community B Swimming Pool for the 2008-09 season were the same as in the 2007-08 season. Children from Fregon, Kenmore Park, Ernabella and Indulkana schools were visiting Community B to use the swimming pool.

Consultations with the community indicated that they were happy with the present opening arrangements, which are summarised in Table 2.7 (below).

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday-Friday</th>
<th>Weekend</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00 - 7:00</td>
<td>School personnel &amp; visitors</td>
<td></td>
</tr>
<tr>
<td>8:00 - 11:00</td>
<td>Set up, maintenance and testing</td>
<td></td>
</tr>
<tr>
<td>11:00 - 13:00</td>
<td>Visiting school children except Friday when CPC mums and infants use the pool between 11:00 and 11:30</td>
<td></td>
</tr>
<tr>
<td>12:00 - 13:00</td>
<td>Community</td>
<td></td>
</tr>
<tr>
<td>14:00 – 15:30</td>
<td>Swimming lessons for Community B and other school students</td>
<td></td>
</tr>
<tr>
<td>15:30 – 18:00</td>
<td>Community and swimming training</td>
<td></td>
</tr>
<tr>
<td>16:30 – 18:00</td>
<td>Community</td>
<td></td>
</tr>
</tbody>
</table>

As was anticipated in the report relating to the September 2008 visit, following a delay caused by technical problems concerning the control of chlorine introduction into the swimming pools water treatment system, the Community B Swimming Pool did not commence operating in the most reason swimming season until October 2008.

Discussions with the Regional Pool Manager indicated that there had been no recurrence of the problems experienced in Community C where a chlorine cell apparently exploded.

2.3.3 Community C

At the time of the first site visit, in September 2007, the swimming pool had not yet opened due to difficulties in recruiting a pool manager. At our second visit, in April 2008, the pool was operating, having opened in December 2007. At our third visit, in September 2008, the swimming pool was not operating due to a number of burst PVC pipes in the plant room. Shortly after the visit it was noted that an explosion had occurred in one of the chlorine cells. This lead to a decision being taken by the APY Lands Swimming Pools Committee to delay opening pools until the problem that had caused the explosion could be identified and rectified. The swimming pool reopened in October 2008.
The schedule for pool hours in Community C is presented in Table 2.8 (below).

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday-Friday</th>
<th>Weekend</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00–10:30</td>
<td>Set up, maintenance and testing</td>
<td></td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>CPC mums and infants.</td>
<td></td>
</tr>
<tr>
<td>11:00-12:00</td>
<td>Years 4-6 each day</td>
<td></td>
</tr>
<tr>
<td>11:00-13:30</td>
<td>Wingalin (Wed), Community D (Tues and Thurs); Murpita (Fri).</td>
<td></td>
</tr>
<tr>
<td>14:15-15:00</td>
<td>Reception to Year 3</td>
<td></td>
</tr>
<tr>
<td>14:30-15:00</td>
<td>Year 7 and over</td>
<td></td>
</tr>
<tr>
<td>12:00 – 14:00</td>
<td>Community</td>
<td></td>
</tr>
<tr>
<td>15:00 – 17:00</td>
<td>Community</td>
<td></td>
</tr>
</tbody>
</table>

Of particular interest it was noted that children from communities across the Western Australian border were now regularly visiting Community C to use the swimming pool.

2.4 STAFFING

The development of budgets to support the operation of each of the swimming pools included a notional staff establishment of:

- a pool manager;
- an assistant pool manager; and
- a team of casual lifeguards.

In early 2008, the swimming pool manager position at Community B was redeveloped as a Regional Pool Manager to support the operation of all three swimming pools.

2.4.1 Recruitment and retention of pool managers

A key issue for the sustainability and operation of swimming pools on the APY lands is availability of the personnel required for their operation. Over the life of the evaluation all three swimming pools have experienced periods when the Pool Manager and Assistant Pool Manager positions have been vacant.

The Community B Pool Manager resigned in late 2007 due to a perceived lack of support and commitment from the school administration at the time. Re structuring this position as a regional position answerable to the Regional Principal facilitated recruitment and the position has remained filled since that time. The incumbent is married to a member of the school staff and therefore has access to accommodation.

In Community A, a pool manager was recruited to commence work in late 2007 as the swimming pool was about to open. The original incumbent was married to a nurse working at the local health clinic, and therefore had access to housing. However, when this nurse resigned the absence of alternative housing meant the pool manager left the community. The position was again recruited to in mid 2008 as was the Assistant Pool manager position. The Pool Manager was recruited to a similar position in a Northern Territory community and left Community A, though the then Assistant Pool Manager was able to take up the role of Pool Manager. Again, the
position was filled by the spouse of a teacher at the Community A School, ensuring that accommodation was available.

In Community C initial recruitment was hampered due to lack of access to accommodation. The local Community Council controlled access to a range of housing but indicated that no housing was available as it was required to support recruitment to other positions in the community. A Pool Manager was recruited and commenced duty when the Community C pool opened but resigned shortly thereafter as a result of dissatisfaction with housing and support. The position was filled and accommodation was agreed with the Council and an Assistant Pool Manager was appointed at the beginning of the 2007-08 season. However, the Pool Manager failed to settle into the role and resigned at the end of 2008 to take up the position of Pool Manager in another community and the Assistant Pool Manager resigned to take up a position with the local CDEP. A temporary Pool Manager was appointed for the final weeks of the 2008-09 season.

Key barriers to recruitment of Pool Managers were:

1) Absence of housing allocated to the Pool Manager position limits the potential applicants to those with a partner who holds another position in the community for which housing is provided. As a result, retention in the position is dependent on the continued employment of a partner and access to housing.

2) The salary offered for pool managers was identified as a second potential barrier. It was noted that the level is comparable to a similar position in suburban Adelaide. Discussions with personnel over the life of the evaluation indicated that this was a disincentive for taking on a position on the APY Lands given the isolation, higher cost of living and lack of accommodation.

Background documentation suggested there was a desire to see Anangu take on the role of Pool Manager, which in the longer term may have reduced the need for housing to be provided with the position. However, it was noted that Anangu were concerned that should a child drown or be seriously injured using the swimming pool they may have to leave their community as a result.

Like the Swimming Pool Manager position in each community, recruiting assistant pool managers has also represented a challenge. In Community C the position has only been filled for a period of three to four months since the pool commenced operating and is currently vacant. The position in Community A was filled at the time of our last visit and had provided an employment option for partners of others with employment and housing in the community. In Community B, the position was shared between two Anangu and it appeared these positions had been relatively stable.

Lack of additional cover for Pool Managers limited their capacity to take leave during the swimming season, a time when their partners may wish to take a holiday. This was identified as another potential barrier to retaining swimming pool managers in the longer term.
2.4.2 Recruitment and training of lifeguards

A key requirement for the operation of each swimming pool has been access to appropriately qualified lifeguards to assist in monitoring the pool. Arrangements have been negotiated to support training in each of the communities with a swimming pool so that training is provided over a week in Adelaide and refresher courses are operated annually on the APY Lands.

The Regional Pool manager, with support from local pool managers promotes participation in Life Guard training. Those interested are identified and advised when the training will occur. Transport to Adelaide and accommodation are provided. It was noted that those who had agreed to undertake training often could not be found when it was time to go to Adelaide.

Each community has trained a pool of lifeguards, though the mobility of the population and other demands on those who have been trained mean there is often only one Life Guard available in a community, and quite often there are none.

It was reported that arrangements had been made for Anangu children attending boarding school in Adelaide to gain their Bronze Medallion so that they were well positioned to take on a Life Guard role when they returned to their community.

The lack of lifeguards in each community limited the capacity for the swimming pools to operate for extended hours. It was noted in Community C that when students from across the Border attended, it was necessary for them to provide a teacher to supervise, otherwise a teacher from the Community C School was required to ensure there was the required level of supervision.

2.4.3 Findings

Recruitment and retention of swimming pool personnel represented the most immediate threat to the sustainable operation of the three swimming pools. The lack of housing designated for the positions limited potential pool managers to partners of those otherwise employed and accommodated in each community. The lack of any additional weighting for salaries also meant that qualified pool managers had no incentive to take positions on the APY Lands, particularly given the higher cost of living and remoteness of the communities.

Training lifeguards will be an ongoing process as the mobility of the population, family and cultural demands limit the number of trained lifeguards available in any community at a given time.

Recommendation 3.

It is recommended that housing be identified or developed for the Pool Manager position each of the APY Lands communities with a swimming pool. Given the shortage of housing in communities, where the incumbent is related to another member of the community who also has access to housing, the designated house would be available for alternative use.
Recommendation 4.

It is recommended that the capacity be maintained in the budget of each swimming pool to support an ongoing training program for Pool Managers and Life Guards to ensure the pool of people able to support the operation of each swimming pool is maintained and expanded.
Summary of the community feedback

During our first and last visits to each of the four communities included in the evaluation, we undertook an oral survey of community members to gain advice regarding their expectations of the swimming pool and then to assess the extent to which these expectations had been achieved. A copy of the oral survey form is provided at Appendix 1.

3.1 EMPLOYMENT AND SWIMMING POOLS

In the course of our first visit to each community, discussions with community members indicated that they were eager to see Anangu employed at the swimming pools. It was noted that Anangu would be much better equipped to keep children in line and stop fighting than non-Anangu. However, there was concern about the potential difficulties an Anangu Pool Manager would experience if a child drowned or was injured at the swimming pool.

The Assistant Pool Manager position reduced the potential risks to Anangu employees and it was noted that both Assistant Pool Managers in Mimil were Anangu. Nevertheless, across the life of the evaluation recruitment of Anangu had been identified as a challenge. Discussions with community members on our final visit indicated there was still a desire within communities for Anangu to take on roles at the swimming pool as lifeguards, Assistant Pool Managers, and with appropriate avenues of responsibility and support the Pool Manager role.

3.2 EXPECTED BENEFITS FOR CHILDREN

Members of each community appeared to be well aware of the potential for swimming pools to contribute to improved health for children, with ears and eyes consistently identified as expected areas for improvement. As the evaluation progressed, and particularly in our final phase of data collection there was a consistent view that:

- children were more active when the swimming pool was open;
- pools provided an alternative to swimming in tanks, rock holes, dams and sewerage ponds was available on hot days;
- children’s skin seemed to improve when the pools were open;
- parents believed it was good for their children to have water washing through their ears; and
- the No School, No Pool policy was a positive encouragement for children to go to school.

3.3 POOL RULES AND OPERATION

We expected that a key requirement for the approach to governing each pool would be effective support in communities for the rules and operation of the swimming pools.
Where the pool was operating at the time of our first visit, there was universal support for the operation of the No School, No Pool Policy, and also for the rules relating to running, fighting, food, drinks, swimwear, showers and supervision.

Where the pool had yet to commence operating there was awareness of the rules that had been established and there was broad community support. However, it was noted at Community C that people had used the Blackstone Pool, where food was available through a kiosk and there was a juke box for music.

On our final visit there was consistent awareness of and support for the range of rules that had been developed to support the operation of the swimming pools.

The only criticism identified across the range of community members interviewed was the limited availability of the swimming pools on weekends and after school. It was noted that availability of lifeguards was a barrier to expanding the operating hours, but there were few suggestions as to how this might be addressed.

### 3.4 BENEFITS ASSOCIATED WITH THE SWIMMING POOL

Although there were hopes that different groups within communities would use the pools on a regular basis, it appeared that outside formal activities organised by the school there had been limited uptake by community groups. In Community A it was noted that the mothers and babies group had used the swimming pool but supervision presented challenges and this activity had declined. Similarly shortly after the Community A pool opened, the local youth worker had the qualifications required to work as a life guard and the youth centre used the pool. Again, changes in personnel had seen this curtailed as there was no capacity to provide a life guard.

At the conclusion of the evaluation it appeared that the school was the major focus for organising and operating events around the swimming pool. However, it was noted that the presence of police and police stations on the APY Lands was developing. Discussions with senior police officers on the APY Lands indicated that the swimming pools were viewed as a key piece of community infrastructure and planning was underway to use them for “blue light” events.

In Community B swimming training and the opportunity to participate in swimming carnivals outside the APY Lands was seen as a major benefit of the swimming pool.

Discussions with a range of community members indicated that an unexpected benefit of the swimming pools had been that children were often tired after swimming, came home and were quiet. Discussion with police indicated that there had not been a documented change in disturbances associated with young people that could be specifically attributed to the swimming pools, but that there was anecdotal evidence children were quieter when the pools were open.

During our initial discussions with community members it was suggested in four discussions that the swimming pools provided a positive development that communities could be proud about. The establishment of the swimming pool in Community C, and regular visits by the school at Blackstone, where people from
Community C in the past had travelled to swim was viewed as a reversal of roles, with Community C now the place everyone wanted to swim.
Conclusions regarding health and social benefits

This Chapter provides a summary of our conclusions regarding the benefits of swimming pools for the three communities on the APY Lands in which they were established.

4.1 HEALTH RELATED BENEFITS

4.1.1 Survey results

Our results regarding positive health outcomes for children following the installation of swimming pools in three communities on the APY Lands have not been as impressive as those seen in the Western Australian study. However, there are a number of factors that may have contributed to the failure to replicate the health improvements seen in the earlier study (Lehmann 2003).

As previously mentioned, we witnessed higher levels of population mobility than that seen in the Western Australian study (see Section 2.2). This has most likely adversely impacted on not only the intervention’s effect but also the underlying cross sectional survey design of the evaluation. In addition, all the pools have not been consistently open over the two years of the evaluation, due to delays in construction and commissioning and short term operational issues. This also will have limited the potential impact of the intervention. Finally, the extremely high burden of underlying infectious and chronic illness in the communities has limited the intervention’s chance of success.

An inherent challenge in undertaking research projects in remote Aboriginal communities is the small participant numbers. The small numbers reduce the power of a study and therefore make it more difficult to achieve significant results.

Added to this are the generally poor overall environmental conditions of the children studied that would negate any health benefits the pools may have had. These include overcrowding in houses, rubbish build-up in living areas, poor nutrition, close contact between dogs and children, limited facilities for the bathing of children and laundering of clothing, bedding and so on.

At this stage, the important message is that there is no one simple solution for the many health problems that occur in remote Aboriginal communities like those on the APY Lands. Pyoderma and chronic ear disease have remained intractably high in these communities for decades. As such we shouldn’t be surprised that this relatively short lived evaluation failed to demonstrate conclusive health outcomes.

Improvements in Aboriginal children’s health, particularly in remote communities, have been remarkably difficult to achieve in the past. For this reason we perhaps should be more surprised (but pleased) with the significant health and social gains of
the Western Australian study. As one editorial on the Western Australian study concluded “We welcome the study…showing improved health outcomes for children after swimming pools were installed in two remote communities in Western Australia – but with guarded optimism.”

For this reason, we suggest there is benefit in continuing to assess the health impact of swimming pools on the childhood population of Community B, Community A and Community C.

To this end we are encouraged by the Federal Department of Health and Ageing’s announcement in late 2008 to fund a further investigative study of the effects of swimming pools on the prevalence of middle ear infections amongst remote Indigenous communities in the APY Lands.

Furthermore, we suggest there would be benefit in prospectively monitoring health and other data (e.g. clinic attendances for skin, middle ear and respiratory infections, juvenile crime information, school attendance, etc) over time and more closely correlating this information against pool opening times and children attendance at the pools, which presents significant challenges in the reliable collection of data on a daily basis.

**Recommendation 5.**

It is recommended that support for the recently initiated monitoring of the ear health of children in APY Land communities be maintained.

**Recommendation 6.**

It is recommended that a small amount of funding be provided to establish a computer based system for determining children who have attend school and are permitted to use the swimming pool so that data about children’s daily use of the swimming pools, at least on school days, can be readily collected, collated and cross referenced with health and hearing data.

**4.2.2 Community feedback**

Many of the community members we interviewed believed that considerable benefits for children and adolescents might be expected from regular respite from heat and boredom, combined with pleasurable physical activity in a safe meeting place where the adverse influences of alcohol and petrol sniffing were banned.

It was noted that community swimming pools were one way of building skills in young people by engaging them in tasks such as supervising and teaching younger swimmers, acting as life-savers, organising competitions etc. This rationale was the basis for the recent decision to provide life saving training to students at Wiltja, a boarding facility in Adelaide for secondary school children from APY Lands communities.

Furthermore it was acknowledged that young people need gathering places, places where they can meet and communicate with other members of the community in a safe and healthy atmosphere. It also provided an alternative to pursuing risky or disruptive activities and behaviours.
Finally, the police commented that the links between teenager boredom and criminal offences are well documented and while they had no local data to support the assertion, they believed the introduction of swimming pools may potentially lead to a reduction in criminal activities.

4.2 HEALTH RELATED HAZARDS

The pools in this evaluation are being used for both educational and recreational functions. As part of the school’s curriculum virtually all children who attend school use the pools, thus benefiting from regular exercise and instruction in swimming and resuscitation techniques, which are important in reducing the rate of drowning in this population.

As was previously reported in the feasibility study for this evaluation, an audit of remote Aboriginal communities reported no deaths due to drowning in any of the 13 remote Aboriginal communities that had a swimming pool. However, deaths had been reported in other remote communities that did not have swimming pools when children swam in other places such as rivers, water holes and dams.

The pools have been well managed by the Department of Education and Children Services. Water quality has been regularly monitored according to government regulations and during the course of the evaluation no outbreaks of infectious disease have occurred. In addition, policies have been put in place to minimise the spread of infectious diseases, such as showering before entering the pool, using swimmer specific bathers and towels that are laundered and stored at the pool and the wearing of appropriate nappies by toddlers.

Accidents of different kinds are prone to happen in swimming pools if appropriate designs, codes of behaviour and supervision measures are not well observed. We have noted the implementation of a number of preventive control measures at the APY Lands pools in order to limit these potential hazards. These include the erection of pool fencing to protect unsupervised children, especially toddlers (design measure), actively discouraging children from performing activities which present inherent risks – running, fighting and diving (behaviour measure), and providing appropriate supervision of children and having a policy prohibiting alcohol consumption at the pool (supervision measure).

The ongoing success of the pools will depend on the continuation of adequate funding and effective management and supervision to maintain the necessary high safety and environmental standards. A pool can turn from a place of fun and health gain to a source of illness and even tragedy if maintenance and supervision are neglected for any reason. For this reason we support a cautious approach being taken with respect to any move to change current funding and governance arrangements of the pool.

In addition, while this short term evaluation has been important, any long term assessment of the value of the swimming pools should not only be based on health improvements but also community participation and sustainability outcomes.
4.3 SOCIAL CAPITAL BENEFITS

The building and maintenance of a swimming pool in a remote community has the potential to develop and promote social capital at a number of levels: within the local community, between the schools and the community and between Governments and the community.

There was no evidence to suggest that the swimming pools had expanded social capital within the local Anangu communities, with the exception of Community B where swimming training and the opportunity to compete in swimming carnivals in other communities had seen a network of children and parents interested in swimming develop and mobilise to participate in swimming carnivals.

The swimming pools had provided a clear avenue for improved links to develop between schools and local community councils. It was noted that at the commencement of the evaluation there appeared to be a relatively poor relationship between the school and local council in one community. However, by the time of our final visit it was noted that both the school and community council were working more closely to ensure the swimming pool remained viable and that support was available for recruiting and accommodating a Swimming Pool Manager.

Finally, it appeared that the development of the swimming pools had provided a mechanism to support ongoing dialogue within government and across departments about the operation of the swimming pools. The close collaboration that had evolved between departments to ensure the swimming pools operated consistently and within the required regulations represented a positive model for interdepartmental collaboration on the APY Lands.
Factors affecting sustainability

The establishment of swimming pools represents a major investment. This investment can only be justified if the swimming pools are located in a broader system that supports their sustainable operation from year to year. This Chapter outlines our findings regarding the sustainability of the swimming pools established on the APY Lands in South Australia.

5.1 GOVERNANCE

5.1.1 Local Swimming Pool Committees

Over the life of the evaluation, the role and activity of the swimming pool committees in Community A, Community B and Community C had remained fairly modest. The Committee in Community B had been in operation the longest, and had developed relatively informal processes for canvassing and resolving issues related to the management of the swimming pool. The Committee in Community A had met infrequently and usually in response to demands outside the community. The Committee in Community C met with support from the regional coordinator appointed by the Office of Indigenous Policy Coordination (OIPC).

There was limited knowledge within communities about the membership of the swimming pool committees, the frequency of meetings or their deliberations. This aside there appeared to be broad support within the community for the rules governing the operation of swimming pools. Furthermore, it was evident that where individuals or families had concerns, they were able to have these matters raised, though generally in an informal manner.

This appeared to support the view that the use of informal networks to access members of the swimming pool committees effectively gauged community concerns and issues and contributed to the development of broad consensus.

5.1.2 Department of Education and Children Services

It was evident that the Department of Education and Children Services had ultimate responsibility for the operation of the swimming pools. While it received funding through the Department of Premier and Cabinet to meet the recurrent costs of operating the swimming pools it ultimately held responsibility for the local management of the swimming pools and coordinating the local swimming pool management committees.

The development of the Regional Pool Manager position provided a framework for supporting consistency across the three swimming pools and also an avenue for support in situations where a pool experienced difficulties with recruitment or operational processes.
Recommendation 7.

It is recommended that development of pools in remote Indigenous communities occur under the auspices of the local school to ensure that the ongoing operation and maintenance of the pool benefits from the administrative and technical capacity of the relevant Department of Education.

5.1.3 APY Lands Swimming Pool Committee

An inter-department committee was established through the South Australian Department of Premier and Cabinet to oversee the planning, construction, commissioning and operation of the swimming pools at Community A, Community B and Community C.

The Committee had representation from:

- the Office of Aboriginal Affairs and Reconciliation within the Department of Premier and Cabinet;
- Department of Education and Children Services;
- South Australian Department of Health;
- Office of Indigenous Policy Coordination;
- South Australian Department of Further Education, Employment, Science and Technology; and
- South Australian Department of Administration and Information Services.

The Committee met about every six weeks to monitor the operations of the swimming pools and discuss emerging issues relating to the pools. It was noted that this arrangement provided an avenue for potentially complex issues to be identified, responsibility for resolution to be allocated and for support or collaboration to be arranged quickly across departments.

Recommendation 8.

It is recommended that where governments seek to establish swimming pools in remote Indigenous communities, and particularly where more than one community is involved, that a formal mechanism to bring the range of affected departments together be established at least for the first five years of the pools operation to ensure that their operation is supported by all agencies.

5.1.4 Findings

It appeared that the swimming pool committee established in each community had a relatively limited formal role and that meetings were held infrequently. However, it was clear that the informal operation of the committees and the link they provided between the Department of Education and Children Services, pool managers and the community were effective in facilitating the resolution of many of the issues relating to the swimming pools.

As a member of the local swimming pool committees, and employer of all personnel involved in the swimming pools, the Department of Education and Children Services continued to play the key role in managing and operating the swimming pools. In particular the Department ensured that the essential requirements for the pools to
operate were in place and responded to issues that arose, such as recruiting local personnel or fixing failed equipment.

The APY Swimming Pools Committee played an active role in ensuring ongoing collaboration between government agencies and support for the Department of Education and Children Services in operating the swimming pools.

Our understanding has been that the intention was for the management of the pools to be handed over to the community in order to maximise community involvement and control. While four years was initially proposed as the timeframe for this transition to occur there does not appear to be the capacity in any of the communities at this point to assume the ongoing management of a swimming pool.

Given all the challenges in maintaining a swimming pool in a remote setting there is a strong argument to continue with the current arrangements whereby the government manages the pool with meaningful community involvement (e.g. swimming pool committee, Anangu employment, etc).

5.2 MANAGEMENT

5.2.1 Pool management

Early on in the evaluation the Department of Education and Children Services changed the management structure for the swimming pools. A Regional Pool Manager position was established to oversee all three swimming pools. This position was linked to Community B’s Pool Manager position. The regional approach was designed to support less experienced local Pool Managers at the individual communities, including providing back up when required, coordinate training (e.g. life saving, first aid, water quality testing, etc.) across the three pools and develop consistent procedures and operating standards.

Attracting and retaining the skilled staff required to manage and supervise the pool (i.e. Pool Managers, Assistant Pool Managers and lifeguards) has presented an ongoing challenge to sustainable pool operations. Indeed, we believe this will be key issue for the sustainability of the pools, with Community C swimming pool providing the clearest example of the challenges faced.

Difficulties recruiting and retaining pool staff at Community C have resulted in multiple unplanned pool closures. There was an initial delay in the pool opening because of difficulties in attracting a Pool Manager. This was largely due to unavailability of housing for that person. The person eventually recruited to the position left after about 12 months having accepted a similar position in another community. At the time he commented that the level of remuneration provided no weighting for the isolated location or the demands of the position. Since then the permanent position has been vacant and a temporary manager has enabled the pool to remain open during the recent swimming season.

Similarly, there have been difficulties in attracting an Assistant Pool Manager. After a long while a person in the community was sourced to fill the position but failed to
take on the role because he received a better job offer. Since then the position has remained vacant.

While three lifeguards had been trained, none have remained in the community. This has created difficulties regarding pool supervision. Operation outside school hours has been reliant on teacher’s spouses providing the required supervision and life saving support.

Over the life of the evaluation a number of the pool management staff have been husbands of teachers at the local school (e.g. Community B and Community A). While probably unintentional this has proved to be an innovative recruitment strategy given the difficulties in finding appropriate individuals to do the job. Also, it fortuitously overcame the need to find additional housing, which had been an obstacle in the retention of the pool manager in one of the communities.

The experience of the Community A pool has been insightful with respect to pool sustainability. The difficulties in recruiting a pool manager in Community A had contributed to the pool being closed in 2007. It appeared the establishment of the Regional Swimming Pool Manager position and the recruitment of a number of teachers’ partners as part time Pool Managers had allowed the Community A swimming pool to operate reliably from December 2007 onwards.

Funding to support the operation of each of the three swimming pools had been designed to allow employment of the Pool Manager for the whole year. This was to ensure that the swimming pools were effectively maintained throughout the off-season. Discussions with the Regional Pool Manager indicated that maintaining motivation amongst the Pool Managers was challenging over the off-season. For this reason consideration should be given to integrating the Pool Manager’s position in to the general operations of the school so as to establish a position that has both school and pool responsibilities.

5.2.2 Training and accreditation of personnel

Due to the remoteness of the APY Lands, training pool personnel appeared to be an ongoing challenge exacerbated by the relatively high turnover of staff.

A collaborative relationship had developed with the Royal Life Saving Society and training had been designed to specifically meet the needs of the APY lands. This arrangement saw five days of initial training undertaken in Adelaide for personnel from each of the three communities followed by annual refresher courses in Community A.

More recently a decision had been taken to provide life saving training to students at Wiltja, a boarding facility in Adelaide for secondary school children from APY Lands communities. It was hoped that this would expand the pool of potential lifeguards.

Training Pool Managers initially occurred outside the APY Lands, usually in Adelaide, followed by the gaining of practical experience at the pool where the Pool Manager resided. Components of the accreditation process were eventually delivered internally but confirmed externally, increasing the ease with which positions could be
5.2.3 Anangu employment

At the beginning of the evaluation community members had expressed the hope that the swimming pools would provide employment opportunities for Anangu. However the recruitment of Anangu to pool positions had proved difficult.

Initial advice was that it would be difficult for an Anangu to take on the role of the Local Pool Manager, as any serious injury or the drowning of a child may require the person to leave their community. Over the evaluation period this view has been confirmed with no Anangu taking on the Pool Manager’s role. As a result, Swimming Pool Managers have been non-Anangu either moving to the community with a spouse who had employment, or in one case specifically to take up the role of swimming pool manager.

Over the course of the evaluation there have been ongoing efforts to recruit Anangu to take on casual lifeguard positions and small groups in each of the three communities had completed training. However experience had shown attendance at training was often poor because competing obligations limited participation and those who had completed training as lifeguards more often than not were unavailable to work because they had moved outside the community or were otherwise engaged (e.g. 2 out of 2 lifeguards in Community C and 2 out of 3 in Community A had left or were usually unavailable).

The difficulties in recruiting and retaining Anangu lifeguards placed additional pressure on the pool managers and teaching staff to ensure the pool was open and meant that the pool had to at times close because there was insufficient staff to effectively supervise the pool.

5.2.4 Findings

Ongoing sustainability of the three swimming pools will rely on the recruitment and retention of the personnel required for the pools to operate effectively. Access to housing and the remuneration available to swimming pool managers remained a potential barrier to recruitment.

The development of assistant pool managers and lifeguards appeared to require a long term commitment to training so that a pool of qualified individuals was eventually available in communities at all times.

5.3 OPERATIONS

5.3.1 Budget

The South Australian Government has allocated $160,000 per annum to each of the pools to cover staff salaries and pool operating costs. External funding was viewed as crucial to the viability of the swimming pools given no individual entry charge was imposed and the communities themselves had limited, if any, avenues to source the required operating funds.
The governments’ commitment was to funding for an initial period of four years, potentially ending in October 2009. However, during the course of the evaluation there appeared to be broad acknowledgement that external funding would need to be continued given the communities’ capacity for self-sufficiency remained low.

Of interest one of the Western Australian pools introduced a one dollar entry fee in order to subsidise the pool’s running costs. This resulted in a fall in pool attendance as the fee was too much for most families. Consequently, the levy was dropped.

5.3.2 Policies

As a consequence of the regional management structure the operational policies for all three pools were largely identical to those of the Community B swimming pool. Clearly, this was a desirable approach as it was efficient, negating any duplication of effort, as well as ensuring a consistent understanding of pool policies, procedures and rules across the APY Lands.

5.3.3 Plant

The automatic water treatment system at each of the three swimming pools was identified as an ongoing issue by the APY Lands Swimming Pools Committee. It was reported that the electronic system failed to maintain the correct chemical balance and that personnel operating pools had taken to turning the system off for periods, hand dosing chemicals and then restarting the systems, despite a fully automated system being a regulatory requirement.

Following the explosion of a chlorine cell at Community C, the operating systems for the swimming pools were replaced, though it is unclear if these revisions have corrected the difficulties that had been experienced.

Examination of the plant rooms at each pool suggested that an ongoing investment for maintenance will be required. In particular, the plant room at the Community A Pool experienced considerable corrosion, which we were advised was due to poor ventilation and a build up of fumes from hydrochloric acid.

5.3.4 Findings

The investment in swimming pools represented a major outlay by governments. The sustained operation of the swimming pools relied on access to the required staff, which presented the greatest challenge for each community. The establishment of the Regional Pool Manager position appeared to go some way to reducing the risks that short term instability in staffing may undermine sustainability. However, longer term strategies to address housing and salary levels for positions will be required if the swimming pools and the staffing structures that support them are to be sustained.

A key strength of the current arrangements on the APY Lands is the management of the swimming pools by DECS. Although there is an attractive philosophical argument for community control of the swimming pools, pursuing this direction would require certainty that there is the organisational infrastructure, expertise and stability in each community for this to occur. The required infrastructure and
expertise did not appear to be present in the communities over the course of the evaluation and is likely to take many years to develop.

Ongoing support and involvement from the APY Lands Swimming Pool Committee will be required if the issues associated with the design and construction of each pool are to be rectified, particularly in relation to the water treatment plant and systems.

**Recommendation 9.**

It is recommended that the operation of the swimming pools on the APY Lands remain within the responsibility of DECS and that the funding to support the ongoing operation of the pools through DECS be maintained with indexation to ensure the capacity to effectively administer the pools is retained.


Appendix 1 Oral Survey