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# Annual Visits to PWG Managed Parks in New South Wales

July 2015

- Prepared for -

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#### 1. EXECUTIVE SUMMARY

#### 1.1 Background

In January 2008, the then NSW Department of Environment and Climate Change (DECC), commissioned Roy Morgan Research to conduct a thirteen-wave telephone survey to estimate annual visits to NSW PWG managed Parks for the 2008 year. In order to determine the best approach to provide a *reliable* estimate of the number of park visits, Roy Morgan Research undertook a pilot survey in September-October 2007. The resultant approach recommended from the pilot was confirmed and approved by DECC. Roy Morgan Research was recommissioned to repeat the study in 2010 and has since been commissioned to conduct the study in 2012, 2014 and 2016 by the Office of Environment & Heritage (OEH) which continues the project from DECC. This report provides a summary from the 2014 survey, consisting of thirteen waves, conducted every 4 weeks throughout 2014.

Interviewing was conducted by Computer Assisted Telephone Interviewing (CATI) and eligible respondents to the survey had to be aged 18+ years living in Sydney, Remainder NSW, ACT, Melbourne, Remainder VIC, Brisbane, and Remainder Southern QLD. The sampling frame was modified for the 2012 and 2014 surveys, using Random Digit Dialling (RDD) for both landline and mobile phone numbers, as opposed to the Electronic White Pages (EWP) for the 2008 and 2010 surveys<sup>1</sup>. Quotas were set for age by sex by region to ensure representativeness across those areas. A total of 1,200 interviews were conducted each wave, with the overall sample size after wave thirteen in 2014 being 15,656 people.

The term <u>visitation</u><sup>2</sup> used throughout this report is defined as the number of <u>visits</u> made to PWG managed parks, not the number of <u>visitors</u> to these parks (i.e. a visitor can make more than one visit to PWG parks in any given 4-week period).

#### 1.2 Approach to Calculating and Improving the Park Visitation Estimate

As was the case for the 2008, 2010 and 2012 surveys, in calculating the 2014 annual PWG park visitation estimate a *robust* approach was undertaken. It was agreed that it was better to derive an estimate that is likely to err on the side of caution, than derive an estimate that could be unduly inflated. The main methods used to ensure that an informative estimate was derived included:

• Limiting survey scope to regions where visitation to NSW was likely and significantly large, in order to strengthen the confidence limit of the estimate;

<sup>&</sup>lt;sup>1</sup> 2008 and 2010 survey estimates have now been adjusted to account for the change in the sampling frame.

<sup>&</sup>lt;sup>2</sup> Visitation calculation =  $[\Sigma(\text{number of adult visits to a PWG park obtained for each respondent multiplied by their individual$ *population* $survey weight for all 13 survey waves) + <math>\Sigma(\text{number of child visits to a PWG park for each household multiplied by their$ *household*survey weight for all thirteen survey waves)] x non-response error adjustment.

- Conducting the survey as a 'stand-alone' survey rather than 'piggy-backing' questions on an Omnibus style survey, in order to improve response rates and reduce non-response bias, thereby improving the reliability of the estimate;
- Expanding the scope of the survey using an RDD sampling approach to include responses from new numbers, silent numbers and households that only have mobile phones in order to ensure that the entire population has an opportunity to complete the survey;
- Limiting recall of visitation to 'within the last 4 weeks' to improve accuracy;
- Asking respondents to *name* the park they visited, ensuring that the park visited could be categorised as being either PWG or non-PWG managed, thereby minimising the inclusion of out-of-scope visits;
- Posing a series of questions to confirm park type when the respondent could not recall the park name to again minimise out-of-scopes;
- Including confirmation questions for high numbers of visits and high numbers of children visiting to ensure that potential outliers were valid; and
- Excluding any children over and above the number in the household, if an adult in the respondent's household was *not* responsible for the care of these children on that visit, so as to minimise the likelihood of double-counting child visits.

Furthermore, in order to ensure that the final PWG park annual visitation estimate obtained was as accurate as possible, and that survey estimates were comparable over time, procedures were put in place to ensure that the quality of survey data obtained improved as the survey progressed (i.e. from wave to wave). Such quality improvement practices included:

- 1. Updating lists of park name aliases at the end of each wave to improve park categorisation;
- 2. Adding names of non-PWG parks regularly visited to assist in excluding parks not in-scope for the survey;
- 3. Including the actual date four weeks prior to the date of interview in the questionnaire to minimise the effects of telescoping the tendency for respondents to over-estimate the time period when they last visited a park (e.g. respondents will name a park they visited 5 weeks ago when they were asked to name a park they visited in the last 4 weeks);
- 4. A rigorous post-field 'cleaning' phase of any responses where a park 'type' could not be assigned at the time of interview;
- 5. Referring parks that could not be classified to OEH for a final decision on categorisation;

- 6. Calculating non-response error to enable potential adjustment of the estimate to account for differing rates of park visitation by respondents and non-respondents to ensure that the final visitation estimate reflects actual 'real world' visits.; and
- 7. Re-calculating the 2008 and 2010 visitation estimates to account for the sampling frame change from EWP to RDD.

After thirteen waves of the 2014 survey, the following results instil great confidence in the visitation estimate obtained:

• As was the case in previous surveys, nine in ten respondents in 2014 (90%) could spontaneously name the park they visited or recalled the park name once prompted from a list of associated towns within close proximity to each park (Fig. A). Provision of park name enabled accurate categorisation of the park to the PWG or non-PWG categories. Similar surveys only ask respondents to name the *type* of park visited. 2007 pilot survey results showed that a significant 50% of respondents categorised NSW park type incorrectly, so minimising the amount of self-categorisation has strengthened the *accuracy* of the visitation estimate. For this 2014 survey, only 10% of responses were categorised as a PWG or non-PWG by park type (8% allocated by park type; 2% imputed, as the respondent was uncertain of park type).

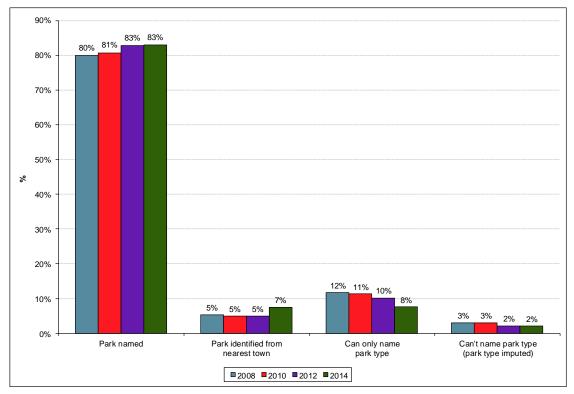


Figure A: Allocation of Park Type by Method<sup>1</sup>

1. If respondents could not provide the name of the park they visited, or the name of the park could not be ascertained from the town claimed to be nearest to that park, they were then asked to classify the park as being a National Park, State Conservation Area or Nature Reserve or not (i.e. the *type* of park visited). Where the type park of visited could not be ascertained from a respondent's survey responses, park type was imputed based on the overall ratio of PWG parks named to Non-PWG parks named for all survey respondents visiting a park in the last 4 weeks (the ratio used was 3:1 PWG to non-PWG).

• Response rates for this survey in 2014 were over 50% higher than that of a comparable omnibus style survey conducted at the same time as each wave (12.62% c.f. 8.18%). Similar response rate differences were found for the 2008, 2010 and 2012 surveys, demonstrating that conducting the survey via a stand-alone survey methodology is more efficient than using a shared-cost methodology. Consequently, the survey estimate is more reliable.

#### 1.3 PWG Park Visitation

#### Annual PWG Park Visitation

Survey results from waves 1-13, along with estimation of visitation for non-surveyed regions (excluding international visitors) provides the following annual PWG Park visitation estimates for 2008 to 2014 (Figure B). The 2014 PWG park visitation estimate is the *highest* so far recorded (39.2m visits). Adult visits comprise 80.34% of all visits in 2014 (80.98 - 2012; 80.55% - 2010; 82.07% - 2008).

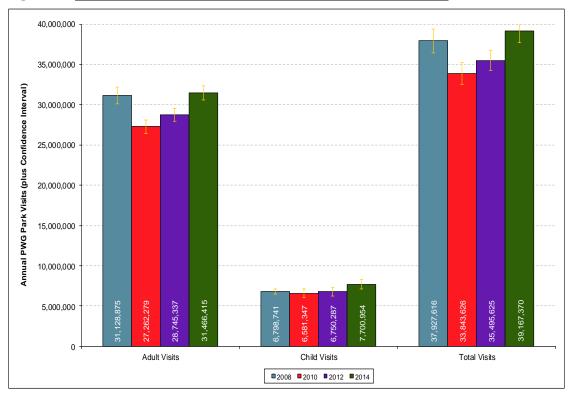


Figure B: Final Annual PWG Park Visitation Estimate - by Year

The confidence interval for the *survey* estimates in 2014 is  $\pm 3.74\%$  of the total estimate ( $\pm 2.75\%$  for adults;  $\pm 7.78\%$  for children). Taking into account the 'implied' error for areas of Australia that were *not surveyed*, the total annual visitation estimate based on thirteen waves in 2014 varies from 37,702,510 to 40,632,229. This overall margin of error ( $\pm 3.85$ ) is well within the parameters required by OEH ( $\pm 8\%$  at the 95% confidence level). It also means that, when taking into account the margin of error for previous surveys, the 2014

annual visitation estimate is significantly higher than the 2010 and 2012 estimates, but is not significantly different to the 2008 estimate.

# Potential Factors influencing PWG Park Visits

Whilst not exhaustive, the following factors have been investigated to identify whether there is any relationship between them and PWG park visits:

#### 1. Visitation to NSW:

- Tourism Research Australia<sup>1</sup> data for both overnight visitors and visitor nights in NSW fell from 2008 to 2010 and then re-bounded in 2012, reaching its highest level in 2014. The trend was evident for both intrastate overnight visits within NSW and interstate overnight visits to NSW. This visitation pattern closely matches the PWG park visitation pattern.
- Day trip visitors in NSW increased steadily from 2008 to 2010 then declined in 2014<sup>2</sup>. With the majority of trips to PWG parks being day trips, the visitation pattern for single trips to parks should closely match day trip visitors to NSW. This is in fact the case as can be seen in Figure C;

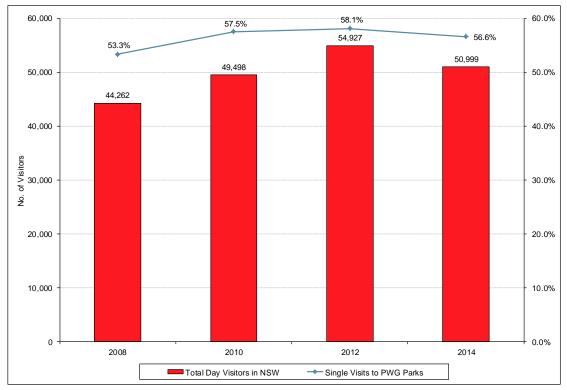


Figure C: Single Visits<sup>3</sup> to PWG Parks versus Day Visitors in NSW

Estimated number of single adult visits from survey estimates is as follows: 16,267,105 - 2008; 15,461,502 - 2010; 16,360,105 - 2012; 17,549,950. Day Visitor Source: National Visitor Survey - Tourism Research Australia (N.B. Number of day visits is not provided by TRA).

<sup>&</sup>lt;sup>1, 2</sup> Tourism Research Australia – National Visitor Survey.

• The number of visitors to PWG parks may be influenced by visitor patterns for overnight visitation. The estimate for overnight visits to NSW shows that the number of overnight visitors in 2012 exceeded the number of overnight visitors in 2008, with 2014 overnight visitors being the highest recorded over the six year survey period. However, in terms of PWG park visits the 2012 estimate did not exceed the 2008 estimate, whilst the 2014 estimate is the highest yet recorded.

Whilst this survey was not designed to calculate the number of annual visitors to PWG parks, using the average number of visits per adult to PWG parks, a *proxy* for the number of adult visitors can be calculated. In 2008 the proxy number of adult visits to PWG parks was 10.4m; in 2010 it was 9.5m; in 2012 it was 10.5m and in 2014 it was 10.8m. Based on this calculation it can be inferred that the number of visitors to PWG parks does in fact mirror overnight visitation in NSW.

This result also shows that from 2008 to 2012, the average number of adult visits to PWG parks was declining (2.95 visits - 2008; 2.91 visits - 2010; 2.67 visits - 2012). The main cause for this decline is the fall in the number of multiple visits taken to parks by 25-34 year old – Generation Y. In 2014 average visits increased to 2.87 (but still lower than 2008 and 2010 averages) and the proportion of multiple visits to PWG parks from Generation Y increased (but not to 2008 and 2010 levels). It would appear that to improve the number of average PWG parks visited, encouragements to attract multiple visits from Generation Y's is still worthy of consideration;

From the results provided above, it does appear that visitation to PWG parks generally mirrors visitation to NSW.

#### 2. Visitation to Overseas Destinations:

• Tourism Research Australia<sup>1</sup> data shows that Australians visiting overseas has steadily increased from 5.25m visitors in 2008 to 8.1m in 2014, representing 54% growth in six years. A competitive Australian dollar makes overseas travel more attractive. As a result Australians either trade-off domestic travel for overseas travel or shorten their domestic trips in order to travel overseas.

Mapping Australian dollar exchange rates against PWG park visitation shows that exchange rates were weak against other currencies in 2008 when park visitation was high. Similarly, exchange rates were stronger in 2010 and 2012 when PWG park visitation was not as high. In 2014 exchange rates were similar to 2012 levels, yet park visitation was high.

More in-depth analysis shows that PWG park visitation generally peaks over summer when people take extended holidays and declines over winter when

<sup>&</sup>lt;sup>1</sup> Tourism Research Australia – National Visitor Survey.

domestic weather is more inclement and travel overseas is more enticing (i.e. for summer in the northern hemisphere).

Furthermore, since 2008 visitor nights in NSW have increased by 7.2%, while the number of overnight visitors has increased by 11.8% over the same period. This indicates that overnight visitors are staying for shorter periods when going on overnight visits, implying that the trade-off to travel overseas is more likely resulting in a reduction in the number of nights spent visiting domestically rather than trading off these visits completely to travel overseas.

This confirms the result seen in average adult visits to NSW parks declining from 2008 to 2012 and not as high as in 2008 and 2010 in 2014 – the impact of overseas travel is potentially reducing the number of trips taken to parks.

# 3. Economic Impacts:

• Lower interest rates are likely to provide more disposable income to travel, as less money needs to be spent on mortgage and loan repayments. Mapping PWG park visitation against interest rates (i.e. cash rate) shows that in 2010 rises in interest rates coincided with lower PWG park visitation, while falls in interest rates in 2012 and 2014 tended to coincide with higher levels of park visitation. However, interest rates were high in 2008 when park visitation was also high, so it would appear that a linkage between interest rates and visitation may not be as strong would be expected.

#### 4. Weather Effects:

- Mapping PWG park visitation against temperature divergence<sup>1</sup> from the average shows a direct correlation between visitation and temperature. When temperatures are above the average visitation increases and when temperatures are below the average visitation decreases. The 2014 visitation estimate by month differs slightly from previous years, as from March to June visitation tended to increase when temperature was decreasing;
- Similarly when rainfall divergence from the average is mapped against PWG park visitation, an opposing movement emerges visitation increases when rainfall falls below the average and vice versa. However, this rainfall-visitation relationship does not appear to be as strong in 2012, compared with other years.

<sup>&</sup>lt;sup>1</sup> Bureau of Meteorology – Climate Data Online.

<sup>•</sup> Significant and sustained weather events are likely to have an impact on park visitation. 2008 was a dry year and visitation was high. 2010 was the third wettest

on record and visitation was low. 2012 started off cool and wet and ended warm and dry. As a result, PWG park visitation was low early in 2012 and high toward the end. 2014 was the warmest year on record and the direct since 2006, resulting in high visitation until winter. Of course local weather events will impact on local visitation. For example, floods and rains as a result of cyclones impacted on communities in 2010, which would have impacted on park visits.

It is clear that the combined effects of domestic visits to NSW, overseas visitation, economic and weather all impact on PWG park visitation. At the end of the 2016 survey, trend analysis will be undertaken to identify any definitive linkages between these factors and park visitation.

# Annual Visitation by Region of Origin

Intrastate visitation comprised 90.53% of all visits in 2014 (88.59% - 2012; 88.27% - 2010; 90.77% - 2008), while interstate visitation comprised 9.47%, of visits (11.41% - 2012; 11.73% - 2010; 9.23% - 2008) (Table A).

Final Adjusted Annual PWG	Adult V	isits	Child \	/isits	Total Visits		
Park Visitation Estimate 2014 <sup>1</sup>	No.	%	No.	%	No.	%	
Sydney	18,565,768	59.00%	4,840,104	62.85%	23,405,872	59.76%	
Remainder NSW	9,819,573	31.21%	2,232,473	28.99%	12,052,045	30.77%	
ACT	472,802	1.50%	120,097	1.56%	592,899	1.51%	
Melbourne	592,299	1.88%	156,027	2.03%	748,326	1.91%	
Remainder VIC	393,032	1.25%	81,458	1.06%	474,490	1.21%	
Brisbane	828,945	2.63%	118,630	1.54%	947,575	2.42%	
Remainder SE QLD	334,561	1.06%	51,671	0.67%	386,232	0.99%	
Remainder QLD	55,985	0.18%	12,246	0.16%	68,231	0.17%	
SA	163,681	0.52%	35,802	0.46%	199,484	0.51%	
WA	145,346	0.46%	31,792	0.41%	177,138	0.45%	
TAS	40,694	0.13%	8,901	0.12%	49,594	0.13%	
NT	53,731	0.17%	11,753	0.15%	65,483	0.17%	
Total Australia 2014	31,466,415	100.00%	7,700,954	100.00%	39,167,370	100.00%	
Margin of Error <sup>2</sup>	±2.84%	n/a	±7.99%	n/a	±3.85%	n/a	
Total Australia 2014	28,745,337	100.00%	6,750,287	100.00%	35,495,625	100.00%	
Margin of Error <sup>2</sup>	±2.90%	n/a	±8.02%	n/a	±3.87%	n/a	
Total Australia 2010	27,262,279	100.00%	6,581,347	100.00%	33,843,626	100.00%	
Margin of Error <sup>2</sup>	±3.18%	n/a	±7.44%	n/a	±4.00%	n/a	
Total Australia 2008	31,128,875	100.00%	6,798,741	100.00%	37,927,616	100.00%	
Margin of Error <sup>2</sup>	±3.34%	n/a	±4.40%	n/a	±3.54%	n/a	

<sup>1.</sup> Excludes visits by International visitors.

<sup>2.</sup> Margin of error based on the 95% confidence level for survey regions only.

#### PWG Park Visitation by Wave

Figure D shows the seasonality of visitation wave by wave for survey estimates only (as wave by wave visitation for non-survey regions cannot be estimated) and includes the margin of error for each wave.

Please note that wave data has been aligned to follow a calendar year, as the 2008, 2010, 2012 and 2014 surveys each commenced at different times of the year. For example, wave 1 in 2010, wave 12 in 2008-09, wave 11 in 2012-13 and wave 1 in 2013-14 all correspond to the visitation period 6 December-6 January.

Overall visitation to PWG parks in 2010 was higher than in 2008 during the winter months (waves 6-9), as well as in January (wave 2). However, 2010 visitation was markedly lower than in 2008 in late summer-early autumn (waves 3-5) and in early summer (waves 12-13).

PWG park visitation in 2012 was significantly higher than in other years in December-January and significantly lower in February-April and June-July. In fact, the high level of visitation in December-January 2012-13 was a primary factor in the annual 2012 estimate being higher than the 2010 estimate.

In 2014 PWG park visitation was significantly higher than in all other years in May (wave 6). Visitation in 2014 was significantly higher than 2008 in December and January (waves 1 and 2), but significantly lower than in 2008 for August-September (wave 10). 2014 visitation was significantly higher than 2010 levels in December (wave 1) and October-November (waves 12 and 13). 2014 visitation was significantly higher than 2012 levels in March (wave 4) and October (wave 12), but was significantly lower in July-August (wave 9).

As was the case in previous years annual and wave by wave PWG park visitation patterns are mainly determined by adult visitation patterns. However, the overall annual child visitation estimate is the highest on record in 2014 (7.7m visits), representing 20% of all PWG park visits.

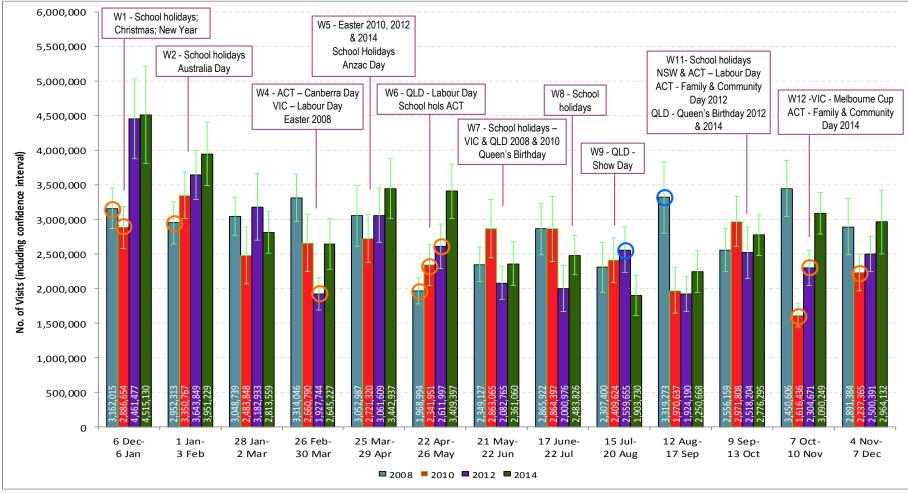


Figure D: Adjusted Annual Visitation Survey Estimate by Wave<sup>1</sup>

Significantly lower than 2014 estimate

Significantly higher than 2014 estimate

<sup>1.</sup> Results provided in the graph only include visitation for regions *surveyed*, so the overall visitation estimate shown above is 38,607,440 for 2014; 34,780,462 for 2012; 33,378,662 for 2010; and 37,238,965 for 2008 (i.e. the additional 559,930 visits in 2014; 715,163 visits in 2012; 464,964 visits in 2010; and 688,651 visits in 2008 are estimated for regions of Australia not included in the survey).

#### PWG Park Visitation by PWG Branch

In 2013 PWG Branch and Region definitions were re-defined by OEH. Three Branches now exist instead of the four defined in 2009 for the 2010 survey. In relation to absolute numbers of visits, Figure E shows that Coastal Branch visits, which have been in decline from 2008 to 2012, returned to 2008 levels in 2014 (15.5m visits). Visits to parks in the Western Branch have increased marginally over time, attaining their highest number recorded in 2014 – 1.5m visits. However, the main reason the record PWG park visitation numbers in 2014 is due to the increase in visitation to parks in the Metro and Mountains Branch in 2014 (20.2m visits). This increase in visitation can be primarily attributed to increases in visitation to Lane Cove, Sydney Harbour and Blue Mountains National Parks.

When comparing proportional contribution to annual PWG park visits located in the three PWG Branches, the contribution to overall visits from parks in the Metro and Mountains Branch increased from 47% in 2008 and 2010 to 50% in 2012 and now to 52% in 2014. Conversely, the contribution to overall visits from parks in the Coastal Branch fell from 42% in 2008 and 2010 to 37% in 2012, but rebounded to 40% in 2014. As was the case in 2010 and 2012, the contribution to visitation from parks in the Western Branch was 4% of all visits (3% in 2008).

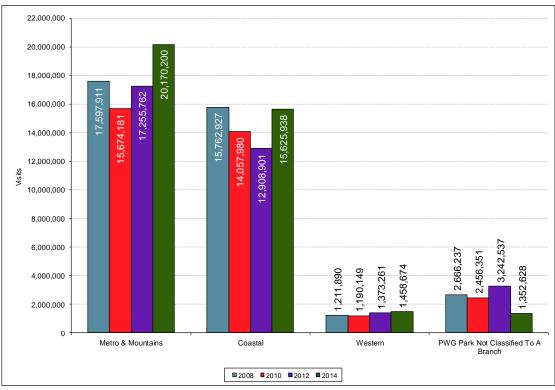


Figure E: PWG Annual Visitation by PWG Branch<sup>1</sup>

1. If respondents could not provide the name of the park they visited, or the name of the park could not be ascertained from the town claimed to be nearest to that park, they were then asked to classify the park as being PWG managed or not. If they classified the park as being PWG managed, the park could not be categorised to a PWG branch or PWG region because the actual location of the park could not be determined. Respondents that were imputed as visiting a PWG park also fell into this category.

#### PWG Park Visitation by PWG Region

It should be noted that PWG regions are subject to significant error and so any interpretation of visitation should be treated with caution. In 2014, the highest numbers of visits (so far recorded) were observed for the Metro South West, Blue Mountains, Northern Rivers, Lower North Coast, Northern, Northern Plains, Western Rivers and Far West Regions. The lowest level of visitation yet recorded was observed for the Northern Tablelands Region. Table B provides a short commentary on the key findings for each Region.

Table B: PWG Region Visitation – Annual Visitation<sup>1</sup>

PWG		Annual	PWG Pa	rk Visits	('000s)	
Branch	PWG Region	2008	2010	2012	2014	Comment
Metro &	Metro North East	6,419	6,533	6,249	8,922	Peak in 2014
Mountains	Metro South West	4,849	3,836	5,605	4,371	Almost back to 2010 low in 2014
Branch	Blue Mountains	4,798	3,783	3,601	5,209	Peak in 2014
Branch	Southern Ranges	1,532	1,522	1,800	1,669	Slight decline for 2012 peak in 2014
	Northern Rivers	2,134	2,620	2,257	2,891	Peak in 2014
	North Coast	2,341	1,454	2,439	1,730	Almost back to 2010 low in 2014
Coastal	Low er North Coast	2,877	3,164	2,686	4,234	Peak in 2014
Branch	Central Coast Hunter	3,283	2,909	1,864	2,570	Recovered from 2012 low in 2014
	South Coast	3,051	2,541	2,638	2,943	Almost back to 2008 peak
	Far South Coast	2,077	1,369	1,025	1,258	Recovered from 2012 low in 2014
	Northern Tablelands	351	283	599	296	Returned to 2008 and 2010 levels in 2014
Western	Northern Plains	207	273	300	311	Upw ard trend in visits over time
Branch	Western Rivers	425	436	291	591	Peak in 2014
	Far West	230	198	184	260	Peak in 2014

<sup>1.</sup> See footnote on page 11 above.

#### 1.4 Activities Undertaken on Most Recent Park Visit

Respondents who had visited a PWG park were asked what activities they undertook on their *most recent* visit. In 2014, the top four activities undertaken remained unchanged. The incidence of undertaking *walking* activities has decreased significantly in 2014 compared with 2012 levels (i.e. returning to 2010 levels), while incidence of undertaking *picnicking* and dining activities was significantly lower than in all other years. Incidence of undertaking *water-based* activities is slowly (but not significantly) increasing over time, whilst the proportion *touring* and *sightseeing* is at its highest level recorded (significantly higher than 2010 and 2012 results):

	2008	2010	2012	2014
Walking	54%	50%	56%	49%
Water-based Activities	17%	18%	19%	20%
Touring and Sightseeing	12%	10%	9%	13%
Picnicking and Dining	14%	16%	16%	11%

# 1.5 Satisfaction with the Experience of one's Most Recent Park Visit

Respondents who had visited a PWG park were asked to give an overall satisfaction rating based the experience of their most recent visit. Figure F shows that in both 2008 and 2010 57% of visitors indicated that they were *very satisfied* with the park experience on their most recent visit, while in 2012 the proportion very satisfied increased to 60%, with a slight decline to 59% occurring in 2014. In 2008, *at least satisfied* with their park visit (i.e. sum of those satisfied or very satisfied). This figure increased to 93% in both 2010 and 2012 and increased to 94% in 2014. The 2008 figure is significantly lower than the proportion attained in all previous years.

For the 2012 and 2014 survey mean satisfaction was calculated (see Section 8.5 for calculation of the mean). The closer the mean score to 2 points, the higher the level of satisfaction. As can be seen, in 2008 and 2010 the mean scores were similar at 1.47 and 1.48 respectively, while in 2012 and 2014 it has risen slightly to 1.50 – so satisfaction with one's recent park visit experience is very high and is increasing slightly over time.

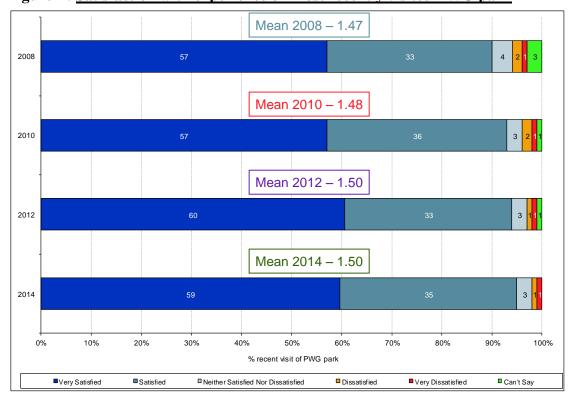


Figure F: Satisfaction with experience on most recently visited PWG park

Figure G shows that the 2014 proportion at least satisfied with their recent experience at a Metro & Mountains Branch was the highest recorded (95%). As a consequence the 2014 mean satisfaction score is the highest recorded for this Branch (1.53).

Overall satisfaction with one's recent visit to parks in the Coastal Branch is significantly higher in 2010, 2012 and 2014 than in 2008 (93% - 2010; 2012 and 2014; 89% - 2008).

Mean satisfaction scores are declining with time for parks in the Western Branch (1.46 - 2008; 1.36 - 2014).

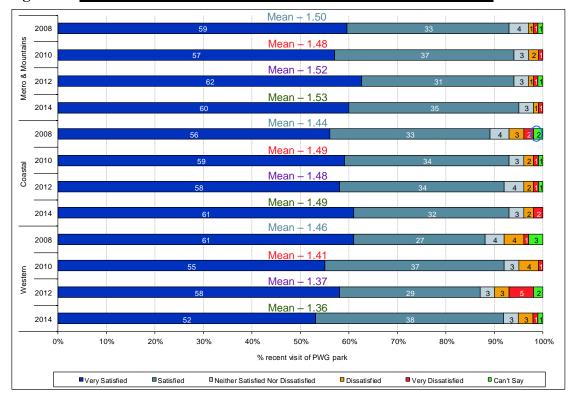


Figure G: Satisfaction with most recently visited PWG park by Branch

Analysis by PWG region in Table C provides commentary on trends by the proportions *at least satisfied* (i.e. sum of those satisfied or very satisfied) and by mean satisfaction scores. Strong and positive satisfaction results were attained in 2014 for the Metro North East, Metro South West, Blue Mountains, Southern Ranges, Northern Rivers, North Coast, Central Coast Hunter, South Coast, Far South Coast, Northern Tablelands, and Western Rivers Regions. Satisfaction declined in 2014 for Lower North Coast, Northern Plains and Western Rivers Regions. Again, please note that samples sizes are small for these regions and subject to large margins of error, so results should be treated with caution.

Mean Satisfaction Score % At Least Satisfied **PWG Region** 2008 2010 2012 2014 2008 2010 2012 2014 %Satisfaction equal highest in 97% 97% Metro North East 92% 96% 1.51 1.50 1.58 1.61 2014 93% 92% 1.51 1.47 Metro South West 94% 95% 1.55 1.52 %Satisfaction highest in 2014 Peak in %Satisfaction and Blue Mountains 91% 95% 91% 92% 1.44 1.55 1.48 1.45 mean in 2012 %Satisfaction & mean Southern Ranges 95% 89% 86% 94% 1.66 1.44 1.22 1.58 returning to 2008 levels in Northern Rivers 94% 1.53 92% 93% 92% 1.44 1.49 1.50 %Satisfaction highest in 2014 %Satisfaction and mean 88% North Coast 89% 95% 97% 1.50 1.44 1.48 1.61 highest in 2014 Peak in %Satisfaction and Low er North Coast 85% 95% 97% 89% 1.31 1.47 1.52 1.38 mean in 2012 Central Coast 88% 93% 90% 94% 1.38 1.57 1.46 1.52 Hunter %Satisfaction highest in 2014 %Satisfaction relatively South Coast 92% 95% 92% 93% 1.45 1.51 1.46 1.50 consistent over time %Satisfaction & mean highest Far South Coast 89% 90% 97% 1.41 1.62 89% 1.50 1.47 in 2014 Northern %Satisfaction and mean 87% 89% 82% 97% 1.33 1.48 1.30 1.64 Tablelands highest in 2014 %Satisfaction and mean 1.25 Northern Plains 79% 91% 87% 75% 1.16 1.37 1.09 low est in 2014 %Satisfaction and mean Western Rivers 98% 94% 99% 89% 1.54 1.53 1.52 1.15 low est in 2014 Peak in %Satisfaction and Far West 78% 100% 86% 95% 1.38 1.72 1.32 1.51 mean in 2012

Table C: Satisfaction with most recently visited PWG park by Region

# 1.6 Child Visitation to PWG Parks and Adult Visitation with Children

In 2014, the Office of Environment and Heritage wanted to explore in more detail visits to PWG parks by children. A summary of key findings is provided below.

Child visits to PWG parks has risen to its highest level in 2014 totalling 7.6m visits (6.7m - 2008; 6.5m - 2010; 6.6m - 2012). Child visits contributed 20% of total visits in 2014, whereas in previous years the contribution has been 17%-18% of all visits.

The number of child visits where at least one child under 18 years lives in the household is increasing over time, from 4.6m visits in 2008 up to 6.6m visits in 2014. However, the number of child visits from households without children (i.e. the child visited a PWG with a grandparent, teacher etc. who does not live in their household) peaked at 2.1m visits in 2008, but declined to 0.8m visits in 2010 and 0.6m visits in 2012 before increasing slightly to 1.0m visits in 2014.

In relation to age of children visiting, the survey questionnaire does not capture this information, so a *proxy* measure for age was calculated using the Roy Morgan Holiday Tracking Survey data (see section 6.4 for more detail). From 2008 to 2012 estimated child visits have remained relatively stable by age (see Figure H for more detail).

However, 2014 estimated visits for children aged 0-11 year jumped to 4.6m visits from 3.9m in previous years, primarily due to increases in visits from 6-11 year olds (from 2.0m visits in previous years to 2.5m visits in 2014).

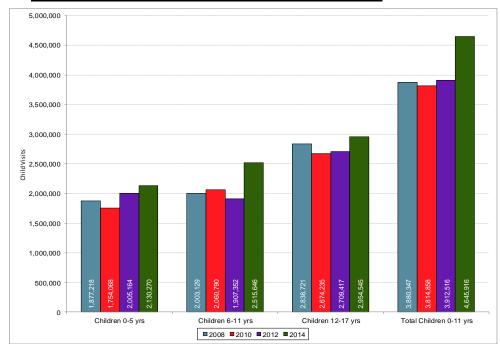


Figure H: Estimated Number of Child Visits by Age Category

In terms of adult visits accompanying children, Figure I shows that in 2014 9.4m adult visits were undertaken with children in 2014, up from 8.4m in 2012 and 8.6m in 2010, but much lower than the 12.3m attained in 2008 (see section 6.4 for calculations).

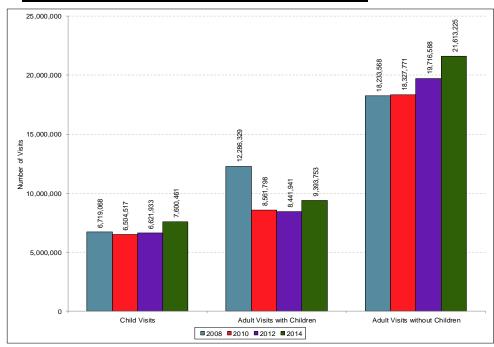


Figure I: Number of Adult Visits with and without Children

#### 2. INTRODUCTION

# 2.1 Background

The Office of Environment and Heritage (OEH), commissioned Roy Morgan Research to repeat a thirteen wave telephone survey previously conducted in 2008, 2010 and 2012 to monitor and estimate the annual number of visits to NSW parks in 2014.

The Parks and Wildlife Group (PWG) within the Office of Environment and Heritage is responsible for ensuring the conservation of protected native flora and fauna within the parks and reserve system and promoting community use, awareness, understanding and appreciation of natural and cultural heritage.

At present there are over 850 parks and reserves in New South Wales for which PWG has responsibility, covering wilderness areas, national parks, nature reserves, state conservation areas, and regional parks.

The NSW Government released its new State Plan in March 2010 in which they continued to set (as per the November 2006 State Plan) as a priority to have 'more people using parks, sporting and recreational facilities, and participating in the arts and cultural activity.' One of the measures that will be used to assess performance in meeting this objective is the number of visits to State Government parks and reserves.

OEH through its Parks and Wildlife Group is responsible for collecting data on visit numbers in order to track park visitation over time. Such an exercise requires an appropriately rigorous and reliable approach to the collection of data on visit numbers. Until 2008 however, estimates of the number of visits to parks and reserves managed by PWG had been determined in an *ad hoc* manner through a mixture of visitor use data provided by individual park managers, based on direct observations, inferred counts, electronic counters located at only a selection of parks, and intermittent park visitor surveys. In 2007, a pilot study was conducted by Roy Morgan Research to provide a methodological approach to more precisely measuring PWG park visitation. In 2008, a slightly modified approach from the pilot was used to estimate annual visitation for 2008 and 2010. Now in 2012 a slightly modified methodology has been applied to estimate PWG park visitation for 2012 and identify any trends in visitation since 2008.

# 2.2 Objectives of This Study

The main objective of this study is to provide a *reliable* estimate of annual PWG park visitation (i.e. the total number of annual visits) for 2014, to be used to compare with results attained in 2008, 2010 and 2012. More specifically, the objectives of this study are to:

- 1. Use the sampling frame and data collection methodology used in 2012 (i.e. CATI slightly modified from the 2008 and 2010 approach) to obtain estimates and confidence limits of total visits to Parks and Wildlife Group (PWG) managed parks in 2012 with a precision similar to that obtained in previous years (i.e. ±4% of the true number);
- 2. Estimate the proportion of visitors participating in different activities when visiting PWG parks and compare visits to PWG managed parks and activities undertaken by different demographic groups;
- 3. Obtain a measure of overall satisfaction with the PWG park visit experience;
- 4. Compare 2014 survey findings with 2008, 2010 and 2012 results and identify any statistically significant changes; and
- 5. Identify any potential causes or 'triggers' that influence park visitation.

The three major research tasks required for the 2014 study are as follows:

- 1. Conduct a Computer Assisted Telephone Interviewing (CATI) survey with residents aged 18 years and over living in NSW, ACT, Victoria and southern and south-east QLD using a methodology and questionnaire employed in 2012 (and similar to that used in 2008 and 2010 see section 3.1.1. for changes), to ensure that survey results will be comparable and whatever changes (i.e. minor modifications to the questionnaire, sampling fame etc.) can be tracked over time;
- 2. Estimate the number of visits to PWG managed parks for the remainder of Australia (i.e. regions not covered by the CATI survey) using a proxy measure; and
- 3. Analyse and report on the following:
  - Visitation estimates to PWG managed parks (i.e. total visits, adult visits, child visits, visits by survey wave and region of origin, visits to each PWG Branch and Region and average number of visits per visitor) and confidence limits for the overall estimate;
  - Compare visits and visitors by different demographic groups to their proportion of the general population;
  - Estimate the proportion of visitors participating in different activities at the park (for their most recent visit);
  - Compare participation in activities by different demographic groups;
  - Estimate level of satisfaction with one's most recent park visit;

- Identify statistically significant differences in number of visits, demographic groups, participation in activities and satisfaction between 2008 and 2014; and
- Investigate any potential influences on park visitation.

#### 3. METHODOLOGY

This study was conducted using Roy Morgan Research's in-house Computer Assisted Telephone Interviewing (CATI) system over thirteen waves, spaced 4-weeks apart over an entire 12-month period. The first wave commenced on 2 January 2014, with the thirteenth and final wave to concluded on 7 December 2014.

In order to be able to compare 2014 data with 2008, 2010 and 2012 results on a wave by wave basis, survey waves for 2014 were scheduled to commence as close as possible to the same week in which waves were conducted in 2008, 2010 and 2012.

# 3.1 Sample Selection

The sample consists of respondents aged 18 years and over living in:

- Sydney;
- Remainder NSW;
- ACT:
- Melbourne;
- Remainder VIC:
- Brisbane, and;
- Remainder Southern and Southeast QLD.

The seven regions listed above were chosen to be included in scope for this survey, because their overall share of visits to and within NSW was the highest of all regions, as determined from Roy Morgan Research Holiday Tracking Survey (HTS) data. Other regions of Australia not surveyed have had PWG park visitation estimated using HTS data (See sections 3.2.2 and 5.5 for more detail).

As was the case for the 2008, 2010 and 2012 surveys, 2014 quotas (Table 3.1) were set each survey wave for age by sex by region so as to be representative of each region's population (based on ABS population estimates for this years).

Age by Sex	Syd-	Rem		Mel-	Rem	Bris-	Rem
Quotas	ney	NSW	ACT	bourne	VIC	bane	SE QLD
Male 18-24	17	11	11	14	6	11	9
Male 25-34	25	15	15	19	7	15	12
Male 35-49	35	28	21	28	14	21	21
Male 50+	46	45	26	37	22	26	31
Female 18-24	16	10	11	13	5	11	8
Female 25-34	25	15	15	19	7	15	12
Female 35-49	35	28	22	29	15	22	23
Female 50+	51	48	29	41	24	29	34
TOTAL	250	200	150	200	100	150	150

Table 3.1: Quotas Set per Wave

# 3.1.1 New Sampling Frame Used in 2012 and 2014

For both the 2008 and 2010 surveys, only one respondent from each household was selected for interview, with the respondent's household being randomly drawn from the Electronic White Pages<sup>1</sup> (EWP). In addition, non-business mobile phone sample was also drawn from the EWP in order to include households with no landlines.

However, there was a downward trend in response rate for this survey using this sampling approach (17.90% in 2008 and 13.27% in 2010). One of the likely causes of a declining response rate is the currency of the sampling frame used for a survey. The EWP was last released by Sensis for commercial use in 2006. Since that time research agencies have used other sources to update telephone records. Whilst every effort is made to keep phone lists as up to date as possible, it is evident that the proportion of new phone telephone numbers being included in the EWP sample frame is declining compared to the proportion actually being generated by telephone companies.

In addition, the method of communicating by telephone across the world is changing rapidly. Households and individuals have the choice of fixed landlines, mobile phones and broadband internet-based telecommunication services such as Skype, VoIP, Google Voice etc. Figure 3.1.1 shows that 22% of Australian households are now solely mobile households (i.e. have no fixed landlines). Only a small proportion of these numbers are listed in the White Pages.

<sup>&</sup>lt;sup>1</sup> The term Electronic White Pages (EWP) relates to Telstra's list of Australian residential phone numbers, known as Australia on Disc, last released in July 2004. In June 2006, the last formal release of this information was provided from Local List Australia. Since this time research organisations have used a number of sources to keep the EWP updated. Roy Morgan Research has updated EWP lists from the following sources – August 2007: Prospect Marketing Pty Ltd (5.7m records); September 2009: Grey Pages (entire white pages listing); and May 2009: Prospect Marketing Pty Ltd (1.1m new records).

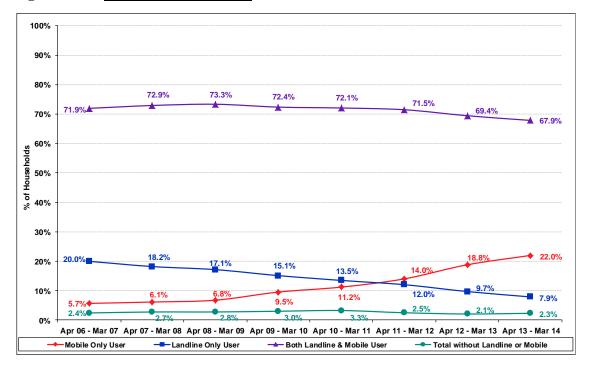


Figure 3.1.1: Phone Status by Year

Source: Roy Morgan Single Source

In addition, approximately 20% of households move location every year, with 10%-15% of these not yet recorded on current phone listings. A further 10% of households have silent numbers. It is clear that the use of phone listings for sampling purposes is becoming increasingly inefficient as it excludes a significant proportion of households not listed.

As a result, for the 2012 and 2014 surveys the sampling frame changed to a Random Digit Dialling (RDD) approach where all telephone numbers have an equal chance of being selected (including silent numbers and mobile only households). Such an approach ensures that newer listings are more appropriately represented in the final sample.

RDD sampling was used to sample both landline and mobile numbers as such an approach included the broadest cross-section of the population as possible in the sample frame, including households with silent numbers, new numbers not yet recorded in phone listings, solely mobile phone households with no landline number, as well as households with their telephone service provided via broadband internet (which uses a portable but standard telephone number, generally a landline number, but sometimes a mobile number).

As moving to RDD was a departure from the existing survey methodology there was some potential that the sample surveyed will differ slightly in its characteristics from the EWP sample. As a result three questions were included at the start of the questionnaire to allow for identification and calibration for any diversion from 2008 and 2010 samples:

If mobile phone number called: Do you live in a home that also has a landline telephone?

This is to determine whether respondents called on mobile phones have a significantly greater probability of being selected for the survey because they also have a landline (i.e. if they both a landline and a mobile phone they have a slightly greater chance of being selected as someone with a mobile only or a landline only).

If landline number called: *Do you personally have a mobile phone?* 

Similarly, this questions whether respondents called on landlines have a significantly greater probability of being selected for the survey because they also have a mobile phone.

All phone numbers called: *How many people, including yourself, live in your household?* 

As we already ask a question on the number of children in the household, the above question, in conjunction with this existing question, allows calculation of the number of people in the household eligible to be selected for the survey (i.e. people aged 18 years and over).

In order to optimise the representativeness of the sample, respondents were called on different days and at different times. Appointments were made when the eligible respondent was unavailable at the time of call, thereby being interviewed at a more suitable time.

# 3.1.2 Survey Waves

Interviews were conducted every four weeks starting with wave 1 of the 2014 survey commencing on January 2, 2014, with the survey asking for visitation to parks within the *preceding* 4 weeks. Such events include public holidays and school holidays, as well as the seasons, region specific weather conditions, activities specific to a region at a particular time of year (e.g. snow skiing) and one-off events (such as festivals in and around towns near PWG managed parks). In order to understand some of the possible reasons why visitation to PWG parks fluctuate each wave, Table 3.1.2 outlines the dates of interviewing for survey waves 1-13 in 2008, 2010, 2014 and 2014, the time period each survey wave relates to for visitation, along with the corresponding school holidays and public holidays occurring within each visitation period for each state surveyed. It also includes the visitation estimate for each survey wave<sup>1</sup>, in total and by state of respondent origin for 2008, 2010, 2012 and 2014.

Roy Morgan Research July, 2015

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<sup>&</sup>lt;sup>1</sup> The visitation estimate does not include visits from non-surveyed states or regions within states.

Please note that all holiday periods listed for 2014 correspond to the same holiday periods in 2008, 2012 and 2012, with the following exceptions:

- Easter fell in the preceding wave in 2008 compared to 2010, 2012 and 2014;
- June school holidays in Victoria and Southeast Queensland fell across 2 waves in 2008 and 2010, but only one wave in 2012 and 2014;
- In 2012 Queensland moved the Queen's Birthday public holiday to October in perpetuity. However, in order to not disrupt business planning, the June Queen's Birthday holiday was also retained (i.e. two Queen's Birthday holidays in the same year 2012); and
- The ACT introduced a Family & Community Day public holiday in 2011 with it falling in wave 12 in 2012 and wave 11 in 2014.

Where analysis by survey wave has been presented in this report, visitation data for each wave in 2012 and 2008 has been transposed to correlate to the same visitation period in the 2010 and 2014 surveys. This is because the 2010 and 2014 survey waves correspond to the calendar year, while the visitation period commences at the beginning of summer 2009-10 and 2013-14, making analysis by season and time of the year more easily understandable.

Table 3.1.2: <u>Survey Waves and School/Holiday Incidence - Summary</u>

			2013-	14			Со	rrespond Wave	ing
Wave	Visitation Period <sup>1</sup>	Survey Period <sup>2</sup>	NSW	VIC	ACT	SE QLD	2008- 09	2009- 10	2012- 13
	6 Dec		School Holidays	School Holidays	School Holidays	School Holidays			
	2013-	2 Jan- 6 Jan 2014	Christmas	Christmas	Christmas	Christmas			
	6 Jan 2014	0 Jan 2014	Boxing Day	Boxing Day	Boxing Day	Boxing Day			
Wave			New Year	New Year	New Year	New Year	Wave	Wave	Wave
1	2014 Visits	Visits 4,515,130	4,237,099	128,001	39,916	110,114	12	1	11
	2012 Visits		3,991,312	197,507	34,793	237,864			
	2010 Visits	2,886,656	2,515,828	86,190	107,422	177,215			
	2008 Visits	3,162,016	2,931,585	78,364	56,379	95,689			
	1 Jan-	28 Jan-	School Holidays	School Holidays	School Holidays	School Holidays			
	3 Feb 2014	3 Feb 2014	Australia Day	Australia Day	Australia Day	Australia Day			
Wave 2	2014 Visits	3,951,229	3,580,875	58,848	74,985	236,522	Wave 13	Wave 2	Wave 12
	2012 Visits	3,643,852	3,077,049	403,824	103,744	59,235			
	2010 Visits	3,350,768	2,884,780	203,400	115,737	146,851			
	2008 Visits	2,952,311	2,640,258	155,992	60,289	95,772			

<sup>1.</sup> The period in which a respondent could have visited a park within the last 4 weeks in each survey wave.

<sup>2.</sup> The period in which interviews were conducted.

Table 3.1.2: <u>Survey Waves and School/Holiday Incidence – Summary (continued)</u>

			2013	-14			Co	rrespond Wave	ing	
Wave	Visitation Period <sup>1</sup>	Survey Period <sup>2</sup>	NSW	VIC	ACT	SE QLD	2008- 09	2009- 10	2012- 13	
	28 Jan- 2 Mar 2017 2014	24 Feb- 2 Mar 2014								
Wave	Visits	2,813,559	2,631,359	62,289	38,274	81,637	Wave	Wave	Wave	
3	2012 Visits	3,182,932	2,943,245	80,831	33,931	124,925	1	3	13	
	2010 Visits	2,483,849	2,314,423	45,195	73,429	50,803				
	2008 Visits	3,048,740	2,933,436	40,789	35,541	38,974				
Wave	26 Feb- 30 Mar 2012 <b>2014</b>	25 Mar- 30 Mar 2014	Easter 2008	Labour Day School Holidays Easter 2008	Canberra Day  Easter 2008	Easter 2008	Wave	Wave	Wave	
4	Visits	2,645,227	2,354,217	158,142	41,312	91,556	2	4	1	
	2012 Visits	1,927,744	1,724,902	166,735	16,082	20,025				
	2010 Visits	2,660,791	2,593,867	0	29,246	37,677				
	2008 Visits	3,314,045	3,052,525	124,376	40,635	96,509				
Wave	25 Mar- 29 Apr 2014	22 Apr- 29 Apr 2014	Easter 2010, 2012, 2014 School Holidays Anzac Day	Wave	Wave	Wave	Wave			
5	2014 Visits	3,442,937	3,042,305	238,017	54,307	108,308	3	5	2	
	2012 Visits	3,061,608	2,805,767	46,555	38,461	170,825				
	2010 Visits	2,721,320	2,400,637	111,906	57,809	150,967				
	2008 Visits	3,052,988	2,781,709	31,309	88,393	151,577				
	22 Apr- 26 May 2014	19 May- 26 May 2014				Labour Day				
Wave 6	2014 Visits	3,409,397	3,232,670	53,608	76,650	46,469	Wave 4	Wave 6	Wave	
	2012 Visits	2,611,996	2,467,454	53,903	32,098	58,541	·	Ŭ		
	2010 Visits	2,341,952	2,201,851	23,961	60,276	55,864				
	2008 Visits	1,968,994	1,761,724	58,192	76,419	72,659				
Wave 7	21 May- 22 Jun 2014	16 Jun- 22 Jun 2014	Queen's B'day	Queen's B'day School Holidays 2008, 2010	Queen's B'day	Queen's B'day 2008, 2010 & 2012 School Holidays 2008, 2010	Wave 5	Wave	Wave	
•	2014	2,361,060	2 201 000	9E 100	E1 061	22 880	J	,	4	
	Visits 2012 Visits	2,082,765	<b>2,201,009</b> 1,953,047	<b>85,100</b> 82,411	<b>51,061</b> 36,971	<b>23,889</b> 10,336				
	2012 Visits	2,863,064	2,457,645	114,768	74,755	215,897				
	2010 Visits	2,349,128	2,197,567	40,655	48,525	62,381				
	17 June- 22 Jul 2014	14 Jul- 22 Jul 2014	School Holidays	School Holidays	School Holidays	School Holidays				
Wave 8	2014 Visits	2,483,826	2,277,874	22,309	94,739	88,903	Wave 6	Wave 8	Wave	
	2012 Visits	2,000,977	1,792,581	126,447	43,560	38,388	U	O	5	
	2010 Visits	2,864,397	2,681,238	30,688	39,887	112,583				
	2008 Visits	2,865,917	2,431,012	296,936	59,324	78,645				

<sup>1.</sup> The period in which a respondent could have visited a park within the last 4 weeks in each survey wave.

<sup>2.</sup> The period in which interviews were conducted.

Table 3.1.2: <u>Survey Waves and School/Holiday Incidence – Summary (continued)</u>

			2013-	14			Со	rrespond Wave	ing
Wave	Visitation Period <sup>1</sup>	Survey Period <sup>2</sup>	NSW	VIC	ACT	SE QLD	2008- 09	2009- 10	2012- 13
	15 Jul- 20 Aug 2014	11 Aug- 20 Aug 2014				Show Day			
Wave 9	2014 Visits	1,903,730	1,581,501	19,618	28,951	273,659	Wave 7	Wave 9	Wave 6
Ť	2012 Visits	2,559,654	2,437,717	14,841	47,908	59,187	,	ŭ	ŭ
	2010 Visits	2,409,625	2,170,757	9,576	70,440	158,852			
	2008 Visits	2,307,400	2,096,677	59,931	77,943	72,850			
	12 Aug- 17 Sep 2014	8 Sep- 17 Sep 2014							
Wave 10	2014 Visits	2,250,668	2,078,805	76,250	37,972	58,361	Wave 8	Wave 10	Wave 7
10	2012 Visits	1,924,190	1,808,195	21,133	54,635	40,227		10	,
	2010 Visits	1,970,636	1,766,194	74,264	18,874	111,305			
	2008 Visits	3,319,275	3,221,417	26,999	25,959	44,900			
	9 Sep- 13 Oct 2014	6 Oct- 13 Oct 2014	School Holidays Labour Day	School Holidays	School Holidays Labour Day	School Holidays			
Wave 11					Family & Community Day 2014		Wave 9	Wave 11	Wave 8
	2014 Visits	2,776,295	2,624,740	77,746	20,043	53,766			Ū
	2012 Visits	2,518,205	2,132,019	32,604	83,729	269,854			
	2010 Visits	2,971,805	2,479,893	128,132	33,646	330,134			
	2008 Visits	2,556,159	2,362,309	75,059	21,773	97,017			
	7 Oct- 10 Nov 2014	3 Nov- 10 Nov 2014		Melbourne Cup	Family & Community Day 2012	Queen's Birthday 2012 & 2014			
Wave 12	2014 Visits	3,090,249	2,776,695	208,509	15,890	89,156	Wave 10	Wave 12	Wave 9
	2012 Visits	2,304,671	2,058,586	106,083	20,887	119,116			
	2010 Visits	1,616,435	1,423,101	65,160	25,582	102,592			
	2008 Visits	3,450,607	3,318,437	52,402	42,193	37,576			
	4 Nov- 7 Dec 2014	1 Dec- 7 Dec 2014							
Wave 13	2014 Visits	2,964,132	2,839,488	34,378	18,800	71,466	Wave 11	Wave 13	Wave 10
	2012 Visits	2,500,392	2,253,692	81,605	90,044	75,051		_	
	2010 Visits	2,237,365	1,982,127	163,833	29,724	61,681			
	2008 Visits	2,891,383	2,696,525	140,552	21,404	32,903			

<sup>1.</sup> The period in which a respondent could have visited a park within the last 4 weeks in each survey wave.

# 3.2 Questionnaire Design

As the key objective of the survey was to estimate NSW PWG managed park visitation from the Australian population, the questionnaire was designed to effectively and accurately record visitation to parks from both interstate respondents and those living in NSW.

<sup>2.</sup> The period in which interviews were conducted.

#### 3.2.1 Park visitation questions

In order to correctly ascertain whether the park visited was PWG managed, and therefore of interest, a series of questions which allowed for clarification and verification of responses was included. Explanations of the survey questions are to follow.

To estimate PWG park visitation, the questionnaire captures the PWG park most recently visited, and if more than one PWG park was visited, up to a further four PWG parks. All parks nominated were based on visitation *within the four weeks prior to interviewing*. The reasons why past 4 week recall was used are as follows:

- Clarity of recall is sharper the shorter the recall period, thereby improving the quality of the visitation estimate. Balancing recall length with the ability to create a continuous 12-month visitation period, based on the number of survey waves that could be feasibly conducted in a year, resulted in 13 waves with a recall period of 4 weeks for each wave;
- Other Australian park visitation surveys use this time period, which allows for comparison of estimates between surveys; and
- So that estimation of visits from non-surveyed areas could be easily calculated without having to create a complex algorithm to re-calibrate the visitation time period, a comparable time period as that used for the Holiday Tracking Survey was employed.

# 3.2.2 Qualifying questions and HTS

Prior to asking specifically about visitation to NSW PWG parks however, two questions were asked about interstate travel to NSW. These questions were taken from the Roy Morgan Research Holiday Tracking Survey (HTS), and were used (post field) as a means of linking datasets produced from this survey to HTS datasets to enable projection of visitation to NSW PWG parks from other regions not included in the sample (such as remainder QLD, NT, SA, TAS and WA).

'QHTS1. Thinking back over the last 12 months to your MOST RECENT HOLIDAY of one or more nights away from home. Was the holiday in....?'

- 1 New South Wales
- 2 Another Australian State or Territory
- 3 Overseas

'QHTS2. Was that holiday in the last 4 weeks?'
'IF NECESSARY, SAY: That is, SINCE [Date 28 days ago]?'

All respondents who were not residents of NSW were asked a further qualifying question - *QTRAVEL. Have you visited New South Wales within the last 4 weeks?* 

This allowed calculation of visitation to NSW from interstate respondents on day trips (i.e. travelled to NSW in last 4 weeks, but did not stay overnight). Obtaining such data allowed for a more precise estimation of PWG Park visitation from non-surveyed regions to be calculated. Interstate respondents who had not visited NSW within the last four weeks were considered out of scope for the remainder of the survey and therefore the interview was concluded at this point.

Qualifying respondents were then asked if they had visited parks in NSW within the last 4 weeks.

'QPARK. Thinking about PARKS anywhere at all in New South Wales, including the city or suburbs of Sydney. Have you visited any parks WITHIN THE LAST 4 WEEKS, that is, SINCE [Date 28 days ago]? By parks, I mean National Parks, State Conservation Areas, Nature Reserves, State Forests, or any other type of park. I DON'T mean botanical gardens, zoos, wildlife parks, or any local council parks.'

This was the key question which determined whether the respondents would proceed through the rest of the questionnaire. Whilst this question obtains visits to parks that are outside the scope of the survey (i.e. non-PWG managed parks), findings from the survey pilot conducted in September-October 2007 showed that a significant proportion of respondents were not aware of the *type* of park they visited. By broadening the scope of this key question to include other parks, subsequent questions were designed to precisely determine the type of park visited and hence those that visited a PWG-managed park. These are discussed further in the following sections.

# 3.2.3 Naming the park visited

Respondents were asked the name of the park they had most recently visited in NSW. It was at this point of the survey that the type of park (PWG managed or not PWG-managed) was established.

As the pilot survey indicated that people were sometimes unable to correctly distinguish between a PWG managed or non-PWG managed park, the survey was programmed in a way to record as much detail as possible to minimise respondent error.

This was done through the provision (by OEH) of a comprehensive 'look-up' tables that listed:

- All PWG managed parks and all known aliases used for each park;
- Non-PWG parks including state forests (including any aliases), and;
- Names of parks which could be either a PWG managed or non-PWG managed.

Programming the survey in such detail allowed for incorrect nominations of a PWG park or non-PWG park to be flagged at the time of interviewing, rather than post-field, in order assign the correct park type at the time of interview (i.e. as soon as the park could be identified as PWG managed, questions on the number of visits could be asked). It also took into consideration, not only the *official* name of the PWG park, but also any aliases, locality names or 'nick names' assigned to the park by locals.

As a number of PWG-managed parks and State Forests (non-PWG managed) share the same name, a check question was added to determine the correct park type. Respondents were asked if they knew specifically whether it was a PWG Park (i.e. a National Park, State Conservation Area or Nature Reserve) or a State Forest. This further assisted in assigning the correct park type at the time of interviewing, assisted post-field cleaning, and minimised the amount of data cleaning required post-field.

As another means of capturing the most accurate data at the time of interview (thus minimising post field cleaning), the survey was programmed to assist respondents who were *unsure* about a park name. This was achieved by programming a comprehensive list of all geographical locations (towns/suburbs/localities etc.) surrounding each park into the survey. This meant that, should a respondent be able to nominate the nearest town to the park they visited, they could be prompted with a list of all possible surrounding parks. Respondents would then select from this list if they recognised the name.

In the situation where respondents were unable to provide the name of the park they had visited and were unable to give the name of the town near the park they visited, an attempt to capture the status (or type) of the park was made by asking the question 'Was that park a National Park, a State Conservation Area or a Nature Reserve, or was it a State Forest or some other type of park'. Capturing this 'generic' description of the park type, although not specific, allowed respondents to continue with the survey rather than having the interview terminated because of lack of precise knowledge.

#### 3.2.4 Questions relating to PWG Park visits

Once it was ascertained that the respondent had visited a PWG managed park, they were then asked questions pertaining to;

- The number of times they had visited the park;
- The number of children under 18 that accompanied them on that visit (which also verified if the children were of the same household, or from additional households);
- The activities in which they partook whilst at the park they most recently visited, and;

• The level of satisfaction experienced whilst visiting that park they most recently visited.

If more than one park had been visited by the respondent within the 4-week period, the same set of questions relating to whether the park was PWG managed or not were asked, and if the park was identified as being PWG managed, questions on the number of times visited and the numbers of children were replicated.

Questions relating to activities and satisfaction were only asked about the PWG park visited *most recently*, as it was considered that recall of the experiences would be most stark for one's most recent visit. Asking these questions about every park visited, could lead to respondent confusion and would also add significant amounts of time to questionnaire length, which would impact on overall project costs and potentially elevate refusal rates.

If the visits named by the respondent were more than nine or if the number of children claimed to have visited with the respondent was more than four, additional questions were asked to *confirm* that this was indeed the correct number. This process allowed potential outliers in visitation to be confirmed or amended at the point of interview, strengthening the validity of the visitation estimate.

To determine whether visits by children were in-scope or out-of-scope for this survey, a series of questions was designed. Firstly, early on in the survey, the number of children under 18 living in the household was asked. If the number of children visiting a PWG park was less than or equal to the number of children living in the household, the assumption was made that the children belonged to the household. However, if the number of children visiting was greater than the number living in the household a supplementary question was asked to determine which adult member of the party was responsible for these additional children. If an adult member of the respondent's household was responsible for them, then they were included in the calculation of child visits for that household.

If an adult from another household was responsible for these extra children, then they were excluded because of the likelihood of double-counting child visits i.e. if the other adult travelling with the respondent was also surveyed, the children would have been counted by the original respondent and this new respondent, inflating the number of child visits.

For the 2008 survey it was recognised that a high number of visits and high number of children visiting contributed significantly to the overall child visitation estimate. To determine whether this high number of visits was in fact correct, a set of 'check' questions was added to the survey questionnaire. It was agreed with OEH that the threshold value to activate this check question series would be a total of 28 child visits. These 'check' questions are as follows:

'To calculate the number of children in your party that visited this park in the last 4 weeks we multiply the number of visits YOU made to this park by the number of children that visited with you on YOUR MOST RECENT VISIT. We calculate this to be [number] child visits in total over the last 4 weeks. Would this be approximately correct?'

IF NO OR CAN'T SAY: 'Could you please explain why this estimated figure is not correct?'

These check questions have continued to be used for the 2010, 2012 and 2014 surveys to ensure that the final child visitation value would more accurately reflect the actual child visitation estimate by eliminating invalid outliers.

#### 3.2.5 Demographic questions

Standard demographic questions were asked of all respondents at the beginning of the survey such as age, sex, geographic location, and the number of children usually living in the household, as these were pertinent for weighting<sup>1</sup> purposes or for calculating derived items used to ask questions later in the survey (e.g. extra children visiting was calculated by calculating the difference between the number of children on the visit and the number of children in the household).

Further demographics were asked of respondents who had visited a park (PWG or non PWG) at the end of the survey. These included questions such as the highest level of education achieved, employment status, the language usually spoken in the household, the lifecycle stage of the respondent, and whether they were the parent of a child living in the household. These questions were used to profile the type of visitor to PWG parks.

In 2014 the question on language usually spoken in the household included an 'other – specify' response to capture in more detail other languages spoken.

#### 3.3 Response Rates and Strike Rates

In order to ensure that the reliability of the survey estimates are as robust as possible, a key objective is to set-up procedures to ensure that as many people as possible approached to complete the survey actually do complete it (i.e. minimise non-response). The sections following detail how this has been achieved.

<sup>&</sup>lt;sup>1</sup> Weighting is the factor by which a respondent's answers are multiplied to ensure that the group in which that respondent is a member is represented in the correct proportion. For this survey each respondent is weighted to the December 2013 population of each survey region, based on their age and sex (population data is obtained from the Australian Bureau of Statistics' National Labour Force Survey: Catalogue 6291.0).

#### 3.3.1 Response Rates

Table 3.3.1 highlights sample outcomes of the 2014 survey and compares them with results from the 2012, 2010 and 2008 surveys, along with 2008, 2010, 2012 and 2014 Roy Morgan Research Omnibus surveys conducted at similar times to the survey waves. The response rate is calculated on total interviews as a proportion of eligible contacts.

For the 2010 a survey a new policy was enacted (in consultation with the OEH), to attempt to complete each of the 13 survey waves in the shortest period as possible (within 4 days if possible). The main reason for doing so was to minimise the number of days of overlap between survey waves when a respondent could have visited a park in NSW. The average days in field for the 2010 survey were 5.15 compared with 7.15 in 2008 – an average reduction of two full days. However, response rates fell from 17.70% in 2008 to 13.27% in 2010 and it was agreed that for the 2012 survey that the field period would return to a maximum of 7 days (average attained for 2012 was 6.85 days). Response rates subsequently increased to 14.55% in 2012. The average number of days that the survey was in field in 2014 was 7.62 days (primarily due to waves 9 and 10 having to remain in field for 10 days to meeting age by sex quotas in smaller survey regions).

Whilst the general trend over time for telephone surveys is a decline in response rates (as households use answering machines, voicemail and number recognition to screen calls), one key reason for the lower response rate in 2010 related to the policy of attempting to complete the survey within a 4 day time period. The introduction of this policy meant that fewer calls were made to the same telephone number in an attempt to obtain an interview, meaning that proportionately fewer households had the opportunity to complete the survey from sample attempted (and contacted). The lower response rate in 2010 can be in part attributed to not using sample efficiently in an effort to minimise field time. This was the reason for reverting to the policy of completing fieldwork within 7 days for the 2012 and 2014 surveys.

It should be noted however, that the overall response rate in 2014 fell to its lowest level recorded (12.62%). This decline has been primarily driven by an increase in the proportion of potential respondents refusing to complete the survey.

Another potential reason for the decline in the response rate is that the proportion of households with mobile numbers in increasing with time (77.6% of households in 2007 to 89.8% of households in 2014). For the 2014 survey 23% of sample loaded were mobile numbers, 23% of numbers called for interview were mobile numbers, yet 30% of all interviews achieved were from mobile numbers. As a result the overall response rate in 2014 from mobile numbers was 18.5% compared to just 11.1% for landline numbers. This suggests that increasing the proportion of sample approached using mobile numbers will increase response rates. It is also of note that the proportion of mobile only households is

increasing rapidly with time, averaging 22% growth each year since 2007 (5.7% of households in 2007 up to 22.0% of households in 2014 - see Figure 3.3.1 for more detail). Increasing the proportion of sample with mobile numbers will also increase the proportion of sample of mobile only households.

One major determinant in electing to use a 'stand-alone' survey approach for this survey was the belief that such a methodology would provide higher response rates and lower refusal rates, thereby improving the overall quality and reliability of the data collected and hence, the overall estimate of visitation. Table 3.3.1 shows that the response rate for this survey in 2014 is *over 54% higher* than that of a shared cost omnibus survey conducted at similar times of the year to this survey's waves (12.62% versus 8.18%). Furthermore, this **disparity** in response rates is consistent across all survey years. These results clearly show that the stand-alone survey approach provides more precise and reliable estimates of PWG park visitation than would have a similar set of questions placed on an omnibus style survey.

Table 3.3.1: Response Rate Comparison – NSW Parks Surveys compared with Roy Morgan Research Omnibus Surveys

		NSW I	Parks Sur	vey			RMR Or	nnibus S	urvey	
Sample	2014		2012	2010	2008	201	4	2012	2010	2008
Outcomes (No.)	Waves 1-13	AVE.	AVE	AVE	AVE.	7 Rounds	AVE	AVE	AVE	AVE.
Long Interview s <sup>1</sup>	2,078	160	141	140	149	n/a	n/a	n/a	n/a	n/a
Short Interview s <sup>2</sup>	13,577	1,044	1,063	1,063	1,060	n/a	n/a	n/a	n/a	n/a
Total Interviews	15,655	1,204	1,204	1,203	1,209	4,162	595	808	744	736
Refusals	76,104	5,854	4,856	5,008	3,226	26,543	3,792	4,194	4,396	4,711
Terminates	29,001	2,231	1,967	2,489	1,530	16,836	2,405	4,137	3,111	2,509
Appointments <sup>3</sup>	3,324	256	243	371	788	3,334	476	231	345	730
Total Eligible Households (HHs)	124,084	9,545	8,270	9,071	6,753	50,875	7,268	9,369	8,596	8,686
Total Quota Failures <sup>4</sup>	11,438	880	735	1,090	518	1,871	267	257	393	546
Business Numbers <sup>5</sup>	10,128	779	734	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Contacts	145,650	11,204	9,738	10,161	7,271	52,746	7,535	9,626	8,989	9,232
Computer Quota Fail prior to contact <sup>6</sup>	51,836	3,987	1,703	5,663	1,976	n/a	n/a	n/a	n/a	n/a
Engaged	3,351	258	130	85	17	4,275	611	412	169	100
No reply	74,212	5,709	3,690	2,612	1,261	57,997	8,285	7,652	7,142	3,439
Unobtainable	200,878	15,452	12,771	6,399	3,341	81,307	11,615	16,131	6,914	4,195
3+ Calls	33,417	2,571	1,958	799	742	698	100	693	297	489
Fax/modem	8,043	619	765	368	258	3,677	525	1,438	735	303
Answ ering Machine	71,236	5,480	4,282	924	628	27,617	3,945	2,692	1,678	1,488
Total Not Contacted	442,973	34,075	25,299	16,850	8,223	175,571	25,082	29,018	16,936	9,973
Total Used Sample (Attempted)	588,623	45,279	35,038	27,011	15,494	213,940	30,563	38,644	25,925	19,205

		NSW	Parks Sur	vey			RMR O	mnibus S	urvey	
	201	2014		2010	2008	2014		2012	2010	2008
Percentage of Eligible Households (%)	Waves 1-13	AVE	AVE	AVE	AVE	9 Rounds	AVE	AVE	AVE	AVE
Long Interview s <sup>1</sup>	1.67%	1.67%	1.71%	1.54%	2.21%	n/a	n/a	n/a	n/a	n/a
Short Interview s <sup>2</sup>	10.94%	10.94%	12.85%	11.72%	15.70%	n/a	n/a	n/a	n/a	n/a
Total Interviews (Response Rate)	12.62%	12.62%	14.55%	13.26%	17.90%	8.18%	8.18%	8.63%	8.66%	8.47%
Refusals	61.33%	61.33%	58.72%	55.21%	47.77%	52.17%	52.17%	44.76%	51.14%	54.24%
Terminates	23.37%	23.37%	23.79%	27.44%	22.66%	33.09%	33.09%	44.15%	36.19%	28.89%
Appointments <sup>3</sup>	2.68%	2.68%	2.94%	4.09%	11.67%	6.55%	6.55%	2.46%	4.01%	8.40%
Total Eligible Households (HHs)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

- Respondents who have visited a park in NSW within the last 4 weeks.
- 2. Respondents who have not visited a park in NSW within the last weeks.
- 3. An appointment, which at the end of interviewing, was no longer required to be kept.
- 4. Quota failures -
  - (a) age x sex x region quota full;
  - (b) refused to provide age;
  - (c) refused to provide number of children in the household; (d) refused postcode (mobile sample only);
  - (e) refused landline phone question (mobile sample only);(f) refused mobile phone question (landline sample only); refused to provide total number in the household.
- 5. Identified as a business number when calling via RDD.
- 6. The region in which the respondent lived had already completed its quota of interviews. These records are then automatically moved to "Quota Fail" by the Fusion sample management system.

## 3.3.2 Strike Rates for Visiting a Park in NSW in the last 4 weeks

The *strike rate* for this survey identifies what proportion of those surveyed actually visited *any* type of park in NSW over the 4 weeks prior to being interviewed (excluding local council parks). This is important because those identified as visiting a park then go on to be asked specific questions about the type of park visited and, if it happens to be a PWG park, the number of times they visited. For all intents and purposes therefore, the higher the strike rate, the more robust the PWG visitation estimate is likely to become. It should be noted however, that the continuous improvement philosophy (see section 4 for more detail), which includes refining the survey methodology and sampling frame is also likely to have a positive impact on strike rate and the robustness of the visitation estimate.

Based on findings arising from the survey pilot, the final sampling structure for this survey was designed. It is therefore important that the actual strike rate obtained be close to or better than the strike rate estimated from the pilot survey. Otherwise the validity of the survey estimate could be questioned.

Using field report data obtained from the survey pilot conducted in September-October of 2007, it was estimated that 12.57% of people responding to the survey would in fact have visited a park of some type within the last 4 weeks of being surveyed. Table 3.3.2 shows that the final strike rates for 2008, 2010, 2012 and 2014 were respectively 12.29%, 11.66%, 11.71% and 13.27%. The four strike rate figures can be considered to be virtually identical, indicating that original strike rate estimates were accurate. Such a result vindicates the methodological approach recommended from the survey pilot as being valid.

As can be seen in the table 3.3.2, the actual strike rates per region of interview for 2014 were similar to or generally improved upon the strike rates obtained in 2012, with strike rates for respondents in Sydney, remainder NSW and Melbourne at their highest recorded levels.

2007 **Pilot Survey Region** 2014 2012 2010 2008 **Estimate** 29.61% 24.86% 25.15% 25.78% 28.64% Sydney Remainder NSW 23.97% 22.07% 21.24% 23.10% 25.58% Total NSW 27.10% 23.62% 23.45% 24.49% 27.28% Melbourne 1.65% 2.23% 1.61% 1.38% 1.50% Remainder VIC 3.06% 3.07% 2.76% 2.40% 2.23% ACT 14.63% 13.14% 12.82% 16.07% 9.80% Brisbane 3.06% 3.17% 2.23% 2.82% 3.59% Remainder SE QLD 3.01% 2.66% 3.32% 3.98% 2.23% Total Interstate 5.00% 4.56% 4.65% 5.29% 3.74% 11.66% **Overall Strike Rate** 13.27% 11.71% 12.29% 12.57%

Table 3.3.2: Survey Strike Rates<sup>1</sup>

## 3.4 Questionnaire Length

Questionnaire length varies depending on whether a respondent lived within NSW or interstate, or whether they had or had not visited a park within the last 4 weeks. Table 3.4 illustrates average questionnaire lengths for 2008 to 2014.

In 2012 three new questions were added to the survey to determine household phone status and likelihood of selection, so that survey data could be more accurately weighted. In 2014 an 'other – specify' response was added to the languages spoken in the household question. As a result average questionnaire length increased by 30-35 seconds over 2010 results.

Table 3.4: Questionnaire Length – By Year

Average Questionnaire Length	Park Visitors			Park Non-Visitors				
(mins)	2014	2012	2010	2008	2014	2012	2010	2008
NSW Questionnaire	5.70	5.73	5.21	4.92	2.05	2.00	1.54	1.45
Interstate Questionnaire	5.83	5.60	5.55	5.14	1.83	1.76	1.33	1.24
Overall Questionnaire	5.73	5.70	5.29	4.98	1.90	1.84	1.40	1.31

The objective was to keep the overall average questionnaire length (i.e. those going through park visitor questions and those who didn't) to just over 2 minutes (2.16 minutes with these new questions added) in order to keep within cost parameters. The average interview length in 2014 was 2.41 minutes, exceeding this objective. However, a greater number of respondents were asked the park visitor questions in 2014 than in other years (on average 160 per wave in 2014 instead of 143 per wave for previous survey years), thereby increasing average questionnaire length. This potentially means that more people in 2014 are visiting parks in NSW than has been the case in previous years, so the increase in average questionnaire length in likely to result in a higher PWG park visitation estimate than has been observed for past surveys.

<sup>1.</sup> Strike rate is the number of respondents who have visited any park in NSW (except local parks) in the last 4 weeks, expressed as a proportion of all respondents surveyed.

#### 4. CONTINUOUS IMPROVEMENT

In order to ensure that the final PWG park visitation estimate obtained was the most accurate possible, procedures have been put into place to ensure that the quality of survey data obtained improved as the survey progressed (i.e. from wave to wave). The following section details the processes that have been put into place for this survey.

## 4.1 Improving the Accuracy of PWG / Non-PWG Park Nominations

As previously discussed, a key issue emerging from the 2007 pilot study was respondent difficulty in distinguishing the difference between a PWG managed park and any other park. As a means of capturing more accurate data over time, thus resulting in more reliable visitation estimates, a variety of quality assurance processes were applied throughout field, and directly afterwards. Such quality assurance practices included:

- 1. Updating lists of park name aliases at the end of each wave to improve park categorisation (i.e. any new park name that could distinguish between a PWG park and a non-PWG park was added to the park name list);
- 2. Adding names of non-PWG parks regularly visited to assist in excluding parks not in-scope for the survey;
- 3. A rigorous post-field 'cleaning' phase of any responses where a park 'type' could not be assigned at the time of interviewing. This primarily took the form of visually checking park names and locations that could not be classified at the time of interview and re-classifying them into the appropriate category; and
- 4. Referring parks that could not be classified via post-field 'cleaning' to OEH for a final decision on categorisation.

The post-field 'cleaning' phase, detailed in points 3 and 4 above, was integral to the capture of accurate park visitation data for OEH.

On completion of each field phase all 'other (specify)' responses relating to park name and type were reviewed and where possible, assigned the correct park name and/or a PWG or non-PWG status. This was achieved through the following process:

- 1. Roy Morgan Research received all other specify / can't say responses pertaining to park name / park location / park type for review;
- 2. Roy Morgan Research conducted a web search based on the information given by the respondent i.e. the alias given or the geographical area in which they believed the park was located. In most cases evidence was obtained using Google Maps and the Google search engine;
- 3. Roy Morgan Research, where possible, assigned the correct park name / park type;

4. Any queries or uncertainties with allocating a park name / park type were then sent to OEH for review, input, and final approval.

Figure 4.1 highlights the effectiveness of this approach with the proportion of respondents directly providing the name of the park increasing with each survey, while 90% of all parks identified in 2014 being named directly by the respondent (via their name or the nearest town to them, up from 85% in 2008) – the highest level recorded. In addition, the proportion of parks identified only by the respondent naming the park *type* is declining over time, while the proportion of parks imputed in 2014 remained at a low 2%, indicating that park allocation is becoming increasingly efficient with time.

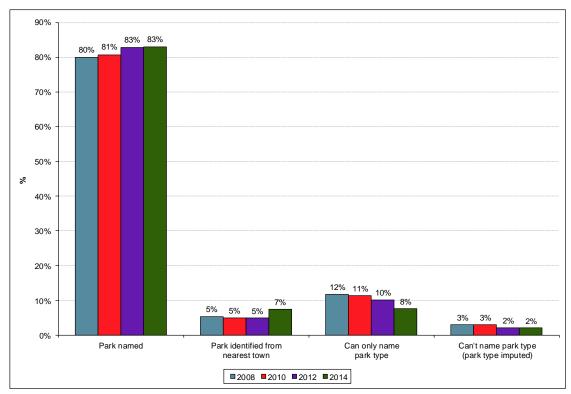


Figure 4.1: Allocation of Park Type by Method<sup>1</sup>

1. If respondents could not provide the name of the park they visited, or the name of the park could not be ascertained from the town claimed to be nearest to that park, they were then asked to classify the park as being a National Park, State Conservation Are or Nature Reserve or not (i.e. the *type* of park visited).

#### 4.2 Improving the Accuracy of the Visitation Estimate

For any survey, potential over or under-estimation of the survey estimate is inherent in the collection methodology employed, sampling frame used and the questionnaire designed. The objective of any survey is to (a) minimise the effect of any unwanted factors that may be affecting the survey estimate; and/or (b) adjust for their effect. The following factors have been identified as affecting the overall PWG park visitation estimate and an explanation provided as to how they have been addressed in calculating the final estimate figure:

1. **Non-response bias** – people refusing or terminating the survey may be less likely to visit any park in NSW in the last 4 weeks than those agreeing to be surveyed. Therefore an estimate of PWG park visitation based on responses of those who complete the survey could be an over-estimate. For the 2014, 2012 and 2010 surveys and waves 7-13 of the 2008 survey, an attempt was made to ask people who refuse or terminate the survey the following question:

Before you go, can I ask you one short question? In the last 4 weeks, have you visited a park like a National Park in New South Wales?

If the proportion visiting a park in NSW in the last 4 weeks differs between survey respondents and those who refuse or terminate, an adjustment factor can be applied rectify the non-response bias in the visitation estimate.

Using data obtained from this non-response analysis, an adjustment to the overall visitation estimate was undertaken to provide a more accurate estimate.

2. **Telescoping** – there may be a tendency for respondents to over-estimate the 4 week time period for visiting a park, thereby over-estimating PWG park visitation (i.e. actual parks visited within the time period and number of times visited within the time period). For example, if a person is asked in mid-May if they visited a park within the last 4 weeks, they may recall back to a time in April that was more than 4 weeks ago. Furthermore, during this time they may have visited that park numerous times, but only a portion of these visits may have in fact occurred during the 4 week period. To counteract this telescoping effect, for the 2010, 2012 and 2014 surveys and waves 7-13 of the 2008 survey, the exact start day and date of last 4 weeks was specified to respondents in order to focus them on parks visited since that date and number of times visited since that date, as detailed in the following two example questions:

What is the NAME of the National Park, State Conservation Area, Nature Reserve, State Forest or other park you visited MOST RECENTLY in NEW SOUTH WALES in the past 4 weeks, that is, SINCE [DAY] [DATE] [MONTH]?

How many times did you visit [%PARK\_NAME] in the last 4 weeks, that is, SINCE [DAY] [DATE] [MONTH]?

3. **Impact of sampling frame changes on survey estimates** – In 2012 the sampling frame changed from being sourced from the Electronic White Pages (EWP) to Random Digit Dialling (RDD) of both landline and mobile numbers, which is likely to have an impact on the visitation estimate.

Firstly, this frame change increases the likelihood of surveying households with new phone listings (as Sensis no longer provides EWP listings, sources used to obtain new listings are likely to omit numbers that Sensis would have otherwise included).

Secondly, silent numbers now have the potential to be contacted and interviewed due to random number generation (although such households are more likely to refuse to be interviewed, so their representation in the final survey sample is likely to be lower than their incidence in the household population, but will be higher than their representation in the 2008 and 2010 samples).

Finally, the inclusion of RDD mobile numbers in the sample frame increases the likelihood of surveying households that have mobile phones, but not landlines (i.e. mobile only households). This is a significant and growing proportion of the population (22% of households in 2014, up from 6% in 2008). These households tend to be younger and are likely to have differing park visitation habits to other households (e.g. previous rounds of this survey show that younger people tend to be less likely to visits PWG parks). It is considered that the omission of mobile only households from the 2008 and 2010 sampling frames is likely to have slightly inflated the overall PWG park visitation estimate in these years.

Using data obtained from the 2012 survey and having data on known incidence rates of mobile only households over time, 2008 and 2010 visitation estimates were adjusted to account for the under-representation of mobile only households in their respective sample frames. Please refer to section 5.6 for more detail.

- 4. **HTS Data calculation for non-surveyed regions** currently it is assumed that incidence of visitation for non-surveyed regions is *at best* as per the lowest visitation level of surveyed regions for both adult and child visitation (i.e. Victoria). It is likely that visitation for these non-surveyed regions is actually even lower than the survey estimate used, indicating an over-estimation of visitation from non-surveyed regions. However, the contribution of the non-surveyed regions to the visitation estimate is small (i.e. just 1.43% of the overall 2014 visitation estimate), so an over-estimate in non-survey region visitation has minimal effect on the overall visitation estimate.
- 5. Other Factors affecting the Estimate Whilst the above four factors are likely to have the most significant effect on the overall visitation estimate, there are other factors relating to collection of data which may also have an effect:
  - a. *Imputation rules for missing data or 'can't says'* manual editing of data post-field can identify a park not previously recognised as a PWG park as being one. In these instances, number of times visited and number of children visiting sometimes needed to be imputed. For those that provide a 'can't say'

response to a visitation related question, this number must also be imputed. Appropriate rules to use for imputation were determined with consideration of their effect on the overall survey estimate and how much they could alter the estimate; and

b. Potential outliers – high numbers of visits or high numbers of children visiting can have a marked impact on the overall visitation estimate obtained.
 It was decided that outliers should be included based on confirming high responses with the respondents themselves at the time of interview.

Analysis of imputation and outlier effects has been conducted for both the 2008 and 2010 surveys. For both surveys, it was determined that these effects have a negligible impact on the overall PWG park visitation estimate. For more detail, please refer to Appendix 7 in each of these survey reports.

#### 5. METHOD OF CALCULATING PWG PARK VISITATION

The methodology for calculating annual PWG park visitation has two main stages:

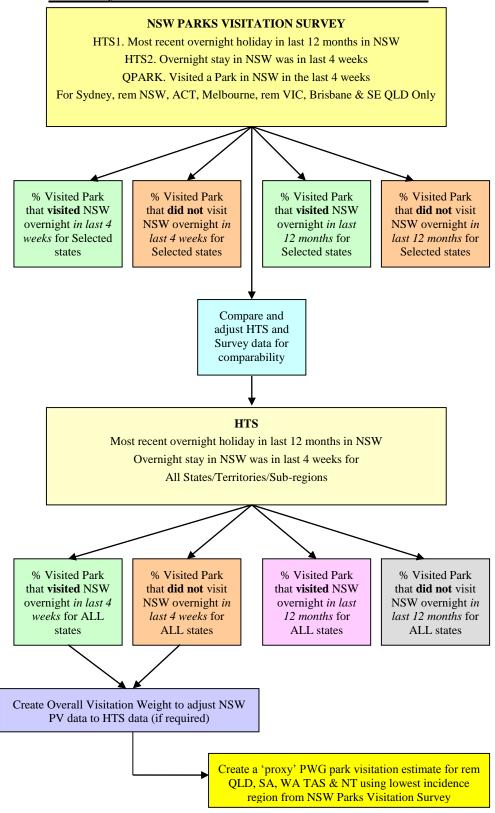
- Calculate visitation for the seven regions of Australia that were surveyed (i.e. Sydney, Remainder NSW, ACT, Melbourne, Remainder VIC, Brisbane and Remainder Southeast Queensland);
- 2. Using comparative questions placed on the NSW Parks Visitation Survey with the same questions asked on the Roy Morgan Research Holiday Tracking Survey (HTS), create a 'proxy' estimate of visitation for the remaining five regions of Australia (i.e. Remainder QLD, SA, WA, TAS and NT)

The rationale for creating a 'proxy' estimate for PWG park visitation for five regions of Australia was that these regions have the lowest levels of incidence in visiting NSW in any 4 week period and therefore incidence of visiting a PWG Park in NSW would also be equivalently lower than for surveyed regions. Conducting a survey over a 12-month period in such low incidence regions would not yield sufficient sample without an inordinate allocation of sampling effort. Therefore, it was determined that PWG visitation from these five non-surveyed regions would be estimated from existing HTS data, regarded as an accurate measure of visitation by region across Australia (i.e. a sample of over 20,000 respondents are surveyed for the HTS each year).

Flow chart 5 provides a summary of the standard visitation calculation.

However, as a new sampling frame has been implemented for the 2012 survey, adjustments to the visitation estimates for 2008 and 2010 was required to account for the non-surveying of mobile only households in these years. This adjustment is detailed in section 5.6.

Flow Chart 5: Summary of PWG Parks Annual Visitation Calculation



## 5.1 Taking a Robust Approach to Estimating Visitation

In calculating the PWG park visitation estimate a *robust* approach was undertaken for this study. It was determined that it was better to derive an estimate that is likely to err on the side of caution, than derive an estimate that could be unduly inflated.

The methods used to ensure that a robust approach to calculating the estimate was undertaken included:

- Focusing survey effort in regions where visitation to NSW was likely and significantly large, in order to strengthen the confidence limit of the estimate;
- Conducting the survey as a 'stand-alone' survey rather than 'piggy-backing' questions on an Omnibus survey to improve response rates and reduce non-response bias, thereby improving the reliability of the estimate;
- Including questions common to the HTS to enable validation and possible adjustment of survey data to industry recognised and verifiable data;
- Limiting recall of visitation to 'within the last 4 weeks' to improve accuracy;
- Asking respondents to name the park they visited, ensuring that the park visited could be classified as either PWG or non-PWG managed, thereby minimising counting of out-of-scope visits;
- Designing a series of questions to confirm park type when the respondent could not recall the park name to again minimise counting of out-of-scope visits;
- Including confirmation questions for high numbers of visits, high numbers of children visiting and high numbers of child visits to ensure that potential outliers are valid; and
- Excluding any children over and above the number in the household, if an adult in the respondent's household was not responsible for the care of these children on that visit, to minimise the likelihood of double-counting child visits.

#### 5.2 PWG Adult Park Visitation Calculation from Survey Data

A seven step process was conducted to calculate PWG park *adult* visitation from survey data, as follows:

- 1. Identify four groups of res¹pondents claiming to have visited a park in NSW within the last 4 weeks
  - a. Were able to *directly name* the park that they visited within the last 4 weeks;
  - b. Were able to name *the nearest town* to the park they visited within the last 4 weeks, which enabled identification of the park name via read out lists;

- c. Could not name the park they visited within the last 4 weeks, but could name the *type* of park they visited (i.e. PWG or non-PWG); and
- d. Could not name the park *nor* the type of park visited within the last 4 weeks.
- 2. Determine the proportion of those directly naming a PWG park to those naming a non-PWG park that they visited (i.e. the name of the park provided has been allocated as being either PWG or non-PWG);
- 3. Assume that those only naming the park *type* visited were correct in their categorisation and allocate them accordingly to the PWG or PWG park category<sup>1</sup>;
- 4. Randomly allocate those that could not name the park nor the type of park they visited (i.e. in 1d) in proportion to those who were able to directly name the park they visited (i.e. in 1a)<sup>2</sup>.
- 5. Calculate the unweighted average number of visits to each PWG park (i.e. exclude from the calculation the "can't says" and blank<sup>3</sup> fields) approximately 99% of responses in 2014;
- 6. Allocate the average number of visits to "can't says" and blank fields approximately 1% of PWG responses in 2014; and
- 7. Multiply each respondent by the appropriate age by sex by region weight and then multiply by the number of visits for each respondent and sum to obtain total visits.

Pilot survey results conducted in September-October 2007 indicated that the proportion of respondents incorrectly claiming the park they visited was a PWG park was balanced out by similar proportions of respondents incorrectly claiming that they visited a non-PWG park. It was determined that the error factor was so similar that any re-allocation of data toward or away from PWG Parks for the 2008, 2010 and 2012 surveys would not improve survey estimates for visitation to PWG parks and, as a consequence, no adjustment was made to 2008, 2010 and 2012 survey data. The robust approach taken was not to attempt to edit these responses.

<sup>&</sup>lt;sup>2</sup> It was determined that those able to *name* the park they visited had the greatest likelihood of correct allocation of a park to the PWG or non-PWG category. Therefore, those for which the park type was not defined should be allocated in proportion to those that could name the park they visited, particularly since only a small proportion of responses, require such allocation (i.e. 2%-4% of all responses in each survey year).

<sup>&</sup>lt;sup>3</sup> Blanks eventuate primarily through those that 'can't say' the park type. Because a respondent does not *know* the type of park visited they are not asked the number of times visited (this rule was incorporated to shorten survey length). In limited circumstances, evidence of park name, nearest town and park type may allow, through post editing, some of these parks to be re-defined as PWG or non-PWG parks *prior* to the pro-rata allocation process outlined in step 4 above. However, number of visits would still remain blank and so must be imputed as detailed in step 6.

## 5.3 PWG Child Park Visitation Calculation from Survey Data

To calculate PWG park *child*<sup>1</sup> visitation from survey data a six step process was followed:

- 1. Use PWG parks allocated for the *adult* visitation estimate, as well as number of adult visits made to each park;
- 2. Use the following assumptions for the child visitation calculation:
  - a. Assume that if children visited a specific PWG park with the adult on the *most recent visit* to that park, the children visited on *all* visits to that PWG park in the 4 week period (i.e. the most likely scenario is for the adult to take the children with them, whenever they visited the park);
  - b. Assume that if the number of children visiting the PWG park on the most recent visit is *equal to* or *less than* the number of children living in the household, the children visiting with the adult are from that same household (i.e. if the household has 2 children and 2 children visited the park, they are likely to be the 2 children who live in the household);
  - c. If the number of children visiting the PWG park on the most recent visit is *greater than* the number of children living in the household, the following calculation applies:
    - i. If the number of extra<sup>2</sup> children were *under the care* of the respondent or another adult member of their household, these extra children were included in the child visitation estimate;
    - ii. If the number of extra children were *not* under the care of the respondent or another adult member of their household (i.e. an adult member from another household), these extra children were *not* included in the child visitation estimate (i.e. to reduce double-counting of children in the estimate).
- 3. If the number of children visiting is unknown (i.e. can't say or blank), allocate number of children visiting as follows:
  - a. For 0 child households, allocate the mean number of children visiting from all 0 child households visiting a PWG park where the number of children visiting was provided after data manipulations 2ci and 2cii have been applied;
  - b. For 1 child households, allocate the mean number of children visiting from all 1 child households visiting a PWG park, as per 3a above;
  - c. For 2 child households, allocate the mean number of children visiting from all 2 child households visiting a PWG park, as per 3a above;

<sup>&</sup>lt;sup>1</sup> A child is classified as being under 18 years of age.

<sup>&</sup>lt;sup>2</sup> Extra children is calculated as number of children visiting that specific PWG park on the respondent's most recent visit to that park, less the number of children living in the respondent's household.

- d. For 3 child households, allocate the mean number of children visiting from all 3 child households visiting a PWG park, as per 3a above;
- e. For 4 or more child households, allocate the mean number of children visiting from all 4 or more child households visiting a PWG park, as per 3a above.
- 4. Where the number of extra children visiting with the adult in the household cannot be determined (i.e. can't say or blank), randomly allocate whether the extra children were or were not in the care of the adult in the household via the proportion of responses that could allocate the care of these children to the adult in the household or not;
- 5. Multiply the number of visits to each PWG park by the number of eligible  $^{1}$  children visiting that park on the most recent visit i.e. raw child visits
- 6. Multiply each respondent by the appropriate number of children in the household by region weight; then multiply this by the number of raw child visits for each PWG park and sum to obtain total visits.

## 5.4 Total PWG Park Visitation Calculation from Survey Data

To calculate the total number of PWG park visits from survey data for all waves in 2008, 2010, 2012 and 2014, the following calculation applies:

- 1. Sum the number of adult visits to a PWG park obtained for each respondent multiplied by their individual population survey weight for all 13 survey waves;
- 2. Sum the number of child visits to a PWG park for each household multiplied by their household survey weight for all thirteen survey waves; and
- 3. Sum total annual adult visits and total annual child visits to obtain total PWG visits from survey data.

## 5.5 PWG Park Visitation Calculation for Non-surveyed Regions

Roy Morgan Research Holiday Tracking Survey (HTS) data provides estimates of overnight visitation to NSW in the last month. This NSW Parks visitation survey asks a similar set of questions to respondents as follows:

QHTS1. Thinking back over the last 12 months to your MOST RECENT HOLIDAY of one or more nights away from home. Was the holiday in...?

1. New South Wales

Roy Morgan Research July, 2015

-

<sup>&</sup>lt;sup>1</sup> An eligible child is one determined to be in the care of the respondent's household i.e. the respondent's children or any extra children deemed to be in the care of the respondent or another member of the respondent's household.

- 2. Another Australian State or Territory
- 3. Overseas
- 4. Did not go on a holiday of one or more nights in the last 12 months
- 5. Can't say

QHTS2. Was that holiday in the last 4 weeks?

- 1. Yes
- 2. *No*
- 3. Can't say

However, a person can possibly visit a park on a day trip to NSW even if they do live interstate. As such, an additional question was included to calculate the amount of day trips to New South Wales by non-NSW respondents, as follows:

QTRAVEL. Have you visited New South Wales within the last 4 weeks?

- 1. Yes
- 2. *No*
- 3. Can't say

This question allows an adjustment to be made to overall visitation to NSW in the last 4 weeks. However, to calculate visitation to a PWG Park, the only comparable information between the two surveys is the incidence of overnight visitation to NSW in the last 4 weeks/month. HTS data is compared with Parks Visitation Survey data to determine whether any adjustment is required to ensure survey data is in line with HTS data.

The key assumption made to calculate PWG park visitation from non-surveyed regions, using HTS data as a proxy, is that the proportion of adult visitors to a PWG park as a proportion of those visiting NSW overnight is equivalent to the proportion achieved for the survey region with the lowest proportion visiting a PWG park. This ratio of visitation is then applied across non-surveyed regions to calculate the proportion of adults visiting PWG parks per region. To calculate total adult visits from these regions, the total number of adults visiting is then multiplied by the average number of adult visits for the survey region with the lowest proportion of adults visiting a PWG park.

To calculate child visitation for these non-survey regions the key assumption made is that child visitation to a PWG Park for these regions is no better than child visitation for the region surveyed with the lowest incidence of visitation. The ratio of child visitors to adult visitors to this lowest incidence survey region is calculated and applied to each non-survey region to calculate number of child visitors from each region. The average number of visits

per child for this lowest incidence survey region is then applied to non-survey regions to calculate total number of child visits per region.

Overall visitation from each non-survey region is then simply the sum of adult visits and child visits in these regions.

#### 5.6 PWG Park Visitation Estimate Revision to Account for Sample Frame Change

As the 2012 and 2014 survey sample frames use a Random Digit Dialling (RDD) approach, the sample was not only weighted to be representative of the population by age, sex, region and number of children in the household (as was the case for the 2008 and 2010 surveys), but was also weighted to account for phone status in the population. Households were classified as (1) landline only households; (2) mobile only households; and (3) households with both landline and mobile phones.

However, as the sampling frame for the 2008 and 2010 surveys was based on the Electronic White Pages (EWP), questions to calculate household phone status were not included. As a consequence visitation estimates for the 2012 and 2014 surveys were not strictly comparable with estimates obtained for the 2008 and 2010 surveys because the weighting regimen differed.

In order to enable comparison of visitation estimates between years, the following process was undertaken:

- 1. Re-weight and rerun all 13 waves of the 2012 survey, excluding respondents from mobile only households, to quantify the difference made to the visitation estimate as a result of the addition of respondents in mobile only households;
- 2. Calculate percentage difference in the 2012 visitation estimate for both adult child visitation with respondents from mobile only households excluded;
- 3. Use Roy Morgan Single Source data to determine the percentage of mobile only households in 2008, 2010 and 2012;
- 4. Calculate percentage difference in the visitation estimates for 2008 and 2010 based on the ratio of mobile only households in these years, compared to 2012;
- 5. Apply these percentage differences to calculate the number of adult visits and number of child visits in 2008 and 2010.

Data by wave, region or origin, PWG Branch, Region and individual park had to be also adjusted so that they summed to the revised visitation estimates in 2008 and 2010.

#### 6. ANNUAL VISITATION ESTIMATE CALCULATION

#### **6.1 Summary of Visitation Estimate**

The 2014 annual PWG park visitation estimate after the conclusion of waves 1-13 (and including calculation of visitation from non-surveyed states) is as follows:

39,167,370	<b>Annual Total Visitation Estimate</b>
7,700,954	Annual Child Visitation Estimate
31,466,415	Annual Adult Visitation Estimate

The 2008 and 2010 visitation estimates were adjusted to account for the change in sampling frame in 2012. The 2014 visitation estimate is the highest yet recorded. It is 10.3% higher than the 2012 estimate (35,495,625), 15.7% higher than the 2010 estimate (33,843,626) and 3.3% higher than the 2008 estimate (37,927,616). The sections following detail how the estimates were calculated.

#### **6.2** Calculating the Visitation Estimate

#### **6.2.1** Annual Visitation from Survey Data

Estimated annual visitation to PWG parks is as follows:

```
Annual PWG Visitation = \sum [Adult visits<sup>1</sup> + Child visits<sup>1</sup>] for the 13 survey waves

1. Within the last 4 weeks.
```

The final estimate is then *adjusted* to take into account the effect of non-response bias. The 2008 and 2010 estimates were also adjusted to account for the change in sampling frame from Electronic White Pages (EWP) to Random Digit Dialling (RDD) in 2012. The following sections highlight each element of the estimation calculation.

#### **6.2.2** Adult Visitation from Survey Data (Unadjusted)

Table 6.2.2 shows that adult visitation to PWG parks by region of origin (i.e. survey region), based solely on survey data, shows that intrastate visitation in 2014, 2012, 2010 and 2008 (i.e. visitation from adults from Sydney and the remainder of NSW) contributes more than 90% of all adult visits (92.2% - 2014; 92.3% - 2012; 92.2% - 2010; 91.9% - 2008). Interstate visitation contributes around 8% of all adult visits.

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Adult Visits	Sydney	Rem NSW	ACT	Mel- bourne	Rem VIC	Bris- bane	Rem SE QLD	Total
2014	31,170,105	16,872,905	799,762	883,076	586,123	1,279,176	497,960	52,089,107
2012	23,180,212	13,734,851	606,660	948,561	396,057	617,054	516,654	40,000,051
2010	24,461,077	13,504,242	703,853	551,148	361,080	799,600	795,125	41,176,125
2008	24,937,199	15,665,180	682,956	1,316,305	363,321	559,223	656,074	44,180,260
% Contribution	Sydney	Rem NSW	ACT	Mel- bourne	Rem VIC	Bris- bane	Rem SE QLD	Total
2014	59.8%	32.4%	1.5%	1.7%	1.1%	2.5%	1.0%	100.0%
2012	58.0%	34.3%	1.5%	2.4%	1.0%	1.5%	1.3%	100.0%
2010	59.4%	32.8%	1.7%	1.3%	0.9%	1.9%	1.9%	100.0%
2008	56.4%	35.5%	1.5%	3.0%	0.8%	1.3%	1.5%	100.0%

Table 6.2.2: <u>Estimated Annual PWG Park Adult Visits by Region of Origin</u> (Unadjusted)

# **6.2.3** Child Visitation from Survey Data (Unadjusted)

Child visitation to PWG parks is calculated somewhat differently to adult visitation, because age and gender data was not collected for each child visiting as part of the survey. As such, child visitation data could not be weighted by age, sex and region as was adult visitation data. Number of children living in the household was collected however, so this variable, along with region of origin, were used to weight child visitation data.

Table 6.2.3-1 highlights the number child visits to PWG parks by number of children living in the household. Of note is the marked decline from 2008 to 2012 in the number and proportion of child visits from households with no children living in them (e.g. grandparents taking their grandchildren on a visit, school teachers taking pupils etc.). In 2008 over one third of child visits came from households with no children (35.3%), while in 2012 this group's contribution to child visitation had fallen to 9.0%. However, contribution from households with no children has rebounded slightly in 2014 to 13.5%. The most evident change in child visitation in 2014 has been the marked increase in contribution to visitation from households with 1 child. One child households contributed 21.6% of child visits in 2014, markedly higher than in previous years. Conversely, contribution of visits from households with 4 or more children has declined in 2014.

**Table 6.2.3-1: Estimated No. of Child Visits by Children in the Household** (Unadjusted)

Child Visits	0 Child Households	1 Child Households	2 Child Households	3 Child Households	4+ Child Households	Total Households
2014	1,764,403	2,810,789	5,101,398	2,333,645	793,486	13,040,669
2012	842,222	1,174,471	3,559,805	2,440,984	1,389,177	9,406,659
2010	1,294,248	1,741,682	4,166,142	1,794,088	1,008,865	10,005,026
2008	3,448,526	1,571,218	2,185,440	1,895,168	664,968	9,765,320
% Contribution	0 Child Households	1 Child Households	2 Child Households	3 Child Households	4+ Child Households	Total Households
2014	13.5%	21.6%	39.1%	17.9%	6.1%	100.0%
2012	9.0%	12.5%	37.8%	25.9%	14.8%	100.0%
2010	12.9%	17.4%	41.6%	17.9%	10.1%	100.0%
2008	35.3%	16.1%	22.4%	19.4%	6.8%	100.0%

Breakdown by region in table 6.2.3-2 reveals that in 2014, the contribution of intrastate child visits to all child visits is at its highest at 93.4% (90.4% - 2012; 89.3% - 2010; 91.5% in 2008), with contribution from interstate visits at its lowest at 6.6% (9.6% - 2012; 10.7% - 2010; and 8.5% in 2008). For the first time, child visits from Sydney households has exceeded 60% of all child visits (63.2% in 2014).

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Child Visits	Sydney	Rem NSW	ACT	Mel- bourne	Rem VIC	Bris- bane	Rem SE QLD	Total
2014	8,093,988	3,868,752	204,061	237,383	130,062	190,995	78,480	12,803,721
2012	5,195,139	3,303,904	206,820	190,859	104,748	181,110	224,078	9,406,659
2010	5,721,350	3,216,259	198,245	105,049	109,198	356,619	298,305	10,005,026
2008	5,457,863	3,473,977	165,277	155,522	71,086	134,190	307,406	9,765,320
% Contribution	Sydney	Rem NSW	ACT	Mel- bourne	Rem VIC	Bris- bane	Rem SE QLD	Total
2014	63.2%	30.2%	1.6%	1.9%	1.0%	1.5%	0.6%	100.0%
2012	55.2%	35.1%	2.2%	2.0%	1.1%	1.9%	2.4%	100.0%
2010	57.2%	32.1%	2.0%	1.0%	1.1%	3.6%	3.0%	100.0%
2008	55.9%	35.6%	1.7%	1.6%	0.7%	1.4%	3.1%	100.0%

Table 6.2.3-2: Estimated No. PWG Park Child Visits by Survey Region (Unadjusted)

## **6.2.4** Annual Survey Visitation Adjustment

As stated in section 4.2 of this report, the survey estimates can be over-inflated because of (1) non-response bias (i.e. those people who elect not to be interviewed have different park visitation patterns to those surveyed); and (2) time period telescoping (i.e. respondents recall visits to parks outside of the survey visitation period – more than 4 weeks prior to being surveyed); (3) sampling frame changes (i.e. from EWP to RDD); and (4) other factors such as outliers and imputation effects. Analysis from past surveys shows that the affects of telescoping and other factors is minor and so only the two factors for non-response and sampling frame change are addressed individually in the sections below.

#### **6.2.4.1** Adjustment for Non-response

This report details estimates of visitation for all 13 waves of the 2014 survey. The questionnaire was designed to account for non-response bias (and at the same time minimise the telescoping effect). People not electing to complete the survey were asked the following question:

Before you go, can I ask you one short question? In the last 4 weeks, that is, SINCE [DAY] [DATE] [MONTH], have you visited a park like a National Park in New South Wales?

Survey questions were also designed to ensure that respondents were aware of the actual commencement date of the 4 week time period, in order to remove reporting of visitation to parks outside of this time period, as follows:

What is the NAME of the National Park, State Conservation Area, Nature Reserve, State Forest or other park you visited MOST RECENTLY in NEW SOUTH WALES in the past 4 weeks, that is, SINCE [DAY] [DATE] [MONTH]?

How many times did you visit [%PARK\_NAME] in the last 4 weeks, that is, SINCE [DAY] [DATE] [MONTH]?

The effects of non-response bias and telescoping have been assessed together (i.e. as one net effect) as procedures put in place to measure their effects have been undertaken since wave 1 of the 2010 survey. While it is extremely difficult to separate the individual effect of non-response bias from the telescoping effect, the telescoping effect will be extremely small due to the inclusion of the actual date 28 days prior to the respondent being surveyed for all relevant visitation questions. Separation of each effect is therefore of little consequence to this study so long as the combined effect of both is accounted for in the overall PWG park visitation estimate. As the telescoping effect for the study will be minimal, further discussion the overall effect will be regarded as the effect of non-response bias.

To calculate the magnitude of non-response bias, comparison of the proportion of people *surveyed* who claimed to have visited a NSW park within the last 4 weeks must be compared with the proportion of people *contacted*, *but not surveyed* who claimed to have visited a NSW park over the same time period.

The visitation estimate can therefore be adjusted to account for non-response bias by making the following key assumptions:

- 1. Non-respondents who *did not* answer the parks visitation question would have the same visitation habits as non-respondents that *did* answer the question;
- 2. By weighting respondents and non-respondents to the population of each region, an *actual* non-response/telescoping adjustment factor can be obtained; and
- 3. The non-response/telescoping adjustment factor can be equally applied to visitation to PWG parks as non-PWG parks.

Table 6.2.4.1-1 highlights the method of calculating the non-response adjustment figure for waves 1-13 of the 2014 survey and compares adjustment factors with the 2012, 2010 and 2008 surveys.

Overall the non-response adjustment factor for 2014 was the lowest of all four surveys.

Table 6.2.4.1-1: Non-response Adjustment by Region 2014

Contact Type - Waves 1-13 2014	Total	Sydney	Rem NSW	ACT	Mel- bourne	Rem VIC	Bris- bane	Rem SE QLD
Persons Contacted, Not Surveyed -								
Yes - Visited a NSW Park <sup>1</sup>	1,864	693	560	331	42	62	85	91
No - Did Not Visit a NSW Park <sup>1</sup> No definitive response	28,924	4,517	4,118	3,780	4,055	3,242	4,784	4,428
given <sup>2</sup> Total Contacted, Not	56,661	10,742	8,070	6,537	8,886	5,134	8,738	8,554
Surveyed Adjusted Yes - Not	87,449	15,952	12,748	10,648	12,983	8,438	13,607	13,073
Surveyed <sup>3</sup> Adjusted No - Not	5,492	2,408	1,507	798	129	159	248	244
Surveyed <sup>s</sup> Contact Type - Waves	81,957	13,544	11,241	9,850	12,854 Mel-	8,279	13,359 Bris-	12,829
1-13 2014	Total	Sydney	Rem NSW	ACT	bourne	Rem VIC	bane	Rem SE QLD
Persons Contacted, Surveyed -								
Yes - Visited a NSW Park <sup>1</sup>	2,077	962	625	288	43	40	60	59
No - Did Not Visit a NSW Park <sup>1</sup>	13,577	2,287	1,982	1,680	2,564	1,267	1,898	1,899
Total Contacted, Surveyed	15,654	3,249	2,607	1,968	2,607	1,307	1,958	1,958
Total Yes - Visited a NSW Park <sup>1</sup>	7,569	3,370	2,132	1,086	172	199	308	303
Total No - Did Not Visit a NSW Park <sup>1</sup>	95,534	15,831	13,223	11,530	15,418	9,546	15,257	14,728
Total Contacted	103,103	19,201	15,355	12,616	15,590	9,745	15,565	15,031
18 Yrs+ Population -								
Dec 2013	13,335,336	3,692,836	2,151,773	294,815	3,369,879	1,208,695	1,516,195	1,101,143
Wtd Yes Pop'n - Visited a NSW Park - All Contacts <sup>1, 5</sup>	1,086,150	648,088	298,753	25,381	37,099	24,684	29,961	22,184
% of Population - All Contacts	8.14%	17.55%	13.88%	8.61%	1.10%	2.04%	1.98%	2.01%
Wtd Yes Pop'n - Visited a NSW Park -All Surveyed <sup>1, 6</sup>	1,824,640	1,093,416	515,864	43,144	55,583	36,991	46,462	33,181
% of Population - All Surveyed	13.68%	29.61%	23.97%	14.63%	1.65%	3.06%	3.06%	3.01%
Non-response Adjustment Factor Waves 1-13 <sup>7</sup> 2014	0.5953	0.5927	0.5791	0.5883	0.6674	0.6673	0.6449	0.6686
Non-response Adjustment Factor Waves 1-13 <sup>7</sup> 2012	0.7040	0.6938	0.6692	0.7741	0.8687	0.8158	0.7877	0.9368
Non-response Adjustment Factor Waves 1-13 <sup>7</sup> 2010	0.6560	0.6094	0.6747	0.8155	0.9440	0.8841	0.7334	0.7841
Non-response Adjustment Factor Waves 7-13 <sup>7</sup> 2008	0.6927	0.7314	0.6424	0.7742	0.6623	0.4835	0.5705	0.6071

- 1. Visited within last 4 weeks.
- 2. Can't say if visited, Refused to answer question, hung-up before answering.
- 3. Key assumption that those not giving a definitive response to the question would have answered in the same proportions (i.e. yes, no) as those who did.
- 4. Sum of adjusted yes and adjusted no with responses to those who were surveyed and answered yes or no.
- 5. Proportion answering yes multiplied by the 18yrs+ population for all contacts.
- 6. Proportion answering yes multiplied by the 18yrs+ population for all surveyed.
- 7. Weighted yes population for all surveyed ÷ Weighted yes population for all contacts.

Table 6.2.4.1-2 shows that, the non-response adjustment factor calculated for each survey wave in 2014. These adjustment factors are used to calculate the visitation estimate on a wave by wave basis.

Table 6.2.4.1-2: Non-response Adjustment Factor by Wave

	Non-response Adjustment 2014								
Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7			
0.5716	0.5846	0.4696	0.5216	0.5758	0.5249	0.2854			
Wave 8	Wave 9	Wave 10	Wave 11	Wave 12	Wave 13	Total			
1.0331	0.6331	0.6980	0.5541	0.5987	0.6156	0.5953			

#### **6.2.4.2** Adjustment for Sample Frame Changes

As the sampling frame in 2008 and 2010 used the Electronic White Pages, while Random Digit Dialling was used in 2012 and 2014, an adjustment to the 2008 and 2010 estimate was made in order to accurately compare visitation estimates over time. As discussed in section 5.1.6, the main difference between the two sampling methods is that mobile only households have not been catered for in 2008 and 2010.

The inclusion of mobile only households in the sampling frame tends to reduce the 2012 visitation estimate marginally, as can be seen in Table 6.2.4.2-1.

Table 6.2.4.2-1: <u>2012 PWG Park Visitation Including & Excluding Mobile Only</u> Households (Unadjusted)

	Unadjusted visits - All respondents	Unadjusted Visits - Excluding Mobile only respondents	Factor	Difference
Adult visits 2012	40,000,051	39,736,931	99.3422%	0.6578%
Child visits 2012	9,406,659	9,253,133	98.3679%	1.6321%

The proportion of mobile only households each year is then used to calculate the Mobile only adjustment factor

Table 6.2.4.2-2: Proportion of Mobile Only Households – PWG Survey Regions

	2008	2010	2012
Population	8.3%	14.2%	20.3%
Households	5.6%	9.4%	13.5%

Source: Roy Morgan Single Source.

The adjustment factor is then calculated dividing the proportion of mobile only households in 2008 or 2010 by the proportion of mobile only households in 2012 and multiplying by the percentage difference in the 2012 visitation estimate when mobile only households are included in the sample frame. For adult visits the proportion of mobile only persons in the population is used, while for children the proportion of mobile only households is used.

Table 6.2.4.2-3: Adjustment Factor for Sampling Frame Change – 2008 & 2010

	2008	2012
Adult visits 2012	99.73%	99.54%
Child visits 2012	99.33%	98.86%

# 6.2.4.3 Revised Survey Visitation Estimates based on Non-response Adjustment

Adjusted annual PWG park visitation on a region of origin basis (Table 6.2.4.3) shows that intrastate visitation accounts for 91.8% of visits in 2014, 90.4% of visits in 2012; 89.5% in 2010; and 92.4% in 2008. The 2014 percentage contribution to visits for each survey region is generally in line with 2012 rates. The only exception was Sydney, which maintained rates similar to those achieved in 2008.

Table 6.2.4.3: Adjustment Park Visitation Estimate by Region of Origin

Adjustment Calculation		Sydney	Rem NSW	ACT	Mel- bourne	Rem VIC	Bris- bane	Rem SE QLD	Total
	Unadjusted Adult visits	31,170,105	16,872,905	799,762	883,076	586,123	1,279,176	497,960	52,089,107
	Adult Non- response Adjustment	18,565,768	9,819,573	472,802	592,299	393,032	828,945	334,561	31,006,979
	Unadjusted Child visits	8,093,988	3,868,752	204,061	237,383	130,062	190,995	78,480	12,803,721
2014	Child Non- response Adjustment	4,840,104	2,232,473	120,097	156,027	81,458	118,630	51,671	7,600,461
	Total Adjusted Visits	23,405,872	12,052,045	592,899	748,326	474,490	947,575	386,232	38,607,440
	% Contribution	60.6%	31.2%	1.5%	1.9%	1.2%	2.5%	1.1%	100.0%
	Unadjusted Adult visits	23,180,212	13,734,851	606,660	948,561	396,057	617,054	516,654	40,000,051
	Adult Non- response Adjustment	16,270,424	9,299,610	475,095	833,710	326,906	584,813	367,971	28,158,528
	Unadjusted Child visits	5,195,139	3,303,904	206,820	190,859	104,748	181,110	224,078	9,406,659
2012	Child Non- response Adjustment	3,641,563	2,233,970	161,747	167,522	86,342	171,414	159,376	6,621,933
	Total Adjusted Visits	19,911,987	11,533,580	636,843	1,001,232	413,248	756,226	527,347	34,780,462
	% Contribution	57.3%	33.2%	1.8%	2.9%	1.2%	2.2%	1.5%	100.0%

Table 6.2.4.3: Adjustment Park Visitation Estimate by Region of Origin (continued)

Adjustment Calculation		Sydney	Rem NSW	ACT	Mel- bourne	Rem VIC	Bris- bane	Rem SE QLD	Total
	Unadjusted Adult visits	24,461,077	13,504,242	703,853	551,148	361,080	799,600	795,125	41,176,125
	Adult Non- response Adjustment	15,114,365	9,239,166	582,011	527,563	323,682	594,579	632,195	27,013,561
	Adult Sampling Frame Adjustment	15,044,991	9,196,758	579,340	525,141	322,197	591,850	629,293	26,889,569
	Unadjusted Child visits	5,721,350	3,216,259	198,245	105,049	109,198	356,619	298,305	10,005,026
2010	Child Non- response Adjustment	3,601,436	2,093,971	159,300	111,491	100,659	274,546	222,386	6,563,789
	Child Sampling Frame Adjustment	3,560,452	2,070,142	157,487	110,222	99,513	271,422	219,855	6,489,093
	Total Adjusted Visits	18,605,442	11,266,899	736,827	635,363	421,710	863,272	849,148	33,378,662
	% Contribution	55.7%	33.8%	2.2%	1.9%	1.3%	2.6%	2.5%	100.0%
	Unadjusted Adult visits	24,937,199	15,665,180	682,956	1,316,305	363,321	559,223	656,074	44,180,260
	Adult Non- response Adjustment	18,242,438	10,065,750	528,865	871,997	175,679	319,116	398,373	30,602,217
	Adult Sampling Frame Adjustment	18,193,366	10,038,673	527,442	869,651	175,206	318,257	397,301	30,519,897
	Unadjusted Child visits	5,457,863	3,473,977	165,277	155,522	71,086	134,190	307,406	9,765,320
2008	Child Non- response Adjustment	3,998,918	2,235,745	128,188	103,189	34,427	76,695	186,954	6,764,117
	Child Sampling Frame Adjustment	3,972,285	2,220,855	127,335	102,502	34,198	76,184	185,709	6,719,068
	Total Adjusted Visits	22,165,651	12,259,529	654,777	972,153	209,404	394,441	583,010	37,238,965
	% Contribution	59.5%	32.9%	1.8%	2.6%	0.6%	1.1%	1.6%	100.0%

# 6.2.4.4 Wave by Wave Analysis of Adjusted Visitation Survey Estimates

Please note that data for each survey year has been aligned so that survey waves follow the calendar year. This alignment applies for all sections showing visitation by survey wave. Where significance testing has been undertaken, coloured circles highlight when a result from 2008, 2010 or 2012 is significantly higher or lower than the 2014 result (at the 95%)

confidence level). The wave in which a public holiday or school holidays fall has also been displayed to identify waves where PWG park visitation may be affected by these events.

Figure 6.2.4.4-1 shows **overall visitation** wave by wave for survey estimates only and includes the margin of error for each wave. In general, PWG park visitation in 2014 tended to be higher than in all other years in December-February (i.e. summer school holidays), April-May (i.e. Easter school holidays) and in November. 2014 visitation was lower than in all other years in July-August (i.e. mid-winter).

2014 PWG park visitation was significantly higher than in all other years in late April-May (wave 6). 2014 visitation was significantly higher than 2008 visitation in waves 1, 2 and 6, significantly higher than 2010 visitation in waves 1, 6, 12 and 13, and significantly higher than 2012 visitation in waves 4, 6 and 12. The only times when PWG Park visitation in 2014 was significantly lower than in other years was in July-August (wave 9), when it was significantly lower than the 2012 estimate and in August-September (wave 10), when it was significantly lower than the 2008 estimate.

As can be seen in Figure 6.2.4.4-2, in general **adult visitation** in 2014 tends to be higher than all other years in April-May (waves 5-6 – autumn), during and after Easter and the accompanying school holidays, along with Anzac Day. 2014 adult visitation also tends to be higher than other years in November (wave 13).

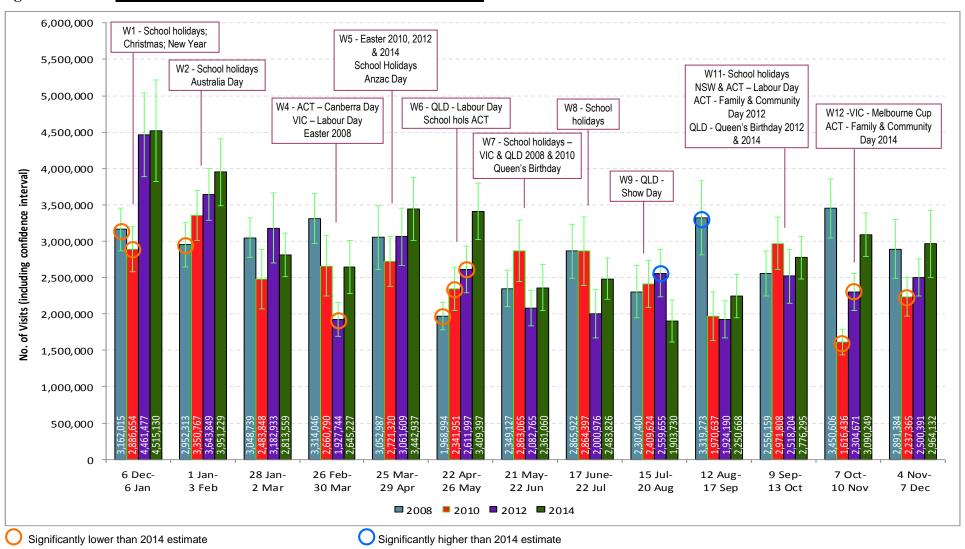
2014 adult visitation was significantly higher than all other years in wave 6 (May). 2014 adult visitation was also significantly higher than 2008 visitation in waves 2 (January) and 5 (April). 2010 adult visitation was also significantly lower than 2014 adult visitation for waves 1 (December) and 3 (February) and waves 12 and 13 (October-November). In relation to 2012, adult visitation was significantly lower than 2014 adult visitation in waves 8 (June-July – mid-winter) and 10 (August-September – late winter-early spring).

2014 adult visitation was significantly lower than 2008 adult visitation in waves 4 (March), 10 (August-September) and 12 (October) and significantly lower than adult visitation in 2010 and 2012 in wave 9 (July-August – mid-winter).

In relation to **child visitation** to PWG parks (see Figure 6.2.4.4-3), visitation over time tends to be increasing over the December-January school holiday period (waves 1-2), in May (wave 6) and in October (wave 12). Child visitation tends to be declining during the Easter school holidays (wave 5) and during winter (waves 7-9).

Child visitation in 2014 is significantly higher than all other years in October (wave 12). It is also higher than 2008 results in waves 1 and 2 (summer) and wave 6 (May), higher than 2010 results in wave 1 (December) and 2012 results in wave 6 (May). 2014 child visitation is significantly lower than 2008 figures in waves 5 (April) and 8 (June-July), lower than 2010 and 2012 result sin wave 3 (February) and wave 7 for 2012 (June).

Figure 6.2.4.4-1: Adjusted Annual Visitation Survey Estimate by Wave



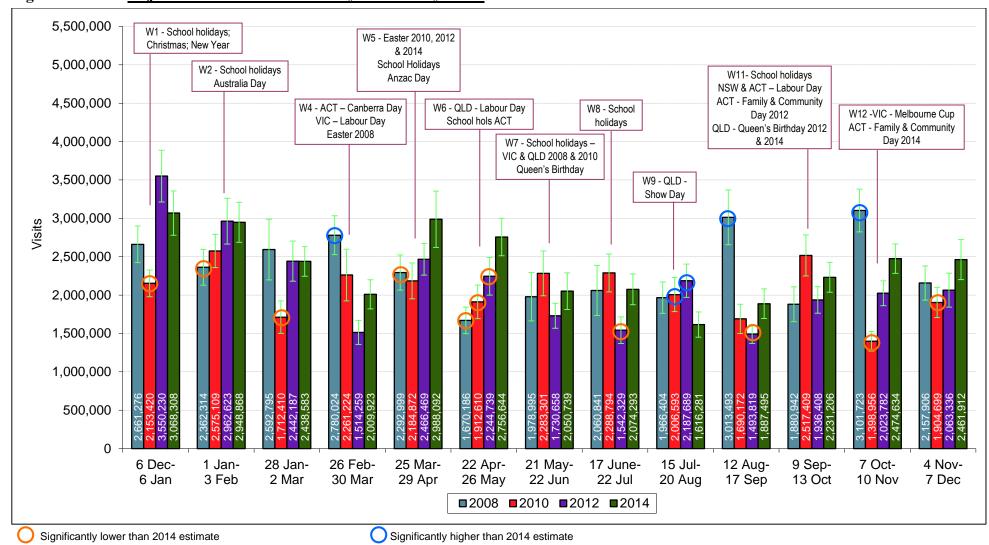
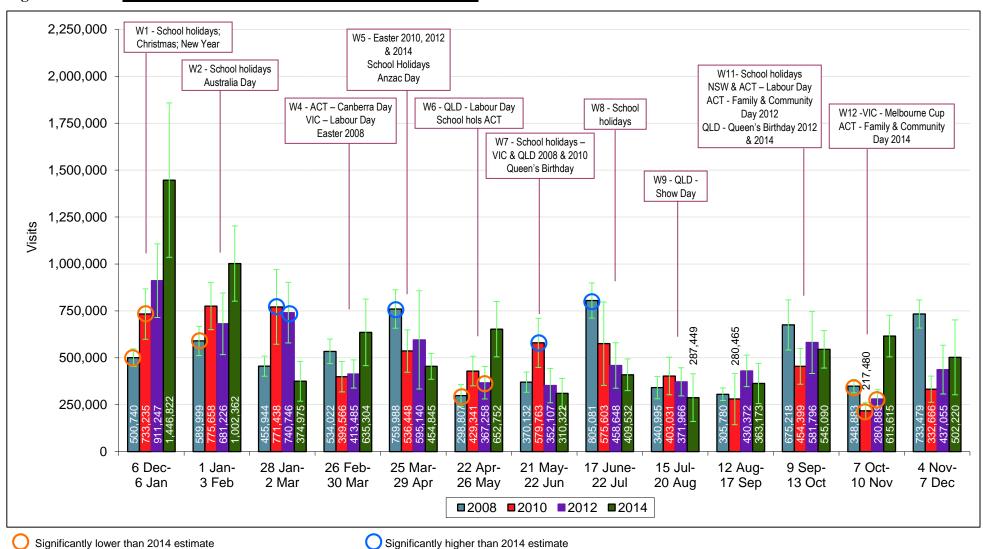


Figure 6.2.4.4-2: Adjusted Adult Visitation Survey Estimate by Wave

Figure 6.2.4.4-3: Adjusted Child Visitation Survey Estimate by Wave



### 6.2.4.5 Region of Origin Analysis of Adjusted Visitation Survey Estimates

Figure 6.2.4.5-1 shows the total number of PWG park visits by the region of origin of the survey respondent for each survey year. The most visits yet recorded from Sydneysiders was observed in 2014 (23.4m), up from 19.9m in 2012 (18.6m in 2010 and 22.2m). 2014 visitation patterns for those surveyed living in non-metropolitan areas of NSW almost equalled the peak achieved in 2008 (12.1m - 2014; 12.3m - 2008) and higher than those observed in 2012 (11.5m) and 2010 (11.3m). In fact, intrastate visitation to PWG parks attained its highest recorded levels in 2014 (35.5m).

PWG park visitation in 2014 was the lowest recorded amongst ACT residents at 592,899, down from the peak in 2010 of 736,827. A similar trend is evident for those living in the area of Southeast QLD that excludes Brisbane (386,232 – 2012; 849,148 – 2010). However in 2014, visitation to PWG parks from people living in Brisbane and in areas of Victoria outside of Melbourne recorded their highest levels so far, attaining 947,575 visits and 474,490 visits respectively. Visits sourced from people living in Melbourne recorded its second lowest result in 2014 (748,326 visits).

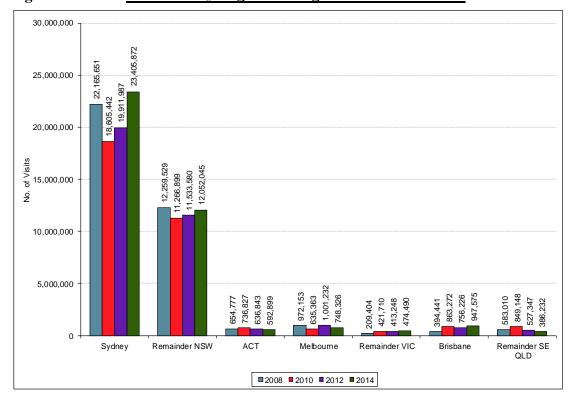


Figure 6.2.4.5-1: Visitation by Region of Origin – Number of Visits

In terms of percentage contribution to PWG park visits, figure 6.2.4.5-2 shows that 60.6% of all visits in 2014 originated from people living in Sydney – the highest proportion yet recorded. However, in 2014 just 31.2% of visits came from those living in other parts of

NSW - the lowest proportion yet recorded. Overall 91.8% of PWG park visits in 2014 originated from people living within the state of NSW – marginally lower than the 2008 result (90.4% - 2012; 89.5% - 2010; 92.4% - 2012).

Interstate visitors in 2014 contributed 8.2% of all visits to PWG parks, down from 10.5% recorded in 2010 (9.6% in 2012 and 7.6% in 2008). In general, proportional contribution to PWG park visits by region of origin in 2014 has generally returned to 2008 levels for those visiting from interstate regions, with only Brisbane residents and those from the remainder of Victoria maintaining levels similar to those attained in 2010 and 2012.

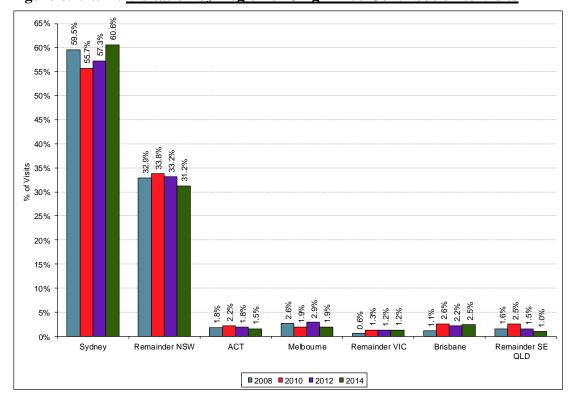


Figure 6.2.4.5-2: Visitation by Region of Origin - % Contribution to Visits

#### 6.2.5 Annual Visitation, including Non-surveyed Region estimates

To calculate visitation to PWG parks for non-surveyed states, Roy Morgan Research Holiday Tracking Survey (HTS) data is used. In order to calculate non-survey region visitation from survey region visitation, the following information is required:

- % visiting NSW overnight for non-surveyed regions;
- The proportion of PWG park adult visitors for survey regions compared with the proportion that visited NSW overnight;
- Average number of adult visits to PWG parks for survey regions; and

 The proportion of PWG park child visits for survey regions compared with adult visits.

It has been assumed for calculation of estimates that PWG park visitation from non-surveyed regions will be *no higher* than the incidence rate for the lowest incidence survey region because incidence of overnight visitation to NSW is lower for these regions than it is for Melbourne and Remainder of Victoria. Therefore the PWG park visitation calculation for non-surveyed regions is *solely* based on the PWG park visitation estimate for Victoria as a whole (i.e. the survey regions of Melbourne and Remainder of Victoria combined). By combining the two survey regions, the reliability of the survey estimate for non-surveyed regions improves (as the sample size is larger for the survey region used in creating the estimate) and also caters for visitation to NSW from interstate urban centres, regional centres and rural communities.

This approach is still however, likely to create visitation estimates for these non-survey regions that are marginally higher than would typically be the case, but the incidence of visitation to NSW from these regions is so small, any affect in inflating the overall survey estimate will be minute.

Using the combined information for Victoria as the adjustment factor for non-surveyed regions (converted to HTS estimates), Table 6.2.5-1 shows that a total of 559,930 PWG park visits were made in 2014 to PWG parks from these non-surveyed regions (459,437 by adults and 100,493 by children). This compares to 715,163 visits in 2012 (586,809 by adults and 128,354 by children), 464,964 visits in 2010 (372,710 by adults and 92,254 by children and 688,651 visits in 2008 (608,968 by adults and 79,673 by children).

South Australians still contribute the highest proportion of PWG park visits of all non-surveyed regions with 35.63% of visits in 2014 coming from this state. However, this is the lowest result ever for South Australia in both absolute visitation numbers and proportional contribution. Western Australian residents contributed over 30% of PWG visits from non-surveyed regions in 2014, the highest level in both absolute visitation numbers and proportional contribution (177,138 and 31.64% respectively). The key region declining in PWG park visitation in 2014 were visits from people in the remainder of Queensland, where just 68,231 people visited (12.19% contribution). This is significantly down on the peak attained in 2012 of 232,371 visits.

Table 6.2.5-2 shows that the overall PWG park visitation estimate for 2014 is 39,167,370 with adult visits contributing 80% and child visits 20% of all visits. This result is similar to previous years (2012 - 81%:19%; 2010 - 81%:19%; 2008 - 82%:18%).

VIC Survey Estimate Non-Survey Regions Rem PWG Park Visitation Calculation QLD SA WA TAS NT Adult Population (Mar 2012) 924,267 1,317,061 1,988,199 389,654 121,342 n/a Visited PWG Park in last 4 wks 1.31% % Visited NSW Overnight in last 4 0.58% 1.19% 0.70% 1.00% 4.24% 2.62% % PWG Visitors to Overnight Visitors n/a n/a 50.10% n/a n/a n/a % Estimate of PWG Visitors 0.29% 0.60% 0.35% 0.50% 2.12% n/a No. Adult PWG Visitors per wave 2,686 7,852 6,973 1,952 2,578 n/a 25,378 Annual Adult PWG Park Visitors 34,914 102,077 90,643 33,508 n/a Average PWG Park Visits per Adult n/a n/a n/a n/a n/a 1.60 Annual Adult PWG Park Visits 55,985 163,681 145,346 40,694 53,731 n/a % Child to Adult PWG Park visits n/a n/a n/a n/a n/a 21.87% Annual Child PWG Park Visits 12,246 35,802 31,792 8,901 11,753 n/a **Total Estimated Annual PWG** 68,231 199,484 177,138 49,594 65,483 n/a Visits - 2014 Contribution to Non-Survey 12.19% 35.63% 31.64% 8.86% 11.69% n/a Region PWG Park Visitation **Total Estimated Annual PWG** 232,371 293,766 94,502 80,981 13,542 n/a Visits - 2012 Contribution to Non-Survey 32.49% 41.08% 13.21% 11.32% 1.89% n/a Region PWG Park Visitation **Total Estimated Annual PWG** 94,608 207,009 109,588 15,894 37,865 n/a Visits - 2010 Contribution to Non-Survey 20.35% 44.52% 23.57% 8.14% 3.42% n/a Region PWG Park Visitation **Total Estimated Annual PWG** 176,917 284,948 122,889 88,304 15,593 n/a Visits -2008

Table 6.2.5-1: Annual PWG Park Visitation – Non-survey Regions

Table 6.2.5-2 also shows that non-survey regions contributed 1.4% to the final annual adjusted PWG park visitation estimate of 39,167,370, contributing a little more to the adult visitation estimate of 31,466,415 (1.5%) and a little less to the child visitation estimate of 7,700,954 (1.30%).

41.38%

17.84%

12.82%

2.26%

n/a

25.69%

Contribution to Non-Survey

Region PWG Park Visitation

Intrastate visitation contributes 90.5% of all PWG park visits in 2012 compared with 88.6% in 2012, 88.3% in 2010 and 90.8% in 2008.

Overall, the 2014 PWG park visitation estimate is 3.3% higher than the 2008 estimate; 15.7% higher than the 2010 estimate and 10.3% higher than the 2012 estimate. Growth is particularly evident in child visitation where levels have been around 6.6m-6.8m from 2008-2012, but increased by approximately 1m child visits in 2014 to 7,700,954 visits. The 2014 adult visit figure is slightly higher than the previous high of 31.1m visits in 2008, now up to 31,5m visits.

Final Adjusted Annual PWG	Adult Visits		Child Visits		Total Visits	
Park Visitation Estimate 2014 <sup>1</sup>	No.	%	No.	%	No.	%
Sydney	18,565,768	59.00%	4,840,104	62.85%	23,405,872	59.76%
Remainder NSW	9,819,573	31.21%	2,232,473	28.99%	12,052,045	30.77%
ACT	472,802	1.50%	120,097	1.56%	592,899	1.51%
Melbourne	592,299	1.88%	156,027	2.03%	748,326	1.91%
Remainder VIC	393,032	1.25%	81,458	1.06%	474,490	1.21%
Brisbane	828,945	2.63%	118,630	1.54%	947,575	2.42%
Remainder SE QLD	334,561	1.06%	51,671	0.67%	386,232	0.99%
Remainder QLD	55,985	0.18%	12,246	0.16%	68,231	0.17%
SA	163,681	0.52%	35,802	0.46%	199,484	0.51%
WA	145,346	0.46%	31,792	0.41%	177,138	0.45%
TAS	40,694	0.13%	8,901	0.12%	49,594	0.13%
NT	53,731	0.17%	11,753	0.15%	65,483	0.17%
Total Australia 2014	31,466,415	100.00%	7,700,954	100.00%	39,167,370	100.00%
Margin of Error <sup>2</sup>	±2.84%	n/a	±7.99%	n/a	±3.85%	n/a
Total Australia 2014	28,745,337	100.00%	6,750,287	100.00%	35,495,625	100.00%
Margin of Error <sup>2</sup>	±2.90%	n/a	±8.02%	n/a	±3.87%	n/a
Total Australia 2010	27,262,279	100.00%	6,581,347	100.00%	33,843,626	100.00%
Margin of Error <sup>2</sup>	±3.18%	n/a	±7.44%	n/a	±4.00%	n/a
Total Australia 2008	31,128,875	100.00%	6,798,741	100.00%	37,927,616	100.00%
Margin of Error <sup>2</sup>	±3.34%	n/a	±4.40%	n/a	±3.54%	n/a

Table 6.2.5-2: Final Annual PWG Park Visitation Estimate - Region of Origin (No.)

#### **6.2.6** Confidence Limits of the Annual Visitation Estimates

The key point to note when calculating the confidence limit of the survey estimate is that adjustments to the estimates for non-response and telescoping have *no effect* on it. The confidence limit relates solely to the estimates derived from the *survey*. Any adjustments to a survey estimate to account for these factors are simply a multiplication of the survey estimate by a constant.

The confidence limits<sup>1</sup> for this study (at the industry accepted 95% confidence level) in 2014 are as follows:

±2.84% Annual Adult Visitation Estimate confidence limit

±7.99% Annual Child Visitation Estimate confidence limit

±3.85% Annual Total Visitation Estimate confidence limit

Lower bound =  $y - t_{\alpha/2}$ , W-1 SE Upper bound =  $y + t_{\alpha/2}$ , W-1 SE

where SE is the standard error and W is the total sum of weights. (approximates to 1.96 due to the sample size).

The % figures for the Confidence Limits on Mean are calculated within EXCEL. The formula used to calculate the % figures is: Absolute value of (CI - Mean)/Mean - as a percentage.

<sup>1.</sup> Excludes visits by International visitors.

<sup>2.</sup> Margin of error based on the 95% confidence level for survey regions only.

<sup>&</sup>lt;sup>1</sup> The Mean, Standard Error of Mean and Confidence Limits on Mean for PWG adult and child park visits have been calculated using the EXAMINE function in SPSS. SPSS uses the following formula for the Confidence Interval for the Mean:

This result compares to an overall confidence limit of  $\pm 3.87\%$  in 2012;  $\pm 4.00\%$  in 2010; and  $\pm 3.54\%$  in 2008.

NSW residents contributed over 90% of PWG visits to the overall visitation estimate in 2014, so as can be seen in table 6.2.6-1, the overall confidence limit is driven by the confidence limits attained for Sydney and remainder NSW. Whilst the confidence limits for other survey regions are large, they have minimal effect on the overall visitation estimate confidence level because visitation is so low from these regions.

Table 6.2.6-1: Confidence Limits by Survey Region of Origin<sup>4</sup>

Number of PWG Park Visits <sup>3</sup>	Syd- ney	Remainder NSW	ACT	Mel- bourne <sup>2</sup>	Remainder VIC	Bris- bane	Remainder SE QLD
Adult Visits Confidence Limit <sup>1</sup>	±3.61%	±4.72%	±14.02%	±9.44%	±17.58%	±18.04%	±13.10%
Child Visits Confidence Limit <sup>1</sup>	±10.73%	±12.21%	±35.57%	±23.68%	±53.09%	±33.60%	±38.67%
Total Visits Confidence Limit <sup>1</sup>	±5.08%	±6.10%	±18.39%	±12.41%	±23.68%	±19.99%	±16.52%

<sup>1. 95%</sup> confidence level.

The confidence limits for overall visitation per survey wave in 2014 ranges between  $\pm 9.79\%$  (wave 12: 7 October-10 November) and  $\pm 15.53\%$  (wave 13: 4 November-7 December) (Table 6.2.6-2).

Table 6.2.6-2: Confidence Limits by Survey Wave<sup>1</sup>

No. PWG Park Visits	Adult Visits Confidence Limit <sup>1</sup>	Child Visits Confidence Limit <sup>1</sup>	Total Visits Confidence Limit <sup>1</sup>	
Wave 1	±9.39%	±28.43%	±15.49%	
Wave 2	±8.83%	±20.00%	±11.67%	
Wave 3	±7.93%	±28.26%	±10.64%	
Wave 4	±9.43%	±27.91%	±13.87%	
Wave 5	±12.26%	±15.17%	±12.64%	
Wave 6	±8.85%	±22.58%	±11.48%	
Wave 7	±11.64%	±25.69%	±13.48%	
Wave 8	±9.67%	±20.56%	±11.47%	
Wave 9	±10.18%	±44.25%	±15.33%	
Wave 10	±10.22%	±29.51%	±13.34%	
Wave 11	±8.73%	±18.32%	±10.61%	
Wave 12	±7.75%	±18.00%	±9.79%	
Wave 13	±10.58%	±39.76%	±15.53%	
Total 2012	±2.75%	±7.78%	±3.74%	

<sup>1. 95%</sup> confidence level for survey estimates only (excludes non-survey estimates).

<sup>2.</sup> Confidence limits of Australian regions not surveyed in 2014 (i.e. SA, WA, Tasmania, NT and remainder SE QLD) will be the same as the combined limit for Melbourne and remainder VIC (8.92% adult visits; 23.74% child visits; 11.58% total visits), as their estimation of PWG park visitation was based on the Victorian estimate.

<sup>3.</sup> The confidence limits for the seven survey regions as a whole in 2014 are ±2.75% adult visits; ±7.78% child visits; and ±3.74% total visits.

<sup>4.</sup> The confidence limits for the overall visitation estimate in 2014, including non-survey regions are:  $\pm 2.84\%$  adult visits;  $\pm 7.99\%$  child visits; and  $\pm 3.85\%$  total visits;

Please note that hereafter, graphs showing PWG park visitation by wave only include margins of error (i.e. the confidence limit) at the overall state level. Graphs for sub-segments (e.g. regions of origin, PWG branch and region etc.) with smaller sample sizes, and consequently larger margins of error will not have these margins of error displayed. However, where relevant, commentary has been made to alert readers to potentially large errors and cautions with interpreting data.

# 6.3 Visitation by PWG Branch and Region

In 2013 PWG Branch and Region definitions were re-defined by OEH. As a result survey data for 2008, 2010 and 2012 had to be modified to include the new definitions to calculate visitation by PWG Branch and Region. PWG Branch and Region were allocated to each respondent visiting a PWG park based on (a) the name of the park; and (b) the name of the nearest town as specified by each respondent's survey responses. Where a respondent could not provide the name of the park, nor its nearest town, the park could not be classified to a PWG Branch or Region. This occurred for 4% of visits in 2014 (9% of visits in 2012 and 7% of visits in both 2008 and 2010) (Figure 6.3.1).

Please note that wave-by-wave analysis of visitation by Branch and Region, whilst presented in this report, is subject to large sampling errors. As a consequence, seasonal fluctuations in visitation should be treated as indicative and any conclusions made treated with caution.

## 6.3.1 Annual Visitation by PWG Branch

When comparing proportional contribution to annual PWG park visits located in the three PWG Branches (Figure 6.3.1), the contribution to overall visits from parks in the Metro and Mountains Branch increased from 47% in 2008 and 2010 to 50% in 2012, up to 52% in 2014. Conversely, the contribution to overall visits from parks in the Coastal Branch fell from 42% in 2008 and 2010 to 37% in 2012, but increased marginally to 40% in 2014. As was the case in 2010 and 2012, the contribution to visitation from parks in the Western Branch in 2014 was 4% of all visits (3% in 2008).

The proportion of visits not classified to a Branch has decreased from 7% in 2008 and 2010 and 9% in 2012 to just 4% in 2014. The number of respondents allocated to this category has been steadily declining over time (190 - 2008; 159 – 2010; 119 – 2012; 112 - 2014). This indicates that the process of allocation of visits to specific parks or towns within Branches improving in efficiency over time.

In relation to absolute numbers of visits, the Metro and Mountains Branch recorded the highest ever number of visits in 2014 at 20.2m. This can be primarily attributed to the

highest ever number of visits being recorded in the Metro North East region (9.9m visits – primarily due to increased visits to Lane Cove National Park - 2.2m and Sydney Harbour National Park - 1.9m) and the Blue Mountains region (5.2m - primarily due to visits to Blue Mountains National Park 4.3m).

The Western Branch also recorded its highest ever number of visits in 2014 at almost 1.5m, primarily due to a record number of visits to parks in the Western Rivers region (0.6m).

Coastal Branch visits in 2014 almost returned to the peak levels experienced in 2008 (15.6m visits versus 15.8m visits) after declines had been observed in 2010 and 2012 (14.1m and 12.9m respectively). This was primarily due to highest ever levels of visitation being recorded in the Northern Rivers region (2.9m) and the Lower North Coast region (4.2m).

For more detail on visitation to PWG park regions refer to section 6.3.2. For more detail on visitation to selected PWG parks refer to section 6.3.3.

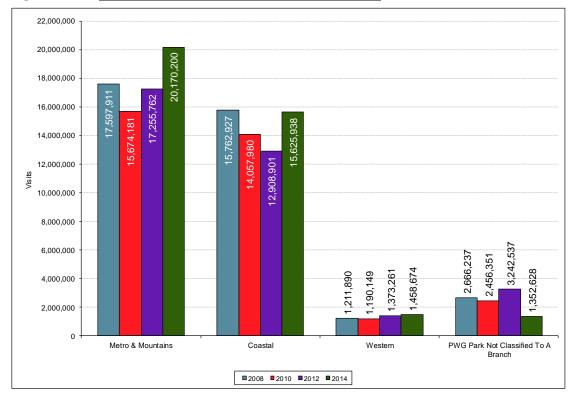


Figure 6.3.1: PWG Annual Visitation by PWG Branch

The following commentary provides comparison of visitation to PWG Branches in 2008 to 2014 by wave. Please refer to Figures 6.3.1-1, 6.3.1-2 and 6.3.1-3 for more detail.

*Metro & Mountains Branch* – Visitation to PWG parks in the Metropolitan Branch was higher in 2014 than in previous years for waves 1 and 2 (summer), 5 and 6 (autumn) and in wave13 (late spring). There is a definite trend in the number of visits increasing with each

year in for these specific waves. Visitation in 2014 was lower than in all other years in wave 7 (early winter). There does not appear to be any cyclical trend in visitation over time for visits to parks in the Metro and Mountains Branch.

Coastal Branch – Their does appear to be a weak cyclical trend in the visitation pattern to Coastal Branch parks over time, high in mid-summer, but low in late summer; higher over Easter and the mid-autumn school holidays, then lower into early winter; a small peak midwinter, then lower again in late-winter; then higher in early spring with the school holidays and labour day in NSW and the ACT. Visitation in 2014 was marginally higher than in previous years in waves 1 and 2 (summer) and markedly higher in wave 3 (late summer). Visitation was also marginally higher than in other years for wave 5 and markedly higher in wave 6 (autumn), and was again higher in wave 11 (early spring). Visitation was at its lowest level ever in wave 4 (early autumn). Number of visits tends to be steadily increasing each year in wave 11 (early spring) and declining in wave 4 (early autumn).

Western Branch – Visitation to parks in the Western Branch in 2014 tended to mirror the pattern observed in 2012 and 2008, while the pattern in 2010 tends to be lagged by one wave. Visitation was highest compared with other years in 2014 for waves 1 and 3 (summer), waves 4 and 5 (autumn) and wave 10 (late winter-early spring). Lowest ever levels of visitation were experienced in wave 7 (early winter) and wave 13 (late spring). Visitation levels are tending to increase year by year for waves 3, 4, and 5 (late summer to early autumn).

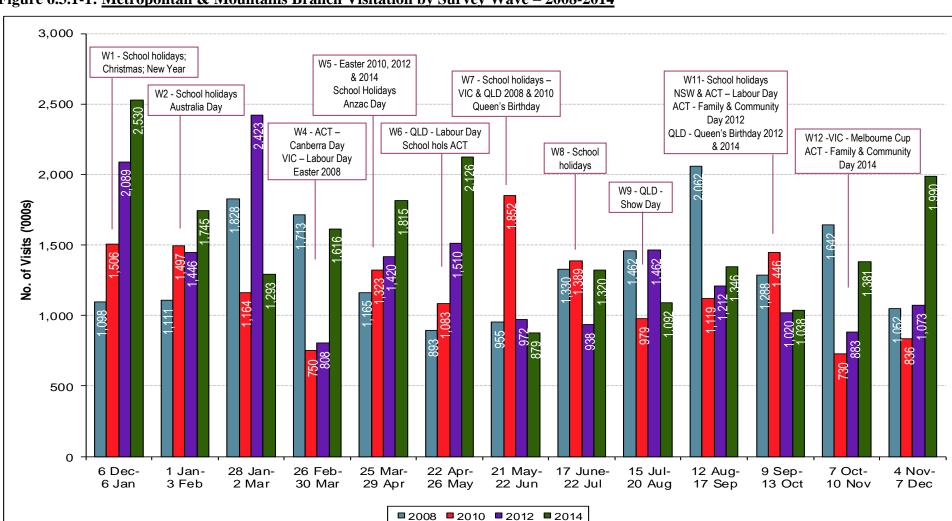
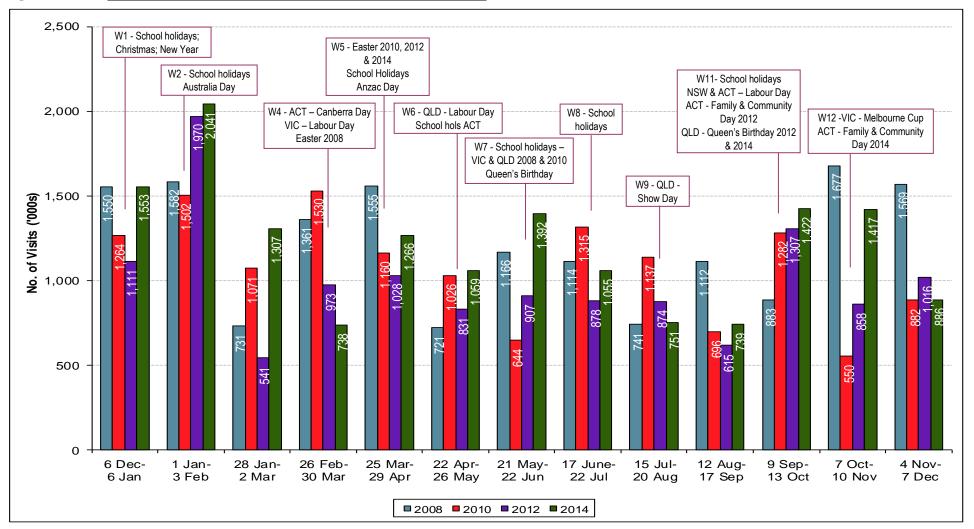
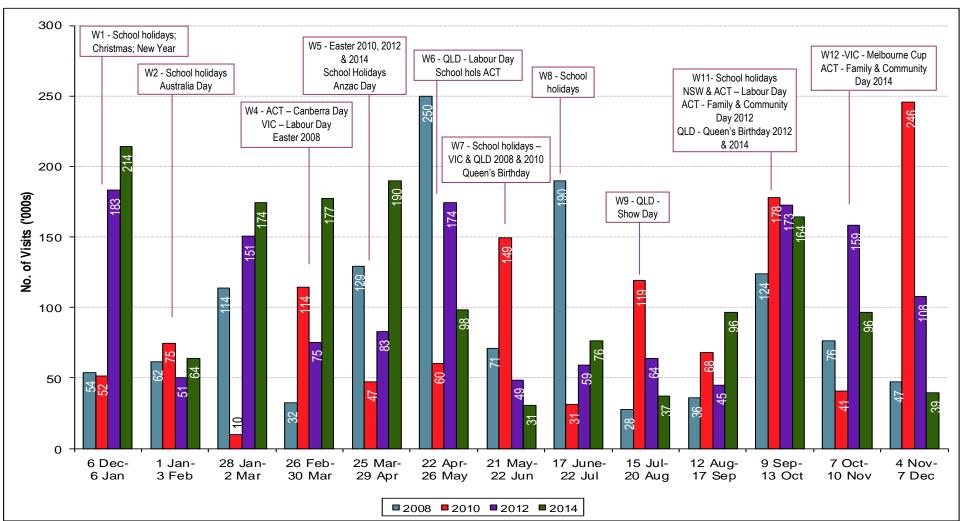


Figure 6.3.1-1: Metropolitan & Mountains Branch Visitation by Survey Wave – 2008-2014









## 6.3.2 Visitation by PWG Region

Please note that wave by wave results by PWG Region are subject to significant error and as such, have not been provided in this analysis. Figure 6.3.2-1 shows annual PWG park visitation by year for Regions in the Metro and Mountains Branch. Of note is the consistency in the level of visits in the Southern Ranges Region over time (1.7m - 2014; 1.8m - 2012; 1.5m - 2010; 1.5m - 2008).

Visits to PWG parks in the Metro North East Region remained relatively constant from 2008 to 2012 (6.2m-6.5m visits). However, in 2014 visits peaked at 8.9m, primarily due to high levels of visitation to Lane Cove National Park (2.1m), Sydney Harbour National Park (1.9m) and Parramatta River Regional Park (0.5m).

After steady declines in visitation to parks in the Blue Mountains Region were observed from 2008 to 2012, visitation to these parks in 2014 increased to their highest level so far records (5.2m visits). This increase in visitation can almost solely be attributed to an increase in visits to Blue Mountains National Park (4.2m visits in 2014).

Visits to parks in the Metro South West Region peaked in 2012 at 5.6m visits, declining to 4.4m visits in 2014. This decrease in visitation in 2014 can be primarily attributed to decreases in visitation to Royal National Park (3.2m visits in 2014 compared with 4.0m visits in 2012). Individual park visitation is investigated in more detail in section 6.3.3.

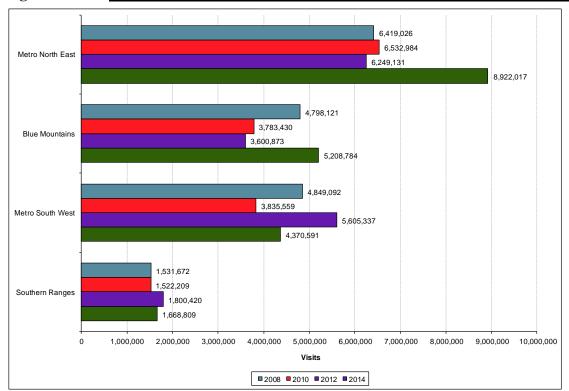


Figure 6.3.2-1: Annual Visitation - PWG Regions in the Metro & Mountains Branch

Aside from a decrease in visitation to PWG parks in the North Coast Region, all other Regions in the Coastal Branch increased in visitation from 2012 to 2014 (see figure 6.3.2-2 for more detail).

The Lower North Coast Region experienced the largest increase in visitation since 2012, achieving 4.2m visits in 2014. This increase was primarily due to increases in visitation to Worimi, Tomaree, Myall Lakes and Booti Booti National Parks.

Visitation to PWG parks in the South Coast Region returned to 2008 levels, with 2.9 visits in 2014, with no individual park being the primary cause of this increase in visitation.

In 2014 PWG park visitation to the Northern Rivers Region attained its highest ever levels at 2.9m visits. This was primarily the result of increases in visitation to Bundjalung National Park (0.7m visits in 2014).

Visitation to parks in the Central Coast Hunter Region has been declining from 2008 to 2012. However, in 2014 this decline was reversed, attaining almost 2.6m visits, with Bouddi National Park recording almost 1m visits.

Visitation to parks in the North Coast region fell from a peak of 2.4m in 2012 to 1.7m in 2014. Visitation to most parks in the Region tended to decline from 2012 levels in 2014.

The decline in visitation to Far South Coast parks from 2008-2012 was arrested with almost 1.3m visits observed in 2014, with increases in visitation observed for Eurobodalla and Mimosa Rocks National Parks (see section 6.3.3. for detail on individual park visits).

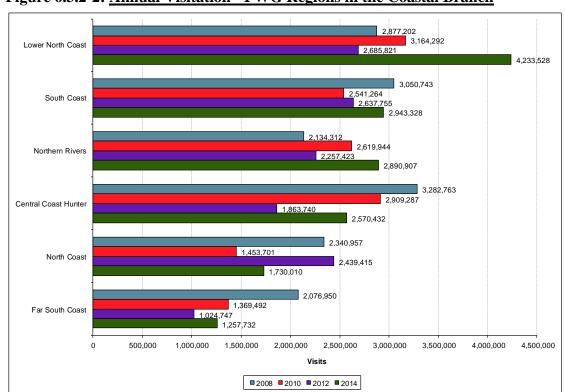


Figure 6.3.2-2: Annual Visitation - PWG Regions in the Coastal Branch

Visitation to PWG parks in the Northern Plains Region continues to increase over time, with 311,269 visits recorded in 2014.

From 2008 to 2012 visitation to parks in the Far West Region was declining. However, in 2014 visits to this region attained their highest levels ever at 259,878 visits.

In 2012, visits to parks in the Northern Tablelands Region almost reached 600,000 visits. However, in 2014 the number of visits returned to 2010 levels with 296,030 visits recorded.

Visitation to the Western Rivers Region fell to their lowest levels in 2012, but in 2014 almost 600,000 visits were made. His was primarily driven by visits to Murray Valley National Park, was only incorporated into the survey in 2014.

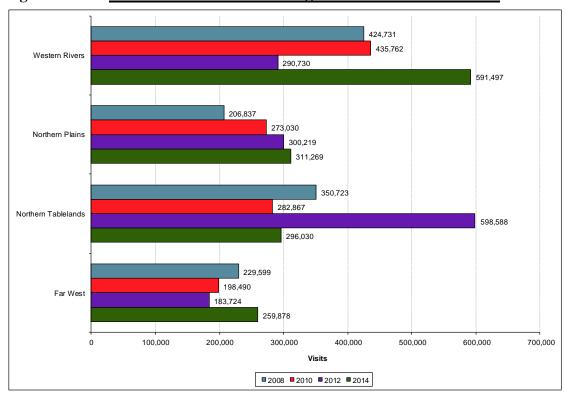


Figure 6.3.2-3: Annual Visitation - PWG Regions in the Western Branch

### 6.3.3 Visitation to Selected PWG Parks

Please note that visitation results by PWG park are subject to significant error and so any comparison of visitation between survey years should be treated with caution. Results have been presented graphically in Figures 6.3.3-1 and 6.3.3-2 to provide an indication of actual park visitation over time.

In terms of the highest number of visits, Blue Mountains National Park (4.3m visits) has regained the top position in 2014 from Royal National Park (3.2m visits), as it did in 2010 and 2008. From 2008 to 2010, visitation to Blue Mountains National was in decline (from 3.6m visits to 3.1m). However, in 2014 visits rose by almost 1.2m visits over 2012 levels. Visits to Royal National Park in 2014 declined by over 0.8m visits from 2012 levels.

In 2014 visitation to Ku-rung-gai Chase National Park (2.7m) has returned to 2010 levels from its peak in 2012 of 3.1m visits. From 2008 to 2012 visitation to Lane Cove and Sydney Harbour National Parks had been on the decline. However, in 2014 visitation to both parks attained the highest levels recorded at 2.2m visits and 1.9m visits respectively.

Apart from a slight fall in visitation in 2010, the number of visits made to Kosciuszko National Park has remained relatively constant over time, with visits in 2014 reaching 1.4m.

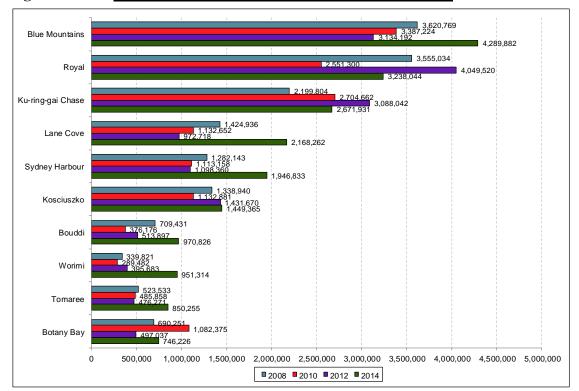


Figure 6.3.3-1: Annual Visitation for Selected Parks – Parks 1-10

Caution – small samples sizes for Bouddi, Worimi, Tomaree and Botany Bay (n<30).

Figure 6.3.3-1 also shows that the highest number of visits to Bouddi, Worimi and Tomaree National Parks occurred in 2014 (970,826, 951,314 and 850,255 visits respectively). Botany Bay National Park was the tenth most visited PWG park in 2014, recording 746,226 visits.

It should be noted that small numbers of respondents can have significant impacts on annual visitation numbers to specific parks. One such example in Figure 6.3.3-2 is Bundjalung National Park where visitation has increased from approximately 147,352 visits in 2012 to 702,875 in 2014. This actually represents an increase from 13 respondents in 2012 to 22 respondents in 2014. As a result, visitation was almost 5 times higher in 2014 than in 2010. This illustrates why analysing visitation results for individual parks should be treated with caution due to small sample sizes. In fact, 9 of the 10 parks shown in Figure 6.3.3-2 have total sample sizes of under 30.

The exception is visitation to Morton National Park, which has declined from over 1m visits in 2008 to just over 453,000 in 2014. The number of respondents naming this park is sufficiently large to indicate that the decline in visitation is realistic (i.e. over n=30).

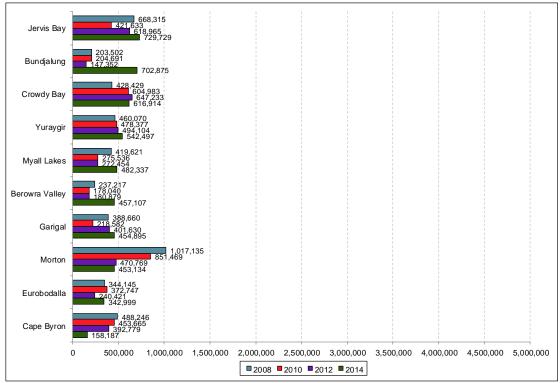


Figure 6.3.3-2: Annual Visitation for Selected Parks – Parks 11-20

Caution – small samples sizes for all parks, except Morton National Park (n<30).

#### 6.4 Child Visitation

In 2014 the Office of Environment and Heritage wanted to investigate child visitation to PWG parks in more detail. The following section provides analysis of this topic, but it

should be noted that analysis of child visitation on a wave by wave basis has already been undertaken in section 6.2.4.4 of this report.

Please note that assessing PWG park child visitation or adult visitation with children has its limitations. The survey questionnaire asks whether a child under 18 years visited with the adult surveyed to a PWG park that they visited on one occasion in four weeks prior to being interviewed, or whether the child visited with the adult surveyed on the most recent visit to that PWG park, if they visited that park on more than one occasion in the four weeks prior to being interviewed. As such, the following definitions apply for this analysis:

Child visit – child under 18 years visited at least one PWG park on at least one occasion with an adult in the four weeks prior to being surveyed.

Adult visit with children – adult visited at least one PWG on at least one occasion with a child under 18 years in the four weeks prior to being surveyed.

Adult visit without children – adult visited a PWG park or multiple PWG parks and on the most recent visit to each park visited without children under 18 years in the four weeks prior to being surveyed.

Assumptions have therefore been made that if the child visited the park on the most recent adult visit, it is likely that they visited the park on all visits that the adult made to that park in the four weeks prior to interview. Conversely, if the child did not visit the park on the most recent adult visit, it is likely that they did not visit the park on any of the visits the adult made in the four weeks prior to interview

Also note that analysis has been restricted to survey estimates only. Analysis does not include visitation from non-surveyed regions.

Figure 6.4.1 shows that child visitation to PWG parks has risen to its highest level in 2014 at 7.6m visits. However, 2014 child visits are only significantly higher than 2010 child visits (i.e. the 2014 estimate is not statistically different to the 2008 and 2012 estimates). Figure 6.4.2 shows that 2014 child visits contribute 20% to total visits, again the highest proportion of all years in which the survey has been conducted, with child visits in other years contributing 17%-18% of all visits. It should be noted however, that the 2014 contribution is not statistically significant than contributions in other years.

Figure 6.4.1: Number of Annual Child Visits to PWG Parks

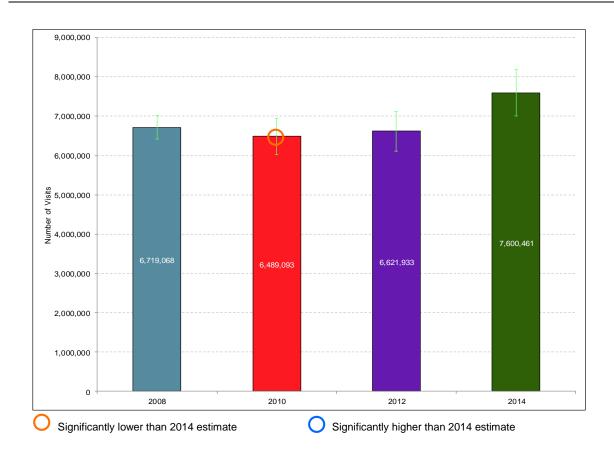
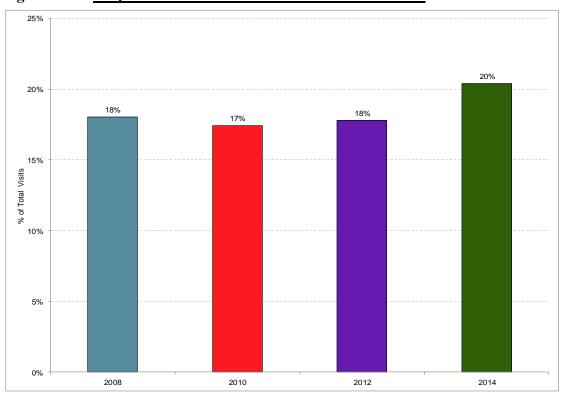


Figure 6.4.2: Proportion of Annual Child Visits to Total Visits



In terms of child visitation by region of origin, Figure 6.4.3 shows that visits from children living in Sydney in 2014 was significantly higher than in all other years, providing over 4.8m visits. In fact, in 2014 over nine in ten child visits came from children living in NSW (93%; 89% - 2012; 87% - 2010; and 92% - 2008).

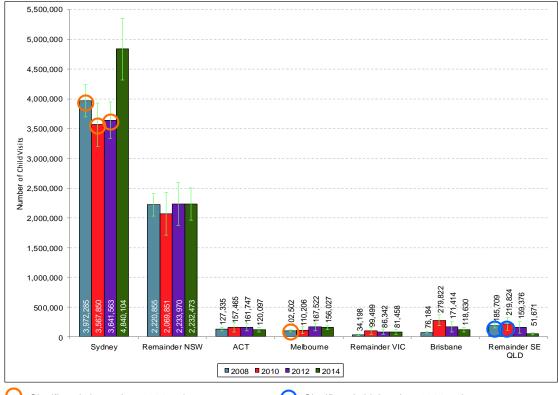


Figure 6.4.3: Number of Annual Child Visits by Region of Origin

Significantly lower than 2014 estimate

Significantly higher than 2014 estimate

The number of child visits where at least one child under 18 years lives in the household is increasing over time (4.6m-2008; 5.7m-2010; 6.0m-2012; and 6.6m-2014). However, the proportional contribution to child visits of households with at least one child living in the household peaked in 2012 at 91% and has declined slightly to 86% in 2014. These results can be seen in Figures 6.4.4 and 6.4.5.

The number of child visits from households without children (i.e. the child visited a PWG park with a grandparent, teacher etc.) peaked at 2.1m visits in 2008 and declined to 0.6m visits in 2012, but rebounded slightly in 2014 to 1.0m visits. In 2008 households without children contributed a significantly high 31% of all child visits, but this declined to just 9% in 2012 before rebounding slightly to 14% in 2014.

These results will be explored in more detail by exploring child visitation by parents and non-parents of visiting children in the pages following.

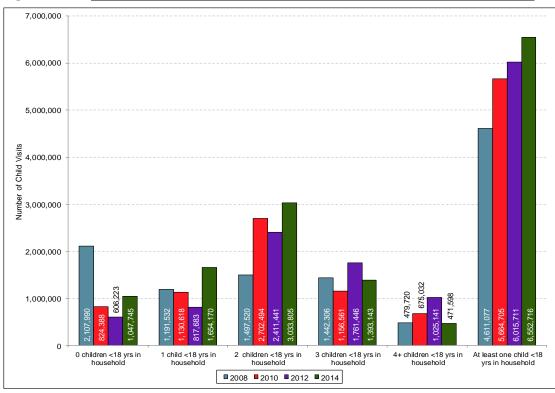
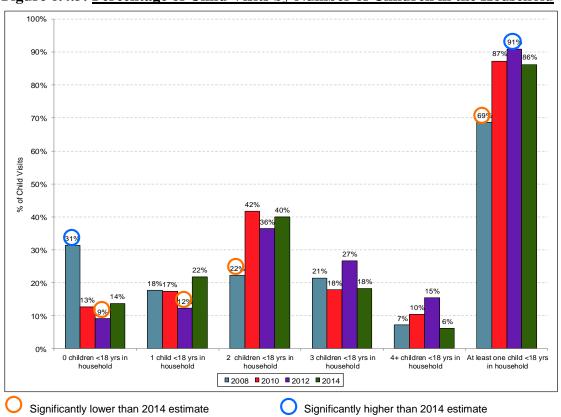


Figure 6.4.4: Number of Child Visits by Number of Children in the Household





The number of child visits with the adult accompanying being a parent of the child/children has been increasing steadily since 2008, with the number of visits with an adult living in the household who was not the parent (e.g. an older brother, sister or other relative) declining over the same period (see Figure 6.4.6).

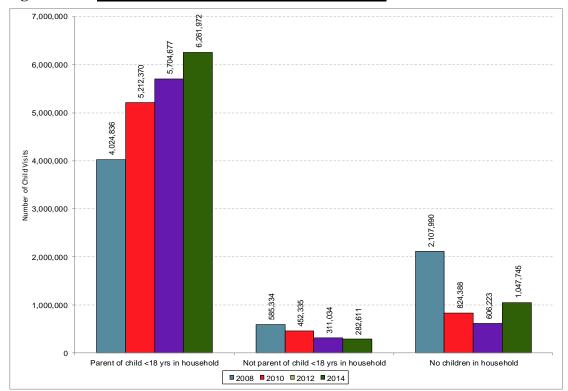


Figure 6.4.6: Number of Child Visits by Parental Status

However, when looking at the proportion of child visits with an accompanying parent, it can be seen that from 2010 to 2014, this proportion has remained relatively static at around 80% to 86% (see Figure 6.4.7). Only in 2008 was this proportion significantly lower (at 60%), with child visits with adults not living in the household (e.g. grandparents, teachers etc.) peaking at a significantly high 31%.

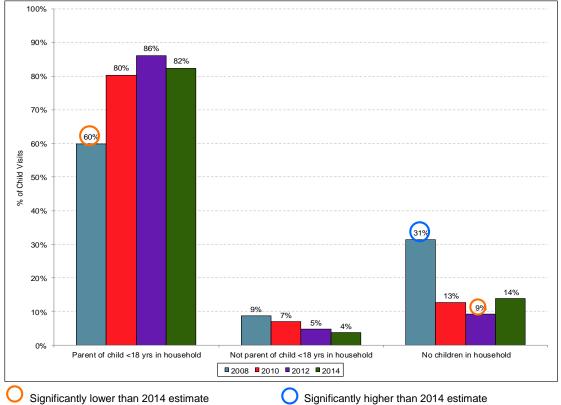


Figure 6.4.7: Percentage of Child Visits by Parental Status

The Office of Environment and Heritage was interested in determining the number of adult visits with children. To calculate this estimate one significant assumption was made – that the non-response adjustment is the same for adults visiting PWG parks with children as those visiting without children. Based on this assumption, Figure 6.4.8 shows that in 2014 9.3m adult visits were undertaken when a child also visited a PWG park (8.4m - 2014; 8.6m -2012; 12.3m – 2008). Since 2008 the number of adult visits without children has increased from 18.2m in 2008 to 21.6m in 2014 (18.3m – 2010; 19.7m – 2012).

To determine how many adult visitors visited a PWG park with a child, the number of visits needs to be divided by average number of times an adult visited a PWG park. This table highlights that until 2014 adults without children visited parked more often than those with children. Note that average non-parent visit in 2008 was more than double the 2014 figure.

Table 6.4.1: Average Times and Adults Visited a PWG Park

	Average Times an Adult Visited a PWG Park					
Year	All Adults	Adult visited with children	Adult visited without children	Parent visited with children	Non-parent visited with children	
2008	2.87	2.77	3.08	2.70	3.66	
2010	2.67	2.57	3.12	2.58	2.28	
2012	2.91	2.24	2.90	2.25	1.59	
2014	2.95	2.86	2.87	2.92	1.60	

In 2014 the estimated number of adult visitors with children on PWG park visits was 3.2m. The estimated number of adult visitors with children has been steadily declining since 2008, when an estimated 4.5m adults visited a PWG park with children. Please note that this estimate of adult visitors should not be confused with the number of *unique* adult visitors, (which cannot be calculated from survey estimates), as these visitors may have visited parks at different times of the year and with a different frequency of visitation each time.

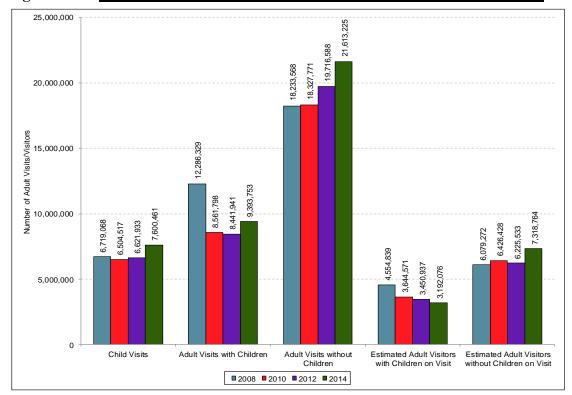


Figure 6.4.8: Number of Adults Visits and Visitors with and without Children<sup>1</sup>

1. Estimated visitors should not be confused with *unique* visitors to PWG parks.

Table 6.4.2 shows that up until 2014 the proportion of adult visitors with children visiting PWG parks was marginally higher than the corresponding proportion of visits. However, in 2014 the proportion of visits and visitors with children are identical at 30% each.

Table 6.4.2: Proportion of Adult Visits and Visitors with and without Children

	% of Adults Visits to PWG Parks		% of Estimated Adult Visitors <sup>1</sup> to PWG Parks	
Year	Adult Visits with children	Adult Visits without children	Adult Visitors¹ with children	Adult Visitors <sup>1</sup> without children
2008	40%	60%	43%	57%
2010	32%	68%	36%	64%
2012	30%	70%	36%	64%
2014	30%	70%	30%	70%

1. Estimated visitors should not be confused with unique visitors to PWG parks.

Figure 6.4.9 shows that adult visits to PWG parks by parents of the children visiting with them are increasing in proportion over time. In 2008 85% of adult visits with children were by parents, while in 2014 the proportion has increased to 94%. As a result the proportion of adult visits by non-parents accompanying children has declined from 15% in 2008 to 6% in 2014.

The proportion of adult visitors visiting PWG parks with children has remained stable over time at around 90%, with the proportion of non-parent visitors accompanying children also remaining stable at 10% across survey years.

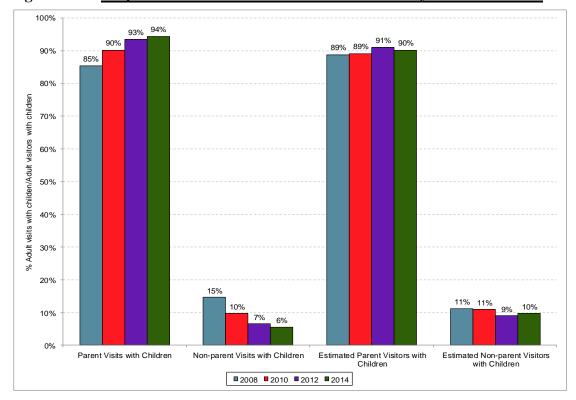


Figure 6.4.9: Proportion of Adults Visits and Visitors with by Parental Status<sup>1</sup>

The Office of Environment and Heritage are also particularly interested in the number of child visits made by age, particularly by 0-11 year olds. However, the survey questionnaire does not capture the age of each child visiting a PWG park. We have therefore had to use a *proxy* to determine the breakdown of child visits by age. In this instance we have used Roy Morgan Research Holiday Tracking Survey data as a proxy (the same source used to calculate visits from non-survey regions).

Please note that the Holiday Tracking Survey (HTS) also does not capture the age of children on visits. However, the HTS does capture the age of children living in the household for each respondent surveyed aged 14 years and over. The HTS also does not capture visits to

PWG managed parks, so a proxy for **visiting a park in NSW** was used using the following activities undertaken on each respondent's visit:

• Bushwalking; visiting National Parks and forests; looking at country wildlife and scenery; visiting gardens and parks; and visiting wilderness.

These same items were used to estimate likely strike rates for visiting parks in NSW for the 2007 pilot survey commissioned by the Office of Environment and Heritage (then the Department of Environment and Climate Change), and have proven to be a good proxy for park visitation.

Applying the proportion of children in each age category of those visiting a park in NSW for each survey year has been apply to each annual number of PWG child visits to provide an estimate of child visitation by age category. It should be noted that results provided below are only estimates and that additional questions would have to be added to the survey to provide more accurate measures of child visitation by age.

Figure 6.4.10 shows that the number of estimated child visits from 2008 to 2012 have been relatively stable per age category. However, for 2014 estimated visits by children aged 0-11 years increased to 4.6m visits from around 3.9m visits in previous years, with visits by 6-11 year olds being the main driver of the increase (averaging 2.0m visits from 2008 to 2012 and 2.5m visits in 2014).

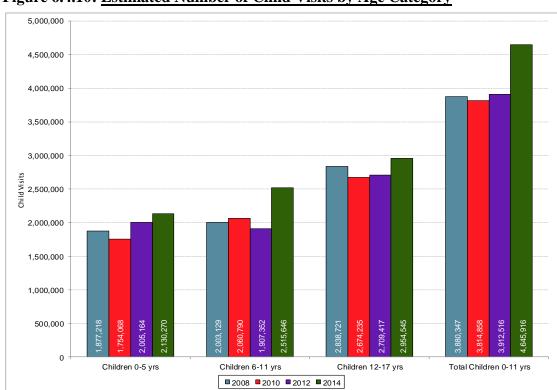


Figure 6.4.10: Estimated Number of Child Visits by Age Category

### 7. POTENTIAL FACTORS INFLUENCING PWG PARK VISITS

This section specifically looks to determine whether changes to PWG park visitation over time is dependent on any external factors. PWG park visitation is to be measured again in in 2016. At the end of 2016, analysis will be undertaken to determine if any trend in visitation has occurred over time. Analysis of external factors and their potential influence on the PWG park visitation estimate will also be conducted at that time. However, it is appropriate to commence identifying potential influences on PWG park visitation so that such factors can be included in any future modelling of park visitation.

This section specifically investigates the following factors:

- Visitation to NSW specifically overnight visitors, visitor nights and day trips;
- Visitation to Overseas destinations specifically domestic visits to overseas destinations and exchange rates;
- Economic Impacts specifically interest rates and fuel prices; and
- Weather specifically temperature, rainfall and specific weather events.

Please note that for some of the following analyses, wave by wave visitation survey data (i.e. excluding visitation from non-surveyed regions) has been converted into month by month data in order to match monthly and quarterly data obtained from other sources. For each survey wave, the number of visits was allocated pro rata based on the number of days in each month within each wave's visitation period. For example, for the visitation period 1 February to 6 March 2008 (wave 1 - 2008), 29 days fell in February and 6 fell in March. The total visitation period is 35 days. Therefore 83% of the visitation period fell in February (29 of 35 days) and 17% fell in March (6 of 35 days). So 83% of the total number of visits in wave 1 2008 were allocated to February and 17% to March.

#### 7.1 Visitation to New South Wales

Figure 7.1.1 shows annual survey visitation data for survey years 2008 to 2014 (adjusted as detailed above) and compares it with the number of visitors taking overnight trips to destinations in New South Wales<sup>1</sup>. Overnight visitation has been divided into interstate visitors and intrastate visitors. Results show that overnight visitation did fall from 2008 to 2010, but rebounded in 2012 (exceeding 2008 levels) and increased again in 2014. This result was consistent across both interstate and intrastate visitors. However, PWG park visitation data, whilst showing a rebound from 2010 levels in 2012, did not exceed 2008 levels, but did increase to its highest level in 2014. The same result can be seen in figure 7.1.2, which compares PWG park visitation data with visitor nights in NSW.

<sup>&</sup>lt;sup>1</sup> National Visitor Survey – Tourism Research Australia.

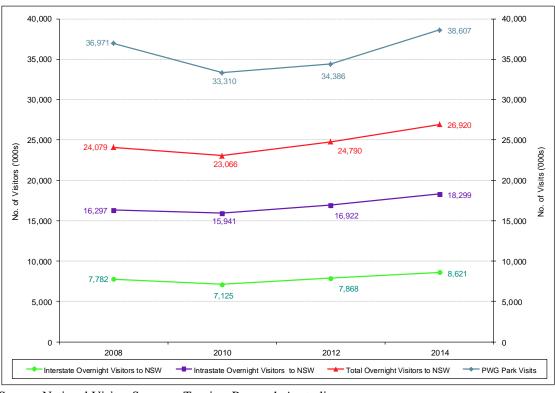


Figure 7.1.1: Annual PWG Park Visitation versus Overnight Visitors to NSW

Source: National Visitor Survey – Tourism Research Australia

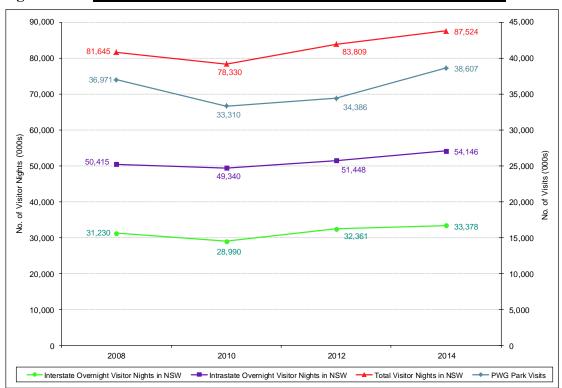


Figure 7.1.2: Annual PWG Park Visitation versus Visitors Nights in NSW

Source: National Visitor Survey - Tourism Research Australia

However, an argument can be made that the majority of visits to PWG parks would be for day trips, so PWG park visitation should match more closely to day trip visitation in NSW.

Figure 7.1.2 compares annual PWG park visitation with day trip visitation to NSW. As can be seen, the number of day trip visitors has steadily increased over time from 44.3m visits in 2008 to 54.9m visits in 2012, and then declined in 2014, whereas the number PWG park visits declined in 2010 and then increased in 2012 (but not to 2008 levels) and then increased to record levels in 2014. The pattern displayed for day trip visitors in NSW is not evident in PWG park visits.

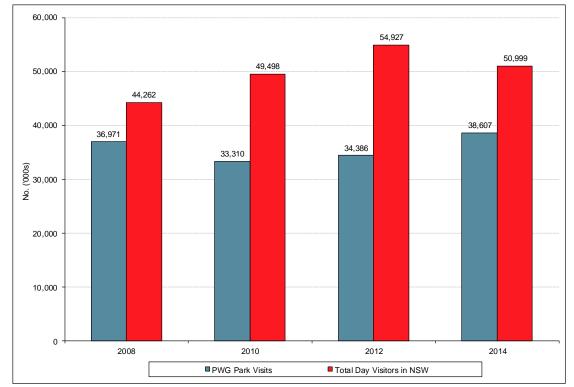


Figure 7.1.3: Annual PWG Park Visitation versus Day Visitors in NSW

Source: National Visitor Survey - Tourism Research Australia

However, as multiple visits to parks do not necessarily equate to individual day visits (i.e. people can stay overnight at locations outside of parks and then visit the park during the day - survey data shows that only 4%-6% of park visitors camp or live in accommodation at parks on their most recent visit), comparison of day visitors to NSW destinations with those making single visits to PWG parks will provide an indication of whether the day trip trend occurs for single park visits or not.

Figure 7.1.4 shows that the proportion of single trips to PWG parks has increased over time from 53.3% of visits in 2008 to 58.1% of visits in 2012, then declined to 56.6% in 2014. Whilst the trend in the proportion of single park visits is not as strong as the trend in day visitors, the pattern of single park visits does match the number day trip visitors to NSW, indicating that there is a relationship between day visitors and single visits to PWG parks.

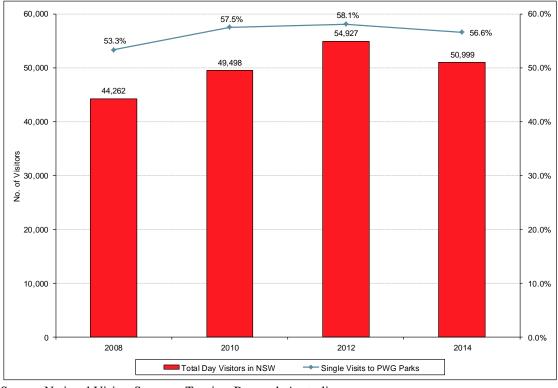


Figure 7.1.4: Single Visits to PWG Parks versus Day Visitors in NSW

Source: National Visitor Survey - Tourism Research Australia

This trend in single visits to PWG parks (which matches day visitors to NSW) and the overall trend in PWG parks visits (which does not tend to mirror overnight visitation to NSW), indicates that multiple visits to PWG parks must not be as strong in 2012 as it has been in previous years, but should have rebounded in 2014.

In fact, as shown in figure 7.1.5, there has been a downward trend from 2008 to 2014 in adults visiting PWG parks 2 times, and a downward trend from 2008 to 2012 for adults visiting 4 times and 5 or more times (with slight increases evident in 2014). Only adults visiting PWG parks 3 times tend to exhibit a slight upward trend over time. Overall, these trends have resulted in a decline in the average number of adult visits made over time from 2008 to 2012 (from 2.95 visits in 2008 to 2.67 visits in 2012), with the average increasing in 2014 (2.87).

If the number of adult visits is divided by the average number of visits, a proxy for the total number of visitors can be obtained<sup>1</sup>. Figure 7.1.6 shows that the proxy for PWG park visitors exhibits the same trend as overnight visits to NSW and visitor nights in NSW, with 2012 numbers exceeding 2008 levels and 2014 numbers being the highest so far recorded. So in fact, PWG park visitors mirror visitors to NSW.

<sup>&</sup>lt;sup>1</sup> Total visitors to PWG parks cannot be accurately calculated from survey data as child visits are not captured on a park by park basis and adult visits do not take into account visits at different times of the year by the same respondent. As such only a proxy calculation of adult visitors can be determined.

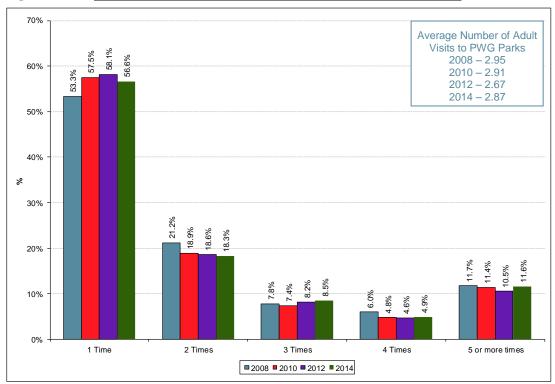
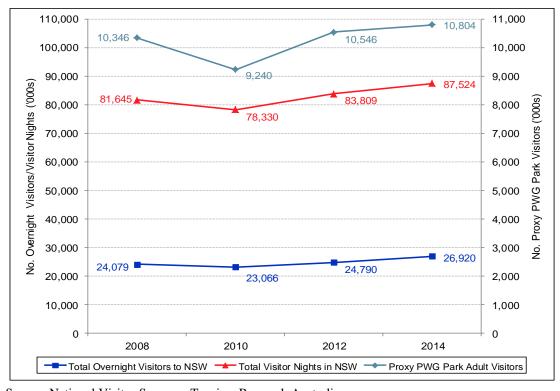


Figure 7.1.5: Number of Times Visiting a PWG Park – Adult Visits





Source: National Visitor Survey – Tourism Research Australia

The downward trend in the average number of adult visits to PWG parks from 2008 to 2012 combined with the upward trend in the proportion of single adult visits over the same period means that there must a decline in the proportion of multiple visits to PWG parks. Figure

7.1.7 shows that in 2008 47% of adult visits were multiple visits, but this has declined to 42% in 2012. There has been a minor increase in the proportion of multiple visits in 2014 (43%). The decline in multiple visits to PWG parks from 2008 to 2012 appears to be solely related to people aged 25-34 years – Generation Y's, with the proportion of 25-34 year olds declining significantly from 49% in 2008 to 33% in 2012. However, there has been some recovery amongst this age group in 2014, along with increases for 34-49 year olds and those age 50years and over. The concern is the fall in the proportion of 18-24 year olds undertaking multiple visits in 2014 (though it is not statistically significant).

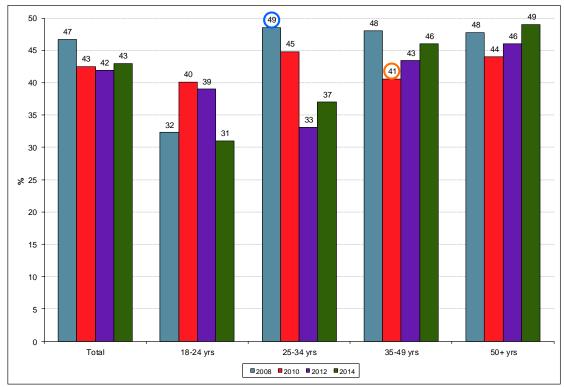


Figure 7.1.7: Multiple Visits<sup>1</sup> to PWG Parks – By Age

1. Two or more PWG park visits

Furthermore, the decline in multiple visits from 2008 to 2012 can be attributed to both male and female Generation Y's, as multiple visitation for males aged 25-34 years has fallen significantly from 52% in 2008 to 39% in 2012, while multiple visitation for females aged 25-34 has also fallen significantly from 44% in 2008 to 27% in 2012 (Figure 7.1.8). Encouragingly, the proportions for both these groups in 2014 have increased slightly.

Unfortunately, the increase in the proportion of multiple visits from males aged 18-24 years from 2008 to 2012 has abated in 2014, while the proportion of females aged 18-24 has fallen to its lowest levels recorded. Whilst in 2012 it looked like Generation Z may help revive PWG park visitation, 2014 results suggest otherwise. Increases in the proportion of multiple visits were only evident in 2014 amongst both sexes aged 25 year or more.

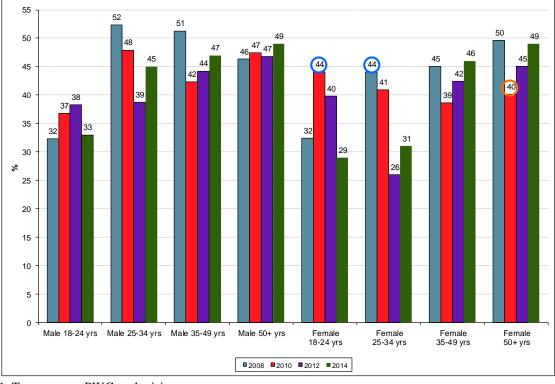


Figure 7.1.8: Multiple Visits<sup>1</sup> to PWG Parks – By Age by Sex

1. Two or more PWG park visits

#### 7.2 Visitation to Overseas Destinations

Another potential reason why PWG park visits may vary from year to year is that exchange rates may make it more or less attractive to visit overseas destinations at the expense of domestic destinations. Figure 7.2.1 shows that Australians visiting overseas has increased from approximately 5.25m in 2008 to approximately 8.1m in 2014 – a growth of 54% in 6 years, while PWG park visits have only increased by 4.4% over the same period.

Figure 7.2.2 compares monthly PWG park visitation with exchange rates (i.e. the Trade Weighted Index divergence from the 4 year average). It can be seen that as exchange rates have increased over time, monthly PWG park visitation since 2008 has generally been lower than 2008 figures. In 2008, exchange rates were low, making it relatively more expensive to take an overseas trip than take a domestic trip. In 2010, 2012 and 2014, exchange rates were high, making it relatively less expensive to take an overseas trip than a domestic one. In 2012, overall PWG park visits increased from 2010 levels, but this was not until the end of 2012, so for the bulk of 2012 PWG park visits were also relatively low. Similarly in 2014, PWG park visits increased, but this was mainly during the summer to autumn months of 2014 and again visits declined. In fact, there looks like there is a peak in domestic visits in the summer months of each year, when individuals and families are generally on extended

holidays, while there are declines in domestic visitation during winter (the most likely time when residents will travel overseas i.e. the northern summer).

A strong Australian dollar encourages Australians to visit overseas at the expense of taking domestic trips – either reducing the total number of domestics trips made or reducing the length of stay. From overnight visitation data we know that the number of visitor nights to NSW has increased by 7.2% from 2008 to 2014. However, the number of overnight visitors to NSW has increased by 11.8% over the same period. This means that overnight visitors are staying for shorter periods when going on overnight visits – i.e. length of stay for any one visit is decreasing. As we also know that average number of PWG park visits has been in decline from 2.95 in 2008 to 2.67 in 2012, but rebounded to 2.87 in 2014 (the second lowest average), it can also be implied that impact of a strong Australian dollar is having the same effect on park visitation as it is having on overnight visitation to NSW – the number of visitors is increasing, but the length of stay (i.e. number of visits) is decreasing.

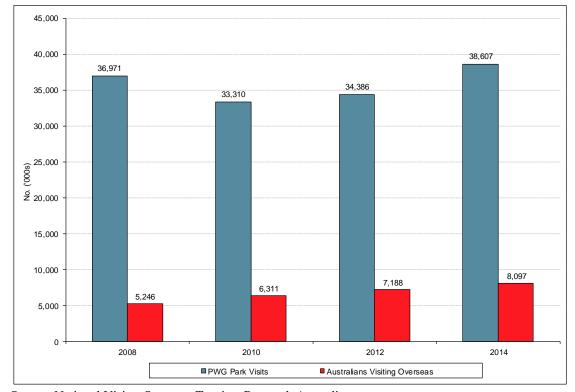


Figure 7.2.1: Annual PWG Park Visitation versus Australian Visiting Overseas

Source: National Visitor Survey – Tourism Research Australia

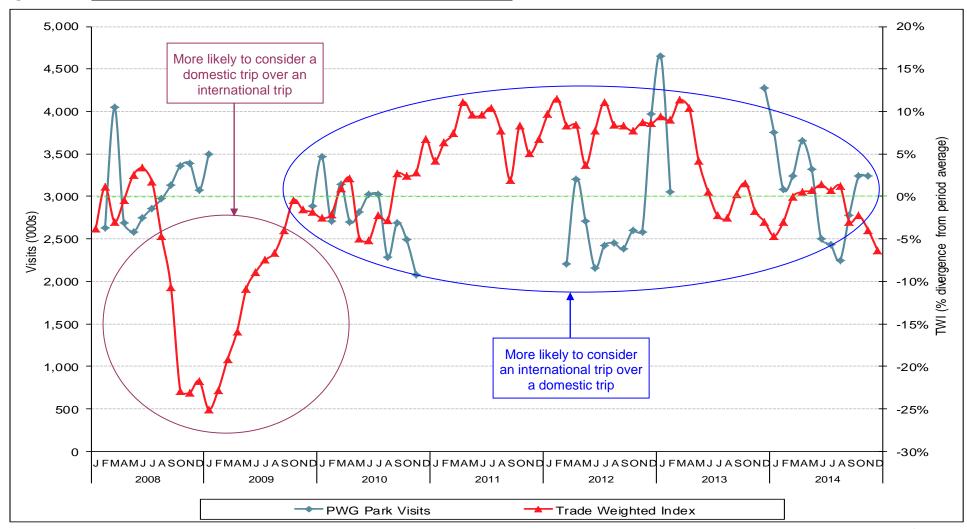


Figure 7.2.2: Monthly PWG Park Visitation versus Trade Weighted Index<sup>1</sup>

1. Source: Reserve Bank of Australia – TWI is the weighted average of a basket of currencies against the Australian dollar (measures the relative purchasing power of the \$AUD)

## 7.3 Economic Impacts

Economic factors may also play a role in impacting on visitation to PWG parks. Lower interest rates may provide more disposable income to travel, as less money needs to be spent on mortgage repayments. Similarly, the lower the price of fuel the cheaper it is to travel, so domestic travel becomes more appealing.

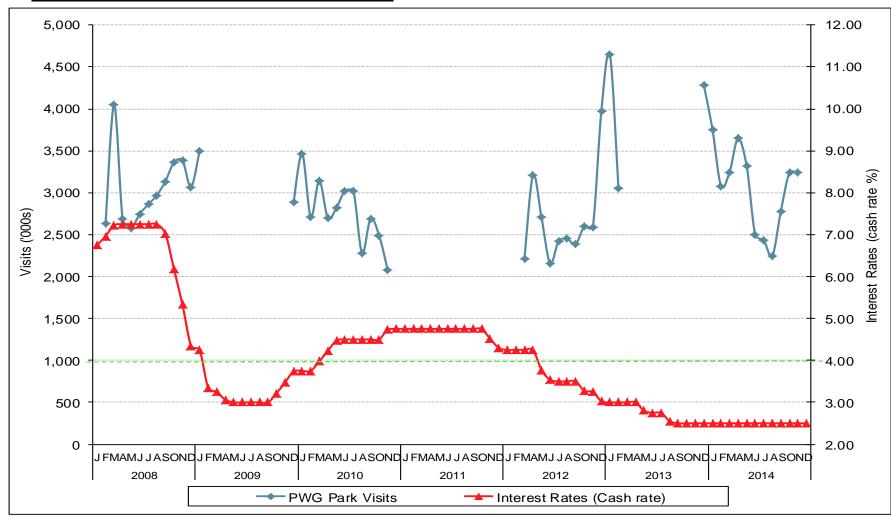
Figure 7.3.1 compares monthly PWG park visitation with monthly interest rates. For the first nine months of 2008 interest rates were high (7.00%-7.25%), yet PWG park visitation was high. 2009 saw interest rates fall sharply to 3.00% and then steadily rise in 2010 from 3.75% to 4.75%. This rise in interest rates coincided with lower levels of PWG park visitation. For much of 2011 interest rates remained at 4.75%. However, from November 2011 interest rates began to fall, so that by the end of 2012 interest rates were at 3.00%. By September 2013 interest rates fell to 2.5% and remained there for all of 2014. However, PWG park visitation was low in 2012, with peaks in visitation only occurring in early 2013. In 2014 PWG park visitation was high until mid-year and then declined.

Such fluctuations in interest rates in 2010 and 2012 tend to confirm what would be expected i.e. the lower the interest rate the greater the likelihood of spending on luxury items such as holidays (i.e. visits to parks). However, the high interest rates present in 2008 do not tend to explain the high levels of PWG park visitation in 2008. Again in early 2013 and 2014 park visits were high, but interest rates were low, as would be expected. However, park visits were low in the second half for 2014, while interest rates remained low, which is counterintuitive. This factor will continue to be monitored for 2016 to determine whether a definitive trend between visitation and interest rates can be identified and measured.

Figure 7.3.2 shows changes in monthly Sydney fuel prices compared with the average fuel price for the 4 year survey period. As can be seen, fuel prices were higher than average in 2008, yet PWG park visitation was high. In 2010, fuel prices were lower than the average, yet PWG park visitation was low. Since 2011, fuel prices have been above the average and have been increasing. Yet PWG park visitation has tended to increase in 2012 and 2014.

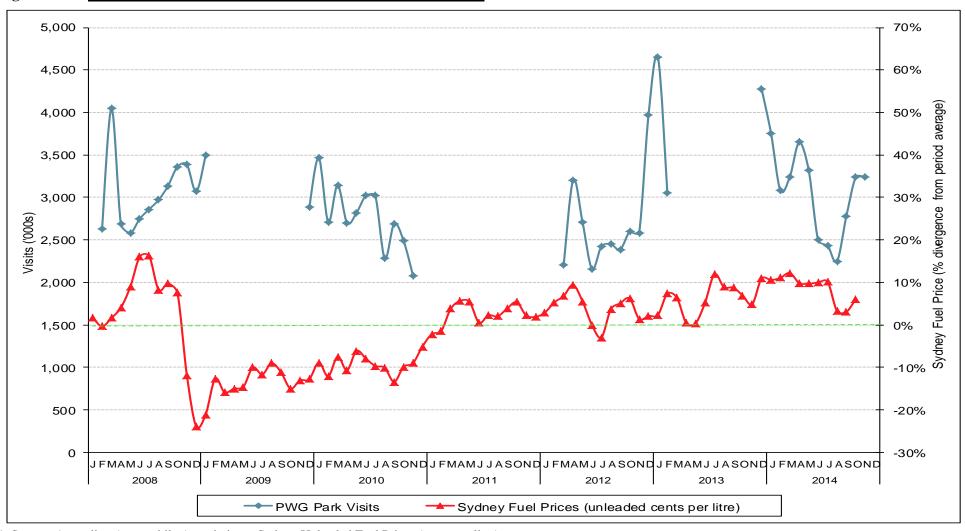
These results run counter-intuitive to what would be expected i.e. the lower the fuel price, the more likely one is to travel and the more likely one would be to travel to a PWG park. Based on this information it would appear that a relationship between fuel prices and PWG park visitation is likely not to exist. Again, this factor will continue to be monitored in 2016 to determine if any relationship between it and park visitation exists.

Figure 7.3.1: Monthly PWG Park Visitation versus Interest Rates<sup>1</sup>



1. Source: Reserve Bank of Australia – Cash Rate.

Figure 7.3.2: Monthly PWG Park Visitation versus Sydney Fuel Prices<sup>1</sup>



1. Source: Australian Automobile Association – Sydney Unleaded Fuel Prices (cents per litre).

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### 7.4 Weather Effects

Investigations in 2010 tended to indicate that PWG park visitation was impacted by weather, particularly significant weather events. Further investigation has been made in their area. This section looks at three weather factors and their impact on park visitation – temperature, rainfall and significant and sustained weather events. All weather data provided in this section comes from the Bureau of Meteorology's (BoM) Climate Data Online service.

### 7.4.1 Temperature Effects on PWG Park Visitation

Figure 7.4.1-1 compares monthly PWG park visitation to monthly maximum daytime temperatures displayed as a divergence from the average<sup>1</sup>. From 2008 to 2014 there appears to be a general trend between PWG park visitation and temperature – the higher the temperature above the average, the greater the number of park visits. In addition, peaks in visitation tend to correspond with peaks in temperature. The 2014 result differs slightly from other years in that from March to June visitation tended to increase when temperature decreased and vice versa. For the 2014 year temperature divergence from the average trended upward, whereas visitation trended downward throughout the course of the year.

Figures 7.4.1-2 to 7.4.1-4 compares the temperature with PWG park visitation at the PWG Branch level.

There does not appear to be any specific trend in relation to visitation and temperature for the Metro and Mountains Branch. In 2008 visitation tended to decrease as temperature increased above the average, while the opposite trend appears to have occurred in 2010. No trend was evident for 2012 and the opposite trend occurred in 2014 (i.e. visits decreased as temperature increased above the average).

Across survey years 2008 to 2012 visits to parks in the Coastal Branch tended to increase as temperature increases above the average. Visitation tended to mirror temperature variations on a month by month basis in 2010 and 2012. Whilst this trend is also evident in 2008, the magnitude of the increase in visitation doesn't match the magnitude of the temperature variation. However, in 2014, visitation tended to decline throughout the course of the year, whilst temperature above the average increased slightly.

Smaller sample sizes for Western Branch visitation makes analysis of any trend more difficult. However, in general, 2008, 2010 and 2014 visitation tends to decrease as temperature increases above the average, while the reverse trend is evident in 2012.

<sup>&</sup>lt;sup>1</sup> Divergence from the average is calculated using 14 weather stations across the state, representing each PWG Region. Average is based on the BoM average for each weather station.

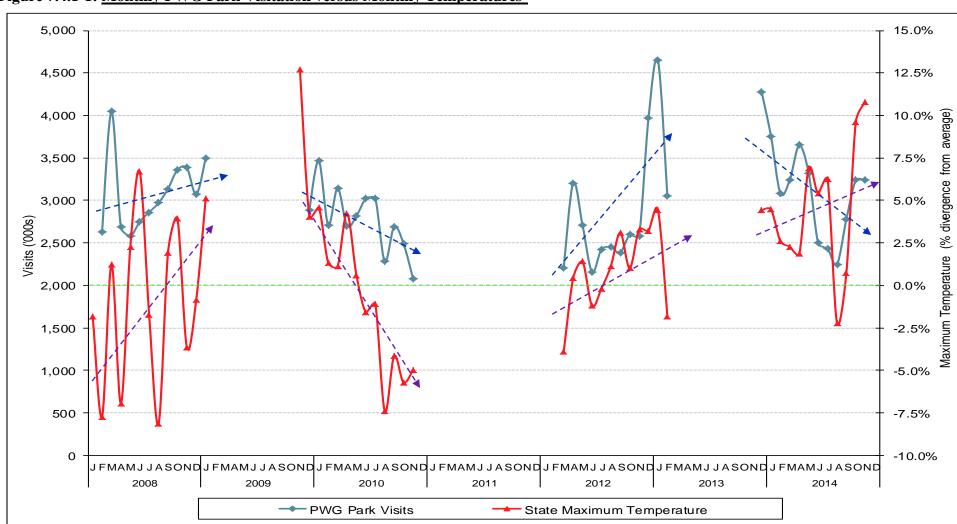


Figure 7.4.1-1: Monthly PWG Park Visitation versus Monthly Temperatures<sup>1</sup>

1. Linear trend lines have been fitted to assist with description of findings. Formal trend analysis will be undertaken at the end of the 2016 survey.

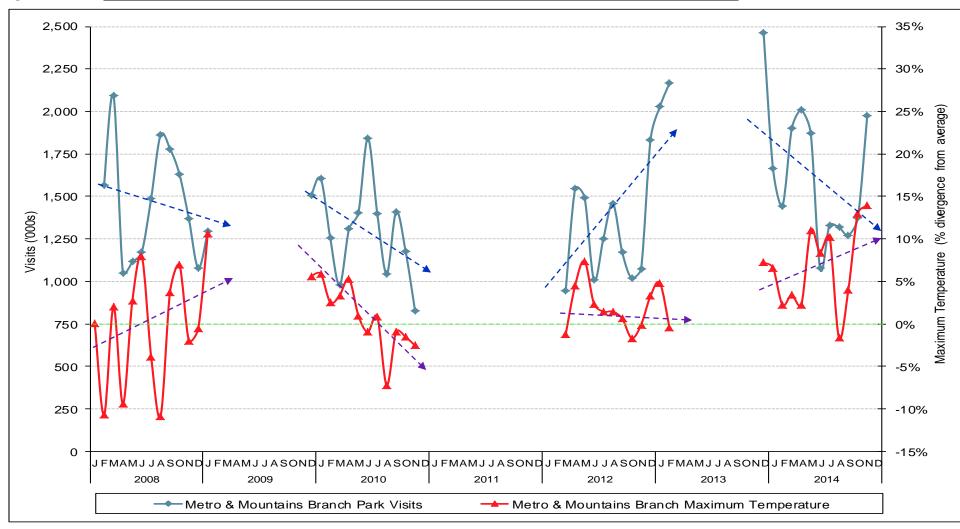


Figure 7.4.1-2: Monthly PWG Park Visitation versus Monthly Temperatures<sup>1</sup> – Metro & Mountains Branch

1. Linear trend lines have been fitted to assist with description of findings. Formal trend analysis will be undertaken at the end of the 2016 survey.

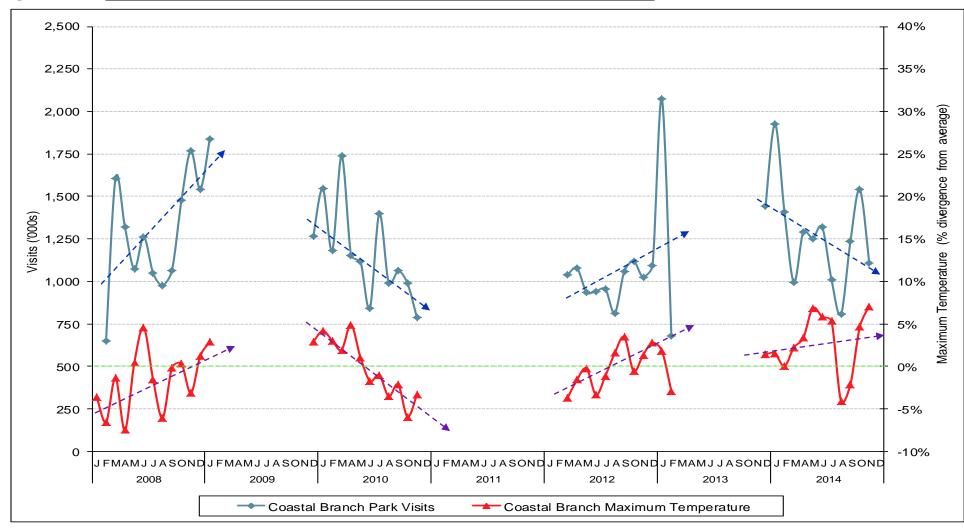


Figure 7.4.1-3: Monthly PWG Park Visitation versus Monthly Temperatures<sup>1</sup> – Coastal Branch

1. Linear trend lines have been fitted to assist with description of findings. Formal trend analysis will be undertaken at the end of the 2016 survey.

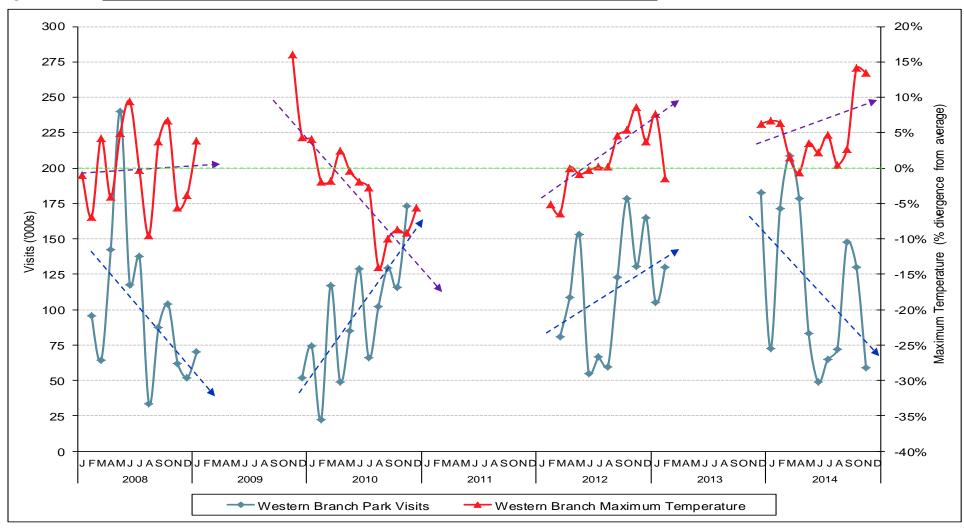


Figure 7.4.1-4: Monthly PWG Park Visitation versus Monthly Temperatures<sup>1</sup> – Western Branch

#### 7.4.2 Rainfall Effects on PWG Park Visitation

Figure 7.4.2-1 compares monthly PWG park visitation to monthly rainfall displayed as a divergence from the average<sup>1</sup>. There appears to be a general opposing trend between visitation and rainfall – the more rainfall is above the average, the fewer visits. This trend is particularly evident in 2008, 2010 and 2014, but the trend is not as strong in 2012. In addition, peaks in visitation tend to correspond with troughs in rainfall.

Figures 7.4.2-2 to 7.4.2-4 compare rainfall with PWG park visitation at the PWG Branch level.

In 2008, visitation to parks in the Metro and Mountains Branch tended to fall as rainfall fell below the average. However, in 2010, 2012 and 2014 visitation decreased as rainfall increased above the average. In 2012 and 2014, rainfall tended to mirror visitation on a month by month basis.

Visitation to parks in the Coastal Branch tends to decrease as rainfall increases above the average in 2008, 2010 and 2014. This trend is less evident in 2012. Peaks in visitation tend to correspond with troughs in rainfall in 2010 and 2014, but this trend is not as evident in 2008 and 2012.

For parks in the Western Branch, visitation in 2008 and 2012 tends to decrease as rainfall increases above the average, while the reverse appears to be the case in 2010 and 2014. The only year in which peaks in visitation correspond to troughs in rainfall (and vice versa) for the Western Branch is 2012.

In terms of climate variation, it would appear that there is a general trend that as rainfall increases above the average PWG park visitation decreases, while visitation tends to increase when temperatures are above the average. These factors will continue to be monitored in 2016 to determine if any relationship between them and park visitation exists.

<sup>&</sup>lt;sup>1</sup> Divergence from the average is calculated using 14 weather stations across the state, representing each PWG Region. Average is based on the BoM average for each weather station.

5,000 400% 4,500 350% 4,000 300% 250% Rainfall (% divergence from average) 3,500 200% 3,000 Visits ('000s) 2,500 150% 100% 2,000 1,500 50% 1,000 0% 500 -50% 0 -100% J FMANJ J ASOND 2008 2009 2010 2011 2012 2013 2014 PWG Park Visits → State Average Rainfall

Figure 7.4.2-1: Monthly PWG Park Visitation versus Monthly Rainfall<sup>1</sup>

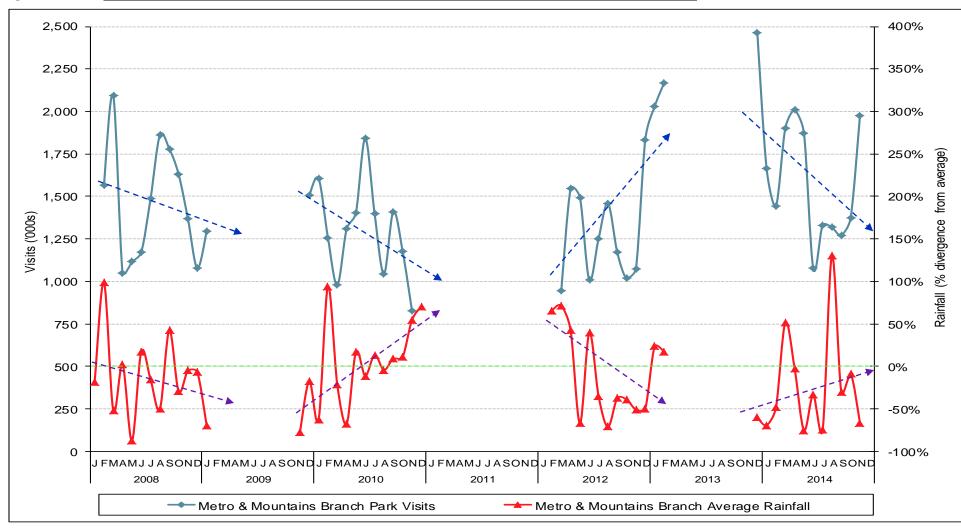


Figure 7.4.2-2: Monthly PWG Park Visitation versus Monthly Rainfall<sup>1</sup> – Metro & Mountains Branch

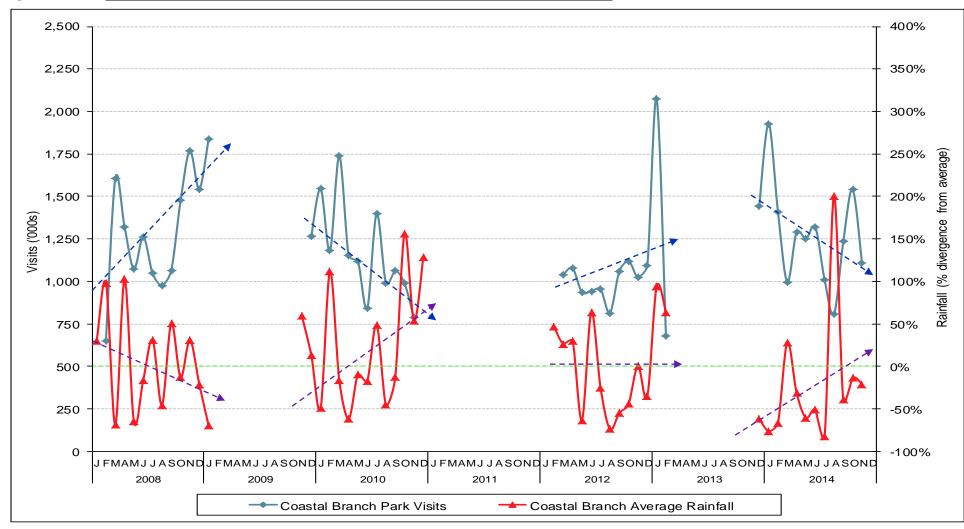


Figure 7.4.2-3: Monthly PWG Park Visitation versus Monthly Rainfall<sup>1</sup> – Coastal Branch

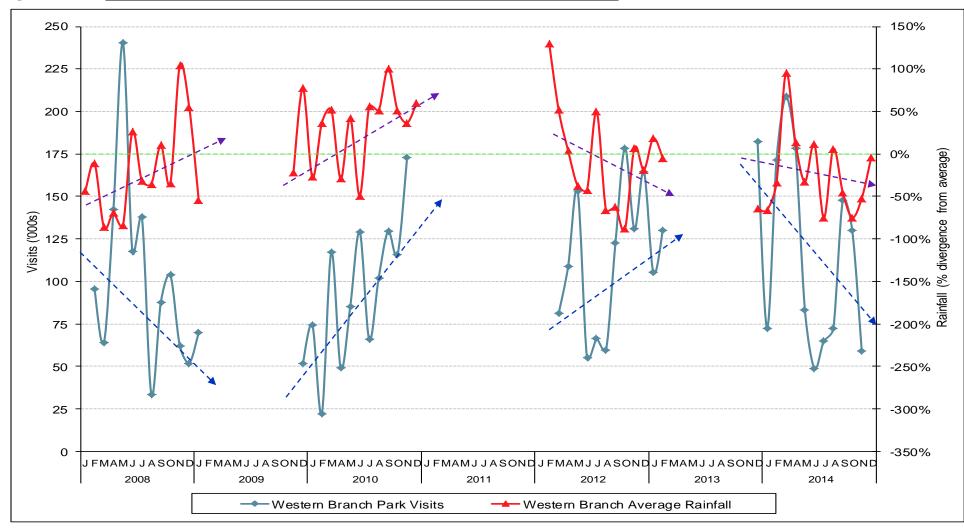


Figure 7.4.2-4: Monthly PWG Park Visitation versus Monthly Rainfall<sup>1</sup> – Western Branch

## 7.4.3 Significant and Sustained Weather Event Effects on PWG Park Visitation

Table 7.4.3-1 provides a weather summary from the Bureau of Meteorology for each survey year. These brief descriptions of the year match with trend analysis for temperature and rainfall. Warm, dry weather results in higher levels of park visitation, while cool, wet weather results in lower levels of park visitation.

Table 7.4.3-1: Weather Summary for NSW and Associated PWG Park Visits

Year	Weather Summary	PWG Annual Park Visitation
2008	Dry year with a drought continuing in southern NSW	High levels of visitation
2010	Third w ettest year on record - w ettest since 1956	Low levels of visitation
2012	Cool w et start w ith w arm, dry finish	Low visitation until summer 2012-13
2014	Warmest year on record, driest year since 2006	High visitation unitl winter 2014

Figure 7.4.3 and Table 7.4.3-2 show monthly PWG park visitation and compares it with quarterly weather summaries for NSW. Key findings are discussed below. Seasons where visitation did not match what would be expected, given temperature, rainfall and specific weather events are highlighted in red in Figure 7.4.3.

Table 7.4.3-2: Seasonal Weather Summary NSW and Associated PWG Park Visits

Season	Wather Summary	Visitation	Comment
Autumn 2008	Dry, below average rainfall	High	Favourable conditions for high visits
Winter 2008	Average winter	Moderate	Conditions typical for moderate visitation
Spring 2008	Warm, but with above average rainfall	High	Mostly favourable conditions for high visits
Summer 2008-09	Above average temperatures	Moderate	Higher summer temperatures may have kept visits down
Summer 2009-10	Wet, warm, cyclones causing high rainfall	Moderate	Visitation higher than expected for conditions
Autumn 2010	Wet, above average temeratures, some flooding	Low	Mostly unfavourable consitions - low visits expected
Winter 2010	Cold, w et w inter	Moderate-Low	Unfavourable conditions - visits slightly higher than expected
Spring 2010	Wettest spring on record, cool	Low	Unfavourable conditions - low visits expected
Autumn 2012	Wettest w eek in March, cold, but dry autumn	Low - Moderate	Visits expected to be low in March (and were) - remainder similar to autumn 2010
Winter 2012	Dry, clear w inter - w arm days, cool nights	Low	Favourable conditions - visits should have been much higher
Spring 2012	Warm, dry spring	Low	Favourable conditions - visits should have been much higher
Summer 2012-13	Warm summer - flooding in the north of NSW in late January	High	Mostly favourable conditions to mid summer - high visits until mid-summer
Summer 2013-14	Driest summer since 1984-5, 5th warmest	High	High visits in early summer, but declined with increasing temperatures late summer
Autumn 2014	Wet & cloudy March, but dier & w armer from mid-April w ith record w arm spell in May	High	Generally favourable conditions for high visits
Winter 2014	Average winter	Moderate-Low	Favourable conditions - visits should have been higher
Spring 2014	Warmest spring on record	Moderate-High	Favourable conditions - but visits could have been slightly higher ove rthe period

The summary above shows that 2010 could have been a worse year for PWG park visitation based on weather conditions. Similarly, weather conditions in 2012 should have resulted in higher levels of visitation than were achieved. In fact, if it wasn't for the high number of visits in the summer of 2012-13, the 2012 year may have been worse for park visitation than 2010.

When looking at visitation in 2014 generally favourable weather conditions in summer and autumn boosted visits in these seasons. However, favourable weather conditions also prevailed in winter and spring, yet visitation in both these seasons should have been at least marginally higher. So 2014 annual park visitation could have been even higher if visitation in winter and spring was at levels expected.

Weather certainly has a strong influence on visitation and weather events at the local level will also impact on local visitation. Weather effects will be investigated in more detail in 2016.

ď

Mar-12 Apr-12 May-12

Autumn

Dry, clear winter

Jun-12 Jul-12

Winter

Warn, dry spring 5th warmest spring

Spring

Nov-12 Dec-12 Jan-13

Summer

Aug-12 Sep-12 Oct-12

Warmestispring

Sep 14 Oct-14

Jul-14 Aug-14

May-14

Record 1

& cloudy I --warmer f

Wet &

Mar-14 Apr-14

Summer Autumn

Feb-14

Dec-13 Jan-14

5,000 2010 2014 2008 2012 Dry with drought continuing 3rd wettest year on record Cool, wet start with Warmest year on record, driest year in southern NSW - wettest since 1956 since 2006 warm, dry finish 4,500 4,000 3,500 3,000 Visits ('000s) ree & Feb from cyclone Olga es with natural disaster Cobar & Central Darling 2.500 looding in north-west NSW due to QLD floods late November 2,000 mid-late No spring on record – double the Ave. & North ( <u>Snow in Blue Mountains in late April</u> Moderate flooding Mid-North coast 1,500 Blue Mountains in late-Oct &ı summer since 1983-84 warmest spring on record Wettest week on record in warm spell in mid-late May on record

Jul-10 Aug-10

Sep-10 Oct-10 Nov-10

Figure 7.4.3: Monthly PWG Park Visitation with Associated Weather Events<sup>1</sup>

Winter 1. Source: Bureau of Meteorology – Annual and Quarterly weather summaries.

30-In

Aug-08 Sep-08 Oct-08 Nov-08

Mar-08 Apr-08 May-08

Summer Autumn

Typical Ave. winter

1,000

500

Roy Morgan Research July, 2015

Dec-08

Summer

Light snow in

Spring

5th wettest summer

Feb-10 Mar-10 Apr-10 May-10

Summer Autumn

### 8. OTHER SURVEY RESULTS

Please note that statistically significant results for 2014 are highlighted in blue (higher) or orange (lower) compared with other years.

# 8.1 Unweighted (Sample) Data versus Weighted (Population) Data

Survey data was weighted by age by sex by region to reflect the actual population for each region. As over-sampling was conducted in the ACT and Remainder South East QLD, their contribution was weighted downward to reflect their actual population contribution (yellow highlight). Low population regions were over-sampled to ensure sufficient numbers of park visitors were surveyed in these regions. Conversely, Sydney and Melbourne respondents were weighted upward to match the actual population these regions contribute (green highlight).

Table 8.1-1: Age and sex by region - All respondents 2014

Age by	Total Pop'n	Male 18-24	Male 25-34	Male 35-49	Male 50+	Female 18-24	Female 25-34	Female 35-49	Female 50+
Sex by	n=	n=	n=	n=	n=	n=	n=	n=	n=
Region	15,656	864	1,064	2,193	3,324	783	1,213	2,413	3,802
				Sy	dney				
uc	3,249	197	249	472	670	167	251	486	757
uc%	21%	23%	23%	22%	20%	21%	21%	20%	20%
wc%	28%	29%	30%	28%	26%	29%	31%	28%	26%
				Remair	nder NSV	V			
uc	2,609	99	150	356	636	90	179	379	720
uc%	17%	11%	14%	16%	19%	11%	15%	16%	19%
wc%	16%	14%	13%	15%	19%	14%	12%	15%	19%
				Α	CT				
uc	1,968	119	139	281	390	106	150	326	457
uc%	13%	14%	13%	13%	12%	14%	12%	14%	12%
wc%	2%	2%	3%	2%	2%	2%	3%	2%	2%
				Melb	ourne				
uc	2,607	166	195	353	529	148	217	399	600
uc%	17%	19%	18%	16%	16%	19%	18%	17%	16%
wc%	25%	26%	28%	26%	23%	26%	28%	26%	24%
					nder VIC				
uc	1,307	65	77	178	302	56	90	202	337
uc%	8%	8%	7%	8%	9%	7%	7%	8%	9%
wc%	9%	8%	7%	9%	11%	7%	7%	9%	10%
					bane				
uc	1,815	119	129	272	335	115	163	283	399
uc%	12%	14%	12%	12%	10%	15%	13%	12%	10%
w c%	11%	13%	12%	12%	10%	13%	12%	12%	10%
						utheast Q			
uc	2,101	99	125	281	462	101	163	338	532
uc%	13%	11%	12%	13%	14%	13%	13%	14%	14%
wc%	8%	8%	7%	8%	9%	8%	7%	8%	9%

uc - Unweighted count (i.e. the number surveyed or asked a given question);

u% -Unweighted count percentage (percentage of the total sample the unweighted count represents in each column); wc% - Weighted percentage (the proportion of the total 18yrs+ population of the seven survey regions that cell represents in each column).

As the sampling frame in 2012 changed from being based on the Electronic White Pages to Random Digit Dialling of both landline and mobile numbers, data was also weighted to reflect the telephone status of respondents. People from mobile only households in 2014 represent 24% of the survey population, yet from the sample only 9% were surveyed in 2014. As a consequence people from mobile only households are weighted up to reflect their population contribution. Similarly, people from households with both mobiles and landlines were weighted down, as they are over-represented in the sample (84% in the sample c.f. 69% in the population in 2014).

This up-weighting of people from mobile only households is not surprising, as a conscious decision was made (in conjunction with the OEH) to limit the proportion of mobile numbers surveyed to 20% of the sample. In order to minimise the degree of mobile only household up-weighting, approximately 50% of the sample would need to be surveyed via a mobile phone. The change in sampling structure could be considered for the 2016 survey.

Table 8.1-2: Phone Status by region - All respondents 2012 and 2014

Phone	Mobiles & in the Ho			s Only ousehold		es Only ousehold				
Status by	2012	2014	2012	2014	2012	2014				
Region	n=13,282	n=13,120	n=1,041	n=1,451	n=1323	n=1,085				
uh%	85%	84%	7%	9%	8%	7%				
w h%	74%	69%	18%	24%	9%	7%				
	Sydney									
uc	2,756	2,724	275	350	227	175				
uh%	85%	84%	8%	11%	7%	5%				
w h%	74%	71%	19%	23%	8%	7%				
		Rei	mainder NS	W						
uc	2,176	2,140	177	229	262	240				
uh%	83%	82%	7%	9%	10%	9%				
w h%	71%	66%	17%	24%	12%	10%				
			ACT							
uc	1,767	1,804	34	47	155	117				
uh%	90%	92%	2%	2%	8%	6%				
w h%	78%	78%	15%	16%	8%	6%				
			Melbourne							
uc	2,161	2,131	259	335	184	141				
uh%	83%	82%	10%	13%	7%	5%				
w h%	75%	71%	18%	24%	7%	5%				
		Re	mainder VI	С						
uc	1,085	1,022	89	189	129	96				
uh%	83%	78%	7%	14%	10%	7%				
w h%	74%	67%	16%	25%	11%	8%				
			Brisbane							
uc	1,614	1,524	121	161	140	130				
uh%	86%	84%	6%	9%	7%	7%				
w h%	72%	66%	21%	28%	7%	6%				
		Remain	der Southe	rn QLD						
uc	1,723	1,775	86	140	226	186				
uh%	85%	84%	4%	7%	11%	9%				
w h%	76%	67%	16%	26%	8%	7%				

uc - Unweighted count (i.e. the number surveyed or asked a given question);

uh% - Unweighted count percentage (percentage of the total sample the unweighted count represents in each row);

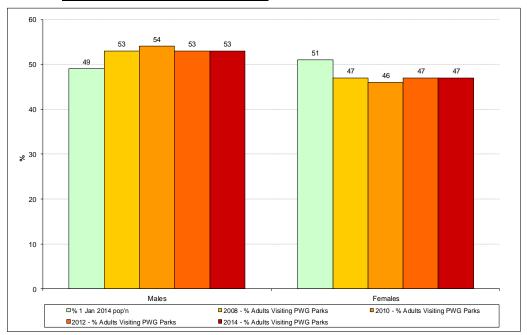
wh% - Weighted percentage (the proportion of the total 18yrs+ population of the seven survey regions that cell represents in each row).

# 8.2 Park visitation by Selected Demographics

The following graphs compare the actual population percentage of the survey region, with the percentage of visitors and visits to *any PWG-managed* park by survey year.

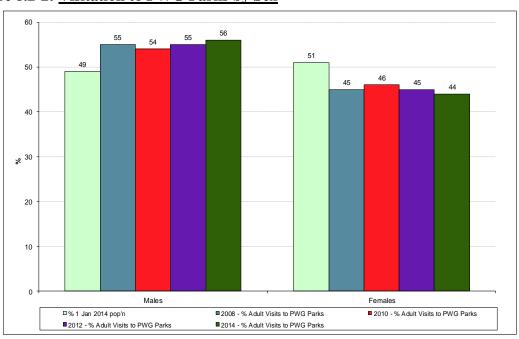
Compared to the population, PWG park visitors are more likely to be male (Figure 8.2-1).

Figure 8.2-1: <u>Visitors to PWG Parks by Sex</u>



Visitation to PWG parks is slightly more over-represented by males than are visitors (Figure 8.2-2).

Figure 8.2-2: <u>Visitation to PWG Parks by Sex</u>



A slightly younger age profile is evident in 2014 compared with other years in terms of visitors to PWG parks, with the proportion of visitors aged 35-49 years significantly lower than in previous years (Figure 8.2-3). The proportion of visits by age in 2014 are no different than in previous years, with the exception that visits by 18-24 year olds are significantly higher than in 2008 (Figure 8.2.4).

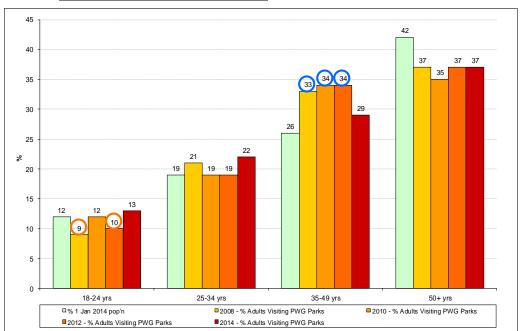
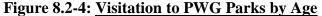
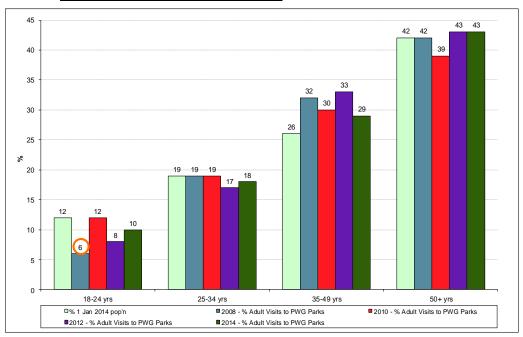


Figure 8.2-3: Visitors to PWG Parks by Age





The increase in the proportion of 18-24 year old visitors in 2014 is primarily due to the increase in male visitors age 18-24, whereas the fall in visitors aged 25-49 in 2014 can be attributed to falls for both sexes in this age group (Figure 8.2-5). Higher levels of visitation from 18-24 year olds in 2014 can be solely attributed to increased visitation by males aged 18-24 (Figure 8.2-6). Whilst the proportion of visits among 25-34 year olds were maintained in 2014, this can be attributed to an increase in the proportion of females visiting, while the proportion of males in this age group declined.

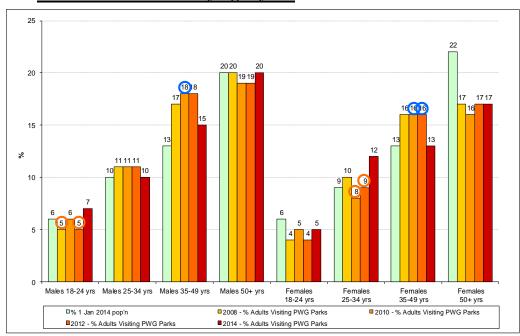
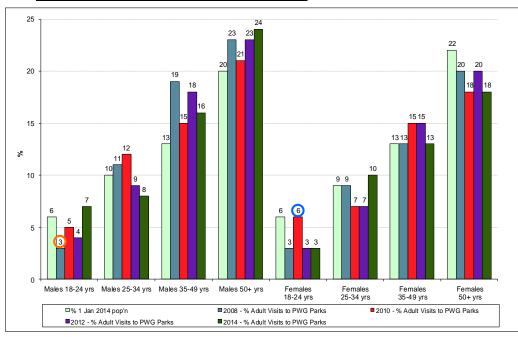


Figure 8.2-5: Visitors to PWG Parks by Age by Sex





In 2014 the proportion of visitors looking for work increased, as did visitation (Figures 8.2-7 and 8.2-8). Visitation from students declined in 2014, as did visitors, while visits and visitation from non-workers increased. While the proportion of visits from those employed has remained static over time (71% in 2014), the proportion of visits fell significantly from 71% in 2012 to 70% in 2014. The proportion of visitors and visits of those in full-time employment continues to be much higher than their representation in the population.

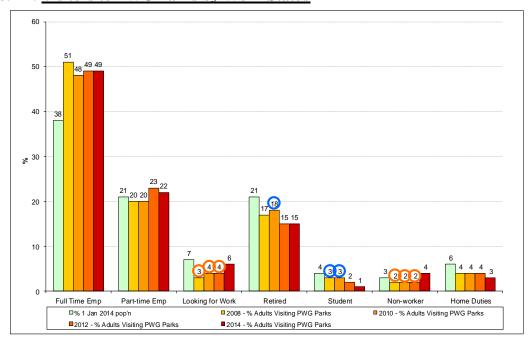
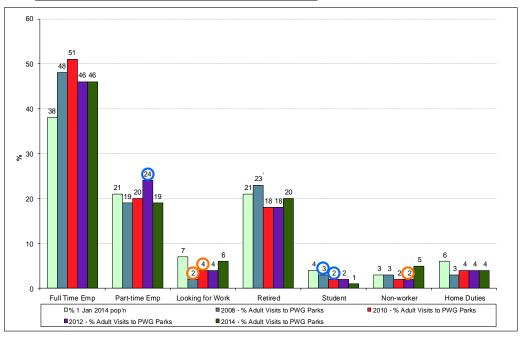


Figure 8.2-7: Visitors to PWG Parks by Work Status





The 2014 proportion of people without any form of tertiary education who visit PWG parks is significantly lower than the proportion of visitors this group in 2008 and 2010. The opposite occurred amongst people with some form of tertiary education (Figure 8.2-9). In terms of visitation there was a slight rebound in 2014 for those with no tertiary education from the low of 2012 (Figure 8.2-10).

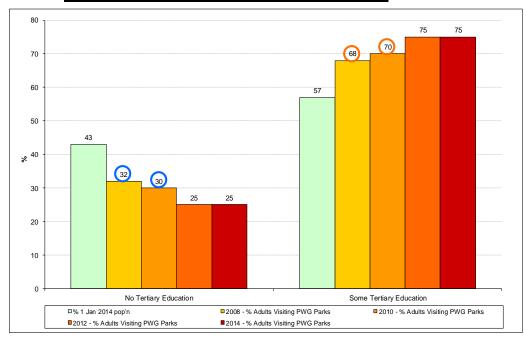
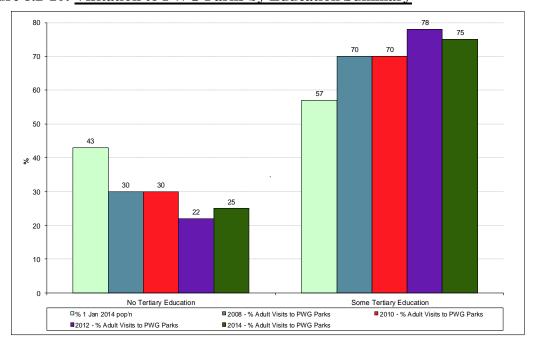


Figure 8.2-9: Visitors to PWG Parks by Education Summary





Overall the proportion of PWG park visitors with 1, 2, 3 or 4 or more children in the household has remained relatively stable over time (Figure 8.2-11). The proportion of visitors from households with no children in the household dipped in 2010 but has since recovered to be at 62% in 2014. The minor decline in the proportion of visits coming from households with no children appears to have been arrested in 2014, as has the proportional increase in visits from households with 2 children (Figure 8.2-12).

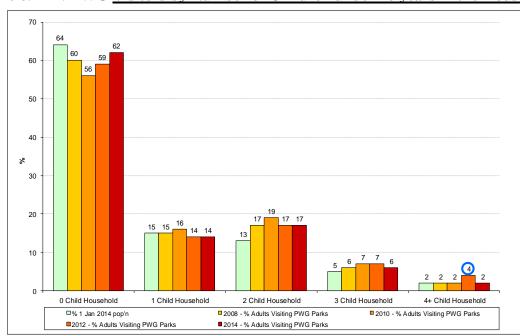
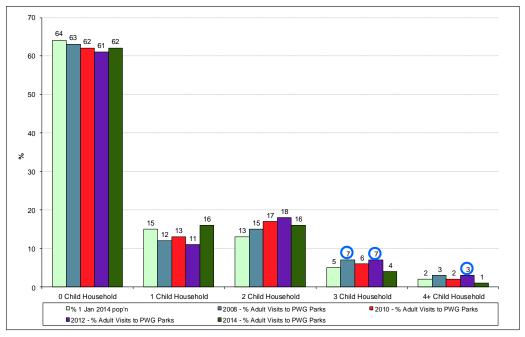


Figure 8.2-11: PWG Visitors by Number of Children under 18 years in the Household





The proportion of visitors in 2014 who are single 18-34 with no children is at its highest level recorded, while the opposite is the case for those married 35 years and over with children (Figure 8.2-13). In relation to visitation, the proportion of singles 18-34 with children continues to increase over time, while the increase with time of visits by those married 35 years and over with children was arrested in 2014 (Figure 8.2-13). The largest segment of the population – married people aged 35+ with no children is continually underrepresented in terms of both visitors and visitation to parks, but visitation tends to be increasing in recent years.

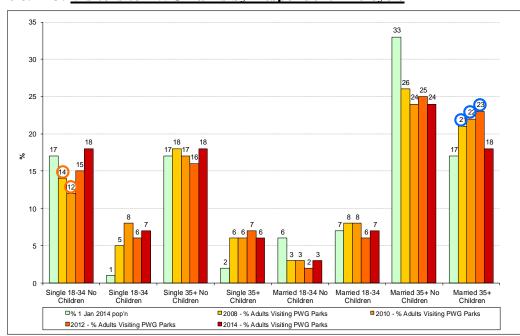
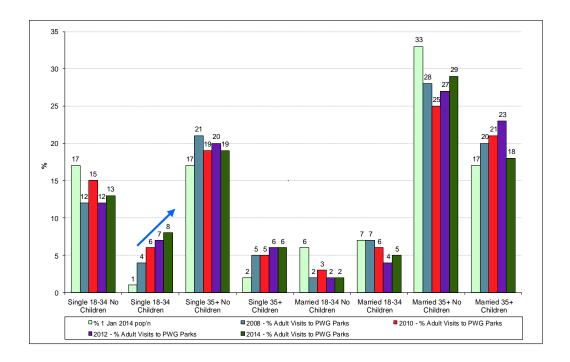


Figure 8.2-13: Visitors to PWG Parks by Respondent Life-cycle

Figure 8.2-14: <u>Visitation to PWG Parks by Respondent Life-cycle</u>



When analysing visitors to PWG parks in terms of phone status, the proportion of adults visiting from mobile only households is significantly lower in 2012 than in 2014, while the proportion is significantly higher in these years for adults visiting from households with both mobiles and landlines. However, the proportion of visits from adults in households with both mobiles and landlines has remained constant at 75% in both years, whilst there appears to be a small (but not significant) increase in the proportion of visits from adults living in mobile only households in 2014 (Figure 8.2.15).

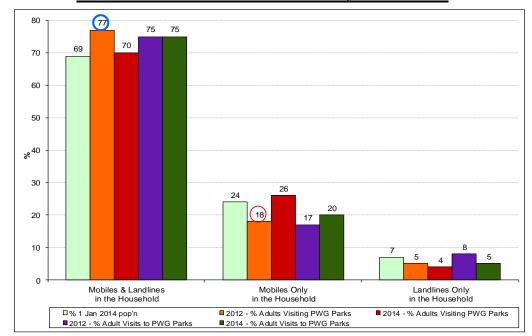


Figure 8.2-15: Visitors and Visitation to PWG Parks by Phone Status

For the 2014 survey the question on languages usually spoken in the household was expanded to capture additional languages, with analysis provided below.

Incidence of speaking English in the household has remained at 96%-97% across all survey years for those respondents visiting any park in NSW in the last 4 weeks, and at 97%-98% for those specifically visiting a PWG managed park in the last 4 weeks.

Incidence of speaking a language other than English in 2014 is significantly higher than 2008 and 2010 results for those visiting any park in NSW in the last 4 weeks or those visiting a PWG park in the last 4 weeks, with the 2014 results each at approximately 11%.

Table 8.2-16 provides details of all languages spoken in the household. It shows that the dominant non-English language of those visiting any park in NSW in 2014 is Mandarin (1.2%), while in terms of those visiting a PWG park, the dominant language is Spanish (1.1%), followed by Mandarin (1.0%), Cantonese (0.9%), Arabic (0.7%) and French (0.7%).

Table 8.2-16: Visitors by Language Usually Spoken in the Household

		Visited A	Any Park		1	Visited a	PWG Park	
		in Last	4 Weeks			in Last 4	weeks	
	2008	2010	2012	2014	2008	2010	2012	2014
Language	n= 1,913	n= 1,821	n= 1,815	n= 2,076	n= 1,563	n= 1,389	n= 1,421	n= 1,644
English	96.2%	96.2%	97.2%	96.6%	97.4%	96.8%	98.4%	97.4%
Total Languages other								
than English	9.9%	9.0%	12.2%	11.0%	8.1%	7.6%	10.4%	10.9%
Spanish	0.5%	0.8%	1.6%	0.9%	0.5%	0.7%	1.7%	1.1%
Mandarin	1.3%	1.1%	1.0%	1.2%	1.2%	0.8%	0.6%	1.0%
Cantonese	0.6%	0.7%	0.5%	0.9%	0.3%	0.6%	0.4%	0.9%
Arabic	0.1%	0.6%	0.7%	0.8%	0.1%	0.4%	0.7%	0.7%
Italian	0.7%	0.6%	0.7%	0.6%	0.4%	0.3%	0.7%	0.6%
Hindi	0.5%	0.2%	0.6%	0.7%	0.4%	0.2%	0.2%	0.6%
Greek	0.6%	0.1%	0.3%	0.8%	0.5%	0.1%	0.2%	0.6%
German	0.6%	0.7%	0.6%	0.4%	0.6%	0.6%	0.6%	0.3%
Vietnamese	0.5%	0.3%	0.1%	0.3%	0.5%	0.1%	0.1%	0.3%
Tagalog (Filipino)	0.2%	0.4%	0.3%	0.1%	0.2%	0.4%	0.2%	0.1%
Aboriginal/ Indigenous Language	0.1%	0.0%	0.1%	-	-	0.2%	0.2%	-
Other Languages -	4.8%	4.2%	7.6%	5.8%	4.0%	3.9%	6.4%	5.6%
French	n/a	n/a	n/a	0.9%	n/a	n/a	n/a	0.7%
Korean	n/a	n/a	n/a	0.4%	n/a	n/a	n/a	0.5%
Dutch	n/a	n/a	n/a	0.3%	n/a	n/a	n/a	0.4%
Portuguese	n/a	n/a	n/a	0.4%	n/a	n/a	n/a	0.3%
Russian	n/a	n/a	n/a	0.2%	n/a	n/a	n/a	0.3%
Macedonian	n/a	n/a	n/a	0.2%	n/a	n/a	n/a	0.2%
Japanese	n/a	n/a	n/a	0.2%	n/a	n/a	n/a	0.2%
Punjabi	n/a	n/a	n/a	0.1%	n/a	n/a	n/a	0.0%
Other Languages	n/a	n/a	n/a	3.3%	n/a	n/a	n/a	3.1%

N.B. Totals sum to greater than 100% as some visitors can speak multiple languages.

In terms of percentage of adult visits to PWG parks 98%-99% of all visits are made by English speakers. Visits made by adults that speak a language other than English was 8.2% in 2014, down from the peak of 11.0% in 2012. Spanish speakers make up the highest proportion of visits to PWG parks (1.2%). More detail is provided in Table 8.2-17.

Table 8.2-17: Top 7 PWG Park Visits by Language Usually Spoken in the Household

	% of Adult Visits to PWG Parks							
Language	2008	2010	2012	2014				
English	98.7%	96.5%	98.7%	98.4%				
Total Languages other than English	6.2%	6.1%	11.0%	8.2%				
Spanish	1.0%	0.5%	1.2%	1.2%				
Arabic	0.0%	0.3%	0.7%	0.8%				
Mandarin	0.5%	1.7%	0.3%	0.7%				
Italian	1.5%	0.2%	0.9%	0.5%				
Cantonese	0.2%	0.3%	0.2%	0.5%				
French	n/a	n/a	n/a	0.5%				

N.B. Totals sum to greater than 100% as some visitors can speak multiple languages.

### 8.3 Number of Individual Visits made to PWG Managed Parks by Adults

Detailed discussion of number of adult visits is provided in section 7.1 of this document (including Figures 7.1.5, 7.1.7 and 7.1.8) in relation to potential factors influencing PWG park visitation.

In summary, the average number of visits by adults has risen from 2.67 in 2012 to 2.87 visits in 2014, comparable with averages achieved in 2008 and 2010 (2.95 and 2.91 respectively). In general, there has been an increase in average visitation from 2012 to 2014 in the main visitation regions of Sydney, reminders NSW and ACT, while declines in average visitation have occurred in Melbourne and reminder Victoria since 2012. Average visitation for Brisbane in 2014 is higher than in 2008 and 2010, but lower than the average attained in 2012 when a confirmed number of high visits from one respondent lifted the average markedly. across all survey regions, the exceptions being the remainder of Victoria and Brisbane. Average visits in 2014 for the remainder of Southeast QLD maintained 2012 levels.

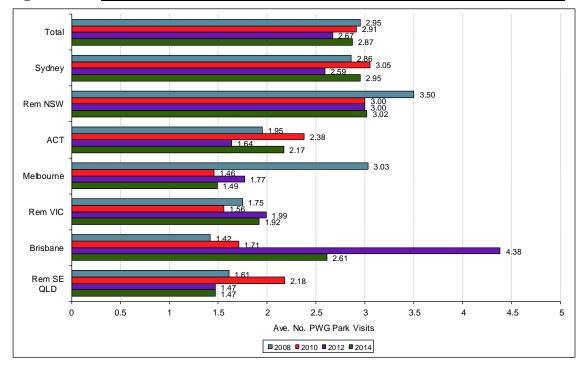


Figure 8.3-1: Average Number of Adult Visits to PWG Parks by Region of Origin

Across all years, average number of visits to PWG parks increases with age. Whilst there is some variation from year to year in the average number of visits by age group, 18-24 year olds have the lowest average number of visits (2.27), followed by 25-24 year olds (2.63), then 35-49 year olds (2.70), with those aged 50 years an over having the highest number of average visits (3.32) (N.B. data is not shown graphically).

#### 8.4 Activities undertaken at most recently visited park

Respondents who had visited a PWG park were asked what activities they undertook on their *most recent* visit. Almost all of those who visited a PWG park did some sort of 'activity', with 99% nominating a specific activity in each of 2008, 2010, 2012 and 2014.

The detailed list of activities was grouped into broader categories for analysis (see figure 8.4-1). The most commonly named activity group undertaken at PWG parks was *walking*, undertaken by 49% of people in 2014, significantly lower than 2008 and 2012 results (54% and 56% respectively). This was followed by *water-based recreation*, which has been increasing slightly (but not significantly) over time (20% - 2014; 19% - 2012; 18% - 2010; 17% - 2008). *Touring and sightseeing* rebounded from its decline in 2010 and 2012 to 12% in 2014. However, *picnicking and dining* fell to its lowest recorded level of 11% in 2014, significantly lower than in all previous years (16% - 2012 and 2010; 14% - 2008. *Exercise and sport* continues to increase in incidence, up to 6% in 2014. All other activities included in the questionnaire were nominated by small proportions of respondents, with sample sizes too small to make any reliable statistical inferences.

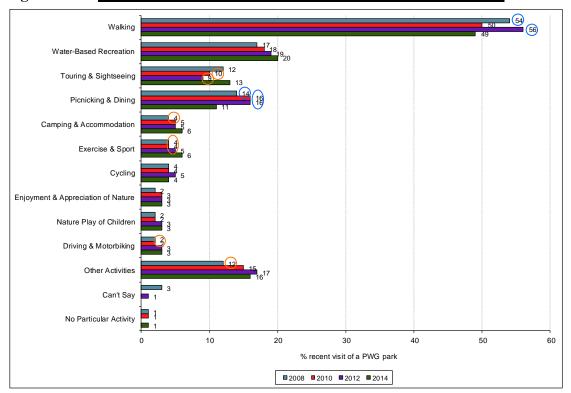


Figure 8.4-1: Activities Undertaken on Most Recent Visit to a PWG Park

Table 8.4-1 lists the four most commonly nominated activities undertaken by visitors. Within this, a further breakdown of the specific activities has been allocated to each of these four broad categories. Comparisons have been made for all three survey years.

Incidence of *walking* has decreased significantly in 2014 from 2012 levels to its lowest level recorded (49%), primarily due to the fall in *walking/bushwalking* (52% - 2008; 49% - 2010; 55% - 2012; 48% - 2014).

Incidence of undertaking *water-based recreation* continues to increase slightly each year, due to significant increases in the proportion of visitors *rowing*, *rafting*, *canoeing* and *kayaking* and to increases in the proportion of visitors swimming.

The significant decline in the proportion of visitors *picnicking and dining* in 2014 is directly related to the significant decline in visitors having *picnics and barbecues*.

The significant increase in the proportion of visitors *touring and sightseeing* compared with 2010 and 2012 results can be attributed to significant increases in *scenic driving*, *lookouts* and *scenery* and *sightseeing* in 2014.

Table 8.4-1: <u>Most common activity undertaken at most recently visited PWG Park in last 4 weeks</u>

		Mos	st recent vis	it to a PWG	park
Activities undertaken o	on one's most recent visit to a		in the last	t 4 weeks	
PWG park		2008	2010	2012	2014
ACTIVITY - SUMMARY		n=1,487	n=1,341	n=1,341	n=1,555
	Orienteering And Rogaining	*	*	*	*
Walking	Walking The Dog	2%	1%	1%	1%
	Walking/ Bushw alking	52%	49%	55%	48%
Walking Total		54%	50%	56%	49%
	Fishing	4%	6%	6%	5%
	Motor Boating/ Parasailing	1%	1%	1%	1%
	Row ing/ Rafting/ Canoeing/ Kayaking	1%	1%	1%	3%
Water-Based Recreation	Sailing/ Kite Surfing/ Sail Boarding	1%	*	1%	*
	Scuba Diving/ Snorkelling	*	1%	*	1
	Surfing	2%	2%	2%	2%
	Sw imming	8%	9%	10%	10%
	Waterskiing	*	*	*	*
Water-Based Recreatio	n Total	17%	18%	19%	20%
Picnicking And Dining	Dining/ Eating At Food Outlets	2%	2%	3%	3%
Tierlieding And Billing	Picnicking And Barbecues	11%	15%	13%	8%
Picnicking And Dining	Гotal	14%	16%	16%	11%
	Holiday/ Break Aw ay/ Weekend Trip	*	1%	*	1%
Touring And Sightseeing	Lookouts And Scenery	2%	2%	1%	3%
Touring And Signiseeing	Scenic Driving	3%	2%	1%	3%
	Sightseeing	7%	6%	7%	9%
Touring And Sightseei	ng Total	12%	10%	9%	13%

<sup>\*</sup> Less than 0.5% response.

Table 8.4-2 shows that the proportion of park visitors undertaking *walking* activities in 2014 declined across all states surveyed. Proportions undertaking *picnicking* and *dining* activities in NSW declined significantly from those recorded in past years, yet levels were maintained

southeast QLD in 2014. The increase in *touring and sightseeing* activities in 2014 were evident in all states except ACT, with 26% doing so amongst Victorians in 2014.

<b>Table 8.4-2:</b>	Main activities at most recently	<u>y visited PWG Park by</u>	y State of Origin

		NS	SW		VIC				ACT				SE QLD			
	2008	2010	2012	2014	2008	2010	2012	2014	2008	2010	2012	2014	2008	2010	2012	2014
Main	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=
Activities	1,113	1,019	1,023	1,211	49	36	49	47	208	189	202	212	117	97	83	85
Walking	53%	50%	55%	49%	54%	45%	63%	45%	52%	60%	52%	50%	59%	52%	54%	49%
Water-Based Recreation	18%	18%	19%	20%	14%	19%	22%	12%	12%	21%	17%	18%	14%	25%	23%	23%
Picnicking And Dining	14%	18%	16%	11%	5%	6%	8%	8%	7%	11%	6%	8%	14%	7%	13%	14%
Touring And Sightseeing	12%	10%	8%	13%	20%	11%	19%	26%	13%	12%	9%	12%	13%	14%	12%	9%

As can be seen in Figure 7.4-2, males aged 18-24 years in 2014 were significantly less likely to undertake *walking* activities than in 2012, with males aged 35-49 years significantly less likely to *walk* than in previous years, while males aged 50 years and over were less likely to *walk* than in 2012. The proportion of females aged 50 years and over undertaking *walking* in 2014 was significantly lower than in 2008. A significant decline from 2012 levels in *water-based recreation* was observed for males 35-49 years, while a significant increase since 2008 has occurred for the same activity amongst males aged 50 years and over. In 2014 a significant decrease in males aged 35-49 years has occurred since 2012 when undertaking *picnicking and dining* activities, with significant declines for these activities also evident for females age 18-24 years in 2010, females aged 25-34 years in 2012 and females aged 35-49 years in 2010 while a significant increase has occurred since 2010 amongst females aged 25-34 years. There has been a significant increase in 2014 for *touring and sightseeing* activities amongst males aged 50 years and over and females aged 18-24 in 2014, and amongst females aged 35-49 from 2008 to 2012.

Table 8.4-3: Main activities at most recently visited PWG park by Age by Sex

Activity	Sex by Age	2008	2010	2012	2014	Activity	Sex by Age	2008	2010	2012	2014
	Male 18-24 yrs	33%	32%	49%	32%		Male 18-24 yrs	12%	21%	12%	18%
	Male 25-34 yrs	42%	39%	40%	38%		Male 25-34 yrs	14%	15%	10%	10%
	Male 35-49 yrs	57%	47%	49%	38%	Picnicking	Male 35-49 yrs	10%	14%	17%	9%
Walking	Male 50+ yrs	53%	47%	61%	48%	And	Male 50+ yrs	12%	15%	12%	8%
waiking	Female 18-24 yrs	52%	47%	64%	51%	Dining	Female 18-24 yrs	20%	21%	14%	15%
	Female 25-34 yrs	48%	64%	49%	58%		Female 25-34 yrs	18%	17%	29%	10%
	Female 35-49 yrs	56%	57%	63%	57%		Female 35-49 yrs	16%	19%	13%	10%
	Female 50+ yrs	68%	59%	63%	59%		Female 50+ yrs	13%	16%	18%	14%
	Male 18-24 yrs	29%	28%	19%	26%		Male 18-24 yrs	10%	5%	6%	8%
	Male 25-34 yrs	19%	27%	16%	29%		Male 25-34 yrs	9%	12%	9%	11%
Water-	Male 35-49 yrs	22%	22%	24%	23%	Touring	Male 35-49 yrs	8%	7%	8%	11%
Based	Male 50+ yrs	12%	14%	18%	18%	And Sight-	Male 50+ yrs	21%	16%	9%	16%
Recreation	Female 18-24 yrs	15%	18%	25%	19%	_	Female 18-24 yrs	18%	17%	*	14%
Recreation	Female 25-34 yrs	15%	13%	17%	22%	seeing	Female 25-34 yrs	10%	5%	6%	8%
	Female 35-49 yrs	21%	20%	23%	17%		Female 35-49 yrs	8%	6%	6%	14%
	Female 50+ yrs	11%	11%	14%	13%		Female 50+ yrs	12%	11%	16%	17%

Analysis of *walking* activities undertaken at one's most recently visited PWG Park by Branch (Figure 8.4-2) shows that across Coastal Branch parks walking has declined significantly from previous years.

For the Metro and Mountains Branch the proportion undertaking *walking* activities has returned to the low levels evident in 2010, while for the Western Branch, walking appears to be on the decline (particularly since 2010).

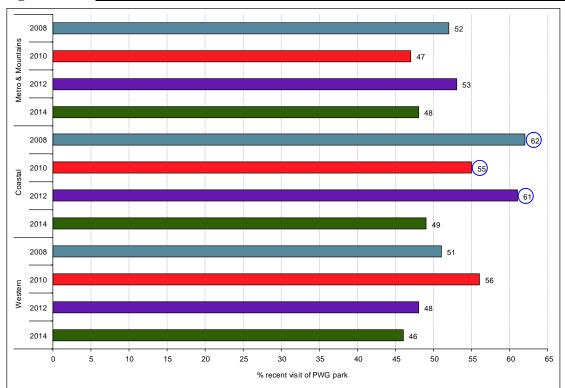


Figure 8.4-2: Walking Activities at most recently visited PWG park by PWG Branch

Figure 8.4-2 shows that over time there has been an increase in the proportion of visitors undertaking *water-based recreation* activities in the Coastal Branch.

For both the Western and Metro and Mountains Branches the undertaking of *water-based activities* has returned to 2008 and 2010 levels from the peaks observed in 2012.

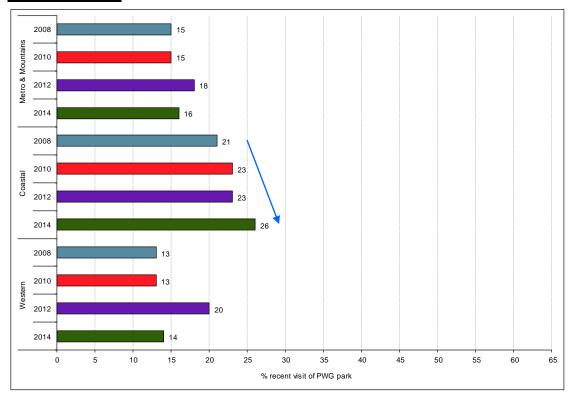


Figure 8.4-2: <u>Water-Based Recreation Activities at most recently visited PWG park</u> by PWG Branch

Incidence of undertaking *picnicking and dining* activities in the Metro and Mountains Branch in 2014 is significantly lower than results obtained in 2012 and 2010, and significantly lower than all previous years for the Coastal Branch. Incidence of undertaking *picnicking and dining* activities are also at their lowest levels in the Western Branch, but are not significantly lower than in previous years. (see Figure 8.4-4).

For all three Branches touring and sightseeing are at their highest levels recorded, but only for the Metro and Mountains Branch in 2012 are the 2014 results significantly higher than in previous years.

Sample sizes are generally too small to analyse activities over time at the PWG region level. However, for the Southern Ranges Region, incidence of undertaking *snow sports* is of interest. In 2014 28% of those on their most recent visit to a PWG park undertook snow sports, identical to 2008 levels (28%), higher than 2010 levels (22%), but slightly lower than 2012 levels (33%).

Figure 8.4-3: <u>Picnicking and Dining Activities at most recently visited PWG park by PWG Branch</u>

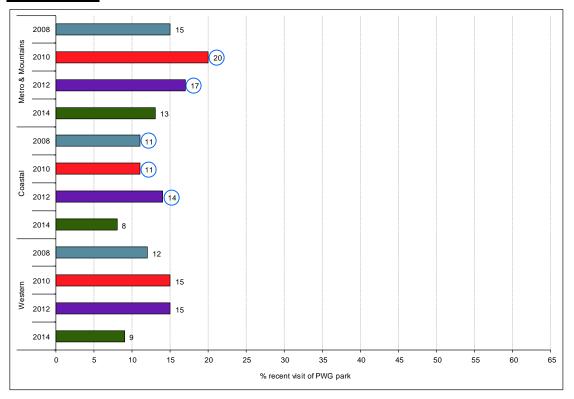
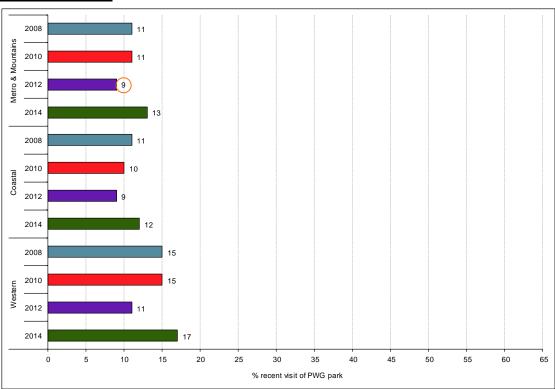


Figure 8.4-4: <u>Touring and Sightseeing Activities at most recently visited PWG park</u> by PWG Branch



When *walking* activities are analysed by survey wave (Figure 8.4-5), it can be seen that the proportion undertaking *walking* activities tends to increase as the year progresses (i.e. a slight upward trend is evident). In 2014, incidence of *walking* peaked in wave 5 (i.e. April). This result is opposite to 2012 results when *walking* incidence was lowest during this period. Wave 2 in 2014 (i.e. January) was when incidence of walking was at its lowest, significantly lower than the 2008 and 2012 result for this wave.

Water-based recreation activities follow a general trend of high incidence through summer and autumn, then low incidence over winter, increasing again over spring (Figure 8.4-6). This trend is evident across all four survey years. The trend is not surprising as weather conditions in winter are likely to deter *water-based activities*, while summer temperatures are likely to encourage them. However, in 2014, incidence of undertaking water-based activities remained relatively high over winter (wave 7 - 16%, wave 8 - 16%; and wave 9 - 19%).

Incidence of undertaking *picnicking and dining* remains relatively stable across the year, as figure 8.4-7 shows across all four survey years. The 2008 year tends to have proportions undertaking *picnicking and dining* that are slightly lower than in 2010 and 2012, while proportions for 2014 tend to be lower than even 2008. This is reflected in the overall proportion undertaking these activities over time (14% - 2008; 16% in 2010 and 2012; 11% in 2014).

Touring and sightseeing activities generally remain stable across each survey year. 2010 proportions however, are generally lower from mid-autumn to mid-winter, which is the likely reason why the annual figure for 2012 is significantly lower than in (Figure 8.4-8). However, in 2014 proportions are generally higher than other years from late summer through autumn, resulting in a slightly higher annual average.

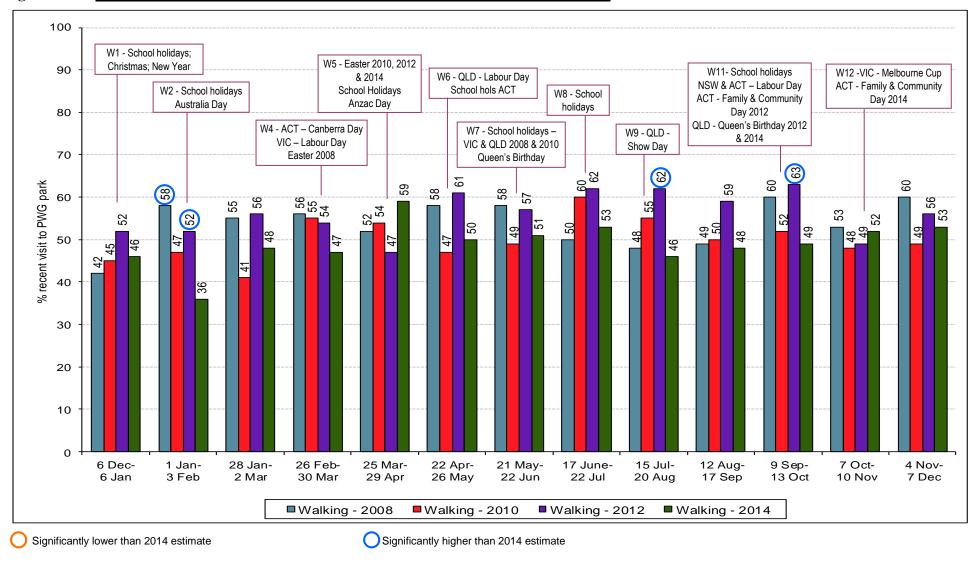


Figure 8.4-5: Walking Activities undertaken at most recently visited PWG park by Wave

100 90 80 W1 - School holidays; W5 - Easter 2010, 2012 Christmas; New Year 70 W11- School holidays W12 -VIC - Melbourne Cup W6 - QLD - Labour Day & 2014 NSW & ACT - Labour Day ACT - Family & Community W2 - School holidays School Holidays School hols ACT W8 - School ACT - Family & Community Day 2014 Australia Day Anzac Day holidavs % recent visit to PWG Park Day 2012 QLD - Queen's Birthday 2012 W4 - ACT - Canberra Day W7 - School holidays -W9 - QLD -& 2014 VIC - Labour Day VIC & QLD 2008 & 2010 Show Day Easter 2008 Queen's Birthday 30 30 27 20 52 œ 10 9 Sep-6 Dec-1 Jan-28 Jan-26 Feb-25 Mar-22 Apr-21 May-17 June-12 Aug-7 Oct-15 Jul-4 Nov-13 Oct 6 Jan 3 Feb 2 Mar 30 Mar 29 Apr 26 May 22 Jun 22 Jul 20 Aug 17 Sep 10 Nov 7 Dec ■Water-Based Recreation - 2008 ■ Water-Based Recreation - 2010 ■ Water-Based Recreation - 2012 ■ Water-Based Recreation - 2014 Significantly lower than 2014 estimate Significantly higher than 2014 estimate

Figure 8.4-6: Water-based Activities undertaken at most recently visited PWG park by Wave

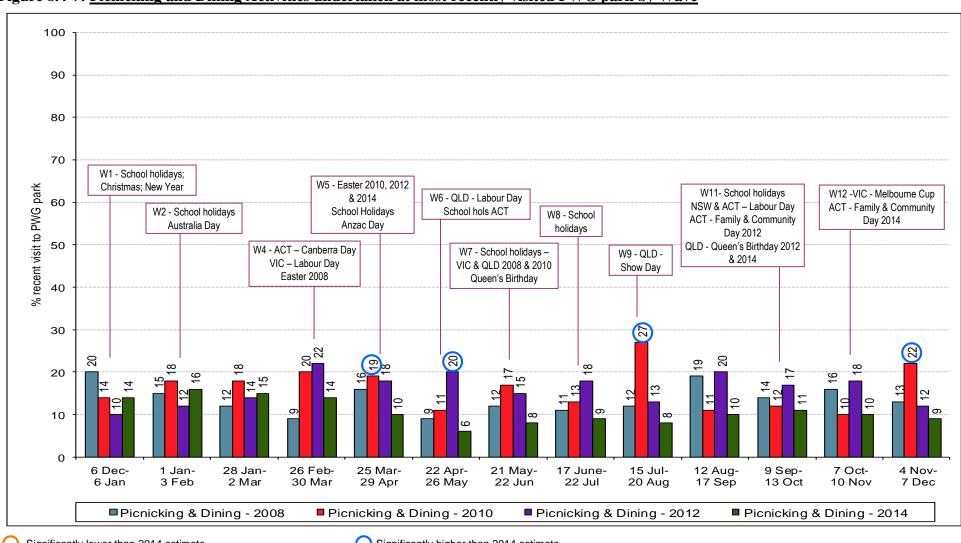


Figure 8.4-7: Picnicking and Dining Activities undertaken at most recently visited PWG park by Wave

Significantly lower than 2014 estimate

Significantly higher than 2014 estimate

100 90 80 70 % recent visit to PWG park W1 - School holidays; W5 - Easter 2010, 2012 Christmas: New Year W11- School holidays W12 -VIC - Melbourne Cup W6 - QLD - Labour Day & 2014 NSW & ACT - Labour Day ACT - Family & Community W2 - School holidays School Holidays School hols ACT W8 - School ACT - Family & Community Day 2014 Australia Day Anzac Day holidays Day 2012 QLD - Queen's Birthday 2012 W4 - ACT - Canberra Day W7 - School holidays -W9 - QLD -& 2014 VIC - Labour Day VIC & QLD 2008 & 2010 Show Day Easter 2008 Queen's Birthday 30 20 20 10 28 Jan-26 Feb-17 June-9 Sep-7 Oct-6 Dec-1 Jan-25 Mar-22 Apr-21 May-15 Jul-12 Aug-4 Nov-13 Oct 6 Jan 3 Feb 2 Mar 30 Mar 29 Apr 26 May 22 Jun 22 Jul 20 Aug 17 Sep 10 Nov 7 Dec

Figure 8.4-8: Touring and Sightseeing Activities undertaken at most recently visited PWG park by Wave

Significantly lower than 2014 estimate

■Touring & Sightseeing - 2008

Significantly higher than 2014 estimate

Roy Morgan Research

July, 2015

■ Touring & Sightseeing - 2010 ■ Touring & Sightseeing - 2012 ■ Touring & Sightseeing - 2014

### 8.4.1 Activities undertaken with Children at Most Recently Visited PWG Park

In 2014 the Office of Environment and Heritage wanted to investigate activities of visits made with children to PWG parks in more detail. The following section provides analysis of this topic.

When looking at the main activities undertaken at one's most recently visited PWG park (Figure 8.4.1-1), the proportion undertaking *walking* activities does not change when children are also on the visit. However, a significantly greater proportion of visitors undertook *water-based recreation* when accompanied by children in 2008, 2010 and 2012, with the proportion also higher in 2014 (though not significantly so). The same trend is evident for visitors undertaking *picnicking and dining* activities.

In relation to *touring and sightseeing*, the proportion of visitors with children undertaking these activities is lower than for all visitors, with these proportions significantly lower in 2008 and 2010.

So overall, it would appear that the types of activities undertaken at parks when adults are accompanied by children do differ to activities undertaken when adults are not accompanied by children.

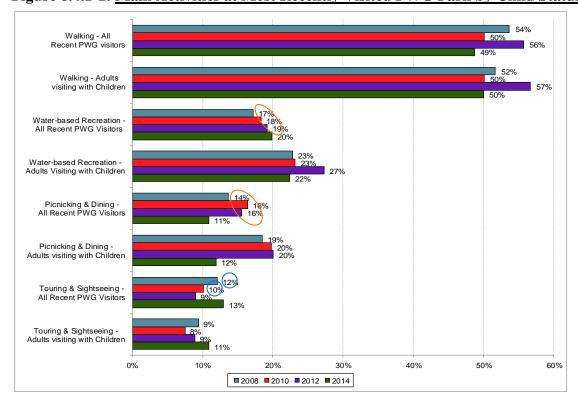


Figure 8.4.1-1: Main Activities at Most Recently Visited PWG Park by Child Status

When looking specifically at the activity *nature play of children*, 2%-3% of all recent visitors to PWG parks undertake this activity each year. However, when analysed by those who have at least one child accompanying them on their visit the proportion increases to 4%-7% each year, a results that was significantly higher in 2010, 2012 and 2014 compared with all recent PWG park visitors. Results for this activity have also been provided in Figure 8.4.1-2 for the adult was the parent of the child or not the parent of the child (although results for non-parent visitors are not reliable due to small sample sizes).

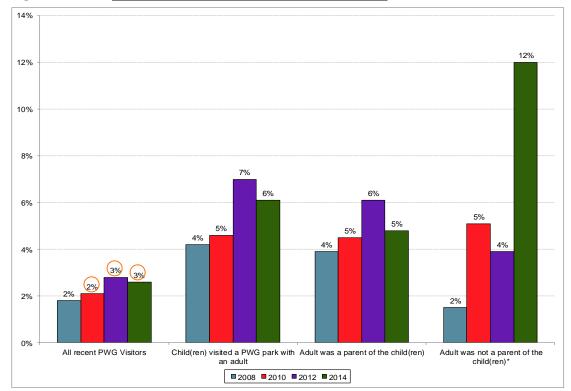


Figure 1.1.1-2: Nature Play of Children by Child Status

\* Caution: small sample sizes.

#### 8.5 Satisfaction with Most Recent visit to a PWG Park

Respondents who had visited a PWG park were asked to give an overall satisfaction rating based on the experience of their most *recent* visit. Figure 8.5-1 shows that in both 2008 and 2010 57% of visitors indicated that they very satisfied with the park experience on their most recent visit, while in 2012 the proportion very satisfied increased to 60%, with a slight decline to 59% occurring in 2014. In 2008 nine in ten were at least satisfied with their park visit (i.e. sum of those satisfied or very satisfied), with proportion increasing to 93% in 2010 and 2012, and increasing to 94% in 2914. The 2014, 2010 and 2010 figures are significantly higher than the 2008 figure of 90%.

For all years mean satisfaction was calculated using the following scores:

- 2 points Very satisfied
- 1 point Satisfied
- 0 points Neither satisfied nor dissatisfied
- -1 point Dissatisfied
- -2 points Very Dissatisfied

Those answering can't say were excluded from the mean satisfaction score calculation.

The closer the mean score to 2 points, the higher the level of satisfaction. As can be seen, in 2008 and 2010 the mean scores were similar at 1.47 and 1.48 respectively, while in 2012 and 2014 the mean had risen to 1.50.

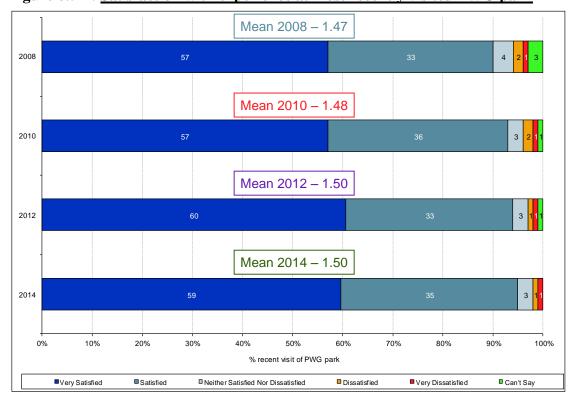


Figure 8.5-1: Satisfaction with experience at most recently visited PWG park

The proportion *very satisfied* with their park experience is the highest recorded in 2014 amongst visitors from remainder NSW (59%), ACT (66%), Melbourne (67%) and remainder southeast QLD (69%) and lowest recorded for visitors from the remainder of Victoria (31%). In 2014 the proportion *total satisfied* was the highest or equal highest recorded for visitors from Sydney (95%), Melbourne (92%), remainder Victoria (96%) and Brisbane (97%), with lowest levels recorded amongst visitors from remainder southeast QLD. (Table 8.5-1)

In general, *mean scores* for satisfaction in 2014 were equivalent to 2012 results across all survey regions, with scores highest or equal highest in remainder NSW, Melbourne and remainder southeast QLD. The means score for visitors from ACT has been increasing steadily each year.

Table 8.5-1: Satisfaction with most recently visited PWG park by region of origin

Region of		Very		Neither Satisfied		Very	Can't	Total	
Origin	Year	Satisfied	Satisfied	nor Dissatisfied	Dissatisfied	Dissatisfied	Say	Satisfied	Mean
	2008	57%	34%	4%	1%	1%	3%	91%	1.50
Sydney	2010	57%	38%	3%	1%	*	1%	95%	1.51
Sydney	2012	62%	32%	4%	1%	1%	1%	93%	1.54
	2014	59%	36%	3%	1%	*	*	95%	1.53
	2008	56%	31%	4%	3%	2%	4%	87%	1.42
Remainder	2010	57%	33%	4%	3%	1%	*	91%	1.43
NSW	2012	57%	35%	3%	2%	3%	*	92%	1.42
	2014	59%	32%	4%	1%	3%	*	91%	1.43
	2008	56%	32%	5%	2%	2%	3%	88%	1.42
ACT	2010	56%	37%	4%	2%	1%	-	93%	1.45
ACI	2012	60%	34%	3%	3%	1%	-	94%	1.50
	2014	66%	27%	5%	*	2%	-	93%	1.54
	2008	53%	34%	3%	-	3%	6%	87%	1.41
Melbourne	2010	50%	35%	5%	5%	5%	-	85%	1.20
Meibourne	2012	55%	36%	6%	3%	-	-	92%	1.44
	2014	67%	25%	<del>-</del>	-	8%	-	92%	1.44
	2008	43%	40%	4%	13%	-	-	83%	1.12
Remainder	2010	49%	32%	7%	-	-	12%	81%	1.48
VIC	2012	57%	31%	6%	-	-	6%	88%	1.55
	2014	31%	66%	4%	-	-	-	96%	1.27
	2008	57%	37%	4%	-	-	2%	94%	1.55
Brisbane	2010	56%	38%	2%	2%	2%	-	93%	1.43
Brisbarie	2012	73%	22%	2%	2%	-	-	95%	1.67
	2014	58%	39%	-	3%	-	-	97%	1.52
	2008	55%	38%	1%	2%	1%	3%	93%	1.47
Remainder	2010	54%	36%	5%	4%	-	-	91%	1.41
SE QLD	2012	49%	50%	2%	-	-	-	98%	1.47
	2014	69%	19%	6%	5%	-	-	89%	1.53
	2008	57%	33%	4%	2%	1%	3%	90%	1.47
Total NSW	2010	57%	36%	3%	2%	1%	1%	94%	1.49
Total NSVV	2012	60%	33%	3%	1%	2%	1%	93%	1.50
	2014	59%	35%	3%	1%	1%	*	94%	1.50
	2008	54%	36%	3%	2%	2%	3%	90%	1.42
Total	2010	54%	36%	4%	3%	2%	1%	90%	1.39
Interstate	2012	59%	35%	4%	2%	*	1%	94%	1.51
	2014	60%	33%	2%	2%	2%	-	93%	1.47

Table 8.2-2 shows that females have higher levels of satisfaction with their recent experience at a PWG park than do males. While the mean satisfaction rating for males has increased from 1.43 in 2008 to 1.47 in 2014, the mean for females is consistently higher (1.51 - 2008; 1.52 - 2010; 1.57 - 2012; 1.53 - 2014). The proportion of males being *very satisfied* with their park visit is at its highest level in 2014 (59%); while the proportion of females being *very satisfied* has returned to 2010 levels in 2014 (60%), down from its peak in 2012 (65%).

The general trend by age for satisfaction with one's park visit experience from 2008 to 2010 was that satisfaction increases with age. 18-24 year olds generally had lower mean levels of satisfaction, with means increasing and peaking with those aged 50 years and over. However, in 2012 and 2014, the lowest level of mean satisfaction was for 25-34 year olds (1.41 and 1.35 respectively), while the mean for 18-24 year olds was higher (1.46 and 1.48 respectively). This lowering of satisfaction levels for 25-34 year olds helps explain why multiple visits by this age group is decreasing over time. If satisfaction is lower, one is less likely to visit a park on multiple occasions.

Table 8.5-2: Satisfaction with most recently visited PWG Park by sex and age

Region of		Very		Neither Satisfied		Very	Can't	Total	
Origin	Year	Satisfied	Satisfied		Dissatisfied		Say		Mean
	2008	53%	36%	4%	2%	1%	3%	89%	1.43
Males	2010	54%	38%	3%	2%	1%	1%	92%	1.44
ivales	2012	56%	36%	4%	2%	1%	1%	91%	1.44
	2014	59%	34%	4%	2%	2%	*	92%	1.47
	2008	61%	30%	3%	2%	1%	3%	90%	1.51
Females	2010	60%	34%	4%	2%	*	*	94%	1.52
remales	2012	65%	29%	2%	1%	2%	*	95%	1.57
	2014	60%	36%	2%	1%	1%	*	95%	1.53
	2008	41%	52%	2%	2%	1%	3%	93%	1.34
18-24 yrs	2010	45%	49%	6%	-	-	-	94%	1.39
10-24 yrs	2012	51%	43%	3%	-	1%	2%	94%	1.46
	2014	59%	34%	5%	-	2%	-	93%	1.48
	2008	48%	40%	5%	1%	1%	5%	88%	1.39
25-34 yrs	2010	54%	40%	2%	2%	1%	*	94%	1.44
23-34 yrs	2012	52%	41%	4%	1%	1%	-	93%	1.41
	2014	48%	43%	5%	2%	1%	*	92%	1.35
	2008	63%	26%	4%	3%	2%	2%	90%	1.50
35-49 yrs	2010	58%	35%	3%	3%	*	*	94%	1.50
33-49 yrs	2012	61%	31%	4%	1%	1%	1%	92%	1.51
	2014	65%	30%	3%	2%	1%	-	94%	1.55
	2008	60%	30%	4%	2%	1%	4%	90%	1.51
50+ yrs	2010	61%	30%	4%	2%	1%	1%	91%	1.50
30+ yis	2012	66%	28%	2%	2%	2%	1%	94%	1.55
	2014	61%	34%	2%	1%	1%	1%	95%	1.54

Figure 8.5-2 shows that the total proportion satisfied with their recent experience at a Metro & Mountains Branch park in 2014 was the highest recorded (95%). As a consequence the 2014 mean satisfaction score is the highest recorded for this Branch (1.53).

Overall satisfaction with one's visit to parks in the Coastal Branch is significantly higher in 2010, 2012 and 2014 than in 2008 (93% - 2010, 2012 and 2014; 90% - 2008). The proportion *very satisfied* with their visit is at its highest level in 2014 (61%)

The proportion *very satisfied* with their visit to parks in the Western Branch is now at its lowest level recorded (52%). Mean satisfaction scores are declining with time for this Branch (1.46 - 2008 to 1.36 in 2014).

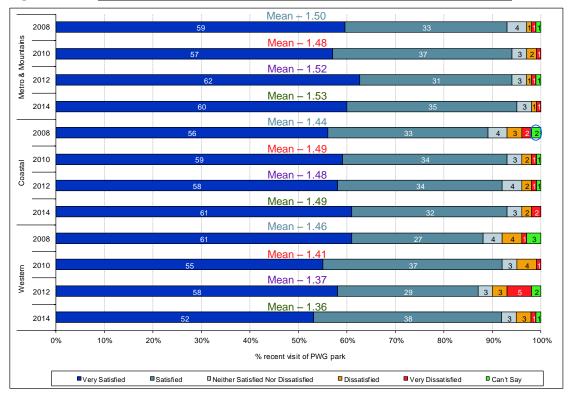


Figure 8.5-2: Satisfaction with most recently visited PWG park by Branch

Analysis by PWG region has only been provided for *overall satisfaction* (i.e. satisfied + very satisfied) due to small sample sizes, detailed in figures 8.5-3 to 8.5-5.

Overall satisfaction has increased over time for people who have visited parks in the Metro North East Region. The increase is significant since 2008. Slight declines in satisfaction levels over time have been observed for the Metro South West Region and the Southern Ranges Region from 2008 to 2012, but these declines have been reversed in 2014.

Aside from satisfaction for parks in the Lower North Coast region, satisfaction levels have increased on 2014 from 2012 results. There has been an increase in satisfaction over time for parks in the North Coast Region, with results in 2014 significantly higher than in 2008 and 2010.

Until 2014, the Western Rivers Region consistently attained high satisfaction scores each year in comparison to other Regions in the Branch. However, in 2014 just 89% of visitors were satisfied with the parks in this region. The Northern Tablelands region attained its highest level of those satisfied in 2014 (97%), while the Far West Region had its best results since 2010. The Northern Plains Region recorded the lowest level of satisfaction ever in 2014 (75% at least satisfied).

Figure 8.5-3 <u>Satisfaction with most recently visited PWG Park – Regions in the Metro</u> and Mountains Branch

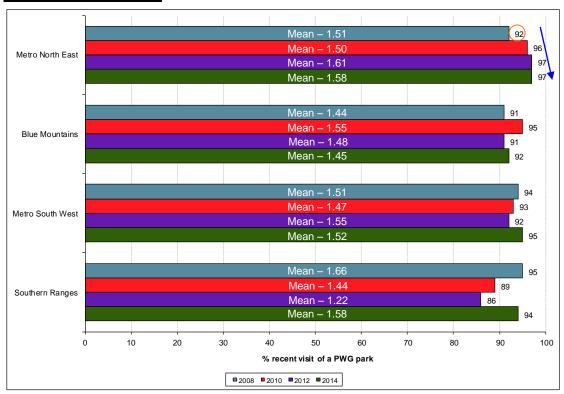
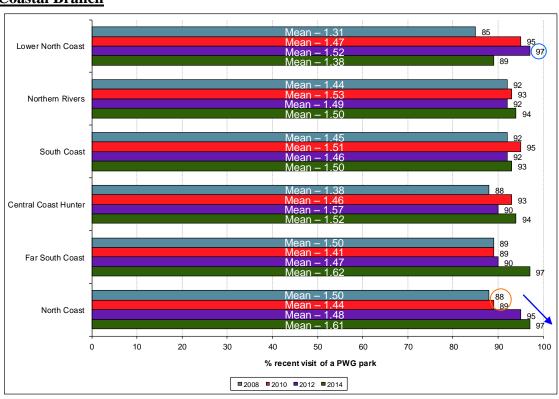


Figure 8.5-4 <u>Satisfaction with most recently visited PWG Park – Regions in the Coastal Branch</u>



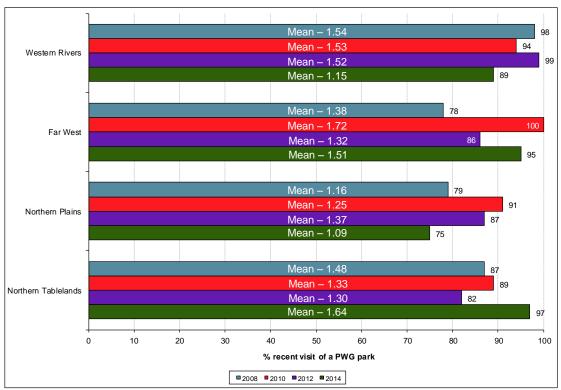


Figure 8.5-5 <u>Satisfaction with most recently visited PWG Park – Regions in the Western Branch</u>

Satisfaction levels of those visiting a PWG park by the main activity undertaken while visiting show that mean satisfaction scores increased for *walking* activities from 2008 to 2012, but declined slightly in 2014 (Figure 8.5-6).

Mean satisfaction levels in 2010, 2012 and 2014 for *water-based recreation* are markedly higher than in 2008. The proportion very satisfied has increased from 58% in 2008 to 65% in 2012 and levelled at 64\$ in 2014.

Mean satisfaction scores in 2010 and 2012 for *picnicking and dining* are the highest attained across all activities (1.59 in 2010 and 1.60 in 2012). The 2014 mean was marginally lower at 1.57.

Mean satisfaction scores for *touring and sightseeing* increasing from 2008 to 2012, with the proportion *very satisfied* increasing from 52% in 2008 to 61% over the same period. However, the total very satisfied declined slight in 2014 to 55%, with the mean satisfaction score also falling slightly to 1.46.

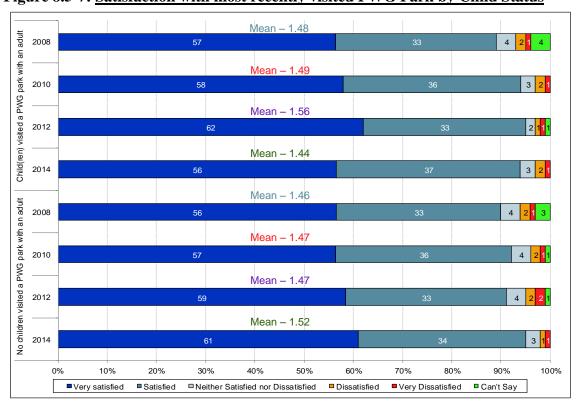
When analysing satisfaction by whether a child was present on the visit or not, there are no significant differences across any year (Figure 8.5-7). The proportion *very satisfied* has increased marginally each year, except for visitors with children which experienced a slight

decline in 2014. Mean satisfaction scores have been increasing marginally over time for adults without children on their visit.

2008 2010 2012 2014 2008 Water-Based Recreation 2010 2012 2014 Picnicking & Dining 2008 2010 2012 2014 2008 Touring & Sightseeing 2010 2012 2014 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% % recent visit of a PWG park ■Very Satisfied ■ Satisfied ■ Neither Satisfied Nor Dissatisfied ■ Dissatisfied ■ Very Dissatisfied □ Can't Say

Figure 8.5-6: Satisfaction with most recently visited PWG Park by Main Activity





#### **8.6 Helix Communities and Personas**

Helix Personas is a unique and powerful consumer segmentation and data integration tool that combines sophisticated psychographic and behavioural data to classify the Australian population into 56 Personas and 7 Communities using a combination of Roy Morgan Single Source data and third party data sources. The Office and Environment and Heritage wanted to analyse 2014 survey data by this segmentation.

Helix Personas is designed to provide accurate profiling of Australian consumers across a variety of attributes. The attributes that have been included in creating Helix Personas have been selected as the most predictive and defining consumer attributes. For more information on Helix Personas, we recommend the following link:

http://www.helixpersonas.com.au/

Table 8.6-1 provides a summary of the seven Helix Communities and the proportion they comprise in the 18 years+ population in 2014 of the seven survey regions included in this survey. It is clear that Leading Lifestyles in the dominant Helix Community, comprising over on quarter of the population.

Table 8.6-1: Helix Communities Summary

HELX COMMUNITY	DESCRIPTION	% POP'N
100 LEADING LIFESTYLES	High income families, typically own their own home in the inner suburbs	27%
200 METROTECHS	Young, single, well educated, inner city professionals with high incomes, typically renting apartments. Cultured, connected, clued-in and cashed up	14%
300 TODAY'S FAMILIES	Young families in the outer suburbs, living up to their above-average incomes. Their beloved gismo-enriched home is the nucleus of their family	8%
400 AUSSIE ACHIEVERS	Closest to the average Australian, these young, educated, outer suburban families are working full time to pay off their expensive separate house	9%
500 GETTING BY	Young parents or older families with children still at home, outer suburbs, bargain hunters	13%
600 GOLDEN YEARS	Conservative, risk-averse retirees focussed on health, security and maintaining and income from investments or the pension, even if they're mortgage free	13%
700 BATTLERS	Mostly Aussie-born, these struggling young families, single mums and retirees are focussed on making ends meet. Many are welfare dependent	15%

Figure 8.6-1 provides a comparison of the seven Helix Communities, by the proportion of the population that visited a PWG park, visited a non-PWG park and those who did not visit any type of park. The chart also details the proportion of all park visits (i.e. adult and child visits from the 7 survey regions) that each Helix Community contributes.

Those that *did not visit any type of park* in 2014 have a significantly higher proportion of Today's Families and Aussie Achievers than are present in the population and have a significantly lower proportion of Leading Lifestyles than the population. Those that *visited* 

*non-PWG parks* in 2014 have significantly higher proportions of Metrotechs and significantly smaller proportions of Aussie Achievers and Todays Families.

In 2014, those that *visited PWG parks* are significantly more likely than the population to be Leading Lifestyles, but are significantly less likely to be Battlers, Getting By, Aussie Achievers and Today's Families. Interestingly, while 13% of visitors to PWG parks are in the Golden Years Community, this group contributes a significantly high 18% of park visits. This means that this group has a high proportion of repeat visitation to PWG parks. The 38% PWG park visitors in the Leading Lifestyles Community also contribute 38% of park visits.

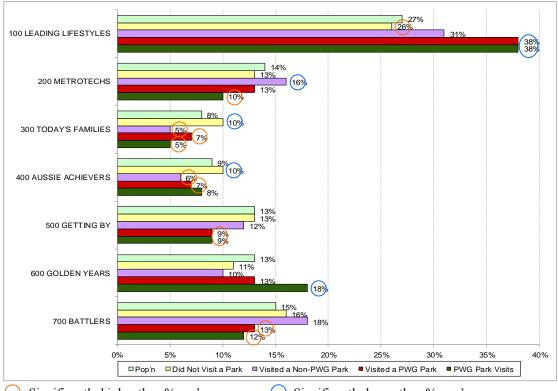


Figure 8.6-1: Non-Visitors and Visitors to Parks and Visitation by Helix Communities

Significantly higher than %pop'n

Significantly lower than % pop'n.

Analysis of visits and visitation by Helix Personas is more difficult because there are 56 distinct Personas, each contributing from less than 0.5% to 4% of the population. Whilst Table 8.6-2 provides a summary of all 56 Personas, Figures 8.6-2 and 8.6-3 provide a summary of the top ten Personas based on their contribution to PWG park visits.

Contributing 6% of PWG park visitors and 9% of all PWG park visits, the *Back to Nature* Persona is the leading Persona in terms of PWG park visitation in 2014. Back to Nature are older households who have retired or plan to soon move to their beach home which they own. These Anglo-Australian parents and grandparents are moderately conservative

themselves, but accepting of others' choices and attitudes, and are both fiscally and environmentally conscious. Often empty nesters, they are either still working as local business owners, employed full or part-time as social professionals, or contentedly retired. Back to Natures believe in supporting and spending time with family and encouraging younger members to pursue their personal ambitions. Although in no rush to adopt the latest technology, they are comfortable with it once it becomes main stream. They participate in community causes and stay on the lookout for ways to improve their lives.

In second place is the *Bluechip* Persona, which contribute 6% of PWG park visitors and 8% of PWG park visits. Bluechips are high income, tech-savvy, fashionable, inner suburb home owners. They are highly educated and highly paid Anglo-Australians working in finance and business, law and communications. Throughout life, their upbringing, education and connections have provided a myriad of opportunities for personal and professional development and they have made the most of each one. Success is important, but always attainable and inevitable. With an endless flow of funds coming in from a range of sources, (often directly managed by others), they are charitable and community-minded about issues of most importance.

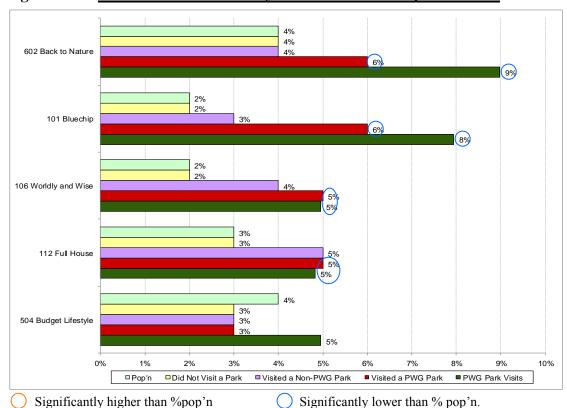
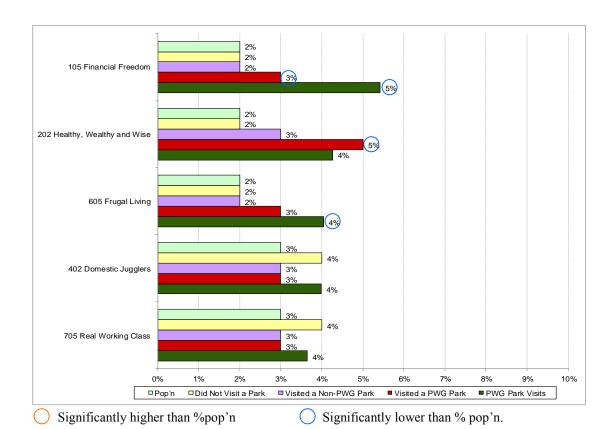


Figure 8.6-2: Visitors and Visitation by Helix Personas – Top 5 Personas

Figure 8.6-2: Visitors and Visitation by Helix Personas – Personas 6-10



A short summary of the remaining top 10 Personas is provided below.

Worldly and Wise	Well educated, inner suburb, older households, typically living in an expensive separate house which they own. Socially conscious, charitable, curious and multicultural, Worldly and Wise would rather travel than work. After a day in the CBD office and a bus or train home, these well-educated managerial and administrative executives kick off their shiny shoes and shrug off the work day with an imported beer. They are not tied to or defined by their careers, but instead work hard to afford a superior lifestyle after-hours and in retirement, with money left over for their children's education and house deposits.
Full House	Married, rural living, paying off their separate house. They are the big fish in the smaller ponds of rural communities and non-capital urban areas. Mostly married Australians, often grandparents, they are rooted in their communities through generations. They believe in mateship over Government, and are conservative but not religious. Despite having limited education beyond some technical college or diploma, many have parlayed skills in agriculture, manufacturing, transport and storage into their own business operations. They have DIY attitude to their homes, families and careers: no one is responsible but them for their successes.
Budget Lifestyle	Well educated, suburban, confident home owners. Mid-life families working full time with high home value. Emerging Australian, Asian and European young parents are making the most of the more affordable rents and housing prices in these mid and outer metro neighbourhoods, as well as the proximity to their parents for childcare support. Streets are a blend of ethnicities and life stages, with commonality in the need to maintain large, local and interdependent family networks. Budget Lifestyles would rather be prudent and cautious with their below-average income than work more or complete further education in order to earn potentially more. As mid-level professionals, office workers, skilled and semi-skilled workers and sales reps in manufacturing, wholesale, retail and community services, Budget Lifestyles have sourced stress-free and undemanding employment with regular hours not far from home. They are socially conservative, technologically clued-up and concerned predominantly by issues of direct personal and financial relevance like interest rates and living costs.

Suburban separate house, family life, tech-savvy. Wealthy and mid-life couples approaching the end of their mortgages, with teenaged children finishing up their private educations before heading off to university. They Financial are at their career peaks, earning high incomes in exchange for long hours and extra responsibilities. After Freedom years of shrewd financial management, they now feel financially stable and are on the cusp of reaping the rewards in a well-earned and luxurious retirement. Healthy, Well educated, high income, inner city workers, typically renting apartments and flats at high cost. Social and health conscious. Often employed in demanding jobs across industries such as property, finance and Wealthy medicine. They are individuals are the career fast lane, working long hours to get ahead. Usually single or de and Wise facto, they still find time to enjoy life to the fullest, and have no plans to start a family any time soon. They live in elderly rural communities and small towns, they subsist on pensions and very low household incomes as either married empty nesters or separated, divorced or widowed older singles. The persona is split Frugal between those who own their home (so have minimal housing expenses) and those who have downsized into Living cheap rental accommodation. Frugal Living are generally undereducated and technophobic, concerned by crime and corruption and the pace of change. They have no grand plans for the future, and are instead contented by smaller habitual pleasures like a flutter at the TAB or a trip to see the grandkids. Mid-life households, proud of their home which they generally own. They are busy, multitasking Anglo-Australian parents, moderately conservative in values but optimistic and open to change. To pay for the Domestic mortgage and the teenagers' schooling and extracurricular interests, perhaps dad works long hours as a Jugglers manufacturing or construction manager, and mum works part-time in (or as proprietor) of a home decor store in town. They are careful financial managers, investing carefully with an eye on an imminent debt-free lifestyle. Low income but still confident, married without children with generally one income earner. Spanning young Real singles, families and older couples without kids, they may not be on high incomes but they're confident in their Working ability to make ends meet. There's an above-average incidence of separated, divorced and widowed Class individuals in this group, too. While the majority are from Australian backgrounds, English-born people are quite well-represented in this segment. Their values tend to be conservative.

Table 8.6-1 provides a summary of visitation for all 56 Helix Personas.

Table 8.6-1: <u>Helix Personas Summary</u>

		Did Not Visit a	Visited a Non- PWG	Visited a PWG	PWG Park
Helx Personas	Pop'n	Park	Park	Park	Visits
602 Back to Nature	4%	4%	4%	6%	9%
101 Bluechip	2%	2%	3%	6%	8%
106 Worldly and Wise	2%	2%	4%	5%	5%
112 Full House	3%	3%	5%	5%	5%
504 Budget Lifestyle	4%	3%	3%	3%	5%
105 Financial Freedom	2%	2%	2%	3%	5%
202 Healthy, Wealthy and Wise	2%	2%	3%	5%	4%
605 Frugal Living	2%	2%	2%	3%	4%
402 Domestic Jugglers	3%	4%	3%	3%	4%
705 Real Working Class	3%	4%	3%	3%	4%
103 Self-made Lifestylers	2%	2%	3%	3%	3%
702 Rural Families	4%	4%	3%	3%	3%
701 Penny Wise	2%	3%	5%	3%	3%
102 Smart Money	2%	2%	1%	3%	3%
109 Progressive Thinkers	4%	3%	1%	4%	3%
110 Savvy self-starters	4%	3%	6%	4%	2%
306 Average Aussie	3%	4%	2%	4%	2%
706 Still Working	2%	3%	4%	2%	2%
108 Successful Bureaucrats	3%	3%	2%	3%	2%
401 Castle and Kids	2%	3%	2%	2%	2%
601 Rural Rewards	1%	1%	1%	1%	2%
404 Family First	4%	4%	2%	2%	2%
604 Fringe Dwellers	4%	1%	1%	1%	2%
505 Aspiring Immigrants	2%	2%	3%	2%	1%

Blue = significantly higher than % pop'n; Red – significantly lower than % pop'n.

Table 8.6-1: <u>Helix Personas Summary (continued)</u>

Helx Personas	Pop'n	Did Not Visit a Park	Visited a Non- PWG Park	Visited a PWG Park	PWG Park Visits
203 New School Cool	2%	2%	3%	2%	1%
107 Humanitarians	3%	3%	2%	1%	1%
210 Quiet Achievers	1%	1%	1%	2%	1%
603 Country Conservative	2%	2%	2%	1%	1%
111 Set for Life	0%	0%	0%	1%	1%
304 On Their Way	2%	2%	2%	1%	1%
508 Rural Traditionalists	0%	0%	0%	0%	1%
303 Looking Good	1%	2%	0%	1%	1%
205 Social Flyers	1%	0%	1%	1%	1%
207 Urban Entertainers	3%	2%	1%	1%	1%
209 Social Academic	0%	1%	2%	1%	1%
509 Doing it Tough	1%	1%	2%	1%	0%
302 Career and Kids	1%	1%	1%	1%	0%
206 Big Future	1%	2%	2%	1%	0%
201 Young and Platinum	1%	1%	3%	1%	0%
501 Urban Optimists	2%	2%	2%	1%	0%
104 Status Matters	0%	1%	2%	1%	0%
606 Twilighters	0%	0%	0%	0%	0%
704 Areas in Transition	1%	0%	1%	0%	0%
506 New Australians	1%	1%	0%	1%	0%
502 Country Comforts	0%	1%	0%	0%	0%
709 Coupon Clippers	1%	1%	0%	0%	0%
707 New Beginnings	1%	0%	1%	0%	0%
305 Successful Immigrants	0%	1%	0%	0%	0%
507 Making the Rent	2%	2%	1%	0%	0%
703 Out of Towner's	0%	0%	-	0%	0%
503 Making Ends Meet	1%	2%	1%	0%	0%
301 Rural Realists	0%	0%	-	0%	0%
204 Fit and Fab	0%	0%	1%	0%	0%
208 Cultural Pioneers	2%	1%	1%	0%	0%
708 Strugglestreet	1%	0%	1%	0%	0%
802 Institutions	0%	0%	-	0%	0%
403 Done Good	0%	0%	-	0%	0%
801 Park/Industrial	0%	0%	- -i-C	- 41-04-0	-

Blue = significantly higher than % pop'n; Red – significantly lower than % pop'n.

## 9. APPENDIX - QUESTIONNAIRE



R07846

#### OEH - NATIONAL PARKS VISITOR MONITOR

2014

#### **STARTTIME**

#### IF LANDLINE PHONE NUMBER, ASK:

Good [Morning/Afternoon/Evening]. I'm (SAY NAME) from Roy Morgan Research. We are currently conducting a study on behalf of the NSW Office of Environment & Heritage about recreation and leisure. I would like to do a short interview with the youngest person in the household aged 18 years or older. Would that be you?

IF NO, SAY: May I please speak to the youngest person in the household aged 18 or more?

IF UNAVAILABLE, ARRANGE AN APPOINTMENT. IF UNABLE TO ARRANGE AN APPOINTMENT, CONTINUE AND SAY:

Could I please speak to the next youngest person living in the household aged 18 years or more?

IF NEXT YOUNGEST NOT AVAILABLE AND SPEAKER IS LIKELY TO BE 18 OR MORE, SAY: Then may I speak to you?

IF RESPONDENT ASKS HOW LONG THE SURVEY WILL TAKE, SAY: It will take about 5 minutes and will be used for research purposes only.

#### **ENDIF**

#### IF MOBILE PHONE NUMBER, ASK:

Good [Morning/Afternoon/Evening]. I'm (SAY NAME) from Roy Morgan Research. We are currently conducting a study on behalf of the NSW Office of Environment & Heritage about recreation and leisure. I would like to do a short interview with you if you are aged 18 years or older. Are you aged 18 or over?

IF NO, SAY: Thank you for your time

IF RESPONDENT ASKS HOW LONG THE SURVEY WILL TAKE, SAY: It will take about 5 minutes and will be used for research purposes only.

#### **ENDIF**

[Single]

IF NECESSARY SAY: Is now a good time or would it be more convenient if I made an appointment to speak to you at another time?

IF NECESSARY, MAKE AN APPOINTMENT.

IF ASK WHO THE CLIENT, SAY: We are conducting this research on behalf of the NSW Office of Environment & Heritage.

IF RESPONDENT ASKS FOR MORE INFO ABOUT THIS PROJECT OR ROY MORGAN RESEARCH, say: If you would like any more information about this project or Roy Morgan Research, you can phone us

on 1800 337 332.

IF RESPONDENT HAS CONCERNS ABOUT PRIVACY ISSUES, say: If you are concerned about privacy issues or Roy Morgan Research's compliance with the Privacy Act, you can phone us on 1800 337 332 or access our privacy policy on our website www.roymorgan.com

IF NECESSARY: You can go to the website www.privacy.gov.au for further information.

- 1 CONTINUE
- 2 REFUSAL

## **IF REFUSAL/TERMINATION, ASK:**

#### [Single]

REFQ. Before you go, can I ask you one short question? In the last 4 weeks, that is, SINCE [%DAY7] [%D7] [%M7], have you visited a park like a National Park in New South Wales?

IF RESPONDENT ASKS WHAT IS MEANT BY A PARK LIKE A NATIONAL PARK, SAY: I MEAN National Parks, State Conservation Areas, Nature Reserves, State Forests, or any other type of park, EXCLUDING local council parks. I DO NOT MEAN botanical gardens, zoos or wildlife parks.

## ₽₽

YES
1 120

- 2 NO
- 3 CAN'T SAY
- 4 REFUSED
- 5 HUNG UP BEFORE QUESTION COULD BE ASKED
- 6 ANSWERING MACHINE
- 7 UNOBTAINABLE

#### [Single]

REGION. COMPUTED FROM SAMPLE

## 中心

- 1 SYDNEY
- 2 REMAINDER NSW
- 3 ACT
- 4 MELBOURNE
- 5 REMAINDER VIC
- 6 BRISBANE

#### 7 REMAINDER SOUTHERN QLD

#### IF LANDLINE PHONE NUMBER, ASK:

[Single]

QMPHONE. Do you personally have a mobile phone?

- 1 YES
- 2 NO
- 3 CAN'T SAY

#### IF CAN'T SAY IF HAVE A MOBILE PHONE (CODE 3 ON QMPHONE), SAY

Thank you for your time, but we need this information to continue with this survey.

## **REFO WILL BE ASKED HERE**

#### **ENDIF**

#### **ENDIF**

#### IF MOBILE PHONE NUMBER, ASK:

[Quantity] {Min: 800, Max: 9999, Default Value: 9999}

QPCODE. What is the postcode where you live?

RECORD POSTCODE

IF DON'T KNOW OR CAN'T SAY, RECORD AS 9999.

## IF DON'T KNOW OR CAN'T SAY POSTCODE (9999 ON QPCODE), SAY

Thank you for your time, but we need your postcode to continue with this survey.

#### **REFO WILL BE ASKED HERE**

## **ENDIF**

[Single]

QNEWREGION. POSTCODE RANGE REGION - COMPUTED FROM QPCODE

- 1 SYDNEY
- 2 REMAINDER NSW
- 3 ACT
- 4 MELBOURNE

- 5 REMAINDER VIC
- 6 BRISBANE
- 7 REMAINDER SOUTHERN QLD
- 8 OTHER REGION

#### IF FROM ANOTHER REGION (CODE 8 ON QNEWREGION), SAY:

Thank you for your time, but we need speak with people from specific regions of Australia.

## **REFQ WILL BE ASKED HERE**

#### **ENDIF**

[Single]

QLLINE. Do live in a home that also has a landline telephone?

- 1 YES
- 2 NO
- 3 CAN'T SAY

#### IF CAN'T SAY IF HAVE A LANDLINE (CODE 3 ON QLLINE), SAY

Thank you for your time, but we need this information to continue with this survey.

## **REFQ WILL BE ASKED HERE**

#### **ENDIF**

#### **ENDIF**

[Single]

REG. COMPUTED FROM QNEWREGION AND REGION FOR QUOTAS

- 1 SYDNEY
- 2 REMAINDER NSW
- 3 ACT
- 4 MELBOURNE
- 5 REMAINDER VIC
- 6 BRISBANE
- 7 REMAINDER SOUTHERN QLD

## IF FROM ANOTHER REGION (CODE 8 ON QNEWREGION), SAY:

Thank you for your time, but we need speak with people from specific regions of Australia.

## **REFQ WILL BE ASKED HERE**

#### **ENDIF**

#### **ENDIF**

[Single]

REG. COMPUTED FROM QNEWREGION AND REGION FOR QUOTAS

₽₽

- 1 SYDNEY
- 2 REMAINDER NSW
- 3 ACT
- 4 MELBOURNE
- 5 REMAINDER VIC
- 6 BRISBANE
- 7 REMAINDER SOUTHERN QLD

## ASK ALL FROM SPECIFIC REGIONS (CODES 1 TO 7 ON QNEWREGION)

[Single]

QSEX. RECORD SEX OF RESPONDENT

₽₽

1 MALE

2 FEMALE

Firstly, I'd like to ask you some questions about you and your household.

#### [Single]

QAGE. Would you mind telling me your approximate age please?

	$\Delta$	
∜≻	ш	Γ

1	LESS THAN 18
2	18-24
3	25-29
4	30-34
5	35-39
6	40-44
7	45-49
8	50-54
9	55-59
10	60-64
11	65-69
12	70+
13	REFUSED

#### IF AGE REFUSED (CODE 13 AT QAGE), TERMINATE:

Thank you for your time and assistance. Unfortunately we need to be able to confirm your age to continue with this survey.

## **REFQ WILL BE ASKED HERE**

#### **ENDIF**

[Single]

SEX BY AGE

**₽**û

1 Male 18-24

2 Male 25-34

3	Male 35-49
4	Male 50+
5	Female 18-24
6	Female 25-34
7	Female 35-49
8	Female 50+

#### IF QUOTA ACHIEVED, TERMINATE:

Thank you for your time and assistance, but we need to speak to people in different age groups.

## **REFQ WILL BE ASKED HERE**

#### **ENDIF**

#### **ASK EVERYONE**

[Quantity] {Min: 0, Max: 99, Default Value:99}

QCHILDREN. How many children under 18 USUALLY live in this household? That is, the child lives or sleeps in this household for more than 50% of the time in a typical week.

IF NECESSARY: Having an understanding of your household structure determines what questions we need to ask you for this survey

INTERVIEWER NOTE: USUAL MEANS THE CHILD LIVES/SLEEPS IN THIS HOUSEHOLD FOR 4

OR MORE DAYS PER WEEK

RECORD NUMBER

INTERVIEWER NOTE: RECORD NO CHILDREN AS 0. RECORD CAN'T SAY/REFUSED AS 99.

#### IF NUMBER OF CHILDREN CAN'T SAY/REFUSED (99 AT QCHILDREN), SAY:

Thank you for your time and assistance. Unfortunately we need to be able to confirm the number of children under 18 living in the household to continue with this survey.

## **REFQ WILL BE ASKED HERE**

#### **ENDIF**

#### **ASK EVERYONE**

[Single]

QHTS1. Thinking back over the last 12 months to your MOST RECENT HOLIDAY of one or more nights away from home. Was the holiday in...? READ OUT

	$\wedge$
412	1 In
~	_

- 1 New South Wales
- 2 Another Australian State or Territory
- 3 Overseas
- (DO NOT READ) DID NOT GO ON A HOLIDAY OF ONE OR MORE NIGHTS IN

THE LAST 12 MONTHS

5 (DO NOT READ) CAN'T SAY

#### IF WENT ON A HOLIDAY IN LAST 12 MONTHS (CODES 1 TO 3 ON QHTS1). ASK:

[Single]

QHTS2. Was that holiday in the last 4 weeks?

IF NECESSARY, SAY: That is, SINCE [%DAY7] [%D7] [%M7]?



- 1 YES
- 2 NO
- 3 CAN'T SAY

## **ENDIF**

IF INTERSTATE RESPONDENT AND HAS NOT SPECIFIED VISITED NSW IN THE LAST 4 WEEKS (CODES 3 TO 7 AT REGION OR QNEWREGION AND NOT CODE 1 ON QHTS1 AND CODE 1 ON QHTS2), ASK:

[Single]

QTRAVEL. Have you visited New South Wales within the last 4 weeks?

IF NECESSARY, SAY: That is, SINCE [%DAY7] [%D7] [%M7]?

**₽**û

1 YES

3 CAN'T SAY

NO

## IF NOT VISITED NSW IN LAST 4 WEEKS OR CAN'T SAY (CODES 2 OR 3 AT QTRAVEL), SAY:

Thank you for your time and assistance. We are collecting information about the frequency of visits to NSW National Parks on behalf of the NSW Department of Environment, Climate Change and Water. This market research is carried out in compliance with the Privacy Act, and the information you have provided will be used only for research purposes.

If you would like any more information about this project or Roy Morgan Research, you can phone us on 1800 337 332.

IF CAN'T SAY (CODE 3 ON QTRAVEL), ASK:

**REFQ WILL BE ASKED HERE** 

**ENDIF** 

WILL INCREMENT QUOTAS, THIS IS A SHORT INTERVIEW

**ENDIF** 

**ENDIF** 

#### **ASK EVERYONE**

[Single]

QPARK. Thinking about PARKS anywhere at all in New South Wales, including the city or suburbs of Sydney. Have you visited any parks WITHIN THE LAST 4 WEEKS, that is, SINCE [%DAY7] [%D7] [%M7]? By parks, I mean National Parks, State Conservation Areas, Nature Reserves, State Forests, or any other type of park. I DON'T mean botanical gardens, zoos, wildlife parks, or any local council parks.



- 1 YES
- 2 NO
- 3 CAN'T SAY

#### **ENDTIME OPARK**

#### TIMING1 - INTRODUCTION TO QPARK (ENDTIMEQPARK-STARTTIME)

IF NOT VISITED A PARK IN LAST 4 WEEKS OR CAN'T SAY (CODES 2 OR 3 AT QPARK), TERMINATE, SAY:

Thank you for your time and assistance. We are collecting information about the frequency of visits to NSW National Parks on behalf of the NSW Department of Environment, Climate Change and Water. This market research is carried out in compliance with the Privacy Act, and the information you have provided will be used only for research purposes.

If you would like any more information about this project or Roy Morgan Research, you can phone us on 1800 337 332

## WILL INCREMENT QUOTAS, THIS IS A SHORT INTERVIEW

**ENDIF** 

## ASK ALL VISITED A PARK IN LAST 4 WEEKS (CODE 1 AT QPARK)

## **STARTTIMEQ1**

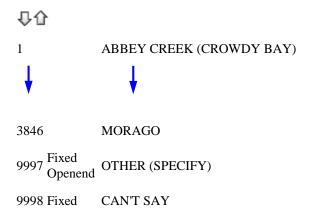
[Single] {Sort}

Q1. What is the NAME of the National Park, State Conservation Area, Nature Reserve, State Forest or other park you visited MOST RECENTLY in NEW SOUTH WALES in the past 4 weeks, that is, SINCE [%DAY7] [%D7] [%M7]?

Remember the park must be in NSW.

IF NECESSARY SAY: By parks I DO NOT MEAN botanical gardens, zoos, wildlife parks, or any local council parks.

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE



<sup>\*</sup> YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

#### **ENDTIMEQ1**

### TIMING2 - Q1 (ENDTIMEQ1-STARTTIMEQ1)

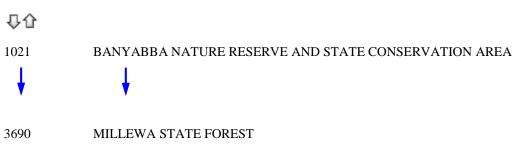
IF A PARK NAME CAN BE EITHER A OEH MANAGED PARK OR SOME OTHER PARK (CODES 2001 TO 2049 ON Q1), ASK:

## **STARTTIMEQ1N1**

# ONLY OEH OR OTHER PARK FOR PARK NAMED WILL APPEAR IN <u>Q1N1</u>

[Single]

Q1N1. #Was that Boat Harbour Aquatic Reserve or Boat Harbour Tomaree/Was that #201.#, or #202.?



### **ENDTIMEQ1N1**

9998 Fixed

## TIMING3 - Q1N1 (ENDTIMEQ1N1-STARTTIMEQ1N1)

#### **ENDIF**

#### IF CAN'T SAY PARK NAME (CODE 9998 AT Q1 OR Q1N1), ASK:

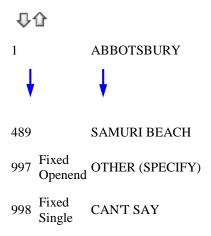
CAN'T SAY

#### **STARTTIMEQ2**

[Multiple] {Spread:20 Sort}

Q2. Where was the park located? What town or suburb was it close to?

IF MENTIONS 2 TOWNS, PLEASE TYPE IN FIRST MENTION. IF UNSUCCESSFUL, PLEASE THEN TYPE IN SECOND MENTION. IF UNSUCCESSFUL, PLEASE SELECT 2ND MENTION AS OTHER SPECIFY AND CONTINUE HIGHLIGHT ALL MENTIONED



\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

IF GAVE NAME OF SUBURB OR TOWN NOT JERVIS BAY (CODES 1 TO 217 OR 219 TO 472 OR 476 TO 489 ON Q2) AND HAS NOT SPECIFIED A PARK NAME (NOT CODES 2001 TO 2047 ON Q1), ASK:

# ONLY PARKS FROM SUBURB OR TOWN MENTIONED IN Q2 WILL APPEAR IN Q2B

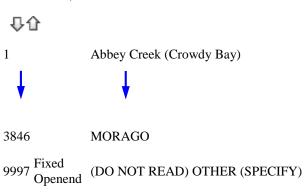
[Single] {Sort}

9998 Fixed

Q2B. Would it have been...? READ OUT

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE

(DO NOT READ) CAN'T SAY



\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

**ENDIF** 

#### **ENDTIMEQ2**

## <u>TIMING4 - Q2 TO Q2B (ENDTIMEQ2-STARTTIMEQ2)</u>

IF STILL CAN'T SAY PARK NAME (CODE 9997 OR 9998 AT Q2B), OR STILL CAN'T NOMINATE TOWN AND HAS NOT SPECIFIED A PARK NAME (CODE 998 AT Q2 AND NOT CODES 2001 TO 2047 AT Q1 OR CODE 997 AT Q2), ASK:

## **STARTTIMEQ3**

#### [Single]

Q3. Was the park a National Park, a State Conservation Area or a Nature Reserve, or was it a State Forest or some other type of park?

## **₽**

- NATIONAL PARK, STATE CONSERVATION AREA OR
- NATURE RESERVE
- 2 STATE FOREST OR SOME OTHER PARK
- 3 CAN'T SAY

## **ENDTIMEQ3**

## TIMING5 - Q3 (ENDTIMEQ3-STARTTIMEQ3)

#### **ENDIF**

#### **ENDIF**

IF PARK OR TOWN MENTIONED IS JERVIS BAY (CODE 457 ON Q1 OR CODE 218 ON Q2) OR TOWN MENTIONED IS NOWRA OR ULLADULLA AND PARK IS JERVIS BAY (CODES 318 OR 408 ON Q2 AND CODE 457 ON Q2B), ASK:

## [Single]

Q1JB. Was the park located on the land that is part of the ACT known as Booderee National Park, next to the Jervis Bay Naval facility (HMAS Creswell) and village, Lake Windermere, the Botanic Gardens and the Wreck Bay Aboriginal Community OR was it the park that is near Huskisson, Vincentia, Hyams Beach, Erowal Bay, Calalla Bay, Calalla Beach or Culburra Beach known as Jervis Bay National Park? Please note that Booderee National Park used to be known as Jervis Bay National Park.



JERVIS BAY NATIONAL PARK
3070 BOODEREE NATIONAL PARK

9998 CAN'T SAY

#### **ENDIF**

## IF TOWN IS VINCENTIA, HYAMS BEACH, EROWAL BAY (CODES 473 TO 475 ON Q2), CODE AS JERVIS BAY NATIONAL PARK ON Q1JB

#### **ENDIF**

## IF PARK NAME OTHER (CODE 9997 AT Q1), ASK:

## **STARTTIMEQ4**

[Single] {Sort}

Q4. Where was the park located? What town or suburb was it close to?



1 ABBOTSBURY

489 SAMURI BEACH

997 Fixed OTHER (SPECIFY)

998 Fixed CAN'T SAY

## \* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

#### [Single]

Q3A. Was the park a National Park, a State Conservation Area or a Nature Reserve, or was it a State Forest or some other type of park?

## ₽₽

- NATIONAL PARK, STATE CONSERVATION AREA OR NATURE
  - RESERVE
- 2 STATE FOREST OR SOME OTHER PARK
- 3 CAN'T SAY

## **ENDTIMEQ4**

## TIMING6 - Q4 (ENDTIMEQ4-STARTTIMEQ4)

#### **ENDIF**

IF MOST RECENT VISITED PARK IS OEH/ PWG (CODES 1 TO 1070 OR 1400 TO 1499 ON Q1 OR CODE 1 ON Q3 OR Q3A) OR UNKNOWN (CODE 9997 ON Q2B OR CODE 997 ON Q2 OR CODE 3 ON Q3 OR Q3A OR CODE 9998 ON Q1N1), ASK:

#### **STARTTIMEQ5**

[Quantity] {Min: 1, Max: 99, Default Value:99}

Q5. How many times did you visit [%PARK\_NAME] in the last 4 weeks, that is, SINCE [%DAY7] [%D7] [%M7]? RECORD NUMBER

INTERVIEWER NOTE: RECORD CAN'T SAY/REFUSED AS 99

#### IF NUMBER OF VISITS 10 OR MORE (>9 ON Q5), ASK:

[Single]

Q5A. That's a large number of visits over the last 4 weeks, is [%Q5] visits correct?

IF NECESSARY, SAY: That is, SINCE [%DAY7] [%D7] [%M7]?

₽₽

- 1 YES NUMBER OF VISITS CONFIRMED
- 2 NO NUMBER TO BE AMENDED

IF NUMBER OF VISITS TO BE AMENDED (CODE 2 ON Q5A), WILL GO BACK TO Q5  $\,$ 

**ENDIF** 

**ENDIF** 

#### IF ONE VISIT ONLY (Q5=1), ASK:

[Quantity] {Min: 0, Max: 99, Default Value:99}

Q6. How many children under 18 IN TOTAL visited [%PARK\_NAME] with you on this visit?

#### RECORD NUMBER

INTERVIEWER NOTE: RECORD NO CHILDREN AS 0. RECORD CAN'T SAY/REFUSED AS 99

#### IF NUMBER OF CHILDREN 5 OR MORE (Q6>4), ASK:

[Single]

Q6A. That's a large number of children, is [%Q6] correct?

₽₽

1 YES - NUMBER OF CHILDREN CONFIRMED

2 NO - NUMBER TO BE AMENDED

IF NUMBER OF CHILDREN TO BE AMENDED (CODE 2 ON Q6A), WILL GO BACK TO Q6

**ENDIF** 

#### **ENDIF**

## IF NUMBER OF CHILDREN IN VISIT IS GREATER THAN NUMBER OF CHILDREN IN HOUSEHOLD (Q6 > QCHILDREN), ASK:

[Multiple]

Q6B. On this visit, were the extra children that don't usually live in your household either...?

READ OUT



1 Single Under Your Care Or The Care Of Another Adult Who Lives In Your Household

2 Single OR Were They In The Care Of An Adult That Doesn't Live In Your Household

3 Single (DO NOT READ) CAN'T SAY

**ENDIF** 

#### **ENDIF**

#### IF MORE THAN ONE VISIT (Q5>1), ASK:

[Quantity] {Min: 0, Max: 99, Default Value:99}

Q7. On your MOST RECENT visit to [%PARK\_NAME], how many children under 18 visited with you IN TOTAL? RECORD NUMBER

INTERVIEWER NOTE: RECORD NO CHILDREN AS 0. RECORD CAN'T SAY/REFUSED AS 99

#### IF NUMBER OF CHILDREN 5 OR MORE (Q7>4), ASK:

[Single]

Q7A. That's a large number of children, is [%Q7] correct?

₽₽

1 YES - NUMBER OF CHILDREN CONFIRMED

2 NO - NUMBER TO BE AMENDED

IF NUMBER OF CHILDREN TO BE AMENDED (CODE 2 ON Q7A), WILL GO BACK TO Q7

**ENDIF** 

**ENDIF** 

IF NUMBER OF CHILDREN IN VISIT IS GREATER THAN NUMBER OF CHILDREN IN HOUSEHOLD (Q7 > QCHILDREN), ASK:

[Multiple]

Q7B. On this visit, were the extra children that don't usually live in your household either...?

READ OUT

₽0

1 Single Under Your Care Or The Care Of Another Adult Who Lives In Your Household

2 Single OR Were They In The Care Of An Adult That Doesn't Live In Your Household

3 Single (DO NOT READ) CAN'T SAY

#### **ENDIF**

#### **ENDIF**

[Quantity] {Min: 0, Max: 999}

DQ567. DUMMY VARIABLE COMPUTED - Q5\*Q6 OR Q5\*Q7

#### IF Q5 x (Q6 OR Q7) > 28, SAY:

[Single]

Q567. To calculate the number of children in your party that visited this park in the last 4 weeks we multiply the number of visits YOU made to this park by the number of children that visited with you on YOUR MOST RECENT VISIT. We calculate this to be [%DQ567] child visits in total over the last 4 weeks. Would this be approximately correct?

## **₽**

1 YES

2 NO

3 CAN'T SAY

#### IF NO OR CANT SAY (CODES 2 OR 3 ON Q567), SAY:

[Multiple] {Spread:10 }

Q567B. Could you please explain why this estimated figure is not correct?

INTERVIEWER RECORD RESPONSES IN FULL

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE

₽0

97 Openend OTHER (SPECIFY)

98 Single CAN'T SAY

\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

**ENDIF** 

**ENDIF** 

## **ENDTIMEQ5**

## TIMING7 - Q5 TO Q7B (ENDTIMEQ5-STARTTIMEQ5)

IF MOST RECENT VISITED PARK IS OEH/ PWG (CODES 1 TO 1070 OR 1400 TO 1499 ON Q1 OR CODE 1 ON Q3 OR Q3A) OR UNKNOWN (CODE 9997 ON Q2B OR CODE 997 ON Q2 OR CODE 3 ON Q3 OR Q3A OR CODE 9998 ON Q1N1), ASK:

#### **STARTTIMEQ8**

[Multiple] {Spread:10 }

Q8. What ACTIVITIES did you undertake during your MOST RECENT visit to [%PARK\_NAME]? HIGHLIGHT ALL MENTIONED

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE

₽û

1 ABORIGINAL HERITAGE APPRECIATION

67 WORKING

97 Openend OTHER (SPECIFY)

98 Single CAN'T SAY

99 Single NONE/ NO OTHER ACTIVITY

\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

## **ENDTIMEQ8**

#### TIMING8 - Q8 (ENDTIMEQ8-STARTTIMEQ8)

## **STARTTIMEQ9**

[Single]

Q9. Thinking about your most recent visit to [%PARK\_NAME], how satisfied were you with your experience of the park? Were you #/very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied or very dissatisfied/very dissatisfied, dissatisfied, neither dissatisfied nor satisfied, satisfied or very satisfied/?

## ₽₽

- I VERY SATISFIED
- 2 SATISFIED
- 3 NEITHER SATISFIED NOR DISSATISFIED
- 4 DISSATISFIED
- 5 VERY DISSATISFIED
- 6 CAN'T SAY

#### **ENDTIMEQ9**

#### TIMING9 - Q9 (ENDTIMEQ9-STARTTIMEQ9)

**ENDIF** 

#### ENDTIMEQ1-Q9

TIMING10 - Q1 TO Q9 (ENDTIMEQ1-Q9-STARTTIMEQ1)

## ASK ALL VISITED A PARK IN LAST 4 WEEKS (CODE 1 AT QPARK)

#### **STARTTIMEQ10A**

[Single] {Sort}

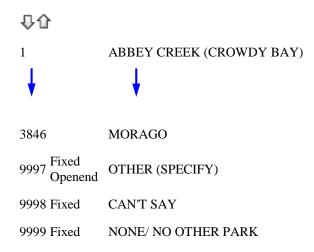
Q10A. What is the NAME of ANOTHER National Park, State Conservation Area, Nature Reserve, State Forest or other park you visited in NEW SOUTH WALES in the past 4 weeks?

IF NECESSARY, SAY: That is, SINCE [%DAY7] [%D7] [%M7]?

Remember the park must be in NSW.

IF NECESSARY SAY: By parks I DO NOT MEAN botanical gardens, zoos, wildlife parks, or any local suburban or town parks.

#### IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE



<sup>\*</sup> YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

## IF A PARK NAME CAN BE EITHER A OEH MANAGED PARK OR SOME OTHER PARK (CODES 2001 TO 2049 ON Q10A.), ASK:

# ONLY OEH OR OTHER PARK FOR PARK NAMED WILL APPEAR IN Q10NA.

[Single] {Sort}

Q10NA. #/Was that Boat Harbour Aquatic Reserve or Boat Harbour Tomaree/Was that /#201.#/, or //#202.?

₽û

1021 BANYABBA NATURE RESERVE AND STATE CONSERVATION AREA

3690 MILLEWA STATE FOREST

9998 Fixed CAN'T SAY

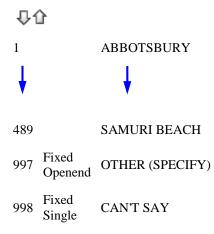
#### **ENDIF**

#### IF CAN'T SAY PARK NAME (CODE 9998 AT Q10A. OR Q10NA.), ASK:

[Multiple] {Spread:10 Sort}

Q11AA. Where was the park located? What town or suburb was it close to?

IF MENTIONS 2 TOWNS, PLEASE TYPE IN FIRST MENTION. IF UNSUCCESSFUL, PLEASE THEN TYPE IN SECOND MENTION. IF UNSUCCESSFUL, PLEASE SELECT 2ND MENTION AS OTHER SPECIFY AND CONTINUE HIGHLIGHT ALL MENTIONED



[Single] {Sort}

IF GAVE NAME OF SUBURB OR TOWN NOT JERVIS BAY (CODES 1 TO 217 OR 219 TO 472 OR 476 TO 489 ON Q11AA.) AND HAS NOT SPECIFIED A PARK NAME (NOT CODES 2001 TO 2047 ON Q10A.), ASK:

# ONLY PARKS FROM SUBURB OR TOWN MENTIONED IN Q11AA. WILL APPEAR IN Q11AB.

```
Q11AB. Would it have been...?
READ OUT

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE

Abbey Creek (Crowdy Bay)

Abbey Creek (Crowdy Bay)

MORAGO

9997 Fixed Openend (DO NOT READ) OTHER (SPECIFY)
```

<sup>\*</sup> YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

9998 Fixed (DO NOT READ) CAN'T SAY

\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

#### **ENDIF**

IF STILL CAN'T SAY PARK NAME (CODE 9997 OR 9998 AT Q11AB.) OR STILL CAN'T NOMINATE TOWN AND HAS NOT SPECIFIED A PARK NAME (CODE 998 AT Q11AA. AND NOT CODES 2001 TO 2047 AT Q10A. OR CODE 997 AT Q11AA.), ASK:

#### [Single]

Q12A. Was the park a National Park, a State Conservation Area or a Nature Reserve, or was it a State Forest or some other type of park?

	^	
بإزال	1:i	r
~	-	

- NATIONAL PARK, STATE CONSERVATION AREA OR NATURE RESERVE
- 2 STATE FOREST OR SOME OTHER PARK
- 3 CAN'T SAY

#### **ENDIF**

#### **ENDIF**

IF PARK OR TOWN MENTIONED IS JERVIS BAY (CODE 457 ON Q10A. OR CODE 218 ON Q11AA.) OR TOWN MENTIONED IS NOWRA OR ULLADULLA AND PARK IS JERVIS BAY (CODES 318 OR 408 ON Q11AA. AND CODE 457 ON Q11AB.), ASK:

#### [Single]

QAJB. Was the park located on the land that is part of the ACT known as Booderee National Park, next to the Jervis Bay Naval facility (HMAS Creswell) and village, Lake Windermere, the Botanic Gardens and the Wreck Bay Aboriginal Community OR was it the park that is near Huskisson, Vincentia, Hyams Beach, Erowal Bay, Calalla Bay, Calalla Beach or Culburra Beach known as Jervis Bay National Park? Please note that Booderee National Park used to be known as Jervis Bay National Park.

₽₽

JERVIS BAY NATIONAL PARKBOODEREE NATIONAL PARK

9998 CAN'T SAY

#### **ENDIF**

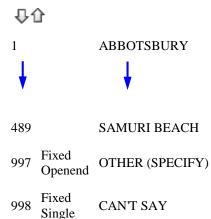
IF TOWN IS VINCENTIA, HYAMS BEACH, EROWAL BAY (CODES 473 TO 475 ON Q11AA.), CODE AS JERVIS BAY NATIONAL PARK ON QAJB.

#### **ENDIF**

#### IF PARK NAME OTHER (CODE 9997 AT Q10A.), ASK:

[Single] {Sort}

Q13A. Where was the park located? What town or suburb was it close to?



#### \* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

## [Single]

Q12AA. Was the park a National Park, a State Conservation Area or a Nature Reserve, or was it a State Forest or some other type of park?



- NATIONAL PARK, STATE CONSERVATION AREA OR NATURE
  - RESERVE
- 2 STATE FOREST OR SOME OTHER PARK
- 3 CAN'T SAY

#### **ENDIF**

IF MOST RECENT VISITED PARK IS OEH/ PWG (CODES 1 TO 1070 OR 1400 TO 1499 ON Q10A. OR CODE 1 ON Q12A. OR Q12AA.) OR UNKNOWN (CODE 9997 ON Q11AB. OR CODE 997 ON Q11AA. OR CODE 3 ON Q12A. OR Q12AA.), ASK:

[Quantity] {Min: 1, Max: 99, Default Value: 99}

Q14A. How many times did you visit [%PARK\_NAMEA] in the last 4 weeks, that is, SINCE [%DAY7] [%D7] [%M7]?
RECORD NUMBER

INTERVIEWER NOTE: RECORD CAN'T SAY/REFUSED AS 99

#### IF NUMBER OF VISITS 10 OR MORE (>9 ON Q14A.), ASK:

[Single]

Q14AA. That's a large number of visits over the last 4 weeks, is [%Q14A] visits correct?

IF NECESSARY, SAY: That is, SINCE [%DAY7] [%D7] [%M7]?

**₽** 

1 YES - NUMBER OF VISITS CONFIRMED

2 NO - NUMBER TO BE AMENDED

IF NUMBER OF VISITS TO BE AMENDED (CODE 2 ON Q14AA.), WILL GO BACK TO Q14A.

**ENDIF** 

**ENDIF** 

#### IF ONE VISIT ONLY (Q14A.=1), ASK:

[Quantity] {Min: 0, Max: 99, Default Value:99}

Q15A. How many children under 18 IN TOTAL visited [%PARK\_NAMEA] with you on this visit? RECORD NUMBER

INTERVIEWER NOTE: RECORD NO CHILDREN AS 0. RECORD CAN'T SAY/REFUSED AS 99

#### IF NUMBER OF CHILDREN 5 OR MORE (Q15A.>4), ASK:

[Single]

Q15AA. That's a large number of children, is [%Q15A] correct?

₽₽

1 YES - NUMBER OF CHILDREN CONFIRMED

2 NO - NUMBER TO BE AMENDED

IF NUMBER OF CHILDREN TO BE AMENDED (CODE 2 ON Q15AA.), WILL GO BACK TO Q15A.

**ENDIF** 

#### **ENDIF**

## IF NUMBER OF CHILDREN IN VISIT IS GREATER THAN NUMBER OF CHILDREN IN HOUSEHOLD (Q15A. > QCHILDREN), ASK:

[Multiple]

Q15AB. On this visit, were the extra children that don't usually live in your household either...?

**READ OUT** 

**₽** 

1 Single Under Your Care Or The Care Of Another Adult Who

Lives In Your Household

2 Single OR Were They In The Care Of An Adult That Doesn't

Live In Your Household

3 Single (DO NOT READ) CAN'T SAY

#### **ENDIF**

#### **ENDIF**

## IF MORE THAN ONE VISIT (Q14A.>1), ASK:

[Quantity] {Min: 0, Max: 99, Default Value:99}

Q16A. On your MOST RECENT visit to [%PARK\_NAMEA], how many children under 18 visited with you IN TOTAL? RECORD NUMBER

INTERVIEWER NOTE: RECORD NO CHILDREN AS 0. RECORD CAN'T SAY/REFUSED AS  $99\,$ 

#### IF NUMBER OF CHILDREN 5 OR MORE (Q16A. > 4), ASK:

[Single]

Q16AA. That's a large number of children, is [%Q16A] correct?

₽₽

1 YES - NUMBER OF CHILDREN CONFIRMED

2 NO - NUMBER TO BE AMENDED

IF NUMBER OF CHILDREN TO BE AMENDED (CODE 2 ON Q16AA.), WILL GO BACK TO Q16A.

**ENDIF** 

#### **ENDIF**

## IF NUMBER OF CHILDREN IN VISIT IS GREATER THAN NUMBER OF CHILDREN IN HOUSEHOLD (Q16A. > QCHILDREN), ASK:

[Multiple]

Q16AB. On this visit, were the extra children that don't usually live in your household either...?

**READ OUT** 



1	Single	Under Your Care Or The Care Of Another Adult Who Lives In Your Household
2	Single	OR Were They In The Care Of An Adult That Doesn't Live In Your Household
3	Single	(DO NOT READ) CAN'T SAY

#### **ENDIF**

#### **ENDIF**

[Quantity] {Min: 0, Max: 999}

DUMMY VARIABLE COMPUTED - Q14A.\*Q15A. OR Q14A.\*Q16A.

#### IF Q14A. x (Q15A. OR Q16A.) > 28, SAY:

[Single]

Q14AB. To calculate the number of children in your party that visited this park in the last 4 weeks we multiply the number of visits YOU made to this park by the number of children that visited with you on YOUR MOST RECENT VISIT. We calculate this to be [%DQ14A] child visits in total over the last 4 weeks. Would this be approximately correct?

	$\sim$
Jak	43
$\overline{}$	

- 1 YES
- 2 NO
- 3 CAN'T SAY

## IF NO OR CANT SAY (CODES 2 OR 3 ON Q14AB.), SAY:

[Multiple] {Spread:10 }

Q14AC. Could you please explain why this estimated figure is not correct?

INTERVIEWER RECORD RESPONSES IN FULL

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE



- 97 Openend OTHER (SPECIFY)
- 98 Single CAN'T SAY

**ENDIF** 

#### **ENDIF**

<sup>\*</sup> YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

**ENDIF** 

### **ENDTIMEQ10A**

## TIMING11 - Q10A TO Q16AB (ENDTIMEQ10A-STARTTIMEQ10A)

#### IF VISITING 2 PARKS (CODES 1 TO 9998 ON Q10A), ASK:

#### **STARTTIMEQ10B**

[Single] {Sort}

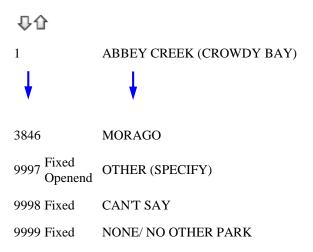
Q10B. What is the NAME of ANOTHER National Park, State Conservation Area, Nature Reserve, State Forest or other park you visited in NEW SOUTH WALES in the past 4 weeks?

IF NECESSARY, SAY: That is, SINCE [%DAY7] [%D7] [%M7]?

Remember the park must be in NSW.

IF NECESSARY SAY: By parks I DO NOT MEAN botanical gardens, zoos, wildlife parks, or any local suburban or town parks.

### IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE



<sup>\*</sup> YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

IF A PARK NAME CAN BE EITHER A OEH MANAGED PARK OR SOME OTHER PARK (CODES 2001 TO 2049 ON Q10B.), ASK:

## ONLY OEH OR OTHER PARK FOR PARK NAMED WILL APPEAR IN Q10NB.

[Single] {Sort}

Q10NB. #/Was that Boat Harbour Aquatic Reserve or Boat Harbour Tomaree/Was that #201.#/, or #202.?

₽0

BANYABBA NATURE RESERVE AND STATE

CONSERVATION AREA

3690 MILLEWA STATE FOREST

9998 Fixed CAN'T SAY

#### **ENDIF**

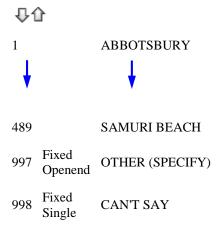
#### IF CAN'T SAY PARK NAME (CODE 9998 AT Q10B. OR Q10NB.), ASK:

[Multiple] {Spread:10 Sort}

Q11BA. Where was the park located? What town or suburb was it close to?

IF MENTIONS 2 TOWNS, PLEASE TYPE IN FIRST MENTION. IF UNSUCCESSFUL, PLEASE THEN TYPE IN SECOND MENTION. IF UNSUCCESSFUL, PLEASE SELECT 2ND MENTION AS OTHER SPECIFY AND CONTINUE

HIGHLIGHT ALL MENTIONED



<sup>\*</sup> YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

IF GAVE NAME OF SUBURB OR TOWN NOT JERVIS BAY (CODES 1 TO 217 OR 219 TO 472 OR 476 TO 489 ON Q11BA.) AND HAS NOT SPECIFIED A PARK NAME (NOT CODES 2001 TO 2047 ON Q10B.), ASK:

## ONLY PARKS FROM SUBURB OR TOWN MENTIONED IN Q11BA. WILL APPEAR IN Q11BB.

[Single] {Sort}

Q11BB. Would it have been...? READ OUT

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE

Abbey Creek (Crowdy Bay)

White the state of the state of

9997 Fixed Openend (DO NOT READ) OTHER (SPECIFY)

9998 Fixed (DO NOT READ) CAN'T SAY

\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

#### **ENDIF**

IF STILL CAN'T SAY PARK NAME (CODE 9997 OR 9998 AT Q11BB.) OR STILL CAN'T NOMINATE TOWN AND HAS NOT SPECIFIED A PARK NAME (CODE 998 AT Q11BA. AND NOT CODES 2001 TO 2047 AT Q10B. OR CODE 997 AT Q11BA.), ASK:

[Single]

Q12B. Was the park a National Park, a State Conservation Area or a Nature Reserve, or was it a State Forest or some other type of park?

**₽** 

1 NATIONAL PARK, STATE CONSERVATION AREA OR NATURE RESERVE

2 STATE FOREST OR SOME OTHER PARK

3 CAN'T SAY

**ENDIF** 

#### **ENDIF**

IF PARK OR TOWN MENTIONED IS JERVIS BAY (CODE 457 ON Q10B. OR CODE 218 ON Q11BA.) OR TOWN MENTIONED IS NOWRA OR ULLADULLA AND PARK IS JERVIS BAY (CODES 318 OR 408 ON Q11BA. AND CODE 457 ON Q11BB.), ASK:

#### [Single]

QBJB. Was the park located on the land that is part of the ACT known as Booderee National Park, next to the Jervis Bay Naval facility (HMAS Creswell) and village, Lake Windermere, the Botanic Gardens and the Wreck Bay Aboriginal Community OR was it the park that is near Huskisson, Vincentia, Hyams Beach, Erowal Bay, Calalla Bay, Calalla Beach or Culburra Beach known as Jervis Bay National Park? Please note that Booderee National Park used to be known as Jervis Bay National Park.

	1	`
باداد	4	4
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457 JERVIS BAY NATIONAL PARK

3070 BOODEREE NATIONAL PARK

9998 CAN'T SAY

#### **ENDIF**

IF TOWN IS VINCENTIA, HYAMS BEACH, EROWAL BAY (CODES 473 TO 475 ON Q11BA.), CODE AS JERVIS BAY NATIONAL PARK ON QBJB.

#### **ENDIF**

#### IF PARK NAME OTHER (CODE 9997 AT Q10B.), ASK:

[Single] {Sort}

Q13B. Where was the park located? What town or suburb was it close to?

↓
ABBOTSBURY

489 SAMURI BEACH

997 Fixed OTHER (SPECIFY)

998 Fixed Single CAN'T SAY

\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

#### [Single]

Q12BA. Was the park a National Park, a State Conservation Area or a Nature Reserve, or was it a State Forest or some other type of park?

### ₽û

- NATIONAL PARK, STATE CONSERVATION AREA OR
  - NATURE RESERVE
- 2 STATE FOREST OR SOME OTHER PARK
- 3 CAN'T SAY

#### **ENDIF**

IF MOST RECENT VISITED PARK IS OEH/ PWG (CODES 1 TO 1070 OR 1400 TO 1499 ON Q10B. OR CODE 1 ON Q12B. OR Q12BA.) OR UNKNOWN (CODE 9997 ON Q11BB. OR CODE 997 ON Q11BA. OR CODE 3 ON Q12B. OR Q12BA.), ASK:

[Quantity] {Min: 1, Max: 99, Default Value:99}

Q14B. How many times did you visit [%PARK\_NAMEB] in the last 4 weeks, that is, SINCE [%DAY7] [%D7] [%M7]? RECORD NUMBER

INTERVIEWER NOTE: RECORD CAN'T SAY/REFUSED AS 99

#### IF NUMBER OF VISITS 10 OR MORE (>9 ON Q14B.), ASK:

[Single]

Q14BA. That's a large number of visits over the last 4 weeks, is [%Q14B] visits correct?

IF NECESSARY, SAY: That is, SINCE [%DAY7] [%D7] [%M7]?

ŪÛ.

- 1 YES NUMBER OF VISITS CONFIRMED
- 2 NO NUMBER TO BE AMENDED

IF NUMBER OF VISITS TO BE AMENDED (CODE 2 ON Q14BA.), WILL GO BACK TO Q14B.

**ENDIF** 

**ENDIF** 

#### IF ONE VISIT ONLY (Q14B.=1), ASK:

[Quantity] {Min: 0, Max: 99, Default Value:99}

Q15B. How many children under 18 IN TOTAL visited [%PARK\_NAMEB] with you on this visit? RECORD NUMBER

INTERVIEWER NOTE: RECORD NO CHILDREN AS 0. RECORD CAN'T SAY/ REFUSED AS 99

#### IF NUMBER OF CHILDREN 5 OR MORE (Q15B.>4), ASK:

[Single]

Q15BA. That's a large number of children, is [%Q15B] correct?

₽₽

YES - NUMBER OF CHILDREN

CONFIRMED

2 NO - NUMBER TO BE AMENDED

IF NUMBER OF CHILDREN TO BE AMENDED (CODE 2 ON Q15BA.), WILL GO BACK TO Q15B.

**ENDIF** 

**ENDIF** 

# IF NUMBER OF CHILDREN IN VISIT IS GREATER THAN NUMBER OF CHILDREN IN HOUSEHOLD (Q15B. > QCHILDREN), ASK:

#### [Multiple]

Q15BB. On this visit, were the extra children that don't usually live in your household either...?
READ OUT

## ₽û

1	Single	Under Your Care Or The Care Of Another Adult Who Lives In Your Household
2	Single	OR Were They In The Care Of An Adult That Doesn't Live In Your Household
3	Single	(DO NOT READ) CAN'T SAY

#### **ENDIF**

#### **ENDIF**

#### IF MORE THAN ONE VISIT (Q14B.>1), ASK:

[Quantity] {Min: 0, Max: 99, Default Value:99}

Q16B. On your MOST RECENT visit to [%PARK\_NAMEB], how many children under 18 visited with you IN TOTAL? RECORD NUMBER

INTERVIEWER NOTE: RECORD NO CHILDREN AS 0. RECORD CAN'T SAY/REFUSED AS 99

#### IF NUMBER OF CHILDREN 5 OR MORE (Q16B. > 4), ASK:

## [Single]

Q16BA. That's a large number of children, is [%Q16B] correct?

**₽**û

YES - NUMBER OF CHILDREN CONFIRMED

2 NO - NUMBER TO BE AMENDED

## IF NUMBER OF CHILDREN TO BE AMENDED (CODE 2 ON Q16BA.), WILL GO BACK TO Q16B.

#### **ENDIF**

#### **ENDIF**

IF NUMBER OF CHILDREN IN VISIT IS GREATER THAN NUMBER OF CHILDREN IN HOUSEHOLD (Q16B. > QCHILDREN), ASK:

#### [Multiple]

Q16BB. On this visit, were the extra children that don't usually live in your household either...? READ OUT

## 00

1	Single	Under Your Care Or The Care Of Another Adult Who Lives In Your Household
2	Single	OR Were They In The Care Of An Adult That Doesn't Live In Your Household
3	Single	(DO NOT READ) CAN'T SAY

#### **ENDIF**

#### **ENDIF**

[Quantity] {Min: 0, Max: 999}

DUMMY VARIABLE COMPUTED - Q14B.\*Q15B. OR Q14B.\*Q16B.

#### IF Q14B. x (Q15B. OR Q16B.) > 28, SAY:

[Single]

Q14BB. To calculate the number of children in your party that visited this park in the last 4 weeks we multiply the number of visits YOU made to this park by the number of children that visited with you on YOUR MOST RECENT VISIT. We calculate this to be [%DQ14B] child visits in total over the last 4 weeks. Would this be approximately correct?

₽₽

3

1	YES
2	NO

#### IF NO OR CANT SAY (CODES 2 OR 3 ON Q14BB.), SAY:

[Multiple] {Spread:10 }

CAN'T SAY

Q14BC. Could you please explain why this estimated figure is not correct?

INTERVIEWER RECORD RESPONSES IN FULL

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE

₽₽

97 Openend OTHER (SPECIFY)

98 Single CAN'T SAY

\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

**ENDIF** 

**ENDIF** 

**ENDIF** 

## **ENDTIMEQ10B**

TIMING12 - Q10B TO Q16BB (ENDTIMEQ10B-STARTTIMEQ10B)

**ENDIF** 

IF VISITING 3 PARKS (CODES 1 TO 9998 ON Q10B), ASK:

## **STARTTIMEQ10C**

[Single] {Sort}

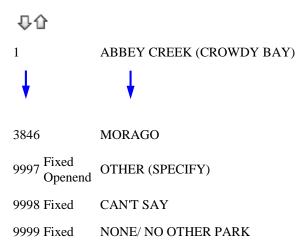
Q10C. What is the NAME of ANOTHER National Park, State Conservation Area, Nature Reserve, State Forest or other park you visited in NEW SOUTH WALES in the past 4 weeks?

IF NECESSARY, SAY: That is, SINCE [%DAY7] [%D7] [%M7]?

Remember the park must be in NSW.

IF NECESSARY SAY: By parks I DO NOT MEAN botanical gardens, zoos, wildlife parks, or any local suburban or town parks.

#### IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE



<sup>\*</sup> YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

IF A PARK NAME CAN BE EITHER A OEH MANAGED PARK OR SOME OTHER PARK (CODES 2001 TO 2049 ON Q10C.), ASK:

## ONLY OEH OR OTHER PARK FOR PARK NAMED WILL APPEAR IN Q10NC.

[Single] {Sort}

Q10NC. #/Was that Boat Harbour Aquatic Reserve or Boat Harbour Tomaree/Was that /#201.#/, or //#202.?



3690 MILLEWA STATE FOREST

9998 Fixed CAN'T SAY

#### **ENDIF**

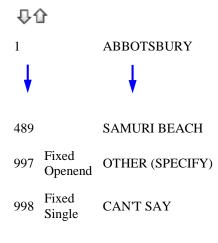
#### IF CAN'T SAY PARK NAME (CODE 9998 AT Q10C. OR Q10NC.), ASK:

[Multiple] {Spread:10 Sort}

Q11CA. Where was the park located? What town or suburb was it close to?

IF MENTIONS 2 TOWNS, PLEASE TYPE IN FIRST MENTION. IF UNSUCCESSFUL, PLEASE THEN TYPE IN SECOND MENTION. IF UNSUCCESSFUL, PLEASE SELECT 2ND MENTION AS OTHER SPECIFY AND CONTINUE

HIGHLIGHT ALL MENTIONED



<sup>\*</sup> YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

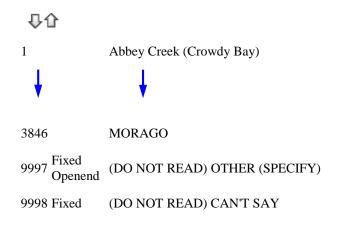
IF GAVE NAME OF SUBURB OR TOWN NOT JERVIS BAY (CODES 1 TO 217 OR 219 TO 472 OR 476 TO 489 ON Q11CA.) AND HAS NOT SPECIFIED A PARK NAME (NOT CODES 2001 TO 2047 ON Q10C.), ASK:

## ONLY PARKS FROM SUBURB OR TOWN MENTIONED IN Q11CA. WILL APPEAR IN Q11CB.

[Single] {Sort}

Q11CB. Would it have been...? READ OUT

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE



\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

#### **ENDIF**

IF STILL CAN'T SAY PARK NAME (CODE 9997 OR 9998 AT Q11CB.) OR STILL CAN'T NOMINATE TOWN AND HAS NOT SPECIFIED A PARK NAME (CODE 998 AT Q11CA. AND NOT CODES 2001 TO 2047 AT Q10C. OR CODE 997 AT Q11CA.), ASK:

#### [Single]

Q12C. Was the park a National Park, a State Conservation Area or a Nature Reserve, or was it a State Forest or some other type of park?

## **₽**û

- 1 NATIONAL PARK, STATE CONSERVATION AREA OR NATURE RESERVE
- 2 STATE FOREST OR SOME OTHER PARK
- 3 CAN'T SAY

#### **ENDIF**

#### **ENDIF**

IF PARK OR TOWN MENTIONED IS JERVIS BAY (CODE 457 ON Q10C. OR CODE 218 ON Q11CA.) OR TOWN MENTIONED IS NOWRA OR ULLADULLA AND PARK IS JERVIS BAY (CODES 318 OR 408 ON Q11CA. AND CODE 457 ON Q11CB.), ASK:

[Single]

QCJB. Was the park located on the land that is part of the ACT known as Booderee National Park, next to the Jervis Bay Naval facility (HMAS Creswell) and village, Lake Windermere, the Botanic Gardens and the Wreck Bay Aboriginal Community OR was it the park that is near Huskisson, Vincentia, Hyams Beach, Erowal Bay, Calalla Bay, Calalla Beach or Culburra Beach known as Jervis Bay National Park? Please note that Booderee National Park used to be known as Jervis Bay National Park.

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Altib.	1 P
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JERVIS BAY NATIONAL PARK
3070 BOODEREE NATIONAL PARK
9998 CAN'T SAY

#### **ENDIF**

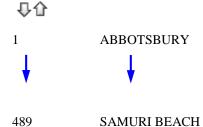
IF TOWN IS VINCENTIA, HYAMS BEACH, EROWAL BAY (CODES 473 TO 475 ON Q11CA.), CODE AS JERVIS BAY NATIONAL PARK ON QCJB.

#### **ENDIF**

### IF PARK NAME OTHER (CODE 9997 AT Q10C.), ASK:

[Single] {Sort}

Q13C. Where was the park located? What town or suburb was it close to?



997 Fixed OTHER (SPECIFY)

998 Single CAN'T SAY

\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

[Single]

Q12CA. Was the park a National Park, a State Conservation Area or a Nature Reserve, or was it a State Forest or some other type of park?

**₽** 

- NATIONAL PARK, STATE CONSERVATION AREA OR
  - NATURE RESERVE
- 2 STATE FOREST OR SOME OTHER PARK
- 3 CAN'T SAY

#### **ENDIF**

IF MOST RECENT VISITED PARK IS OEH/ PWG (CODES 1 TO 1070 OR 1400 TO 1499 ON Q10C. OR CODE 1 ON Q12C. OR Q12CA.) OR UNKNOWN (CODE 9997 ON Q11CB. OR CODE 997 ON Q11CA. OR CODE 3 ON Q12C. OR Q12CA.), ASK:

[Quantity] {Min: 1, Max: 99, Default Value:99}

Q14C. How many times did you visit [%PARK\_NAMEC] in the last 4 weeks, that is, SINCE [%DAY7] [%D7] [%M7]? RECORD NUMBER

INTERVIEWER NOTE: RECORD CAN'T SAY/REFUSED AS 99

#### IF NUMBER OF VISITS 10 OR MORE (>9 ON Q14C.), ASK:

[Single]

Q14CA. That's a large number of visits over the last 4 weeks, is [%Q14C] visits correct?

IF NECESSARY, SAY: That is, SINCE [%DAY7] [%D7] [%M7]?

₽₽

- 1 YES NUMBER OF VISITS CONFIRMED
- 2 NO NUMBER TO BE AMENDED

IF NUMBER OF VISITS TO BE AMENDED (CODE 2 ON Q14CA.), WILL GO BACK TO Q14C.

**ENDIF** 

#### **ENDIF**

#### IF ONE VISIT ONLY (Q14C.=1), ASK:

[Quantity] {Min: 0, Max: 99, Default Value:99}

Q15C. How many children under 18 IN TOTAL visited [%PARK\_NAMEC] with you on this visit? RECORD NUMBER

INTERVIEWER NOTE: RECORD NO CHILDREN AS 0. RECORD CAN'T SAY/ REFUSED AS 99

#### IF NUMBER OF CHILDREN 5 OR MORE (Q15C.>4), ASK:

[Single]

Q15CA. That's a large number of children, is [%Q15C] correct?

**₽** 

YES - NUMBER OF CHILDREN

CONFIRMED

2 NO - NUMBER TO BE AMENDED

IF NUMBER OF CHILDREN TO BE AMENDED (CODE 2 ON Q15CA.), WILL GO BACK TO Q15C.

**ENDIF** 

**ENDIF** 

IF NUMBER OF CHILDREN IN VISIT IS GREATER THAN NUMBER OF CHILDREN IN HOUSEHOLD (Q15C. > QCHILDREN), ASK:

[Multiple]

Q15CB. On this visit, were the extra children that don't usually live in your household either...?

**READ OUT** 

₽₽

1 Single Under Your Care Or The Care Of Another Adult Who Lives In Your Household

2	Single	OR '	Were T	hey In T	Γhe Ca	re Of	An Adult T	hat
	Siligid	_			**			

Doesn't Live In Your Household

3 Single (DO NOT READ) CAN'T SAY

#### **ENDIF**

#### **ENDIF**

#### IF MORE THAN ONE VISIT (Q14C.>1), ASK:

[Quantity] {Min: 0, Max: 99, Default Value:99}

Q16C. On your MOST RECENT visit to [%PARK\_NAMEC], how many children under 18 visited with you IN TOTAL? RECORD NUMBER

INTERVIEWER NOTE: RECORD NO CHILDREN AS 0. RECORD CAN'T SAY/REFUSED AS 99

#### IF NUMBER OF CHILDREN 5 OR MORE (Q16C. > 4), ASK:

[Single]

Q16CA. That's a large number of children, is [%Q16C] correct?

**₽** 

YES - NUMBER OF CHILDREN

CONFIRMED

2 NO - NUMBER TO BE AMENDED

IF NUMBER OF CHILDREN TO BE AMENDED (CODE 2 ON Q16CA.), WILL GO BACK TO Q16C.

**ENDIF** 

#### **ENDIF**

IF NUMBER OF CHILDREN IN VISIT IS GREATER THAN NUMBER OF CHILDREN IN HOUSEHOLD (Q16C. > QCHILDREN), ASK:

#### [Multiple]

Q16CB. On this visit, were the extra children that don't usually live in your household either...? READ OUT

## Ūû.

1	Single	Under Your Care Or The Care Of Another Adult Who Lives In Your Household
2	Single	OR Were They In The Care Of An Adult That Doesn't Live In Your Household
3	Single	(DO NOT READ) CAN'T SAY

#### **ENDIF**

#### **ENDIF**

[Quantity] {Min: 0, Max: 999}

DUMMY VARIABLE COMPUTED - Q14C.\*Q15C. OR Q14C.\*Q16C.

#### IF Q14C. x (Q15C. OR Q16C.) > 28, SAY:

[Single]

Q14CB. To calculate the number of children in your party that visited this park in the last 4 weeks we multiply the number of visits YOU made to this park by the number of children that visited with you on YOUR MOST RECENT VISIT. We calculate this to be [%DQ14C] child visits in total over the last 4 weeks. Would this be approximately correct?



1	YES
2	NO

3 CAN'T SAY

### IF NO OR CANT SAY (CODES 2 OR 3 ON Q14CB.), SAY:

[Multiple] {Spread:10 }

Q14CC. Could you please explain why this estimated figure is not correct?

INTERVIEWER RECORD RESPONSES IN FULL

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE

₽₽

97 Openend OTHER (SPECIFY)

98 Single CAN'T SAY

\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

**ENDIF** 

**ENDIF** 

**ENDIF** 

## **ENDTIMEQ10C**

TIMING13 - Q10C TO Q16CB (ENDTIMEQ10C-STARTTIMEQ10C)

**ENDIF** 

IF VISITING 4 PARKS (CODES 1 TO 9998 ON Q10C), ASK:

#### **STARTTIMEQ10D**

[Single] {Sort}

Q10D. What is the NAME of ANOTHER National Park, State Conservation Area, Nature Reserve, State Forest or other park you visited in NEW SOUTH WALES in the past 4 weeks?

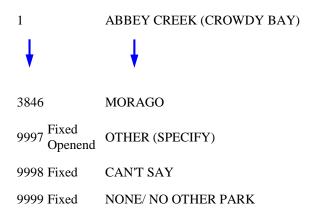
IF NECESSARY, SAY: That is, SINCE [%DAY7] [%D7] [%M7]?

Remember the park must be in NSW.

IF NECESSARY SAY: By parks I DO NOT MEAN botanical gardens, zoos, wildlife parks, or any local suburban or town parks.

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE

₽₽



<sup>\*</sup> YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

## IF A PARK NAME CAN BE EITHER A OEH MANAGED PARK OR SOME OTHER PARK (CODES 2001 TO 2049 ON Q10D.), ASK:

## ONLY OEH OR OTHER PARK FOR PARK NAMED WILL APPEAR IN Q10ND.

[Single] {Sort}

Q10ND. #/Was that Boat Harbour Aquatic Reserve or Boat Harbour Tomaree/Was that /#201.#/, or //#202.?



#### **ENDIF**

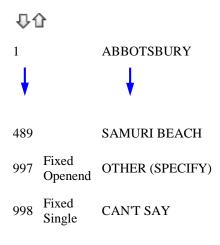
#### IF CAN'T SAY PARK NAME (CODE 9998 AT Q10D. OR Q10ND.), ASK:

[Multiple] {Spread:10 Sort}

Q11DA. Where was the park located? What town or suburb was it close to?

IF MENTIONS 2 TOWNS, PLEASE TYPE IN FIRST MENTION. IF UNSUCCESSFUL, PLEASE THEN TYPE IN SECOND MENTION. IF

UNSUCCESSFUL, PLEASE SELECT 2ND MENTION AS OTHER SPECIFY AND CONTINUE HIGHLIGHT ALL MENTIONED



<sup>\*</sup> YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

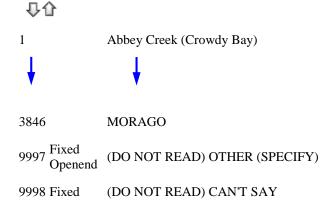
IF GAVE NAME OF SUBURB OR TOWN NOT JERVIS BAY (CODES 1 TO 217 OR 219 TO 472 OR 476 TO 489 ON Q11DA.) AND HAS NOT SPECIFIED A PARK NAME (NOT CODES 2001 TO 2047 ON Q10D.), ASK:

## ONLY PARKS FROM SUBURB OR TOWN MENTIONED IN Q11DA. WILL APPEAR IN Q11DB.

[Single] {Sort}

Q11DB. Would it have been...? READ OUT

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE



\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

#### **ENDIF**

IF STILL CAN'T SAY PARK NAME (CODE 9997 OR 9998 AT Q11DB.) OR STILL CAN'T NOMINATE TOWN AND HAS NOT SPECIFIED A PARK NAME (CODE 998 AT Q11DA. AND NOT CODES 2001 TO 2047 AT Q10D. OR CODE 997 AT Q11DA.), ASK:

#### [Single]

Q12D. Was the park a National Park, a State Conservation Area or a Nature Reserve, or was it a State Forest or some other type of park?

## ₽₽

- 1 NATIONAL PARK, STATE CONSERVATION AREA OR NATURE RESERVE
- 2 STATE FOREST OR SOME OTHER PARK
- 3 CAN'T SAY

#### **ENDIF**

### **ENDIF**

IF PARK OR TOWN MENTIONED IS JERVIS BAY (CODE 457 ON Q10D. OR CODE 218 ON Q11DA.) OR TOWN MENTIONED IS NOWRA OR ULLADULLA AND PARK IS JERVIS BAY (CODES 318 OR 408 ON Q11DA. AND CODE 457 ON Q11DB.), ASK:

## [Single]

QDJB. Was the park located on the land that is part of the ACT known as Booderee National Park, next to the Jervis Bay Naval facility (HMAS Creswell) and village, Lake Windermere, the Botanic Gardens and the Wreck Bay Aboriginal Community OR was it the park that is near Huskisson, Vincentia, Hyams Beach, Erowal Bay, Calalla Bay, Calalla Beach or Culburra Beach known as Jervis Bay National Park? Please note that Booderee National Park used to be known as Jervis Bay National Park.

## ₽û

457	JERVIS BAY NATIONAL PARK
3070	BOODEREE NATIONAL PARK
9998	CAN'T SAY

#### **ENDIF**

IF TOWN IS VINCENTIA, HYAMS BEACH, EROWAL BAY (CODES 473 TO 475 ON Q11DA.), CODE AS JERVIS BAY NATIONAL PARK ON QDJB.

#### **ENDIF**

#### IF PARK NAME OTHER (CODE 9997 AT Q10D.), ASK:

[Single] {Sort}
Q13D. Where was the park located? What town or suburb was it close to?

↓ ↓

ABBOTSBURY

↓ ↓

489 SAMURI BEACH

997 Fixed Openend OTHER (SPECIFY)

998 Fixed Single CAN'T SAY

\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

#### [Single]

Q12DA. Was the park a National Park, a State Conservation Area or a Nature Reserve, or was it a State Forest or some other type of park?



- 1 NATIONAL PARK, STATE CONSERVATION AREA OR NATURE RESERVE
- 2 STATE FOREST OR SOME OTHER PARK
- 3 CAN'T SAY

#### **ENDIF**

IF MOST RECENT VISITED PARK IS OEH/ PWG (CODES 1 TO 1070 OR 1400 TO 1499 ON Q10D. OR CODE 1 ON Q12D. OR Q12DA.) OR UNKNOWN (CODE 9997 ON Q11DB. OR CODE 997 ON Q11DA. OR CODE 3 ON Q12D. OR Q12DA.), ASK:

[Quantity] {Min: 1, Max: 99, Default Value:99}

Q14D. How many times did you visit [%PARK\_NAMED] in the last 4 weeks, that is, SINCE [%DAY7] [%D7] [%M7]? RECORD NUMBER

INTERVIEWER NOTE: RECORD CAN'T SAY/REFUSED AS 99

#### IF NUMBER OF VISITS 10 OR MORE (>9 ON Q14D.), ASK:

[Single]

Q14DA. That's a large number of visits over the last 4 weeks, is [%Q14D] visits correct?

IF NECESSARY, SAY: That is, SINCE [%DAY7] [%D7] [%M7]?

₽0

1 YES - NUMBER OF VISITS CONFIRMED

2 NO - NUMBER TO BE AMENDED

IF NUMBER OF VISITS TO BE AMENDED (CODE 2 ON Q14DA.), WILL GO BACK TO Q14D.

**ENDIF** 

**ENDIF** 

#### IF ONE VISIT ONLY (Q14D.=1), ASK:

[Quantity] {Min: 0, Max: 99, Default Value: 99}

Q15D. How many children under 18 IN TOTAL visited [%PARK\_NAMED] with you on this visit? RECORD NUMBER

INTERVIEWER NOTE: RECORD NO CHILDREN AS 0. RECORD CAN'T SAY/ REFUSED AS 99

IF NUMBER OF CHILDREN 5 OR MORE (Q15D.>4), ASK:

#### [Single]

Q15DA. That's a large number of children, is [%Q15D] correct?

₽0

YES - NUMBER OF CHILDREN

CONFIRMED

2 NO - NUMBER TO BE AMENDED

IF NUMBER OF CHILDREN TO BE AMENDED (CODE 2 ON Q15DA.), WILL GO BACK TO Q15D.

**ENDIF** 

#### **ENDIF**

IF NUMBER OF CHILDREN IN VISIT IS GREATER THAN NUMBER OF CHILDREN IN HOUSEHOLD (Q15D. > QCHILDREN), ASK:

#### [Multiple]

Q15DB. On this visit, were the extra children that don't usually live in your household either...? READ OUT



1 Single Under Your Care Or The Care Of Another Adult Who Lives In Your Household

2 Single OR Were They In The Care Of An Adult That

Doesn't Live In Your Household

3 Single (DO NOT READ) CAN'T SAY

#### **ENDIF**

#### **ENDIF**

#### IF MORE THAN ONE VISIT (Q14D.>1), ASK:

[Quantity] {Min: 0, Max: 99, Default Value:99}

Q16D. On your MOST RECENT visit to [%PARK\_NAMED], how many children under 18 visited with you IN TOTAL? RECORD NUMBER

INTERVIEWER NOTE: RECORD NO CHILDREN AS 0. RECORD CAN'T SAY/REFUSED AS 99

#### IF NUMBER OF CHILDREN 5 OR MORE (Q16D. > 4), ASK:

[Single]

Q16DA. That's a large number of children, is [%Q16D] correct?

**₽** 

YES - NUMBER OF CHILDREN

CONFIRMED

2 NO - NUMBER TO BE AMENDED

IF NUMBER OF CHILDREN TO BE AMENDED (CODE 2 ON Q16DA.), WILL GO BACK TO Q16D.

**ENDIF** 

#### **ENDIF**

IF NUMBER OF CHILDREN IN VISIT IS GREATER THAN NUMBER OF CHILDREN IN HOUSEHOLD (Q16D. > QCHILDREN), ASK:

[Multiple]

Q16DB. On this visit, were the extra children that don't usually live in your household either...?

**READ OUT** 



1 Single Under Your Care Or The Care Of Another Adult Who Lives In Your Household

2 Single OR Were They In The Care Of An Adult That Doesn't Live In Your Household

Doesn't Live in Tour Household

3 Single (DO NOT READ) CAN'T SAY

#### **ENDIF**

#### **ENDIF**

[Quantity] {Min: 0, Max: 999}

DUMMY VARIABLE COMPUTED - Q14D.\*Q15D. OR Q14D.\*Q16D.

#### IF Q14D. x (Q15D. OR Q16D.) > 28, SAY:

[Single]

Q14DB. To calculate the number of children in your party that visited this park in the last 4 weeks we multiply the number of visits YOU made to this park by the number of children that visited with you on YOUR MOST RECENT VISIT. We calculate this to be [%DQ14D] child visits in total over the last 4 weeks. Would this be approximately correct?

## ₽₽

- 1 YES
- 2 NO
- 3 CAN'T SAY

#### IF NO OR CANT SAY (CODES 2 OR 3 ON Q14DB.), SAY:

[Multiple] {Spread:10 }

Q14DC. Could you please explain why this estimated figure is not correct?

INTERVIEWER RECORD RESPONSES IN FULL

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE

**₽û** 

97 Openend OTHER (SPECIFY)

98 Single CAN'T SAY

\* YOU MUST ENTER TEXT INTO THE OPEN BOX IF YOU HAVE CODED "OTHER". \*

**ENDIF** 

#### **ENDIF**

#### **ENDIF**

## **ENDTIMEQ10D**

## TIMING14 - Q10D TO Q16DB (ENDTIMEQ10D-STARTTIMEQ10D)

#### **ENDIF**

## **DEMOGRAPHICS**

## **ASK EVERYONE**

Finally a few more questions about you and your household.

## **STARTTIMEQ17**

## [Multiple]

Q17. Which languages are USUALLY spoken in the household?

## ₽₽

1		ENGLISH
2		ITALIAN
3		GREEK
4		CANTONESE
5		MANDARIN
6		ARABIC
7		VIETNAMESE
8		GERMAN
9		SPANISH
10		HINDI
11		TAGALOG (FILIPINO)
12		ABORIGINAL/INDIGENOUS LANGUAGE
97	Openend	OTHER (SPECIFY)

98	Single	CAN'T SAY/REFUSED

#### [Single]

Q18. What is the highest level of education you have reached?

	$\wedge$
₹	1ır

1	PRIMARY	SCHOOL

- 2 SOME SECONDARY SCHOOL
- 3 SOME TECHNICAL OR COMMERCIAL
- 4 PASSED 4TH FORM/ YEAR 10
- 5 PASSED 5TH FORM/ YEAR 11/ LEAVING
- 6 FINISHED TECHNICAL SCHOOL, COMMERCIAL COLLEGE OR TAFE
- 7 FINISHED/ NOW STUDYING H.S.C./ V.C.E./ YEAR 12
- 8 DIPLOMA FROM C.A.E.
- 9 SOME UNIVERSITY/ C.A.E.
- 10 DEGREE FROM UNIVERSITY OR CAE
- 11 POST GRADUATE QUALIFICATION

#### [Single]

Q19. Are you now in paid employment?

IF YES, ASK: Is that full-time for 35 hours or more a week, or part-time?



- 1 YES, FULL-TIME
- 2 YES, PART-TIME
- 3 NO

#### IF NOT IN PAID EMPLOYMENT (CODE 3 ON Q19), ASK:

#### [Single]

Q19B. Are you now looking for a paid job?

IF LOOKING, ASK: A full-time job for 35 hours or more a week, or a part-time job?

IF NOT LOOKING, ASK: Are you retired, a student, a non-worker or home duties?

₽û

1 LOOKING FOR FULL-TIME

2	LOOKING FOR PART-TIME
3	RETIRED
4	STUDENT
5	NON-WORKER
6	HOME DUTIES

## **ENDIF**

## ASK EVERYONE

## [Single]

Q20. Are you married, separated, divorced, widowed, de facto, engaged, planning to marry or single?

	$\wedge$	
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~	100	

1	MARRIED
2	SEPARATED
3	DIVORCED
4	WIDOWED
5	DE FACTO
6	ENGAGED
7	PLANNING TO MARRY
8	SINGLE

## IF CHILDREN LIVE IN HOUSEHOLD (QCHILDREN>0), ASK:

#### [Single]

Q21. Are you the parent of any of the children who usually live in this household?

₽0

1 YES

2 NO

3 CAN'T SAY

#### **ENDIF**

#### [Single]

## Q22. RESPONDENT LIFECYCLE - COMPUTED FROM QAGE, QCHILDREN, Q20 AND Q21 $\,$

## ₽0

1	Single 18-34 No Children
2	Single 18-34 Children
3	Single 35+ No Children
4	Single 35+ Children
5	Married 18-34 No Children
6	Married 18-34 Children
7	Married 35+ No Children
8	Married 35+ Children

Thank you for your time and assistance. This market research is carried out in compliance with the Privacy Act, and the information you have provided will be used only for research purposes. We are conducting this research on the frequency of visits to National Parks for the NSW Office of Environment and Heritage.

If you would like any more information about this project or Roy Morgan Research, you can phone us on 1800 337 332

## **ENDTIMEQ17**

## TIMING15 - Q17 TO END (ENDTIMEQ17-STARTTIMEQ17)

## **END-OF-QUESTIONNAIRE**

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