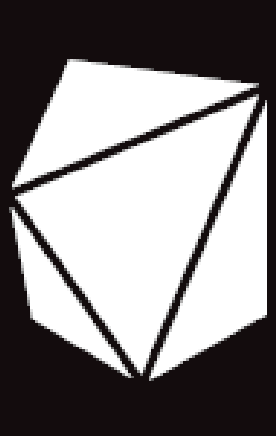

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Annual Visits to NPWS Managed Parks in New South Wales

August 2019

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Final Report

August 2019

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Contents

1. Executive Summary

1.1 Background

In January 2008, the then NSW Department of Environment and Climate Change (DECC), commissioned Roy Morgan to conduct a thirteen-wave telephone survey to estimate annual visits to NSW NPWS managed Parks for the 2008 calendar year. In order to determine the best approach to provide a *reliable* estimate of the number of park visits, Roy Morgan undertook a pilot survey in September-October of 2007. The resultant approach recommended from the pilot was confirmed and approved by DECC. Roy Morgan was recommissioned to repeat the study in 2010, and has since been commissioned by the Office of Environment and Heritage (OEH) to conduct the study every two years from 2012, with the most recent survey being conducted in 2018. This report provides a summary of findings from the 2018 survey.

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 from the 2012 survey onwards, using Random Digit Dialling (RDD) for both landline and mobile phone numbers, as opposed to the Electronic White Pages (EWP) used in the 2008 and 2010 surveys[1]. Interlocking 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 2018 being 15,645 people.

The term *visitation*[2] used throughout this report is defined as the number of *visits* made to NPWS managed parks, not the number of *visitors* to these parks (i.e. a visitor can make more than one visit to NPWS Parks in any given four-week period).

1.2 Approach to Calculating and Improving the Park Visitation Estimate

As was the case for the 2008, 2010, 2012, 2014 and 2016 surveys, in calculating the 2018 annual NPWS Park visitation estimates, 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;
- 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;

[1] 2008 and 2010 survey estimates have now been adjusted to account for the change in the sampling frame.

[2] Visitation calculation = [Σ(number of adult visits to a NPWS Park obtained for each respondent multiplied by their individual *population* survey weight for all 13 survey waves) + (Σ(number of child visits to a NPWS Park for each household multiplied by their *household* survey weight for all 13 survey waves)} x non-response error adjustment.

- 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 of recall;
- Asking respondents to name the park they visited, ensuring that the park visited could be categorised as being either NPWS or non-NPWS 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-scope visits;
- 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-counted child visits.

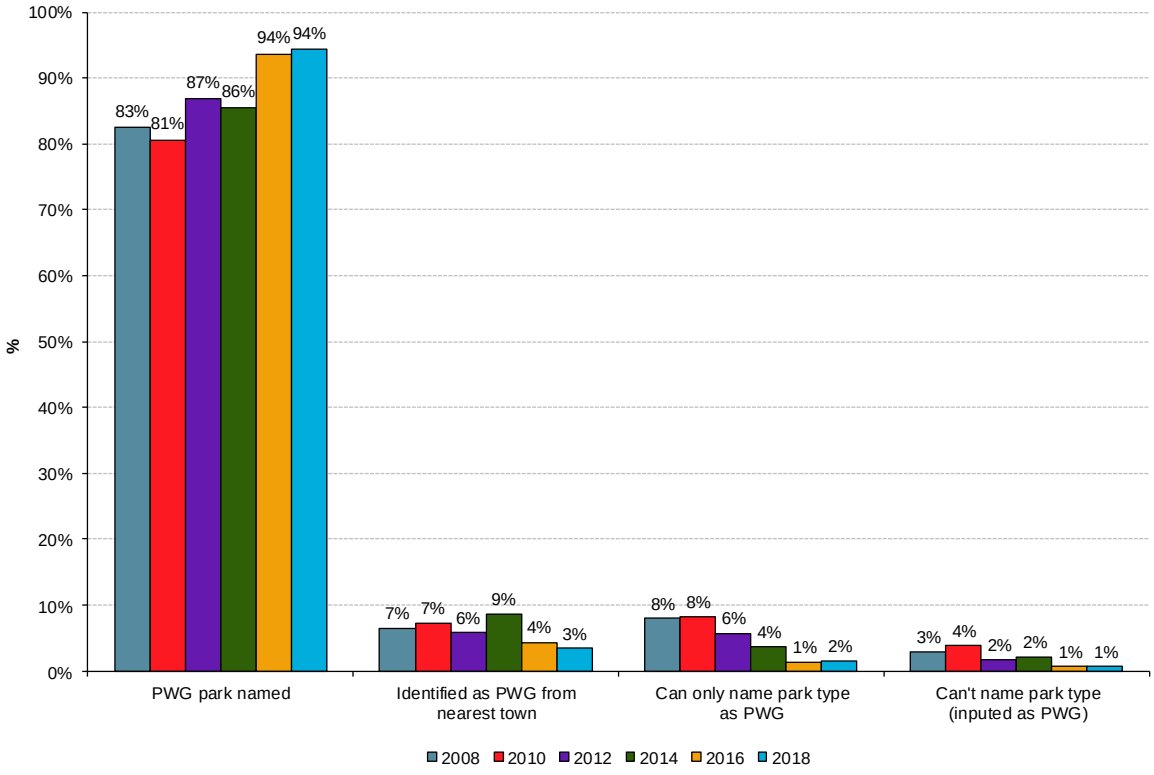
Furthermore, in order to ensure that the final NPWS Park annual visitation estimate obtained was as accurate as possible, and that the survey estimates were comparable over time, procedures were put in place to ensure that the quality of survey data obtained improved as the survey progressed (i.e. from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

- Where necessary, updating lists of NPWS Park names and their aliases at the end of each wave to improve park categorisation;
- Adding names of non-NPWS Parks regularly visited to the survey frame to assist in easily identifying and excluding parks not in-scope for the survey;
- 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 age when they were asked to name a park they visited in the last 4 weeks);
- A rigorous post-field 'cleaning' phase of any responses where a park 'type' could not be assigned at the time of interview;
- Referring parks that could not be classified to OEH for a final decision on categorisation;
- 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 estimates reflect the actual 'real world' visits; and
- Re-calculating the 2008 and 2010 visitation estimates to account for the sampling frame change from EWP to RDD.

After thirteen waves of the 2018 survey, two major aspects allowed for great confidence in the visitation estimate obtained. Firstly, in 2018, 1,680 respondents (97.8%) could spontaneously name the park they visited or recalled the park name once prompted from a list of associated parks within close proximity to a number of towns in New South Wales—a result consist with 98% in 2016 (see Chart A). The provision of park names enabled accurate categorisation of the park to either NPWS or non-NPWS categories. Similar surveys only ask respondents to name the *type* of park visited, which relies on respondents understanding the different type of parks and their associated management structures. The 2007 pilot survey results shows that a significant 50% of respondents categories the NSW park type incorrectly, so minimising the amount of self-categorisation in all main

survey waves has strengthened the *accuracy* of the visitation estimates for this survey structure. For the 2018 survey, only 2.2% of responses were categorised as either a NPWS or non-NPWS Park by park type only (1.5% allocated by respondent, 0.7% imputed, as the respondent was uncertain of the park type).

Chart A: Allocation of Park Type by Method[3]



Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,705, 2018 n=1,718

Secondly, response rates for this survey are consistently higher than those of a comparable omnibus style survey conducted at the same time as each wave (approximately 70% higher in each survey year). This demonstrates that conducting the survey via a stand-alone survey methodology is more efficient than using a shared-cost methodology. Subsequently, the survey estimate is also more reliable.

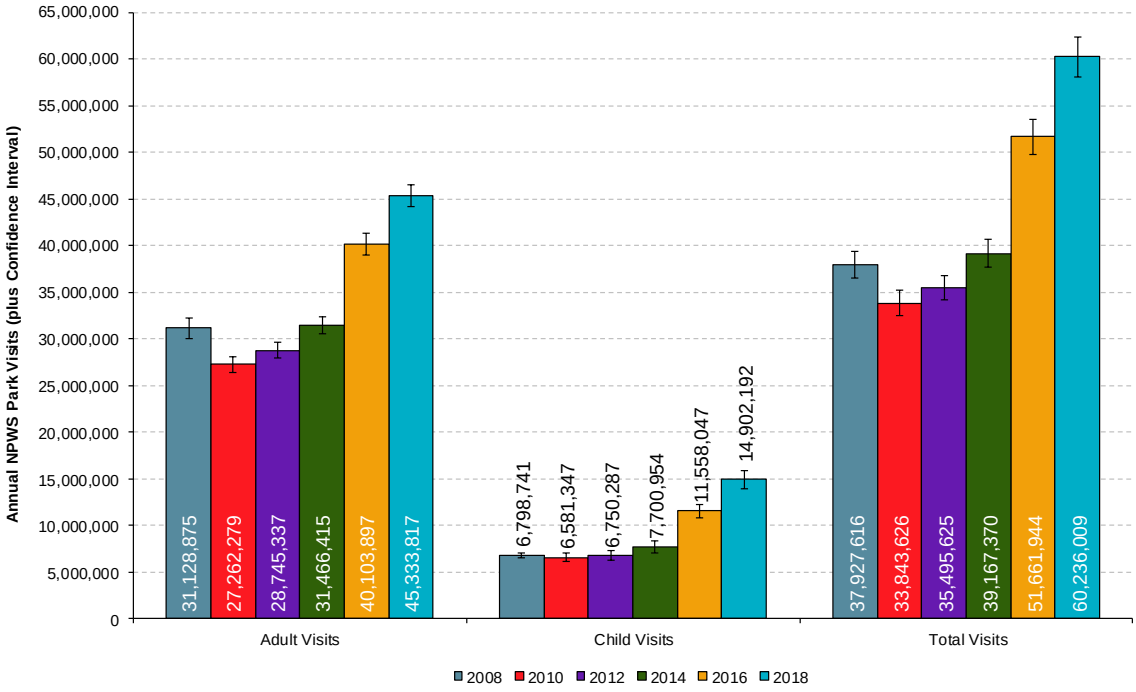
[3] If respondents could not provide the name of the park they visited, or the name of the park could not be ascertained from the town claimed to be nearest to that park, they were then asked to classify the park as being a National Park, State Conservation Area or Nature reserve or not (i.e. the *type* of park visited). Where the type of park visited could not be ascertained from a respondent's survey responses, park type was imputed based on the overall ratio of NPWS Parks named to Non-NPWS Parks named for all survey respondents visiting a park in the last 4 weeks (the ratio used in 2018 was 3:1 NPWS to non-NPWS Parks).

1.3 NPWS Park Visitation

1.3.1 Annual NPWS Park Visitation

Survey results from waves one through thirteen, along with an estimation of visitation for non-surveyed regions (excluding international visitors) provides the following annual NPWS Park visitation estimates for 2008 to 2018 (Chart B). The 2018 NPWS Park visitation estimate is highest yet attained (60.2 million visits). Adult visits comprise 75.3% of all visits in 2018, compared with 77.6% in 2016, 80.3% in 2014, 81.0% in 2012, 80.6% in 2010 and 82.1% in 2008.

Chart B: Final Annual NPWS Park Visitation Estimate by Year



Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

The confidence interval for the *survey* estimate in 2018 is ±3.61% of the total estimate (±2.61% for adults; ±6.64% 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 2018 varies from 58.1m to 62.4m. This overall margin of error (±3.61) is well within the parameters required by OEH (±8% at the 95% confidence level). It also means that, when taking into account the margin of error for previous surveys, the 2018 annual visitation estimate is significantly higher than the visitation estimates for all previous years.

1.3.2 Impact of Non-Response Adjustment on the NPWS Park Visitation Estimate

It should be noted that the final NPWS Park visitation *survey* estimate is recalibrated to account for non-response (i.e. people *completing the survey* are likely to have a slightly higher incidence rate of visiting NPWS Parks than those contacted *who did not complete the survey*). This is undertaken by interviewers asking one final question to non-completers before the telephone call ends, as follows:

> *Q: 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?*

The incidence rate obtained from this question is compared with the rate obtained for a similar question asked of survey respondents:

> *Q: 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}?*

The incidence rate from non-survey respondents is divided by the incidence rate from survey respondents to calculate the non-response adjustment ratio. This ratio is then applied to the NPWS visitation survey estimate to obtain the final adjusted survey visitation estimate. Since 2008, the non-response adjustment ratios have been as follows:

- 2008: 0.6927
- 2010: 0.6560
- 2012: 0.7040
- 2014: 0.5953
- 2016: 0.7667
- 2018: 0.7600

As can be seen above, the 2014 non-response adjustment ratio was the lowest, whilst the 2016 ratio was the highest. This means that the 2014 visitation calculation from survey responses was down-weighted the most and the 2016 calculation was down-weighted the least to account for non-responses.

The reason for this is that, in an effort to improve the accuracy of the visitation estimate, greater proportions of mobile phone numbers were contacted for interviewing in 2016 (53%) and 2018 (40%) than in 2014 (23%) in order to more accurately reflect the Australian population based on phone status (i.e. respondent or household is mobile only, landline only or has both mobiles and landlines). This increase in phone calls to mobile numbers resulted in 29% of mobile only respondents being surveyed in 2018 and 22% in 2016, compared with 9% in 2014 when the actual incidence rate in the survey populations were 33%, 26% and 24% respectively.

1.3.3 Potential Factors Influencing NPWS Park Visits

Whilst not exhaustive, the following factors have been investigated to identify whether there is any relationship between them and NPWS Park visits.

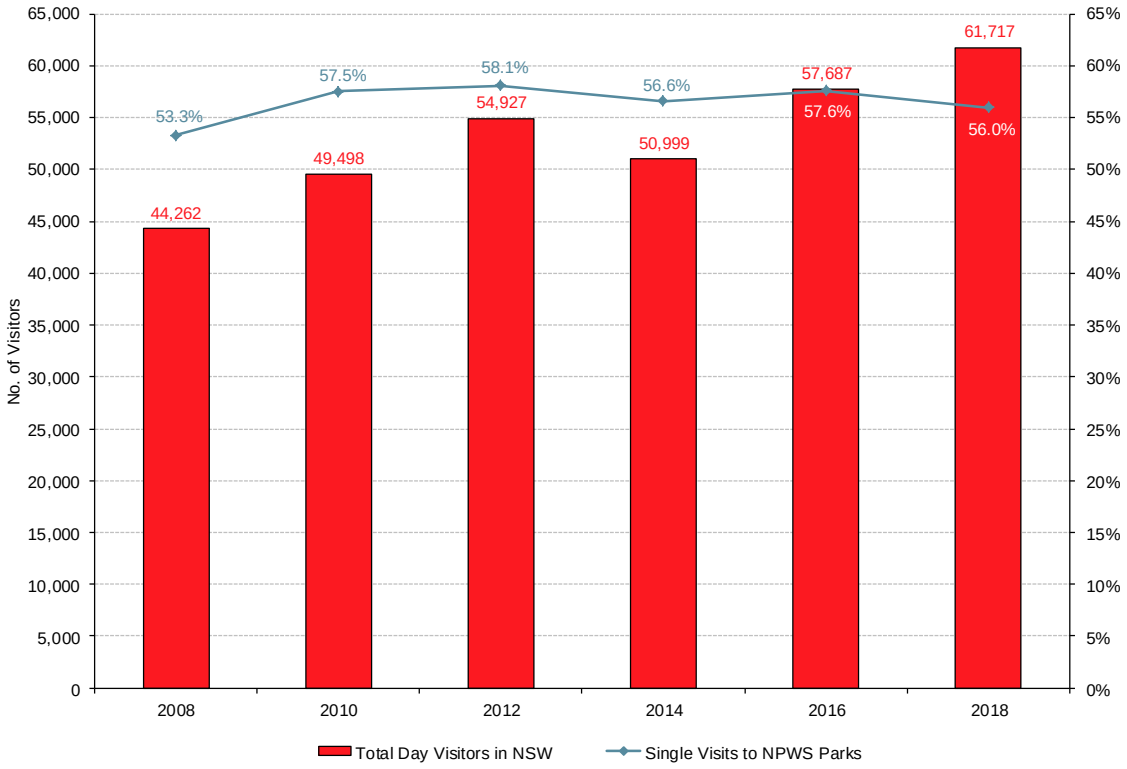
- **Visitation to NSW**. As shown below, visitation to NPWS Parks generally mirrors visitation to and within NSW.
  - Tourism Research Australia[4] (TRA) data for both overnight visitors and visitor nights in NSW fell from 2008 to 2010; then rebounded in 2012 and has continued to increase

[4] Tourism Research Australia – National Visitor Survey

from 2014 to 2016, then declined again in 2018. This trend was evident for both intrastate overnight visits within NSW and interstate overnight visits to NSW. This visitation pattern closely matches the NPWS Park visitation pattern.

- Day trip visitors to NSW increased steadily from 2008 to 2012, declined in 2014, then rebounded in 2016 and continued to increase in 2018[5]. With the majority of trips to NPWS 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 for all years except 2018 (see Chart C).

Chart C: Single Visits to NPWS Parks versus Day Visitors in NSW



Sources: National Visitor Survey – Tourism Research Australia; NPWS Parks Visitor Surveys 2008-2018:

- Additionally, whilst this survey was not designed to calculate the number of annual visitors to NPWS Parks, using the average number of visits per adult to NPWS parks, a *proxy* for the number of adult visitors can be calculated. In 2008 the proxy number of adult visits to NPWS parks was 10.3m; in 2010 it decreased to 9.5m; in 2012 it bounced back to 10.5m; in 2014 it continued to increase to 10.8m; rose significantly to 15.0m in 2016 and increase further to 16.1m in 2018. This pattern generally matches the overnight visitation pattern sourced from TRA. Therefore, it can be inferred that the number of *visitors* to NPWS Parks does in fact mirror overnight visitation in NSW.

- **Visitation to Overseas Destinations.** The impact of overseas travel is potentially inhibiting the number of trips taken to NPWS Parks.

[5] Tourism Research Australia – National Visitor Survey

- Again, Tourism Research Australia[6] data shows that Australians visiting overseas has steadily increased from 5.2m visitors in 2008 to 9.8m in 2018, representing 87.2% growth over ten 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 NPWS Park visitation shows that exchange rates were very weak against other currencies in 2008 when park visitation was high. Similarly, exchange rates were stronger in 2010 and 2012 when NPWS Park visitation was not as high. In 2014, exchange rates were weaker, and park visitation was high, while in 2016 and 2018 exchange rates were weaker than in 2014 and visitation was extremely high.
- More in-depth analysis shows that NPWS Park visitation generally peaks over summer when people take extended holidays and declines over winter when domestic weather is more inclement and travel overseas more enticing (i.e. for summer in the northern hemisphere). However, the decline in winter NPWS Park visitation is becoming less prominent over time, so the relationship is weakening.
- Furthermore, since 2008, visitor nights in NSW have increased by 31.6%, while the number of overnight visitors has increased by 43.5% 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 with overseas travel. This is confirmed by the observed decline in average adult visits to NPWS Parks from 2008 to 2018 (2.95 to 2.79 visits).

- **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 NPWS Park visitation against interest rates (i.e. cash rate) shows that in 2010 rises in interest rates coincided with lower NPWS Park visitation, while falls in interest rates in 2012 to 2018 tended coincide with higher levels of park visitation. However, interest rates were high in 2008 when park visitation was also high, so whilst it would appear that a linkage between interest rates and visitation may not be as strong as expected, this should be tempered with the fact that overseas travel was also lowest in 2008, suggesting that there is a potentially combined impact of interest rates and exchange rates on park visitation, rather than direct linkages from either aspect in isolation.

- **Weather Effects.**
  - Mapping NPWS Park visitation against temperature divergence[7] from the average shows a direct correlation between visitation and temperature from 2008 to 2012. When temperatures were above the average, visitation increased, and when temperatures were below the average, visitation decreased. However, the 2014 visitation estimates by month differ slightly from previous years, as from March to June visitation tended to increase when temperature was decreasing. Nevertheless, the 2008 to 2012 trend was again observed in 2016 and 2018, so it would appear that this temperature-visitation

[6] Tourism Research Australia – National Visitor Survey
[7] Bureau of Meteorology – Climate Data Online.

correlation is genuine, but may be subject to some variation at the regional level. It also does not to be as strong in 2018 as was the case in 208 and 2010.

- Similarly, when rainfall divergence from the average is mapped against NPWS Park visitation, an opposing movement emerges, with visitation increasing when rainfall falls below the average, and decreasing when rainfall is above the average. This trend was observed from 2008 to 2014. However, a weak, but opposing trend emerged in 2016, although in 2018 the original relationship between rainfall and visitation was observed. Rather than a direct impact of rainfall in general, the impact of rainfall on visitation is more likely to occur if it is raining at both the origin of the visitor, as well as at the intended destination. Therefore, the overall impact of rainfall on visitation is more likely to be felt at the regional level. This was likely the case in 2016.
- Rather than looking individually at rainfall and temperature, it can be noted that significant and sustained weather events are also 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, NPWS Park visitation was low early in 2012 and high towards the end. 2014 was the warmest year on record, and the driest since 2006, resulting in high visitation until winter. In 2016, summer and autumn were warm and it was generally warm in winter and spring (apart from some rain in June and September), with park visitation being the highest recorded to that time. The 2018 year outstripped 2014 to become the warmest year on record and the 6th driest on record. This made conditions favourable for park visitation and result in 2018 having the highest visitation levels so far estimated. Of course, local weather events will impact on local visitation as well. For example, floods and rains as a result of cyclones impacted on communities in 2010, which would have impacted on park visits.

Essentially, the above shows that the combined effects of domestic visits to NSW, levels of overseas visitation, the economic climate and weather influence NPWS Park visitation levels.

1.3.4 Annual Visitation by Region of Origin

Intrastate visitation comprised 87.2% of all visits in 2018, compared with 87.5% in 2016, 90.5% in 2014, 88.6% in 2012, 88.3% in 2010 and 90.8% in 2008. By comparison, interstate visitation comprised 12.8% of visits in 2018, compared with 12.6% in 2016, 9.5% in 2014, 11.4% in 2012, 11.7% in 201 and 9.2% in 2008) (see Table A).

Table A: Final Annual NPWS Park Visitation Estimate by Region of Origin

Final Adjusted Annual PWG Park Visitation Estimate 2018[1]	Adult Visits		Child Visits		Total Visits	
	No.	%	No.	%	No.	%
Sydney	24,826,398	54.76%	8,496,187	57.01%	33,322,585	55.32%
Remainder NSW	14,937,565	32.95%	4,280,507	28.72%	19,218,072	31.90%
ACT	686,397	1.51%	259,833	1.74%	946,230	1.57%
Melbourne	1,920,081	4.24%	682,206	4.58%	2,602,287	4.32%
Remainder VIC	575,303	1.27%	219,814	1.48%	795,117	1.32%
Brisbane	1,099,846	2.43%	605,504	4.06%	1,705,350	2.83%
Remainder SE QLD	753,086	1.66%	164,702	1.11%	917,788	1.52%
Remainder QLD	64,888	0.14%	23,455	0.16%	88,343	0.15%
SA	120,192	0.27%	43,446	0.29%	163,638	0.27%
WA	219,565	0.48%	79,368	0.53%	298,933	0.50%
TAS	105,414	0.23%	38,105	0.26%	143,519	0.24%
NT	25,081	0.06%	9,066	0.06%	34,148	0.06%
Total Australia 2018	**45,333,817**	**100.00%**	**14,902,193**	**100.00%**	**60,236,009**	**100.00%**
Margin of Error[2]	**±2.61%**	**n/a**	**±6.64%**	**n/a**	**±3.61%**	**n/a**
Total Australia 2016	**40,103,897**	**100.00%**	**11,558,047**	**100.00%**	**51,661,944**	**100.00%**
Margin of Error[2]	**±2.89%**	**n/a**	**±6.24%**	**n/a**	**±3.64%**	**n/a**
Total Australia 2014	**31,674,661**	**100.00%**	**7,761,387**	**100.00%**	**39,436,048**	**100.00%**
Margin of Error[2]	**±2.84%**	**n/a**	**±7.99%**	**n/a**	**±3.85%**	**n/a**
Total Australia 2012	**28,745,337**	**100.00%**	**6,750,287**	**100.00%**	**35,495,625**	**100.00%**
Margin of Error[2]	**±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[2]	**±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[2]	**±3.34%**	**n/a**	**±4.40%**	**n/a**	**±3.54%**	**n/a**

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

1. Excludes visits by International visitors.
2. Margin of error based on the 95% confidence level for survey regions only.

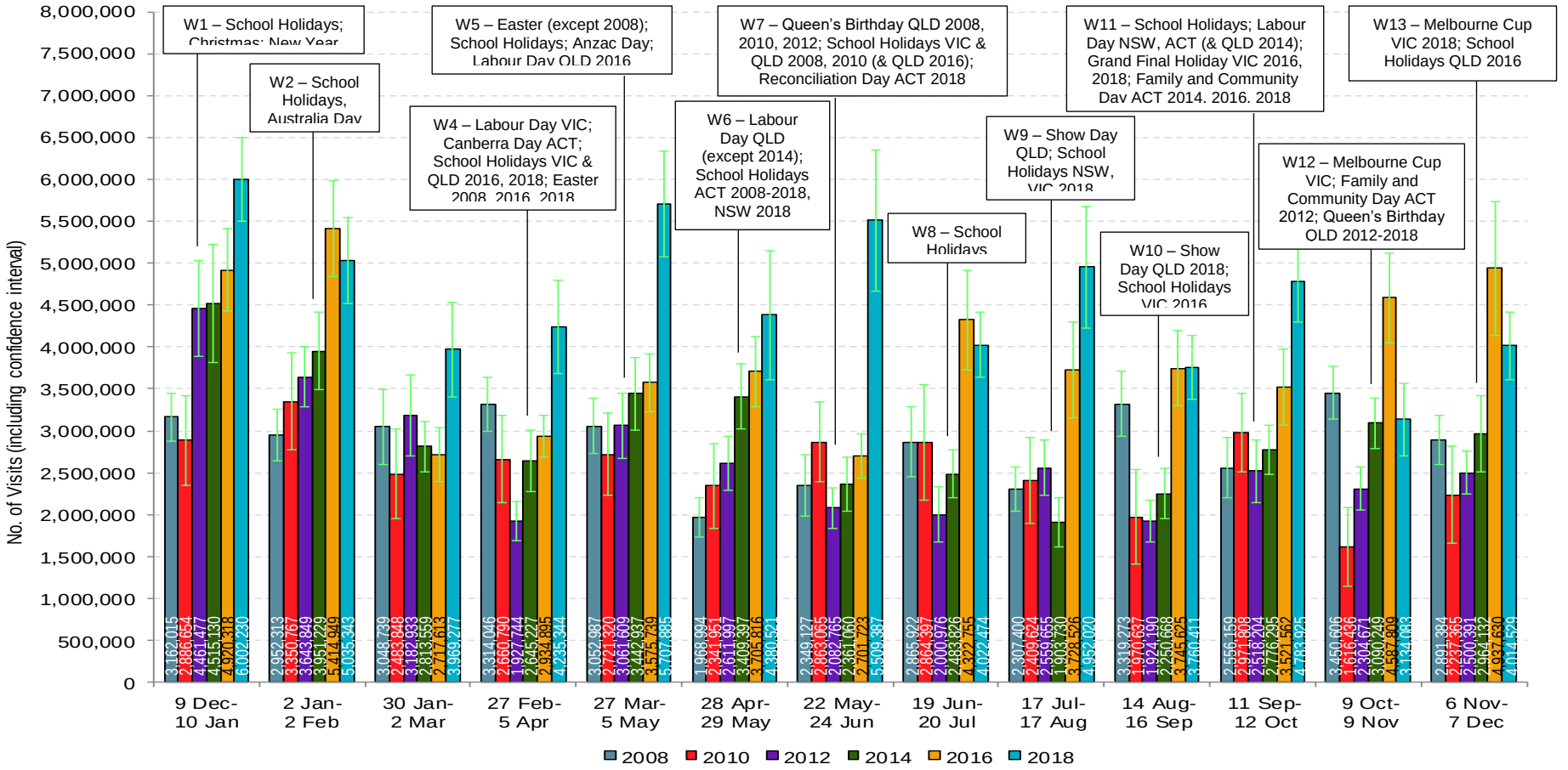
1.3.5 NPWS Park Visitation by Wave

Chart 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.

In general, NPWS park visitation in 2018 tends to be significantly higher than in all other years across all months. The exceptions are in January, May, June to September and November, where the 2016 estimate is statistically similar, while for October, the 2016 estimate is significantly higher than the 2018 estimate.

As was the case in previous years, annual and wave by wave NPWS Park visitation patterns are mainly determined by adult visitation patterns. Overall annual child visitation estimate was the highest on record in 2018 (14.9m visits), with child visits representing 24.7% of all NPWS Park visits. Over time the number of child visits as a proportion of all visits is increasing (18.0% in 2008, 19.4% in 2010, 19.0% in 2012, 19.7% in 2014, 22.4% in 2016 and 24.7% in 2018).

Chart D: Adjusted Annual Visitation Survey Estimate by Wave[8]



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

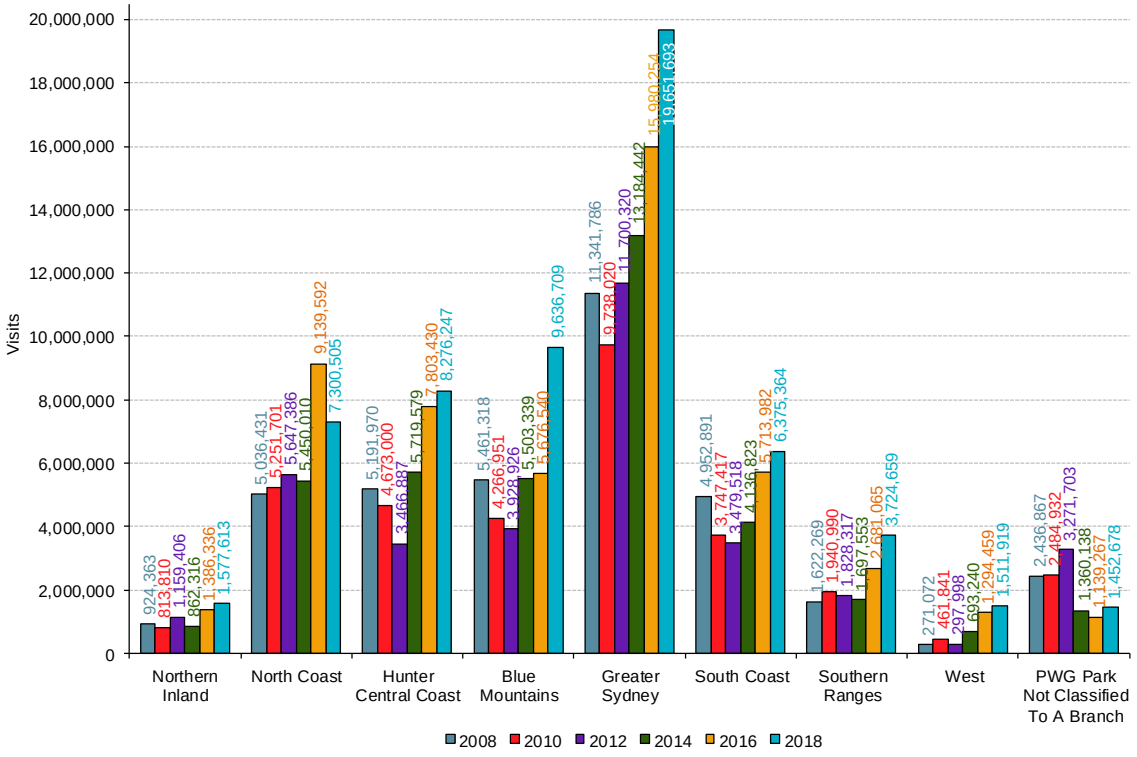
[8] Results provided in the graph only include visitation estimates for regions *surveyed*, so the overall visitation estimate shown above is 37,238,965 for 2008; 33,378,662 for 2010; 34,780,462 for 2012; 38,607,440 for 2014; 50,804,396 for 2016; and 59,507,428 for 2018 (i.e. the additional 688,651 visits in 2008; 464,964 visits in 2010; 715,163 visits in 2012; 559,930 visits in 2014; 857,548 visits in 2016; and 728,581visits in 2018) are estimate for regions of Australia not included in the survey.

1.3.6 NPWS Park Visitation by NPWS Branch

In relation to absolute numbers, Chart E shows that in 2018, visits to parks increased for six of the eight Branches (significantly so for Northern Inland, Blue Mountains, Greater Sydney and Southern Ranges Branches), with the exceptions being the North Coast and West Branches (significantly lower for the former). The largest proportional rises in visits since 2016 occurred for the Blue Mountains Branch, up 69.8% (5.7m 2016; 9.6m 2018), and Southern Ranges Branch, up 38.9% (2.7m 2016; 3.7m 2018). However the largest numerical rise in visits was for the Great Sydney Branch, increasing from 16.0m visits in 2016 to 19.7m visits in 2019 (a 23.0% increase). Visits to North Coast branch in 2018 fell by 20.1% (from 9.1m in 2016 to 7.3m in 2018).

When comparing proportional contribution to annual NPWS Park visits in the eight NPWS Branches, the contribution to overall visits from parks in the North Coast Branch fell from 18% in 2016 to 12% in 2018. Contribution to visitation increased for the Blue Mountains Branch, from 11% in 2016 to 16% in 2018.

Chart E: NPWS Annual Visitation by NPWS Branch[9]



Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

[9] 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 NPWS managed or not. If they classified the park as being NPWS managed, the park could not be categorised to a NPWS Branch or NPWS Region because the actual location of the park could not be determined. Respondents that were imputed as visiting a NPWS Park also fell into this category.

1.4 Activities Undertaken on Most Recent Park Visit

Respondents who had visited a NPWS Park were asked what activities they undertook on their *most recent* visit. As shown in Table B, in 2018 the top four activities undertaken remained unchanged. Walking activities increase in 2018 to their highest level recorded (64%), as did water-based recreation (21%) and touring and sightseeing (14%). Picnicking and dining activities maintained 2014 and 2016 levels in 2018 (14%), but have not returned to the high of 16% observed in 2010 and 2012.

Table B: Top Four Activities Undertaken on Most Recent Park Visits

	2008	2010	2012	2014	2016	2018
Walking	54%	50%	56%	49%	63%	64%
Water-based Activities	17%	18%	19%	20%	17%	21%
Picnicking and Dining	14%	16%	16%	11%	14%	14%
Touring and Sightseeing	12%	10%	9%	13%	13%	14%

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

In 2018 a new question was asked in relation to those people who undertook walking, bushwalking or walking the dog.

> *For how long did you [walk or bushwalk / walk the dog] on this visit? Less than an hour; up to half a day; up to one day; a multi-day walk*

Overall, just over one third of those undertaking walking activities walked for *less than an hour* (35%), while more than half walked for *up to half a day* (approximately 4 hours – 56%). Only 4% walked for *up to one day* (approximately 8 hours), while just 2% went on a *multi-day walk*.

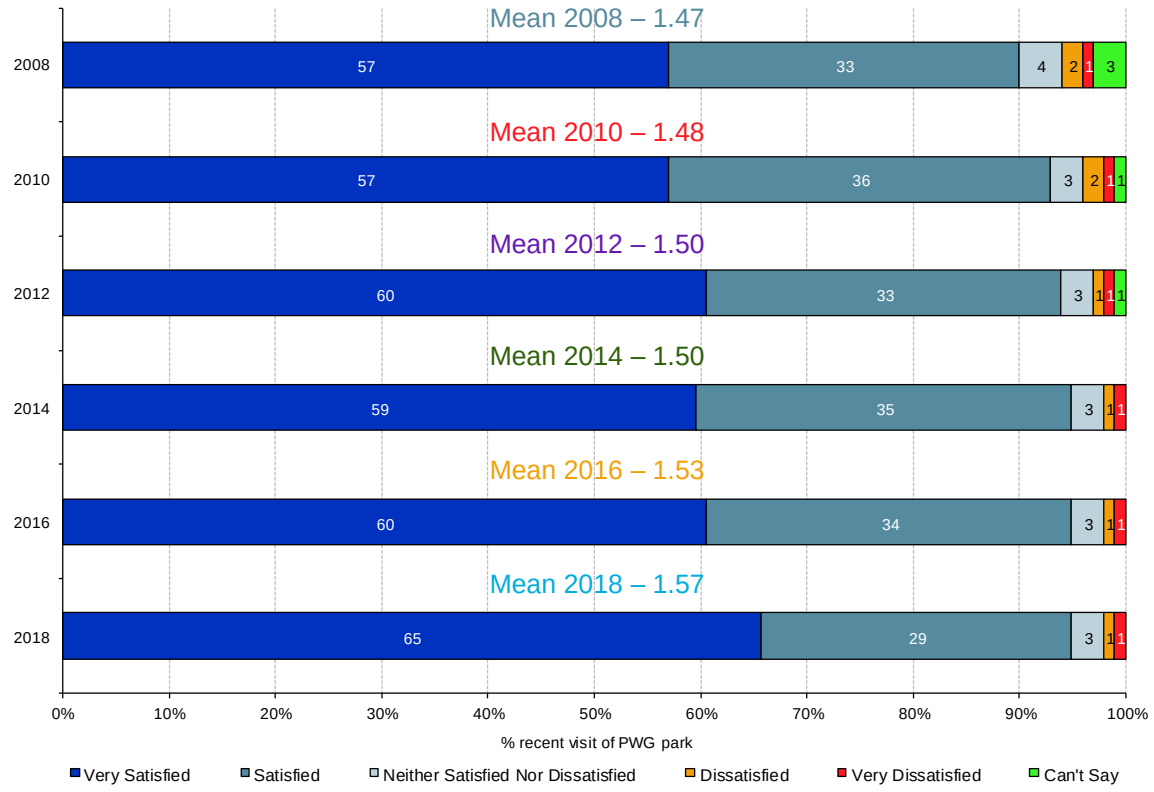
1.5 Satisfaction with the Experience of Most Recent Park Visit

Respondents who had visited a NPWS Park were asked to give an overall satisfaction rating based on the experience of their *most recent visit*. Chart 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 and 2016 that proportion increased to 60%, and dipped slightly to 59% in 2014. In 2018 the proportion *very satisfied* increased to its highest level recorded at 65%. In 2008, 90% of recent visitors to NPWS Parks were *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 further to 94% in 2014, 2016 and 2018. The 2008 figure is significantly lower than the proportion attained in all subsequent years.

A mean satisfaction score has been calculated for satisfaction with their visit to a NPWS Park (see Section 8.8 for a calculation of the mean). The closer the mean score is 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 scores rose slightly to 1.50. In 2016 the score rose again to 1.53. In 2018, the mean score increased further to 1.57. So satisfaction with one's most recent

park visit experience is very high and is increasing slowly over time. In fact, the 2018 mean satisfaction score is significantly higher than the 2008 to 2014 mean scores.

Chart F: Satisfaction with Experience on Most Recent NPWS Park Visit



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

Charts G and H show that in 2018 only two Branches increased their *overall satisfaction* score – South Coast Branch (95%) and Southern Ranges Branch (97%).

The increasing trend in *overall satisfaction* over time ceased in 2018 for the North Coast Branch and continued to decline for the Greater Sydney Branch (where the trend first ceased in 2016). However, there appears to be a general increasing trend in *overall satisfaction* observed for the South Coast Branch.

Mean scores for South Coast Branch (1.58), Hunter Central Coast Branch (1.56) and Southern Ranges Branch (1.67) were the highest recorded. However, the *mean score* for the West Branch in 2018 was significantly low (1.30).

Chart G: Satisfaction with Most Recent NPWS Park Visit by Branch (Part A)

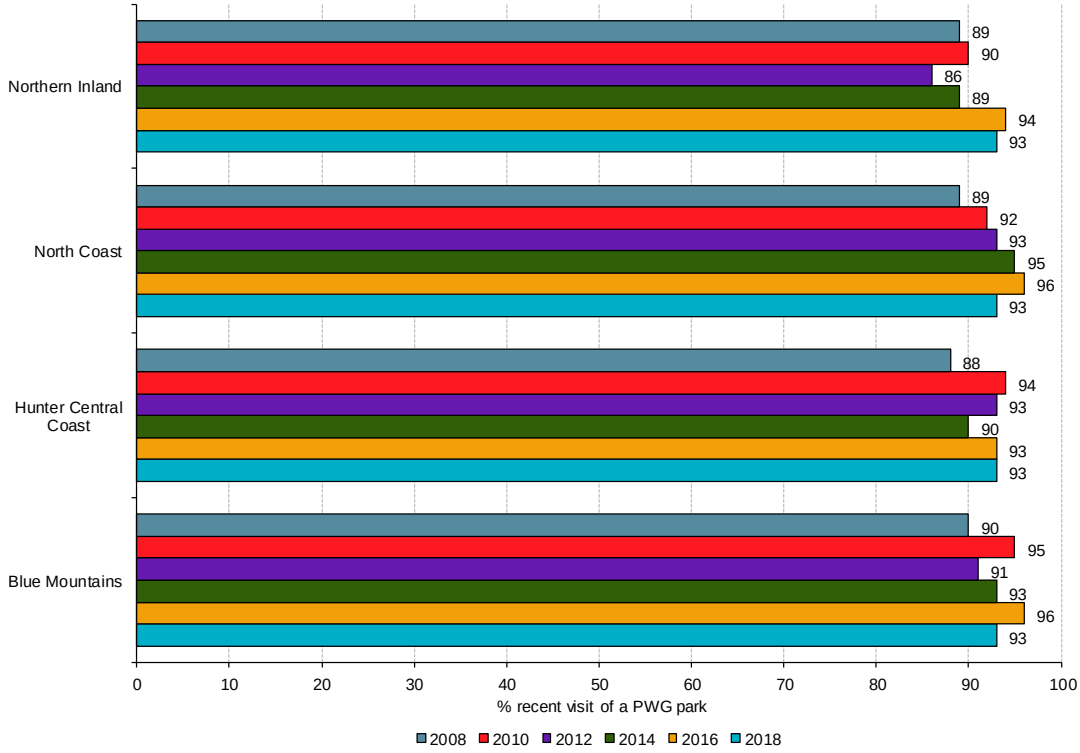
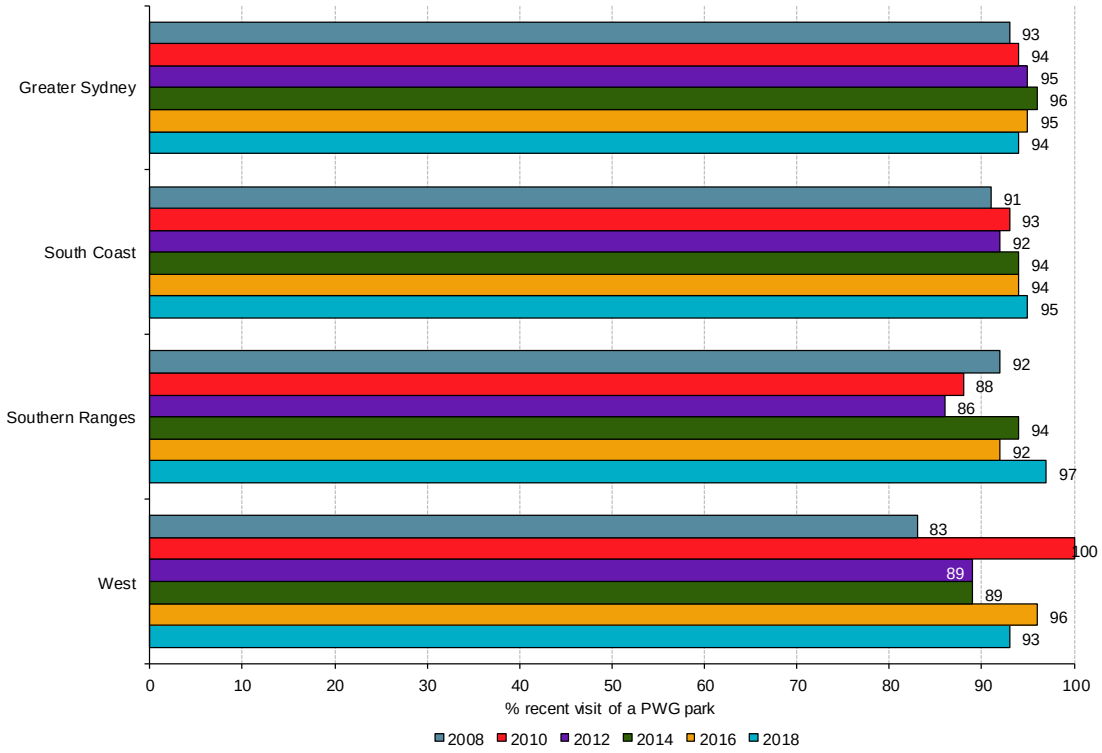


Chart H: Satisfaction with Most Recent NPWS Park Visit by Branch (Part B)



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

1.6 Duration of Visit and Type of Trip to a NPWS Park in 2018

In 2018 NPWS park visitors were asked a new question for each different NPWS park they visited in relation to their *duration* of visit:

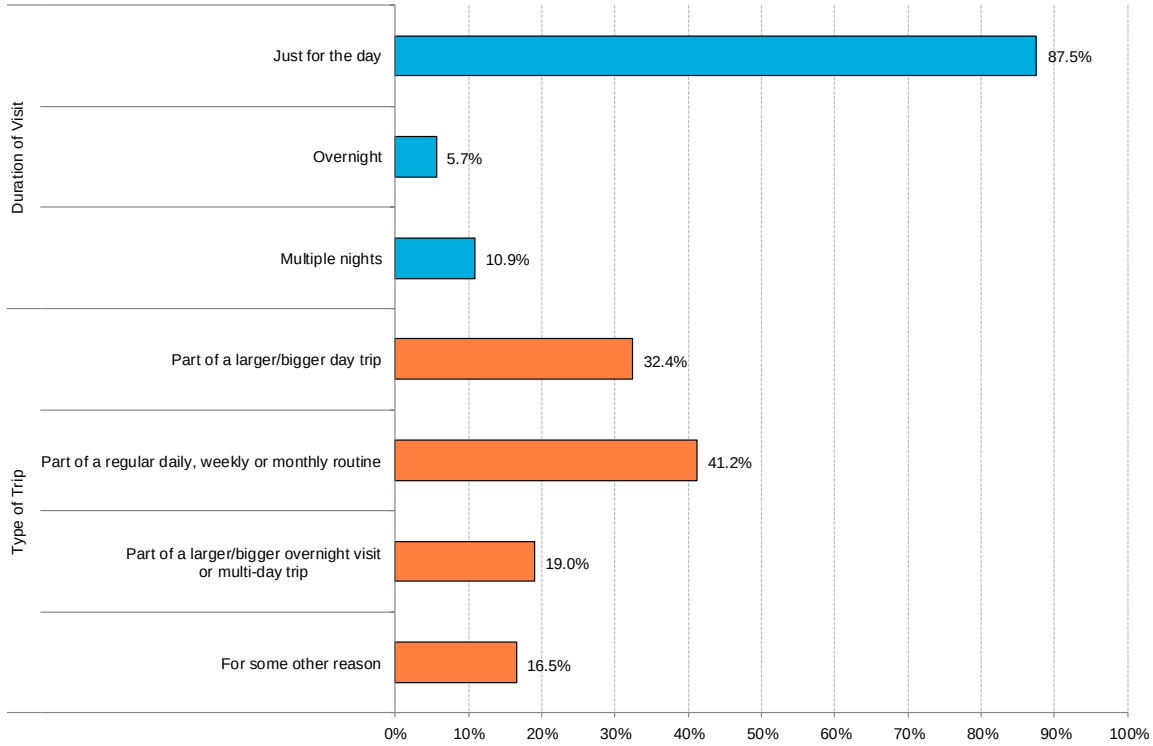
> *On this occasion was your visit to this park just for the day or did you stay in it overnight or for multiple nights?*

Chart I shows that almost nine in ten visits to NPWS parks were *just for the day* (87.5%). One in six visits were either *overnight* (5.7%) or for *multiple nights* (10.9%).

The inclusion of this question resulted in a modification in the question wording for the *type* of trip the visitor was on when visiting a NPWS park. As a result, data collected in 2016 could not be compared with 2018 figures. Around one third of NPWS park visitors in 2018 included their park visit as *part of a larger/bigger day trip* (32.4%), while four in ten considered it to be part of their *regular routine* (41.2%). Almost one in five coupled their park visit with a *larger/bigger overnight visit or multi-day trip* (19.0%), while one in six claimed the park visit was for *some other reason* (16.5%).

Almost all of those who visited a NPWS park as part of a larger/bigger day trip visited the park *just for the day* (99.6%). Nine in ten of those who visited a NPWS park as part of a regular routine also visited *just for the day* (91.1%), though small proportions visited *overnight* (5.9%) or for *multiple nights* (7.0%) as part of this routine. For those who visited a NPWS park as part of a larger/bigger overnight visit or multi-day trip six in ten still visited the park *just for the day* (59.7%), while one in eight visited *overnight* (12.8%) and almost four in ten visited for *multiple nights* (38.3%).

Chart I: Duration of Visit and Type of Trip to a NPWS Park



Source: NPWS Parks Visitor Surveys 2018
Base: n=1,741

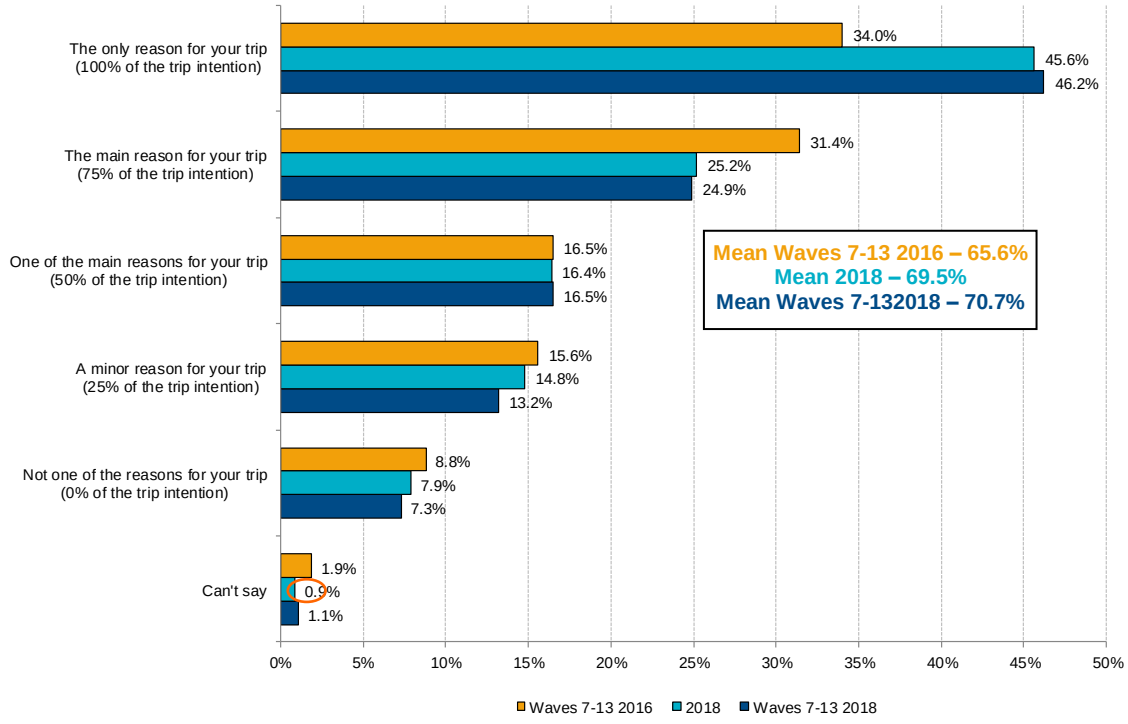
1.7 Role of Park Visit in the Overall Travel Decision

The role of the park visit in one's overall travel decision was first asked in waves 7-13 of the 2016 survey. Chart J shows that almost half of NPWS park visitors stated that the *only reason* for their trip was to visit the NPWS park (45.6%), significantly higher than the result obtained for waves 7-13 in 2016 (34.0%).

Because of the higher proportion nominating their NPWS park visit as their *only reason* for their trip in 2018 than in 2016, the mean score derived in 2018 is significantly higher than the 2016 mean (69.5% c.f. 65.6%).

The increase in the proportion of NPWS park visitors claiming that their visit from 2016 to 2018 was the *only reason* for their trip was not evident across all NPWS Management Branches. The lift was only marked for visitors to parks in the Hunter Central Coast (35.5% to 48.4%), Blue Mountains (37.2% to 47.9%), Greater Sydney (38.7% to 55.6%), South Coast (15.9% to 39.3% and West Branches (20.3% to 45.2%).

Chart J: Role of NPWS Park Visit in Trip Decision



Source: NPWS Parks Visitor Surveys 2016 – 2018
Base: Wave 7-13 2016 n=849, 2018 n=1,741; waves 7-13 2018 n=869

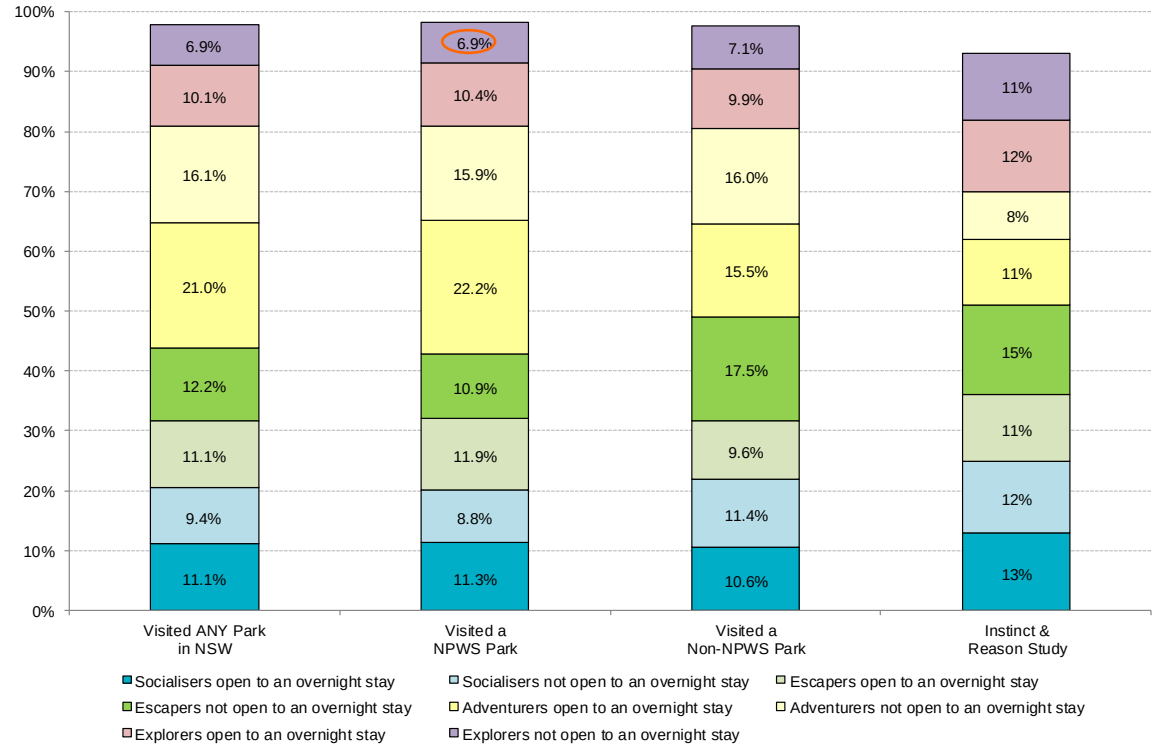
1.8 Park Visitor Needs Base Segmentation

In 2016 the research agency Instinct and Reason undertook a needs-based segmentation for OEH. Originally a four-segment model was devised and then enhanced by breaking down the four segments based on whether people were open or not open to an overnight stay in a national park. For the 2018 NSW Parks Visitor Survey, segmentation questions were added to enable a comparison of park visitors with the general population.

Adventurers open to an overnight stay at a NSW National Park have significantly higher proportions amongst NPWS park visitors than in the original segmentation (22.2% NPWS visitors; 11% Instinct and Reason study). So too are *Adventurers not open* to an overnight stay (15.9% NPWS visitors; 8% for the Instinct and Reason study), as can be seen in Chart K.

Based on the original segmentation, NPWS park visitors would therefore more likely to be (a) motivated by cultural and educational experiences, wanting family friendly activities; or alternatively (b) needing parks to deliver experiences that really engage tweens (11-14 year olds) and encourage their parents to take them.

Chart 1: Core Sub-segments

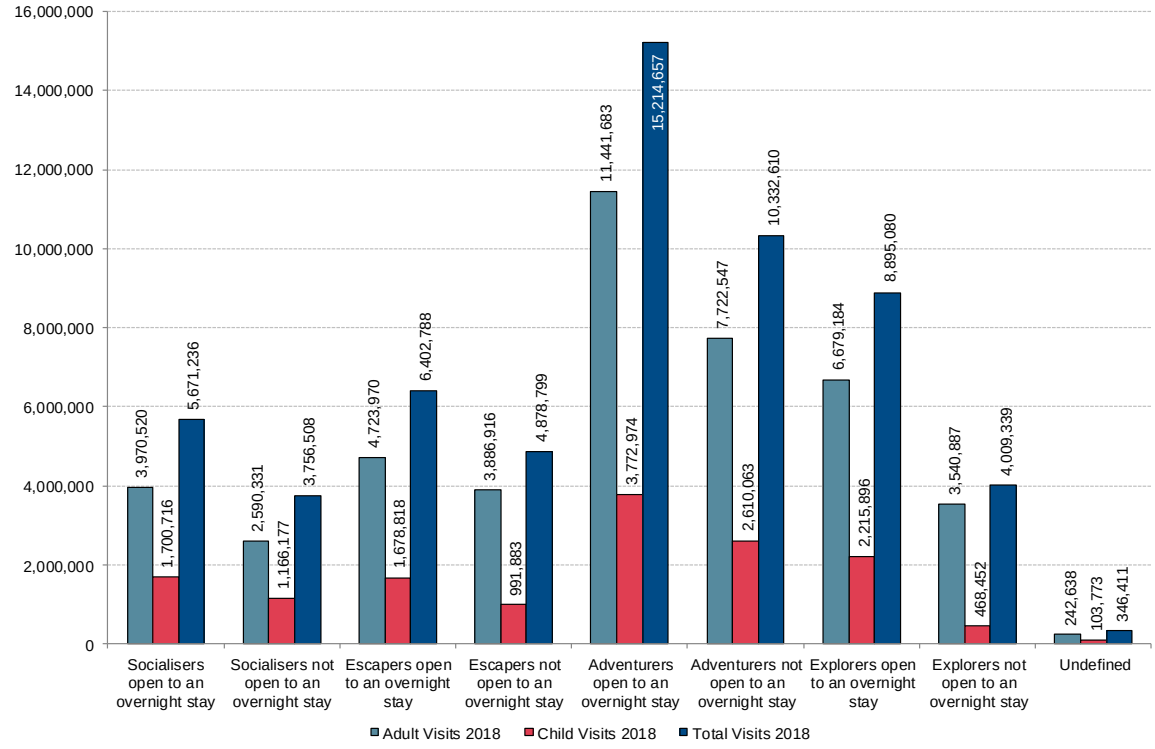


Source: NPWS Parks Visitor Surveys 2018 – Visited a park in NSW in the last 4 weeks; Instinct & Reason Need-based Segmentation
Base: NPWS Parks Visitor Survey 2018 - n=2,094; Instinct and Reason Study – n=2,542

Of the total 59.5m NPWS park visits made in 2018 from survey regions (i.e. excluding visits from non-survey regions) *Adventurers open to an overnight stay* contribute 15.2m, comprised of 11.4m adult visits and 3.8m child visits (Chart L). The second highest contribution to visits was from *Adventurers not open to an overnight stay* with 10.3m visits (7.7m adult visits; 2.6m child visits). The

third most visits came from *Explorers open to an overnight stay*, contributing 8.9m visits (6.7m child visits; 2.2m child visits). These three segments contributed almost 60% of all visits to NPWS parks in 2018 (57.9%).

Chart L: NPWS Visits by Sub-Segment



Source: NPWS Parks Visitor Surveys 2018 – Visited a NPWS park in the last 4 weeks
Base: n=1,687

Adventures open to an overnight stay contribute a greater proportion of visits than they represent among visitors (25.6% c.f. 22.2%), which means that they average more visits to parks than does the typical visitor (i.e. 3.20 visits c.f. 2.79 visits). *Adventurers not open to an overnight stay* also contribute more to visits than they represent among visitors (17.4% c.f. 15.9%) averaging 3.06 visits. *Explorers open to an overnight stay* also over-contribute to visits compared with their representation among visitors (14.9% c.f. 10.4%) averaging 3.80 visits.

Adventurers open to an overnight stay remain the major sub-segment across all NPWS Branches, with significantly high proportions evident for the Southern Ranges (35.3%) and North Coast (28.7%) Branches. Significantly high proportions were also evident for other sub-segments, such as *Escapers open to an overnight stay* in the South Coast Branch (19.0%) and *Explorers open to an overnight stay* in the Hunter Central Coast Branch (15.5%).

2. Introduction

2.1 Background

The Office of Environment and Heritage (OEH), commissioned Roy Morgan to repeat a thirteen wave telephone survey previously conducted in 2008, 2010, 2012, 2014 and 2016 to monitor and estimate the annual number of visits to NSW parks in 2018. It should be noted that changes in the machinery of NSW Government Agencies came into effect on 1 July 2019. Under these changes the National Parks and Wildlife Service is a Directorate within the Department of Planning, Industry and Environment which itself is part of the Environment, Energy and Science Group

The National Parks and Wildlife Service (NPWS) Directorate within the Department of Planning, Industry and Environment (DPIE) is responsible for ensuring the conservation of protected native flora and fauna within the parks and reserves system and promoting community use, awareness, understanding and appreciation of natural and cultural heritage.

At present there are over 870 parks and reserves in New South Wales for which NPWS has responsibility, covering wilderness areas, national parks, nature reserves, state conservation areas, and regional parks.

DPIE through NPWS, 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. However, until 2008 estimates of the number of visits to parks and reserves managed by NPWS had been determined in an *ad hoc* manner through a mixture of visitor use data provided by individual park managers, 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 to provide a methodological approach to more precisely measuring NPWS park visitation. In 2008, a slightly modified approach from the pilot was used to estimate annual visitation for 2008 and 2010. Since 2012 the methodology was again modified slightly to more accurately estimate NPWS park visitation for 2012, 2014, 2016 and 2018 and identify any trends in visitation since 2008.

2.2 Objectives of This Study

The main objective of the 2018 study was to provide a *reliable* estimate of annual NPWS park visitation (i.e. the total number of annual visits) for 2018, to be used to compare with results obtained in previous years (i.e. 2008, 2010, 2012, 2014 and 2016). Additional objectives of this study were 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 (NPWS) managed parks in 2018 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 NPWS parks and compare visits to NPWS managed parks and activities undertaken by different

demographic groups. For 2018, this included measuring the length of walking activities at the most recent visited NPWS park;
3. Obtain a measure of overall satisfaction with the NPWS park visit experience;
4. Obtain measures of duration of park visit, type of trip taken when the park visit was made and role of the park visit in the overall decision to travel;
5. Replicate the segmentation exercise undertaken by Instinct and Reason and determine any differences evident amongst park visitors;
6. Compare 2018 survey findings with results from previous years to identify any statistically significant changes; and
7. Identify any potential causes or 'triggers' that influence park visitation.

The three major research tasks required for the 2018 study were 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 southeast 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 would 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 NPWS 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 NPWS managed parks (i.e. total visits, adult visits, child visits, visits by survey wave and region of origin, visits to each NPWS Branch and Region and average number of visits per visitor) and confidence limits for the overall estimates;
    - 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 the level of satisfaction with one's most recent park visit;
    - Determine measures of duration of park visit, type of trip taken when the park visit was made and role of the park visit in the overall decision to travel;
    - Conduct a segmentation of park visitors;
    - Identify statistically significant differences in number of visits, demographic groups, participation in activities and satisfaction between 2008 and 2018; and
    - Investigate any potential influences on park visitation.

3. Methodology

This study was conducted using Roy Morgan'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 2018, with the thirteenth and final wave concluded on 7 December 2018.

In order to be able to compare 2018 data with 2008, 2010, 2012, 2014 and 2016 results on a wave by wave basis, survey waves for 2018 were scheduled to commence as close as possible to the same week in which waves were conducted in previous years.

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 as 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 Holiday Tracking Survey (HTS) data. Other regions of Australia not surveyed have had NPWS 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, 2012, 2014 and 2016 surveys, 2018 quotas (Table 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 that year). A total of 1,200 interviews were to be conducted each wave.

Table 1: Quotas Set per Wave

Age by Sex Quotas 2018	Sydney	Rem. NSW	ACT	Melbourne	Rem. VIC	Brisbane	Rem. SE QLD
Male 18-24 years	16	10	14	13	5	10	10
Male 25-34 years	26	14	16	21	7	15	17
Male 35-49 years	33	22	20	26	12	19	19
Male 50+ years	47	51	22	37	25	29	29
Female 18-24 years	15	12	8	13	5	10	9
Female 25-34 years	27	14	18	22	7	15	16
Female 35-49 years	34	23	23	27	12	21	17
Female 50+ years	52	54	29	41	27	31	33
TOTAL	**250**	**200**	**150**	**200**	**100**	**150**	**150**

Source: ABS: Census Population Estimates 2018

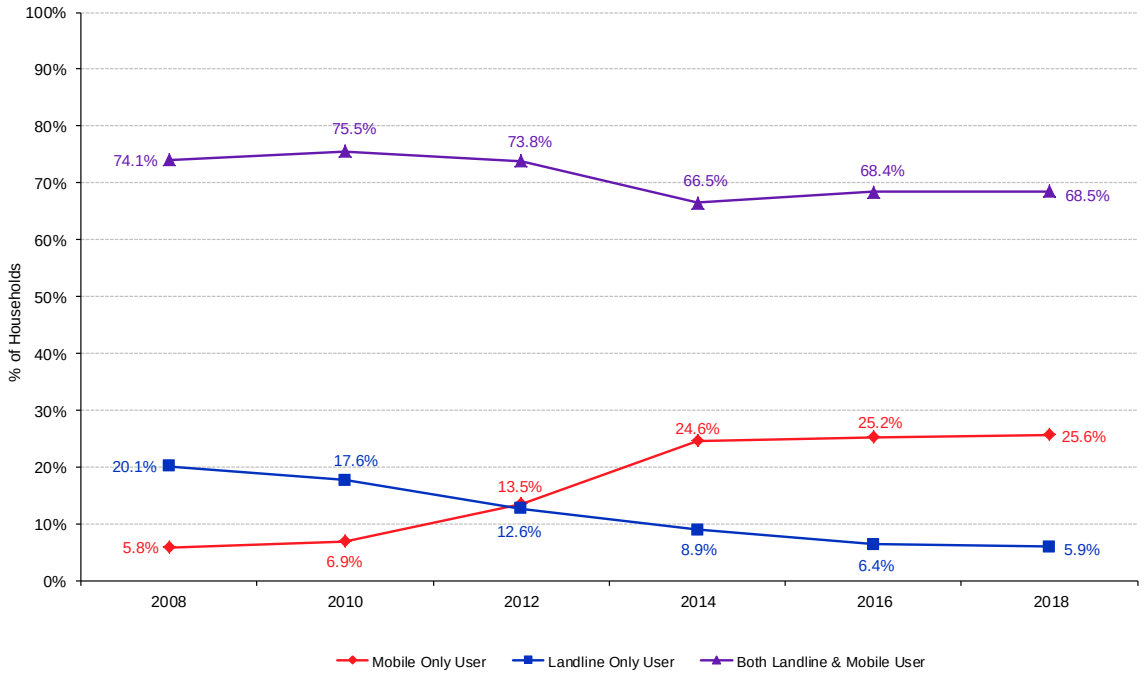
3.1.1 New Sampling Frame Used in 2012, 2014, 2016 and 2018

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[10] (EWP). In addition, non-business mobile phone sample was also drawn from the EWP in order to include households which may have 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 was 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 with 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 (e.g. Skype, VoIP, and Google Voice etc.). Chart 1 shows that 25.6% of the households in the survey area come from solely mobile households (i.e. have no fixed landlines). A small proportion of these numbers are listed in the White Pages.

Chart 1: Phone Status by Year – Survey Area



Source: Roy Morgan Single Source – Proportion of households in the Survey area

[10] 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).

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, the sampling frame for all surveys from 2012 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).

In 2008 and 2010, approximately 12% of phone numbers called were mobile numbers. In 2012, using RDD and in an attempt to obtain a sufficiently large proportion of mobile only households (in order to appropriately weight the data by phone status) around 22% of all calls were made to mobile numbers. In 2014, the proportion of mobile numbers called increased to 23%. However, the overall response rate fell from 14.6% in 2012 to 12.6% in 2014, while response rates for mobile numbers called remained comparable (19.2% - 2012; 18.5% - 2014). Hence the response rate for landline numbers fell from 2012 to 2014 (from 13.5% to 11.1%).

It was therefore agreed between Roy Morgan and OEH to increase the proportion of mobiles called in 2016 in order to (1) increase the overall response rate (which it did – up to 18.1% in 2016); and (2) to ensure that the proportion of mobile only households *surveyed* was more in line with survey area household population (which it was – 22.3% survey sample: 21.3% survey area household population). The proportion of mobile phone numbers called in 2018 was again designed as per the 2016 agreement, with the proportion of mobile only households surveyed being 29.3% compared with the proportion of survey area households at 25.6%. Therefore, in 2018 a slight over-sample of mobile only households was delivered even though far fewer mobile numbers were called in 2018 compared with 2016 (39.6% - 2018: 53.3%). This essentially means that over time the incidence of obtaining interviews from landline numbers is declining, while the incidence of obtaining interviews from mobile numbers is increasing).

As moving to RDD was a departure from the survey methodology used in 2008 and 2010 there was some potential that the sample surveyed would 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: Q: *Do you live in a home that also has a landline telephone?*

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

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

Similarly, this was used to determine whether respondents called on landlines had a significantly greater probability of being selected for the survey because they also had a mobile phone.

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

As there was already a question on the number of children in the household, the above question, in conjunction with the existing question on the number of children, allowed for 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 of day. Appointments were made when the eligible respondent was unavailable at the time of call, thereby allowing them to be interviewed at a more suitable time.

3.1.2 Survey Waves

Interviews were conducted every four weeks starting with wave 1 of the 2018 survey commencing on January 2, 2018, with the survey asking for visitation to parks within the *preceding* 4 weeks. Consequently, park visitation figures for each wave fluctuate depending on the types of events that have occurred in the 4 weeks prior to the survey. 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 NPWS managed parks).

In order to understand some of the possible reasons why visitation to NPWS parks fluctuate each wave, Table 2 outlines the dates of interviewing for survey waves 1-13 in all previous survey years, 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[11], in total and by state of respondent origin.

Please note that all holiday periods listed for 2018 correspond to the same holiday periods in previous years, with the following exceptions:

- Easter fell in the wave 4 in 2008 compared to wave 5 in 2010, 2012 and 2014, while Easter spanned both waves 4 and 5 in 2016 and 2018;
- April school holidays in spanned wave 4 and wave 5 in VIC and SE QLD in 2016 and 2018, and spanned wave 5 and wave 6 in ACT in 2016;
- June school holidays in VIC and SE QLD fell across waves 7 and 8 in 2008 and 2010, but only one wave in 2012 and 2014. In 2016 the June school holidays fell across waves 7 and 8 in SE QLD only. In 2018 the June school holidays fell across waves 8 and 9 for NSW and ACT;
- In 2012 QLD 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 in 2012 (i.e. two Queen's Birthday holidays in the same year - 2012);
- In 2018 the QLD Show Day spanned both waves 9 and 10;
- Labour Day in QLD was shifted from May to October from 2013-2015 (so fell in wave 11 in 2014), and was then moved back to May in 2016, where is panned both waves 5 and 6;

[11] The visitation estimate does not include visits from non-surveyed states or regions within states.

- In 2018 the VIC Melbourne Cup Holiday spanned both waves 12 and 13;
- In 2016 the December school holidays in QLD started in Wave 13; 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 and 2016. This holiday was replaced by a Reconciliation Day public holiday in 2018, which fell in wave 7.

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, 2014, 2106 and 2018 surveys. This is because the 2010, 2014, 2016 and 2018 survey waves correspond to the calendar year, while the visitation period commences at the beginning of summer 2009-10, 2013-14, 2015-16 and 2017-18 making analysis by season and time of the year more easily understandable.

Table 2: Survey Waves and School/Holiday Incidence - Summary

2017-18							Corresponding Wave			
Wave	Visitation Period[1]	Survey Period[2]	NSW	VIC	ACT	SE QLD	2008 -2009	2009 -2010	2012 -2013	2013 -2014
Wave 1	9 Dec 2017 - 10 Jan 2018	2 Jan- 9 Jan 2018	School Holidays Christmas Boxing Day New Year	School Holidays Christmas Boxing Day New Year	School Holidays Christmas Boxing Day New Year	School Holidays Christmas Boxing Day New Year	Wave 12	Wave 1	Wave 11	Wave 1
	2018 Visits	***6,002,230***	***2,951,505***	***1,452,421***	***464,433***	***1,133,870***				
	2016 Visits	*4,920,318*	*3,835,001*	*632,578*	*54,994*	*397,744*				
	2014 Visits	4,515,130	4,237,099	128,001	39,916	110,114				
	2012 Visits	4,461,477	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				
Wave 2	2 Jan- 2 Feb 2018	29 Jan- 2 Feb 2018	School Holidays Australia Day	School Holidays Australia Day	School Holidays Australia Day	School Holidays Australia Day	Wave 13	Wave 2	Wave 12	Wave 2
	2018 Visits	***5,035,343***	***4,220,736***	***406,304***	***107,335***	***300,967***				
	2016 Visits	*5,414,949*	*4,670,389*	*433,251*	*96,440*	*214,869*				
	2014 Visits	3,951,229	3,580,875	58,848	74,985	236,522				
	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				
Wave 3	30 Jan- 2 Mar 2018	26 Feb- 2 Mar 2018					Wave 1	Wave 3	Wave 13	Wave 3
	2018 Visits	***3,969,277***	***3,791,777***	***42,296***	***42,720***	***92,483***				
	2016 Visits	*2,717,613*	*2,495,693*	*91,463*	*38,438*	*92,019*				
	2014 Visits	2,813,559	2,631,359	62,289	38,274	81,637				
	2012 Visits	3,182,932	2,943,245	80,831	33,931	124,925				
	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				

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

1. The period in which a respondent could have visited a park within the last 4 weeks in each survey wave.
2. The period in which interviews were conducted.

Table 2: Survey Waves and School/Holiday Incidence - Summary (continued)

2017-18							Corresponding Wave			
Wave	Visitation Period[1]	Survey Period[2]	NSW	VIC	ACT	SE QLD	2008 -2009	2009 -2010	2012 -2013	2013 -2014
Wave 4	27 Feb- 5 Apr 2018	26 Mar- 5 Apr 2018	Easter 2008, 2016, 2018	School Holidays 2016, 2018 Labour Day Easter 2008, 2016, 2018	Canberra Day Easter 2008, 2016, 2018	School Holidays 2016, 2018 Easter 2008, 2016, 2018	Wave 2	Wave 4	Wave 1	Wave 4
	2018 Visits	***4,235,344***	***3,699,292***	***438,554***	***17,969***	***79,529***				
	2016 Visits	*2,934,895*	*2,552,565*	*234,963*	*28,329*	*119,038*				
	2014 Visits	2,645,227	2,354,217	158,142	41,312	91,556				
	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 5	27 Mar- 5 May 2018	23 Apr- 30 Apr 2018	Easter 2010, 2012, 2014, 2016, 2018 School Holidays 2008-2018 Anzac Day	Easter 2010, 2012, 2014, 2016, 2018 School Holidays 2008-2018 Anzac Day	Easter 2010, 2012, 2014, 2016, 2018 School Holidays 2008-2018 Anzac Day	Easter 2010, 2012, 2014, 2016, 2018 School Holidays 2008-2018 Labour Day 2016 Anzac Day	Wave 3	Wave 5	Wave 2	Wave 5
	2018 Visits	***5,707,885***	***5,457,700***	***167,063***	***21,626***	***61,496***				
	2016 Visits	*3,575,739*	*3,251,048*	*155,204*	*74,886*	*94,600*				
	2014 Visits	3,442,937	3,042,305	238,017	54,307	108,308				
	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				
Wave 6	28 Apr- 29 May 2018	21 May- 28 May 2018	School Holidays 2018		School Holidays 2008-2018	Labour Day 2008, 2010, 2012, 2016, 2018	Wave 4	Wave 6	Wave 3	Wave 6
	2018 Visits	***4,380,521***	***4,183,200***	***82,659***	***33,319***	***81,343***				
	2016 Visits	*3,705,816*	*3,590,963*	*7,456*	*59,024*	*48,373*				
	2014 Visits	3,409,397	3,232,670	53,608	76,650	46,469				
	2012 Visits	2,611,996	2,467,454	53,903	32,098	58,541				
	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	22 May- 24 Jun 2018	18 Jun- 24 Jun 2018	Queen's B'day	Queen's B'day School Holidays 2008 & 2010	Queen's B'day Reconcilliation Day 2018	Queen's B'day 2008, 2010 & 2012 School Holidays 2008, 2010, 2016	Wave 5	Wave 7	Wave 4	Wave 7
	2018 Visits	***5,509,387***	***5,258,627***	***100,757***	***36,977***	***113,026***				
	2016 Visits	*2,701,723*	*2,245,699*	*301,278*	*30,609*	*124,136*				
	2014 Visits	2,361,060	2,201,009	85,100	51,061	23,889				
	2012 Visits	2,082,765	1,953,047	82,411	36,971	10,336				
	2010 Visits	2,863,064	2,457,645	114,768	74,755	215,897				
	2008 Visits	2,349,128	2,197,567	40,655	48,525	62,381				
Wave 8	19 Jun- 20 Jul 2018	16 Jul- 20 Jul 2018	School Holidays 2008-2018	School Holidays 2008-2018	School Holidays 2008-2018	School Holidays 2008-2018	Wave 6	Wave 8	Wave 5	Wave 8
	2018 Visits	***4,022,474***	***3,808,886***	***94,150***	***23,849***	***95,588***				
	2016 Visits	*4,322,755*	*4,084,236*	*34,302*	*56,640*	*147,577*				
	2014 Visits	2,483,826	2,277,874	22,309	94,739	88,903				
	2012 Visits	2,000,977	1,792,581	126,447	43,560	38,388				
	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				

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

1. The period in which a respondent could have visited a park within the last 4 weeks in each survey wave.
2. The period in which interviews were conducted.

Table 2: Survey Waves and School/Holiday Incidence – Summary (continued)

2017-18							Corresponding Wave			
Wave	Visitation Period[1]	Survey Period[2]	NSW	VIC	ACT	SE QLD	2008 -2009	2009 -2010	2012 -2013	2013 -2014
Wave 9	17 Jul-17 Aug 2018	13 Aug-17 Aug 2018	School Holidays 2018		School Holidays 2018	Show Day 2008-2018	Wave 7	Wave 9	Wave 6	Wave 9
	2018 Visits									
	2016 Visits	*3,728,526*	*3,403,226*	*145,746*	*72,976*	*106,577*				
	2014 Visits	1,903,730	1,581,501	19,618	28,951	273,659				
	2012 Visits	2,559,654	2,437,717	14,841	47,908	59,187				
	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				
Wave 10	14 Aug-16 Sep 2018	10 Sep-16 Sep 2018		School Holidays 2016		Show Day 2018	Wave 8	Wave 10	Wave 7	Wave 10
	2018 Visits	***4,952,020***	***4,818,099***	***69,639***	***48,202***	***16,080***				
	2016 Visits	*3,745,625*	*3,548,257*	*98,289*	*43,995*	*55,084*				
	2014 Visits	2,250,668	2,078,805	76,250	37,972	58,361				
	2012 Visits	1,924,190	1,808,195	21,133	54,635	40,227				
	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				
Wave 11	11 Sep-12 Oct 2018	8 Oct-12 Oct 2018	School Holidays 2008-2018 Labour Day	School Holidays 2008-2018 Grand Final Holiday 2016, 2018	School Holidays 2008-2018 Labour Day Family & Community Day 2014, 2016, 2018	School Holidays 2008-2018	Wave 9	Wave 11	Wave 8	Wave 11
	2018 Visits	***4,783,925***	***4,140,414***	***164,292***	***44,527***	***434,692***				
	2016 Visits	*3,521,562*	*2,564,891*	*414,086*	*71,557*	*471,027*				
	2014 Visits	2,776,295	2,624,740	77,746	20,043	53,766				
	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				
Wave 12	9 Oct-9 Nov 2018	5 Nov-9 Nov 2018	School Holidays 2018	Melbourne Cup	School Holidays 2018 Family & Community Day 2012	Queen's Birthday 2012, 2014, 2016, 2018	Wave 10	Wave 12	Wave 9	Wave 12
	2018 Visits	***3,134,083***	***2,990,889***	***49,109***	***18,113***	***75,972***				
	2016 Visits	*4,587,809*	*4,406,104*	*28,056*	*36,231*	*117,418*				
	2014 Visits	3,090,249	2,776,695	208,509	15,890	89,156				
	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				
Wave 13	6 Nov-7 Dec 2018	3 Dec-7 Dec 2018		Melbourne Cup		School Holidays 2016	Wave 11	Wave 13	Wave 10	Wave 13
	2018 Visits	***4,014,529***	***3,820,034***	***123,920***	***35,382***	***35,193***				
	2016 Visits	*4,937,630*	*4,623,419*	*165,698*	*15,013*	*133,500*				
	2014 Visits	2,964,132	2,839,488	34,378	18,800	71,466				
	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				

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

1. The period in which a respondent could have visited a park within the last 4 weeks in each survey wave.
2. The period in which interviews were conducted.

3.2 Questionnaire Design

As the key objective of the survey was to estimate NSW NPWS 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.

3.2.1 Park Visitation Questions

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

To estimate NPWS Park visitation, the questionnaire captures the NPWS Park most recently visited, and if more than one NPWS Park was visited, up to a further four NPWS Parks. All parks nominated are 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 recalibrate the visitation time period, a comparable time period as that used for the Roy Morgan Holiday Tracking Survey was employed.

3.2.2 Qualifying Questions and HTS

Prior to asking specifically about visitation to NSW NPWS Parks, two questions were asked about interstate travel to NSW. These questions were taken from the Roy Morgan Holiday Tracking Survey (HTS), and were used (post field) as a means of linking datasets produced from this survey to the HTS datasets to enable projection of visitation to NSW NPWS Parks from other regions not included in the sample (such as remainder QLD, NT, SA, TAS and WA). Please note that this question was asked of all survey participants, including those residing in NSW, in order to capture the proportion of NSW residence taking a holiday away from their usual place of residence within their home state.

> **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 the last 4 weeks, but did not stay overnight). Obtaining such data allowed for a more precise estimation of NPWS 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 respondent 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-NPWS 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 NPWS 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 (NPWS Managed or non-NPWS Managed) was established.

As the 2007 pilot survey indicated that people were sometimes unable to correctly distinguish between a NPWS managed or non-NPWS managed park, the survey was programmed in such a way so as to record as much detail as possible to minimise respondent error. This was done through the provision (by OEH) of comprehensive 'look-up' tables that listed:

- All NPWS Managed Parks and all known aliases used for each park;
- Non-NPWS Parks including state forests (and their associated aliases); and
- Names of parks which could be either NPWS Managed or non-NPWS Managed.

Programming the survey in such detail allowed for incorrect nominations of a NPWS Park or non-NPWS 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 NPWS managed, questions on the number of visits could be asked). It also took into consideration, not only the *official* name of the NPWS Park, but also any aliases, locality names or 'nick names' assigned to the park by locals.

As a number of NPWS managed parks and State Forests (non-NPWS 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 NPWS 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 following question:

> **Q:** *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 NPWS Park Visits

Once it was ascertained that the respondent had visited a NPWS 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 (including length of walk if they undertook walking activities);
- The level of satisfaction experienced whilst visiting the park they most recently visited;
- Duration of park visit;
- Type of trip taken when the park visit was made; and
- Role of the park visit in the overall decision to travel.

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 NPWS managed or not were asked, and if the park was identified as being NPWS managed, questions on the number of times visited, number of children visiting, visit duration, visit type and role of the park in the decision to travel were replicated.

Questions relating to activities and satisfaction were only asked about the NPWS 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 were 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 NPWS 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 (i.e. one visit per day over the 28 day visitation period). These 'check' questions were as follows:

> **Q:** *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, 2014, 2016 and 2018 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 New Questions Exploring NPWS Park Visitation

As of wave seven 2016 two new questions were asked of NPWS park visitors in relation to their the type of trip they were taking when visiting a NPWS park and the role of the park visit in the respondent's overall decision to travel, as follows:

> ***Q:*** *Was visiting this park part of your regular daily, weekly or monthly routine; part of a day trip; part of an overnight visit or multi-day trip; or for some other reason?*

> ***Q:*** *Was visiting this park the only reason for your trip (100% of the trip purpose or intention), the main reason for your trip (75% of the trip purpose or intention); one of the main reasons for your trip (50% of the trip purpose or intention), a minor reason for your trip (25% of the trip purpose or intention), or not one of the reasons for your trip (0% of the trip purpose or intention)?*

In 2018, an additional question on duration of park visit was added, as follows:

> ***Q:*** *On this occasion was your visit to this park just for the day or did you stay in it overnight or for multiple nights?*

1. *Just for the day*
2. *Overnight*
3. *Multiple nights*
4. *Can't say/can't recall*

As a consequence the question on type of trip take was revised, as follows:

> **Q:** *Was visiting this park part of your regular daily, weekly or monthly routine; part of a larger/bigger day trip; part of a larger/bigger overnight visit or multi-day trip; or for some other reason?*

Finally, an additional question was asked in 2018 from those respondents who indicated that they had undertaken walking or bushwalking activities on their most recent visit:

> **Q:** *For how long did you [walk or bushwalk/walk the dog] on this visit? Was it less than an hour; up to half a day (four hours approx.); up to one day (eight hours approx.); or a multi-day walk?*

3.2.6 Park Visitor Market Needs Based Segmentation Questions

In 2015 OEH commissioned an online survey to develop a needs based segmentation for park visitors and non-visitors. The segmentation was based on two questions (1) incidence of undertaking selected activities for leisure purposes in the last 12 months; and (2) likelihood of taking an overnight trip to a NSW National Park in the next 12 months. For the 2018 NSW Park Visitation Survey these questions were added to enable the segmentation to be created for NSW park visitors (i.e. the questions were not asked of non-visitors to NSW parks). In addition, because the likelihood of taking an overnight trip was included, OEH requested that a question on the likelihood of taking a day trip to a NSW national park be included. The questions asked were as follows:

Q: *Which of the following activities have you undertaken in the last 12 months FOR LEISURE PURPOSES? READ OUT*

1. *Education experiences of some form?*
2. *Aboriginal cultural experience?*
3. *Non-aboriginal small group heritage or cultural tours?*
4. *Experiences that provided you with a sense of balance/time out/health/ wellness?*
5. *Nature appreciation?*
6. *A low cost trip just to get out of home?*
7. *Taken visitors to visit a NSW national park?*
8. *Visited a natural place just to escape technology?*
9. *A family fun experience?*
10. *Exercising to get healthy?*
11. *Engaging with the arts in some way?*
12. *Attended an outdoor music/culture event?*
13. *Attended an outdoor sporting event*
14. *Stayed overnight in a special location*
15. *An extended walking trip?*

98. [DO NOT READ] NONE OF THESE
99. [DO NOT READ [CAN'T SAY/CAN'T RECALL

Q: *Using a scale of 1 to 10 where 1 means not at all likely and 10 means very likely, how likely are you to consider each of the following types of trips to a NSW national park IN THE NEXT 12 MONTHS? READ OUT*

A day trip to a NSW national park

RECORD NUMBER

99. CAN'T SAY/REFUSED

An overnight trip to a NSW national park

RECORD NUMBER

99. CAN'T SAY/REFUSED

3.2.7 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[12] 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 (NPWS or non NPWS) 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, marital status, 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 NPWS Parks.

[12] 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 January 2018 population of each survey region, based on their age and sex (population data was obtained from the Australian Bureau of Statistics' National Labour Force Survey: Catalogue 6291.0).

In 2014 the question on language usually spoken in the household included an 'other – specify' response to capture in more detail other languages spoken. As of wave seven 2016, two additional questions were asked of all survey respondents on annual household income, as follows:

> ***Q:*** *What is the approximate ANNUAL IINCOME of your household (i.e. all income earned before any expenses, including tax, are deducted)?*
>
> **IF CAN'T SAY OR PREFER NOT TO SAY HOUSEHOLD INCOME: Q:** *Well would you say that your approximate annual household income is $65,000 or less per year or more than $65,000 per year?*

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 was to set-up procedures to ensure that as many people as possible approached to complete the survey actually did complete it (i.e. minimise non-response). The sections following detail how this was achieved.

3.3.1 Response Rates

Table 3 highlights sample outcomes of the 2018 survey, and compares them with results from the 2008, 2010, 2012, 2014 and 2016 surveys, along with Roy Morgan Omnibus surveys conducted at similar times to the survey waves. The response rate is calculated as total interviews as a proportion of eligible contacts.

For the 2010 survey a new policy was enacted (in consultation with the then 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 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, with the average increasing to almost 8 days in 2016 (7.92—mostly due to difficulties in chasing quotas over weekends in field, resulting in more quota clean-up having to be undertaken on the Monday with most younger respondents only being available after the weekend). In 2018, the average number of days in field was 6.08.

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), the key reason for the lower response rate in 2010 related to the policy to complete the survey within a 4 day time period. This policy's introduction 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 the sample attempted (and contacted). Therefore, the lower response rate in 2010 can be in part attributed to not using sample efficiently in an effort to minimise field time. For this reason the policy reverted to managing fieldwork over a 7 day period for the 2012 to 2018 surveys.

In 2016 it was also determined (in consultation with the then OEH) to increase the proportion of mobile numbers called for two main reasons:

1. To increase the overall response rate; and
2. To ensure that the proportion of mobile only households surveyed was more in line with the Australian household population, in order to obtain a more representative survey sample (and hence a more accurate survey visitation estimate).

The response rate for mobile numbers was 19.19% in 2012 and 18.53% in 2014, whilst the landline response rate was 13.46% in 2012 and 11.08% in 2014. These resulted in overall response rates of 14.55% in 2012 and 12.62% in 2014.

The proportion of mobile numbers called was 53.5% in 2016 and 39.6% in 2018, compared with 23.3% in 2014 and 22.0% in 2012. This resulted in the proportion of mobile only respondents surveyed being 22.3% in 2016 and 29.3% in 2018, a proportions similar to the actual 2016 and 2018 proportion of mobile only households in the survey region (25.2% and 25.5% respectively). Furthermore, the response rate for mobile numbers increased on both 2012 and 2014 levels to 20.7% in 2016 and 25.9% in 2018, as did the landline response rate in 2016 (15.3%), but not in 2018 (11.4%), resulting in overall response rates of 18.1% in 2016 (the highest response rate achieved since the survey's inception in 2008) and 16.9% in 2018 (the third highest overall) (See Table 3). Therefore the policy of increasing mobile sample has resulted in a better response rate and a more representative sample in both 2016 and 2018.

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 than using an omnibus styled survey, thereby improving the overall quality and reliability of the data collected and hence, the overall estimate of visitation. Table 3 shows that response rates for this survey since 2008 have been markedly higher than shared cost omnibus surveys conducted at similar times of the year to NPWS survey waves (N.B. No omnibus survey was conducted by Roy Morgan in 2018 are a comparable time to the NPWS park visitor survey). Shared cost omnibus surveys also use an RDD sampling frame, with the proportion of mobile numbers called set at 50%, similar to the parks visitation survey. This, therefore, allows for a direct comparison in response rates between the two surveys.

The disparity in response rates between the parks visitation survey and omnibus surveys has been consistent across all survey years. These results clearly show that the stand-alone survey approach provides more precise and reliable estimates of NPWS park visitation than would have a similar set of questions placed on an omnibus style survey.

Table 3: Response Rate Comparison—NSW Parks Survey Compared with Roy Morgan Omnibus Surveys

	NSW Parks Visitation Survey							Roy Morgan Omnibus Survey*				
Sample Outcomes (No.)	2018 Waves 1-13	2018 AVE.	2016 AVE.	2014 AVE.	2012 AVE.	2010 AVE.	2008 AVE.	2016 AVE.	2014 AVE.	2012 AVE.	2010 AVE.	2008 AVE.
Long Interviews[1]	2,099	161	164	160	141	140	149	n/a	n/a	n/a	n/a	n/a
Short Interviews[2]	13,546	1,042	1,042	1,044	1,063	1,063	1,060	n/a	n/a	n/a	n/a	n/a
Total Interviews	***15,645***	***1,203***	***1,206***	***1,204***	**1,204**	**1,203**	**1,209**	**636**	**595**	**808**	**744**	**736**
Refusals	62,624	4,817	4,111	5,854	4,856	5,008	3,226	3,459	3,792	4,194	4,396	4,711
Terminates	7,172	552	890	2,231	1,967	2,489	1,530	1,362	2,405	4,137	3,111	2,509
Appointments[3]	7,205	554	445	256	243	371	788	373	476	231	345	730
Total Eligible Households (HHs)	**92,646**	**7,127**	**6,653**	**9,545**	**8,270**	**9,071**	**6,753**	**5,831**	**7,268**	**9,369**	**8,596**	**8,686**
Total Quota Failures[4]	14,117	1,086	765	880	735	1,090	518	562	267	257	393	546
Business Numbers[5]	10,787	830	536	779	734	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Contacts	**117,550**	**9,042**	**7,954**	**11,204**	**9,738**	**10,161**	**7,271**	**6,393**	**7,535**	**9,626**	**8,989**	**9,232**
Computer Quota Fail prior to contact[6]	11,237	864	622	3,987	1,703	5,663	1,976	n/a	n/a	n/a	n/a	n/a
Engaged	6,191	476	174	258	130	85	17	235	611	412	169	100
No reply	114,174	8,783	8,059	5,709	3,690	2,612	1,261	6,649	8,285	7,652	7,142	3,439
Unobtainable	110,597	8,507	9,792	15,452	12,771	6,399	3,341	7,434	11,615	16,131	6,914	4,195
3+ Calls	364	28	18	2,571	1,958	799	742	0	100	693	297	489
Fax/modem	3,158	243	308	619	765	368	258	118	525	1,438	735	303
Answering Machine	203,504	15,654	7,947	5,480	4,282	924	628	5,018	3,945	2,692	1,678	1,488
Total Not Contacted	**449,225**	**34,556**	**26,920**	**34,075**	**25,299**	**16,850**	**8,223**	**19,454**	**25,082**	**29,018**	**16,936**	**9,973**
Total Used Sample (Attempted)	***566,775***	***43,598***	***34,874***	***45,279***	***35,038***	***27,011***	***15,494***	***29,931***	***30,563***	***38,644***	***25,925***	***19,205***
Long Interviews[1]	2.27%	2.27%	2.47%	1.67%	1.71%	1.54%	2.21%	n/a	n/a	n/a	n/a	n/a
Short Interviews[2]	14.62%	14.62%	15.66%	10.94%	12.85%	11.72%	15.70%	n/a	n/a	n/a	n/a	n/a
Total Interviews (Response Rate)	**16.89%**	**16.89%**	**18.13%**	**12.62%**	**14.55%**	**13.26%**	**17.90%**	**10.91%**	**8.18%**	**8.63%**	**8.66%**	**8.47%**
Refusals	67.59%	67.59%	61.80%	61.33%	58.72%	55.21%	47.77%	59.32%	52.17%	44.76%	51.14%	54.24%
Terminates	7.74%	7.74%	13.37%	23.37%	23.79%	27.44%	22.66%	23.36%	33.09%	44.15%	36.19%	28.89%
Appointments[3]	7.78%	7.78%	6.69%	2.68%	2.94%	4.09%	11.67%	6.40%	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%**	**100.00%**	**100.00%**

1. 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.

* No Roy Morgan Omnibus Surveys were conducted in 2018 at a comparable time to the NPWS Parks Visitor Surveys
Source: NPWS Parks Visitor Surveys 2008 – 2018; Roy Morgan Telephone Omnibus Surveys

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

The *strike rate* for this survey identified 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 NPWS park, the number of times they visited. Therefore, the higher the strike rate, the more robust the NPWS 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.

The final sampling structure for this survey was designed based on findings arising from the survey pilot. 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 outcome 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 4 shows that the final strike rates for each survey year were 12.29% for 2008, 11.66% for 2010, 11.71% for 2012, 13.27% for 2014, 13.63% for 2016 and 13.42% for 2018. These strike rate figures can be considered to be close to identical, indicating that original strike rate estimates were accurate. Such a result justifies the methodological approach recommended from the survey pilot as being valid.

As can be seen in the Table 4, the actual strike rates per region of interview for 2018 were quite similar to the 2016 strike rates.

Table 4: Survey Strike Rates[13]

Survey Region	2018	2016	2014	2012	2010	2008	2007 Pilot Estimate
Sydney	29.01%	30.16%	29.61%	24.86%	25.15%	25.78%	28.64%
Remainder NSW	24.81%	24.77%	23.97%	22.07%	21.24%	23.10%	25.58%
Total NSW	*27.14%*	*27.77%*	*27.10%*	*23.62%*	*23.45%*	*24.49%*	*27.28%*
Melbourne	2.07%	1.72%	1.65%	1.61%	1.38%	1.50%	2.23%
Remainder VIC	2.99%	3.67%	3.06%	3.07%	2.76%	2.40%	2.23%
ACT	14.25%	14.23%	14.63%	13.14%	12.82%	16.07%	9.80%
Brisbane	3.62%	3.69%	3.06%	2.82%	3.17%	3.59%	2.23%
Remainder SE QLD	3.28%	3.21%	3.01%	2.66%	3.32%	3.98%	2.23%
Total Interstate	*5.18%*	*5.18%*	*5.00%*	*4.56%*	*4.65%*	*5.29%*	*3.74%*
Overall Strike Rate	**13.42%**	**13.63%**	**13.27%**	**11.71%**	**11.66%**	**12.29%**	**12.57%**

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

3.4 Questionnaire Length

[13] 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.

Questionnaire length varies depending on whether a respondent lived within NSW or interstate, and whether they had or had not visited a park within the last 4 weeks. Table 5 illustrates the average questionnaire lengths for 2008 to 2018 surveys.

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. In 2016, from wave 7 onwards two new demographic questions on household income were asked of all respondents, while two new questions exploring NPWS park visitation (type of trip and role of park visit in overall decision to travel) were asked of all NPWS park visitors for each NPWS park they visited (i.e. they could have been asked up to 5 times). From wave 11 to 13 in 2016 only all NSW and ACT respondents were asked four questions on NPWS park visitation advertising. These were removed for the 2018 survey. For 2018, additional questions on length of walk at one's most recently visited park and duration of stay at each park visited were asked. In addition, those who had visited a park in NSW were asked three questions to create segmentation variables used by OEH in other research studies. Overall questionnaire length increased to 3.11 minutes in 2018 from 2.55 minutes in 2016. For visitors to parks in NSW average questionnaire length increased from 4.78 minutes in 2016 to 8.35 minutes in 2018, primarily due to the inclusion of the segmentation questions (see Table 5).

Table 5: Average Questionnaire Length by Visitor Type and Year

Average Questionnaire Length (mins)	Park Visitors						Park Non-Visitors					
	2018	2016	2014	2012	2010	2008	2018	2016	2014	2012	2010	2008
NSW Questionnaire	8.35	4.81	5.70	5.73	5.21	4.92	2.48	2.05	2.05	2.00	1.54	1.45
Interstate Questionnaire	8.10	4.68	5.83	5.60	5.55	5.14	2.22	2.09	1.83	1.76	1.33	1.24
Overall Questionnaire	**8.29**	**4.78**	**5.73**	**5.70**	**5.29**	**4.98**	**2.31**	**2.20**	**1.90**	**1.84**	**1.40**	**1.31**

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

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 3 minutes on average for all 13 waves in order to keep within cost parameters. The average interview length in 2018 was *3.11 minutes*, which aligned with this objective (Table 6).

Table 6: Average Overall Questionnaire Length by Year

Overall Questionnaire Length	All Respondents					
	2018	2016	2014	2012	2010	2008
Average Questionnaire Length (mins)	3.11	2.55	2.41	2.29	1.85	1.76

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

4. Continuous Improvement

In order to ensure that the final NPWS 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 NPWS/Non-NPWS Park Nominations

As previously discussed, a key issue emerging from the 2007 pilot study was respondent difficulty in distinguishing the difference between a NPWS 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 NPWS park and a non-NPWS park was added to the park name list);
2. Adding names of non-NPWS 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.

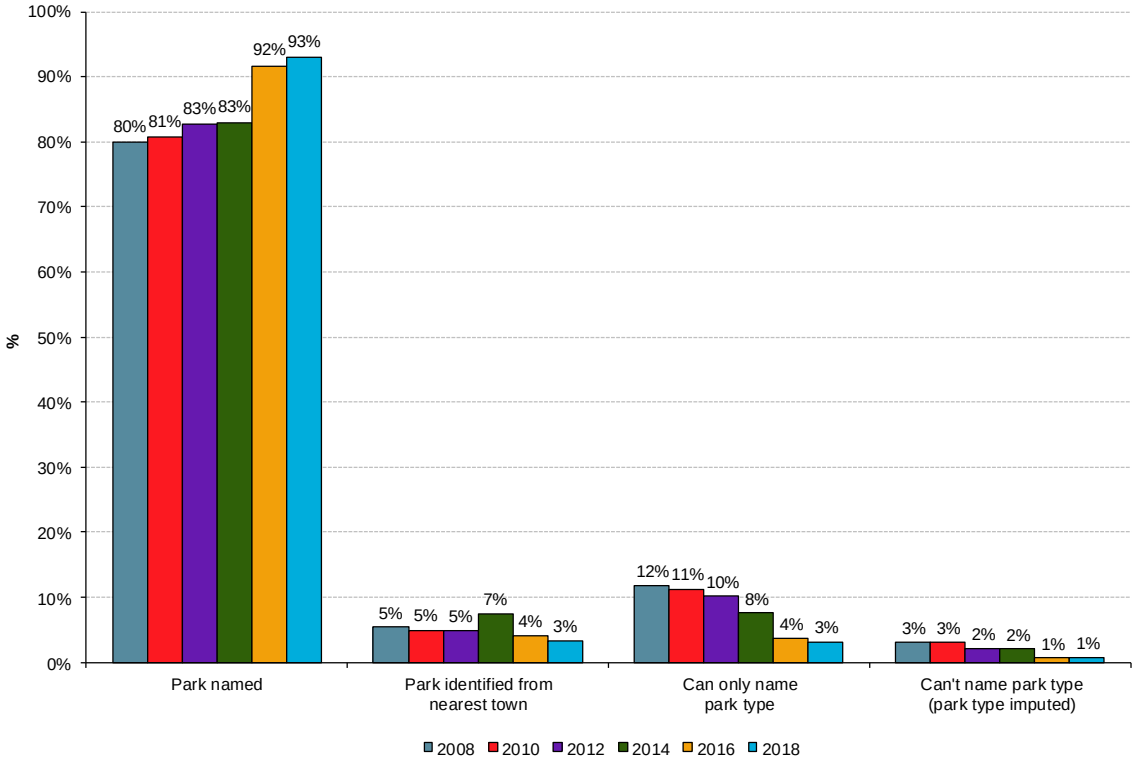
On completion of each field phase all 'other (specify)' responses relating to park name and type were reviewed and where possible, assigned the correct park name and/or a NPWS or non-NPWS status. This was achieved through the following process:

1. Roy Morgan received all other specify/can't say responses pertaining to park name/park location/park type for review;
2. Roy Morgan 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, 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.

Chart 2 highlights the effectiveness of this approach with the proportion of respondents directly providing the *name* of the park increasing with each survey, with 96% of all parks identified in 2018 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 2018 and 2016 were the lowest recorded (1%), indicating that park allocation is becoming increasingly efficient with time.

Chart 2: Allocation of Park Type by Method[14]



Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

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 NPWS 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 NPWS park visitation based on responses of those who complete the survey could be an over-estimate. For the 2018, 2016, 2014, 2012 and 2010 surveys and waves

[14] 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).

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 NPWS 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, 2014, 2016 and 2018 surveys and waves 7-13 of the 2008 survey, the exact day and date four weeks ago was specified to respondents in order to focus them on parks visited since that date and number of times visited since that date. The day and date updated automatically with each new survey day, 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 actual 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 (almost 26% of

households in 2018, 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. this survey shows that younger people tend to have lower levels of visitation to NPWS parks than older people). 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 NPWS 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 1.2% of the overall 2018 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:
    - *Imputation rules for missing data or 'can't say'*—manual editing of data post-field can identify a park not previously recognised as a NPWS park as being one. In these instances, number of times visited and number of children visiting sometimes needs 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
    - *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 the confirmation of 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 NPWS park visitation estimate. For more detail, please refer to Appendix 7 in each of these survey reports.

5. Method of Calculating NPWS Park Visitation

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

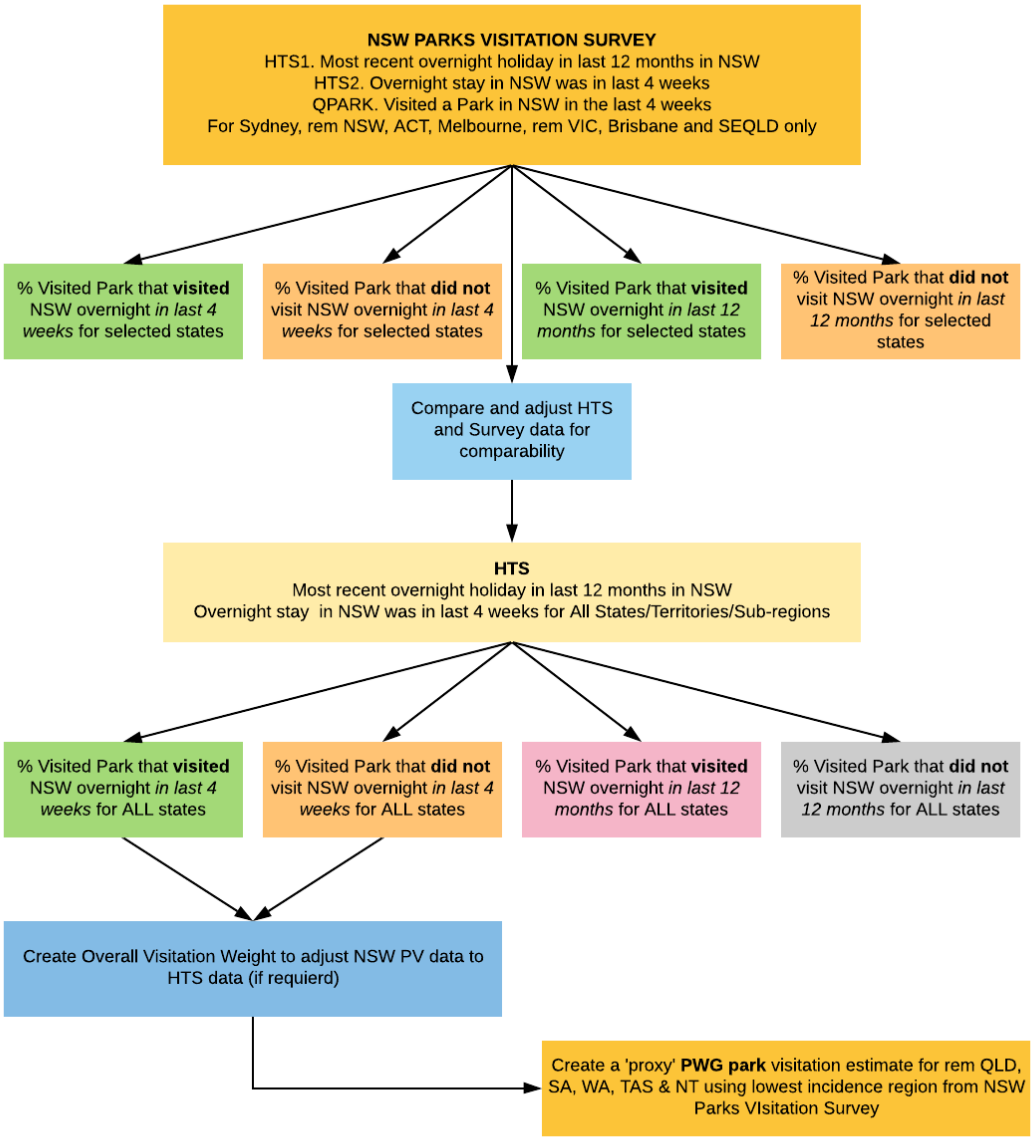
1. Calculate visitation for the seven regions of Australia that were surveyed (i.e. Sydney, Remainder NSW, ACT, Melbourne, Remainder VIC, Brisbane and Remainder Southeast Queensland).
2. Using comparative questions placed on the NSW Parks Visitation Survey with the same questions asked on the Roy Morgan 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 NPWS 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 NPWS 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 NPWS 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).

Figure 1 provides a summary of the standard visitation calculation.

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

Figure 1: Summary of NPWS Parks Annual Visitation Calculation



5.1 Taking a Robust Approach to Estimating Visitation

In calculating the NPWS 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 Roy Morgan 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 NPWS or non-NPWS 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 NPWS Adult Park Visitation Calculation from Survey Data

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

1. Identify four groups of respondents claiming to have visited a park in NSW within the last 4 weeks who –
    - were able to directly name the park that they visited within the last 4 weeks;
    - 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;
    - could not name the park they visited within the last 4 weeks, but could name the type of park they visited (i.e. NPWS or non-NPWS); and
    - 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 NPWS park to those naming a non-NPWS park that they visited (i.e. the name of the park provided has been allocated as being either NPWS or non-NPWS);

3. Assume that those only naming the park type visited were correct in their categorisation and allocate them accordingly to the NPWS or NPWS park category[15];
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)[16];
5. Calculate the unweighted average number of visits to each NPWS park (i.e. exclude from the calculation the "can't say" and blank[17] fields)—approximately 99% of responses in 2018;
6. Allocate the average number of visits to "can't say" and blank fields—approximately 1% of NPWS responses in 2018; 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.

5.3 NPWS Child Park Visitation Calculation from Survey Data

To calculate NPWS park *child*[18] visitation from survey data a six step process was followed:

1. Use NPWS 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:
    - Assume that if children visited a specific NPWS park with the adult on the *most recent visit* to that park, the children visited on *all* visits to that NPWS 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);
    - Assume that if the number of children visiting the NPWS 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);
    - If the number of children visiting the NPWS park on the most recent visit is *greater than* the number of children living in the household, the following calculation applies:
        - If the number of extra[19] 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;

[15] Pilot survey results conducted in September-October 2007 indicated that the proportion of respondents incorrectly claiming the park they visited was a NPWS park was balanced out by similar proportions of respondents incorrectly claiming that they visited a non-NPWS park. It was determined that the error factor was so similar that any re-allocation of data toward or away from NPWS Parks for the 2008 to 2018 surveys would not improve survey estimates for visitation to NPWS parks and, as a consequence, no adjustment was made to 2008 to 2018 survey data. The robust approach taken was not to attempt to edit these responses.

[16] It was determined that those able to *name* the park they visited had the greatest likelihood of correct allocation of a park to the NPWS or non-NPWS 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. 1%-4% of all responses in each survey year).

[17] 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 NPWS or non-NPWS 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.

[18] A child is classified as being under 18 years of age.

[19] Extra children is calculated as number of children visiting that specific NPWS park on the respondent's most recent visit to that park, less the number of children living in the respondent's household.

- 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:
    - For 0 child households, allocate the mean number of children visiting from all 0 child households visiting a NPWS park where the number of children visiting was provided after data manipulations 2ci and 2cii have been applied;
    - For 1 child households, allocate the mean number of children visiting from all 1 child households visiting a NPWS park, as per 3a above;
    - For 2 child households, allocate the mean number of children visiting from all 2 child households visiting a NPWS park, as per 3a above;
    - For 3 child households, allocate the mean number of children visiting from all 3 child households visiting a NPWS park, as per 3a above;
    - For 4 or more child households, allocate the mean number of children visiting from all 4 or more child households visiting a NPWS 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 NPWS park by the number of eligible[20] children visiting that park on the most recent visit—i.e. raw child visits; and
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 NPWS park and sum to obtain total visits.

5.4 Total NPWS Park Visitation Calculation from Survey Data

To calculate the total number of NPWS park visits from survey data for all waves in 2008, 2010, 2012, 2014, 2016 and 2018, the following calculation applies:

1. Sum the number of adult visits to a NPWS 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 NPWS 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 NPWS visits from survey data.

5.5 NPWS Park Visitation Calculation for Non-surveyed Regions

Roy Morgan 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:

[20] 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.

***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*
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 NPWS 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 NPWS park visitation from non-surveyed regions, using HTS data as a proxy, is that *the proportion of adult visitors to a NPWS 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 NPWS park*. This ratio of visitation is then applied across non-surveyed regions to calculate the proportion of adults visiting NPWS 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 NPWS park.

To calculate child visitation for these non-survey regions the key assumption made is that *child visitation to a NPWS 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 NPWS Park Visitation Estimate Revision to Account for Sample Frame Change

As the 2012, 2014, 2016 and 2018 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, 2014, 2016 and 2018 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:

- 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;
- Calculate percentage difference in the 2012 visitation estimate for both adult child visitation with respondents from mobile only households excluded;
- Use Roy Morgan Single Source data to determine the percentage of mobile only households in 2008, 2010 and 2012;
- 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;
- 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, NPWS 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 2016 annual NPWS park visitation estimate after the conclusion of waves 1-13 (and including calculation of visitation from non-surveyed states) is as follows:

45,333,817	Annual Adult Visitation Estimate
14,902,193	Annual Child Visitation Estimate
60,236,009	**Annual Total Visitation Estimate**

The 2008 and 2010 visitation estimates were adjusted to account for the change in sampling frame in 2012. The 2018 visitation estimate is the highest yet recorded. It is 16.6% higher than the 2016 estimate (51,661,944), 52.7% higher than the 2014 estimate (39,436,048), 69.7% higher than the 2012 estimate (35,495,625), 78.0% higher than the 2010 estimate (33,843,626) and 58.8% 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 NPWS parks is as follows:

$$\text{Annual NPWS Visitation} = \sum[\text{Adult visits}^{1} + \text{Child visits}^{1}] \text{ for the 13 survey waves}$$

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 7 shows that adult visitation to NPWS parks by region of origin (i.e. survey region), based solely on survey data, shows that intrastate visitation for 2008 to 2018 (i.e. visitation from adults from Sydney and the remainder of NSW) contributes more than 90% of all adult visits (92.7% in 2018, 91.8% in 2016; 92.2% in 2014; 92.3% in 2012; 92.2% in 2010; 91.9% in 2008). Interstate visitation contributes around 7-8% of all adult visits.

Table 7: Estimated Annual NPWS Adult Visits by Region of Origin (Unadjusted)

Adult Visits	Sydney	Rem NSW	ACT	Mel-bourne	Rem VIC	Bris-bane	Rem SE QLD	Total
2018	**35,084,511**	**19,573,313**	**805,508**	**1,338,504**	**456,954**	**1,051,892**	**631,894**	**58,942,575**
2016	28,438,583	18,727,916	677,087	1,194,898	759,929	1,062,244	544,753	51,405,409
2014	31,170,105	16,872,905	799,762	883,076	586,123	1,279,176	497,960	52,089,107
2012	23,111,368	13,670,963	581,421	948,561	396,057	548,075	508,300	39,764,745
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**
2018	**59.5%**	**33.2%**	**1.4%**	**2.3%**	**0.8%**	**1.8%**	**1.1%**	**100.0%**
2016	55.3%	36.4%	1.3%	2.3%	1.5%	2.1%	1.1%	100.0%
2014	59.8%	32.4%	1.5%	1.7%	1.1%	2.5%	1.0%	100.0%
2012	58.1%	34.4%	1.5%	2.4%	1.0%	1.4%	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%

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

6.2.3 Child Visitation from Survey Data (Unadjusted)

Child visitation to NPWS 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 8 highlights the number child visits to NPWS 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 rebounded slightly in 2014 to 13.5%, but has then declined to 8.7% in 2016 and to its lowest levels in 2018 (5.7%). The two most evident changes in child visitation in 2016 and 2018 from 2014 levels are the decrease in contribution to visitation from households with 1 child (from 22.0% in 20914 down to 19.2% in 2016 and 19.3% in 2018) and the comparable increase in contribution to visitation from households with 3 children (from 18.2% in 2014 up to 23.0% in 2016 and 23.4% in 2018).

Table 8: 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
2018	**1,101,383**	**3,726,896**	**8,235,668**	**4,528,917**	**1,759,755**	**19,352,618**
2016	1,297,950	2,859,493	6,052,547	3,410,700	1,237,005	14,857,694
2014	1,764,403	2,810,789	5,101,398	2,333,645	793,486	12,803,721
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**
2018	**5.7%**	**19.3%**	**42.6%**	**23.4%**	**9.1%**	**100.0%**
2016	8.7%	19.2%	40.7%	23.0%	8.3%	100.0%
2014	13.8%	22.0%	39.8%	18.2%	6.2%	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%

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

Breakdown by region in Table 9 reveals that in 2016, the contribution of intrastate child visits to all child visits was at lowest recorded at 88.6% (91.3% in 2018; 93.4% in 2014; 90.4% in 2012; 89.3% in 2010; 91.5% in 2008), with contribution from interstate visits at its highest at 11.4% (8.7% in 2018; 6.6% in 2014; 9.6% in 2012; 10.7% in 2010; and 8.5% in 2008).

Table 9: Estimated No. of NPWS Park Child Visits by Survey Region (Unadjusted)

Child Visits	Sydney	Rem NSW	ACT	Mel-bourne	Rem VIC	Bris-bane	Rem SEQLD	Total
2018	**12,046,938**	**5,627,696**	**305,942**	**477,163**	**175,179**	**581,041**	**138,658**	**19,352,618**
2016	8,009,805	5,159,990	222,035	465,818	219,624	250,429	529,993	14,857,694
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 SEQLD**	**Total**
2018	**62.2%**	**29.1%**	**1.6%**	**2.5%**	**0.9%**	**3.0%**	**0.7%**	**100.0%**
2016	53.9%	34.7%	1.5%	3.1%	1.5%	1.7%	3.6%	100.0%
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%

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

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 having different park visitation patterns to those surveyed); and (2) time period telescoping (i.e. respondents recalling 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 effects 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 2018 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 NPWS 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 NPWS parks as non-NPWS parks.

Table 10 highlights the method of calculating the non-response adjustment figure for waves 1-13 of the 2018 survey and compares adjustment factors with the 2016, 2014, 2012, 2010 and 2008 surveys.

Overall the non-response adjustment factor for 2018 was the second highest of all six surveys, with 2016 obtaining the highest adjustment factor and 2014 the lowest.

Table 1: Non-response Adjustment by Region 2018

Contact Type - Waves 1-13 2018	Total	Sydney	Rem NSW	ACT	Mel-bourne	Rem VIC	Bris-bane	Rem SE QLD
Persons Contacted, Not Surveyed -								
Yes - Visited a NSW Park[1]	2,169	649	520	562	78	64	139	157
No - Did Not Visit a NSW Park[1]	20,996	3,045	2,580	4,169	2,414	1,570	3,530	3,688
No definitive response given[2]	35,907	6,970	5,153	6,598	3,881	2,416	5,936	4,953
Total Contacted, Not Surveyed	**59,072**	**10,664**	**8,253**	**11,329**	**6,373**	**4,050**	**9,605**	**8,798**
Adjusted Yes - Not Surveyed[3]	*5,501*	*1,821*	*1,343*	*1,282*	*204*	*156*	*353*	*342*
Adjusted No - Not Surveyed[3]	*53,571*	*8,843*	*6,910*	*10,047*	*6,169*	*3,894*	*9,252*	*8,456*
Persons Contacted, Surveyed -								
Yes - Visited a NSW Park[1]	2,099	945	648	278	54	39	71	64
No - Did Not Visit a NSW Park[1]	13,546	2,312	1,964	1,673	2,555	1,266	1,888	1,888
Total Contacted, Surveyed	**15,645**	**3,257**	**2,612**	**1,951**	**2,609**	**1,305**	**1,959**	**1,952**
Total Yes - Visited a NSW Park[1]	**7,600**	**2,766**	**1,991**	**1,560**	**258**	**195**	**424**	**406**
Total No - Did Not Visit a NSW Park[1]	**67,117**	**11,155**	**8,874**	**11,720**	**8,724**	**5,160**	**11,140**	**10,344**
Total Contacted	**74,717**	**13,921**	**10,865**	**13,280**	**8,982**	**5,355**	**11,564**	**10,750**
18 Yrs+ Population - Jan 2018	**14,415,436**	**4,034,270**	**2,129,045**	**316,340**	**3,844,504**	**1,155,274**	**1,856,386**	**1,079,617**
Wtd Yes Pop'n - Visited a NSW Park - All Contacts[1, 5]	**1,490,101**	**801,480**	**390,047**	**37,167**	**110,452**	**42,061**	**68,072**	**40,821**
% of Population - All Contacts	**10.34%**	**19.87%**	**18.32%**	**11.75%**	**2.87%**	**3.64%**	**3.67%**	**3.78%**
Wtd Yes Pop'n - Visited a NSW Park -All Surveyed[1, 6]	**1,960,557**	**1,170,520**	**528,186**	**45,076**	**79,572**	**34,525**	**67,281**	**35,397**
% of Population - All Surveyed	**13.60%**	**29.01%**	**24.81%**	**14.25%**	**2.07%**	**2.99%**	**3.62%**	**3.28%**
Non-response Adjustment Factor Waves 1-13[7] 2016	**0.7600**	**0.6847**	**0.7385**	**0.8246**	**1.3881**	**1.2183**	**1.0118**	**1.1532**
Non-response Adjustment Factor Waves 1-13[7] 2016	**0.7667**	**0.7533**	**0.7285**	**0.7487**	**1.2293**	**0.6915**	**0.8049**	**0.9761**
Non-response Adjustment Factor Waves 1-13[7] 2014	**0.5953**	**0.5927**	**0.5791**	**0.5883**	**0.6674**	**0.6673**	**0.6449**	**0.6686**
Non-response Adjustment Factor Waves 1-13[7] 2012	**0.7040**	**0.6938**	**0.6692**	**0.7741**	**0.8687**	**0.8158**	**0.7877**	**0.9368**
Non-response Adjustment Factor Waves 1-13[7] 2010	**0.6560**	**0.6094**	**0.6747**	**0.8155**	**0.9440**	**0.8841**	**0.7334**	**0.7841**
Non-response Adjustment Factor Waves 7-13[7] 2008	**0.6927**	**0.7314**	**0.6424**	**0.7742**	**0.6623**	**0.4835**	**0.5705**	**0.6071**

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n= 43,763; 2010 n=113.745; 2012 n=96,055; 2014 n=103,103; 2016 n=53,454, 2018 n=74,717

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.

It should be noted that the non-response adjustment calculation for the 2016 estimate was revised in 2018 as a result of an identified error in the calculation. As such, the 2016 visitation estimate for 2016 has been amended.

Table 11 shows the non-response adjustment factor calculated for each survey wave in 2018. These adjustment factors are used to calculate the visitation estimate on a wave by wave basis.

Table 2: Non-response Adjustment Factor by Wave for 2018

Non-response Adjustment 2018						
Wave 1	**Wave 2**	**Wave 3**	**Wave 4**	**Wave 5**	**Wave 6**	**Wave 7**
0.7980	0.7379	0.7679	0.8042	0.7870	0.7816	0.4343
Wave 8	**Wave 9**	**Wave 10**	**Wave 11**	**Wave 12**	**Wave 13**	**Total**
0.6362	0.9386	0.8814	0.7812	0.7867	0.8346	**0.7600**

Source: NPWS Parks Visitor Surveys 2018
Base: n= 74,717

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, 2014, 2016 and 2018 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, 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 12.

Table 3: 2012 NPWS Park Visitation Including & Excluding Mobile Only 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%

Source: NPWS Parks Visitor Surveys 2012
Base: 2012 n=15,646;

The proportion of mobile only households each year is then used to calculate the Mobile only adjustment factor (Table 13).

Table 4: Proportion of Mobile Only Households - NPWS Survey Regions

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

Source: Roy Morgan Single Source
Base: 2008 n=38,135; 2010 n=36,521; 2012 n=38,032;

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 14)

Table 14: Adjustment Factor for Sampling Frame Change—2008 and 2010

	2008	2010
Adult visits 2012	99.73%	99.54%
Child visits 2012	99.33%	98.86%

Source: NPWS Parks Visitor Surveys 2008-2010
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646

6.2.4.3 Revised Survey Visitation Estimates based on Non-response Adjustment

Adjusted annual NPWS park visitation on a region of origin basis (Table 15) shows that intrastate visitation in 2018 accounts for the lowest proportion of total visits since surveying commenced (88.3% compared with 89.1% of visits in 2016; 91.8% of visits in 2014, 90.4% of visits in 2012; 89.5% in 2010; and 92.4% in 2008). This marginal decline is due to a general decline in the proportion of visits from people living in both Sydney and the rest of NSW compared with previous years (56.0% - Sydney 2018 vs 57.5% - average 2008-2016; 32.3% - Remainder of NSW vs 33.1% - average 2008-2016).

Table 5: Adjustment Park Visitation Estimate by Region of Origin

Adjustment Calculation		Sydney	Rem NSW	ACT	Mel-bourne	Rem VIC	Bris-bane	Rem SE QLD	Total
2018	Unadjusted Adult visits	35,084,511	19,573,313	805,508	1,338,504	456,954	1,051,892	631,894	58,942,575
	Adult Non-response Adjustment	24,826,386	14,937,554	686,399	1,920,076	575,301	1,099,846	753,084	44,798,646
	Unadjusted Child visits	12,046,938	5,627,696	305,942	477,163	175,179	581,041	138,658	19,352,618
	Child Non-response Adjustment	8,496,182	4,280,504	259,832	682,205	219,813	605,504	164,701	14,708,741
	Total Adjusted Visits	**33,322,568**	**19,218,058**	**946,231**	**2,602,281**	**795,114**	**1,705,350**	**917,785**	**59,507,387**
	% Contribution	*56.0%*	*32.3%*	*1.6%*	*4.4%*	*1.3%*	*2.9%*	*1.5%*	*100.0%*
2016	Unadjusted Adult visits	28,438,583	18,727,916	677,087	1,194,898	759,929	1,062,244	544,753	51,405,409
	Adult Non-response Adjustment	21,674,979	13,804,029	512,902	1,486,208	531,682	865,048	538,022	39,412,870
	Unadjusted Child visits	8,009,805	5,159,990	222,035	465,818	219,624	250,429	529,993	14,857,694
	Child Non-response Adjustment	6,033,527	3,758,926	166,228	572,615	151,865	201,558	517,333	11,402,052
	Total Adjusted Visits	**27,708,506**	**17,562,955**	**679,130**	**2,058,823**	**683,547**	**1,066,606**	**1,055,355**	**50,814,922**
	% Contribution	*54.5%*	*34.6%*	*1.3%*	*4.1%*	*1.3%*	*2.1%*	*2.1%*	*100.0%*

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n= 43,763; 2010 n=113.745; 2012 n=96,055; 2014 n=103,103; 2016 n=53,454, 2018 n=74,717

Table 15: 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
2014	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
	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%*
2012	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
	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%*
2010	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
	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%*
2008	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
	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%*

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n= 43,763; 2010 n=113.745; 2012 n=96,055; 2014 n=103,103; 2016 n=53,454, 2018 n=74,717

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, 2012, 2014 or 2016 is significantly higher or lower than the 2018 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 NPWS park visitation may be affected by these events.

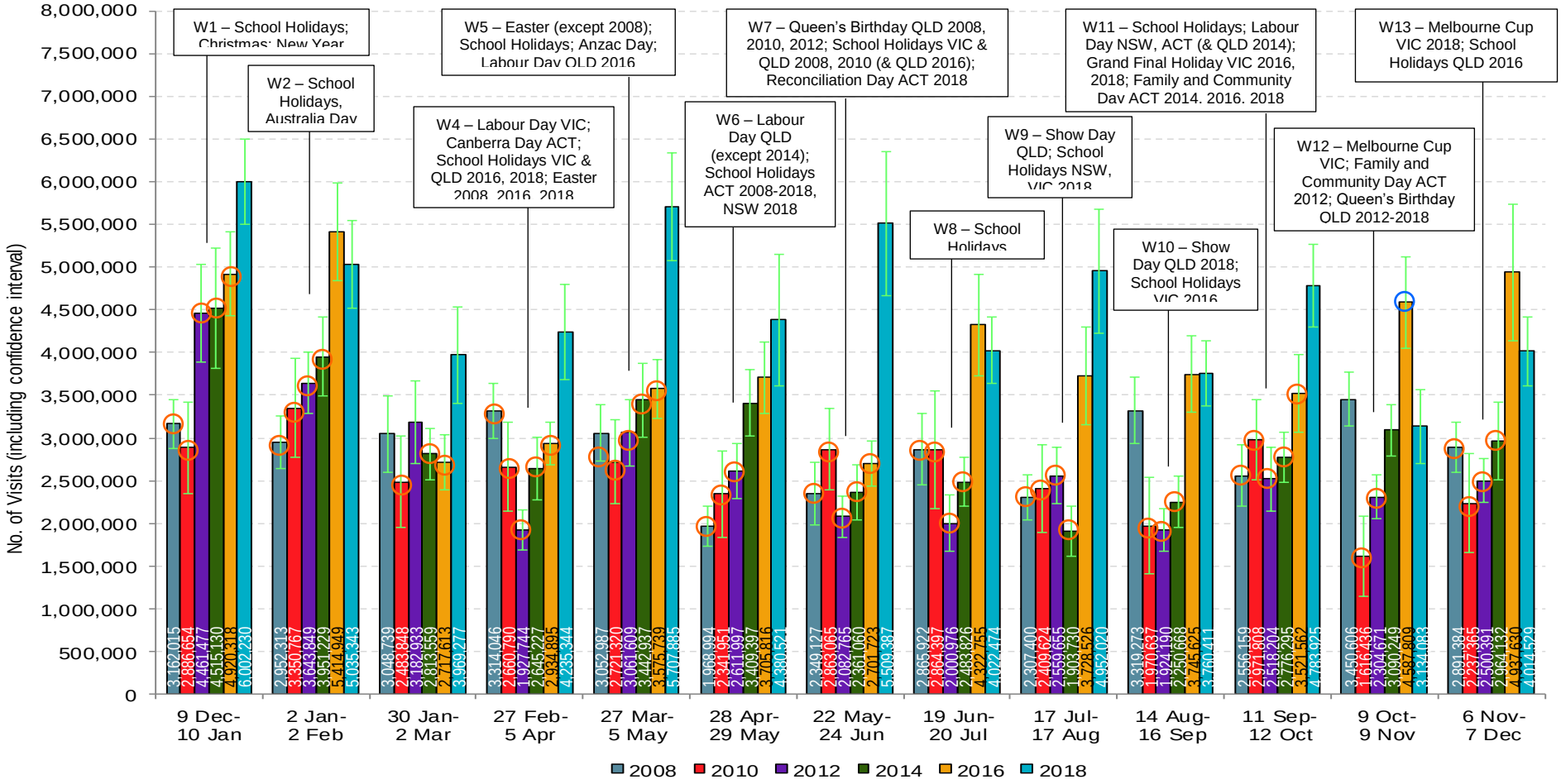
Chart 3 shows **overall visitation** wave by wave for survey estimates only and includes the margin of error for each wave. In general, NPWS park visitation in 2018 tends to be significantly higher than in all other years across all months. The exceptions are in January, May, June to September and November, where the 2016 estimate is statistically similar, while for October, the 2016 estimate is significantly higher than the 2018 estimate.

As can be seen in Chart 4, in general **adult visitation** in 2018 tends mirror overall visitation in 2016, with adult visitation significantly higher than in previous years in the same waves listed for overall visitation. Again, the 2016 adult visitation estimate was significantly higher than the 2018 estimate for October.

In relation to **child visitation** to NPWS parks (see Chart 5), visitation in 2018 was higher than all other years from wave 2 (2 January) to the end of wave 7 (24 June) and for wave 9 (17 Jul to 17 August). Child visitation tends to be increasing over time in the January school holiday period (wave 2) and in May (wave 6).

Child visitation in 2018 is significantly higher than all previous years from waves 4 (27 February) to wave 7 (24 June) and again in wave 9 (17 July to 17 August). The 2016 child visitation estimate is significantly higher in waves 8 and 13 (mid-June to mid-July and November).

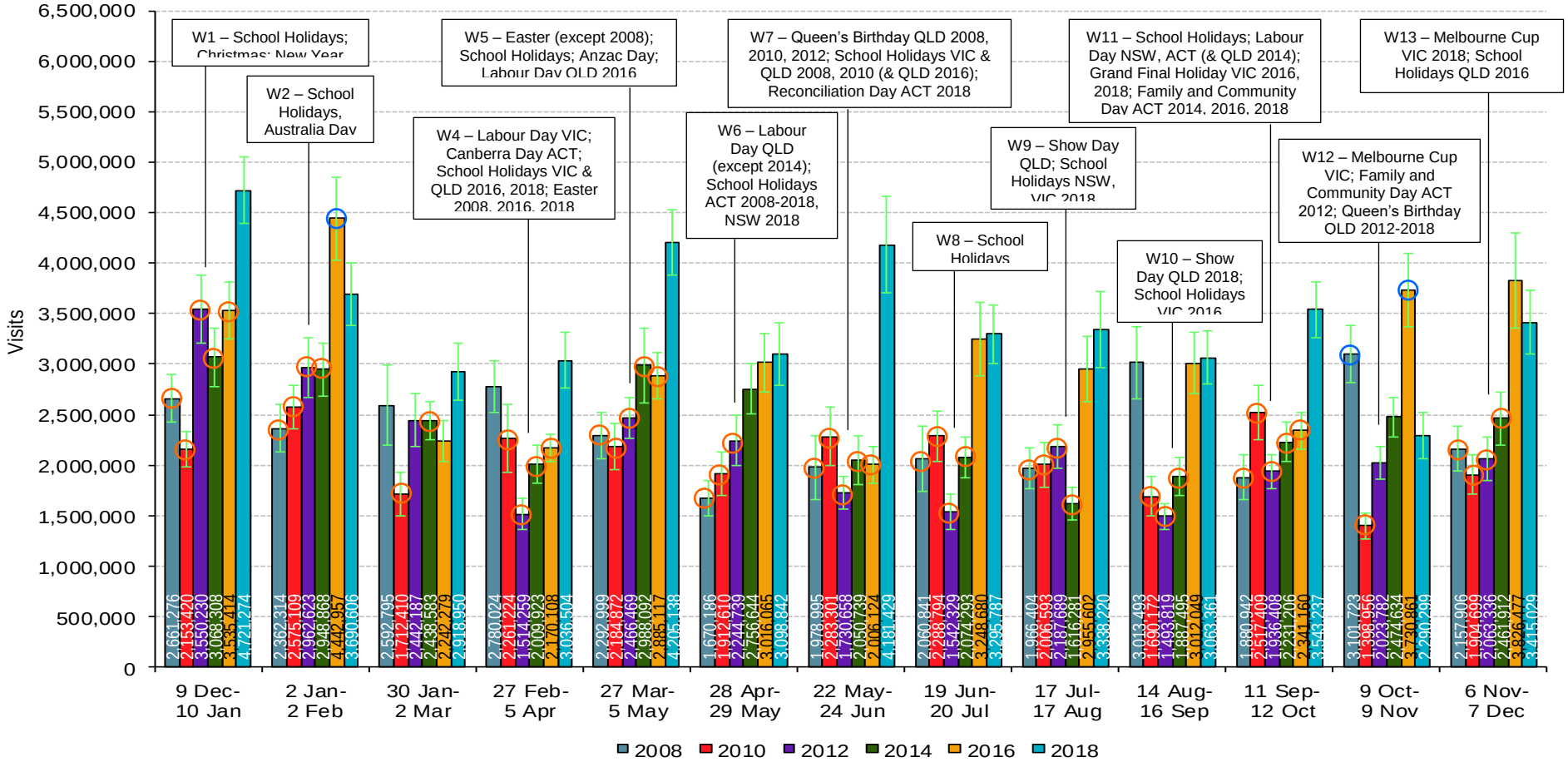
Chart 3: Adjusted Annual Visitation Survey Estimate by Wave



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

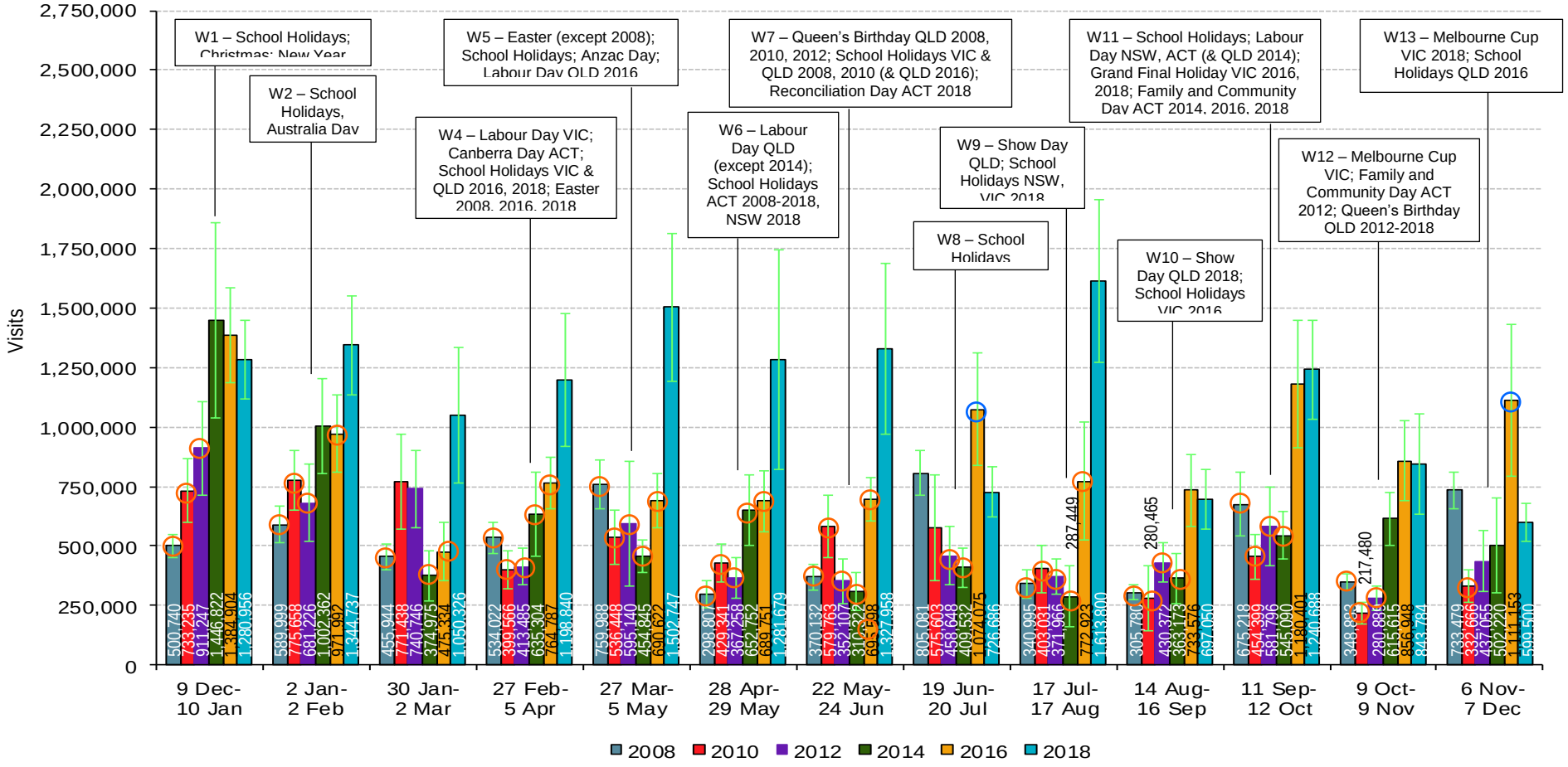
Chart 4: Adjusted Adult Visitation Survey Estimate by Wave



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

Chart 5: Adjusted Child Visitation Survey Estimate by Wave



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

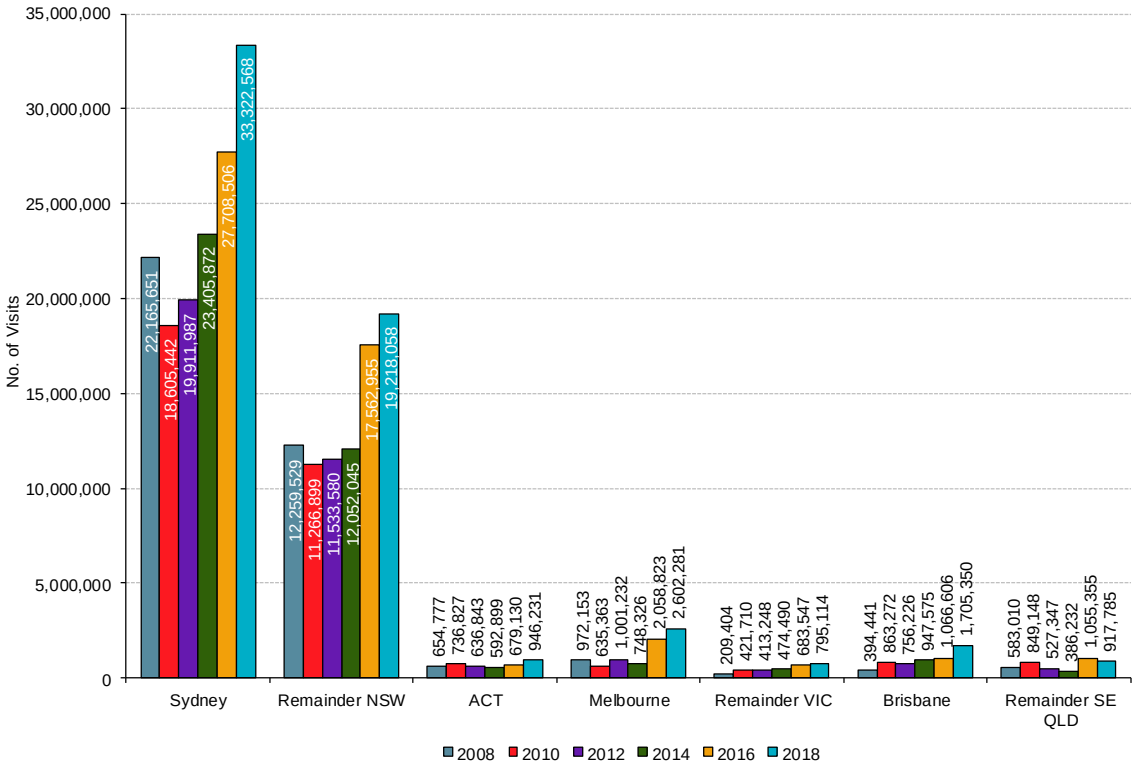
6.2.4.5 Region of Origin Analysis of Adjusted Visitation Survey Estimates

Chart 6 shows the total number of NPWS park visits by the region of origin of the survey respondent for each survey year. In 2018 the highest number of visits was recorded in each region, with the exception of remainder southeast QLD, where 2016 remains the highest.

In 2018 a total of 33.3m visits to NPWS parks were made by Sydneysiders, 5.6m higher than the previous high recorded in 2016 (27.7m). NPWS park visits from areas of NSW outside of Sydney reached 19.2m in 2018, 1.6m visits higher than the previous recorded high in 2016 (17.6m).

NPWS park visitation in 2018 from people living in Melbourne (2.60m) increased by 0.54m over the previous high of 2.06m recorded in 2016. Visitation to NPWS parks from people living in Remainder Victoria and from Brisbane has been steadily increasing over time. Over 795,000 people visited NPWS parks from Remainder Victoria in 2018, over 110,000 visits higher than the previous high of approximately 684,000 in 2016. Visits to NPWS parks from Brisbanites reached 1.705m in 2018, almost 640,000 visits higher than in 2016 (1.066m). NPWS park visits from ACT residents reached almost 950,000 in 2018, almost 210,000 visits higher than the previous high attained in 2010 (737,000 visits). Visits from the Remainder of Southeast QLD had been declining since the 2010 high of 849,000 visits, but increased to 1.1m in 2016. In 2018 there was a marginal decline in visits to 918,000, representing a decrease of almost 14,000.

Chart 6: Visitation by Region of Origin



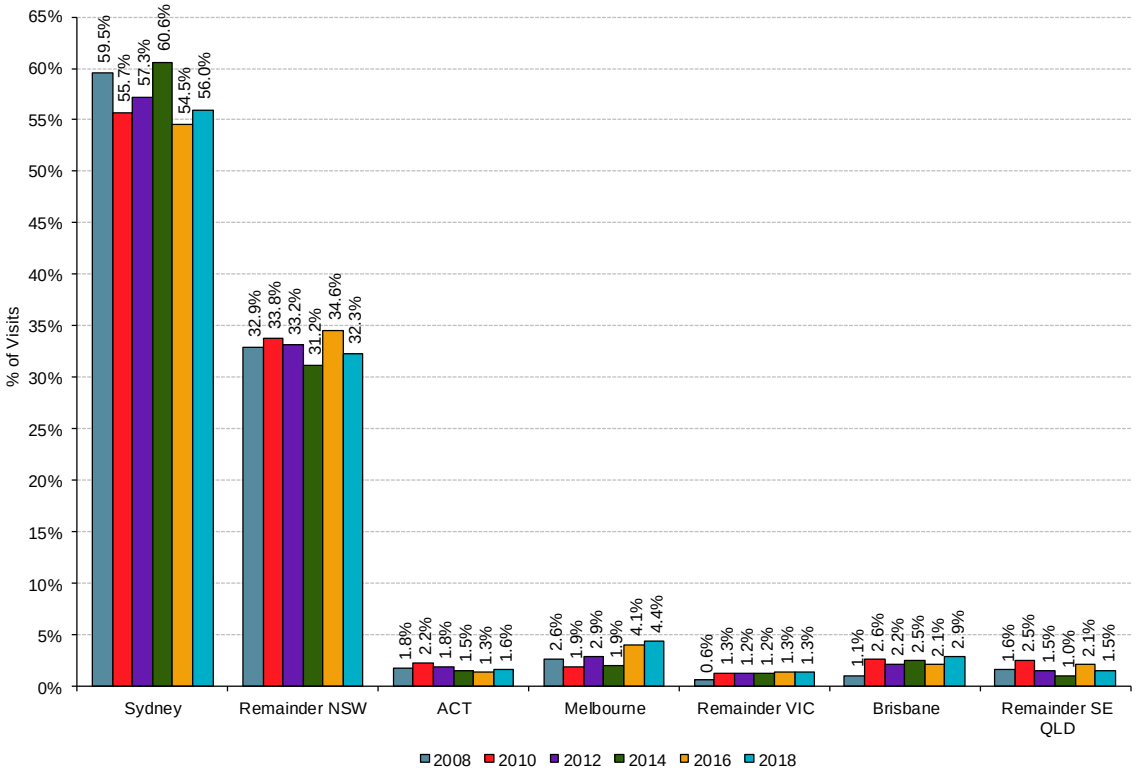
Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

In terms of percentage contribution to NPWS park visits, Chart 7 shows that 56.0% of all visits in 2018 originated from people living in Sydney, while 32.3% of visits in 2018 came from those living

in other parts of NSW. Overall 88.3% of NPWS park visits in 2018 originated from people living within the state of NSW – the lowest proportion recorded so far (89.1% - 2016; 91.8% - 2014 90.5% - 2012; 89.5% - 2010; and 92.4% - 2008).

Interstate visitors in 2018 contributed 11.7% of all visits to NPWS parks – the highest percentage recorded (10.9% – 2016; 8.1% - 2014; 9.6% - 2012; 10.5% 2010; and 7.7% - 2008). The increase in NPWS park visitation from Melbourne in both 2016 and 2018 has been the most marked. In 2016 Melbourne contributed 4.1% of visits and 4.4% in 2018, with the previous high being 2.9% in 2012. The proportion of visits from people living in Brisbane appears to fluctuate every second survey year – comparatively low in 2008, 2012 and 2016 and comparatively higher in 2010, 2014 and 2018. Proportional contribution from ACT residents has been declining steadily from 2010 to 2016 (from 2.2% to 1.3%). However the trend ceased in 2018, with visits from ACT residents increasing to 1.6%.

Chart 7: Visitation by Region of Origin - % Contribution to Visits



Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

6.2.5 Annual Visitation, including Non-surveyed Region Estimates

To calculate visitation to NPWS parks for non-surveyed states, Roy Morgan 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 NPWS park adult visitors for survey regions compared with the proportion that visited NSW overnight;
- Average number of adult visits to NPWS parks for survey regions; and
- The proportion of NPWS park child visits for survey regions compared with adult visits.

It has been assumed for calculation of estimates that NPWS 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 NPWS park visitation calculation for non-surveyed regions is *solely* based on the NPWS 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 16 shows that a total of 728,581 NPWS park visits were made in 2018 to NPWS parks from these non-surveyed regions (535,141 by adults and 193,440 by children). This compares to 857,548 in 2016 (691,002 by adults and 166,546 by children), 559,930 visits in 2014 (459,437 by adults and 100,493 by children), 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).

In 2018 Western Australians contributed the highest proportion of visits to NPWS parks (41.0%), topping South Australians who have previously contributed the highest proportion of NPWS park visits of all non-surveyed regions from 2008 to 2016. The remainder of Queensland region returned to its 2014 low proportional representation of visits in 2018 (12.2%) from 24.2% in 2016.

Table 16: Annual NPWS Park Visitation—Non-Survey Region

Non-Survey Regions NPWSPark Visitation Calculation	Rem QLD	SA	WA	TAS	NT	VIC Survey Estimate
Adult Population (Jan 2018)	994,053	1,344,943	2,018,196	406,145	120,884	n/a
Visited PWG Park in last 4 w ks						1.69%
% Visited NSW Overnight in last 4 w ks	0.84%	1.15%	1.40%	3.34%	2.67%	3.94%
% PWG Visitors to Overnight Visitors	n/a	n/a	n/a	n/a	n/a	42.96%
% Estimate of PWG Visitors	0.36%	0.49%	0.60%	1.44%	1.15%	n/a
No. Adult PWG Visitors per w ave	3,588	6,645	12,140	5,828	1,387	n/a
Annual Adult PWG Park Visitors	46,638	86,388	157,814	75,767	18,027	n/a
Average PWG Park Visits per Adult	n/a	n/a	n/a	n/a	n/a	1.39
Annual Adult PWG Park Visits	*64,888*	*120,192*	*219,565*	*105,414*	*25,081*	*n/a*
% Child to Adult PWG Park visits	n/a	n/a	n/a	n/a	n/a	36.15%
Annual Child PWG Park Visits	*23,455*	*43,446*	*79,368*	*38,105*	*9,066*	*n/a*
Total Estimated Annual PWG Visits - 2018	**88,343**	**163,638**	**298,933**	**143,519**	**34,148**	**n/a**
Contribution to Non-Survey Region PWG Park Visitation	***12.1%***	***22.5%***	***41.0%***	***19.7%***	***4.7%***	***n/a***
Total Estimated Annual PWG Visits - 2016	***207,797***	***293,060***	***232,394***	***74,828***	***49,469***	***n/a***
Contribution to Non-Survey Region PWG Park Visitation	***24.2%***	***34.2%***	***27.1%***	***8.7%***	***5.8%***	***n/a***
Total Estimated Annual PWG Visits - 2014	***68,231***	***199,484***	***177,138***	***49,594***	***65,483***	***n/a***
Contribution to Non-Survey Region PWG Park Visitation	***12.2%***	***35.6%***	***31.6%***	***8.9%***	***11.7%***	***n/a***
Total Estimated Annual PWG Visits - 2012	**232,371**	**293,766**	**94,502**	**80,981**	**13,542**	**n/a**
Contribution to Non-Survey Region PWG Park Visitation	***32.5%***	***41.1%***	***13.2%***	***11.3%***	***1.9%***	***n/a***
Total Estimated Annual PWG Visits - 2010	**94,608**	**207,009**	**109,588**	**37,865**	**15,894**	**n/a**
Contribution to Non-Survey Region PWG Park Visitation	***20.3%***	***44.5%***	***23.6%***	***8.1%***	***3.4%***	***n/a***
Total Estimated Annual PWG Visits -2008	**176,917**	**284,948**	**122,889**	**88,304**	**15,593**	**n/a**
Contribution to Non-Survey Region PWG Park Visitation	***25.7%***	***41.4%***	***17.8%***	***12.8%***	***2.3%***	***n/a***

Source: NPWS Parks Visitor Survey 2018 and Roy Morgan Single Source Holiday Tracking Survey 2018
Base: NPWS Parks Visitor Survey 2018 n=1,739; HTS 2018 – n=11,752

Table 17 shows that the overall NPWS park visitation estimate for 2018 is 60,236,009 with adult visits contributing 75% and child visits 25% of all visits. The proportion of visit contributed by adults is slowly declining over time (2008 – 82%; 2010 – 81%; 2012 – 81%; 2014 – 80%; 2017 – 78%; 2018 – 75%).

Table 17 also shows that non-survey regions contributed 1.2% to the final annual adjusted NPWS park visitation estimate of 60,236,009, contributing 1.3% to the adult visitation estimate of 45,333,817 and a little more to the child visitation estimate of 14,902,193 (1.3%).

Intrastate visitation contributed 87.2% in 2018, compared with 87.6% in 2016, 90.5% in 2014, 88.6% in 2012, 88.3% in 2010 and 90.8% in 2008, indicating that intrastate visitation is in decline.

Overall, the 2018 NPWS park visitation estimate is 58.8% higher than the 2008 estimate; 78.0% higher than the 2010 estimate, 69.7% higher than the 2012 estimate, 52.7% higher than the 2014 estimate and 16.6% higher than the 2016 estimate. Growth was evident in both adult and child visitation in 2018. Adult visitation levels have been around 27.3m-31.7m from 2008-2014, but increased by approximately 8.4m adult visits in 2016 to 40.1m visits and then by 5.2 adult visits in 2018. Child visitation levels have been around 6.6m-7.8m visits from 2008-2014, but the 2016 figure of 11,6m was much higher, up 3.8m visits from the previous high in 2014. In 2018 the number of child visits jumped again by 3.3m to 14,9m visits.

Table 17: Final Annual NPWS Park Visitation Estimate—Region of Origin (No.)

Final Adjusted Annual NPWS Park Visitation Estimate 2018[1]	Adult Visits		Child Visits		Total Visits	
	No.	%	No.	%	No.	%
Sydney	24,826,398	54.76%	8,496,187	57.01%	33,322,585	55.32%
Remainder NSW	14,937,565	32.95%	4,280,507	28.72%	19,218,072	31.90%
ACT	686,397	1.51%	259,833	1.74%	946,230	1.57%
Melbourne	1,920,081	4.24%	682,206	4.58%	2,602,287	4.32%
Remainder VIC	575,303	1.27%	219,814	1.48%	795,117	1.32%
Brisbane	1,099,846	2.43%	605,504	4.06%	1,705,350	2.83%
Remainder SE QLD	753,086	1.66%	164,702	1.11%	917,788	1.52%
Remainder QLD	64,888	0.14%	23,455	0.16%	88,343	0.15%
SA	120,192	0.27%	43,446	0.29%	163,638	0.27%
WA	219,565	0.48%	79,368	0.53%	298,933	0.50%
TAS	105,414	0.23%	38,105	0.26%	143,519	0.24%
NT	25,081	0.06%	9,066	0.06%	34,148	0.06%
Total Australia 2018	**45,333,817**	**100.00%**	**14,902,193**	**100.00%**	**60,236,009**	**100.00%**
Margin of Error[2]	**±2.61%**	**n/a**	**±6.64%**	**n/a**	**±3.61%**	**n/a**
Total Australia 2016	**40,103,897**	**100.00%**	**11,558,047**	**100.00%**	**51,661,944**	**100.00%**
Margin of Error[2]	**±2.89%**	**n/a**	**±6.24%**	**n/a**	**±3.64%**	**n/a**
Total Australia 2014	**31,674,661**	**100.00%**	**7,761,387**	**100.00%**	**39,436,048**	**100.00%**
Margin of Error[2]	**±2.84%**	**n/a**	**±7.99%**	**n/a**	**±3.85%**	**n/a**
Total Australia 2012	**28,745,337**	**100.00%**	**6,750,287**	**100.00%**	**35,495,625**	**100.00%**
Margin of Error[2]	**±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[2]	**±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[2]	**±3.34%**	**n/a**	**±4.40%**	**n/a**	**±3.54%**	**n/a**

Source: NPWS Parks Visitor Surveys 2008 – 2018 and Roy Morgan Single Source Holiday Tracking Surveys 2008-2018
Base: NPWS Parks Visitor Surveys –- 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739;
HTS Surveys – 2008 n = 14,905; 2010 n= 11,827; 2012 n= 13,518; 2014 n= 10,383; 2016 n= 13,467; 2018 n= 11,752

1. Excludes visits by International visitors.
2. Margin of error based on the 95% confidence level for survey regions only.

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[21] for this study (at the industry accepted 95% confidence level) in 2018 are as follows:

±2.61% Annual Adult Visitation Estimate confidence limit
±6.64% Annual Child Visitation Estimate confidence limit
±3.61% Annual Total Visitation Estimate confidence limit

This result compares to an overall confidence limit of ±3.64% in 2016; ±3.85% in 2014; ±3.87% in 2012; ±4.00% in 2010; and ±3.54% in 2008.

NSW residents contributed over 87% of NPWS visits to the overall visitation estimate in 2018, so as can be seen in Table 18, 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 18: Confidence Limits by Survey Region of Origin[22]

Number of NPWS Park Visits[3]	Sydney	Remainder NSW	ACT	Mel-bourne[2]	Remainder VIC	Brisbane	Remainder SE QLD
Adult Visits Confidence Limit[1]	±3.19%	±4.84%	±11.06%	±9.63%	±13.35%	±8.13%	±13.69%
Child Visits Confidence Limit[1]	±8.66%	±11.61%	±27.74%	±23.56%	±27.44%	±22.44%	±30.19%
Total Visits Confidence Limit[1]	±4.58%	±6.35%	±15.64%	±13.28%	±17.25%	±13.21%	±16.65%

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

1. 95% confidence level.
2. Confidence limits of Australian regions not surveyed in 2018 (i.e. SA, WA, Tasmania, NT and remainder SE QLD) will be the same as the combined limit for Melbourne and remainder VIC (7.94% adult visits; 18.74% child visits; 10.81% total visits), as their estimation of PWG park visitation was based on the Victorian estimate.
3. The confidence limits for the seven survey regions as a whole in 2018 are ±2.55% adult visits; ±6.48% child visits; and ±3.52% total visits.

[21] The Mean, Standard Error of Mean and Confidence Limits on Mean for NPWS 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:

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

[22] The confidence limits for the overall visitation estimate in 2018, including non-survey regions are ±2.61% adult visits; ±6.64% child visits; and ±3.61% total visits.

The confidence limits for overall visitation per survey wave in 2018 ranges between ±8.26% (wave 1 9 December 2017-10 January 2018) and ±17.50% (wave 6: 28 April-29 May 2018) (see Table 19 following).

Table 19: Confidence Limits by Survey Wave[23]

No. NPWS Park Visits	Adult Visits Confidence Limit[1]	Child Visits Confidence Limit[1]	Total Visits Confidence Limit[1]
Wave 1	±8.02%	±12.90%	±8.26%
Wave 2	±8.31%	±15.53%	±10.24%
Wave 3	±9.69%	±26.97%	±14.26%
Wave 4	±9.05%	±23.39%	±13.11%
Wave 5	±7.66%	±20.74%	±11.10%
Wave 6	±9.87%	±35.95%	±17.50%
Wave 7	±11.52%	±27.08%	±15.27%
Wave 8	±10.37%	±14.46%	±9.72%
Wave 9	±11.34%	±21.34%	±14.60%
Wave 10	±8.48%	±17.69%	±10.19%
Wave 11	±7.75%	±16.91%	±10.13%
Wave 12	±9.80%	±24.95%	±13.88%
Wave 13	±9.34%	±13.43%	±9.95%
Total 2018	**±2.55%**	**±6.48%**	**±3.52%**

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

1. 95% confidence level for survey estimates only (excludes non-survey estimates).

Please note that hereafter, charts showing NPWS 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, NPWS branch etc.) have smaller sample sizes, and consequently large margins of error. For these graphs margins of error are not displayed. Where relevant, commentary has been made to alert readers to potentially large errors and cautions with interpreting data.

6.3 Visitation by Park Operations Branch

NSW NPWS went through a comprehensive restructure known as Future NPWS from late 2016 to early 2019. The restructure had a wide scope and included design, development, testing and extensive internal consultation on initiatives and changes to operations, programs, staffing, structure and administrative areas. Amongst these changes the one which is most relevant for Park Visitor Survey reporting and analysis is changes to administrative areas. In particular, the boundary based definitions of the 8 Branches and 37 Areas which are the foundation of the operational structure of NPWS.

The Park Visitor Survey captures data on visitation to individual parks. For reporting purposes these parks are aggregated to specific Branches which are the lowest level of the NPWS structure for which some results can be reliably reported. The consultation process to determine the final boundaries of NPWS's Branches commenced in mid 2017. The Branch definitions used for the 2018 Park Visitor Survey were based on information available when the survey was being set up before field work commenced. The first wave of interviewing commenced on 2 January 2018.

[23] 95% confidence level for survey estimates only (excludes non-survey estimates).

Between set up and commencement of the survey there were a number of minor modifications to Branch boundaries with the most significant of these relating to the NPWS Northern Inland and West Branches. See Table 20 below for a summary of these changes.

Table 20: Summary NPWS Park Movements from Commencement of Interveiwing

Park Movements	From	To	Visits
Mount Canobolas SCA	Northern Inland	West	245,386
Dharug NP	Hunter CC	Northern Inland	61,525
The Rock NR	West	Southern Ranges	49,429
Goobang NP	Northern Inland	West	43,328
Hill End HS	Northern Inland	Northern Inland	39,235
Beni CCAZ3 SCA	Northern Inland	West	38,971
Thalaba NR	Blue Mountains	Southern Ranges	26,708
Borenore KCR	Northern Inland	West	21,458
Nocoleche NR	West	Northern Inland	8,732
Gundabooka NP/SCA	West	Northern Inland	8,681
Ledknapper NR	West	Northern Inland	8,023

Most of the reserves involved received relatively low levels of visitation with the possible exception being Mount Canobolas SCA. A small number of Branch related tables and visit estimates in this report have been updated to reflect final Branch boundaries. These include Chart E in the Executive Summary and Charts 8 and 9 in section 6.3.1 and their associated commentary. All other Branch related trend commentary in the report has not been updated as the changes involved have minimal impact on the overall nature of these trends.

The full database (2008-2018) will be updated to reflect final Branch boundary definitions as at beginning of 2019. The 2020 survey will also incorporate these changes.

NPWS Branch was allocated to each respondent visiting a NPWS 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 NPWS Branch or Region. This occurred for 2% of visits in 2018 (2% of visits in 2016, 4% of visits in 2014, 9% of visits in 2012 and 7% of visits in both 2008 and 2010) (Chart 9).

Please note that wave-by-wave analysis of visitation by Branch, 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 NPWS Branch

In relation to absolute numbers, Chart 8 shows that in 2018, visits to parks increased for six of the eight Branches (significantly so for Northern Inland, Blue Mountains, Greater Sydney and Southern Ranges Branches), with the exceptions being the North Coast and West Branches (significantly lower for the former).

Visits to parks in the *Greater Sydney Branch* increased from 16.0m in 2016 to 19.7m in 2018 (Chart 8). This can be primarily attributed to the highest ever number of visits being recorded at Royal (6.1m), Ku-ring-gai Chase (3.9m), Sydney Harbour (2.4m), Lane Cove (2.4m), Garigal (1.1m) and Berowra Valley (0.8m) National Parks.

NPWS visits to parks in the *North Coast Branch* have decreased by 1.8m from 9.1m visits in 2016 to 7.3m visits in 2018. While high numbers of visits were observed in 2018 for Cape Byron (1.3m), and Yuraygir (0.6m) National Parks, visits declined from 2016 highs for Crowdy Bay (1.3m down to 0.4m) and Bundjalung (1.0m down to 0.29m) resulting in the overall decline in visits to this Branch in 2018.

Visits to *Hunter Central Coast Branch* parks increased by 0.5m in 2018 from 7.8m in 2016 to 8.3m. This was mainly due to the substantial increase in visits to Myall Lakes National Park (from 0.5m in 2014 to 1.3m in 2018) and marginal increases in visits to Bouddi (from 1.2m in 2016 to 1.3m in 2018) and Tomaree (from 0.9m in 2016 to 1.0m in 2018) National Parks.

The *Blue Mountains Branch* recorded its highest number of visits in 2018 (9.6m), up by 3.9m on 2016 levels (5.7m). Visits to Blue Mountains National Park comprised almost 90% of all visits to the Branch in 2016 (88.2%), recording 8.4m visits.

An increase of 0.7m visits from 2016 was observed for parks in the *South Coast Branch* (from 5.7m in 2016 to 6.4m in 2018). The increase in visitation was primarily the result of increased visits to Jervis Bay (from 0.6m in 2016 to 1.4m in 2018) and to a lesser extent, Morton (from 0.4m in 2016 to 0.6m in 2018) National Parks. Whilst visits to Ben Boyd National Park were maintained from 2016 levels in 2018 (0.5m in each year), a decline in visitation were observed for Eurobodalla National Park (from 0.7m in 2016 to 0.5m in 2018).

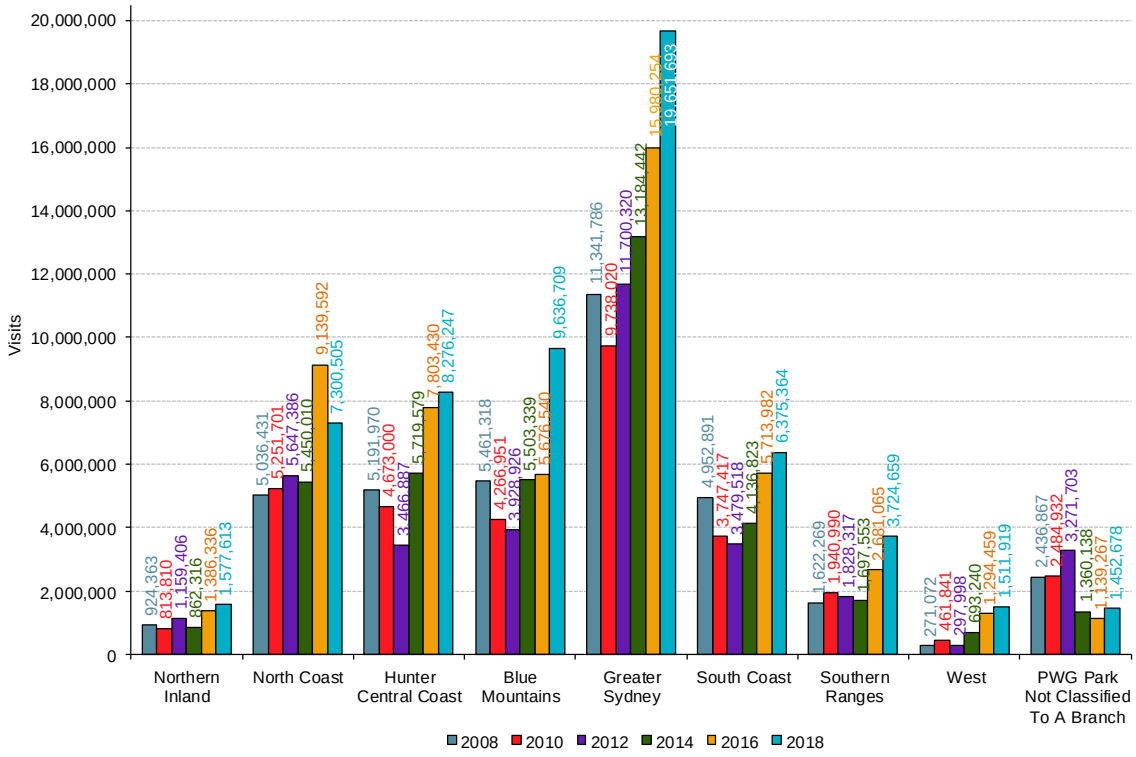
Visits to parks in the *Southern Ranges Branch* increased by over 1.0m in 2086 from 2016 levels (3.7m vs 2.7m). Almost 90% of all visits to this Branch come from visits to Kosciuszko National Park, which attained 3.3m visits in 2018, up from 2.2m in 2016.

A rise in visits of almost 0.2m was observed for parks in the *Northern Inland Branch*, with visitation rising from 1.4m in 2016 to1.6m in 2019. Visits are spread over a large number of parks for this Branch, with Pilliga (265,657) and Nymboida (233,335) National Parks and recording the highest number of visits in 2018. Oxley Wild Rivers (110,914) and Warrumbungle National Parks (90,577) were the next most visited parks.

Visits to the *West Branch* increased by 0.2m 2018 recording just 57,000 from 1.3m in 2016 to 1.5m in 2018. This was primarily due to a record number of visits made to Murray Valley National Park (838,736) and the inclusion of visits from Mount Canobolas State Conservation Area (245,386) from the Northern Inland Branch to the West Branch due to a definitional change. Visits to Murrumbidgee Valley National Park were slightly lower than the 2016 estimate (95,766 n 2018 down from 149,921 in 2016).

For more detail on visitation to selected NPWS parks refer to section 6.3.2 of this report.

Chart 8: NPWS Annual Visitation by NPWS Branch



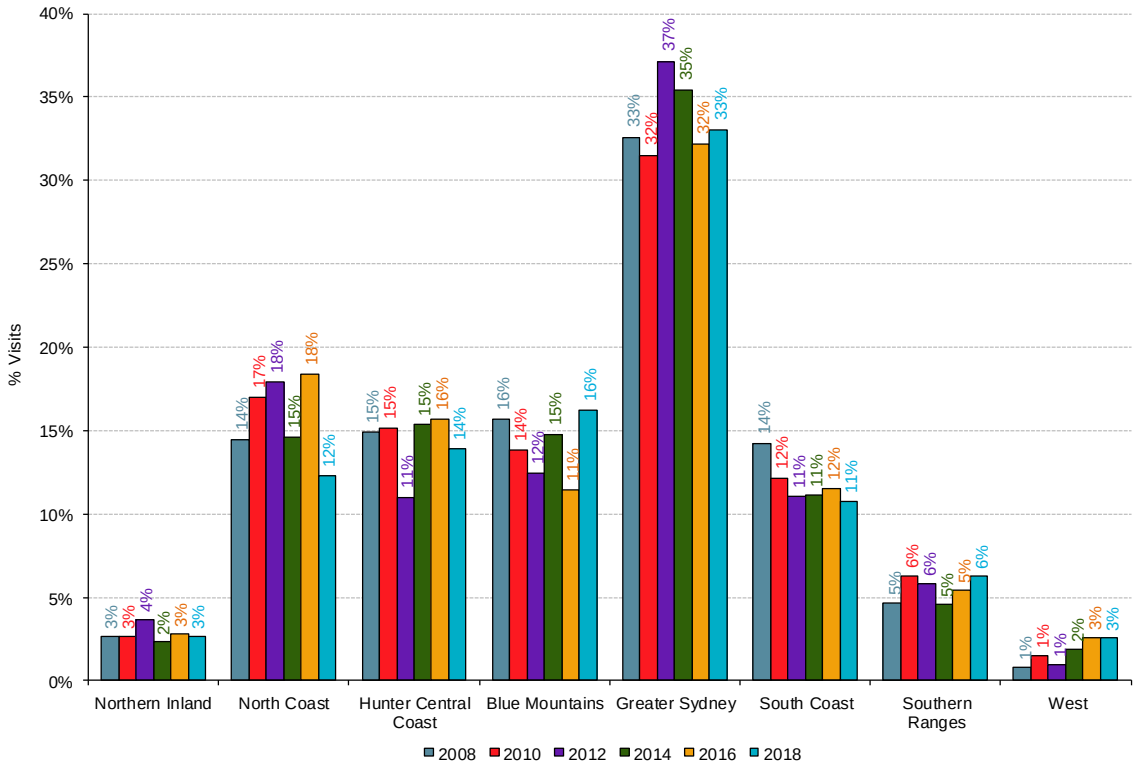
Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

When comparing proportional contribution to annual NPWS park visits located in the eight NPWS Branches (Chart 9), the contribution to overall visits from parks in the *Greater Sydney Branch* increased from 32% in 2016 to 33% in 2018. Increases in proportional contribution to park visits were also observed for the *Blue Mountains Branch*, up from 11% in 2016 to 16% in 2018 (the highest proportion attained) and for the *Southern Ranges Branch*, up from 5% in 2016 to 6% in 2018 (the same proportion as in 2012).

Whilst the proportional contribution for *Northern Inland and West Branches* were each maintained at 3% for 2018, the proportional contribution to annual NPWS park visits for all other Branches decreased from 2016 levels in 2018. The most notable decline was observed for the *North Coast Branch*, which fell from 18% in 2016 to 12% in 2018, the lowest proportion recorded for this Branch.

The proportion of visits *not classified to a Branch* has decreased from 7% in 2008 and 2010 and 9% in 2012 to 4% in 2014 to 2% in both 2016 and 2018. The number of respondents allocated to this category has been steadily declining over time (173 - 2008; 159 – 2010; 119 – 2012; 112 – 2014; 57 - 2016), although it did rebound slightly in 2018 to 73). This indicates that the process of allocation of visits to specific parks or towns within Branches has generally improved in efficiency over time.

Chart 9: Proportional NPWS Annual Visitation by NPWS Branch



Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

The following commentary provides comparison of visitation to NPWS Branches in 2008 to 2018 by wave. Please refer to Chart 10 to Chart 17 for more detail.

Please note that hereafter, charts showing NPWS 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, NPWS branch etc.) have smaller sample sizes, and consequently large margins of error. For these graphs margins of error are not displayed. As a consequence, seasonal fluctuations in visitation should be treated as indicative and any conclusions made treated with caution. Where relevant, commentary has been made to alert readers to potentially large errors and cautions with interpreting data.

Greater Sydney Branch – Visitation to NPWS parks in the Greater Sydney Branch was higher in 2018 than in all previous years in waves 4 and 5 (March and April – Easter and school holidays) and in waves 7 to 11 (June to mid-October – winter and spring school holidays). Visitation levels in 2018 were the second highest recorded (with 2016 levels being the highest) in waves 12 and 13 (mid-October to mid-December). Compared with previous years, relatively low levels of visitation were observed in 2018 over the Christmas-New Year and summer school holiday period in December-January (waves 1 and 2).

North Coast Branch – There does appear to be a cyclical trend in the visitation pattern to North Coast Branch parks over time, high in mid-summer (January), mid-Autumn (April), mid-Winter (July-August) and mid-spring (mid-September to mid-October) and in recent years, in early summer (December). Visitation is generally lower at all other times. Visitation in 2018 was higher than in

previous years in wave 1 (January) and in waves 5 and 7 (April and June). A downward trend in visitation over time can be seen in mid-July to mid-August (wave 9 – winter), while visitation was the lowest recorded on wave 11 of 2018 mid-September to mid-October (spring).

Hunter Central Coast Branch – Similar to the North Coast Branch, Hunter Central Coast visits tend to be cyclical, being high in mid-summer (January) and mid-Autumn (April), while the peak in winter is earlier (June) and the peak in Spring later (mid-October-mid-November). Visitation was higher in 2018 than in any other year in waves 2 and 3 (January-February – mid-late summer), wave 5 (April – Easter and school holidays), wave 7 (June – school holidays), wave 11 (mid-September to mid-October – school holidays) and wave 13 (mid-November to mid-December).

Blue Mountains Branch – Visitation to parks in the Blue Mountains Branch tend to be relatively stable across the course of the year, with minor peaks in visitation in December, February, May and mid-July-mid August), with the biggest troughs in visitation occurring from September to November. Extremely high peaks in 2018 visitation occurred in wave 3 (February – late summer), waves 5 to 7 (April to June – autumn to early winter – Easter and school holidays) and wave 9 (mid-July to mid-August – winter). The highest level of visitation was also recorded in wave 11 2018 (mid-September to mid-October – spring and school holidays), but this peak was not markedly higher than in previous years and was still low in comparison to visits in other months. There appears to be a downward trend in visitation for wave 10 – mid-August to mid-September).

South Coast Branch – As a general trend, visitation to parks in the South Coast Branch tend to peak in waves 1 and 2 (December-January during the summer holidays) and decline to low levels of visitation in wave 12 (mid-October-mid-November) and then increase to the peak in summer. This is not surprising as people tend to head to the South Coast in summer and escape the heat. In 2018 however the highest peaks in visitation were observed in waves 6 and 7 (May and June) as well as in wave 1 (December), with notably high levels of visitation also occurring in waves 2 (January) and wave 4 (March – Easter).

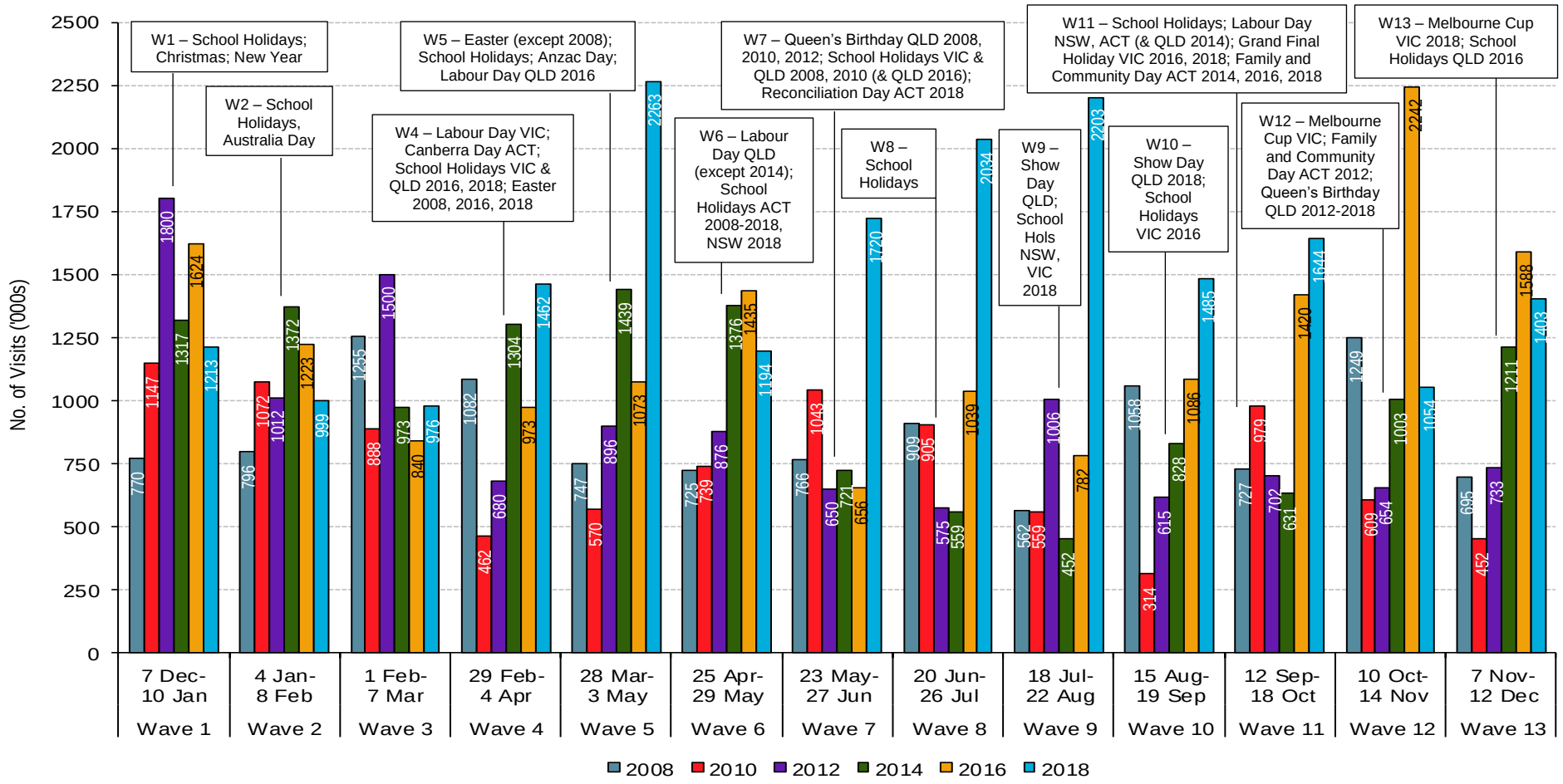
Southern Ranges Branch – Visitation to parks in the Southern Ranges Branch tends to peak from wave 8 to wave 11 (mid-June to mid-October), which coincides with the snow season. There also appears to be a smaller peak in wave 3 (February), but this peak is influenced heavily by large visitation numbers in that wave in 2010 and 2012, while visitation in other years has been very low in that wave. The highest recorded levels of visitation were observed in 2018 for waves 1 and 2 (summer), wave 4 (March – Easter) and in waves 10, 11 and 12 (mid-August to mid-November), which coincided with a later than average snow season. The lowest level of visitation ever recorded in wave 8 (mid-Jun to mid-July) also confirms the later than average snow season in 2018.

Northern Inland Branch – On average, only 6 respondents claim to visit parks in the Northern Inland Branch each wave, so visitation estimates per wave are subject to large error and should be treated with caution. That stated, visitation tends to peak in the Northern Inland Branch in wave 1 (December), wave 5 (April) and wave 11 (mid-September-mid October) in line with school holidays. The highest visitation levels recorded were observed in 2018 for waves 1 (December), wave 5 (March-April) and waves 10 and 11 (mid-August-mid-October).

Western Branch – On average, only 2 to 3 respondents claim to visit parks in the West Branch each wave, so visitation estimates per wave are subject to significantly large error and should be treated with extreme caution. Excluding the exceptionally high visitation estimates in wave 13 of

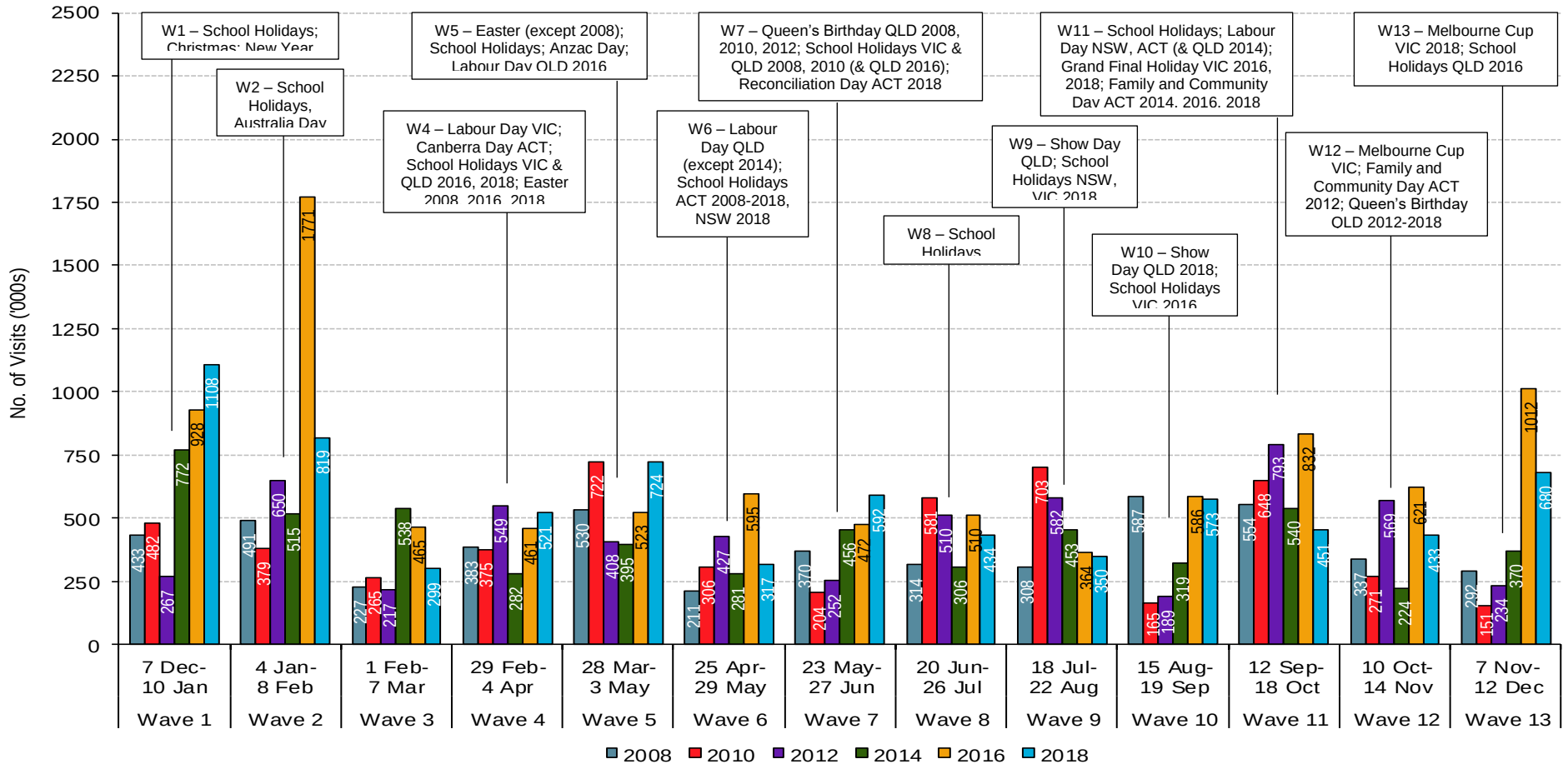
2010, visitation in waves 1 and 2 of 2016 and waves 1 and 6 of 2018 for parks in the West Branch remains at consistently low levels at around 30,000 to 60,000 visits per wave. The September school holiday period in waves 10 and 11, particularly from 2014 onwards, do tend to exhibit slightly higher average visitation at around 70,000-80,000 visits, but aside from this, visitation all other waves remains relatively constant. The high levels of visitation in wave 1 and 2 of 2016 and wave 1 and 6 of 2018 are the result of a high number of visits from two or three respondents and cannot be considered to accurately reflect visitation to this Branch over this period.

Chart 2: Greater Sydney Branch Visitation by Survey Wave—2008-2018



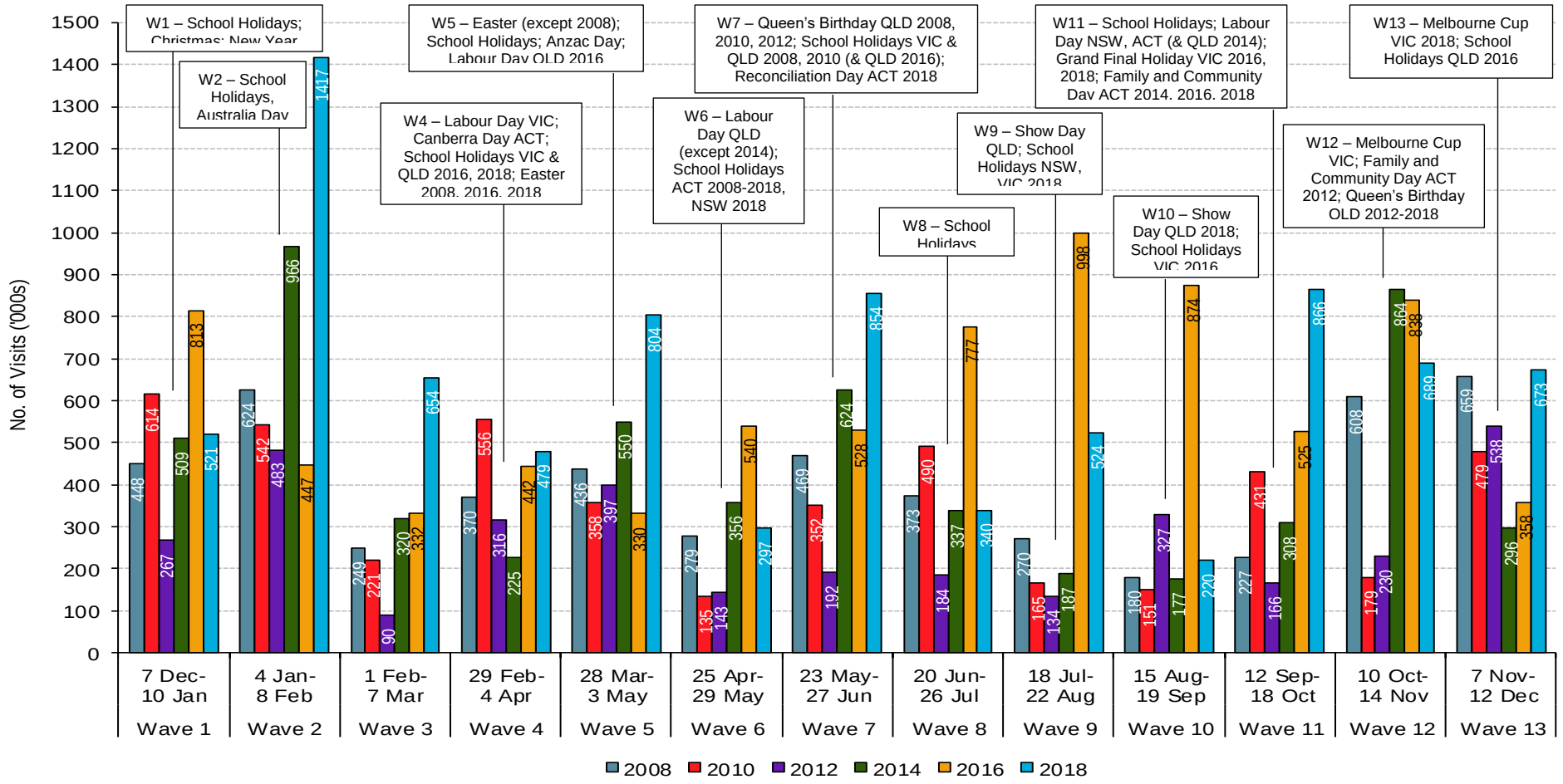
Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=513; 2010 n=470; 2012 n=519; 2014 n=567; 2016 n=618, 2018 n=647

Chart 3: North Coast Branch Visitation by Survey Wave—2008-2018



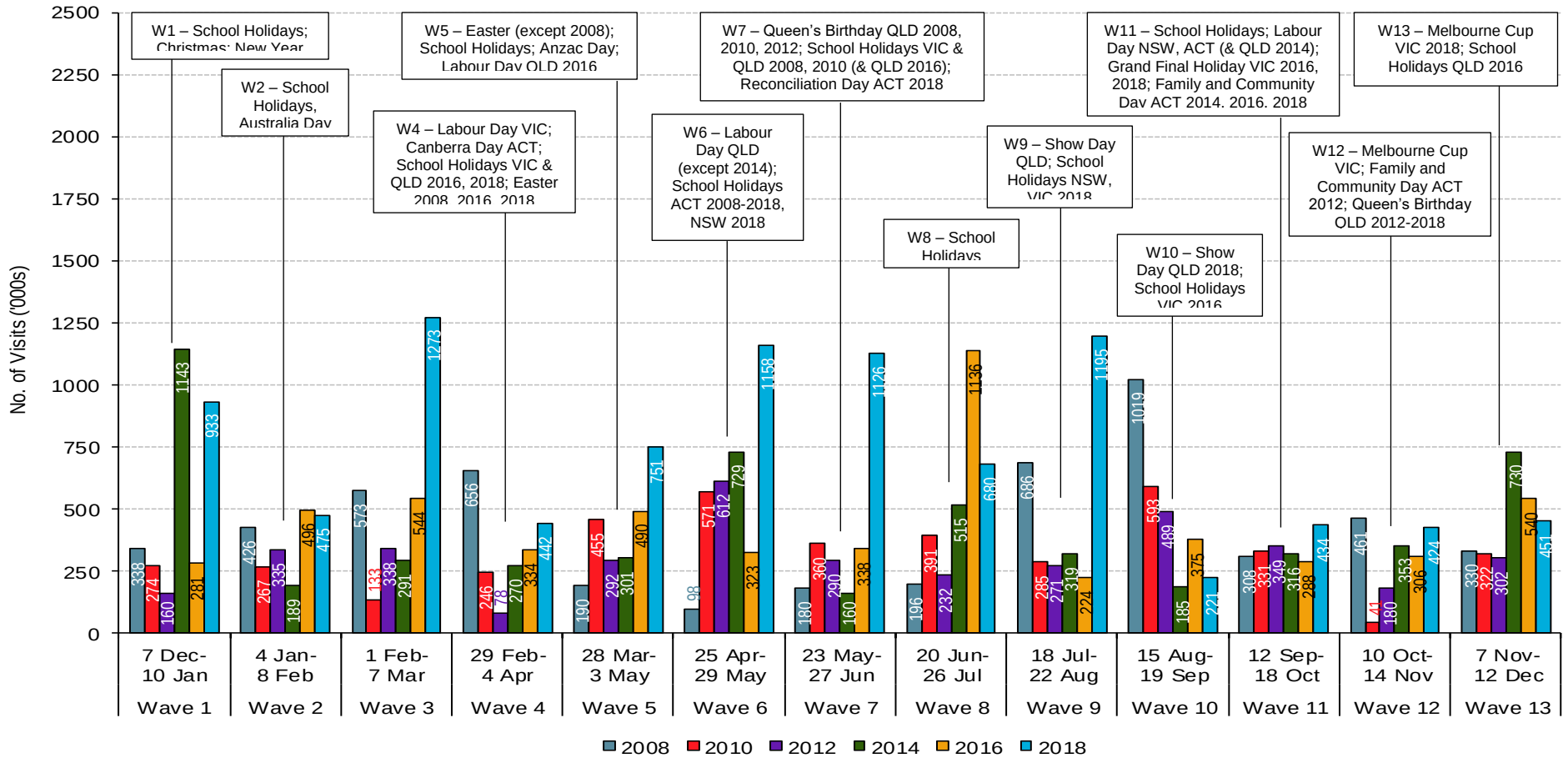
Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=297; 2010 n=280; 2012 n=257; 2014 n=309; 2016 n=332, 2018 n=301

Chart 12: Hunter Central Coast Branch Visitation by Survey Wave—2008-2018



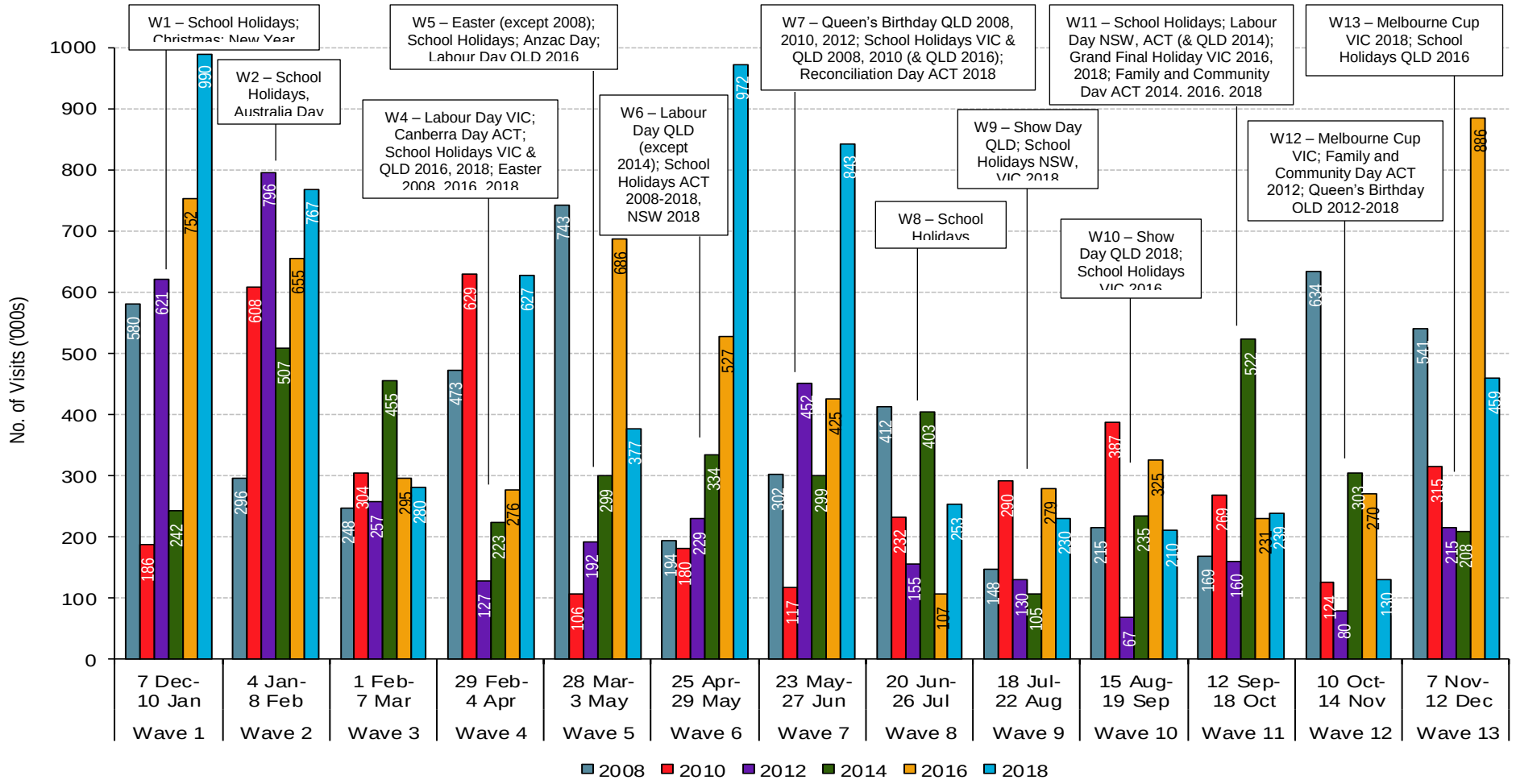
Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=211; 2010 n=204; 2012 n=177; 2014 n=242; 2016 n=223, 2018 n=265

Chart 13: Blue Mountains Branch Visitation by Survey Wave—2008-2018



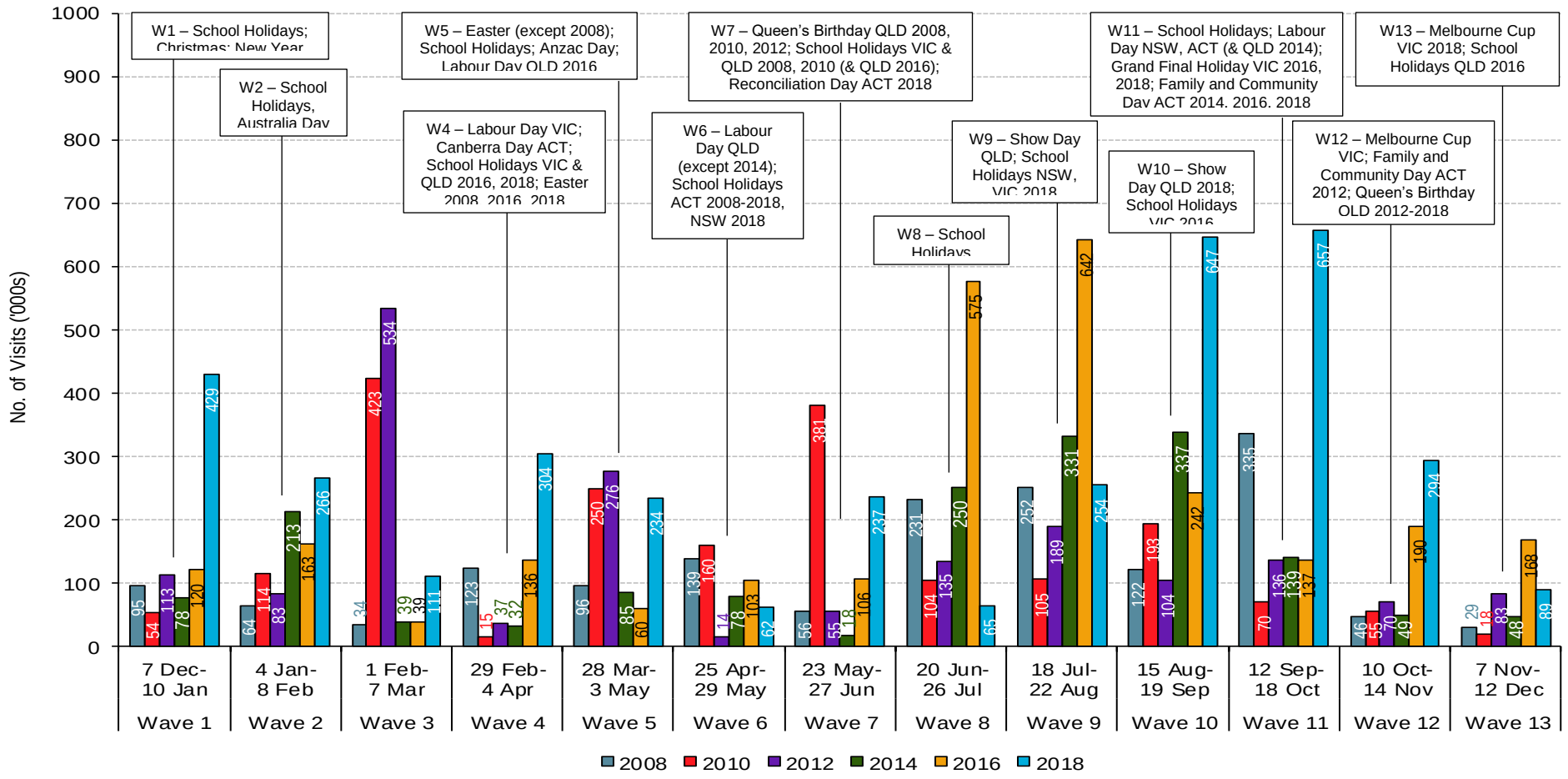
Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=201; 2010 n=187; 2012 n=185; 2014 n=228; 2016 n=223, 2018 n=219

Chart 14: South Coast Branch Visitation by Survey Wave—2008-2018



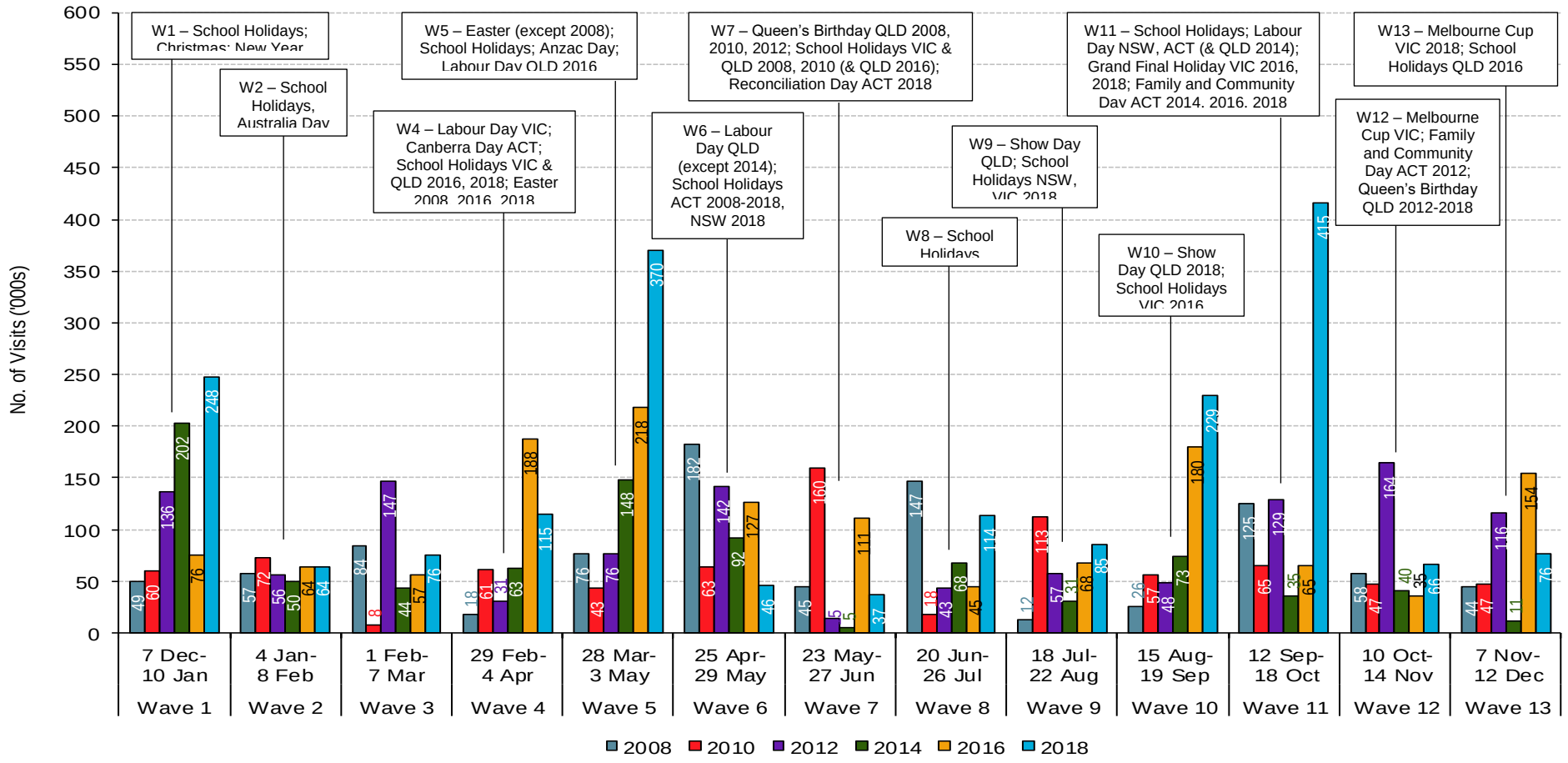
Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=305; 2010 n=250; 2012 n=256; 2014 n=322; 2016 n=279, 2018 n=269

Chart 15: Southern Ranges Branch Visitation by Survey Wave—2008-2018



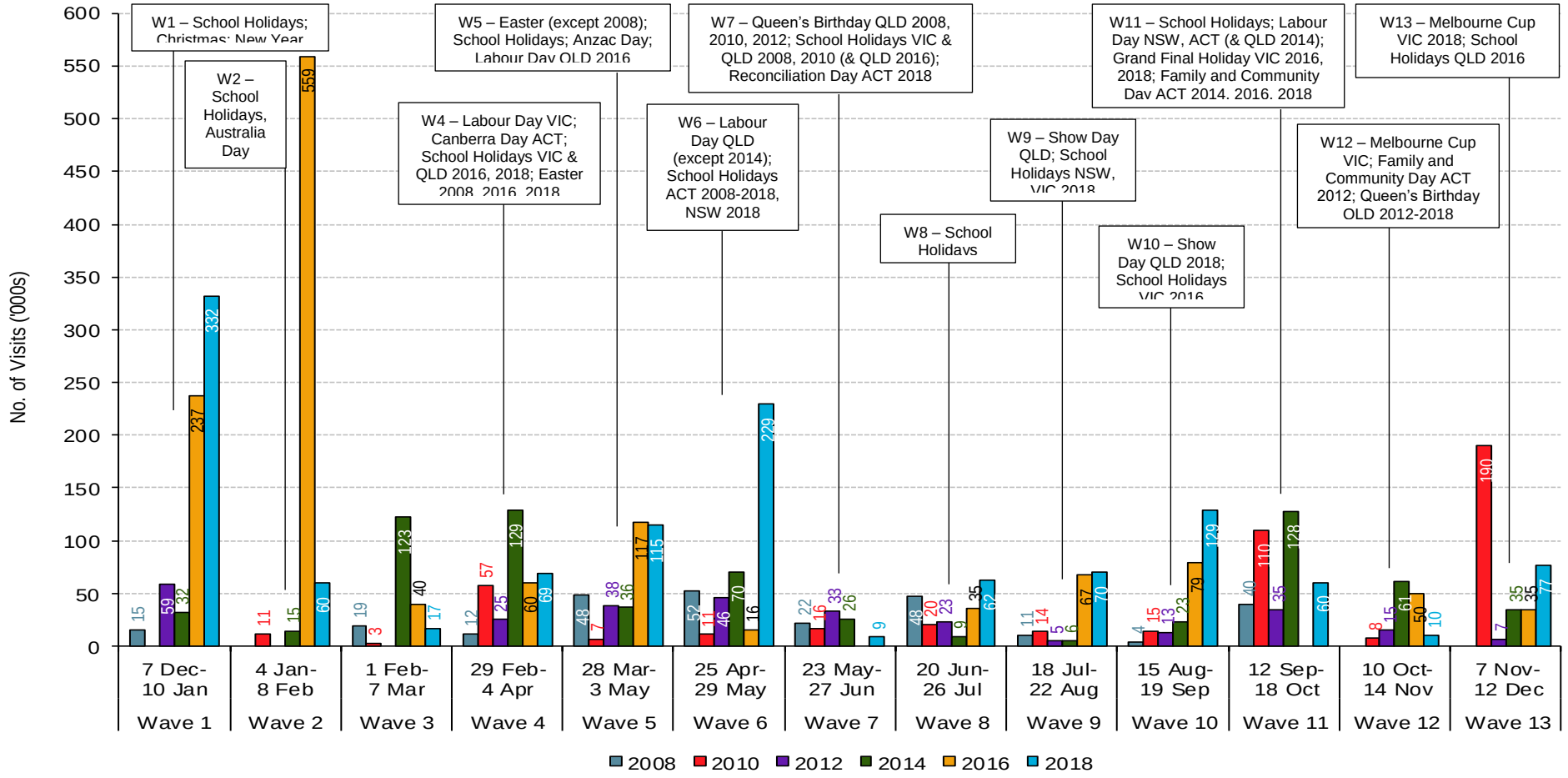
Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=145; 2010 n=145; 2012 n=143; 2014 n=167; 2016 n=185, 2018 n=169

Chart 16: Northern Inland Branch Visitation by Survey Wave—2008-2018



Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=77; 2010 n=65; 2012 n=82; 2014 n=79; 2016 n=87, 2018 n=93

Chart 17: West Branch Visitation by Survey Wave—2008-2018



Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=23; 2010 n=25; 2012 n=31; 2014 n=41; 2016 n=44, 2018 n=51 – Caution, small sample sizes

6.3.2 Visitation to Selected NPWS Parks

Please note that visitation results by NPWS 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 Chart 18 and Chart 19 to provide an indication of actual park visitation to individual parks over time.

In terms of the highest number of visits, *Blue Mountains National Park* (8.4m visits) has maintained the top position in 2018 from Royal National Park (6.1m visits). From 2008 to 2010, visitation to Blue Mountains National was in decline (from 3.6m visits to 3.1m), but has since broken visitation records in 2014, 2016 and 2018. Visits to *Royal National Park* have tended to be cyclical, achieving higher levels of visitation in 2008, 2012 and 2014 and lower levels of visitation in 2010 and 2012. However, this cycle has now ceased, with record levels of visitors observed in 2018.

From 2008 to 2012 visitation to *Ku-ring-gai Chase National Park* was steadily increasing, but in 2014 visitation declined to 2010 levels. However in 2016 and 2018, record levels of visitation were recorded (3.4m and 3.9m respectively).

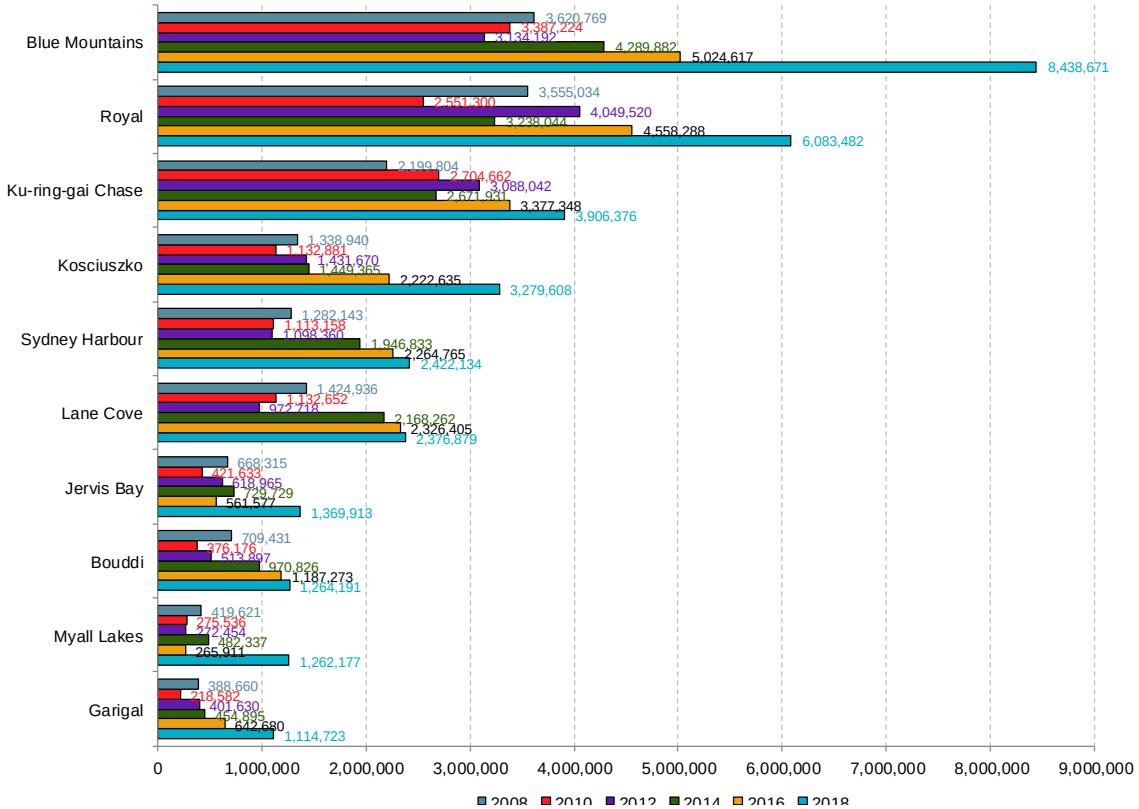
Apart from a slight fall in visitation in 2010, the number of visits made to *Kosciuszko National Park* has remained relatively constant over time. However, in 2016 visits increased by almost 0.75m on 2014 levels to 2.2m visits, which have been topped in 2018 to 3.3m visits, an increase of 1.1m visits on 2016 levels.

From 2008 to 2012 visitation to *Sydney Harbour* and *Lane Cove* National Parks had been on the decline. However, in 2014 visitation to both parks broke visitation records, which have since been broken in 2016 and again in 2018 (2.4m each in 2018).

These six parks tend to record the highest number of visits in any given year, with the remaining parks in the top ten varying from year to year. This is because the number of respondents visiting each of these six parks each year is statistically robust (ranging from n=50 up to n=250), while the number of respondents visiting each of the four remaining parks each year is not statistically robust (i.e. under n=35 respondents). Therefore, visitation estimates for parks with fewer than 35 respondents should be treated with great caution and regarded as indicative, rather than precise. It should be noted that visitation estimates for these parks will vary markedly from year to year due to these small sample sizes.

In 2018, the following four parks placed seventh to tenth in terms of total visits made – *Jervis Bay* (1.4m), *Bouddi* (1.3m), *Myall Lakes* (1.3m) and *Garigal* National Parks (1.1m).

Chart 18: Annual Visitation for Selected Parks—Parks 1-10



Caution: Small sample sizes for Bouddi, Myall Lakes and Garigal (n<30)
Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

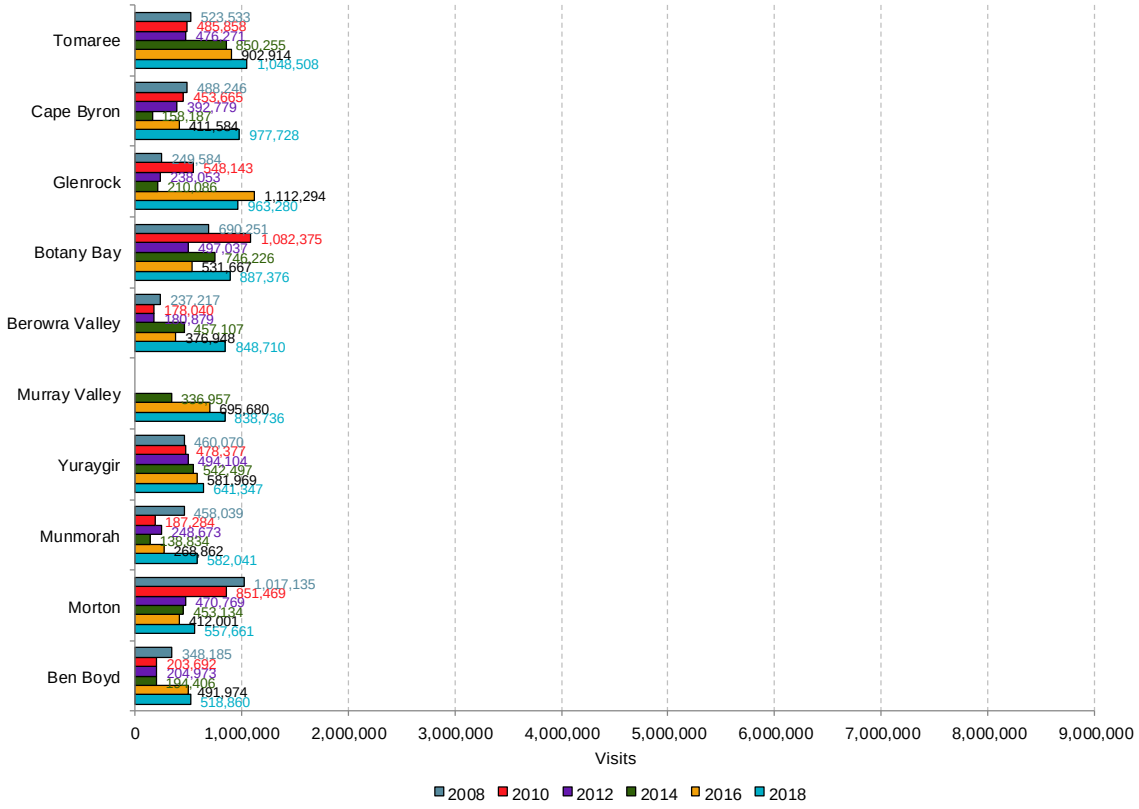
For parks ranked 11 to 20, number of visits should be taken with caution due to small samples sizes. As can be seen in Chart 19 visitation for each of the parks ranked 11 to 20 in 2018 was the highest ever estimated, except for visits to *Glenrock, Botany Bay* and *Morton* National Parks.

As discussed it must be noted that small numbers of respondents can have significant impacts on annual visitation numbers to specific parks. One such example in Chart 19 is *Cape Byron National Park* where visitation has increased from 158,187 visits in 2014 to 977,728 in 2018. This actually represents an increase from 14 respondents in 2014 to 23 respondents in 2018. This underscores why analysing visitation results for individual parks should be treated with great caution.

Tomaree, *Botany Bay*, *Murray Valley* and *Yuraygir* National Parks tend to be regularly listed in the top 20 visited parks, with *Morton* National Park close to, if not in, the top 20 each year. Glenrock National Park has been in the top 20 in 2016 and 2018. Newcomers for 2018 are *Cape Byron, Berowra Valley, Munmorah and Ben Boyd* National Parks.

Visitation to *Tomaree*, *Yuraygir* and *Murray Valley* National Parks tends to be steadily increasing over time, while visitation to *Botany Bay* National Park tends to be cyclical – lower than average in 2008, 2012 and 2016 and higher than average in 2010, 2014 and 2018.

Chart 19: Annual Visitation for Selected Parks—Parks 11-20



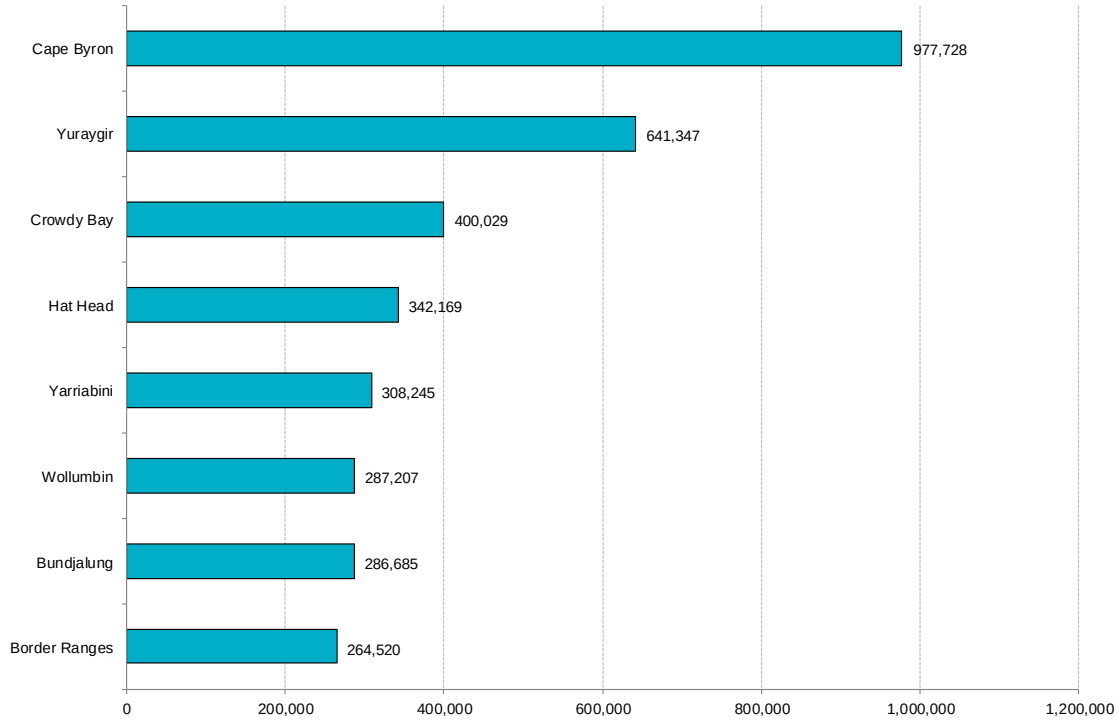
Caution: Small sample sizes for all parks (n<30), except Botany Bay
Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

Estimates for the most visited parks in each NPWS Management Branch for 2018 have been provided in Charts 20 to 27 below. *Please note that visitation estimates calculated for the majority of these parks is based on very small sample sizes and therefore subject to significant error. Visitation numbers should therefore only be seen as indicative.*

Greater Sydney Branch has seven parks in the top 20 for visits, Hunter Central Coast Branch has five, South Coast Branch has three, North Coast Branch has two and Blue Mountains Branch and West Branch each have one. Pilliga National Park, the most visited park in the Northern Inland Branch ranks 39th in terms of visits in 2018.

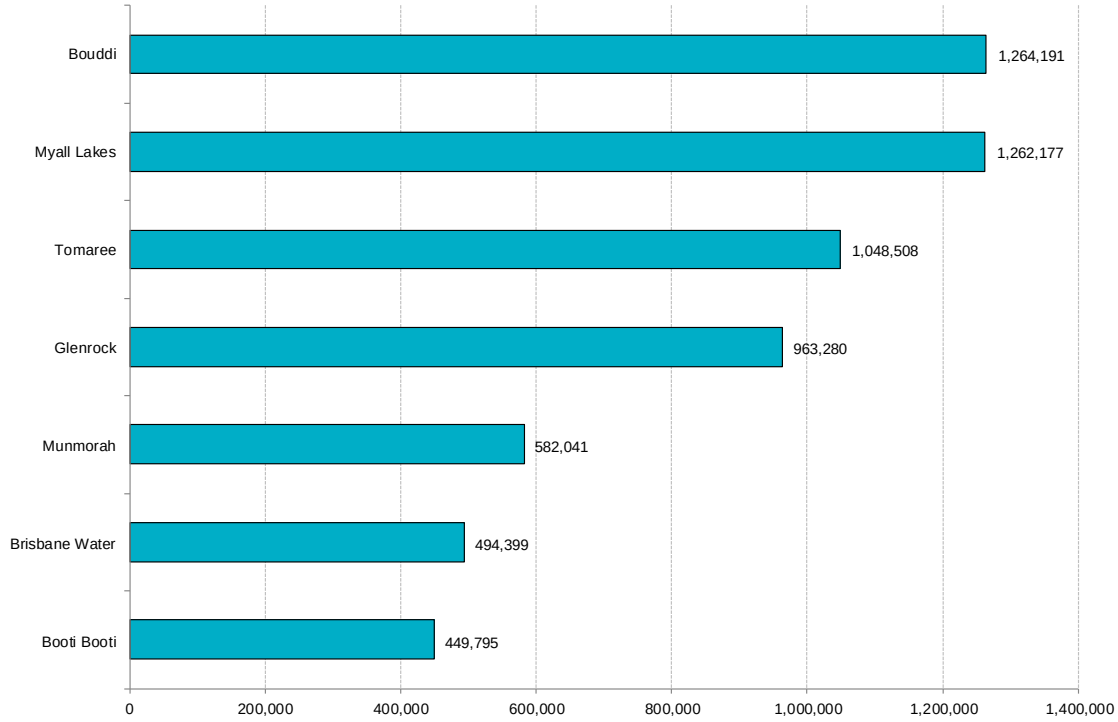
Please note that the redefining of NPWS Parks to NPWS Branches which occurred during 2019 has been conducted for the following analysis. As a result visits to Mount Canobolas SCA have been included in visits to the West Branch for 2018, rather than in the Northern Inland Branch, which was the case for 2008 to 2016.

Chart 20: 2018 Visitation for the top parks in the North Coast Branch



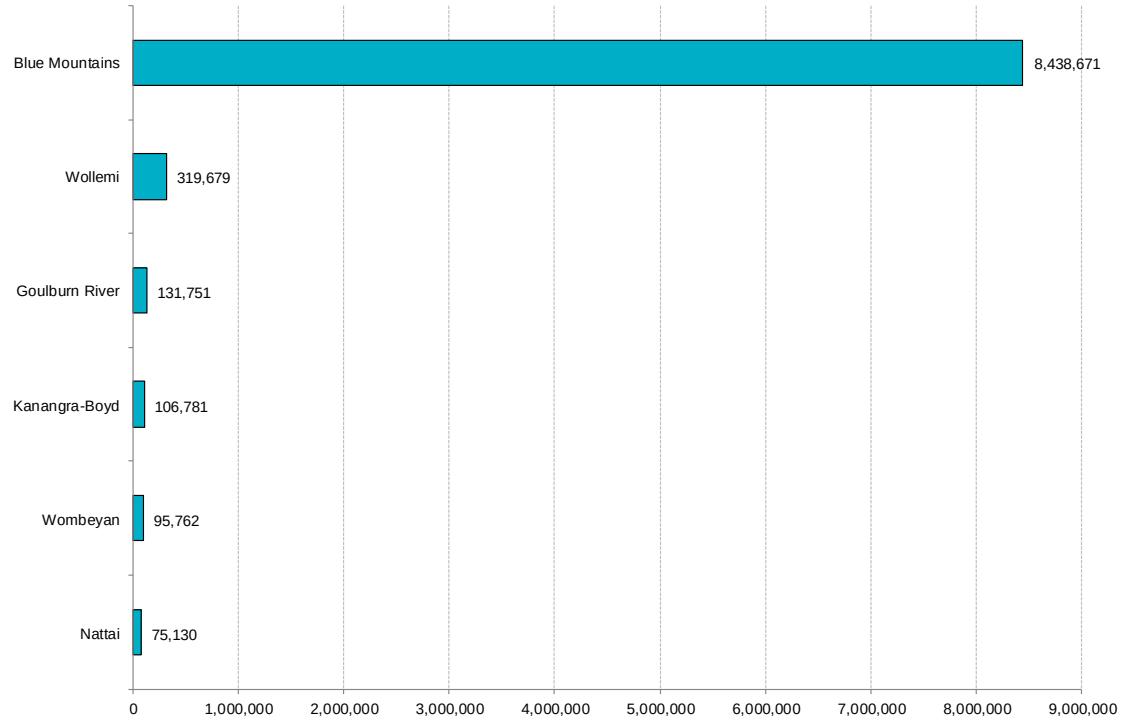
Source: NPWS Parks Visitor Surveys 2018
Base: n=301

Chart 21: 2018 Visitation for the top parks in the Hunter and Central Coast Branch



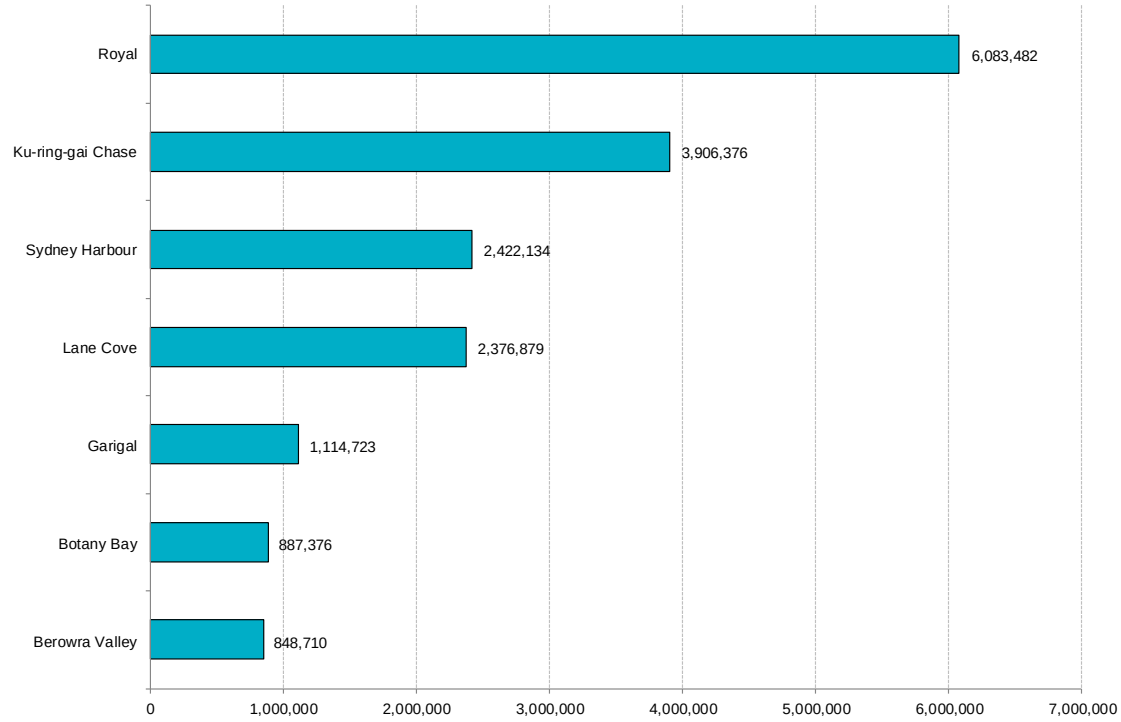
Source: NPWS Parks Visitor Surveys 2018
Base: n=265

Chart 22: 2018 Visitation for the top parks in the Blue Mountains Branch



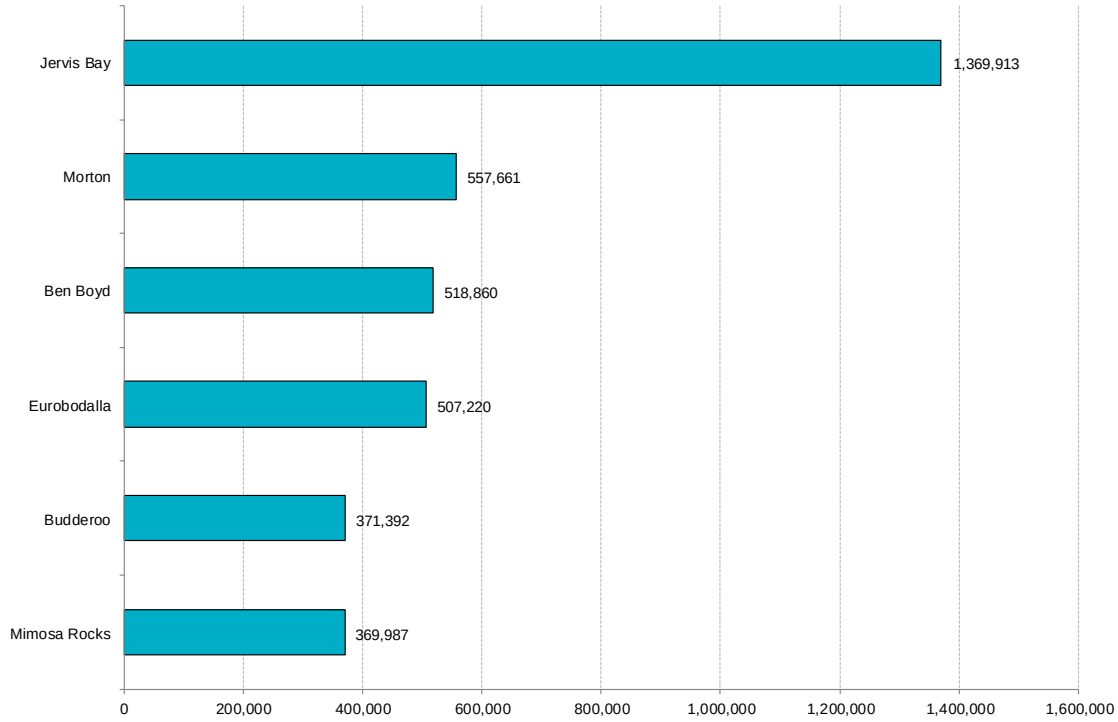
Source: NPWS Parks Visitor Surveys 2018
Base: n=219

Chart 23: 2018 Visitation for the top parks in the Greater Sydney Branch



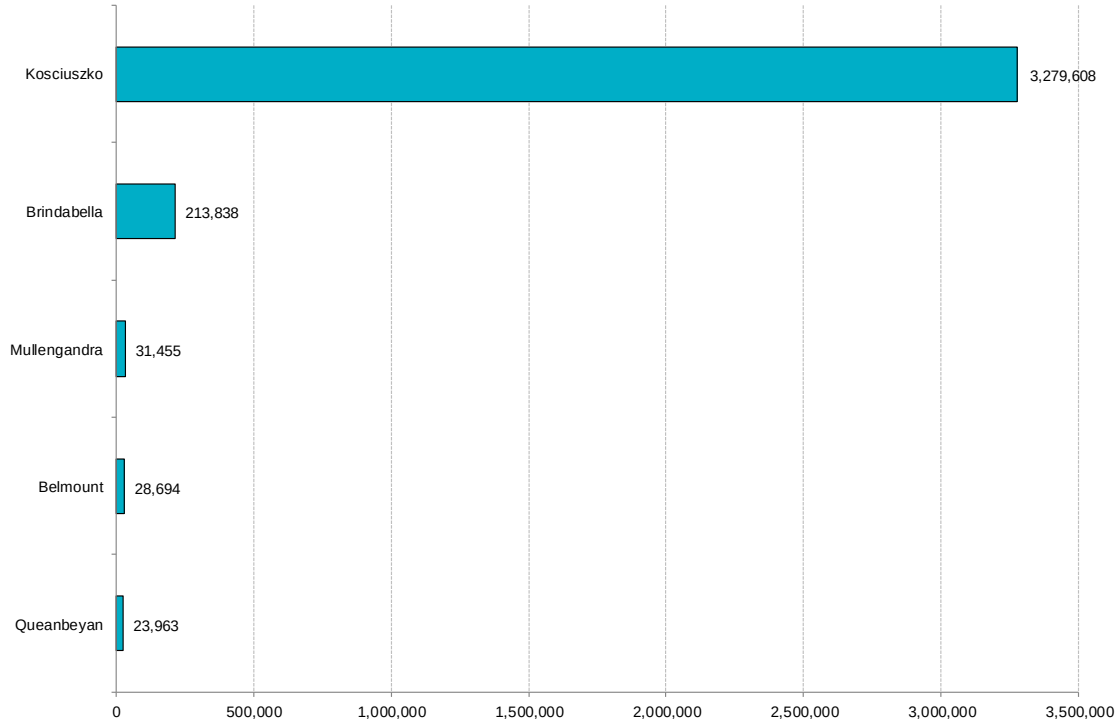
Source: NPWS Parks Visitor Surveys 2018
Base: n=647

Chart 24: 2018 Visitation for the top parks in the South Coast Branch



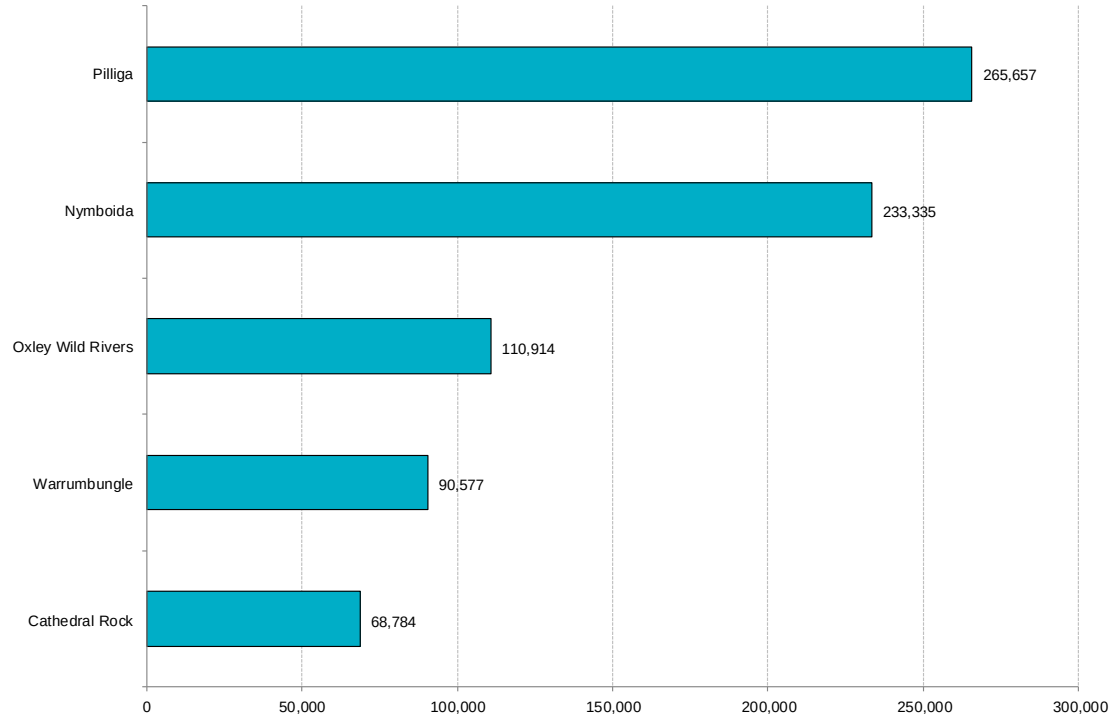
Source: NPWS Parks Visitor Surveys 2018
Base: n=269

Chart 25: 2018 Visitation for the top parks in the Southern Ranges Branch



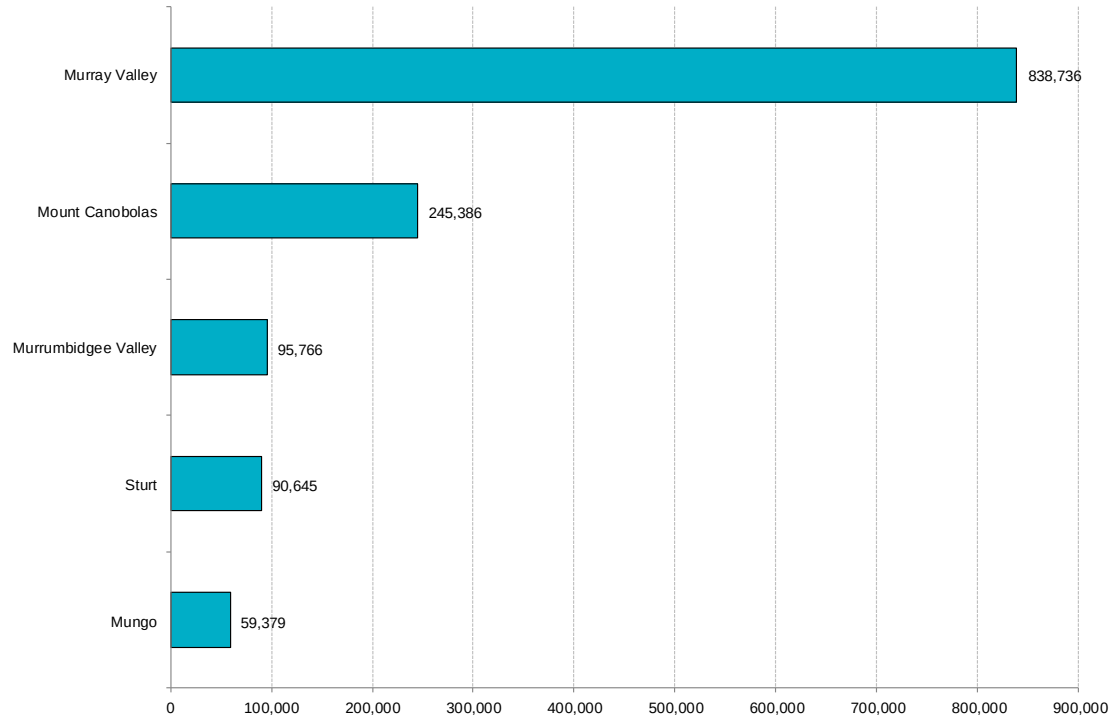
Source: NPWS Parks Visitor Surveys 2018
Base: n=169

Chart 26: 2018 Visitation for the top parks in the Northern Inland Branch



Source: NPWS Parks Visitor Surveys 2018
Base: n=93

Chart 27: 2018 Visitation for the top parks in the West Branch



Source: NPWS Parks Visitor Surveys 2018
Base: n=51

7. Potential Factors Influencing Park Visits

This section specifically looks to determine whether changes to NPWS park visitation over time is dependent on any external factors and 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 and quarter by quarter 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 in 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.

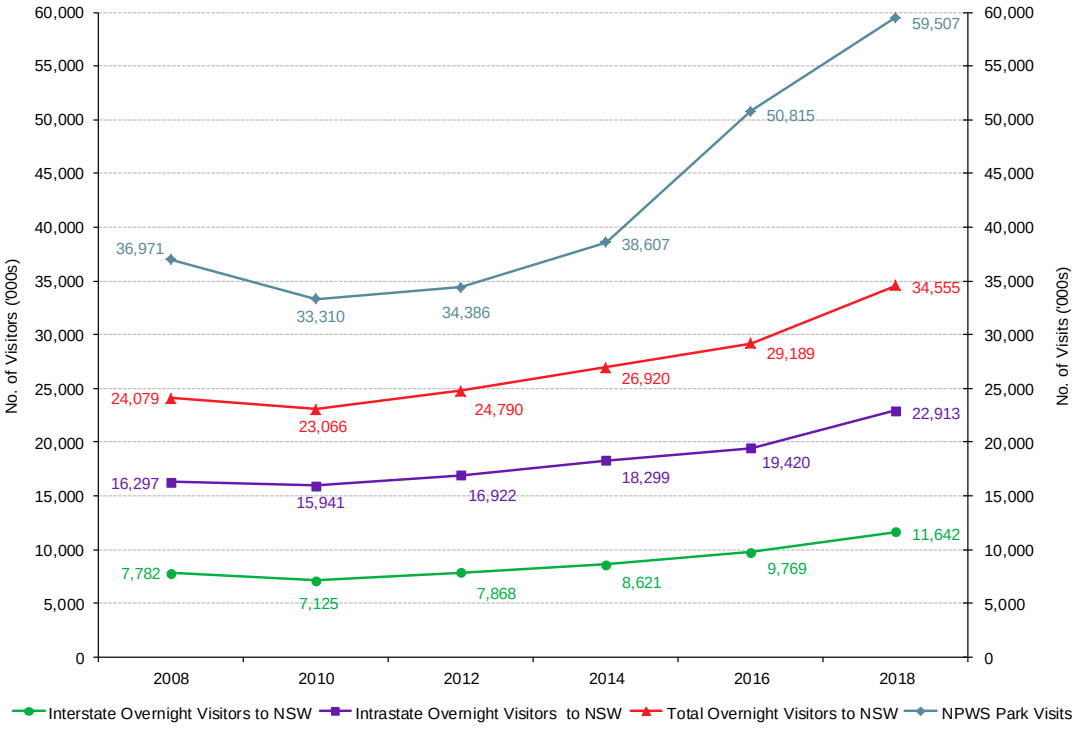
7.1 Visitation to New South Wales

Chart 28 shows annual survey visitation data for survey years 2008 to 2018 (adjusted as detailed above) and compares it with the number of visitors taking overnight trips to destinations in New South Wales[24]. 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, 2016 and 2018. This result was consistent across both interstate and intrastate visitors. However, NPWS park visitation data, whilst showing a rebound from 2010 levels in 2012, did not exceed 2008 levels, but increased from 2014 onward to its highest level in 2018.

The same result can be seen in Chart 29, which compares NPWS park visitation data with visitor nights in NSW.

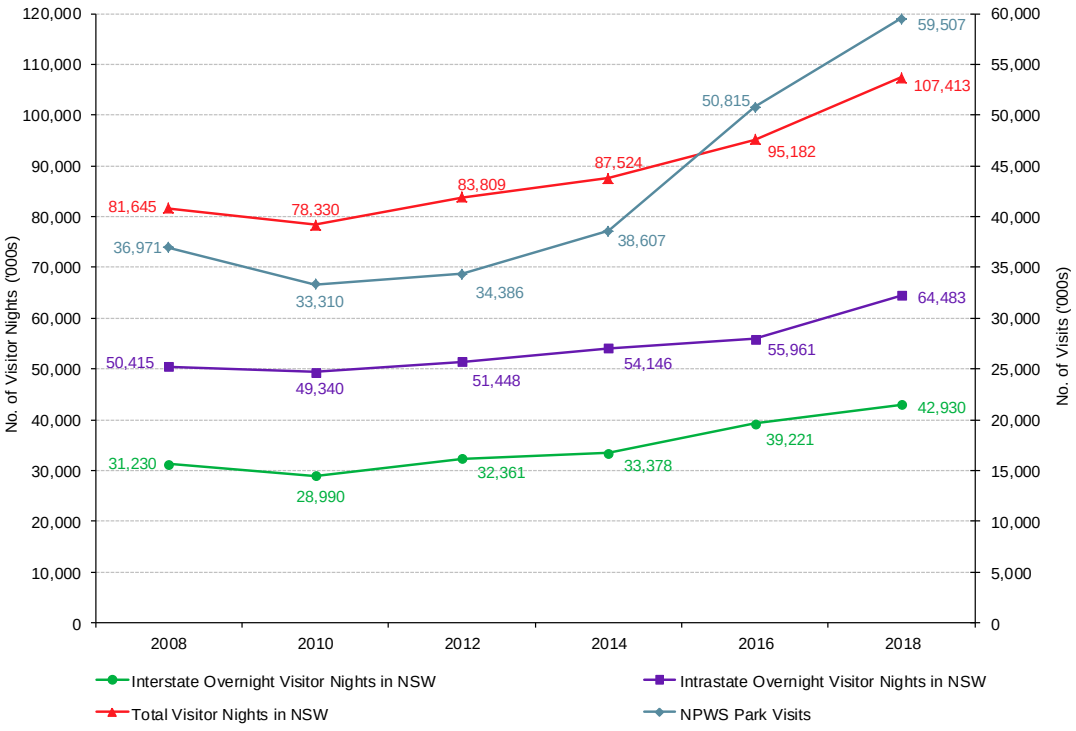
[24] National Visitor Survey – Tourism Research Australia.

Chart 4: Annual NPWS Park Visitation versus Overnight Visitors to NSW



Sources: National Visitor Survey – Tourism Research Australia; NPWS Parks Visitor Surveys 2008-2018:

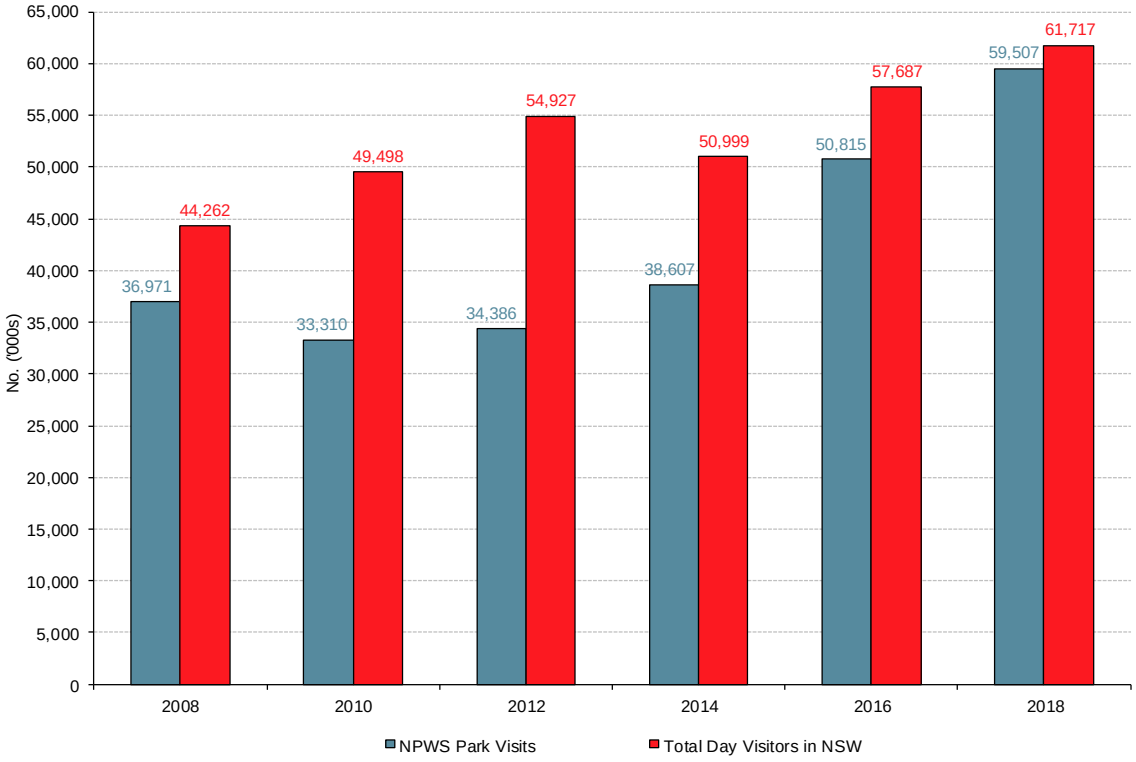
Chart 5: Annual NPWS Park Visitation versus Visitors' Nights in NSW



Sources: National Visitor Survey – Tourism Research Australia; NPWS Parks Visitor Surveys 2008-2018:

However, an argument can be made that the majority of visits to NPWS parks would be for day trips (which has been proven via new questions added from wave 7 in 2016—see section 8.4 for more details), so NPWS park visitation should match more closely with day trip visitation in NSW. Chart 30 compares annual NPWS 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 to 51.0m, before increasing again in to 57.7m in 2016 and 61.7m in 2018. Conversely, the number of NPWS park visits declined in 2010 and then increased in 2012 (but not to 2008 levels) and then further increased from 2014 to record levels in 2016 and 2018. The pattern displayed for day trip visitors in NSW is not evident in NPWS park visits.

Chart 6: Annual NPWS Park Visitation versus Day Visitors in NSW



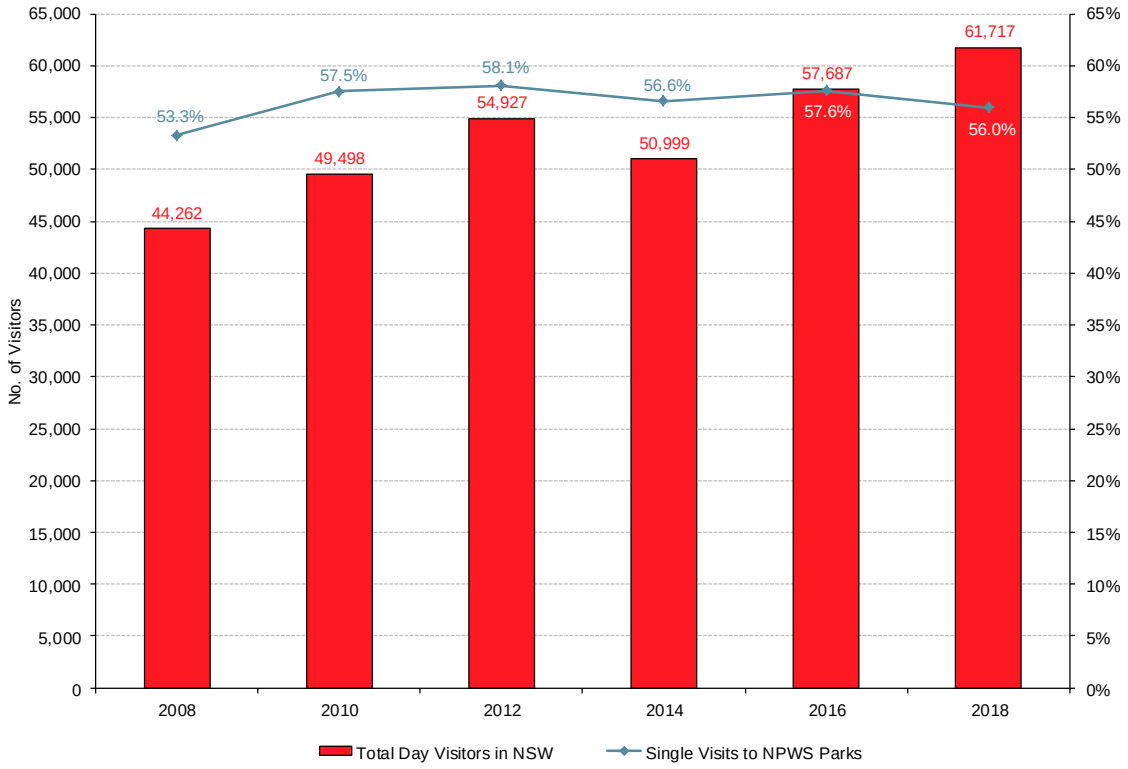
Sources: National Visitor Survey – Tourism Research Australia; NPWS Parks Visitor Surveys 2008-2018:

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 in any given year 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 NPWS parks will provide an indication of whether the day trip trend occurs for single park visits or not. (N.B. As the new question asking about *duration of trip* to a NPWS park was not asked until the 2018 survey, time series analysis cannot be undertaken using this question. Therefore *single visits* to a NPWS park has been used as a proxy for day trips to undertake this analysis).

Chart 31 shows that the proportion of single trip visits to NPWS 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 before increasing again to 57.6% in 2016. However, in 2018, the proportion of single visits declined to 56.0% while the number of day visitors to NSW increased – so the pattern of change differs in 2018. However,

the new question on duration of visit in 2018 shows that 85.5% of NPWS visitors went just for the day, so future waves may indicate that the trend in day trips to NPWS parks follows the trend of day visitors to NSW. So 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 generally match the number of day trip visitors to NSW, indicating that there is likely to be a relationship between day visitors and single visits to NPWS parks (and hopefully day trips to NPWS parks going forward).

Chart 7: Single Visits to NPWS Parks versus Day Visitors in NSW

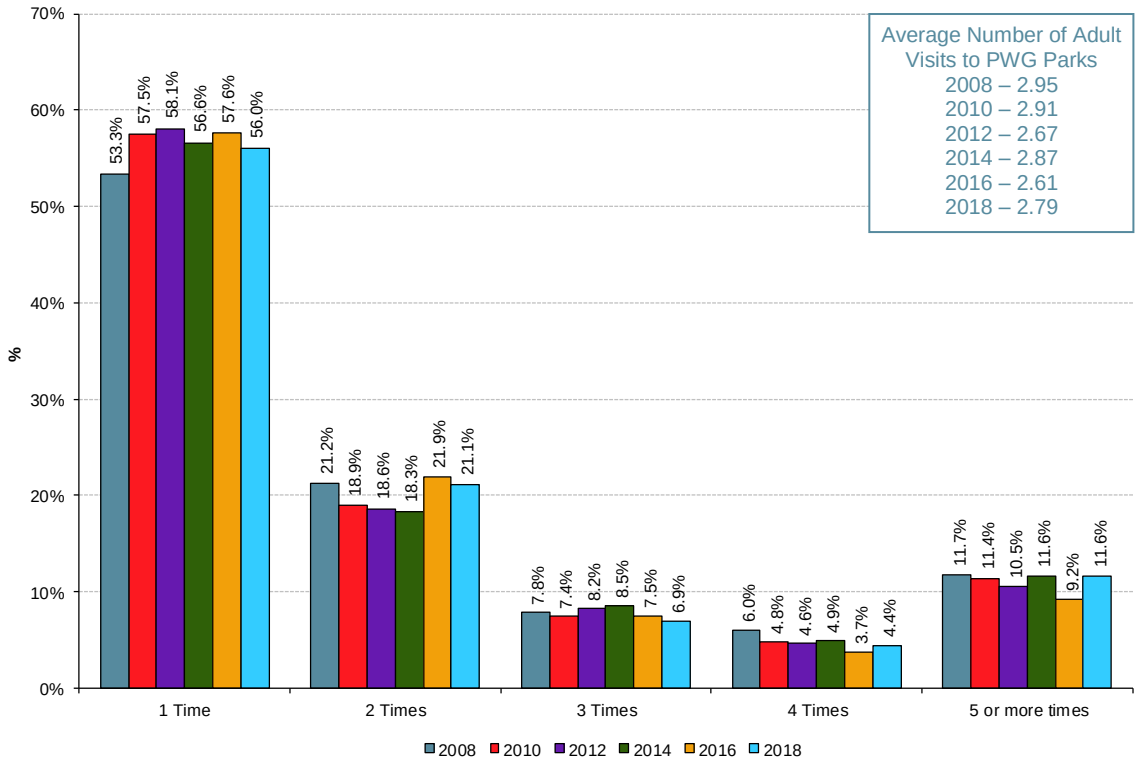


Sources: National Visitor Survey – Tourism Research Australia; NPWS Parks Visitor Surveys 2008-2018:

This trend in single visits to NPWS parks (which generally matches day visitors to NSW) and the overall trend in NPWS parks visits (which does not necessarily mirror overnight visitation to NSW), indicates that multiple visits to NPWS parks must not have been as strong in 2012 as it had been in previous years, but should have rebounded in 2014 through 2018.

In fact, as shown in Chart 32, there has been a downward trend from 2008 to 2014 in adults visiting NPWS parks *2 times* (which rebounded in 2016 and 2018). There was a downward trend from 2008 to 2012 for adults visiting *4 times* and *5 or more times* (with slight increases evident in 2014), then declining again in 2016, and returning to 2014 levels in 2018. Only adults visiting NPWS parks *3 times* tended to exhibit a slight upward trend from 2010 to 2014, but again a decline was evident in 2016 and 2018. 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 to 2.87 visits in 2014, before declining again in 2016 to 2.61 visits and following the 2014 increase in 2018 to 2.79 visits.

Chart 8: Number of Times Visiting a NPWS Park—Adult Visits



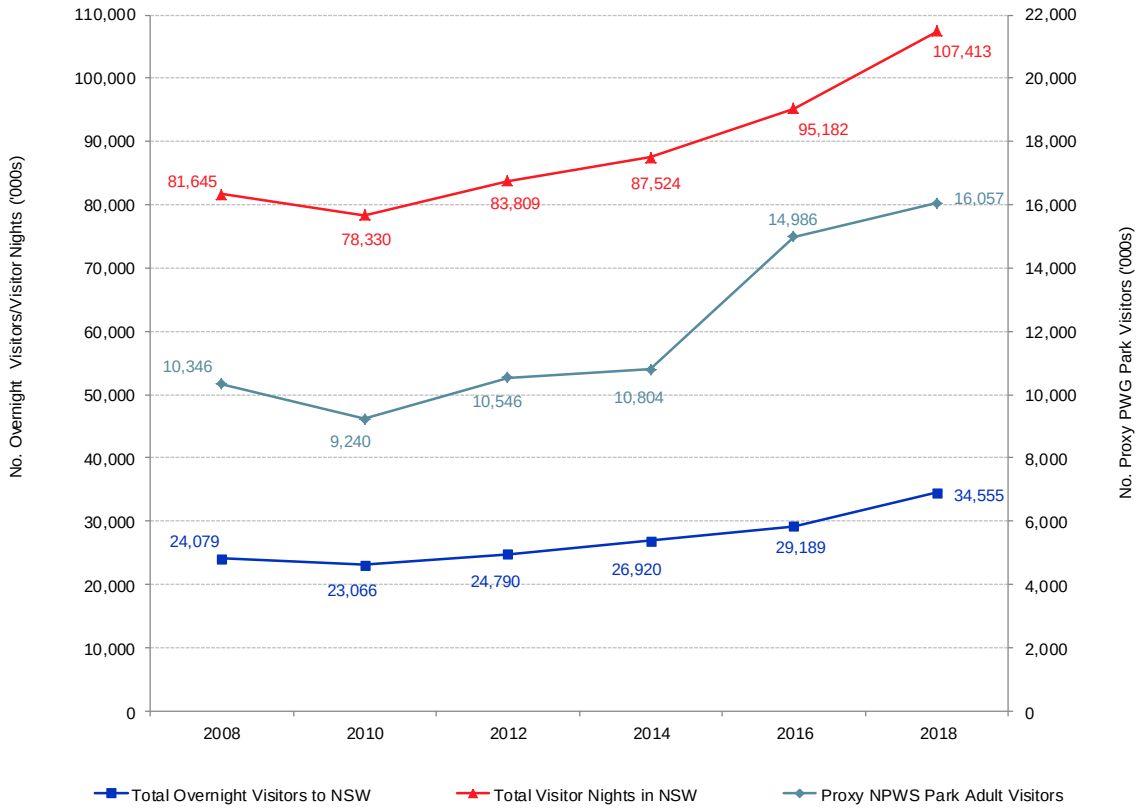
Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=1,563; 2010 n=1,468; 2012 n=1,457; 2014 n=1,667; 2016 n=1,728, 2018 n=1,739

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[25]. Chart 33 shows that the proxy for NPWS park visitors exhibits the same trend as overnight visits to NSW and visitor nights in NSW, with 2012 numbers exceeding 2008 levels and 2014, 2016 and 2018 numbers steadily increasing to the highest so far recorded in each year.

So in fact, NPWS park visitors do mirror visitors to NSW.

[25] Total visitors to NPWS 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.

Chart 9: Proxy NPWS Park Visitors versus Overnight Visitation to NSW



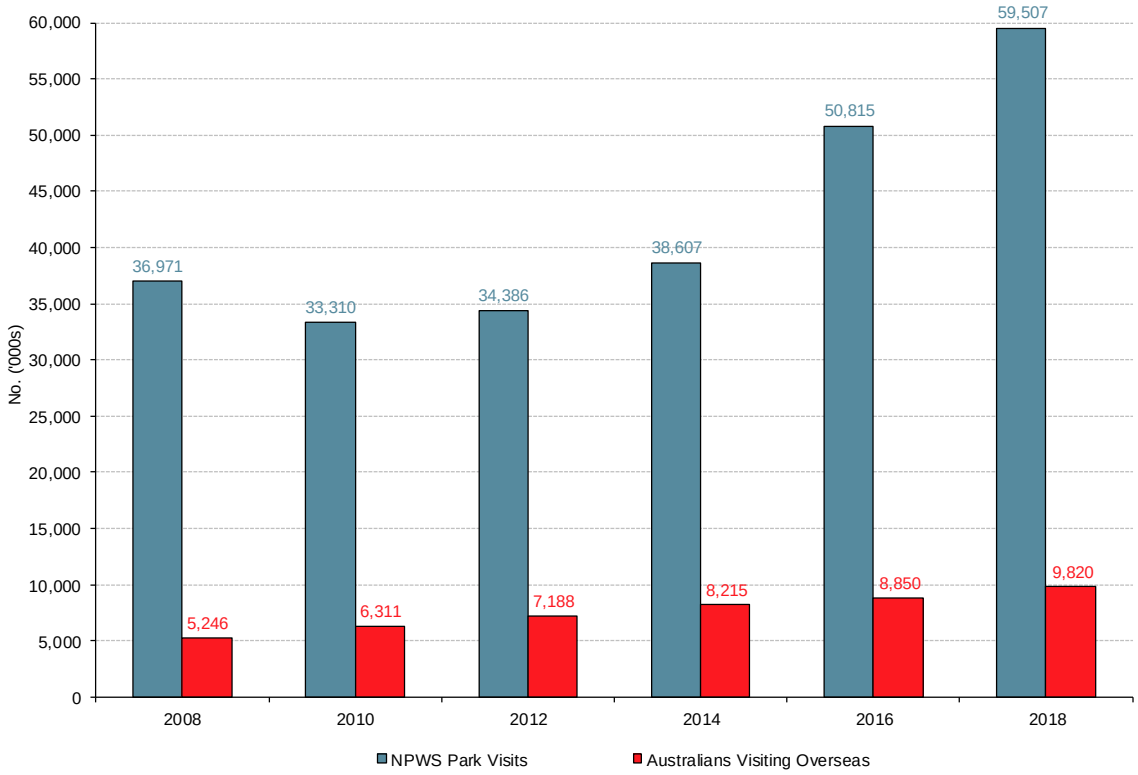
Sources: National Visitor Survey – Tourism Research Australia; NPWS Parks Visitor Surveys 2008-2018:

7.2 Visitation to Overseas Destinations

Another potential reason why NPWS 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. Chart 34 shows that Australians visiting overseas has increased from approximately 5.2m in 2008 to approximately 9.8m in 2018 – a growth of over 87% in 10 years, while NPWS park visits have increased by almost 61% over the same period.

Chart 35 compares monthly NPWS park visitation with exchange rates (i.e. the Trade Weighted Index divergence from the 8 year average). 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. Once again in 2016 and 2018, exchange rates were low, making it relatively more expensive to take an overseas trip. So any increase in capacity to undertake overseas visits may provide some inhibitive impact on domestic NPWS park visits.

Chart 10: Annual NPWS Park Visitation versus Australians Visiting Overseas

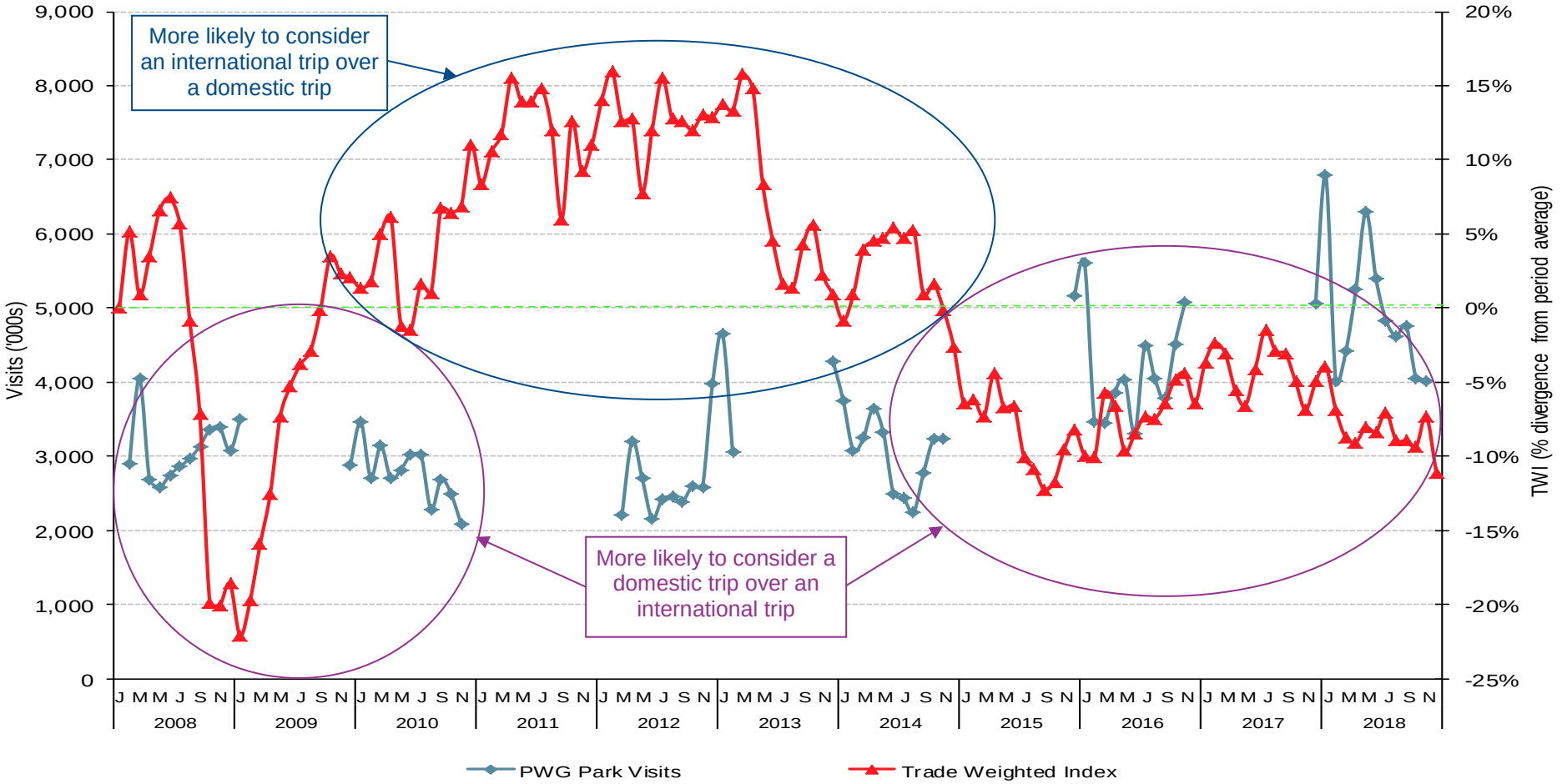


Sources: National Visitor Survey – Tourism Research Australia; NPWS Parks Visitor Surveys 2008-2018:

In 2012, overall NPWS park visits increased from 2010 levels, but this was not until the end of 2012, so for the bulk of 2012 NPWS park visits were also relatively low. Similarly in 2014, NPWS park visits increased, but this was mainly during the summer to autumn months of 2014 and after autumn visits again declined. In early 2016 NPWS visits were high, when exchange rates were at their least competitive for overseas travel. This again occurred in early 2018. In fact, there appears to be a peak in domestic park 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 total number of visitor nights to NSW has increased by 31.6% from 2008 to 2018. However, the number of overnight visitors to NSW has increased by 43.5% 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 the average number of NPWS park visits has been in decline from 2.95 in 2008 to 2.61 in 2016 (but increased to 2.79 in 2018), it can be postulated that 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.

Chart 11: Monthly NPWS Park Visitation versus Trade Weighted Index



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); NPWS Parks Visitor Surveys 2008-2018:

7.3 Economic Impacts

Economic factors may also play a role in impacting on visitation to NPWS 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.

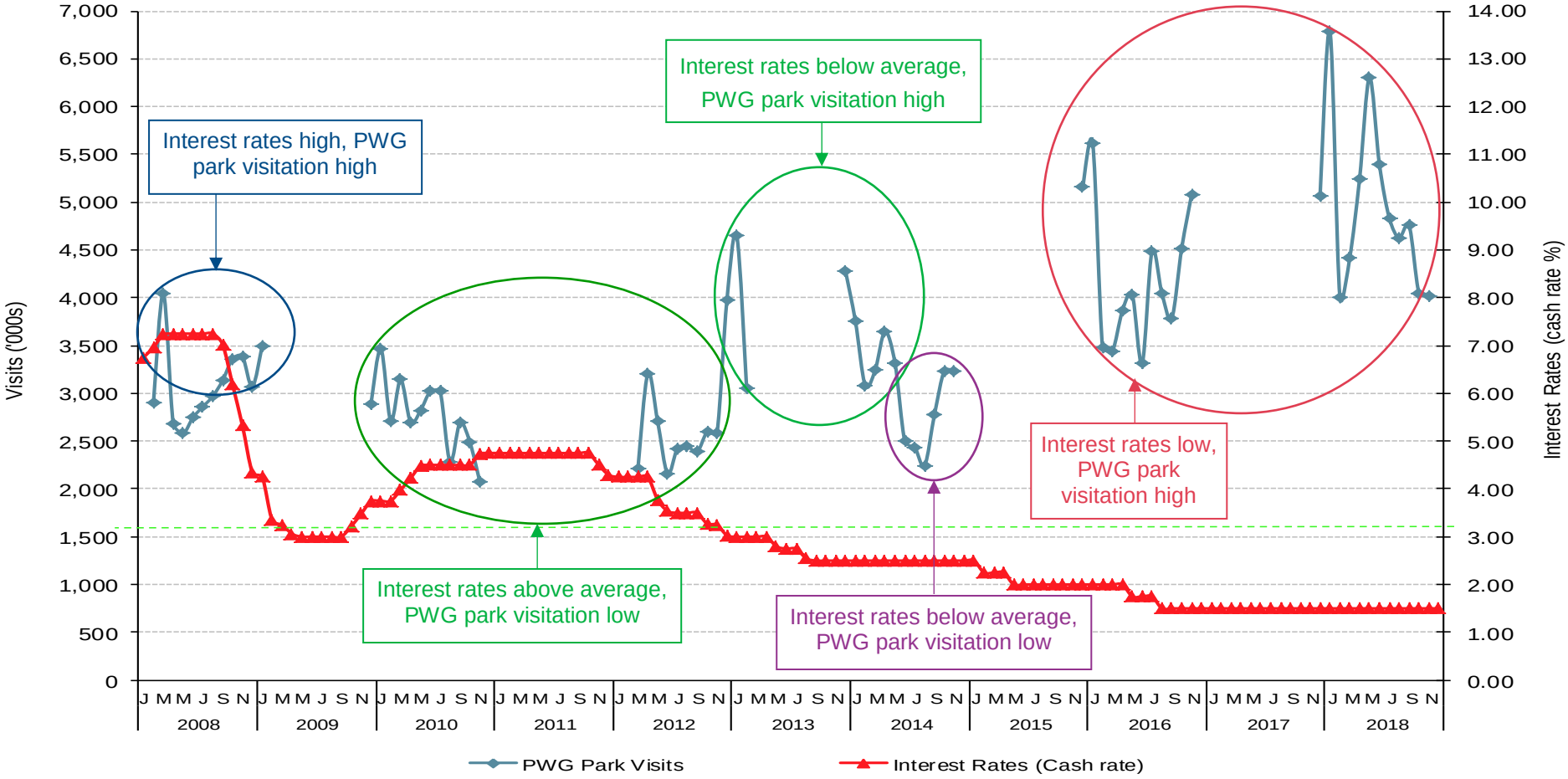
Chart 36 compares monthly NPWS park visitation with monthly interest rates. For the first nine months of 2008 interest rates were high (7.00%-7.25%), yet NPWS park visitation was high. 2009 saw interest rates fall sharply to 3.00% and then steadily rise in 2010 from 3.75% to 4.75%. This rise in interest rates coincided with lower levels of NPWS 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. At the start of 2016 interest rates were at 2.0% and have declined to 1.5%. However, NPWS park visitation was low in 2012, with peaks in visitation only occurring in early 2013. In 2014 NPWS park visitation was high until mid-year and then declined, while for all of 2016 and 2018 visitation has been high.

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 NPWS park visitation in 2008. Again in early 2014 and for all of 2016 NPWS park visits were high, but interest rates were low, as would be expected. However, park visits were low in the second half of 2014, while interest rates remained low, which is counter-intuitive. It would appear that park visitation is not strongly linked with interest rates.

Chart 37 shows changes in monthly Sydney fuel prices compared with the average fuel price for the 11 year survey period. As can be seen, the general trend is that when fuel prices are higher than average, NPWS park visitation is lower at the corresponding part of that specific year, or when fuel prices are lower than average, NPWS park visitation is higher during the corresponding part of that specific year. However, there are periods when this apparent trend does not apply. At the end of 2012 and the start of 2014 and in the early to middle part of 2018, fuel prices are higher than average, yet NPWS visits are higher for the corresponding part of each specific year. In the middle of 2016 fuel process are low, yet NPWS park visitation is high for 2016 at that time.

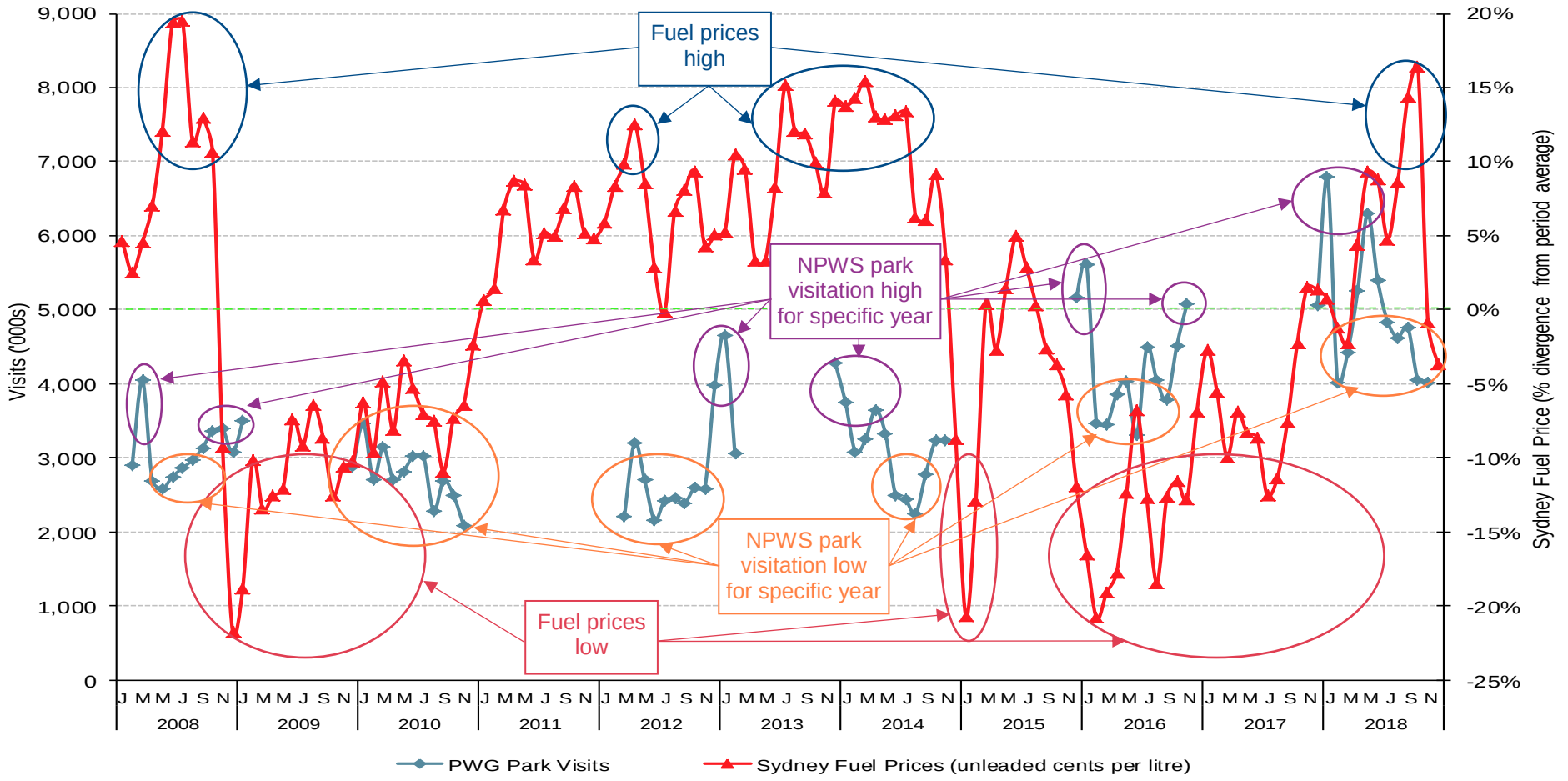
Based on this information it would appear that a relationship between fuel prices and NPWS park visitation is weak or possibly does not exist.

Chart 12: Monthly NPWS Park Visitation versus Interest Rates



Source: Reserve Bank of Australia—Cash Rate

Chart 13: Monthly NPWS Park Visitation versus Sydney Fuel Prices



Source: Royal Automobile Club of Queensland – Monthly Fuel Price Report – Average ULP Price (cents per litre)

7.4 Weather Effects

Investigations in 2010 tended to indicate that NPWS park visitation was impacted by weather, particularly significant weather events. This is perhaps not surprising given parks mainly offer an outdoor nature based experience. This section looks at three weather factors and their indicative 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 NPWS Park Visitation

Chart 38 compares monthly NPWS park visitation to monthly maximum daytime temperatures displayed as a divergence from the average[1]. From 2008 to 2012 and again from 2016 to 2018 there appears to be a relationship between NPWS park visitation and temperature – namely, the higher the temperature above the average, the greater the number of park visits. However, this indicative relationship does not hold true for 2014 in that, as temperature increases above the average, park visitation decreases.

Chart 39 to Chart 46 compares the temperature with NPWS park visitation at the NPWS Branch level.

As temperature increases above the average visits to parks in *Greater Sydney Branch* tend to decrease. This has been the case since 2012 (to 2018). However, from, 2008 to 2010, the opposite trend occurred. The general trend is the direct opposite to the state-wide trend where temperatures above the average tend to result in increased visits.

In survey years 2008, 2014, 2016 and 2018 visits to parks in the *North Coast Branch* tended to decrease as temperature increases above the average. However, in 2010 and 2012 the opposite trend was evident.

There does not appear to be a decided trend in visits to the *Hunter Central Coast Branch* based on temperature. For the years 2008, 2010 and 2018, as temperature increased above the average, visits increased. However, from 2012 to 2016 the opposite trend was evident.

Similarly for visits to the *Blue Mountains Branch* no trend in visitation was evident. In 2008, 2016 and 2018 visits increases as temperature above the average increased, but from 2010 to 2014 the opposite was the case.

Visitation trends were again mixed for the *South Coast Branch*, with visitation declining as temperature increased above the average in 2008, 2012 and 2014, but trended in the opposite direction in 2010, 2016 and 2018.

For visits to the *Southern Ranges Branch* visitation increased as temperature increased above the average in 2008, 2010 and 2014, but visitation decreased as temperature increased above the average in 2012, 2016 and 2018.

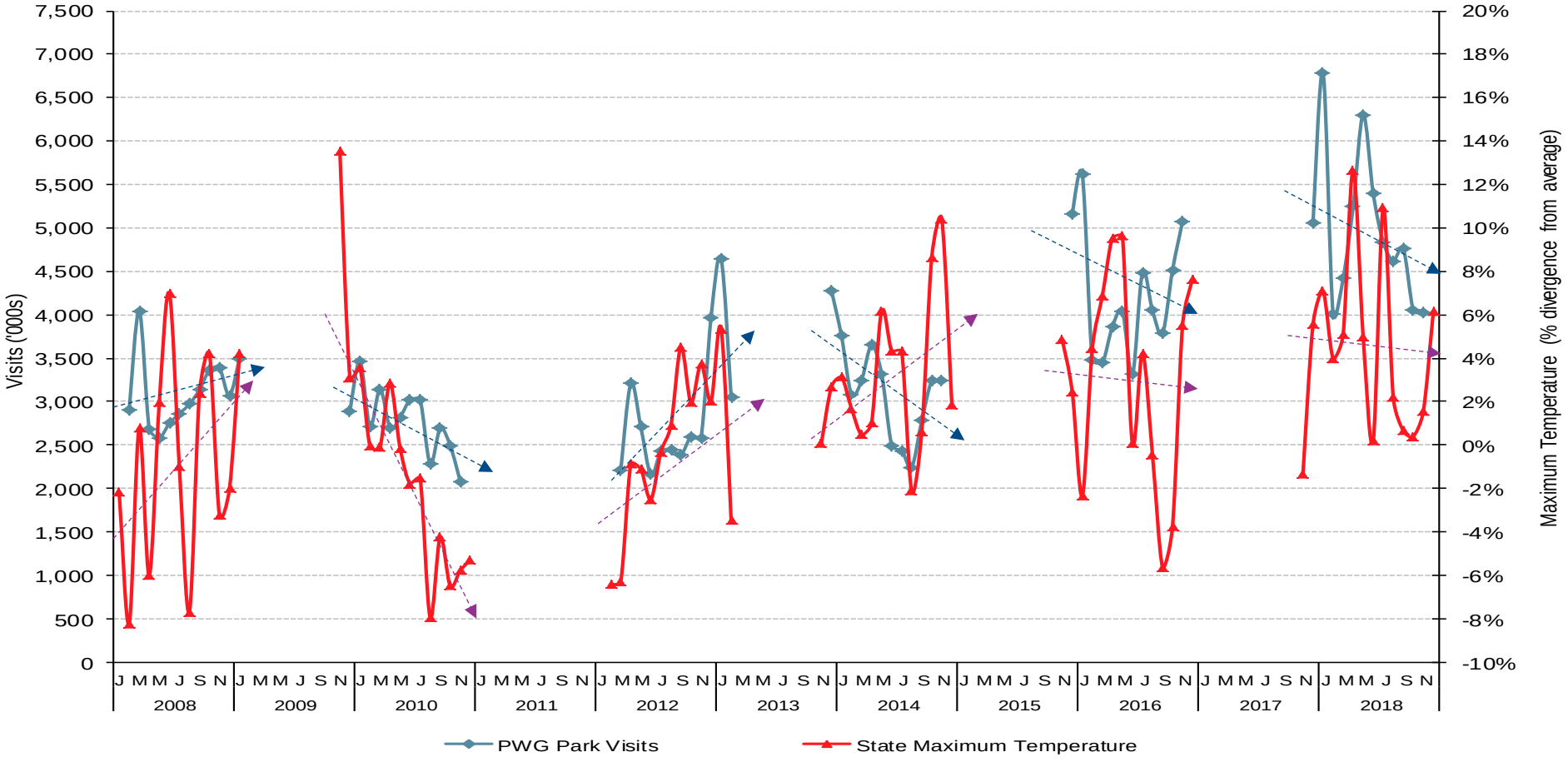
[1] Divergence from the average is calculated using 51 weather stations across the state, representing each NPWS Region. Average is based on the BoM average for each weather station.

Analysis of visitation to parks in the *Northern Inland Branch* should be treated with caution due to small sample sizes. However, visits generally tended to increase when temperature was above the average in 2008, 2012, 2016 and 2018, but declined with temperature in 2010 and 2014.

Visitation to parks in the *West Branch* should be analysed with extreme caution due to extremely low sample sizes. However, from 2008 to 2014 visitation tended to decrease as temperature increased above the average, but tended to increase with temperature in 2016 and 2018.

It therefore appears that the temperature-visitation correlation of high visits at times when the temperature is above average is weak and is certainly subject to variation at the regional level across each year. For the state as a whole the correlation is slightly more definitive, with the opposing trend only evident in 2014.

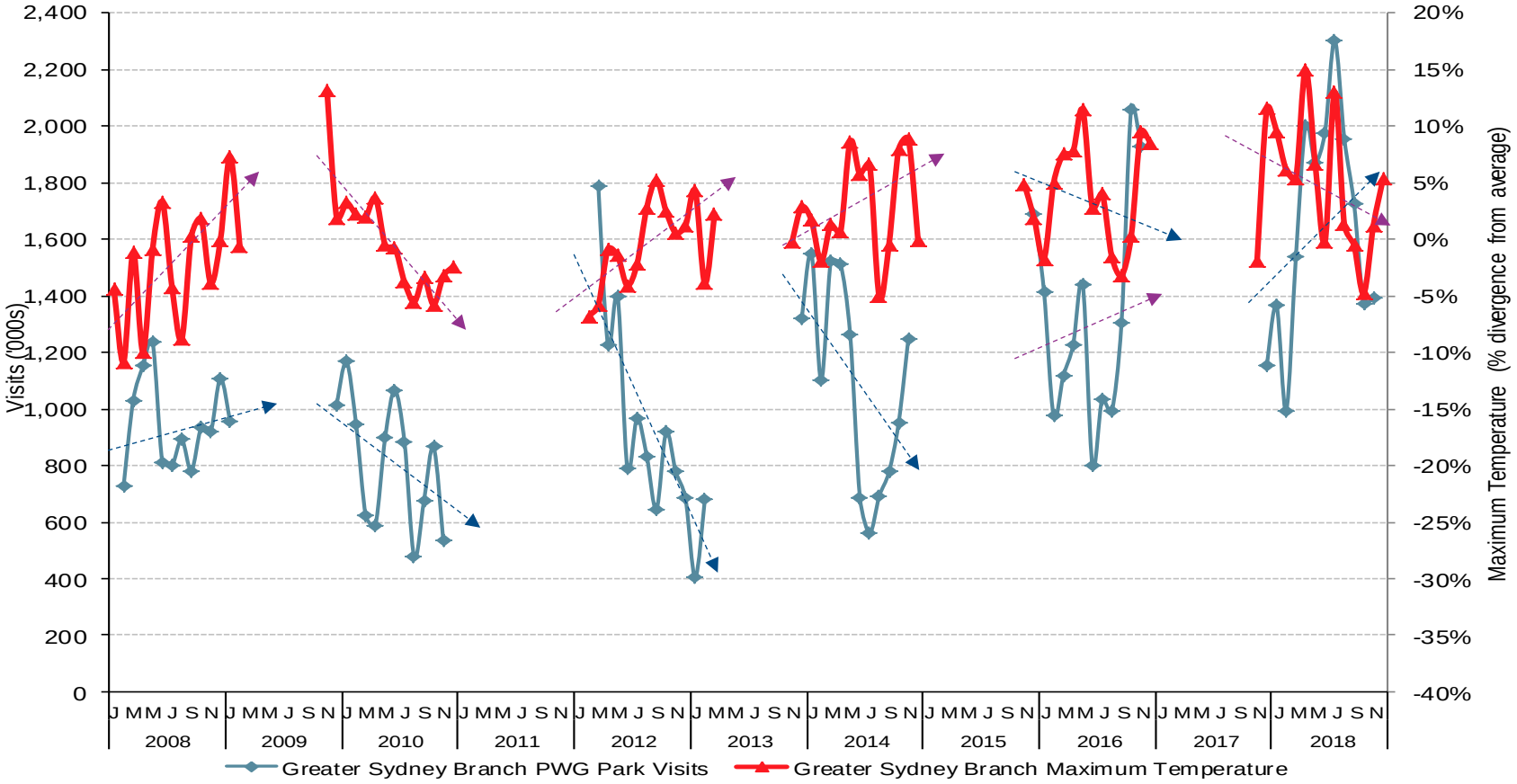
Chart 14: Monthly NPWS Park Visitation versus Monthly Temperature[27]



Source: Bureau of Meteorology – Climate data online 20018-2018 – Mean maximum temperature = Average of 51 weather stations across NSW.

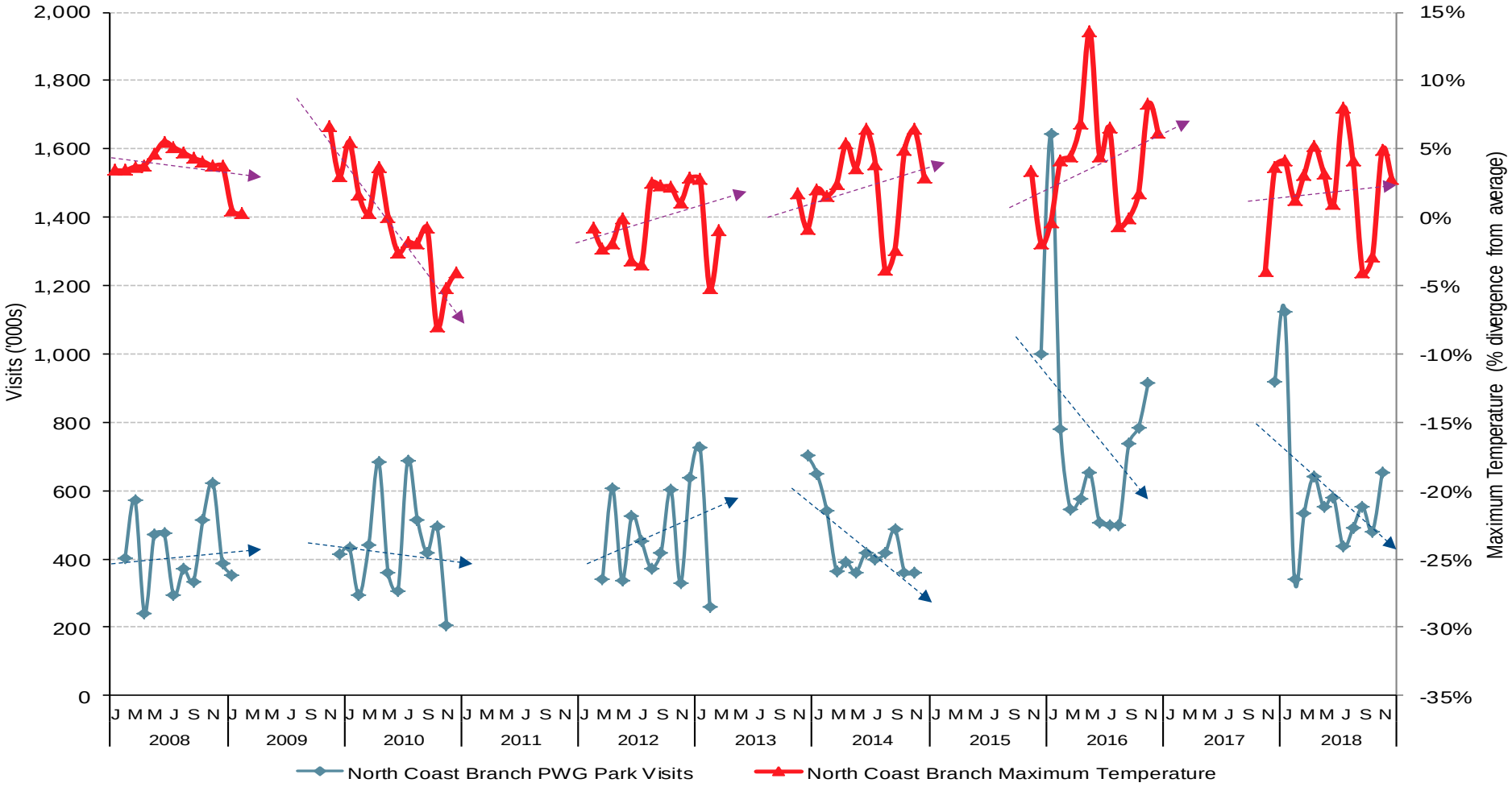
[27] Linear trend lines have been fitted to assist with description of findings.

Chart 15: Monthly NPWS Park Visitation versus Monthly Temperature[52]—Greater Sydney Branch



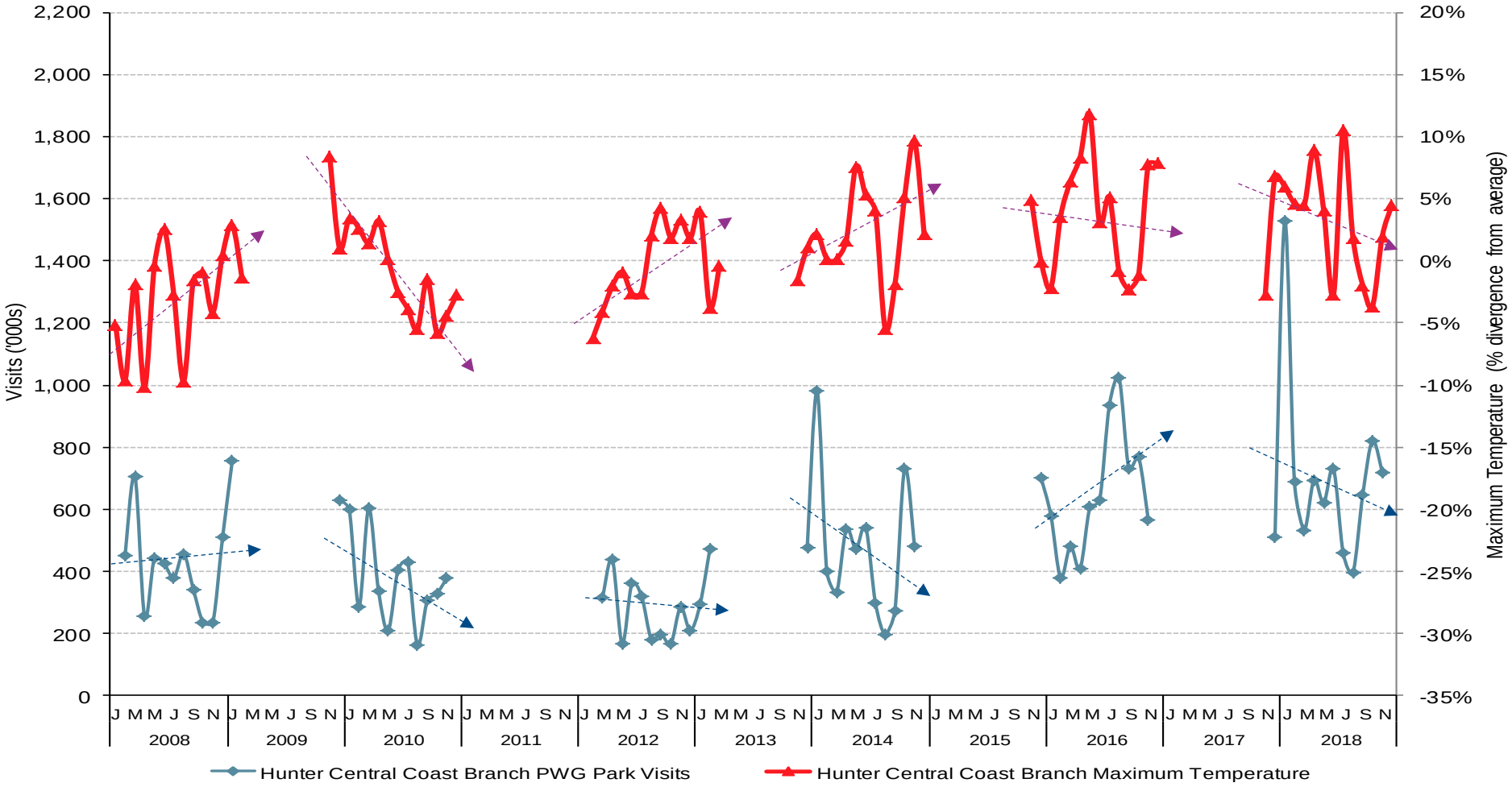
Source: Bureau of Meteorology – Climate data online 20018-2018 – Mean maximum temperature = Average of 4 weather stations across the Greater Sydney Branch geographic region.

Chart 16: Monthly NPWS Park Visitation versus Monthly Temperature[52]—North Coast Branch



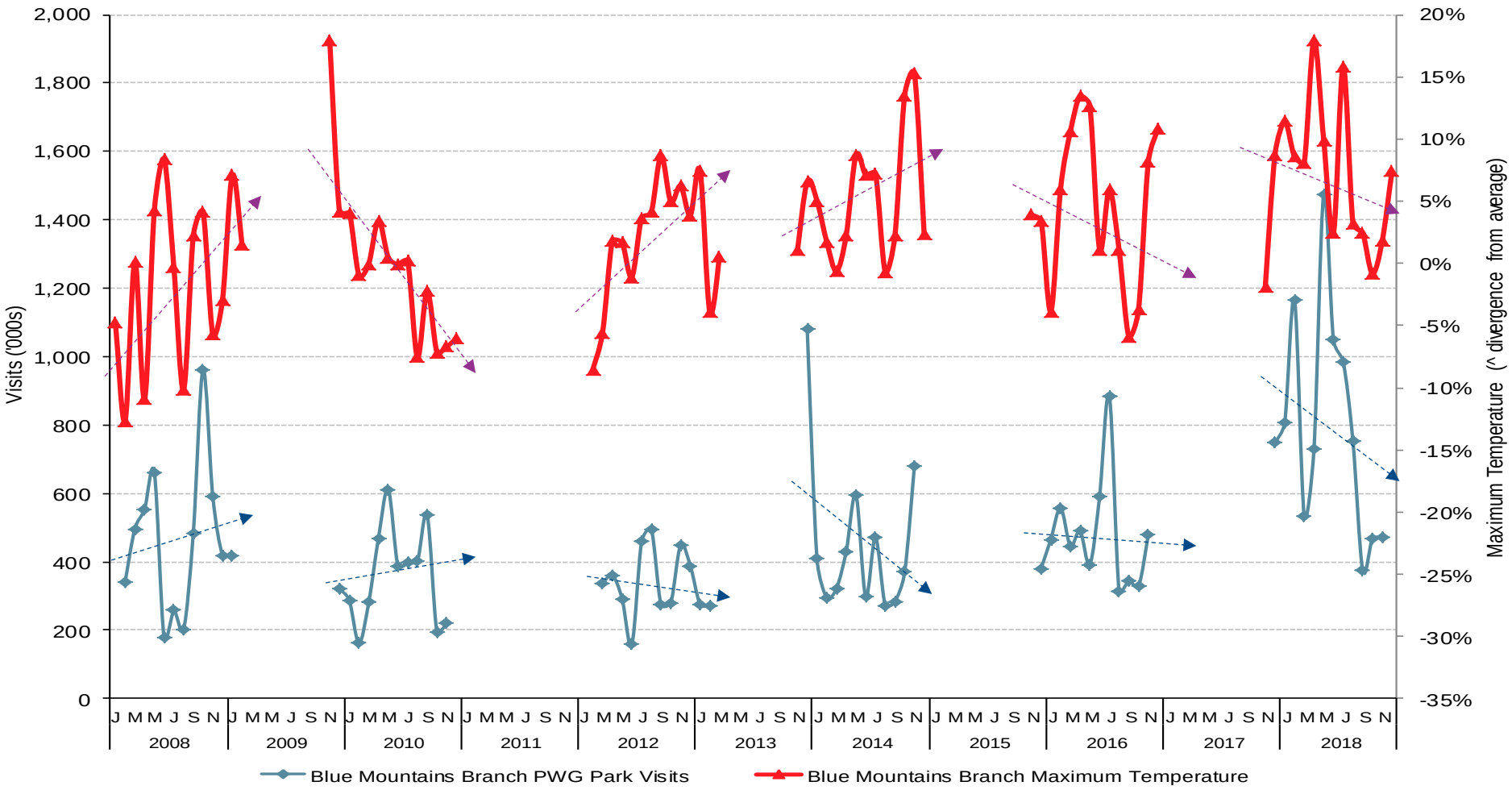
Source: Bureau of Meteorology – Climate data online 20018-2018 – Mean maximum temperature = Average of 8 weather stations across the North Coast Branch geographic region.

Chart 17: Monthly NPWS Park Visitation versus Monthly Temperature[52]—Hunter Central Coast Branch



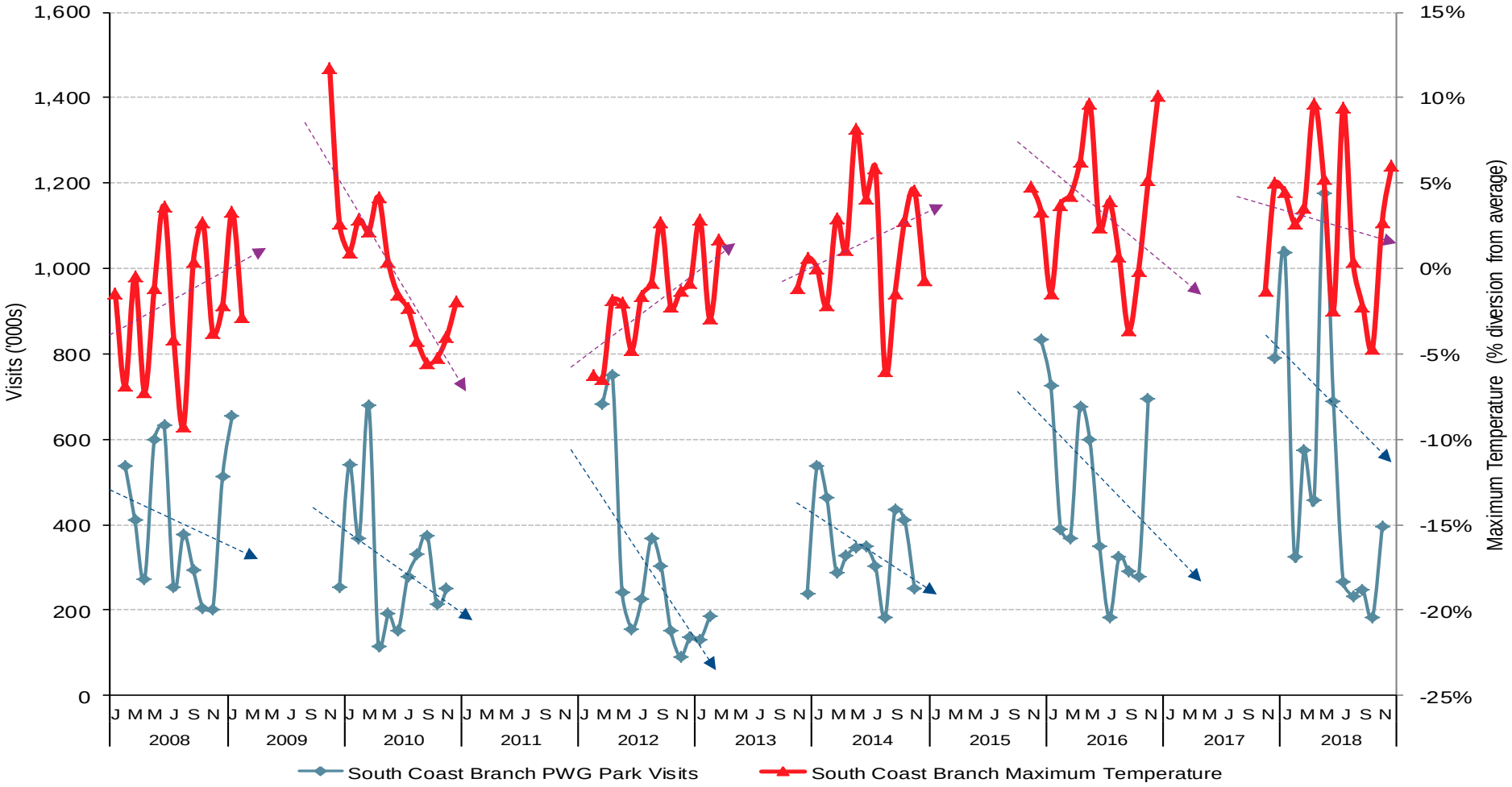
Source: Bureau of Meteorology – Climate data online 20018-2018 – Mean maximum temperature = Average of 8 weather stations across the Hunter Central Coast Branch geographic region.

Chart 18: Monthly NPWS Park Visitation versus Monthly Temperature[52]—Blue Mountains Branch



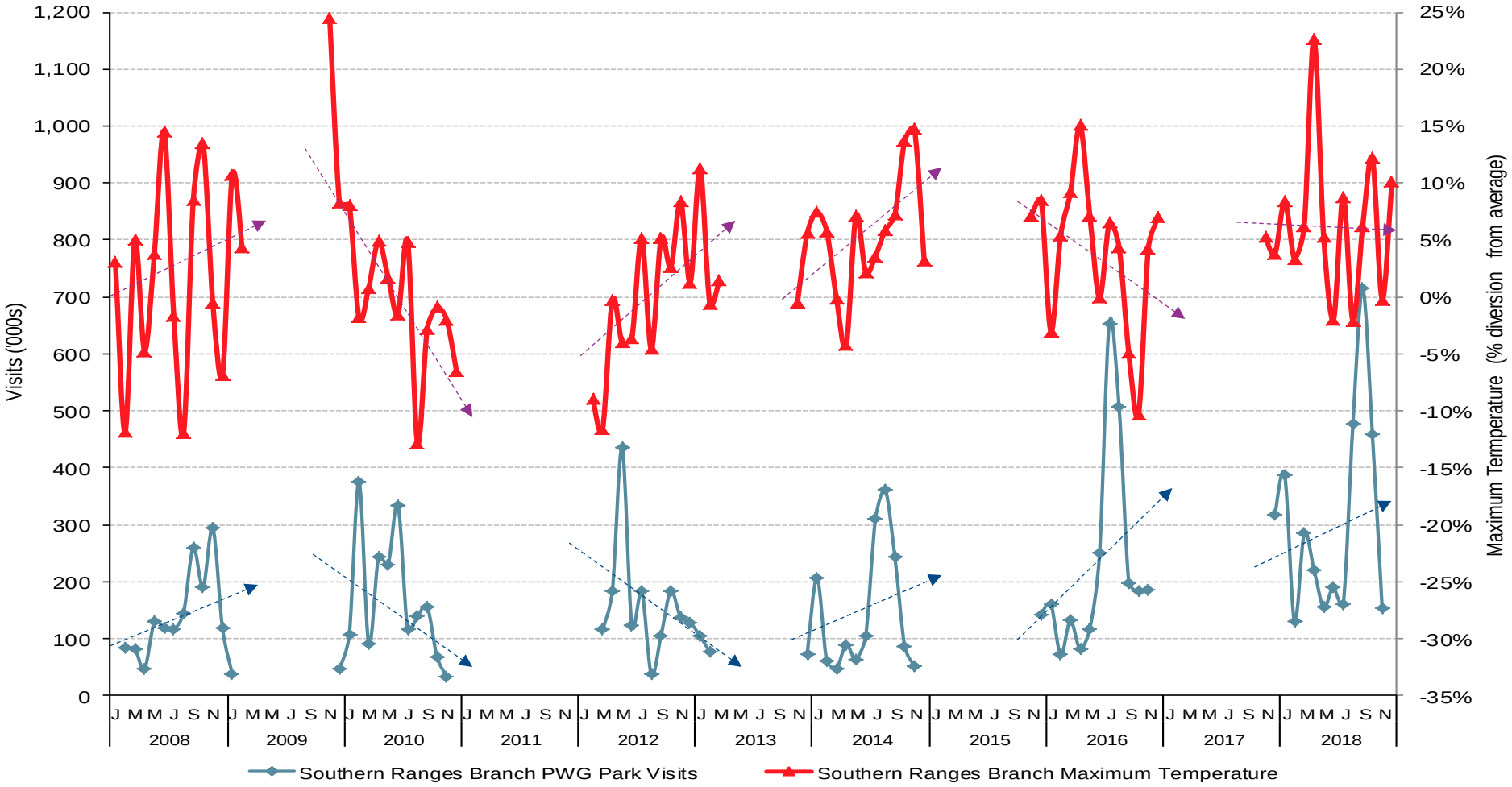
Source: Bureau of Meteorology – Climate data online 20018-2018 – Mean maximum temperature = Average of 6 weather stations across the Blue Mountains Branch geographic region.

Chart 19: Monthly NPWS Park Visitation versus Monthly Temperature[52]—South Coast Branch



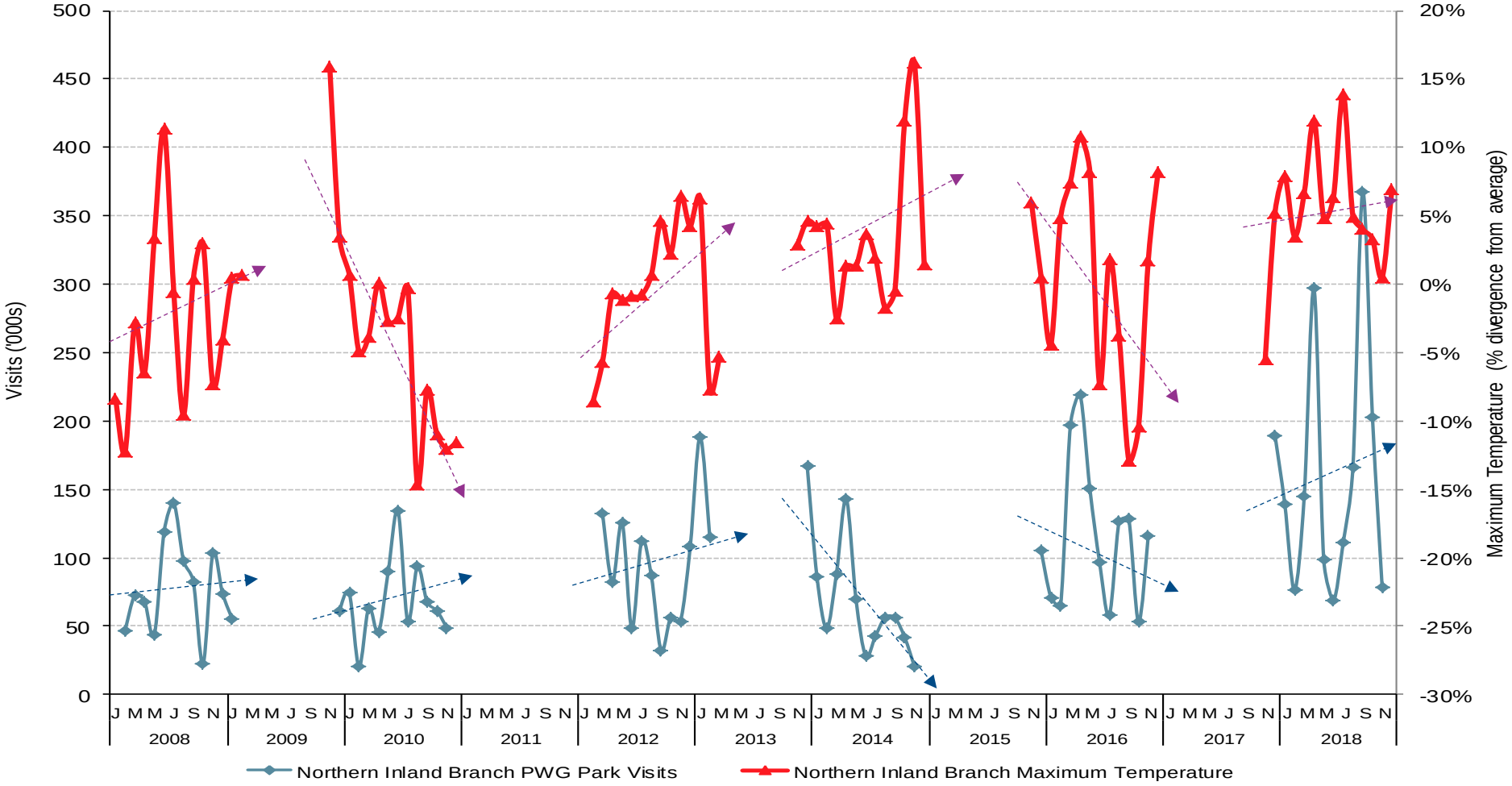
Source: Bureau of Meteorology – Climate data online 20018-2018 – Mean maximum temperature = Average of 7 weather stations across the South Coast Branch geographic region.

Chart 20: Monthly NPWS Park Visitation versus Monthly Temperature[52]—Southern Ranges Branch



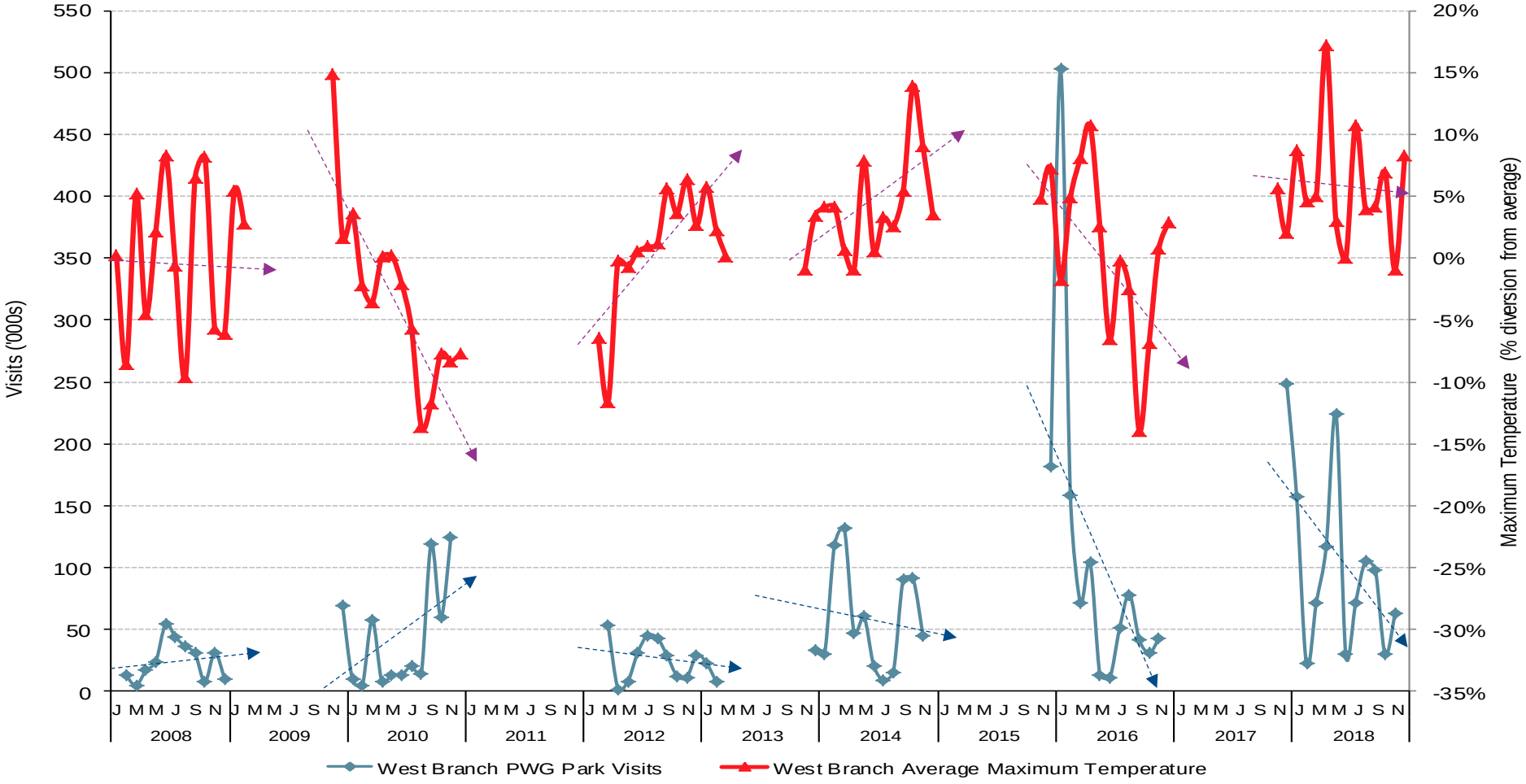
Source: Bureau of Meteorology – Climate data online 20018-2018 – Mean maximum temperature = Average of 6 weather stations across the Southern Ranges Branch geographic region.

Chart 21: Monthly NPWS Park Visitation versus Monthly Temperature[52]—Northern Inland Branch



Source: Bureau of Meteorology – Climate data online 20018-2018 – Mean maximum temperature = Average of 7 weather stations across the Northern Inland Branch geographic region.

Chart 22: Monthly NPWS Park Visitation versus Monthly Temperature[52]—West Branch



Source: Bureau of Meteorology – Climate data online 20018-2018 – Mean maximum temperature = Average of 5 weather stations across the West Branch geographic region.

7.4.2 Rainfall Effects on NPWS Park Visitation

Chart 47 compares monthly NPWS park visitation to monthly rainfall displayed as a divergence from the average[28]. From 2008 to 2014 there appears to be a general opposing trend between visitation and rainfall - the more rainfall is above the average, the fewer visits. In 2016 there was a weak opposing trend – the more rainfall is above the average, the more visits there are. However, in 2018 the original trend observed from 2018 to 2014 was evident.

It should be noted that, for the most part, 2016 was dry, with high rainfall in 3 months (January, June and September). These rainfall events may have skewed averages, influencing the general rainfall- visitation relationship. Across each year, peaks in visitation generally tended to correspond with troughs in rainfall. In addition, rainfall is more likely to impact on visitation if it is raining at both the origin of the visitor, as well as at the visitor's intended destination and is therefore more likely to impact on visitation at the regional level. This is likely to be the reason for the opposing trend evident in 2016.

Chart 48 to Chart 55 compares rainfall with NPWS park visitation at the NPWS Branch level. In 2008 and 2010 and again in 2014 and 2016, visitation to parks in the *Greater Sydney Branch* tended to fall as rainfall increased above the average. However, in 2012 and again in 2018, visitation decreased as rainfall decreased below the average.

Visitation to parks in the *North Coast Branch* tended to decrease as rainfall increased above the average, as observed in 2008, 2010, 2014 and 2018. However, the opposite trend emerged in 2012 and 2016.

Visitation to parks in the *Hunter Central Coast Branch* followed a general trend whereby visitation increased when rainfall decreased below the average. The only year in which this trend was not evident was in 2012 where a weak downward trend in rainfall below the average was paired with a weak decline in visits over the course of the year.

In 2008, 2014 and 2018 visitation to parks in the *Blue Mountains Branch* tended to increase when rainfall decreased below the average. However, from 2010 to 2012 and again in 2016 the opposite trend was evident.

For the *South Coast Branch* visitation increased as rain increased above the average in 2008, 2012, 2016 and 2018, but behaved in the opposite manner in 2010 and 2014.

Visitation to the *Southern Ranges Branch* increased as rain fell below the average in 2008, 2010 and 2018, but the opposite trend was evident from 2012 to 2016.

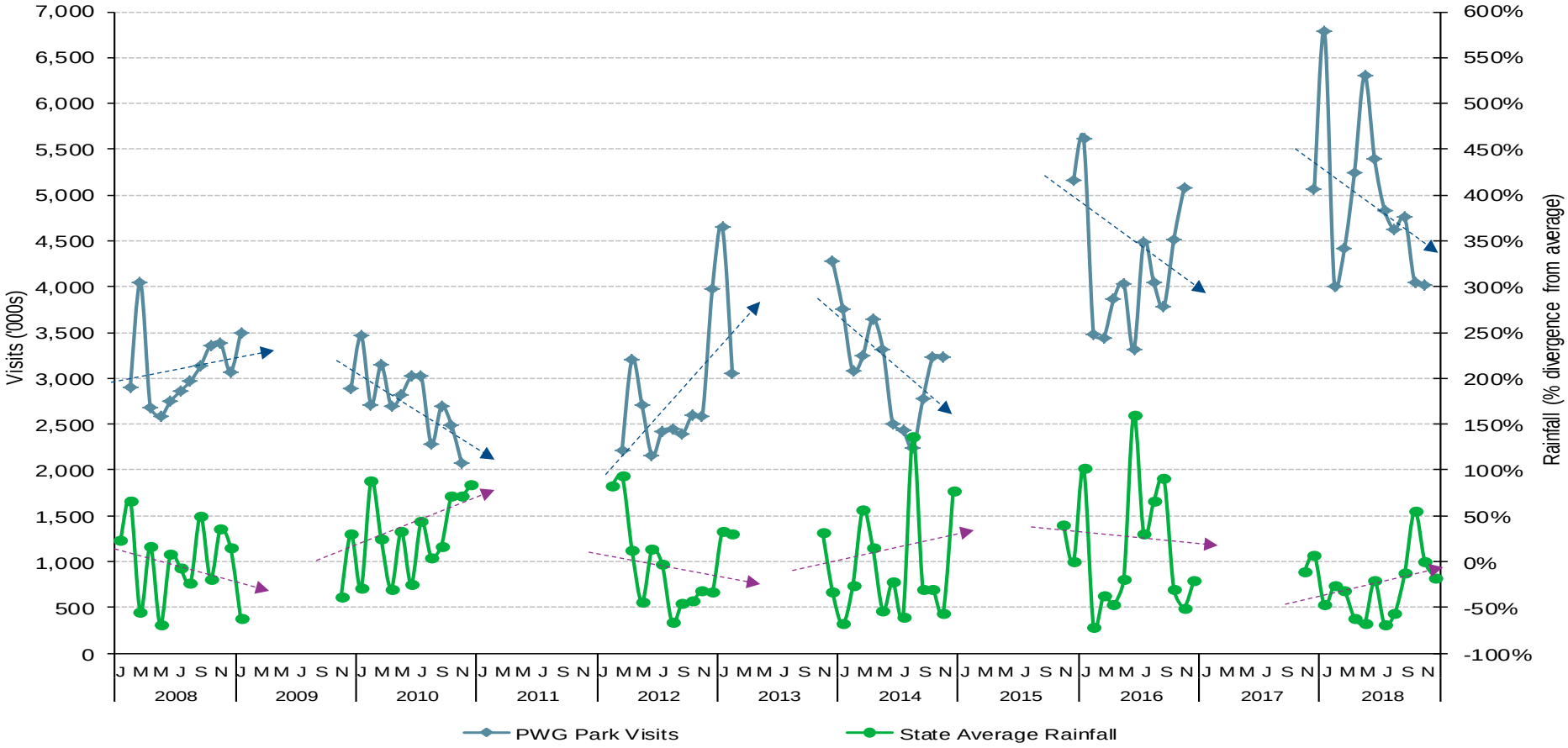
Visitation to parks in the *Northern Inland Branch* should be analysed with caution due to small sample sizes. In 2008, 2010 and 2018 visitation tended to increase as rainfall increased above the average, but tended to decrease with rainfall in 2012, 2014 and 2016.

[28] Divergence from the average is calculated using 51 weather stations across the state, representing each NPWS Region. Average is based on the BoM average for each weather station.

Analysis of visitation to parks in the *West Branch* should be treated with extreme caution due to extremely small sample sizes. However, from 2008 to 2014 and again in 2018 visits tended to increase when rainfall was above the average. However, in 2016 the opposite trend was evident.

In terms of climate variation, it would appear that there is a general trend from 2008 to 2014 that as rainfall increases above the average NPWS park visitation decreases. This trend was again evident in 2018. This trend tends to be slightly stronger than the temperature trend. Of course, it should be noted these trends are based on an average for the state of NSW as a whole or based on selected weather stations in each Branch. Local weather conditions at both the visitor's region of origin and their intended destination is likely to be a key determinant for visitation at the regional level.

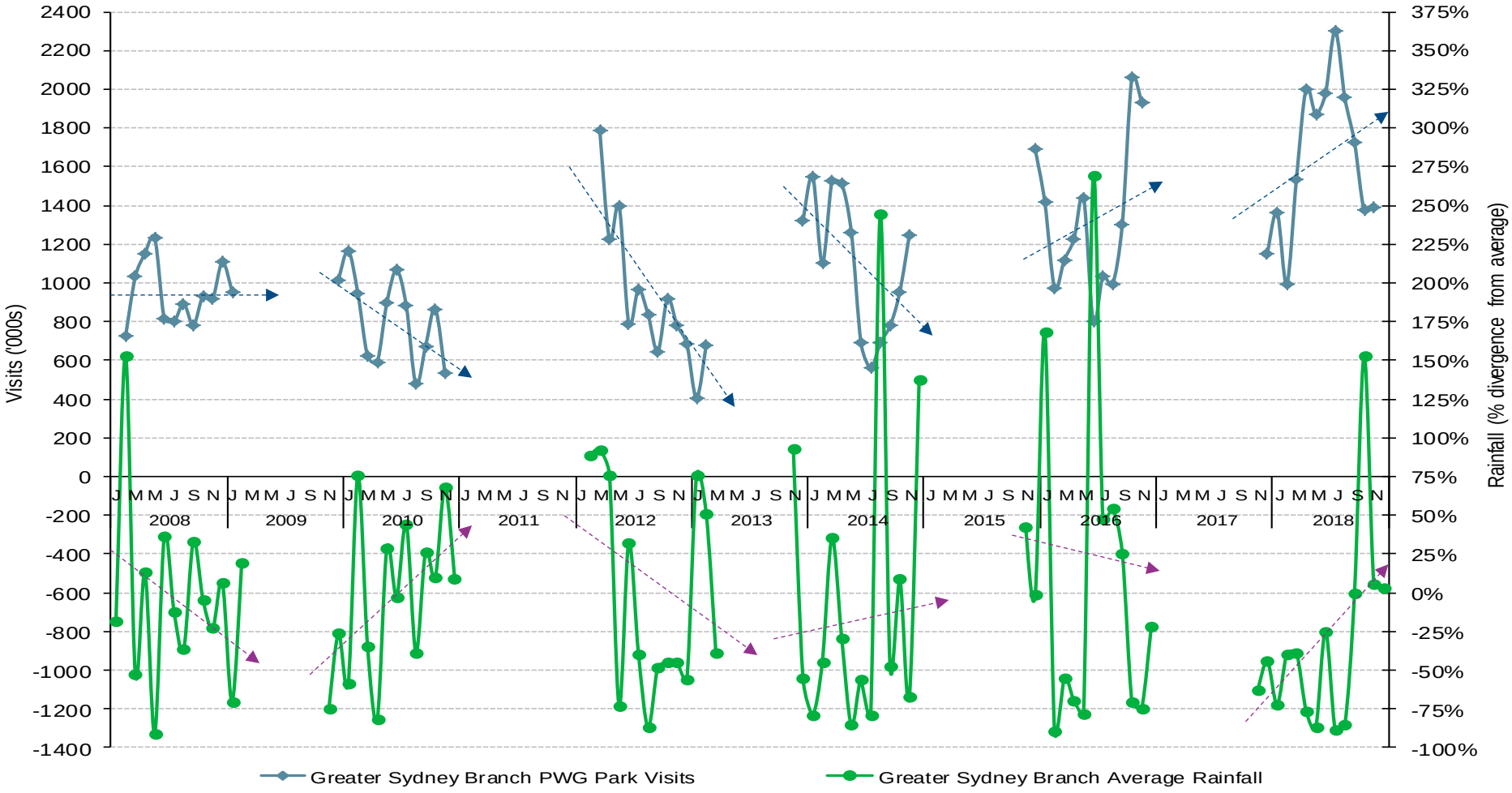
Chart 23: Monthly NPWS Park Visitation versus Monthly Rainfall[29]



Source: Bureau of Meteorology – Climate data online 20018-2018 – Monthly Rainfall = Average of 51 weather stations across NSW.

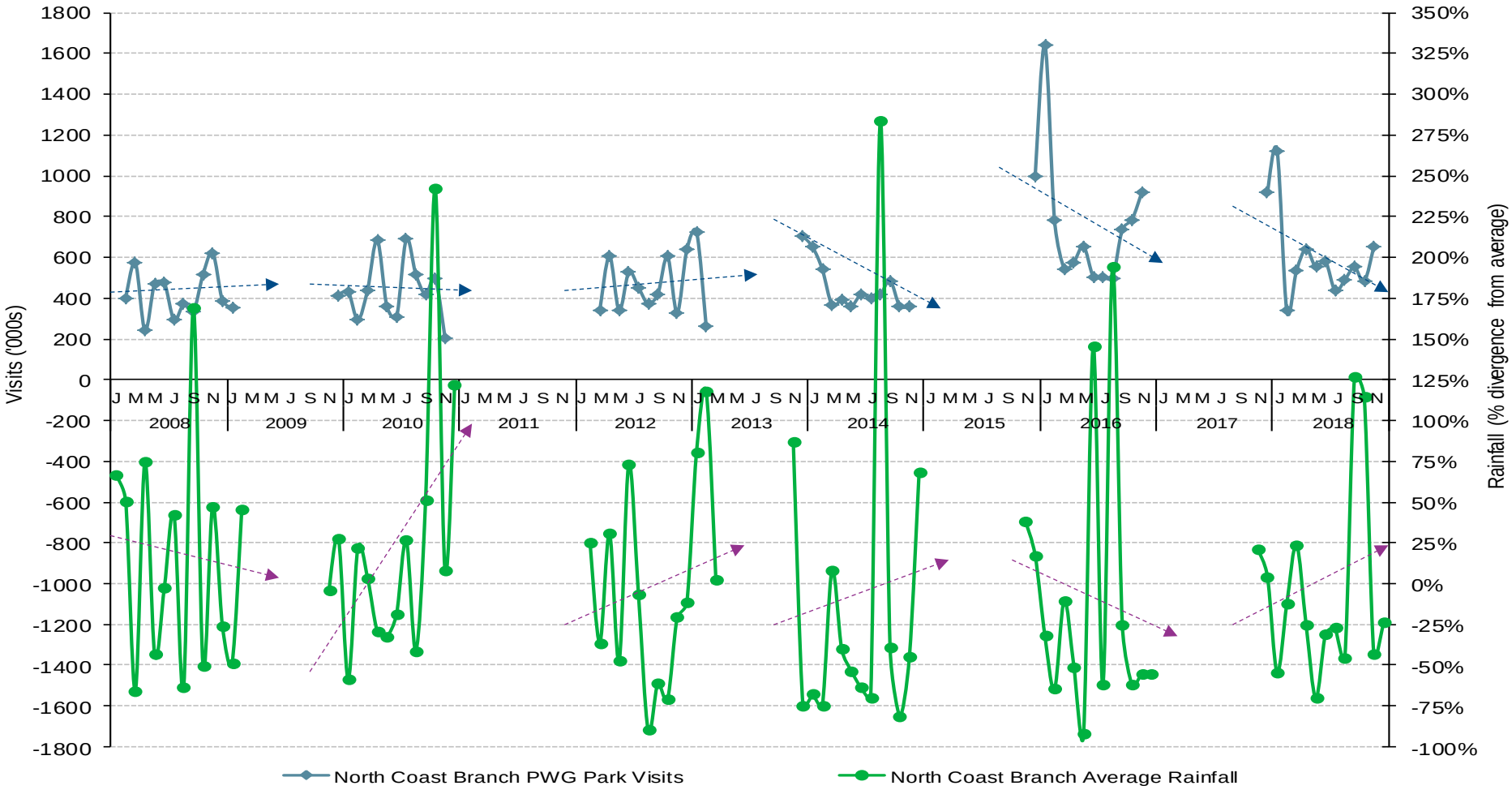
[29] Linear trend lines have been fitted to assist with description of findings. Formal trend analysis will be undertaken at the end of the 2018 survey.

Chart 24: Monthly NPWS Park Visitation versus Monthly Rainfall[54]—Greater Sydney Branch



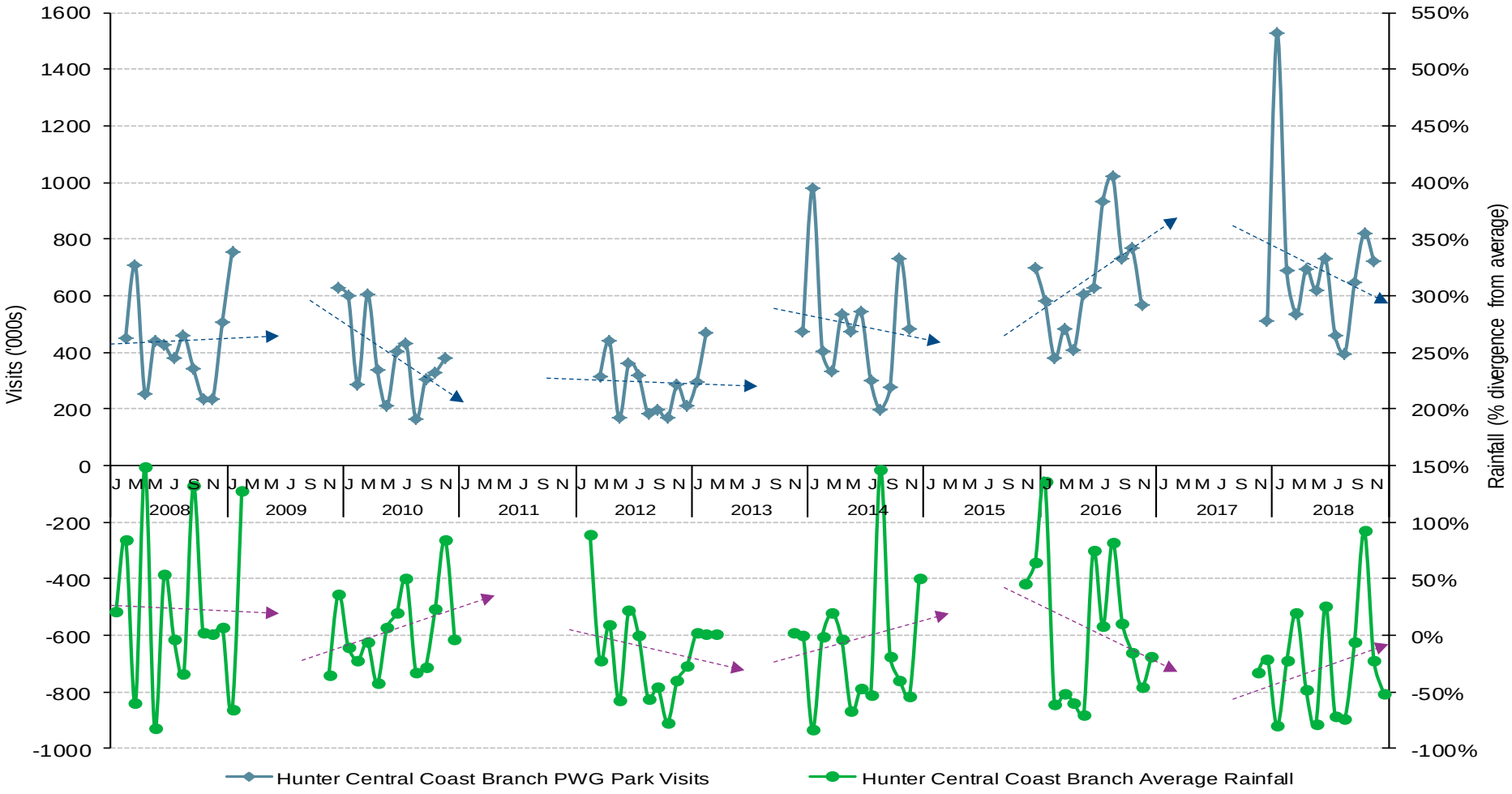
Source: Bureau of Meteorology – Climate data online 20018-2018 – Monthly Rainfall = Average of 5 weather stations across the Great Sydney Branch geographic region.

Chart 25: Monthly NPWS Park Visitation versus Monthly Rainfall[54]—North Coast Branch



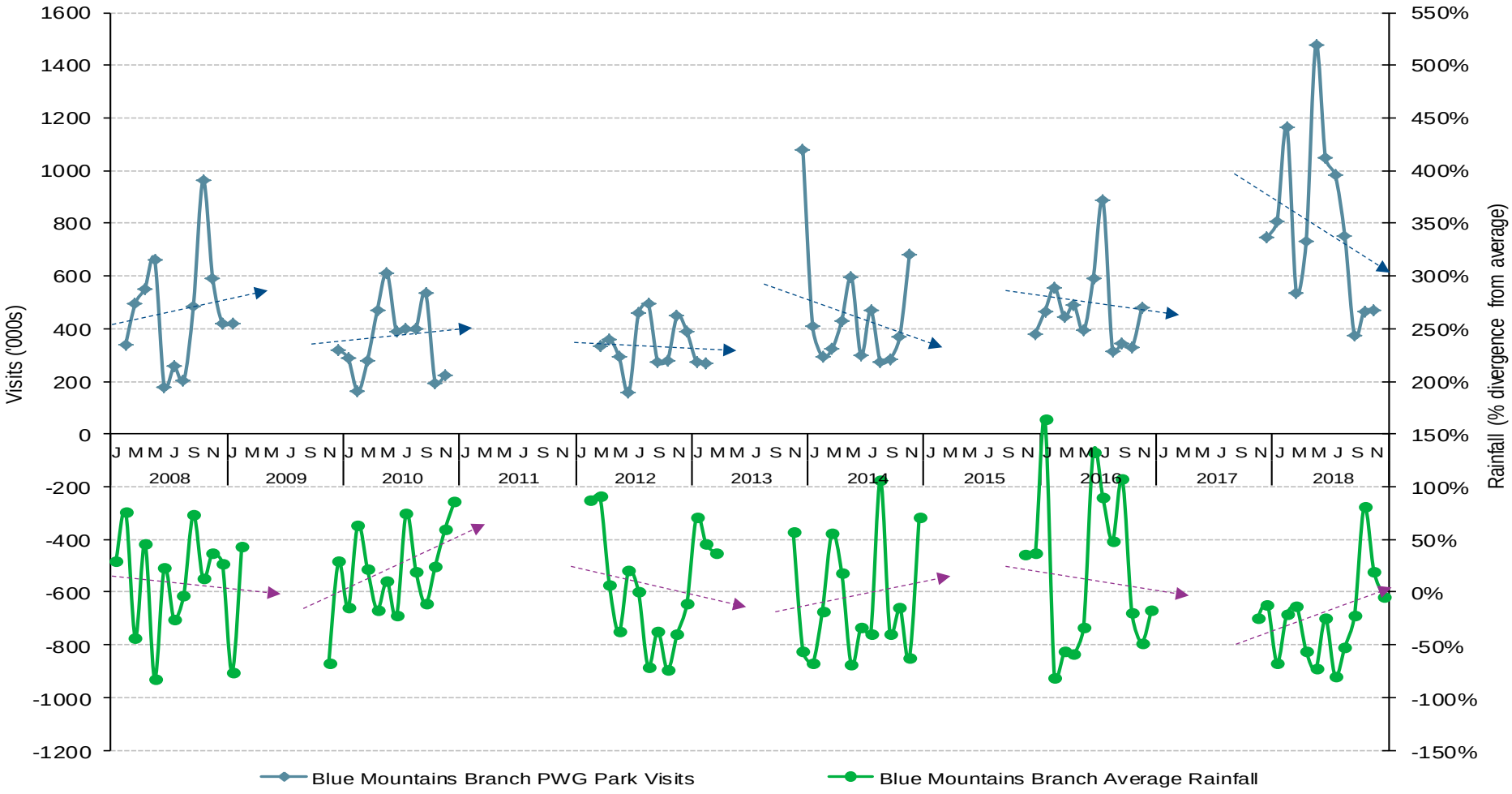
Source: Bureau of Meteorology – Climate data online 20018-2018 – Monthly Rainfall = Average of 8 weather stations across the North Coast Branch geographic region.

Chart 26: Monthly NPWS Park Visitation versus Monthly Rainfall[54]—Hunter Central Coast Branch



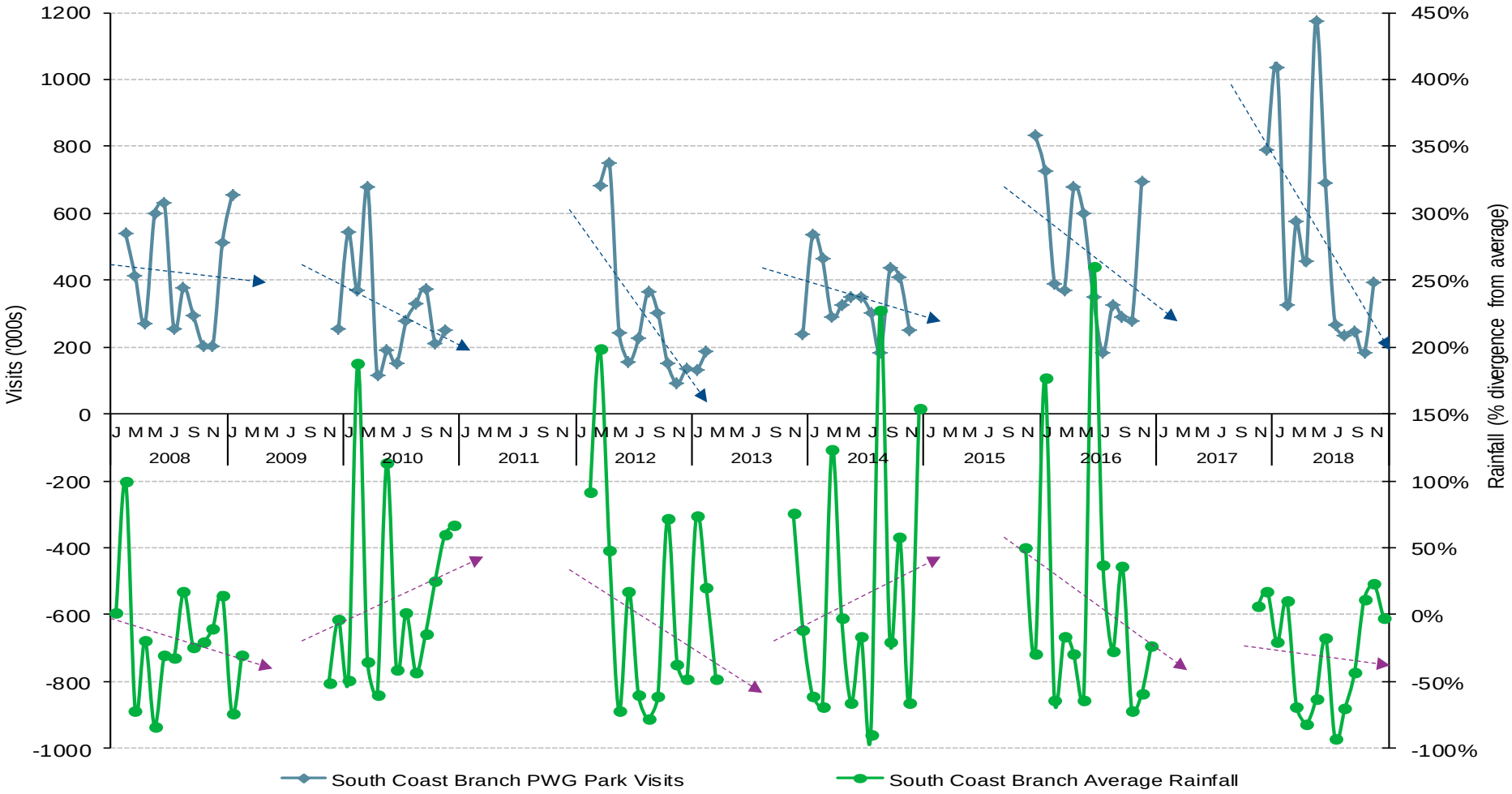
Source: Bureau of Meteorology – Climate data online 20018-2018 – Monthly Rainfall = Average of 8 weather stations across the Hunter Central Coast geographic region.

Chart 27: Monthly NPWS Park Visitation versus Monthly Rainfall[54]—Blue Mountains Branch



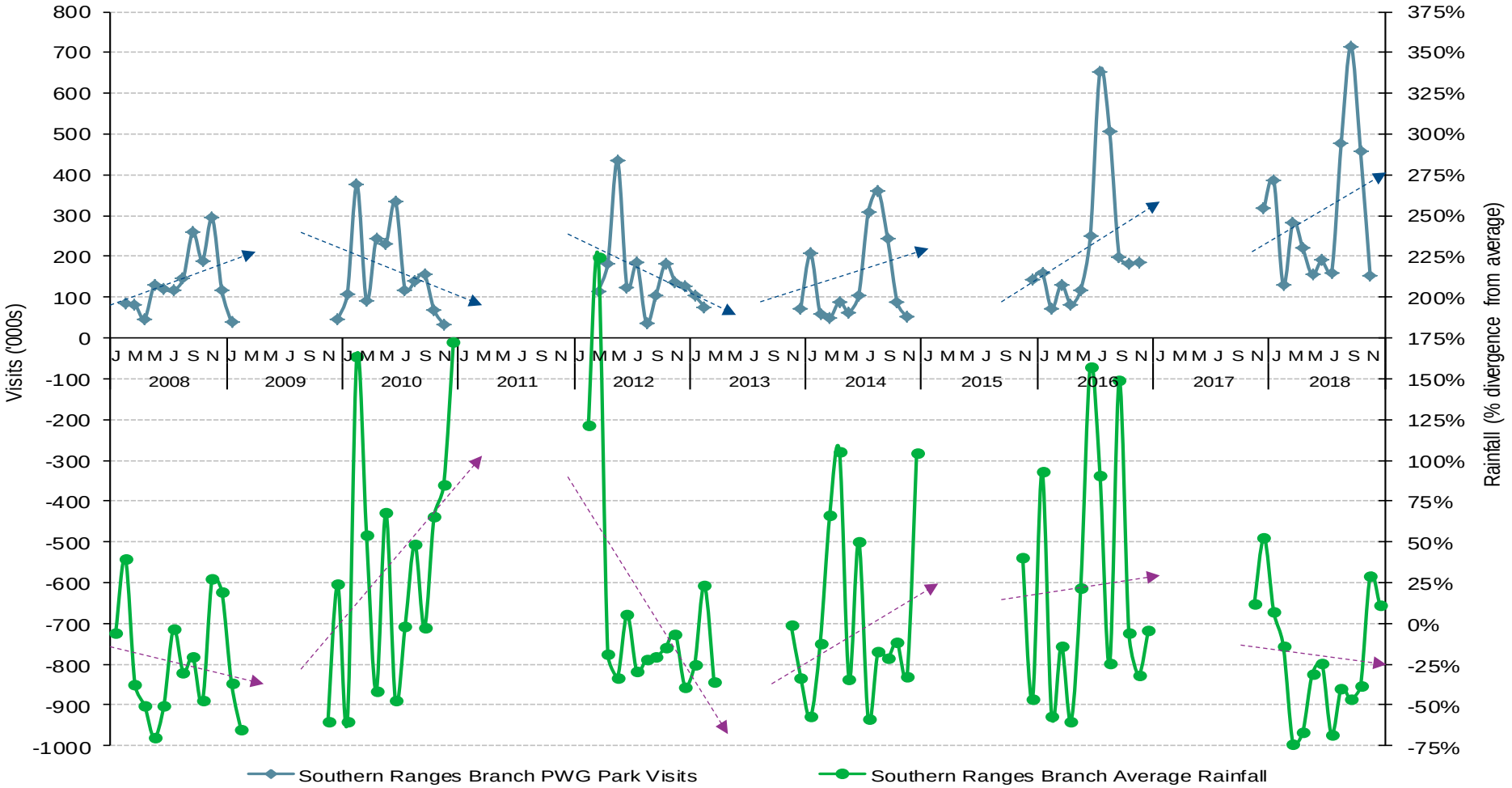
Source: Bureau of Meteorology – Climate data online 20018-2018 – Monthly Rainfall = Average of 61 weather stations across the Blue Mountains Branch geographic region.

Chart 28: Monthly NPWS Park Visitation versus Monthly Rainfall[54]—South Coast Branch



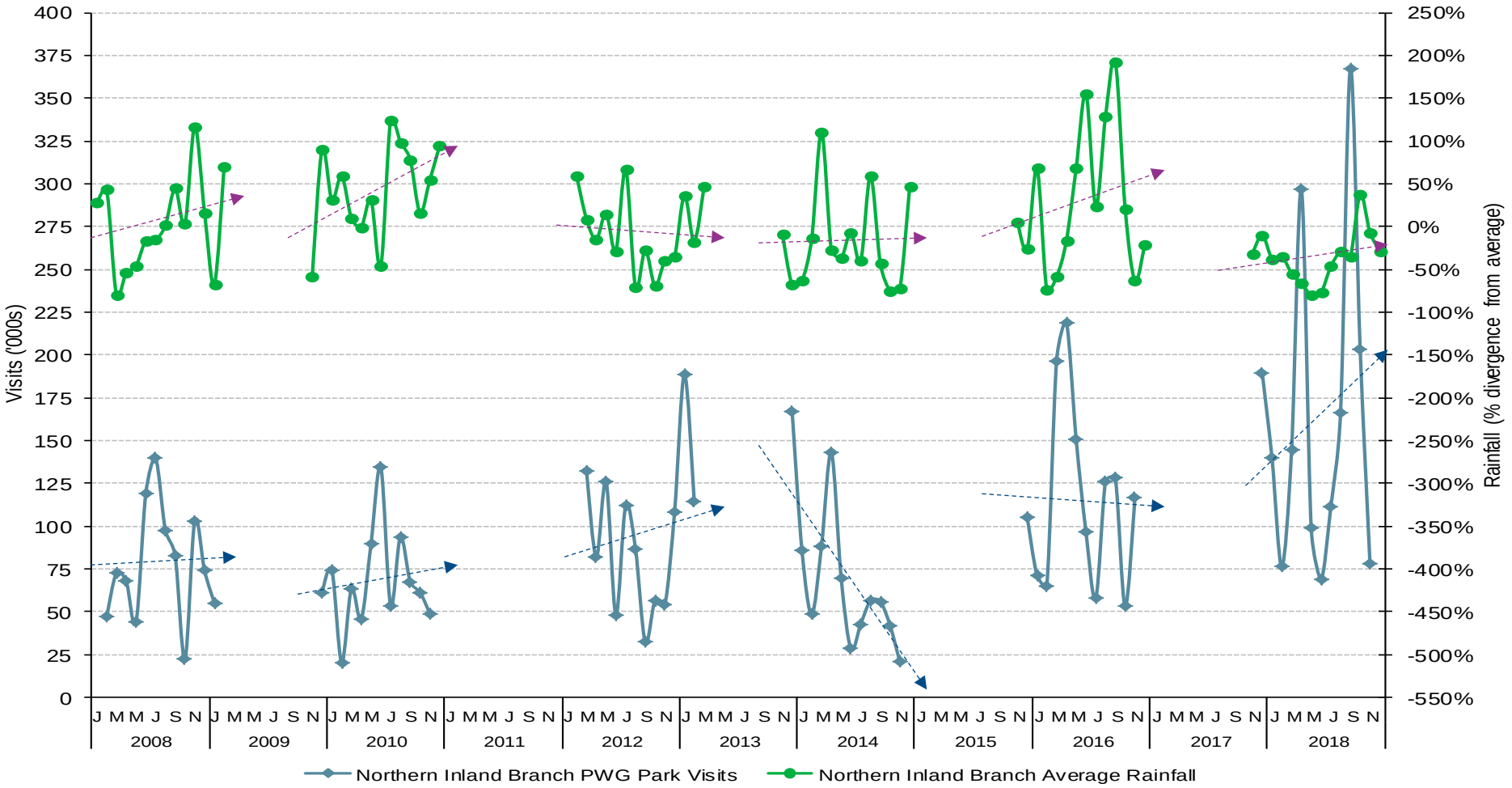
Source: Bureau of Meteorology – Climate data online 20018-2018 – Monthly Rainfall = Average of 7 weather stations across the South Coast Branch geographic region.

Chart 29: Monthly NPWS Park Visitation versus Monthly Rainfall[54]—Southern Ranges Branch



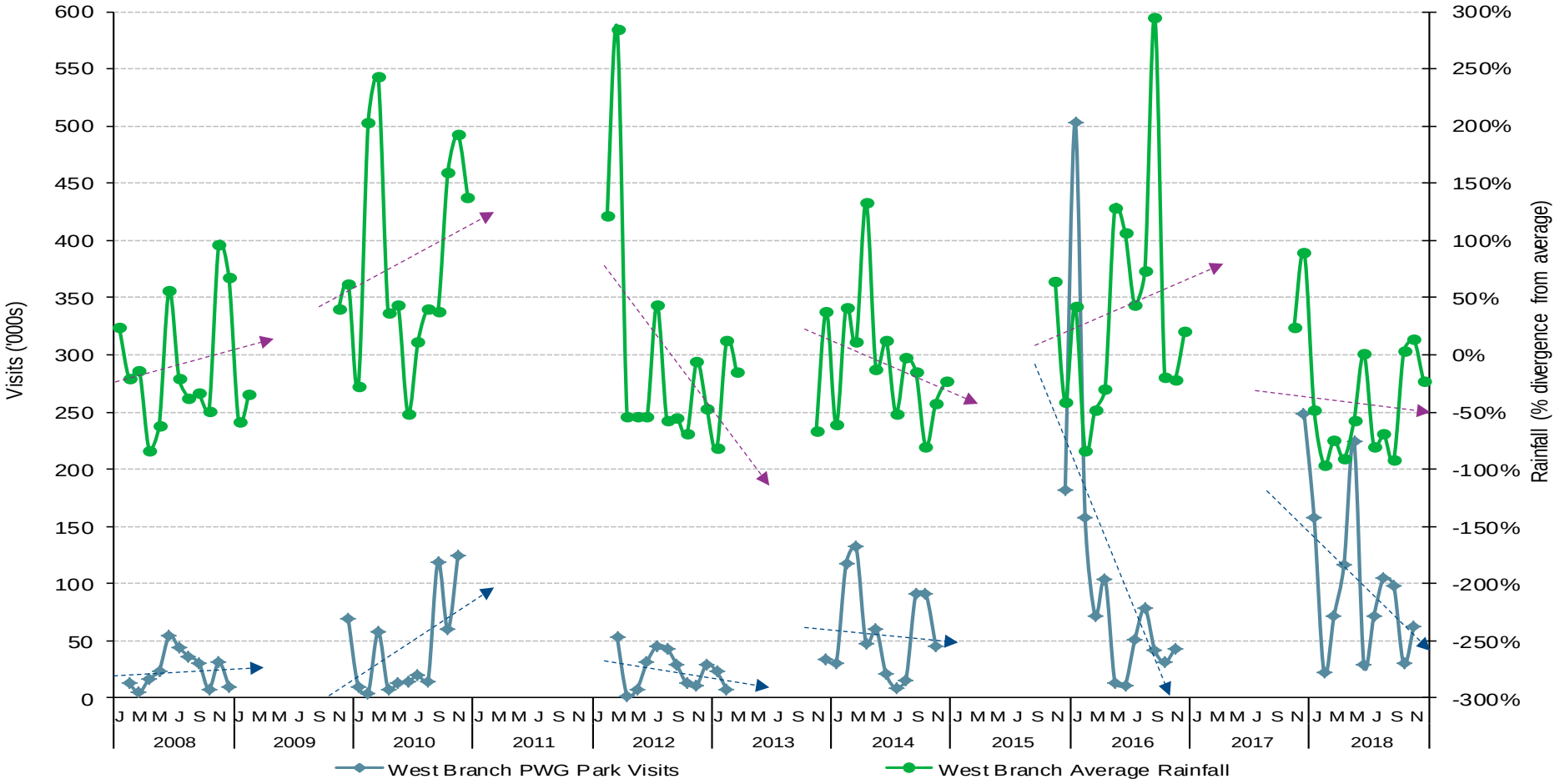
Source: Bureau of Meteorology – Climate data online 20018-2018 – Monthly Rainfall = Average of 6 weather stations across the Southern Ranges Branch geographic region.

Chart 30: Monthly NPWS Park Visitation versus Monthly Rainfall[54]—Northern Inland Branch



Source: Bureau of Meteorology – Climate data online 20018-2018 – Monthly Rainfall = Average of 7 weather stations across the Northern Inland Branch geographic region.

Chart 31: Monthly NPWS Park Visitation versus Monthly Rainfall[54]—West Branch



Source: Bureau of Meteorology – Climate data online 20018-2018 – Monthly Rainfall = Average of 5 weather stations across the West Branch geographic region.

7.4.3 Significant and Sustained Weather Event Effects on NPWS Park Visitation

Table 21 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 21: Weather Summary for NSW and Associated NPWS 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 wettest year on record - wettest since 1956	Low levels of visitation
2012	Cool wet start with warm, dry finish	Low visitation until summer 2012-13
2014	Warmest year on record, driest year since 2006	High visitation until winter 2014
2016	Warm in Summer and Autumn and generally warm in Winter and Spring, with high rainfall in June and September	High visitation generally across entire year. Highest visitation in spring
2018	Warmest year on record, 6th driest on record (since 2002)	Highest visitation in summer, autumn and winter

Source: Bureau of Meteorology – Climate Summaries for NSW.

Table 22 and Chart 56 show seasonal NPWS park visitation and compare it with seasonal climate 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 Chart 56.

2010 could have been a worse year for NPWS 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 could have been higher. Therefore 2014 annual park visitation could have been even higher if visitation in winter and spring was at levels expected.

Apart from three wet months (January, June and September) the 2016 year was warm, even in winter. This provided ideal conditions for NPWS park visitation. As a result, visitation in 2016 was high, with the highest visitation levels recorded in spring of 2016.

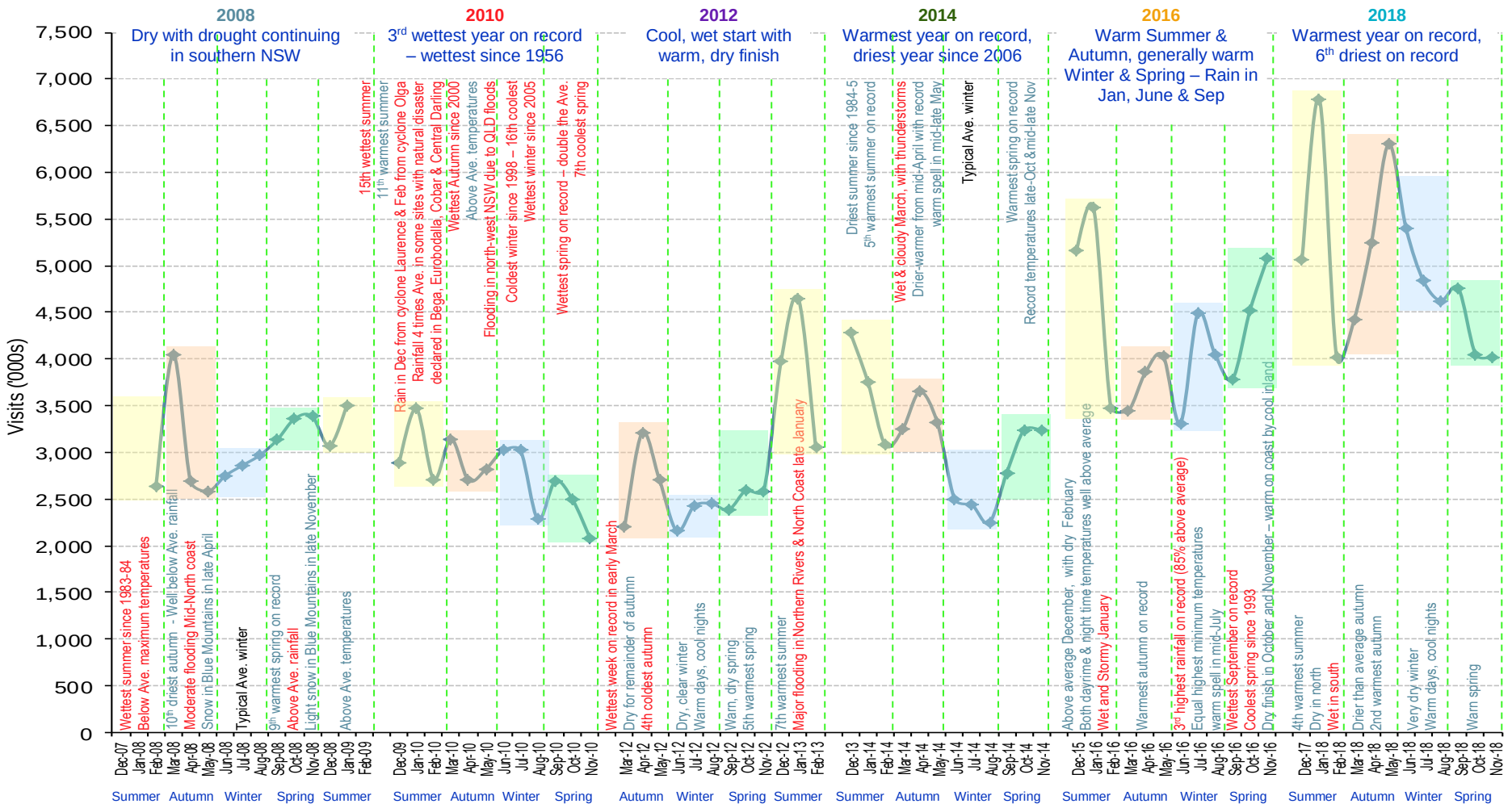
In 2018, favourable weather conditions for the majority of NSW in the summer, autumn and winter (warm and dry) resulted in the highest levels of NPWS park visitation recorded. Rain in spring in Sydney and in the areas surrounding Sydney (i.e. the Illawarra and Hunter Central Coast) had some detrimental impact on visitation, as this would have dissuaded visitors typically going to the most frequently visited in parks in NSW from visiting. However, for most of spring and for the remainder of the state weather conditions were warn, resulting in the second highest number of spring visits recorded.

Table 22 Seasonal Weather Summary NSW and Associated NPWS Park Visits

Season	Weather 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, wet winter	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 week 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 winter - warm 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 & warmer from mid-April with record warm 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 over the period
Summer 2015-16	Stormy summer, but dry for the most part	High	Generally favourable conditions for high visits
Autumn 2016	Warmest autumn on record	High	Favourable conditions for high visits
Winter 2016	Mild winter, with warmest nights on record, but third wettest on record	Moderate-High	Unfavourable for June visits, but favourable for high visits in July and August
Spring 2016	Cool, wet September, but dry October and November. Warm on coast, but cool inland	Moderate-High	Unfavourable for September visits, but favourable for high visits in October and November
Summer 2017-18	Warmer than average summer, dry across the north, but wet in the south	High	Generally favourable conditions for high visits
Autumn 2018	Warmer and drier autumn than average	High	Extremely favourable conditions for high visits
Winter 2018	Very dry winter with warm days and cool nights	High	Favourable conditions for high visits
Spring 2018	Warm spring, some rain in Greater Sydney, Illawarra and Hunter Central Coast	Moderate-High	Generally favourable conditions for high visits, but rain around Sydney negatively impacts on the most visited parks

Source: Bureau of Meteorology – Seasonal Climate Summaries for NSW.

Chart 32: Monthly NPWS Park Visitation with Associated Weather Events



Source: Bureau of Meteorology - Annual and Quarterly weather summaries

8. Other Survey Results

Please note that results highlighted in blue (higher) or orange (lower) compared in the remainder of this report are statistically significant 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 in Table 20). 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 23: Age and Sex by Region—All Respondents 2018

Age by Sex by Region	Total Pop'n n= 15,644	Male 18-24 n= 894	Male 25-34 n= 1,409	Male 35-49 n= 2,009	Male 50+ n= 3,314	Female 18-24 n= 767	Female 25-34 n= 1,417	Female 35-49 n= 2,133	Female 50+ n= 3,701
Sydney									
uc	3,256	199	335	420	646	164	326	457	709
uc%	21%	22%	24%	21%	19%	21%	23%	21%	19%
wc%	28%	29%	31%	29%	26%	29%	31%	29%	26%
Remainder NSW									
uc	2,612	109	186	299	686	117	177	307	732
uc%	17%	12%	13%	15%	21%	15%	12%	14%	20%
wc%	15%	13%	11%	13%	18%	12%	11%	13%	18%
ACT									
uc	1,951	134	168	289	333	87	170	334	436
uc%	12%	15%	12%	14%	10%	11%	12%	16%	12%
wc%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Melbourne									
uc	2,609	162	274	342	492	151	287	352	549
uc%	17%	18%	19%	17%	15%	20%	20%	17%	15%
wc%	27%	29%	30%	28%	24%	29%	30%	27%	24%
Remainder VIC									
uc	1,305	57	86	157	336	47	93	160	360
uc%	8%	6%	6%	8%	10%	7%	7%	8%	10%
wc%	8%	7%	6%	7%	10%	7%	6%	7%	10%
Brisbane									
uc	1,959	110	189	256	417	85	192	232	471
uc%	13%	14%	12%	12%	12%	14%	12%	14%	12%
wc%	13%	14%	13%	13%	12%	14%	13%	14%	12%
Remainder Southern & Southeast QLD									
uc	1,952	110	189	256	417	85	192	232	471
uc%	12%	12%	13%	13%	13%	11%	14%	11%	13%
wc%	7%	6%	6%	7%	9%	7%	6%	7%	9%

uc: Unweighted count (i.e. the number surveyed or asked a given question):
uc%: 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 call represents in each column).

Source: NPWS Parks Visitor Surveys 2018
Base: n=15,644

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. In 2012 and 2014, 22%-23% of calls were made to mobile numbers. In an effort to increase the representability of mobile only households in the sample 53% percent of respondents were called on mobile numbers in 2016 and 39% in 2018.

Table 24 shows that people from mobile only households in 2018 represent 33% the population and 29% of this segment were found in the survey sample in 2018. This represents a stark increase from 2012 and 2014 levels (7% and 9% respectively). Therefore, respondents from mobile only households were given smaller weights in 2018 than 2012 and 2014 in order to reflect their population contribution. This means that the sample was more representative by phone status in 2018 than in 2012 and 2014. Similarly, people from households with both mobiles and landlines were weighted down slightly, as they were slightly over-represented in the sample (68% in the sample c.f. 64% in the population in 2018). Note that higher weights for mobile only households in the ACT and Queensland were employed, because fewer mobile calls were made to these regions (even though they were over-sampled).

Table 24: Phone Status by Region—All Respondents 2012-2018

Phone Status by Region	Mobiles & Landlines in the Household				Mobiles Only in the Household				Landlines Only in the Household			
	2012 n=13,282	2014 n=13,120	2016 n=11,600	2018 n=10,572	2012 n=1,041	2014 n=1,451	2016 n=3,500	2018 n=4,593	2012 n=1323	2014 n=1,085	2016 n=583	2018 n=479
uh%	85%	84%	74%	68%	7%	9%	22%	29%	8%	7%	4%	3%
w h%	74%	69%	70%	64%	18%	24%	26%	33%	9%	7%	4%	3%
Sydney												
uc	2,756	2,724	2,358	2,45	275	350	822	943	227	175	79	68
uh%	85%	84%	72%	69%	8%	11%	25%	59%	7%	5%	2%	2%
w h%	74%	71%	71%	67%	19%	23%	26%	30%	8%	7%	3%	3%
Remainder NSW												
uc	2,176	2,140	1,906	1,723	177	229	582	765	262	240	120	124
uh%	83%	82%	73%	66%	7%	9%	22%	29%	10%	9%	5%	5%
w h%	71%	66%	69%	65%	17%	24%	26%	29%	12%	10%	6%	7%
ACT												
uc	1,767	1,804	1,655	1,553	34	47	222	323	155	117	83	75
uh%	90%	92%	84%	80%	2%	2%	11%	17%	8%	6%	4%	4%
w h%	78%	78%	64%	62%	15%	16%	33%	37%	8%	6%	2%	1%
Melbourne												
uc	2,161	2,131	1,810	1,597	259	335	757	990	184	141	45	22
uh%	83%	82%	69%	61%	10%	13%	29%	38%	7%	5%	2%	1%
w h%	75%	71%	72%	69%	18%	24%	25%	29%	7%	5%	3%	2%
Remainder VIC												
uc	1,085	1,022	956	831	89	189	308	445	129	96	43	29
uh%	83%	78%	73%	64%	7%	14%	24%	34%	10%	7%	3%	2%
w h%	74%	67%	72%	58%	16%	25%	22%	38%	11%	8%	5%	4%
Brisbane												
uc	1,614	1,524	1,420	1,390	121	161	463	465	140	130	94	104
uh%	86%	84%	72%	41%	6%	9%	23%	24%	7%	7%	5%	5%
w h%	72%	66%	66%	55%	21%	28%	30%	42%	7%	6%	4%	3%
Remainder Southern QLD												
uc	1,723	1,775	1,495	1,233	86	140	346	662	226	186	119	57
uh%	85%	84%	76%	63%	4%	7%	18%	34%	11%	9%	6%	3%
w h%	76%	67%	69%	56%	16%	26%	28%	40%	8%	7%	4%	4%

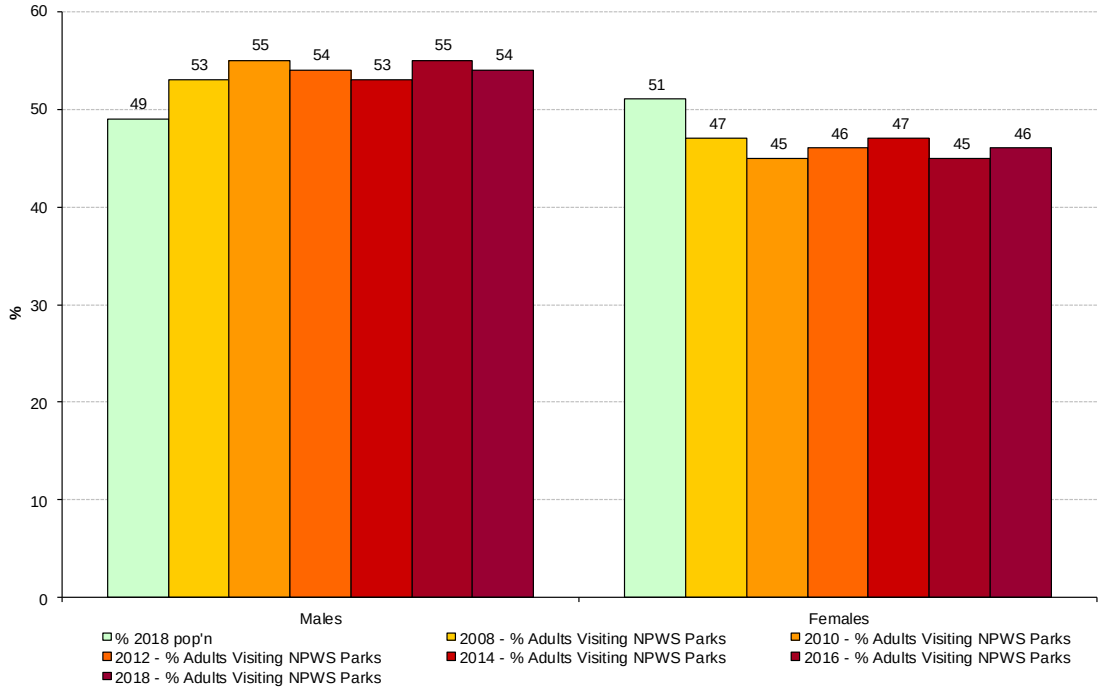
uc: Unweighted count (i.e. the number surveyed or asked a given question):
uh%: Unweighted count percentage (percentage of the total sample the unweighted count represents in each row);
wh%: Weighted percentage (the proportion of the total 18yrs+ population of the seven survey regions that call represents in each row).

Source: NPWS Parks Visitor Surveys 2008 - 2018
Base: 2008 n=15,715; 2010 n=15,643; 2012 n=15,646; 2014 n=15,656; 2016 n=15,683, 2018 n=15,644

8.2 Park Visitation by Selected Demographics

The following charts compare the actual population percentage of the overall survey region, with the percentage of visitors and visits to *any NPWS-managed* park by survey year. Compared with the population, NPWS park visitors are more likely to be male (Chart 57).

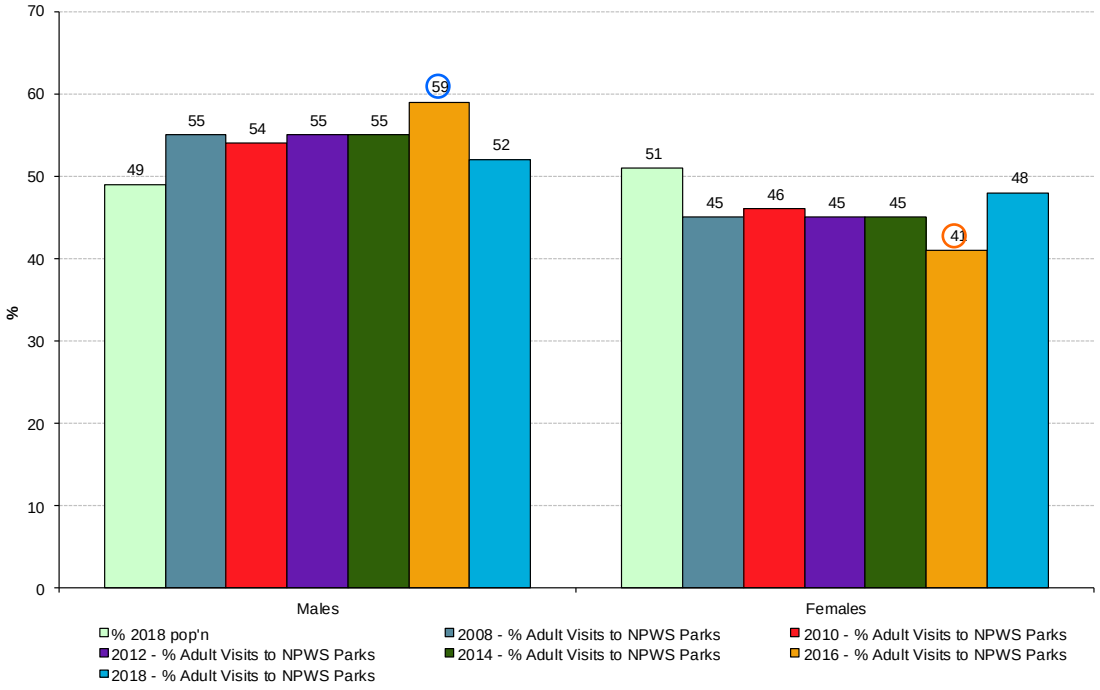
Chart 33: Visitors to NPWS Parks by Sex



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Visitation to NPWS parks is slightly more over-represented by males than are visitors (Chart 58). Visitation by males decreased to 52% in 2018 from 59% in 2016 (and females increased to 48% from 41%). This decrease in the proportion of male visits to NPWS parks from 2016 to 2018 was statistically significant.

Chart 34: Visitation to NPWS Parks by Sex



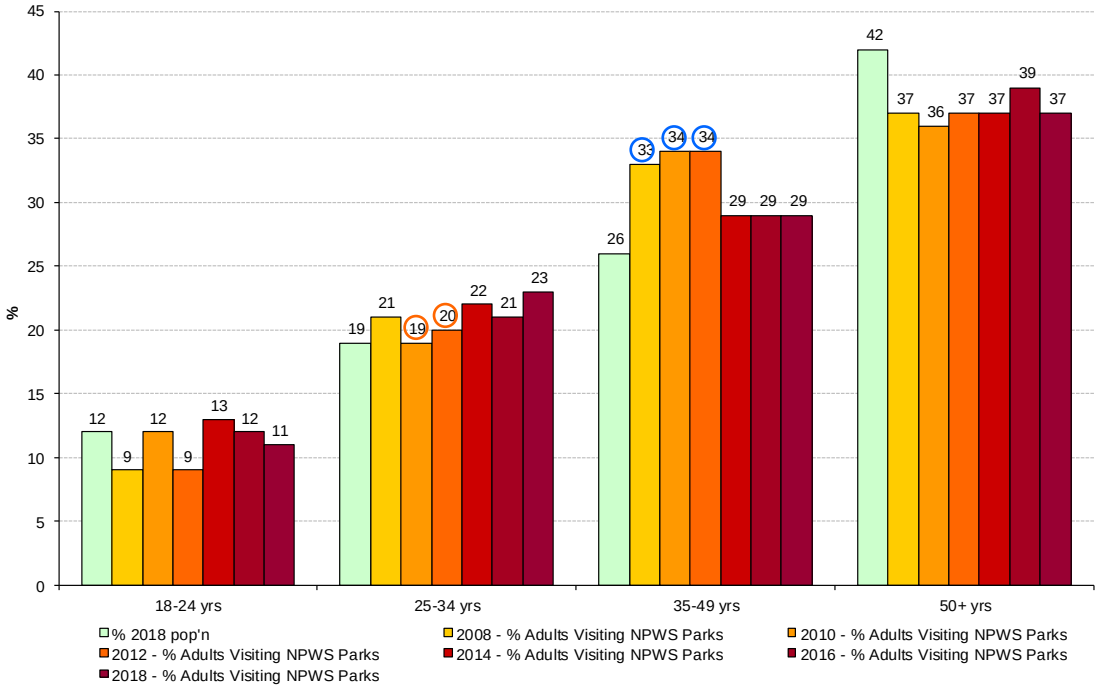
Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

A slightly younger age profile is evident in 2014, 2016 and 2018 compared with other years in terms of visitors to NPWS parks, with the proportion of visitors aged 35-49 years significantly higher in 2018 than in 2010 and 2012 (Chart 59).

The proportion of visits made by 18-24 year olds in 2010, 2014, 2016 and 2018 are significantly higher than in 2008 (Chart 60). The proportion of visits from 18-34 year olds in both 2010 and 2018 are significantly higher than in 2008, 2012 and 2016, indicating that the age profile for visits made is younger in 2010 and 2018.

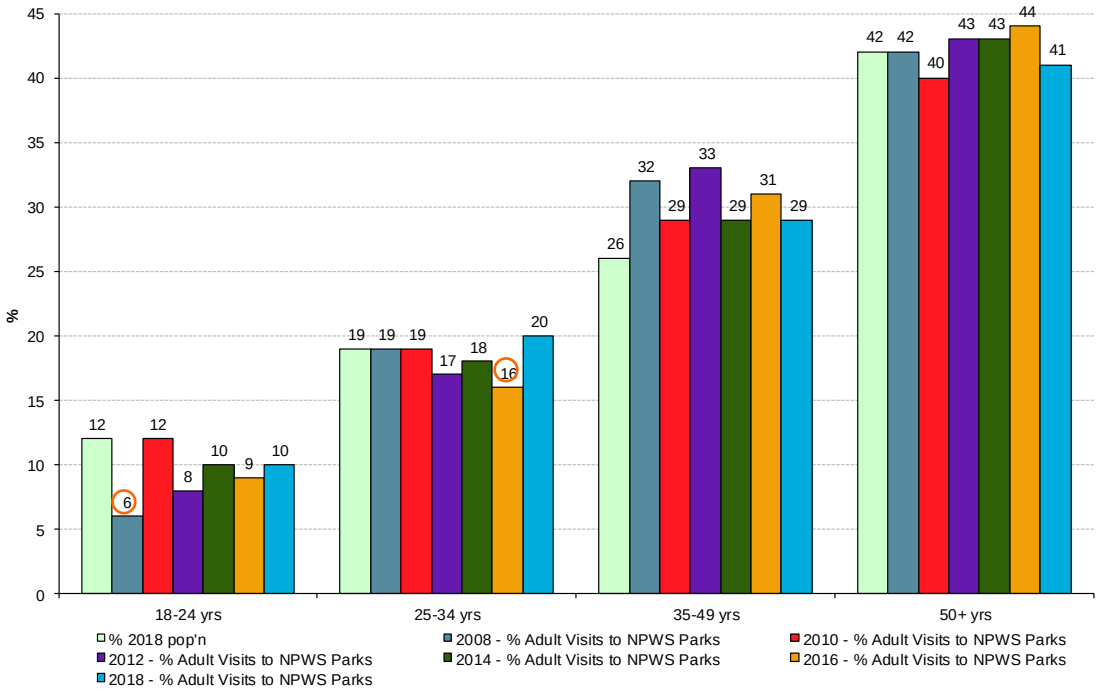
Chart 35: Visitors to NPWS Parks by Age



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

Chart 36: Visitation to NPWS Parks by Age

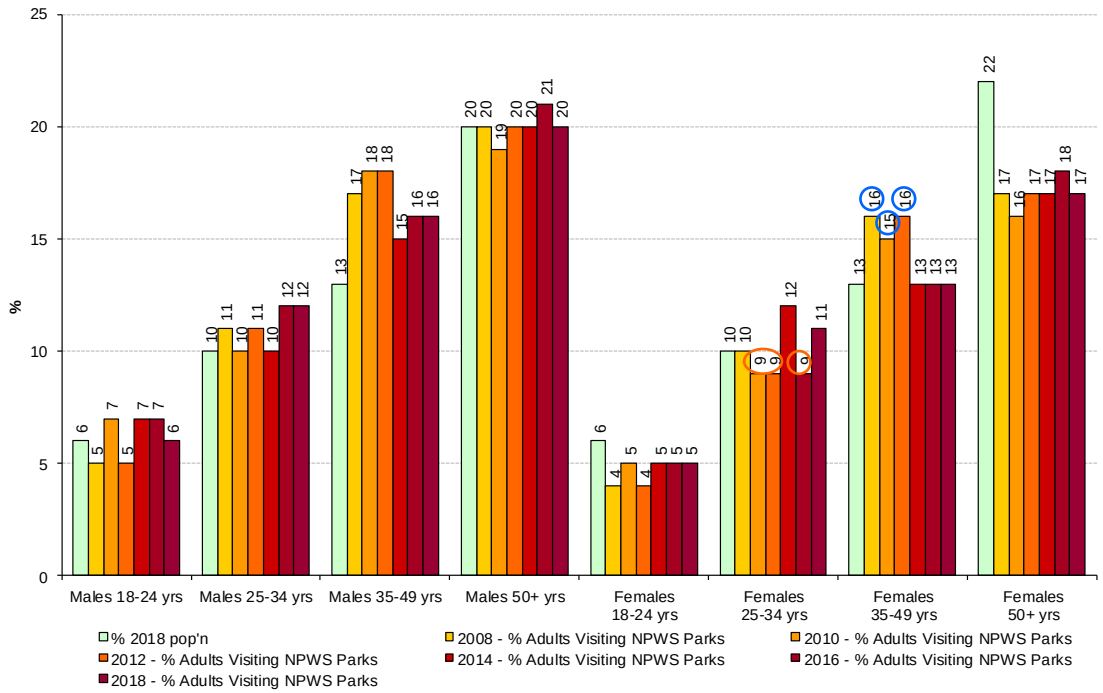


Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

The slightly younger age profile of visitors in 2014, 2016 and 2018 cannot be explained by any consistent change in the proportion of males or females in the younger age groups across years. (Chart 61).

Chart 37: Visitors to NPWS Parks by Age by Sex

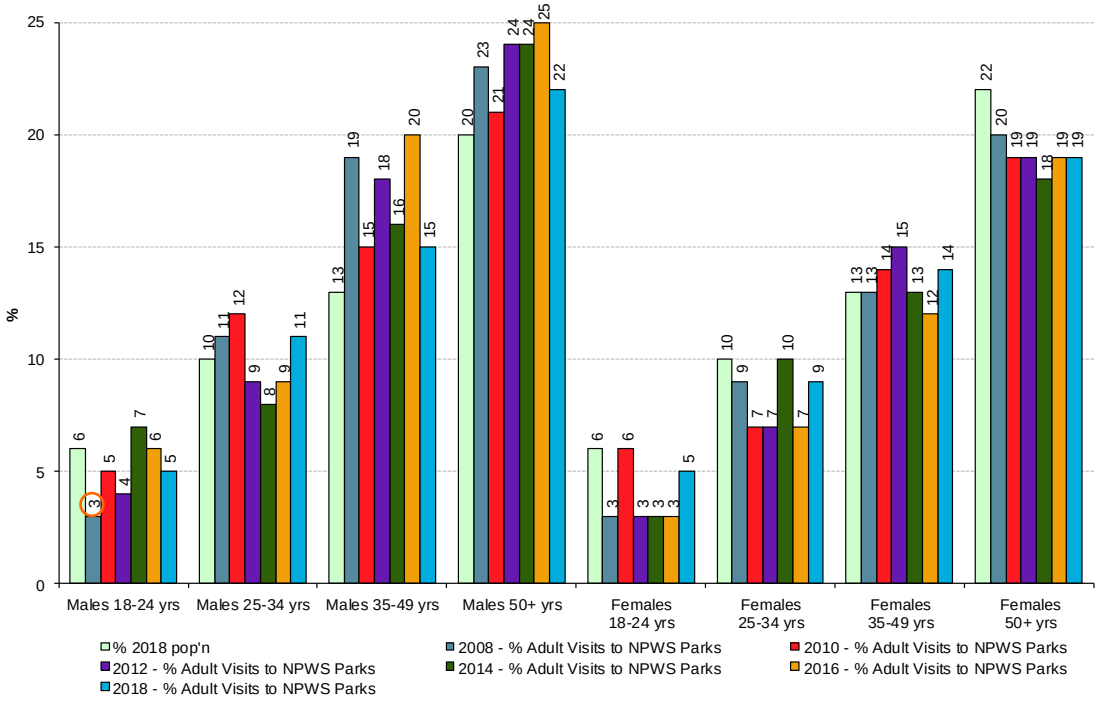


Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

Higher levels of visitation from 18-34 year olds in 2018 can be attributed to increased visitation by males aged 25-34 (Chart 62).

Chart 38: Visitation to NPWS Parks by Age by Sex



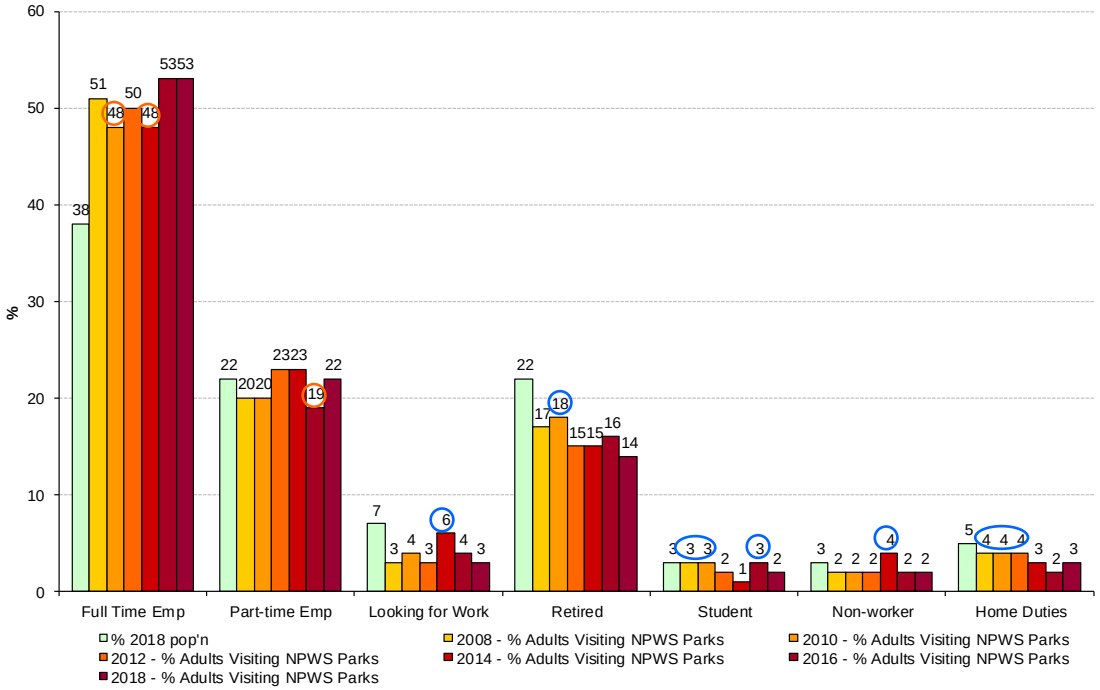
Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

In 2018 the proportion of visitors employed in work increased to its highest proportion recorded (75%), as did visitation by employed people (71% - Chart 63 and Chart 64). This was due to significant increases in visitors in part-time employment from 2016 levels (22% c.f. 19%) while visitation increased for people in both full time and part-time employment.

The proportion of retired visitors to NPWS parks declined in 2018 to 14%, the lowest proportion recorded. This decline was not observed for visitation, with 2018 proportions at the same level as 2010, 2012 and 2016 (18%).

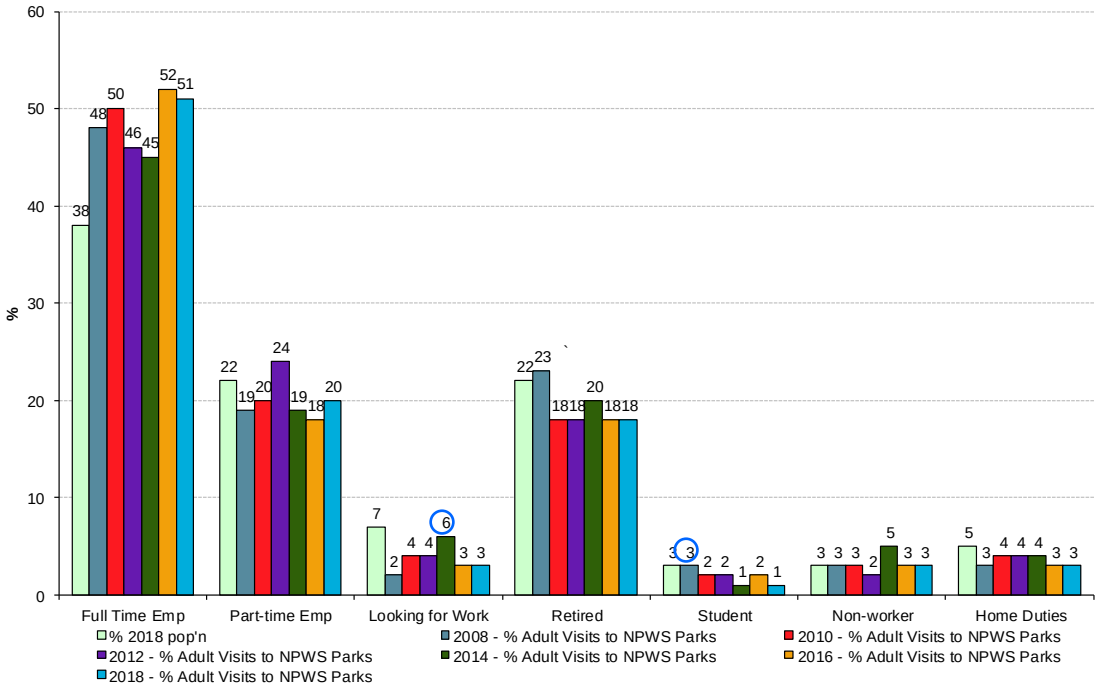
Chart 39: Visitors to NPWS Parks by Work Status



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

Chart 40: Visitation to NPWS Parks by Work Status

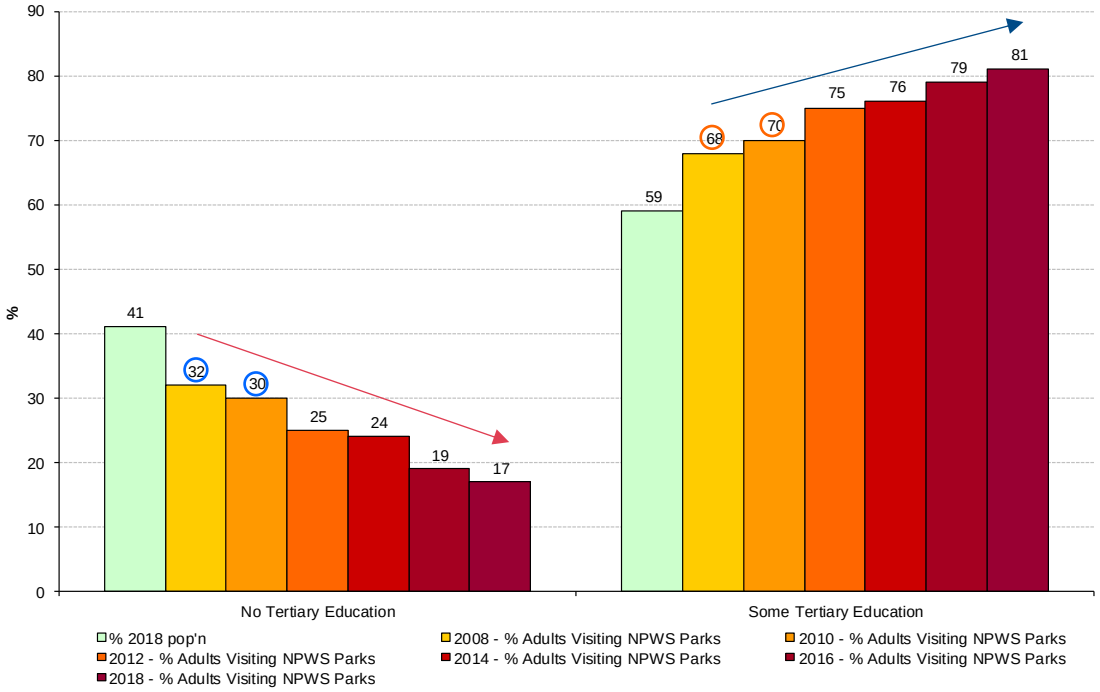


Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

The proportion of people without any form of tertiary education who visit NPWS parks is declining over time. The opposite trend is evident amongst people with some form of tertiary education (Chart 65).

Chart 41: Visitors to NPWS Parks by Education Summary

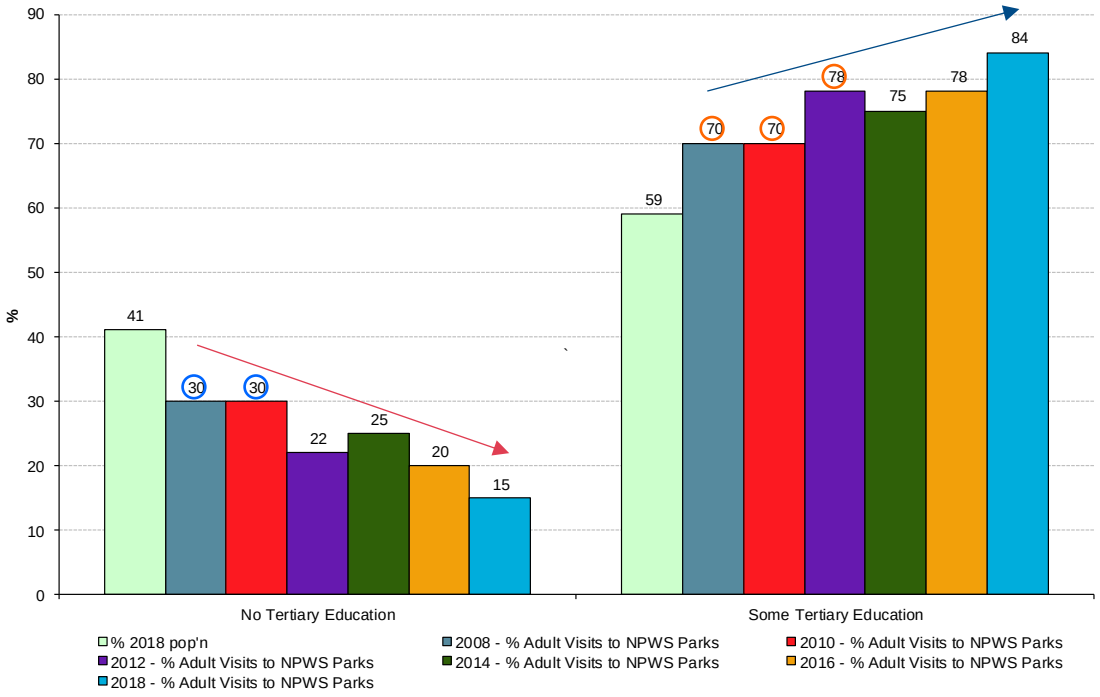


Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

In terms of visitation, there continues to be an increase in the proportion of visits from people with some tertiary education over time, with the proportion of visits from these people increasing to 84% in 2018 (Chart 66).

Chart 42: Visitation to NPWS Parks by Education Summary



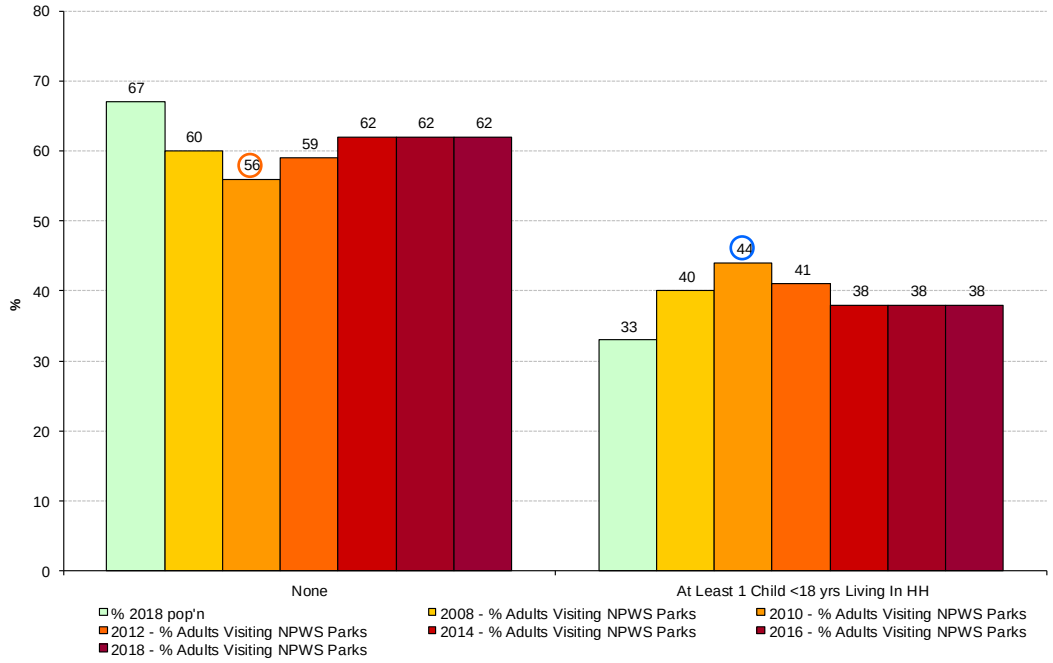
Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

Overall the proportion of NPWS park visitors with 1, 2, 3 or 4 or more children in the household declined to its lowest levels in 2014 and sustained this level in 2016 and 2018 (Chart 67). 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, 2016 and 2018.

2016 remains the year with the lowest proportion of visits coming from households with at least one child under 18 years living in them (35%). The proportion of visits from this group increased to 37% in 2018, but in reality, yearly changes in visitation by number of children in the household are not statistically significant (Chart 68).

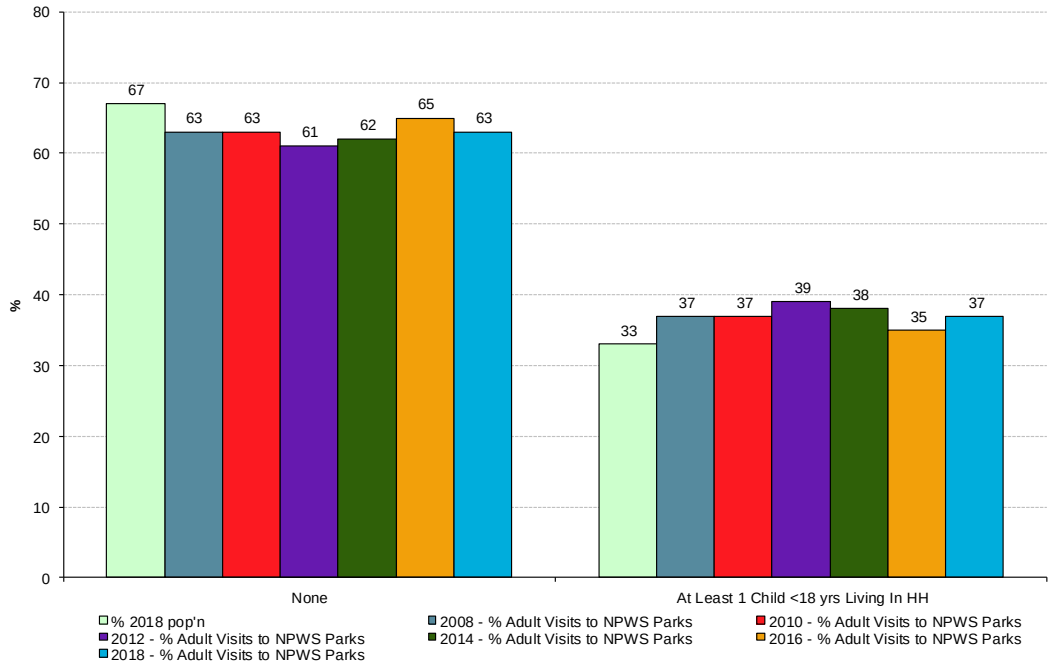
Chart 43: Visitors to NPWS Parks by Number of Children Under 18 Years in the Household



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

Chart 44: Visitation to NPWS Parks by Number of Children Under 18 Years in the Household



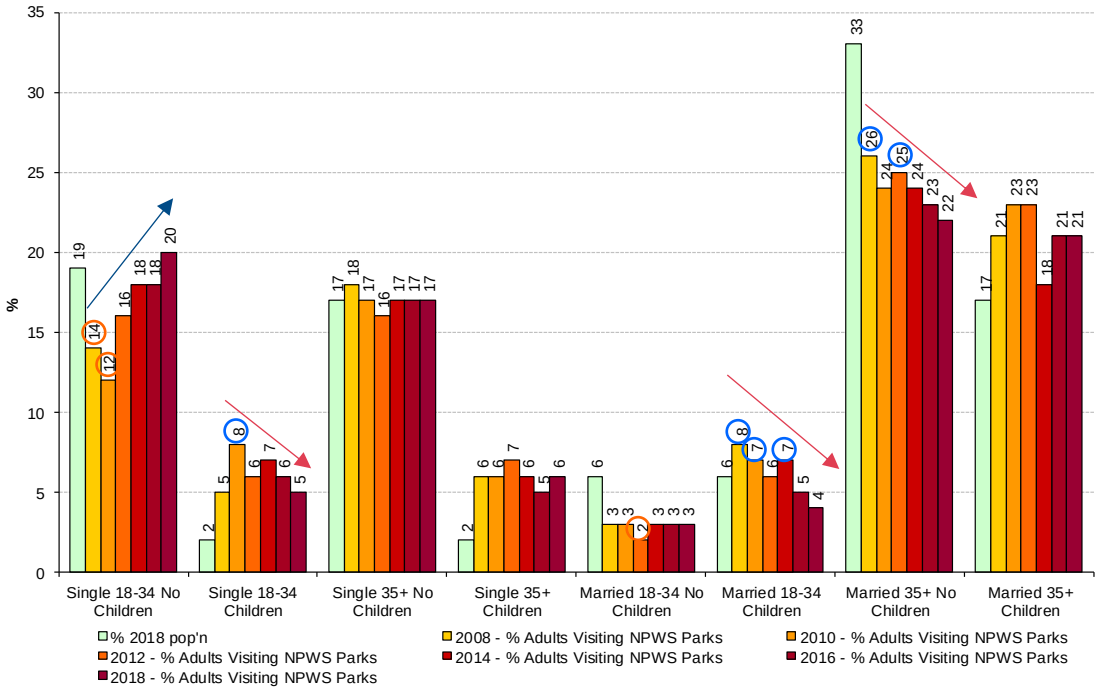
Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

The proportion of visitors in 2018 who are single aged 18-34 years with no children is at its highest level recorded (20%), while the opposite is the case in 2018 for those married aged 18-34 with children (4%) and those married 35 years and over with no children (22% - Chart 69). There are

downward trends evident in the proportion who are single aged 18-34 with no children, married aged 18-34 with children and married aged 35 years and over with no children. There is an upward trend in the proportion of visitors from single households aged 18-34 with no children.

Chart 45: Visitors to NPWS Parks by Respondent Life-Cycle

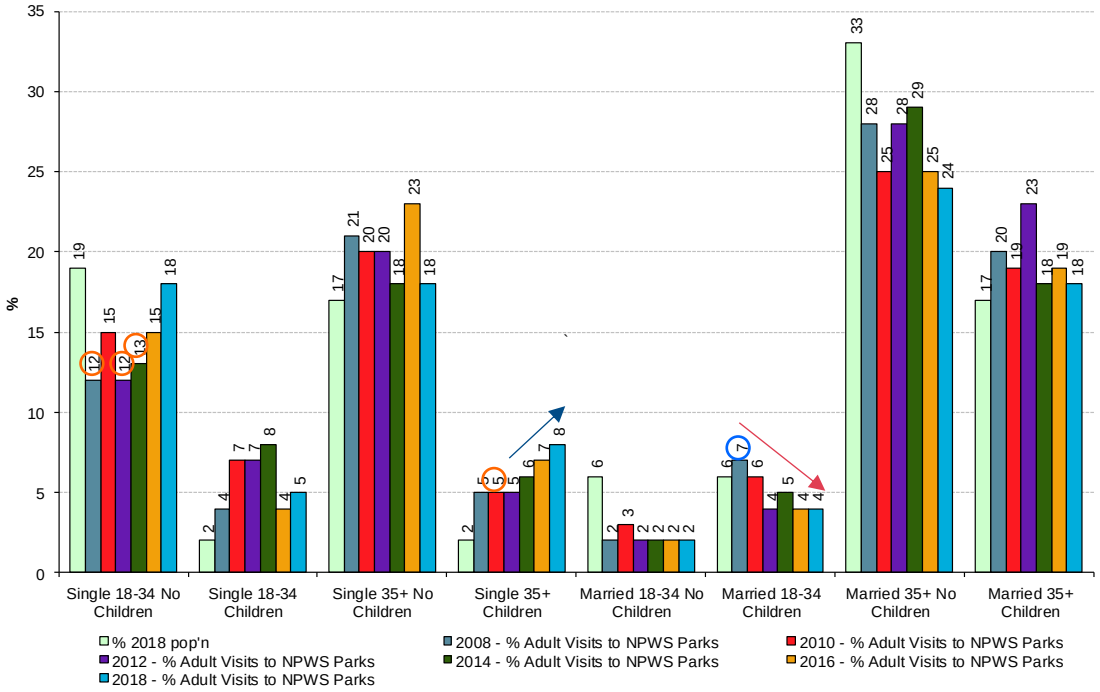


Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

In relation to visitation, the proportion of visits from singles aged 18-34 years with no children is at its highest level in 2018 (18%), as was visits from singles aged 35 years and over with children (8%) (Chart 70). An upward trend in visitation over time is evident amongst singles aged 35 years and over with children, while a downward trend in visits is evident for those married aged 18-34 with children.

Chart 46: Visitation to NPWS Parks by Respondent Life-Cycle



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

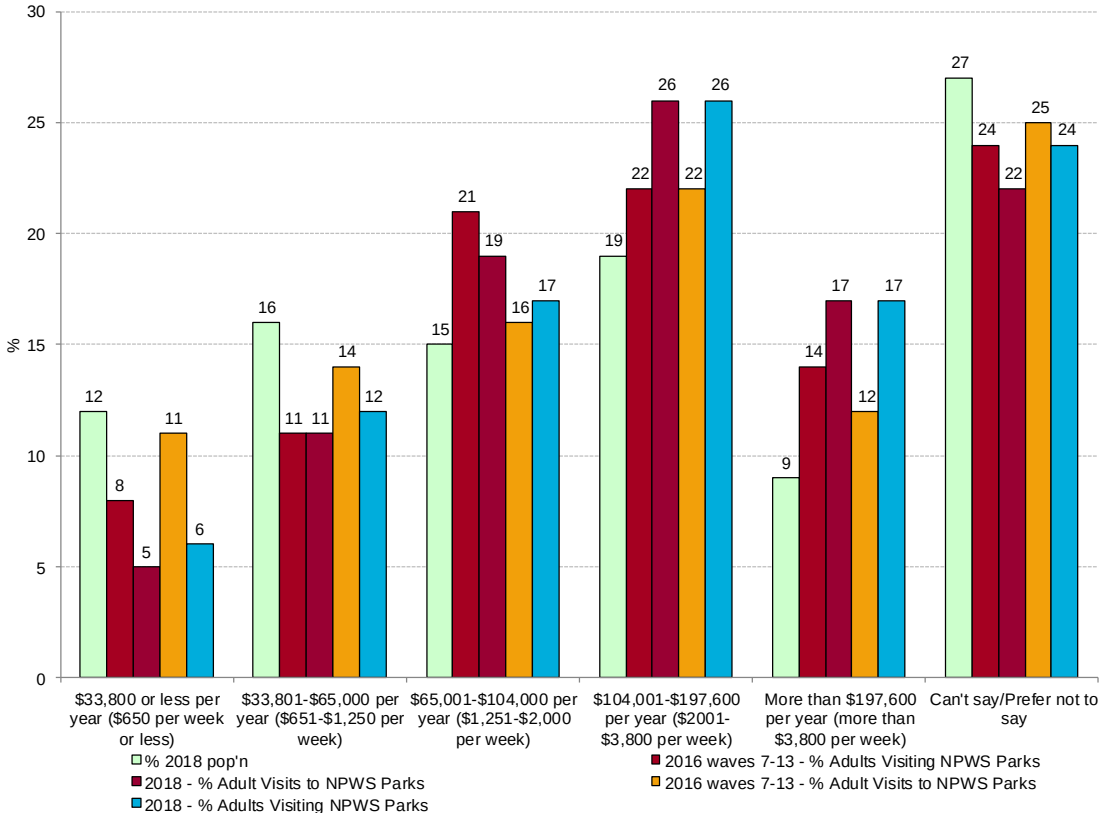
Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

From wave 7 in 2016, a new demographic question was asked of all respondents on household income before tax. Survey data has been compared with population data for the survey region (Table 71).

The proportion of visitors earning *$33,800 or less per year* has declined since 2016, as have the proportion of visits for people earning this income (See Chart 71). The proportion of visitors with household incomes of *$33,801-$65,000 per year* has remained stable at 11%, but the proportion of visits from this group has declined from 14% in 2016 to 12% in 2018. Interestingly, the proportion of visitors earning *$65,001-$104,000 per year* has declined from 21% in 2016 to 19% in 2018, while the proportion of visits from this group has increased (from 16% in 2016 to 17% in 2018).

The major contributors to NPWS park visitors and NPWS park visits are people from high income households, namely those with household incomes of *$104,001-$197,600 per year* and those with incomes of *more than $197,600 per year*. These two groups contribute 26% and 17% of visitors and visits respectively in 2018.

Chart 47: Visitation to NPWS Parks by Household Income (Wave 7-13 2016 only)

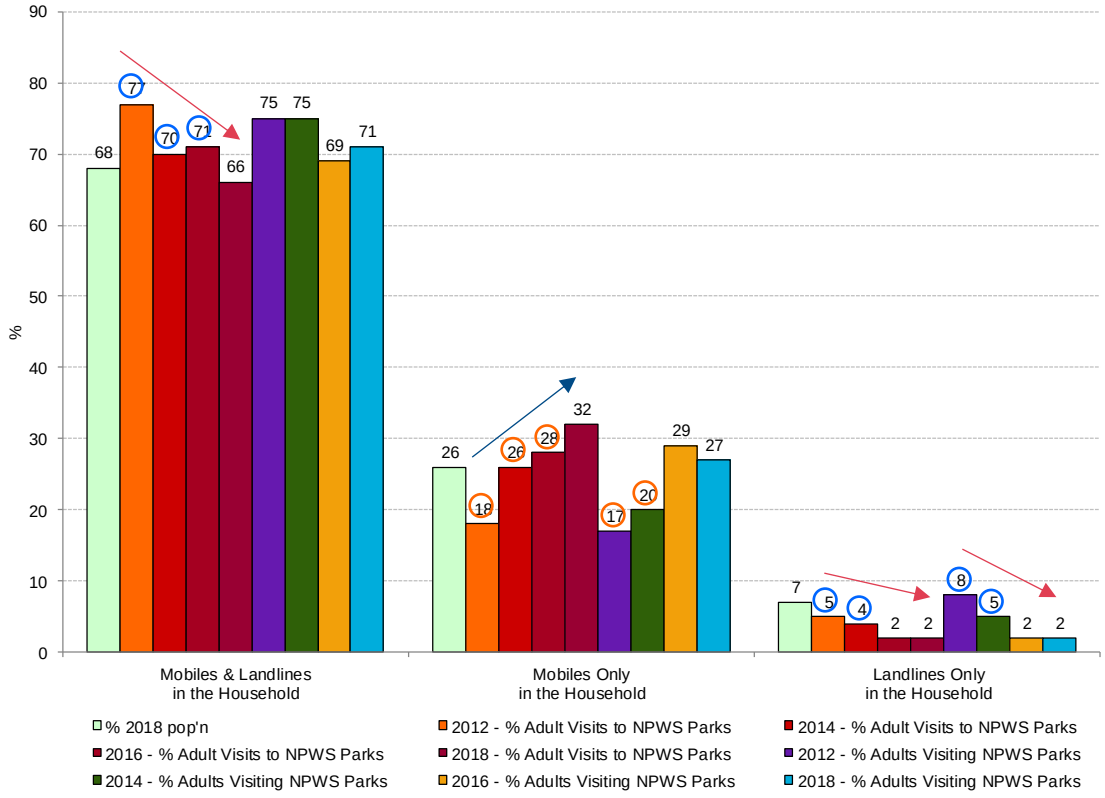


Source: NPWS Parks Visitor Surveys 2016 – 2018
Base: 2016 waves 7-13 n=1,015, 2018 n=2,087

When analysing visitors to NPWS parks in terms of phone status, the proportion of visitors going to NPWS parks from households with both landline and mobile phones has generally been declining over time (Chart 72). The same trend is evident for households that only have landline phones in the household. The proportion of visitors to NPWS parks from mobile only households is increasing over time. These trends are in line with the general trend for home ownership in households over time in Australia.

However, in relation to actual visits to NPWS parks these trends are only evident for visits from households with landlines only. Whilst the proportion of visitors from mobile only households was increasing over time, the proportion of visits from these households declined in 2018 (to 27% from 29% in 2016). At this stage, no trend is evident in the proportion of NPWS visits from households with both landlines and mobiles.

Chart 48: Visitors and Visitation to NPWS Parks by Phone Status



Source: NPWS Parks Visitor Surveys 2012 – 2018
Base: 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

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

Table 25 provides details of all languages spoken in the household by visitors to NPWS parks and by total visits made to NPWS parks. Cells highlighted in blue or red indicate that the figure in the cell is significantly higher or lower (respectively) than the 2018 result.

Whilst the proportion of people speaking English visiting a park or the proportion of park visits for English speakers declined in 2016, the proportion of visitors and visits returned to typical levels in 2018.

There was a significant decline in the proportion of visitors and visits from people who speak Cantonese in 2018, significantly lower than in 2016. The proportion of people speaking Arabic increased to its highest levels in 2018 (1.0%), but this did not result in the highest proportion of visits for this group (0.6% c.f. 0.8% in 2014). However the proportion of visitors speaking Hindi (0.8%) and the proportion of visits from Hindi speakers (0.6%) was the highest recorded. Whilst the proportion of visitors and visits from those speaking Korean declined in 2018, the proportion of visitors and visits from those speaking Japanese increased in 2018.

Table 6: NPWS Visitors and Visits by Language Usually Spoken in the Household

Language	Visited a PWG Park in Last 4 weeks						Adult Visits to a PWG Park in Last 4 weeks					
	2008	2010	2012	2014	2016	2018	2008	2010	2012	2014	2016	2018
English	97.4%	96.8%	98.4%	97.4%	93.8%	96.5%	98.8%	96.2%	98.8%	98.4%	95.9%	97.6%
Total Languages other than English	**8.1%**	**7.6%**	**10.4%**	**10.9%**	**11.9%**	**9.7%**	**6.0%**	**6.4%**	**10.8%**	**8.4%**	**9.8%**	**8.3%**
Mandarin	1.2%	0.8%	0.6%	1.0%	1.5%	1.0%	0.5%	1.9%	0.3%	0.8%	1.0%	0.4%
Cantonese	0.3%	0.6%	0.4%	0.9%	1.2%	0.4%	0.2%	0.2%	0.2%	0.5%	0.5%	0.2%
Spanish	0.5%	0.7%	1.7%	1.1%	1.0%	0.7%	1.0%	0.5%	1.2%	1.2%	0.9%	0.6%
Arabic	0.1%	0.4%	0.7%	0.7%	0.7%	1.0%	*	0.4%	0.7%	0.8%	0.4%	0.6%
German	0.6%	0.6%	0.6%	0.3%	0.7%	0.8%	1.1%	0.3%	0.7%	0.4%	0.6%	0.5%
Italian	0.4%	0.3%	0.7%	0.6%	0.5%	0.7%	1.5%	0.2%	0.9%	0.5%	0.3%	0.5%
Hindi	0.4%	0.2%	0.2%	0.6%	0.5%	0.8%	0.2%	0.1%	0.1%	0.3%	0.3%	0.6%
Tagalog (Filipino)	0.2%	0.4%	0.2%	0.1%	0.4%	0.2%	0.2%	0.2%	0.1%	*	0.3%	0.3%
Greek	0.5%	0.1%	0.2%	0.6%	0.3%	0.4%	0.9%	0.1%	0.2%	0.3%	0.2%	0.2%
Vietnamese	0.5%	0.1%	0.1%	0.3%	0.1%	0.1%	0.3%	*	*	0.2%	0.1%	0.1%
Aboriginal/ Indigenous Language	-	0.2%	0.2%	-	0.2%	0.2%	-	0.2%	1.2%	-	0.9%	0.6%
Other Languages -	4.0%	3.9%	6.4%	5.6%	5.8%	4.4%	3.5%	2.7%	6.6%	4.2%	4.9%	4.4%
French	n/a	n/a	n/a	0.7%	0.6%	0.9%	n/a	n/a	n/a	0.5%	0.4%	0.7%
Russian	n/a	n/a	n/a	0.3%	0.4%	0.2%	n/a	n/a	n/a	0.1%	0.4%	0.2%
Portuguese	n/a	n/a	n/a	0.3%	0.3%	0.3%	n/a	n/a	n/a	0.3%	1.2%	0.2%
Korean	n/a	n/a	n/a	0.5%	0.2%	*	n/a	n/a	n/a	0.2%	0.2%	*
Japanese	n/a	n/a	n/a	0.2%	0.1%	0.4%	n/a	n/a	n/a	0.1%	*	1.1%
Punjabi	n/a	n/a	n/a	*	0.1%	0.1%	n/a	n/a	n/a	*	*	0.6%
Dutch	n/a	n/a	n/a	0.4%	0.2%	0.2%	n/a	n/a	n/a	0.4%	0.1%	0.1%
Macedonian	n/a	n/a	n/a	0.2%	-	0.1%	n/a	n/a	n/a	0.1%	-	0.1%
Other Languages	n/a	n/a	n/a	3.1%	3.9%	4.2%	n/a	n/a	n/a	2.5%	2.5%	4.3%

Note: Total sum to great than 100% as some visitors can speak multiple languages
Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,644; 2016 n=1,705, 2018 n=1,718

* Less than 0.5% response.

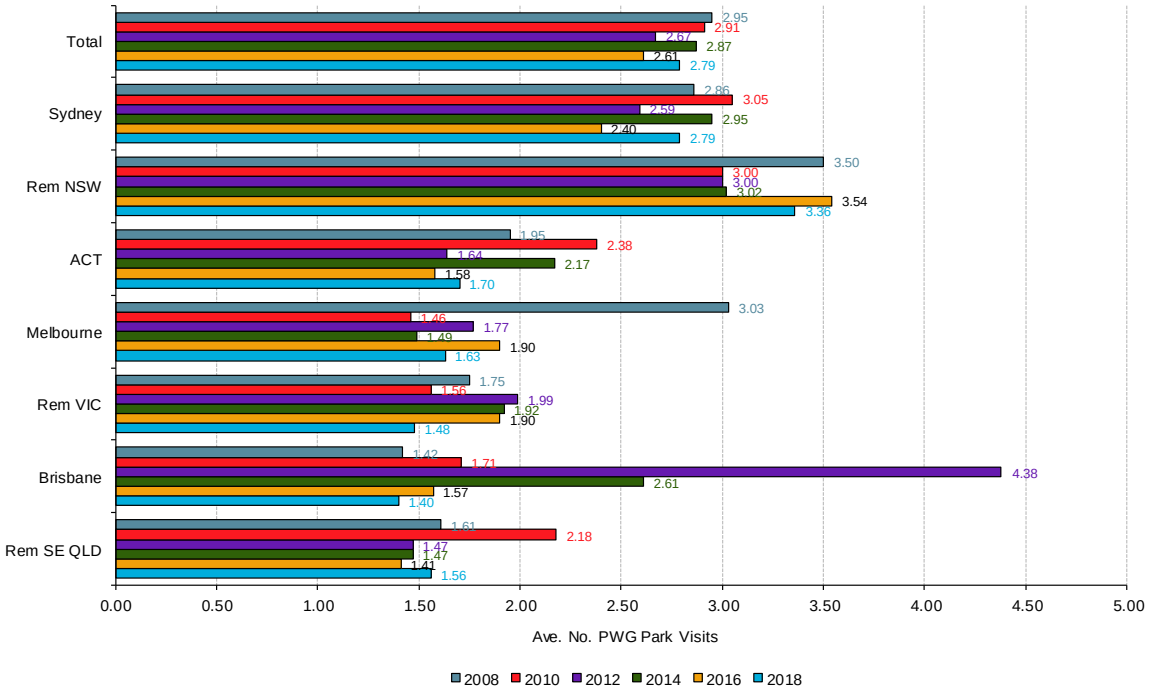
8.3 Number of Individual Visits made to NPWS Managed Parks by Adults

Detailed discussion of number of adult visits is provided in section 7.1 of this document (including Chart 30, Chart 32 and Chart 33) in relation to potential factors influencing NPWS park visitation.

In summary, the average number of visits by adults increased in 2018, from its lowest recorded figure in 2016 – 2.63 visits per adult visitor to 2.79 (Chart 73). By dividing total NPWS visits for each year by the average number of visits a *proxy* for the total number of visitors can be calculated (noting that this would not be unique visitors, as a visitor can visit a park in another 4 week visitation period over the course of the year). In 2018, the number of proxy visitors to NPWS parks is 16,056, 873, up from 14,985,892 in 2016. The number of proxy visitors in previous years ranges from 9.2m to 10.8m.

There have been declines in the average number of visits in 2018 from 2016 levels for remainder NSW, Melbourne, remainder VIC and Brisbane, with the averages for remainder VIC and Brisbane being the lowest attained.

Chart 49: Average Number of Adult Visits to NPWS Parks by Region of Origin



Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2008 n=1,563; 2010 n=1,389; 2012 n=1,421; 2014 n=1,651; 2016 n=1,708, 2018 n=1,718

Across all years, average number of visits to NPWS parks generally increases with age. In 2018 18-24 year olds had the lowest average number of visits (2.40), followed by 25-24 year olds (2.48), then 35-49 year olds (2.79), with those aged 50 years an over having the highest number of average visits (3.09) (N.B. data is not shown graphically). However, average number of visits for 18-24 year olds and 25-34 year olds both rebounded from the lowest averages recorded in 2016 (1.99 and 1.94 respectively).

8.4 Duration of Visit to a NPWS Park

In 2018 NPWS park visitors were asked a new question for each different NPWS park they visited in relation to their *duration* of visit:

> *On this occasion was your visit to this park just for the day or did you stay in it overnight or for multiple nights?*

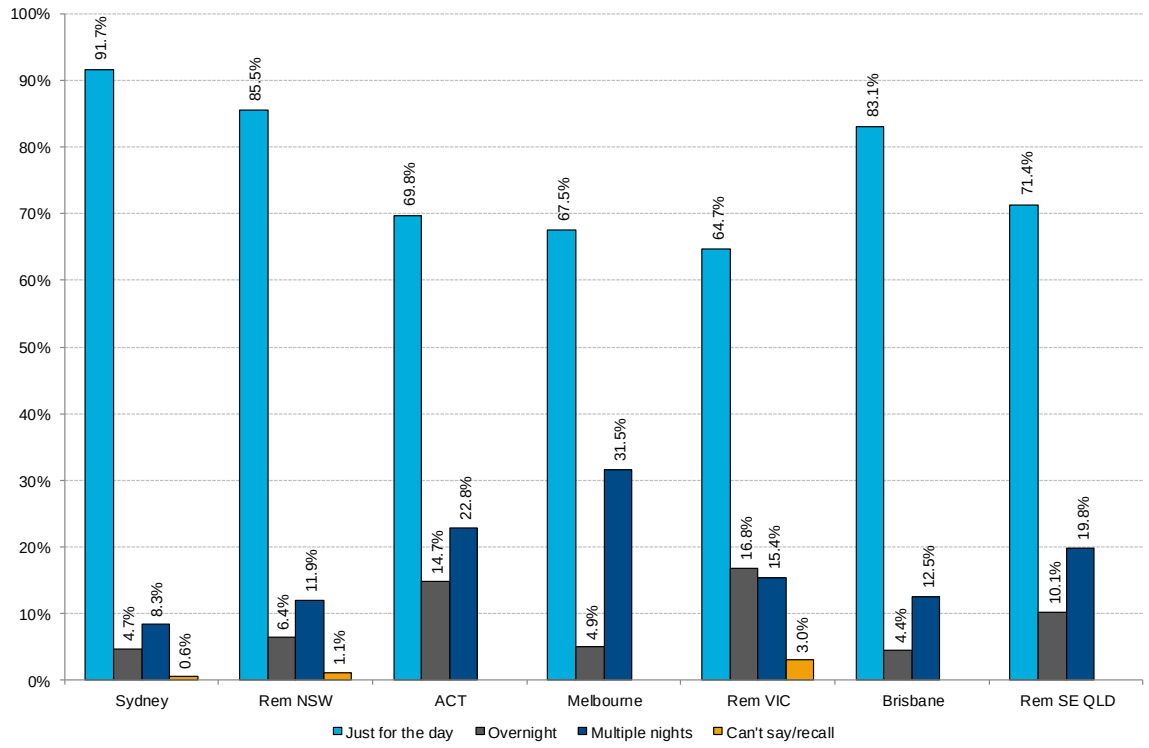
Note that as respondents can visit more than one NPWS park in a given 4 week period, duration totals sum to more than 100%.
Almost nine in ten visits to NPWS parks were *just for the day* (87.5%). One in six visits were either *overnight* (5.7%) or *multiple night* visits (10.9% - Chart 74).

Not surprisingly, visiting a NPWS part just for the day was more likely based on proximity to a NPWS park. Over nine in ten visitors from Sydney visited *just for the day* (91.7%) followed by visitors from the remainder of NSW (85.5%), who would live is reasonably close proximity to a number of NPWS parks. Those from Brisbane (83.1%) and from the remainder of southeast QLD

(71.4%) had the next highest proportions visiting *just for the day*, as they live close to the large number of parks running along the NSW-QLD border.

As may be expected, those from regions of origin which are located further away from relevant NPWS Branches have greater proportions taking at least an overnight trip. For example, up to 36.4% of Melbourne residents visiting a NPWS park have 36.4% visiting at least overnight, while 36.5% of ACT residents visiting a NPWS park visited at least overnight. A notable difference between these origin markets is that Melbourne residents have greater proportions than ACT residents visiting NPWS parks for *multiple nights* (31.5% vs 22.8%), while ACT residents have greater proportions visiting *overnight* (14.7% vs 4.9%). This makes sense, as people from Melbourne have to travel all the way to NSW to visit a park (therefore more likely to stay for multiple nights), while people form the ACT are only a few hour's drive to the parks located in the Snowy mountains or the south coast of NSW, where they can spend the night and return home the next day.

Chart 50: Duration of Visit to NPWS Park by Region of Origin



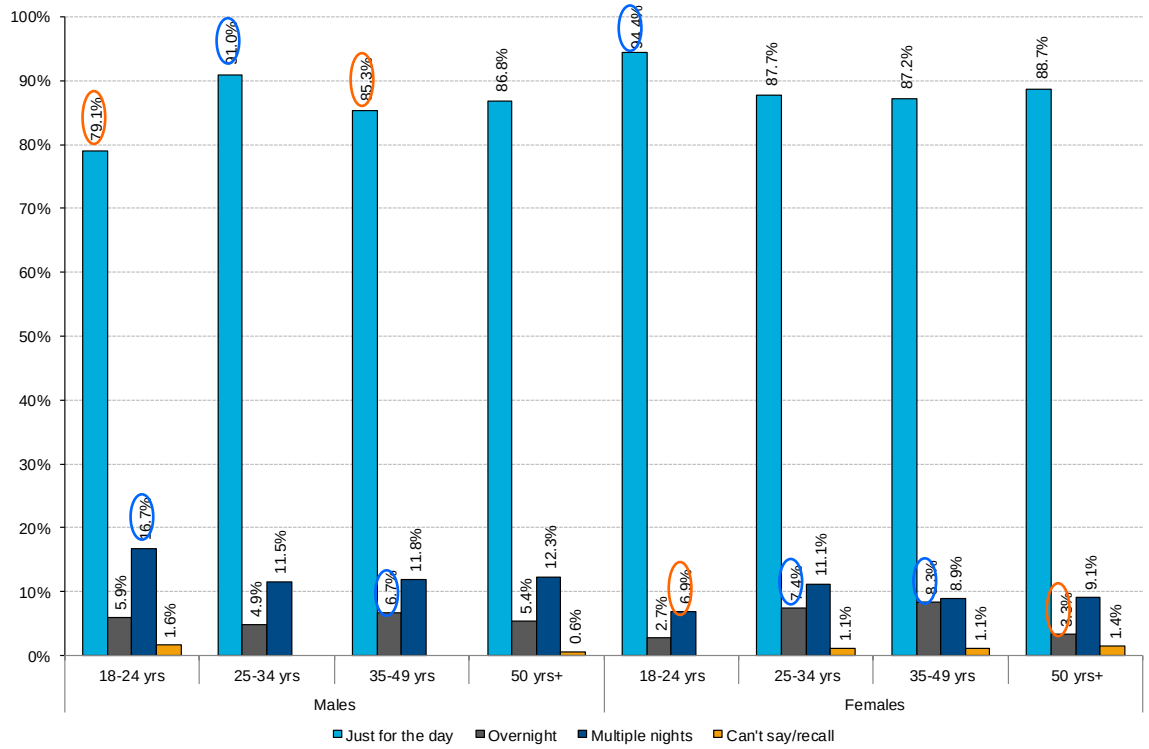
Source: NPWS Parks Visitor Surveys 2018
Base: 2018 n=1,741

In terms of duration of trip by sex, the proportion visiting *just for the day* varies little (86.5% males: 88.7% females), as is also the case for those staying *overnight* (5.7% males: 5.6% females. However, proportions visiting for *multiple nights* differs by sex, with 12.4% of males versus 9.2% of females visiting NPWS parks for multiple nights.

In terms of age, duration of trip does not differ markedly. However, when analysed by age by sex some key differences emerge (Chart 75). Females aged 18-24 years visiting a NPWS park have the highest proportions visiting *just for the day* (94.4%), while males aged 18-24 years have the lowest proportions doing so (79.1%). As a consequence, males aged 18-24 years have the highest proportions visiting NPWS parks for *multiple nights* (16.7%), while females aged 18-24 years have

the lowest (6.9%). Few females aged 50 years or more stay in NPWS parks *overnight* (3.3%), while females aged 35-49 years (8.3%) and females aged 25-34 years (7.4%) have the highest proportions doing so.

Chart 51: Duration of Visit to NPWS Park by Age by Sex

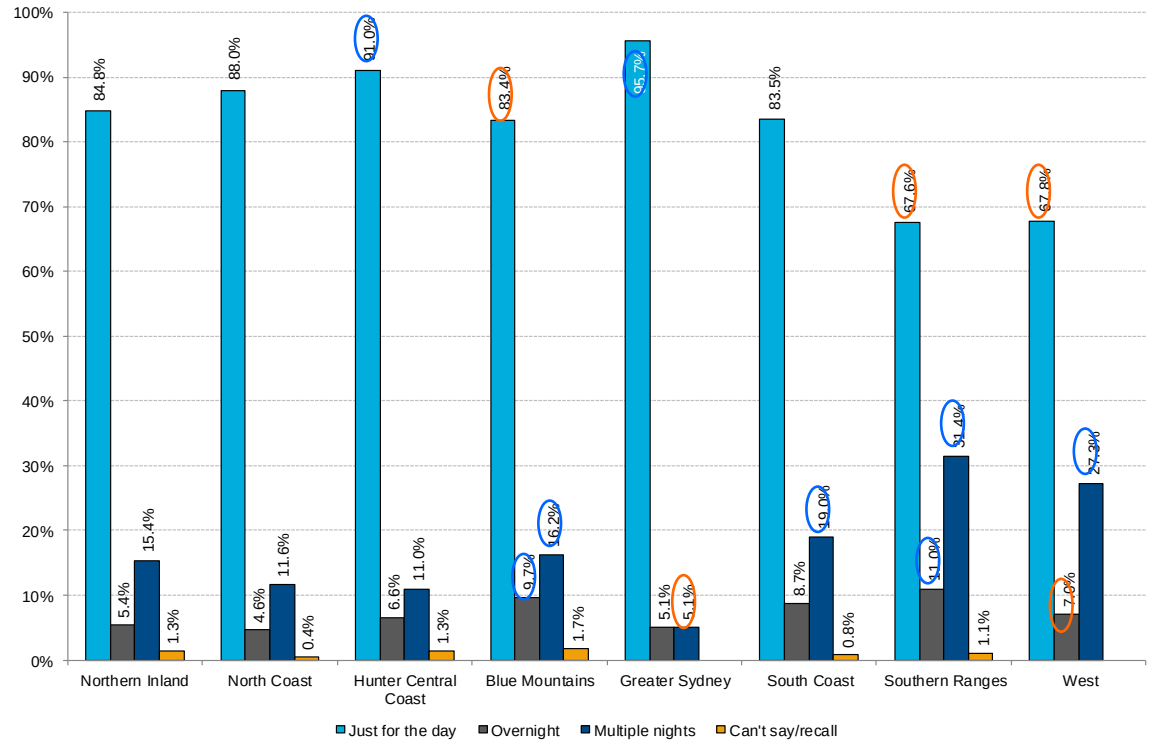


Source: NPWS Parks Visitor Surveys 2018
Base: 2018 n=1,741

Significantly lower
Significantly higher

Analysis of duration of trip by NPWS Management Branch (Chart 76) shows that the highest proportion of visits *just for the day* are to parks in the Greater Sydney Branch (95.7%) and the Hunter Central Coast Branch (91.0%). The proportion of *overnight visits* is highest in the Southern Ranges Branch (11.0%) and the Blue Mountains Branch (9.7%). *Multiple night visits* have the highest proportions in the Southern Ranges (31.4%), West (27.3%), South Coast (19.0%) and the Blue Mountains (16.2%) Branches.

Chart 52: Duration of Visit to NPWS Park by NPWS Management Branch



Source: NPWS Parks Visitor Surveys 2018
Base: 2018 n=1,741

Significantly lower than total survey area
Significantly higher than total survey area

8.5 Type of Trip to a NPWS Park

As of wave 7 in 2016 (i.e. from the travel period 23 May to 12 December) adult NPWS park visitors were asked a new question for each different NPWS park they visited in relation to their *purpose* of visit:

> *Was visiting this park part of a regular, daily, weekly or monthly routine; part of a day trip; part of an overnight visit or multi-day trip; or for some other reason?*

In 2018 the question wording was revised to take into account the sequencing impact of asking a *duration of park* visit question in advance of *a type of trip* question. Elaboration was required to ensure respondents understood that that the "type of trip" referred to their overall trip rather than their park specific trip. The new wording in 2018 was as follows:

> *Was visiting this park part of a regular, daily, weekly or monthly routine; part of a larger/bigger day trip; part of a larger/bigger overnight visit or multi-day trip; or for some other reason?*

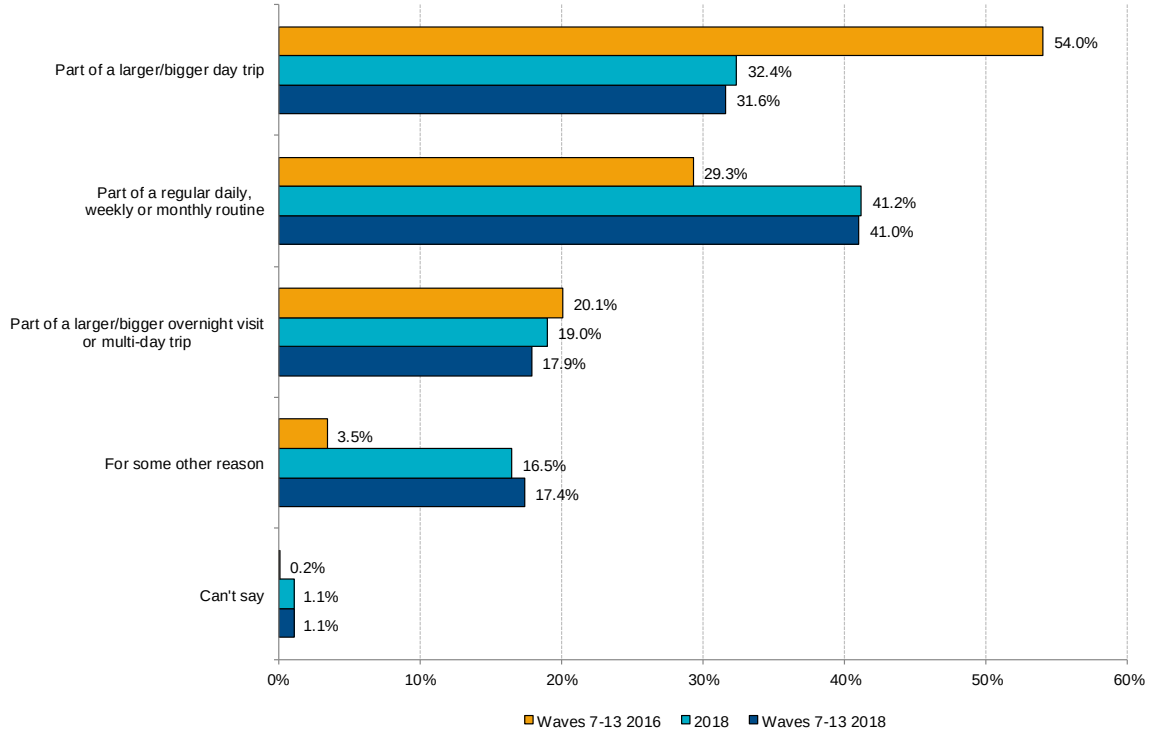
Note that whilst the question was asked as a single response question, respondents could visit more than one NPWS park in the 4 week survey period, so their type of visit could differ from park to park. Overall, the question must be regarded as a multiple response question (i.e. the sum of all responses totals over 100%).

The result of the change in wording was that response to the question varied markedly between years. For waves 7-13 of 2016 the park visit being *part of a day trip* was named by 54.0% of NPWS park visitors. However in 2018 the park visit being *part of a larger/bigger day trip* was named by

only 32.4% of park visitors. Differences were also observed for the visit being *part of a regular daily, weekly or monthly routine* (29.3% in 2016: 41.2% in 2018), but the most marked difference was the proportion of NPWS park visitors claiming that the park visit was for *some other reason*, named by 16.5% of visitors in 2018, but just 3.5% of visitors in waves 7-13 of 2016.

Consideration was given to the fact that the 2016 question was only asked in waves 7-13, which may have had a bearing on response. However, when 2018 results for waves 7-13 were analysed, results closely mirrored the overall 2018 response and did not follow the 2016 wave 7-13 pattern (Chart 77). As a consequence, it was determined that the re-wording of the question in 2018 significantly altered the manner in which the question was answered, constituting a break in the series. As a result, analysis for the remainder of this section has been confined to 2018 survey results only.

Chart 53: Type of Trip to NPWS Park



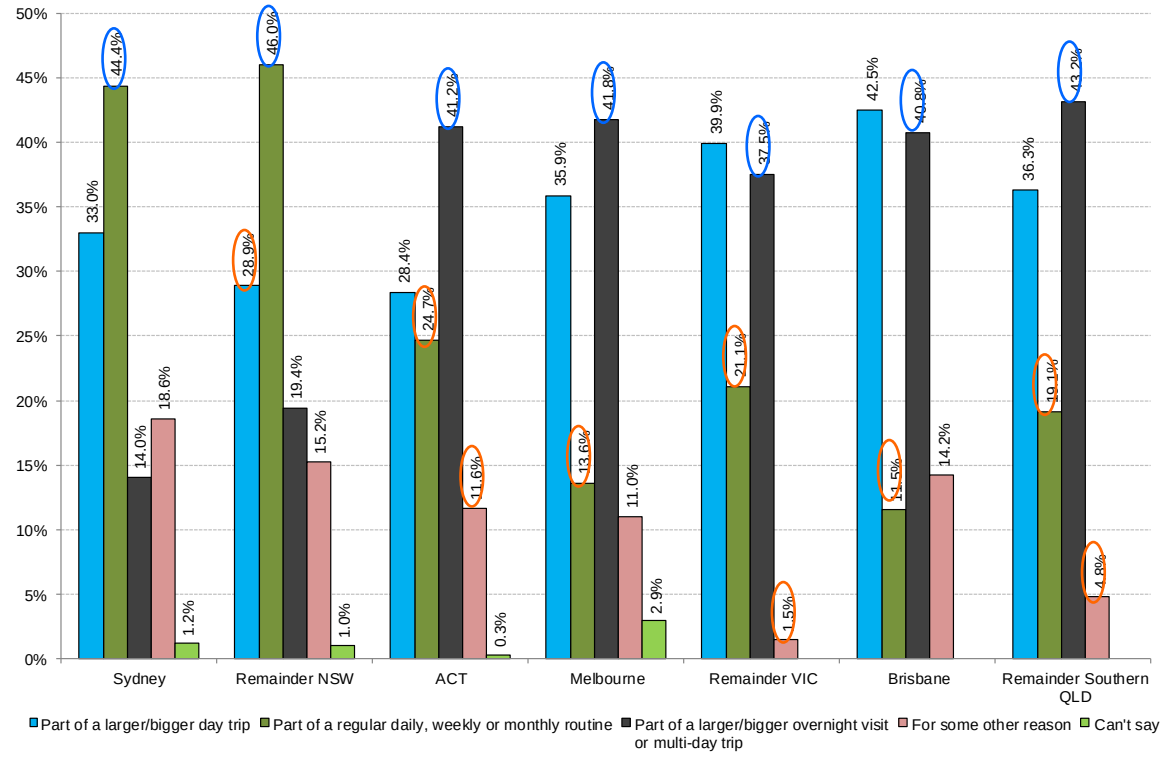
Source: NPWS Parks Visitor Surveys 2008 – 2018
Base: 2016 waves 7-13 n=849, 2018 n=2,590, waves 7-13 208 n=1,741

Chart 78 shows that one's purpose for visiting a NPWS park differs by region of origin. The vast bulk of residents from NSW tend to visit NPWS parks as *part of a regular routine* (44.4% - Sydney; 46.0% Remainder NSW), followed by being *part of a larger/bigger day trip* (33.0% - Sydney; 28.9% Remainder NSW), with relatively small proportions visiting as part of a *larger/bigger overnight visit or multi-day trip* (14.0% - Sydney; 19.4% Remainder NSW). In fact, a great proportion of Sydney residents indicated that their park visit was for *some other reason* than being part of a larger/bigger overnight or multi-day trip (18.6%).

Conversely, the vast bulk of visitors from ACT, Melbourne, remainder VIC and reminder southern QLD visited NPWS parks as part of a *larger/bigger overnight visit or multi-day trip*, obviously travelling some distance to spend time away from home (ACT – 41.2%; Melbourne – 41.8%, Remainder Victoria – 40.8%; Remainder southern QLD - 43.2%), with being part of a larger/bigger

day trip the second most nominated visit type. For Brisbane residents being part of a *larger/bigger day trip* is the main type of the visit to a NPWS park (42.5%), closely followed by part of a *larger/bigger overnight or multi-day trip* (40.8%), . This indicates that Brisbanites have some regular NPWS parks that are relatively close to them that can be visited on a day trip (which is not surprising, with parks located close to the QLD-NSW border), while other parks are accessed by spending some time away from home. The same can be assumed for those from remainder VIC, who are likely to visit parks close to the NSW-VIC border.

Chart 54: Type of Trip to NPWS Park by Region of Origin

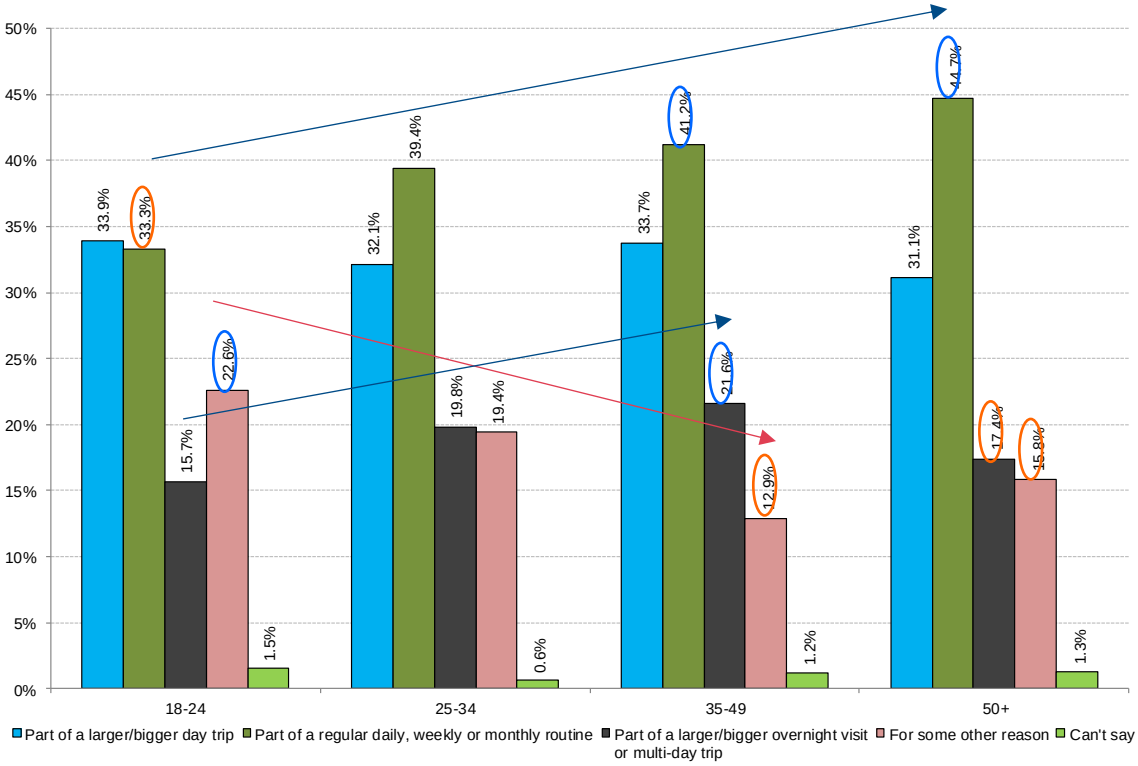


Source: NPWS Parks Visitor Surveys 2018
Base: 2018 n=1.741

Significantly higher than the 2018 total
Significantly lower than the 2018 total

No marked differences in type of visit were evident by sex of the respondent, but differences were evident by age of respondent (See Chart 79). While the proportion visiting NPWS parks as part of a *larger/bigger day trip* remain reasonably stable by age (around 33%), the proportion visiting as part of a *regular routine* increases with age (33.3% 18-24 year olds; 39.4% 25-39s; 41.2% 35-49s; and 44.7% 50 years and over). Similarly, visiting a NPWS park as part of a *larger/bigger overnight or multi-day trip* increases with aged up to the age of 49, but then declines for those aged 50 years and over (15.7% 18-24 year olds; 19.8% 25-39s; 21.6% 35-49s; and 17.4% 50 years and over). The opposing trend is evident for visits to NPWS parks for *other reasons* (22.6% 18-24 year olds; 19.4% 25-39s; 12.9% 35-49s; and 15.8% 50 years and over).

Chart 79: Type of Trip to NPWS Park by Age

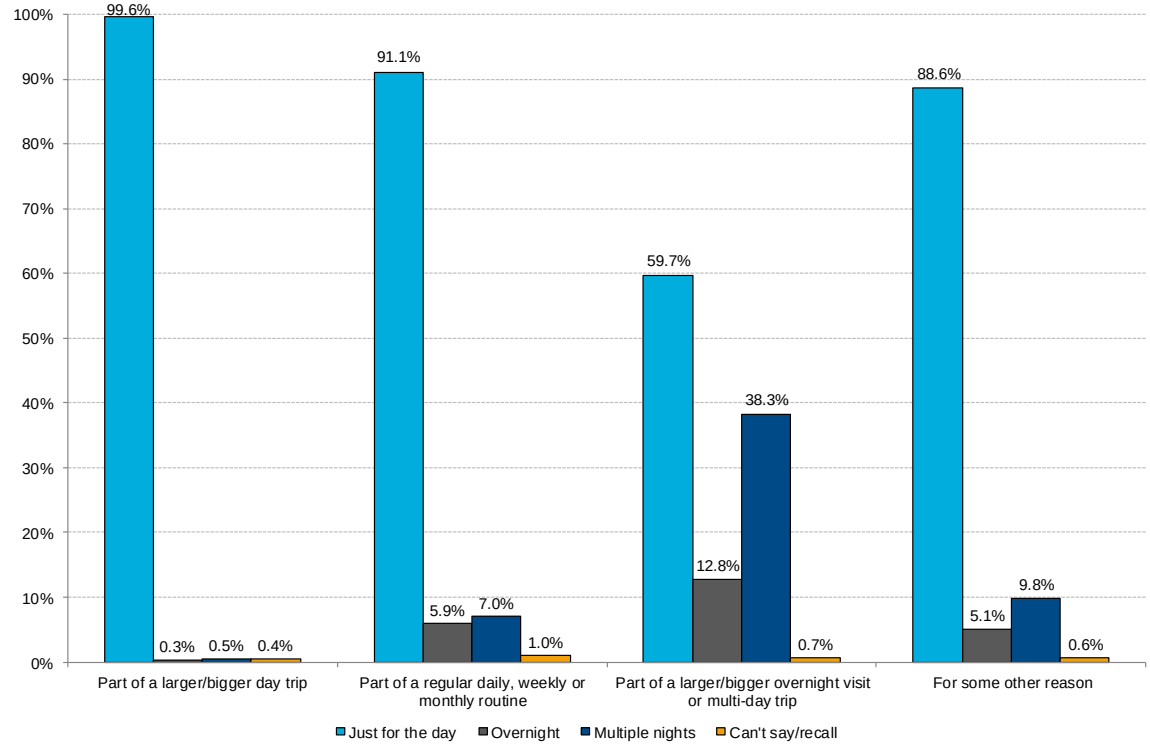


Source: NPWS Parks Visitor Surveys 2018
Base: 2018 n=1.741

Significantly higher than the 2018 total
Significantly lower than the 2018 total

When duration of NPWS park visit is analysed by type of visit taken (Chart 80) it shows that visiting the park *just for the day* is the dominant duration across all visit types. Visiting *overnight* (12.8%) or for *multiple nights* (38.3%) is far more commonly nominated when the type of trip was part of a *larger/bigger overnight visit or multi-day trip*.

Chart 80: Type of Visit to NPWS Park by Duration of NPWS Park Visit

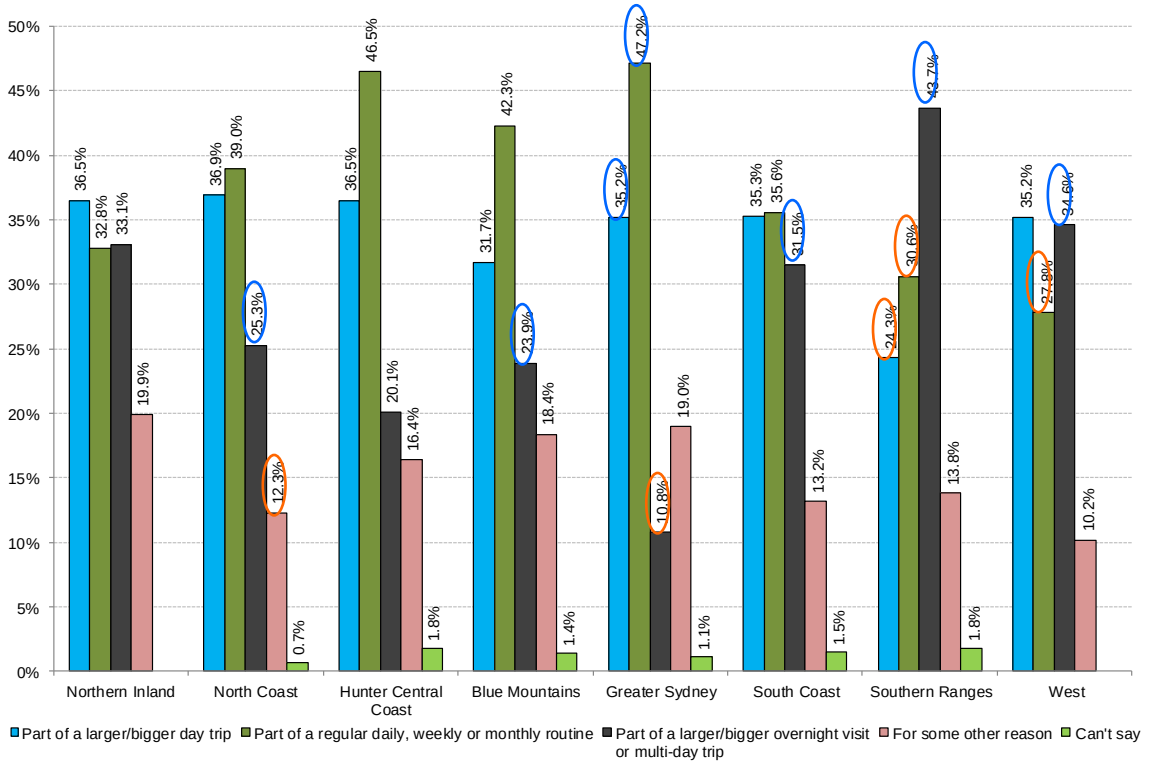


Source: NPWS Parks Visitor Surveys 2018
Base: 2018 n=1.741

Visits to NPWS parks are more likely to be as *part of a regular routine* when visiting parks in Greater Sydney (47.2%) and Hunter Central Coast (46.5%) Branches. This is because a large proportion of the urban population live in close proximity to parks in these two Branches, therefore allowing regular visitation to occur. (Chart 81).

Visits as part of a *larger/bigger overnight or multi-day trip* were more common among parks visited in the Southern Ranges (43.7%), West (34.6%), Northern Inland (33.1%) and South Coast (31.5%) Branches. Parks in these Branches are more isolated from the large urban centres of Sydney, Newcastle and Wollongong, resulting in longer trips to be taken.

Chart 81: Type of Visit to NPWS Park by NPWS Branch



Source: NPWS Parks Visitor Surveys 2018
Base: 2018 n=1.741

Significantly higher than the 2018 total
Significantly lower than the 2018 total

8.6 Role of NPWS Park Visit in Trip Decision

As of wave 7 in 2016 adult NPWS park visitors were asked a new question for each different NPWS park they visited in relation to their reason for visit:

> *Was visiting this park the only reason for your trip (100% of the trip purpose or intention); the main reason for your trip (75% of the trip purpose or intention); one of the main reasons for your trip (50% of the trip purpose or intention); a minor reason for your trip (25% of the trip purpose or intention); or not one of the reasons for your trip (0% of the trip purpose or intention)?*

This question was again asked for the 2018 survey. Note that whilst the question was asked as a single response question, respondents could visit more than one NPWS park in the 4 week survey period, so the reason for their visit to each park could differ from park to park. Overall, the question must be regarded as a multiple response question (i.e. the sum of all responses totals over 100%). In addition, the *mean reason* for one's visit could be calculated based on percentages allocated to each response option (i.e. 100% for the only reason through to 0% for not one of the reasons).

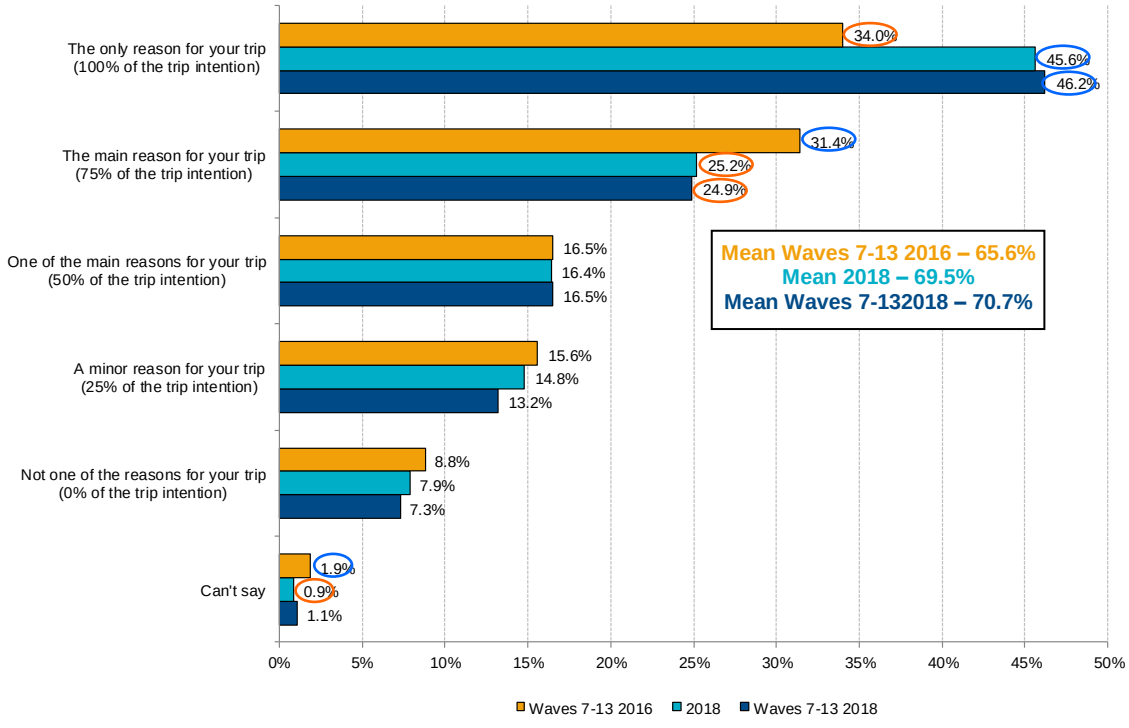
Chart 82 shows that almost half of NPWS park visitors indicated that their *only reason* for their trip was to visit the NPWS park (45.6%), significantly higher than the result obtained for waves 7-13 in 2016 (34.0%). In waves 1-7 2016 almost one third (31.4%) indicated that the NPSW visits was the *main reason* for their trip (but not the only reason), significantly higher than the 2018 proportion of 25.2%). While this disparity could lay claim to a suggestion of a break in the series between the two survey years (as observed in 'type' of visit in the preceding section), it is not founded in evidence. Firstly the question wording has not changed between the two years. Secondly the pattern of response for each year is very similar for the remaining response categories in the question (e.g.

the responses for one of the main reasons for the trip were almost identical between years – 16.5% in 2016 and 16.4% in 2018). Finally, even though pattern of response differs across years for the top two response categories, when these two categories are combined the proportions for each year are similar (65.4% for 2016 and 70.8% for 2018 as a whole).

It would appear that the only difference between responses in each survey year is that in 2018 greater proportions named their NPWS park visit as their *only reason* for their trip, while in 2016 greater proportions named their visit as their *main reason* for their trip. This is corroborated by comparing wave 7-13 2016 results with wave 7-13 2018 results, were the same overall trend emerges. Therefore it can be concluded that comparison of survey results by year can be conducted (and form the basis for the remainder of this section's analysis).

Because of the higher proportion nominating their NPWS park visit as their *only reason* for their trip in 2018 than in 2016, the mean score derived in 2018 is significantly higher than the 2016 mean (69.5% c.f. 65.6%).

Chart 82: Role of NPWS Park Visit in Trip Decision



Source: NPWS Parks Visitor Surveys 2016 – 2018
Base: Wave 7-13 2016 n=849, 2018 n=1,741; waves 7-13 2018 n=869

Significantly higher
Significantly lower

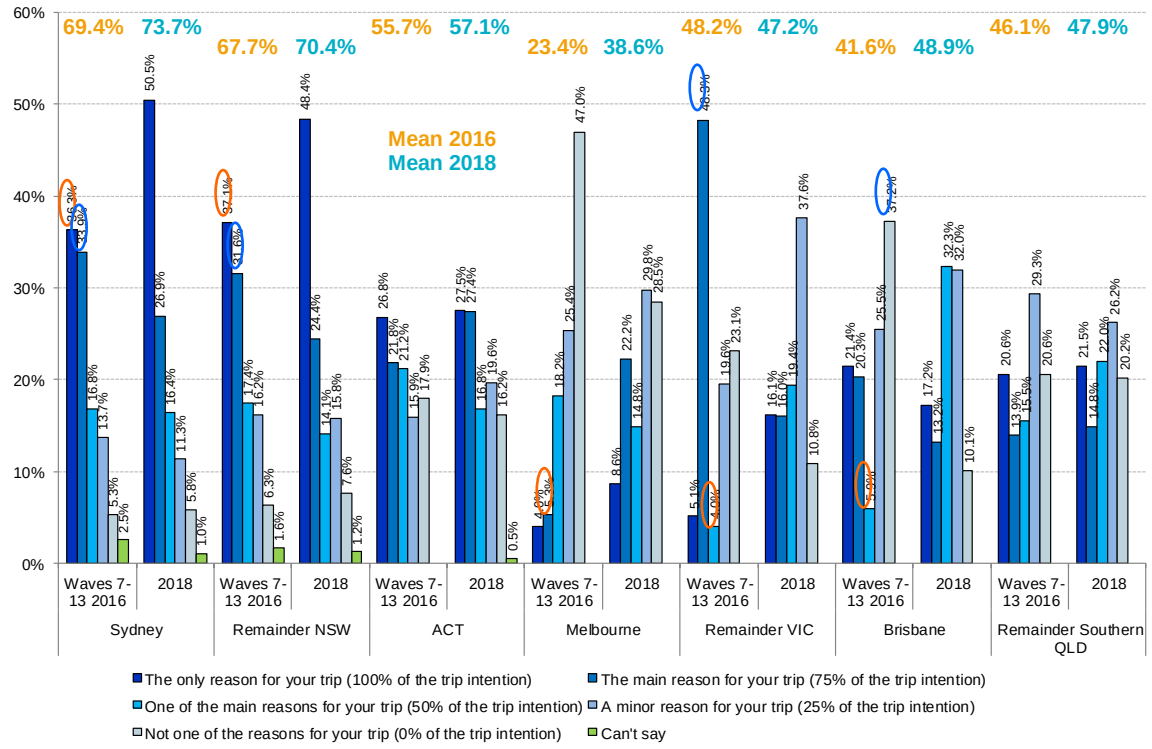
When analysed by region of origin (Chart 83) around seven in ten people from NSW in both 2016 and 2018 claim that their visit to the NPWS park was their *only reason* or their *main reason* for their trip (Sydney 2016 - 70.2%; Sydney 2018 – 77.4%; remainder NSW 2016 – 68.7%; remainder NSW 2018 – 72.8%). This is reflected in mean scores in NSW in both years being around 70 (Sydney 2016 mean - 69.4%; Sydney 2018 mean – 73.7%%; remainder NSW 2016 mean – 67.7%; remainder NSW 2018 mean – 70.4%).

Proportions of reasons for visit were reasonably evenly spread for people living in the ACT in both 2016 and 2018, with around half claiming that their visit to the NPWS park was their *only reason* or

their *main reason* for their trip (2016 - 48.6%; 2018 – 54.9%), attaining a mean score of 55.7% in 2016 and 57.1% in 2018. A similarly even spread was evident for people living in Remainder Southern Queensland, but with the highest proportions (29.3% in 2016 and 26.2% in 2018) indicating that the visit was a *minor reason* for the trip, resulting in the mean score being lower at 46.1% in 2016 and 47.9% in 2018.

Role of a NPWS park visit in one's trip decision varied between years for people visiting from Melbourne, remainder VIC and Brisbane. For 2018, greater proportions of Melburnians indicated that their NPWS visit was the *only reason* or the *main reason* for their trip (30.8%) compared with 2016 (9.3%), coupled with a lower proportion indicating it was *not a reason for the trip* (28.5% c.f. 47.0%). As a consequence, the mean score was higher in 2018 (38.6 c.f. 23.4% in 2016).

Chart 83: Role of NPWS Park Visit in Trip Decision by Region of Origin



Source: NPWS Parks Visitor Surveys 2016 – 2018
Base: Wave 7-13 2016 n=849, 2018 n=1,741; waves 7-13 2018 n=869

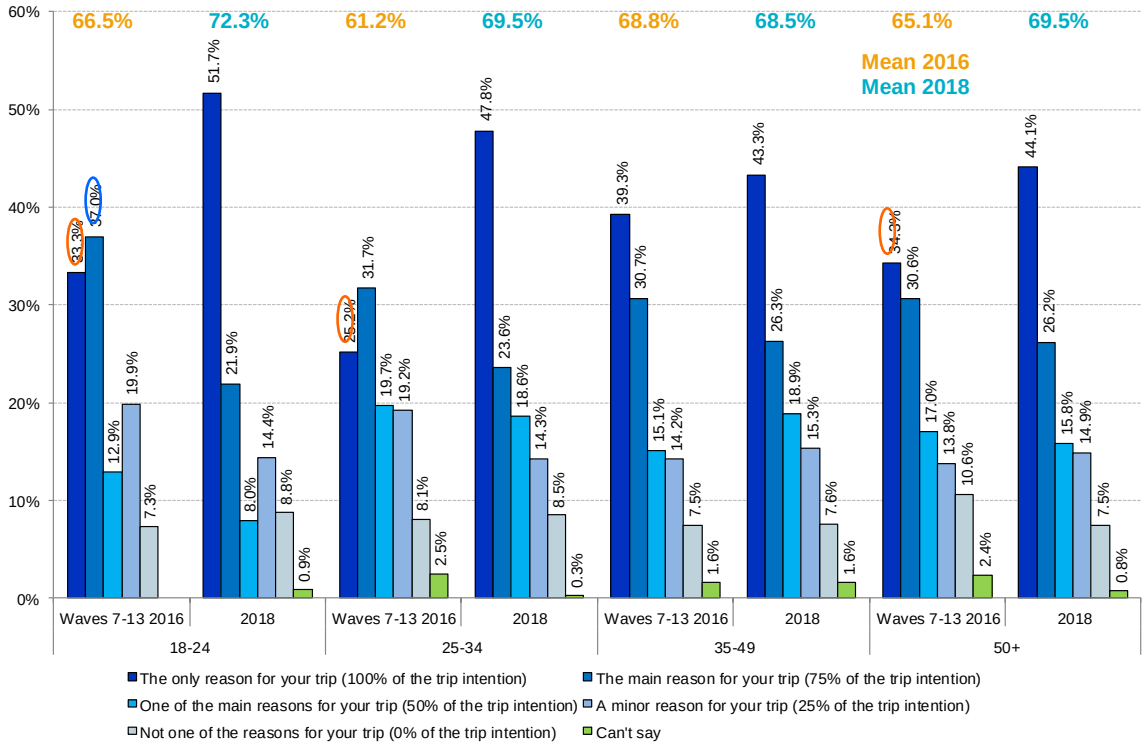
Significantly higher than 2018
Significantly lower than 2018

For those living in remainder VIC, means scores remained similar (48.2% - 2016; 47.2% 2016), but the spread of roles of the NPWS visit in trip decision was much more evenly distributed in 2018, whereas in 2016 the NPWS visit was *not a reason for the trip* for almost half (47.0%). For those living in Brisbane the mean score increased from 41.6% in 2016 to 48.9% in 2018, mainly because of the increase in proportions claiming that the NPWS park visit was one of the main reasons for their visit (5.9% 2016; 32.3% 2018).

When comparing 2016 and 2018 survey results by sex, there is an increase in the proportion of both males and females claiming that their NPWS visit was the *only reason* for their trip (males 2016 – 32.4%; males 2018 – 46.6%; females 2016 - 35.9%; females 2018 – 44.4%). However, when analysed by age, the lift in proportion claiming their park visit was the *only reason* for their trip was only marked amongst 18-24 year olds, 25-34 year olds and those aged 50 years and over.

There was no significant lift in proportion for 35-49 year olds (See Chart 84). This lack of lift in 35-49 year olds was consistent across both male and female 35-49 year olds (not shown on Chart).

Chart 55: Role of NPWS Park Visit in Trip Decision by Age

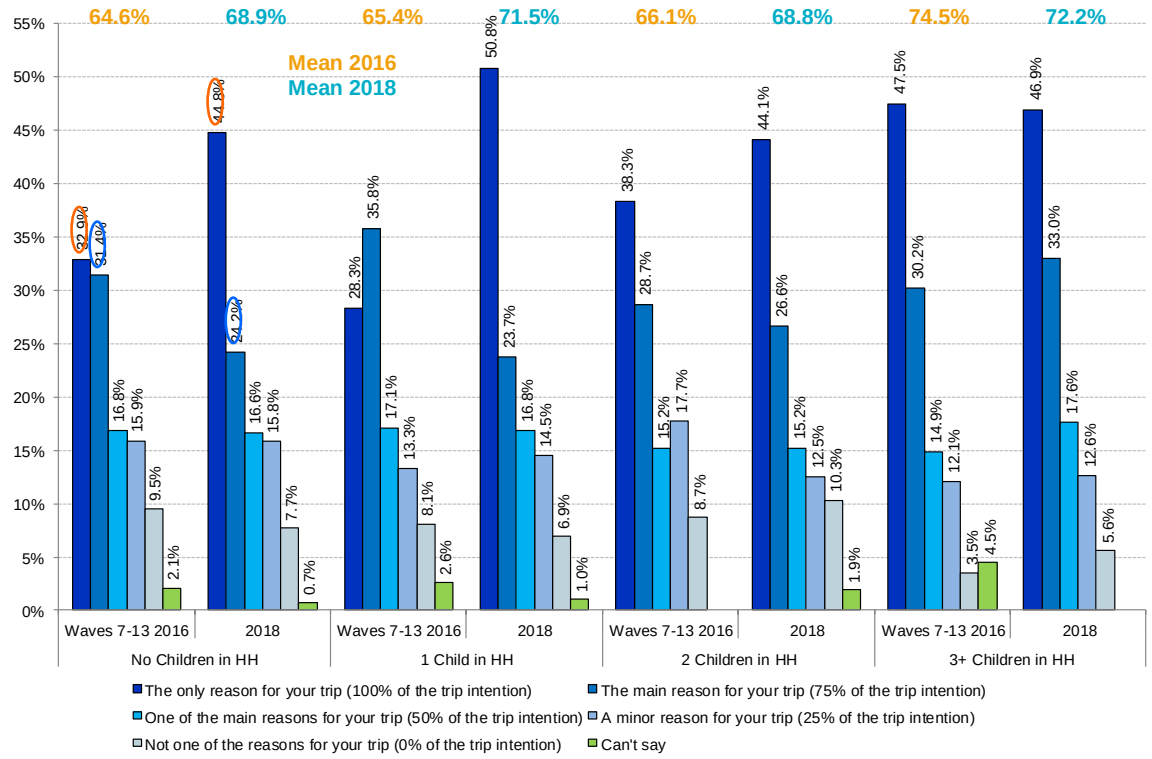


Source: NPWS Parks Visitor Surveys 2016 – 2018
Base: Wave 7-13 2016 n=849, 2018 n=1,741; waves 7-13 2018 n=869

Significantly higher than 2018
Significantly lower than 2018

Similarly, when analysed by number of children in the household, the lift in proportion claiming their park visit was the *only reason* for their trip was only marked amongst those with no children in the household and those with one child in the household. The lift was not significant for NPWS park visitors with 2 or more children in the household (Chart 85).

Chart 56: Role of NPWS Park Visit in Trip Decision by Children in Household



Source: NPWS Parks Visitor Surveys 2016 – 2018
Base: Wave 7-13 2016 n=849, 2018 n=1,741; waves 7-13 2018 n=869

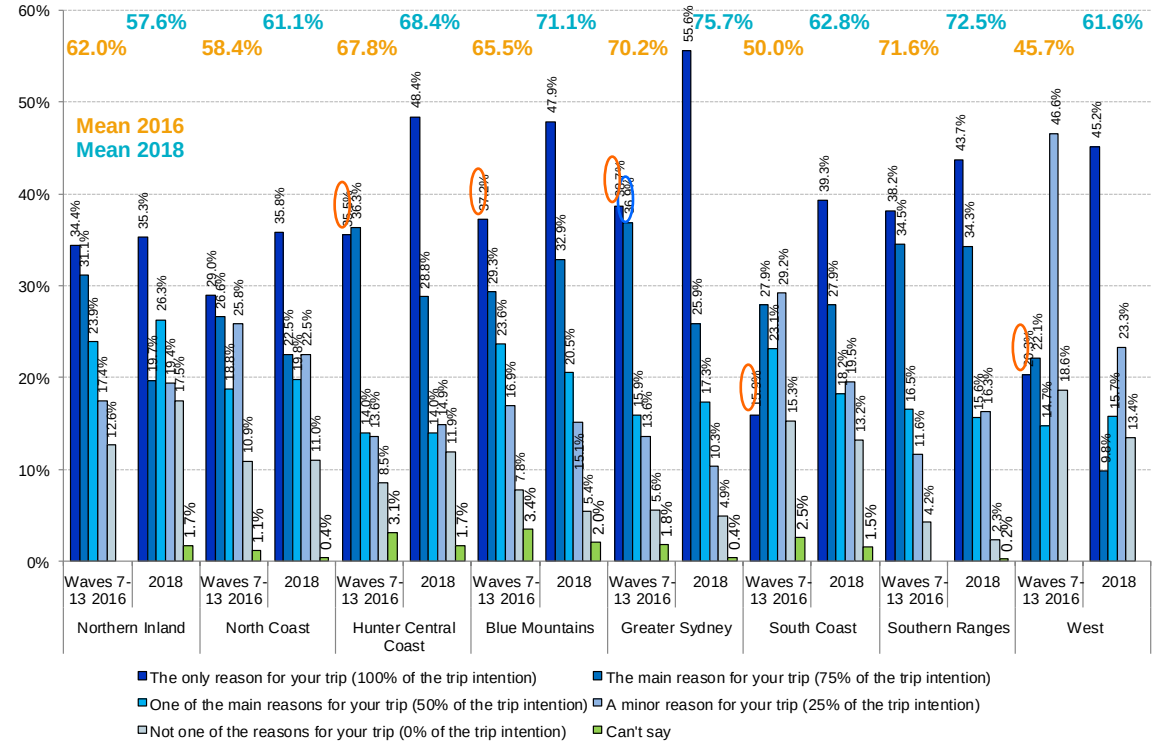
Significantly higher than 2018
Significantly lower than 2018

The increase in the proportion of NPWS park visitors claiming that their visit from 2016 to 2018 was the *only reason* for their trip was not evident across all NPWS Management Branches. The lift was only marked for visitors to parks in the Hunter Central Coast, Blue Mountains, Greater Sydney, South Coast and West Branches (Chart 86).

The lowest mean score attained in 2016 was for West Branch scoring 45.7%. However in 2018 the increased to 61.6% due to the significantly higher proportion claiming that their visits was the *only reason* for their trip. Northern Inland Branch attained the lowest mean score in 2018 (57.6%) and was the only Branch to decrease in mean score from 2016 (62.0%).

The highest mean score in 2016 came from Southern Ranges Branch (71.6%) and while the Branch's mean score increased for 2018 (72.5%), the highest mean score attained in 2018 came from Greater Sydney Branch (75.7%).

Chart 86: Role of NPWS Park Visit in Trip Decision by NPWS Branch



Source: NPWS Parks Visitor Surveys 2016 – 2018
Base: Wave 7-13 2016 n=849, 2018 n=1,741; waves 7-13 2018 n=869

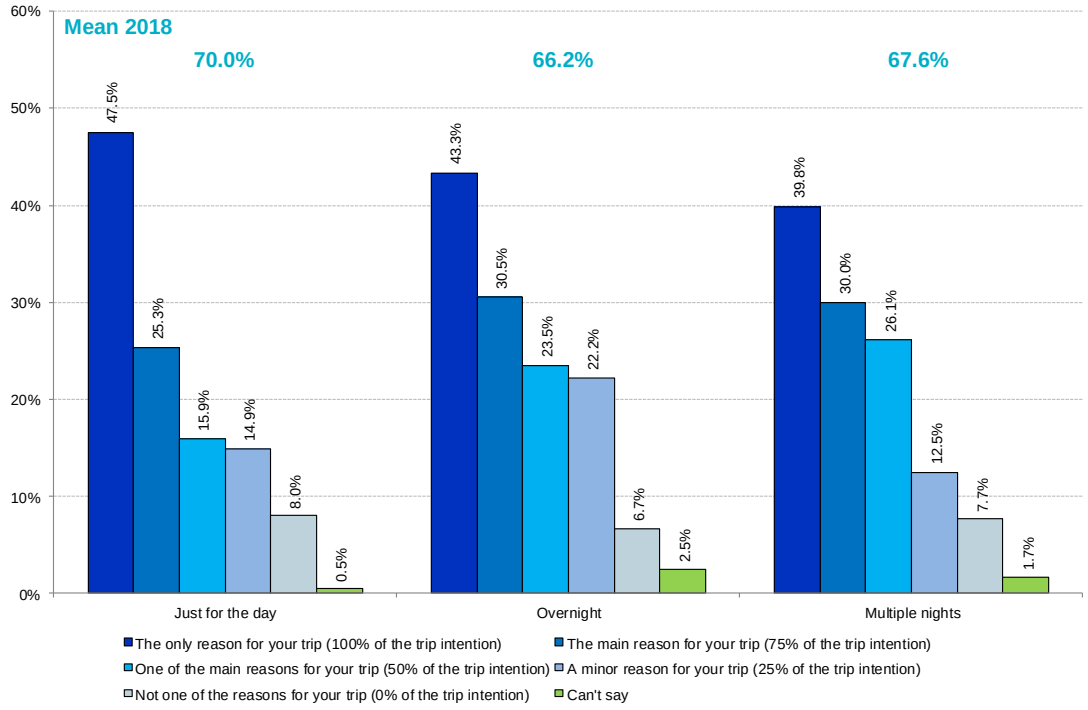
Significantly higher than 2018
Significantly lower than 2018

When role of NPWS visit is analysed by *duration* of NPWS for 2018 data visit the pattern of response is very similar, not matter how long the length of the trip to the park was (See Chart 87).

However, when analysed by *type* of visit in 2018, whilst the patterns were similar for those who visited the park as *part of a larger/bigger day trip*, as *part of a regular routine* and for *some other reason*, the NPWS visit being part of a *larger/bigger overnight or multi-day trip* varied markedly (Chart 88). Similar proportions named that the visit to the NPWS park was the *only reason* for the visit (27.3%), the *main reason* for the visit (22.4%), *one of the main reasons* for the visit (28.7%) and *a minor reason* for the visit (25.2%), which resulted in a far lower mean score being achieved (55.3%).

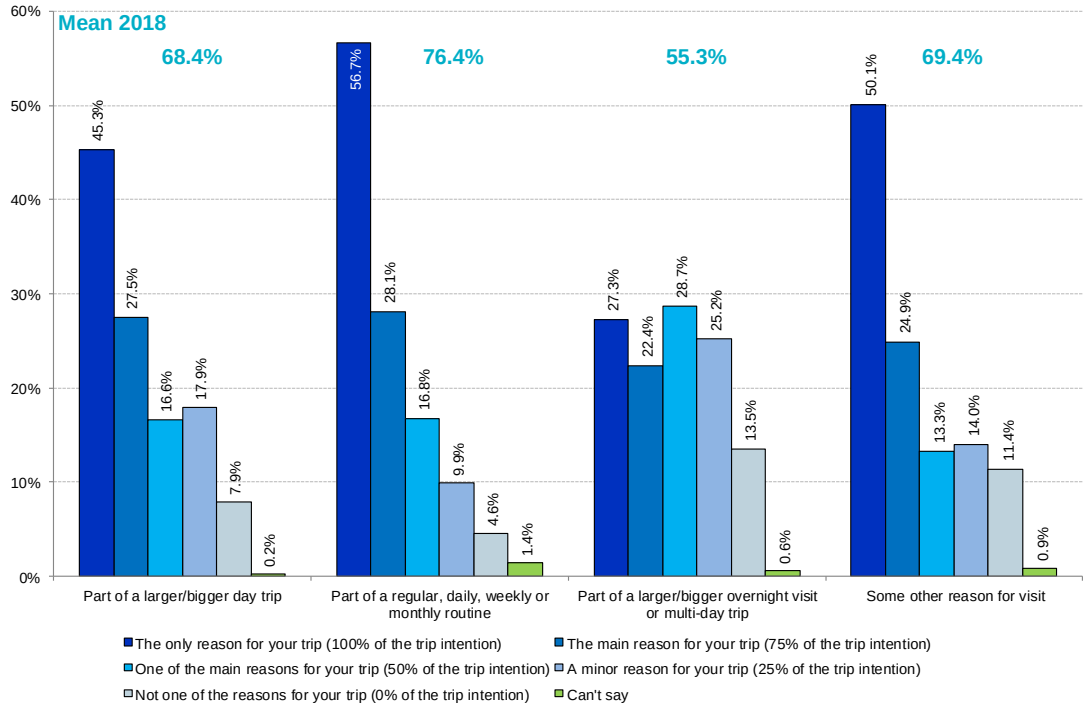
Also not surprising was that those that visit an NPWS park due to a *regular routine* have the highest proportion claiming that their visit was the *only reason* for their visit (56.7%), resulting in a mean score of 76.4%.

Chart 57: Role of NPWS Park Visit in Trip Decision by Duration of Visit



Source: NPWS Parks Visitor Surveys 2018
Base: n=1,741

Chart 58: Role of NPWS Park Visit in Trip Decision by Type of Visit



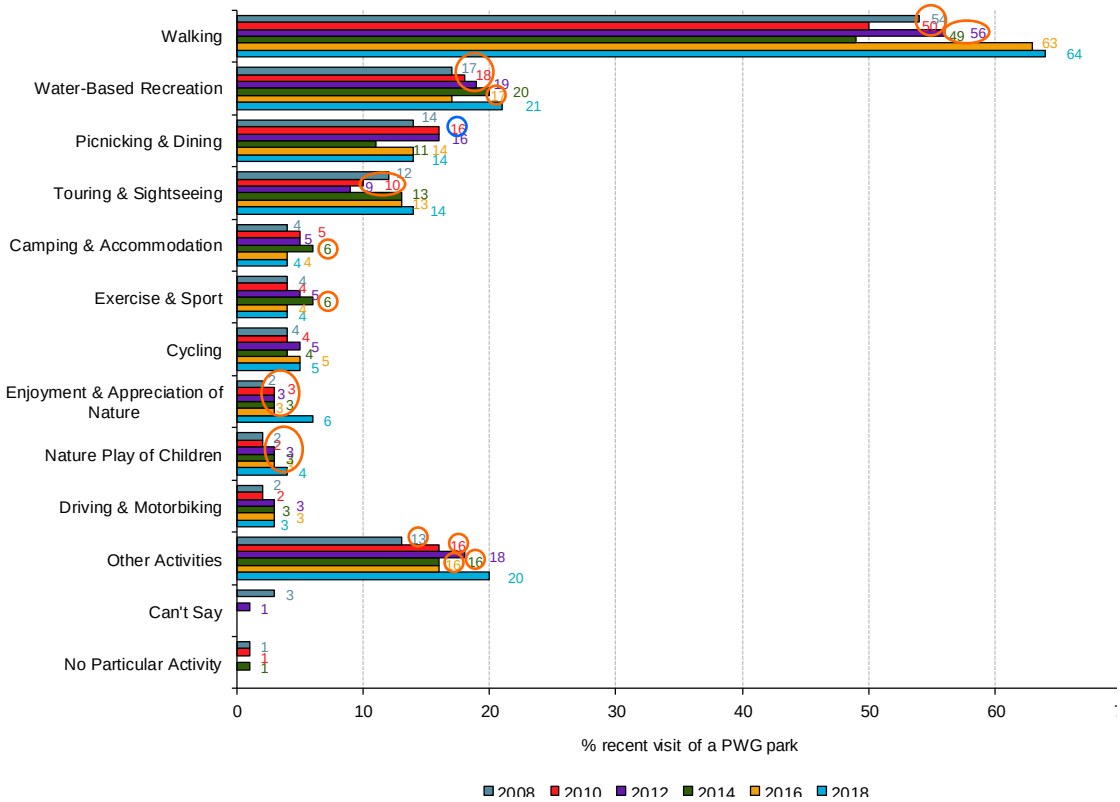
Source: NPWS Parks Visitor Surveys 2018
Base: n=1,741

8.7 Activities Undertaken at Most Recently Visited Park

Respondents who had visited a NPWS park were asked what activities they undertook on their *most recent* visit. Almost all of those who visited a NPWS park did some sort of 'activity', with 99% nominating a specific activity in each of the years from 2008 to 2018.

The detailed list of activities was grouped into broader categories for analysis (see Chart 89). The most commonly named activity group undertaken at NPWS parks was *walking*, undertaken by a significantly high 64% of people in 2018. 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), declining to 2008 levels in 2016 (17%), but rising to its highest level in 2018 (21%). *Picnicking and dining*, which fell to its lowest recorded level of 11% in 2014, rebounded to 14% in 2016 and 2018. *Touring and sightseeing* rebounded from its decline in 2010 and 2012 to 13% in each of 2014 and 2016 and increase to 14% in 2018. *Enjoyment and appreciation of nature* (6%) and *nature play of children* (4%) attained their highest levels recorded in 2018. All other activities included in the questionnaire were nominated by small proportions of respondents, with significance testing provided to highlight any changes over time.

Chart 59: Activities Undertaken on Most Recent Visit to a NSW Park



Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

Table 26 lists the four most commonly nominated activities undertaken by visitors on their most recent visit to a NPWS park. 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 survey years.

Incidence of *walking* decreased significantly in 2014 to its lowest level recorded (49%), but rebounded to its highest level recorded in 2016 (63%) and then increased again to 64% in 2018. The increase is primarily due to the increase in the proportion *walking/bushwalking* (52% - 2008; 49% - 2010; 55% - 2012; 48% - 2014; 63% - 2016; 62% - 2018).

Incidence of undertaking *water-based recreation* increased to its highest level in 2018 (21%), due to the significant increase in the proportion of visitors swimming (13%), *fishing* (5%) and *rowing, rafting, canoeing and kayaking* (3%).

The increase in the proportion of visitors *picnicking and dining* in 2016 and 2018 from the low in 2014 is directly related to the significant increase in visitors having *picnics and barbecues*. The proportion *touring and sightseeing* increased in 2018 due to significant increases in proportions undertaking *lookouts and scenery* (3%).

Table 26: Most Commonly Activity Undertaken at Most Recently Visited NPWS Park in Last 4 Weeks

Activities undertaken on one's most recent visit to a PWG park		Most recent visit to a PWG park in the last 4 weeks					
		2008	2010	2012	2014	2016	2018
ACTIVITY - SUMMARY		n=1,487	n=1,341	n=1,341	n=1,555	n=1,582	n=1,614
Walking	Orienteering And Rogaining	*	*	*	*	*	8
	Walking The Dog	2%	1%	1%	1%	1%	2%
	Walking/ Bushw alking	52%	49%	55%	48%	63%	62%
Walking Total		54%	50%	56%	49%	63%	64%
Water-Based Recreation	Fishing	4%	6%	6%	5%	4%	5%
	Motor Boating/ Parasailing	1%	1%	1%	1%	1%	*
	Row ing/ Rafting/ Canoeing/ Kayaking	1%	1%	1%	3%	1%	3%
	Sailing/ Kite Surfing/ Sail Boarding	1%	*	1%	*	1%	1%
	Scuba Diving/ Snorkelling	*	1%	*	1	*	*
	Surfing	2%	2%	2%	2%	2%	2%
	Sw imming	8%	9%	10%	10%	11%	13%
	Waterskiing	*	*	*	*	1%	*
Water-Based Recreation Total		17%	18%	19%	20%	17%	21%
Picnicking And Dining	Dining/ Eating At Food Outlets	2%	2%	3%	3%	2%	2%
	Picnicking And Barbecues	11%	15%	13%	8%	12%	11%
Picnicking And Dining Total		14%	16%	16%	11%	14%	14%
Touring And Sightseeing	Holiday/ Break Aw ay/ Weekend Trip	*	1%	*	1%	*	*
	Lookouts And Scenery	2%	2%	1%	3%	1%	3%
	Scenic Driving	3%	2%	1%	3%	1%	2%
	Sightseeing	7%	6%	7%	9%	11%	10%
Touring And Sightseeing Total		12%	10%	9%	13%	13%	14%

* Less than 0.5% response
Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

Significantly lower
Significantly higher

Table 24 shows that the proportion of park visitors undertaking *walking* activities in 2018 increased significantly across all states of origin, with the exception of southern and southeast QLD, where it declined from the 2016 high of 70% to 58%. The proportions undertaking *water-based recreation* increased significantly for NSW and ACT residents. Proportions undertaking *picnicking and dining* activities increased significantly for those visitors living in the ACT, but declined significantly for those living in Victoria. *Touring and sightseeing* activities in 2018 increased across all regions except southern and southeast QLD and increased significantly in the ACT.

Table 24: Main Activities Undertaken at Most Recently Visited NPWS Park by State of Origin

	NSW						VIC					
	2008	2010	2012	2014	2016	2018	2008	2010	2012	2014	2016	2018
Main Activities	n= 1,113	n= 1,019	n= 1,023	n= 1,211	n= 1,212	n= 1,237	n= 49	n= 36	n= 49	n= 47	n= 61	n= 64
Walking	53%	50%	55%	49%	64%	64%	54%	45%	63%	45%	48%	72%
Water-Based Recreation	18%	18%	19%	20%	17%	21%	14%	19%	22%	12%	25%	22%
Picnicking And Dining	14%	18%	16%	11%	14%	14%	5%	6%	8%	8%	16%	7%
Touring And Sightseeing	12%	10%	8%	13%	12%	14%	20%	11%	19%	26%	22%	23%
	ACT						SE QLD					
	2008	2010	2012	2014	2016	2018	2008	2010	2012	2014	2016	2018
Main Activities	n= 208	n= 189	n= 202	n= 212	n= 199	n= 208	n= 117	n= 97	n= 83	n= 85	n= 85	n= 105
Walking	52%	60%	52%	50%	67%	58%	59%	52%	54%	49%	70%	58%
Water-Based Recreation	12%	21%	17%	18%	26%	23%	14%	25%	23%	23%	13%	18%
Picnicking And Dining	7%	11%	6%	8%	6%	13%	14%	7%	13%	14%	9%	12%
Touring And Sightseeing	13%	12%	9%	12%	12%	17%	13%	14%	12%	9%	16%	12%

Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

Significantly lower
Significantly higher

As can be seen in Table 27, people of all ages (except males aged 50 years and over) were significantly more likely to undertake *walking* activities than in previous years.

The increase in the proportion of NPWS park visitors undertaking *water-based recreation* activities in 2018 can be primarily attributed to significant increases in males aged 18-24 years and 50 years and over and females aged 25-34 years and 50 years and over.

While significant increases in the proportions of males and females aged 50 years and over were observed for *picnicking and dining* activities in 2018, a significant decline was observed for females aged 25-34 years.

The increase in the proportion *touring and sightseeing* in 2018 can be attributed to significant increases in both males and females aged 25-39 years undertaking these activities. However, a significant decline was also observed for males aged 18-24 years in 2018.

Table 27: Main Activities Undertaken at Most Recently Visited NPWS Park by Age by Sex

Activity	Sex by Age	2008	2010	2012	2014	2016	2018
Walking	Male 18-24 yrs	33%	32%	49%	32%	54%	56%
	Male 25-34 yrs	42%	39%	40%	38%	54%	66%
	Male 35-49 yrs	57%	47%	49%	38%	56%	56%
	Male 50+ yrs	53%	47%	61%	48%	59%	57%
	Female 18-24 yrs	52%	47%	64%	51%	76%	67%
	Female 25-34 yrs	48%	64%	49%	58%	68%	76%
	Female 35-49 yrs	56%	57%	63%	57%	70%	65%
	Female 50+ yrs	68%	59%	63%	59%	75%	68%
Water-Based Recreation	Male 18-24 yrs	29%	28%	19%	26%	12%	33%
	Male 25-34 yrs	19%	27%	16%	29%	19%	24%
	Male 35-49 yrs	22%	22%	24%	23%	23%	25%
	Male 50+ yrs	12%	14%	18%	18%	15%	18%
	Female 18-24 yrs	15%	18%	25%	19%	27%	21%
	Female 25-34 yrs	15%	13%	17%	22%	11%	19%
	Female 35-49 yrs	21%	20%	23%	17%	18%	20%
	Female 50+ yrs	11%	11%	14%	13%	14%	18%
Picnicking And Dining	Male 18-24 yrs	12%	21%	12%	18%	14%	11%
	Male 25-34 yrs	14%	15%	10%	10%	14%	9%
	Male 35-49 yrs	10%	14%	17%	9%	13%	11%
	Male 50+ yrs	12%	15%	12%	8%	12%	13%
	Female 18-24 yrs	20%	21%	14%	15%	13%	15%
	Female 25-34 yrs	18%	17%	29%	10%	20%	16%
	Female 35-49 yrs	16%	19%	13%	10%	15%	13%
	Female 50+ yrs	13%	16%	18%	14%	13%	18%
Touring And Sight-seeing	Male 18-24 yrs	10%	5%	6%	8%	18%	9%
	Male 25-34 yrs	9%	12%	9%	11%	12%	11%
	Male 35-49 yrs	8%	7%	8%	11%	13%	19%
	Male 50+ yrs	21%	16%	9%	16%	15%	19%
	Female 18-24 yrs	18%	17%	*	14%	7%	13%
	Female 25-34 yrs	10%	5%	6%	8%	10%	8%
	Female 35-49 yrs	8%	6%	6%	14%	10%	13%
	Female 50+ yrs	12%	11%	16%	17%	15%	14%

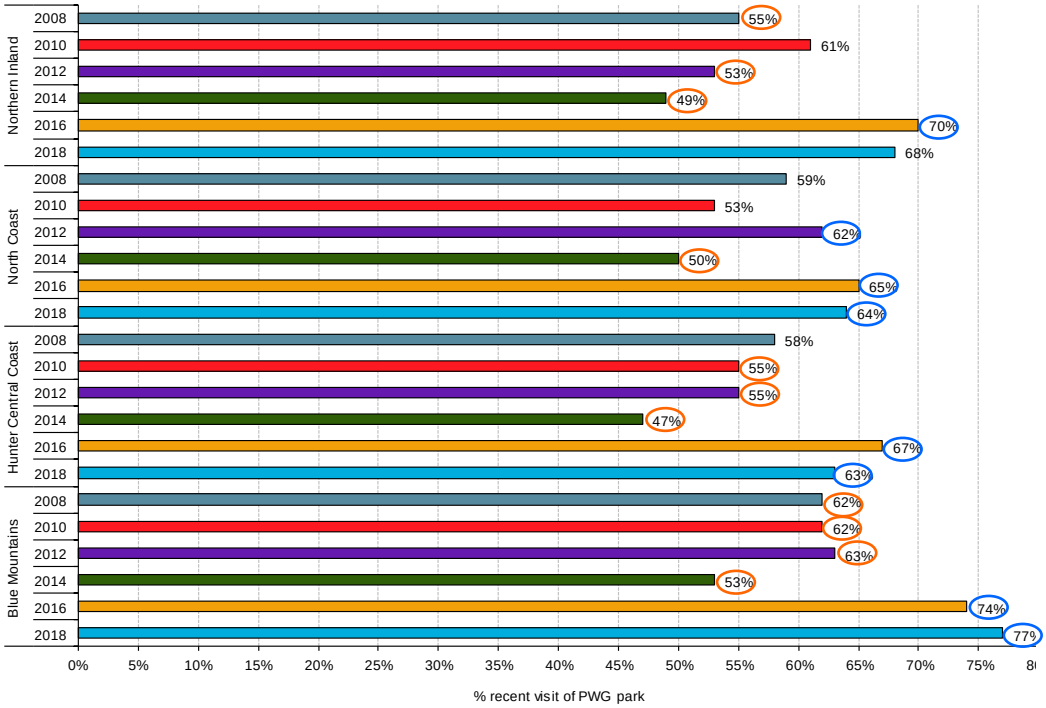
Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

Significantly lower
Significantly higher

Analysis of *walking* activities undertaken at one's most recently visited NPWS Park by Branch (Charts 90 and 91) shows that significantly high incidences of walking were recorded in 2016 and 2018 for five of the eight Branches (North Coast, Hunter Central Coast, Blue Mountains, Greater Sydney and South Coast). *Walking* was significantly high for the Northern Inland Branch in 2016, but not so in 2018 (though the proportion was still high). A cyclical pattern emerges for *walking* in parks in the North Coast, Hunter Central Coast and South Coast Branches, with relative highs in 2008, 2012 and 2016 and relative lows in 2010, 2014 and 2016.

Chart 92 and Chart 93 show that incidence of *water-based recreation* activities are generally higher in the Hunter Central Coast, North Coast, South Coast and Greater Sydney Branches (although the West Branch has been high since 2014). Water-based activities tend to exhibit a cyclical trend in the Hunter Central Coast Branch, low in 2008, 2012 and 2016 and high in 2010, 2018 and 2014.

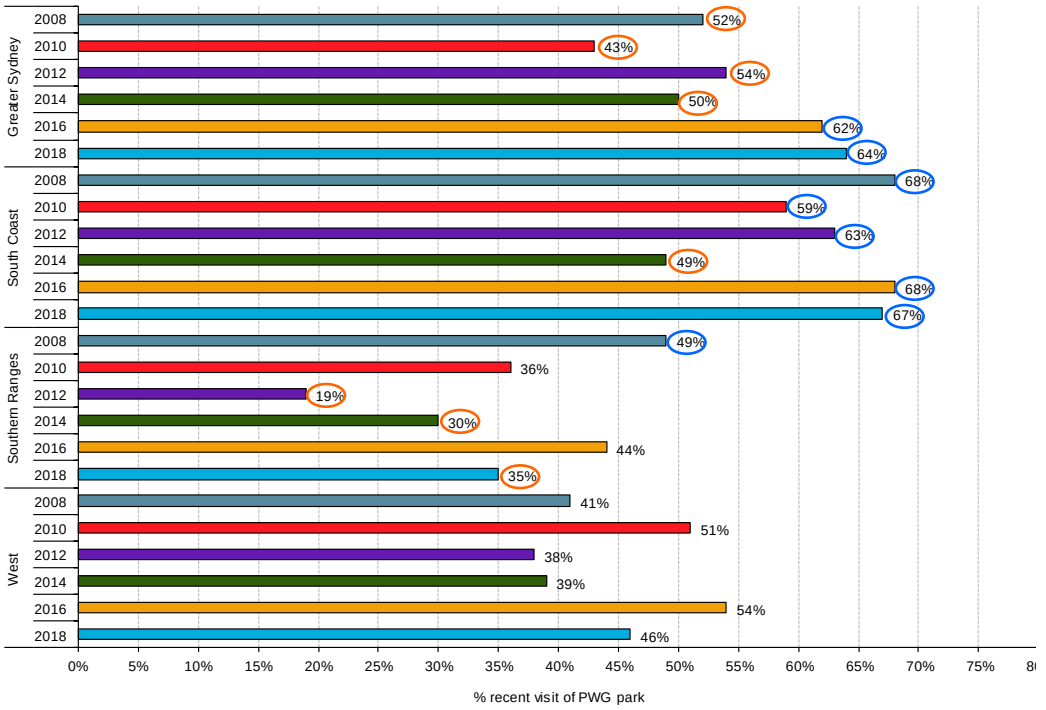
Chart 90: Walking Activities at Most Recently Visited NPWS Park by NPWS Branch (Pt 1)



Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park undertaking walking activities 2008 – 2018
Base: 2008 n=804; 2010 n=695; 2012 n=765; 2014 n=802; 2016 n=1,001 2018 n=1,016

Significantly lower
Significantly higher

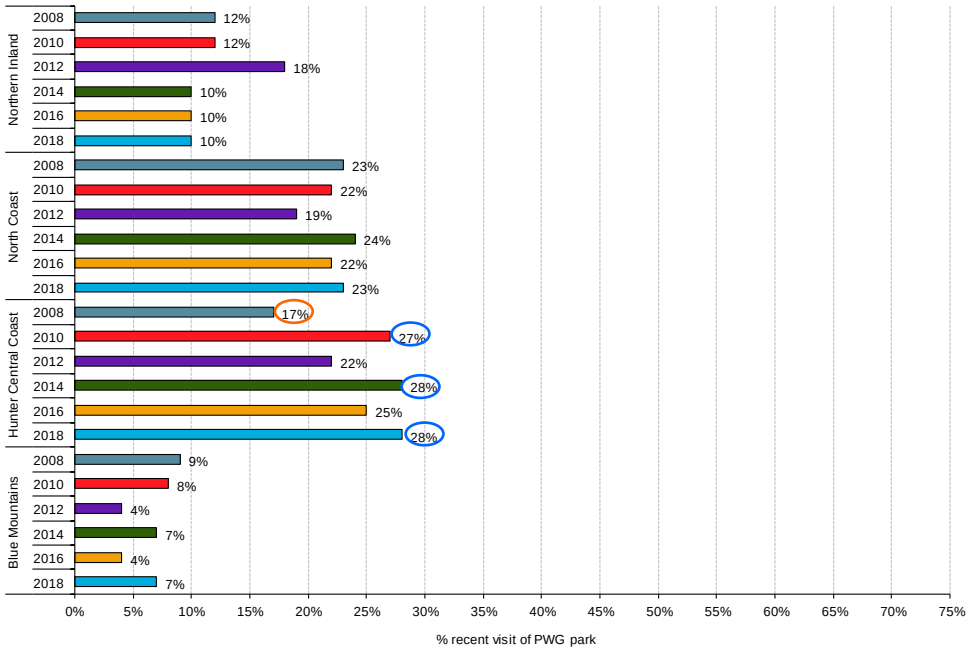
Chart 91: Walking Activities at Most Recently Visited NPWS Park by NPWS Branch (Pt 2)



Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park undertaking walking activities 2008 – 2018
Base: 2008 n=804; 2010 n=695; 2012 n=765; 2014 n=802; 2016 n=1,001 2018 n=1,016

Significantly lower
Significantly higher

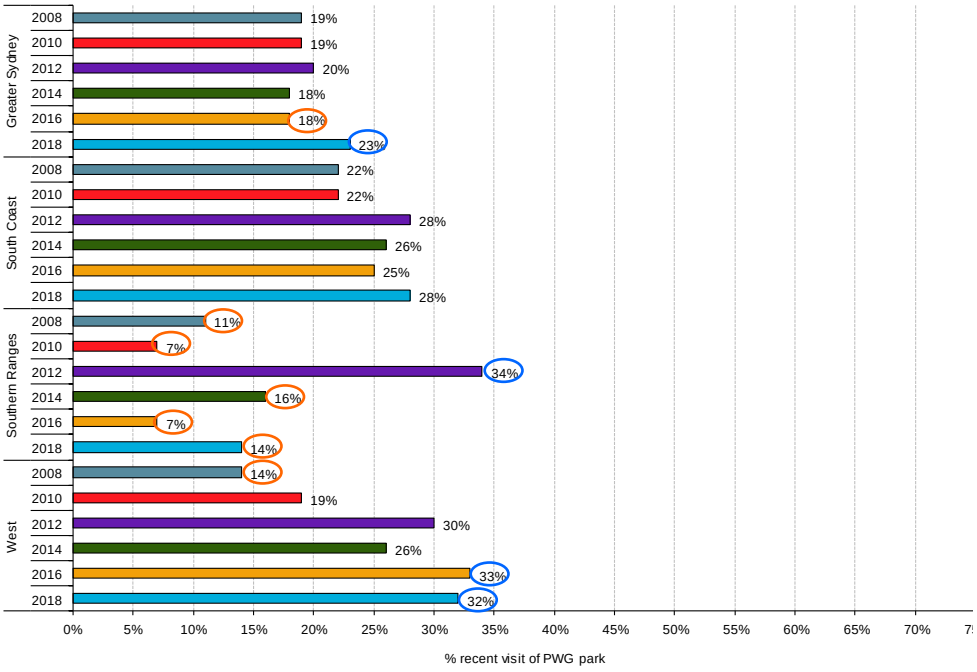
Chart 92: Water-Based Recreation Activities at Most Recently Visited NPWS Park by NPWS Branch (Pt 1)



Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park undertaking water-based activities 2008 – 2018
Base: 2008 n=249; 2010 n=252; 2012 n=244; 2014 n=288; 2016 n=297 2018 n=342

Significantly lower
Significantly higher

Chart 93: Water-Based Recreation Activities at Most Recently Visited NPWS Park by NPWS Branch (Pt 2)



Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park undertaking water-based activities 2008 – 2018
Base: 2008 n=249; 2010 n=252; 2012 n=244; 2014 n=288; 2016 n=297 2018 n=342

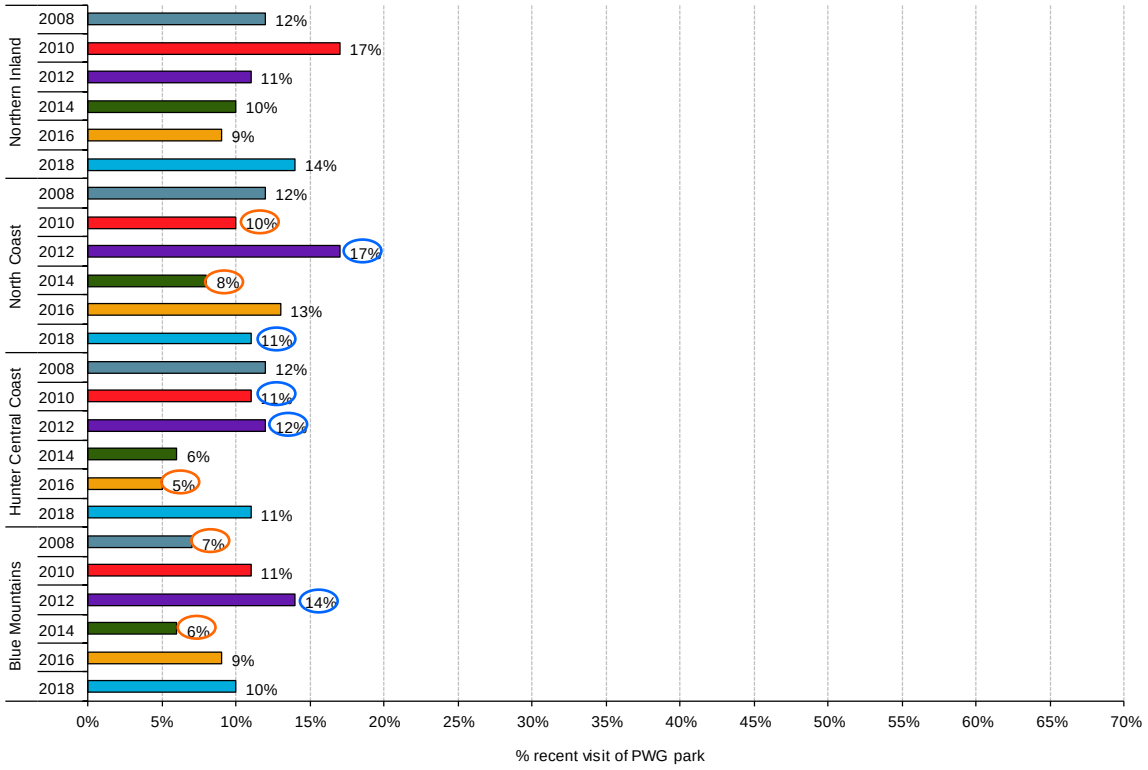
Significantly lower
Significantly higher

Incidence of undertaking *picnicking and dining* activities tends to be highest in the Greater Sydney Branch, averaging around a 20.3% incidence rate from 2008 to 2018. Incidence of *picnicking and*

dining activities were significantly low in 2016 for the Southern Ranges Branch (around 3% - with consistently low incidence rates evident since 2010) (see Chart 94 and Chart 95 for more detail).

Touring and sightseeing activities are generally high in the Blue Mountains Branch, averaging around 20.3%. Whilst the West Branch averages 21.6% for touring and sightseeing, sample sizes are small and are subject to large error. The highest proportions recorded for *touring and sightseeing* were observed in 2018 for the Northern Inland (21%), North Coast (15%), Hunter Central Coast (14%), Greater Sydney (11%) and West (30%) Branches. The lowest proportion recorded for the South Coast Branch occurred in 2018 (7%). More detail can be observed in Chart 96 and Chart 97).

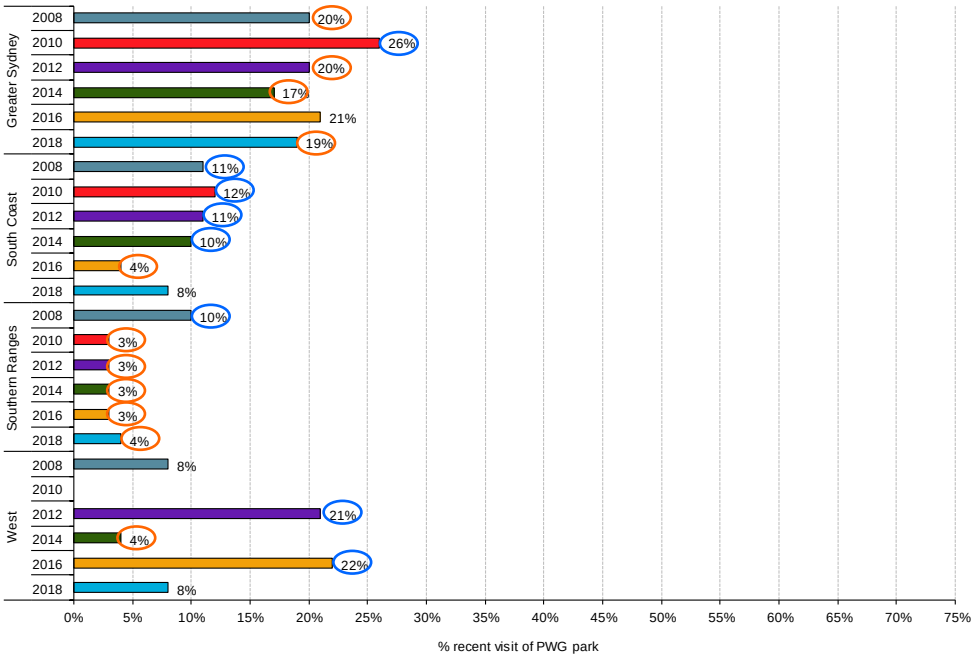
Chart 60: Picnicking and Dining Activities at Most Recently Visited NPWS Park by NPWS Branch (Pt 1)



Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park undertaking picnicking and dining 2008 – 2018
Base: 2008 n=192; 2010 n=202; 2012 n=186; 2014 n=172; 2016 n=196, 2018 n=205

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

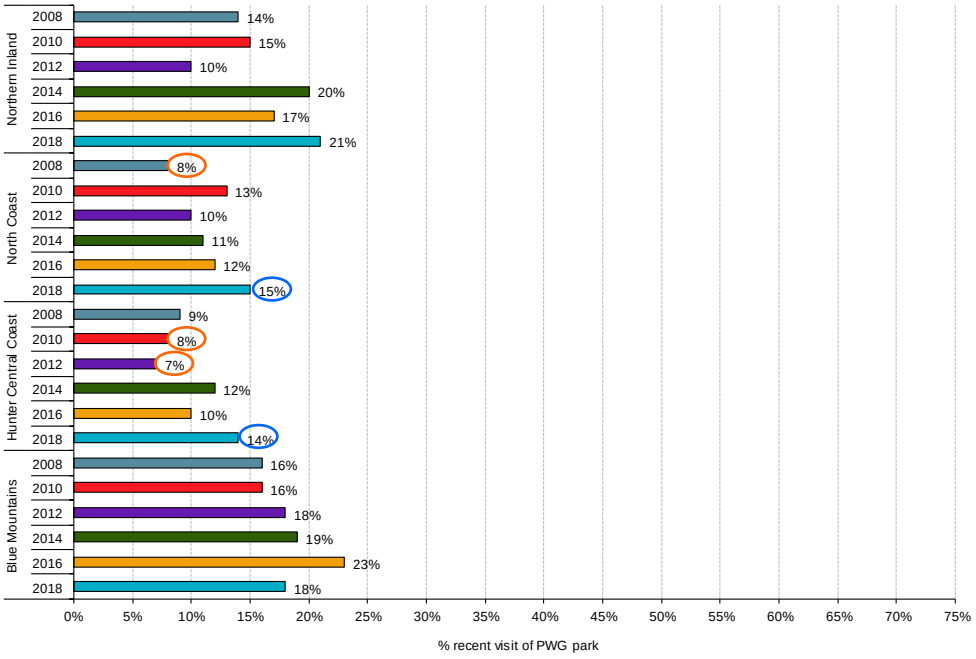
Chart 61: Picnicking and Dining Activities at Most Recently Visited NPWS Park by NPWS Branch (Pt 2)



Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park undertaking picnicking and dining 2008 – 2018
Base: 2008 n=192; 2010 n=202; 2012 n=186; 2014 n=172; 2016 n=196, 2018 n=205

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

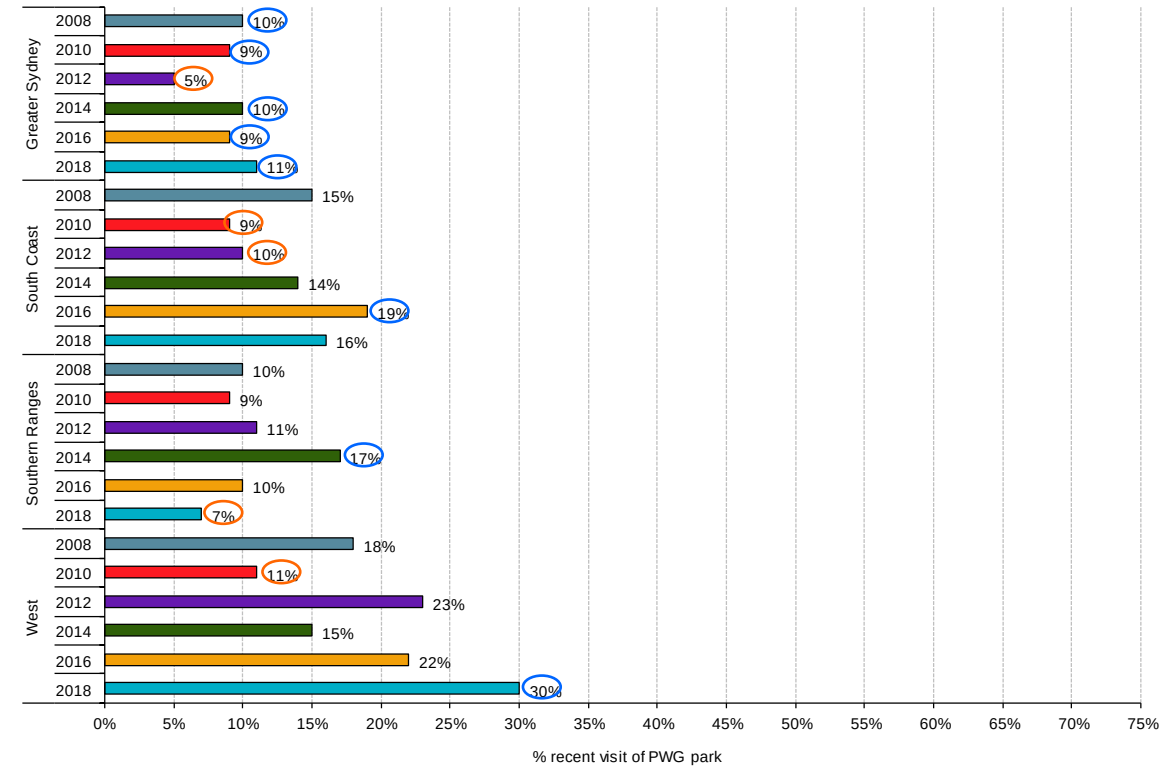
Chart 62: Touring and Sightseeing Activities at Most Recently Visited NPWS Park by NPWS Branch (Pt 1)



Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park undertaking touring and sightseeing 2008 – 2018
Base: 2008 n=184; 2010 n=145; 2012 n=133; 2014 n=197; 2016 n=206, 2018 n=243

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

Chart 63: Touring and Sightseeing Activities at Most Recently Visited NPWS Park by NPWS Branch (Pt 2)

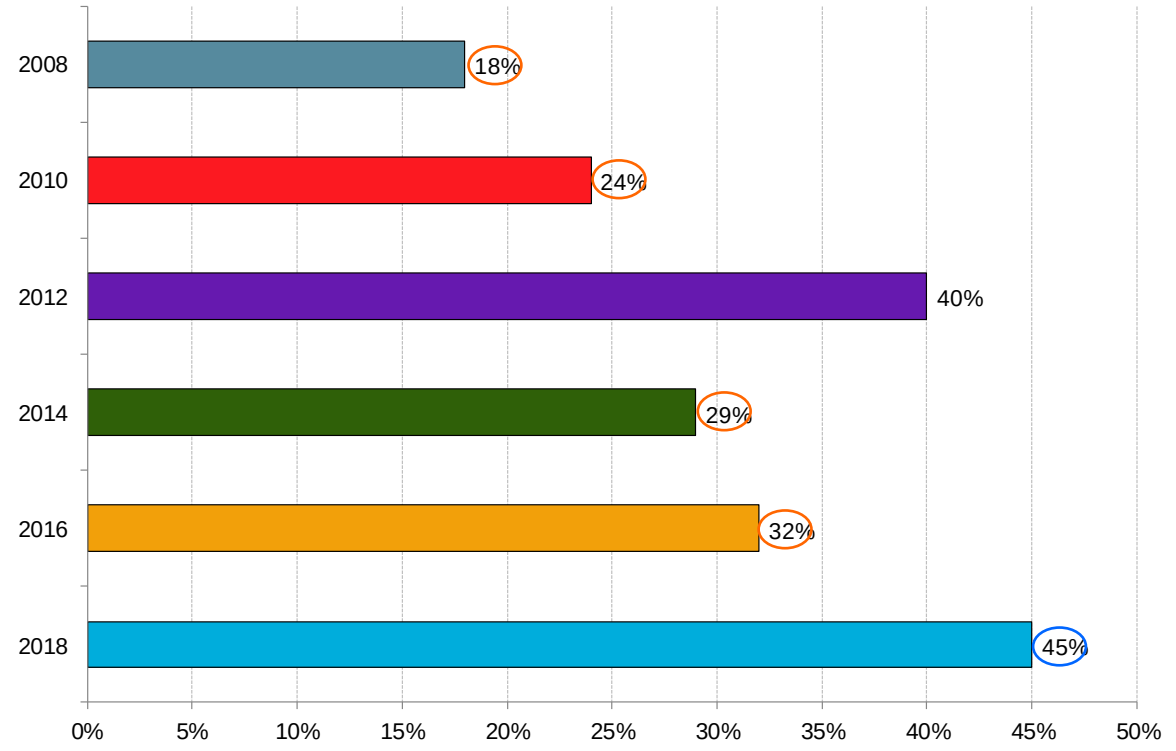


Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park undertaking touring and sightseeing 2008 – 2018
Base: 2008 n=192; 2010 n=202; 2012 n=186; 2014 n=172; 2016 n=196, 2018 n=205

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

Sample sizes are generally too small to analyse other activities over time at the NPWS Branch level. However, for the Southern Ranges Branch, incidence of undertaking *snow sports* is of interest. In 2018 almost half of those on their most recent visit to a NPWS park undertook snow sports (45%), a significantly higher response than in 2008, 2010, 2014 and 2016 (18%, 24%, 29% and 32% respectively) (See Chart 98).

Chart 64: Snow Sports at Recently Visited Park in the Southern Ranges Branch



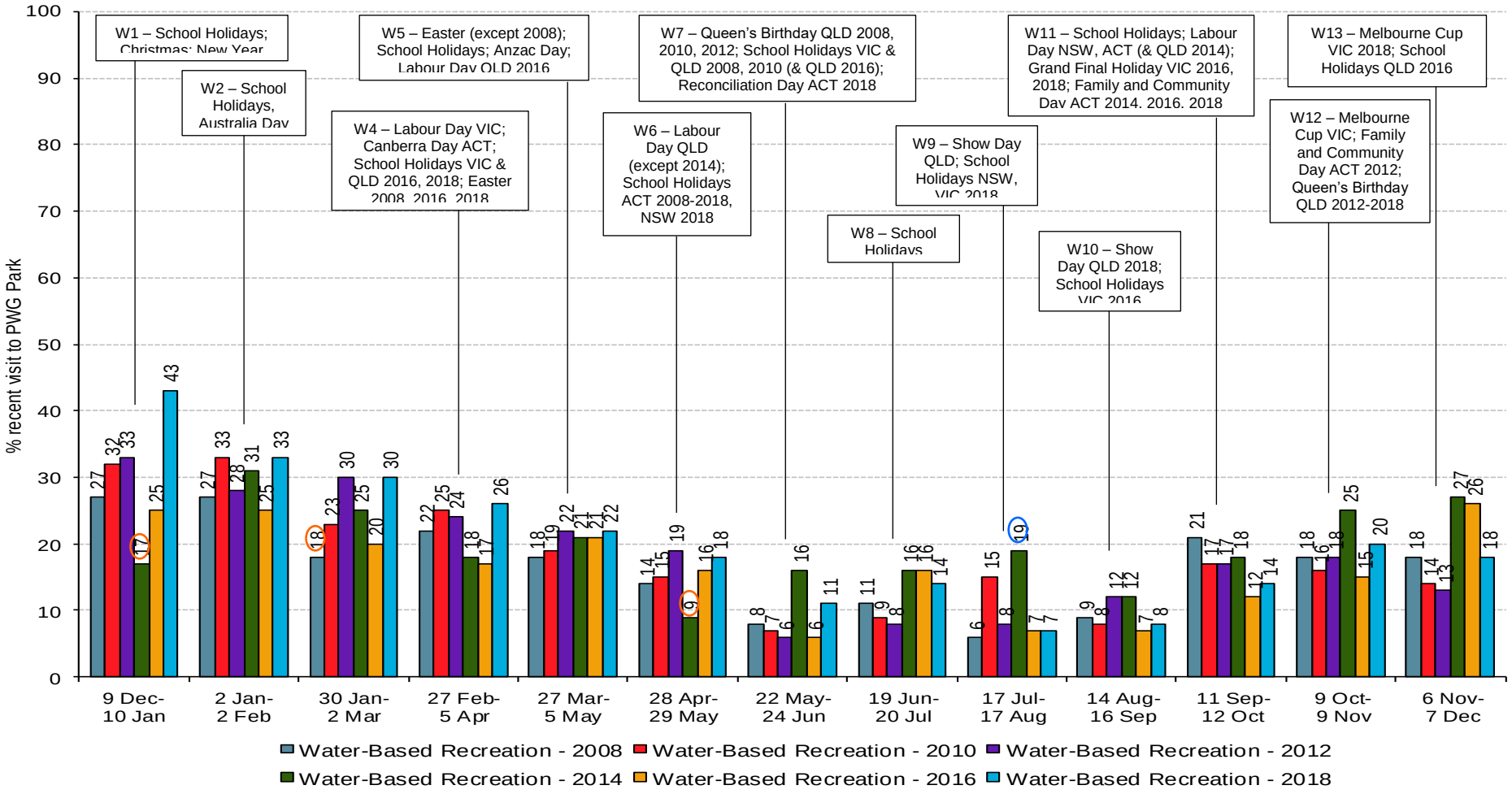
Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park in Southern Ranges Branch 2008 – 2018
Base: 2008 n=199; 2010 n=128; 2012 n=131; 2014 n=152; 2016 n=165, 2018 n=155

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

When *walking, water-based recreation, picnicking and dining* and *touring and sightseeing* activities are analysed by survey wave, only *water-based activities* exhibit any trends. The other three activities are relatively stable across the calendar year. Participation in water-based activities tends to be very high during the summer school holidays (waves 1-2 – December-January – around 29.5% on average) and high during February and March (waves 3-4 – Easter and school holidays - around 22%-25% on average), then declines to very low proportions from wave 7 to wave 10 (mid-May to mid-September – around 10% on average) and then rises to average levels in waves 12 and 13 (October-November – around 19%). This is not surprising with water-based activities likely to be more commonplace during the summer months and less common in the winter months (See Chart 99).

In 2018 incidence of *water-based activities* was high from December 2017 to the end of April 2018, being significantly high in wave 1 (43% - December), equal highest in waves 2 and 3 (33% and 30% respectively), highest in wave 4 (26%) and equal highest in wave 5 (22%).

Chart 65: Water-Based Recreation Activities Undertaken at Most Recently Visited NPWS Park by Wave



Source: NPWS Parks Visitor Surveys – Most recently visits NPWS park undertaking water-based activities 2008 – 2018
Base: 2008 n=249; 2010 n=252; 2012 n=244; 2014 n=288; 2016 n=297 2018 n=342

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

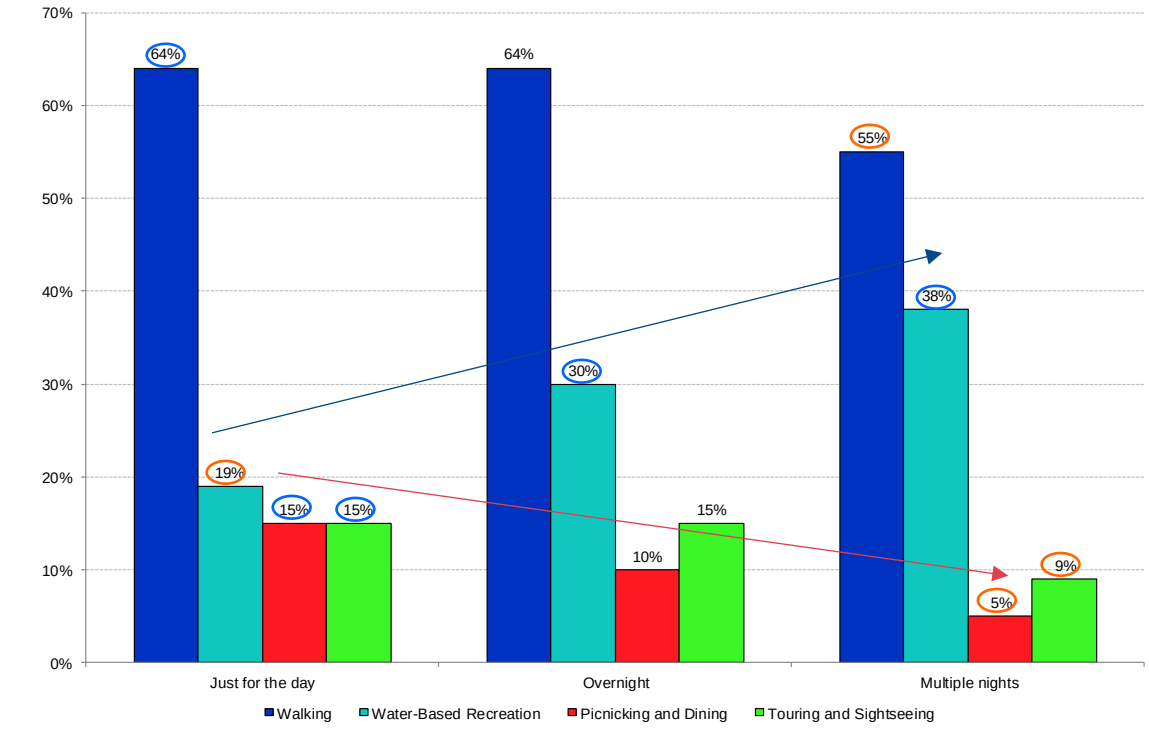
When analysing main activities by *duration* of trip Chart 100 shows that *walking* is equally prevalent for *day trips* and *overnight trips* (each 64%), but is less common for park visits of *multiple nights* (55%). This may indicate that one of the main motivations for taking a day trip or overnight trip to an NPWS park is to walk, but is less of a motivator for visits for longer trips.

There is a clear trend that the longer the duration of the trip to a NPWS park the more likely one is to undertake *water-based recreation* activities as part of that visit. One in five undertake these activities as part of a *day trip* (19%), but double this proportion do so as part of a *multiple night* trip. It would appear that water-based recreation is a motivator for longer visits to NPWS parks.

The opposite trend is evident for *picnicking and dining* activities, with greater proportions doing so on *day trips* to NPSW parks (15%) than on visits of *multiple nights* (5%). This would indicate that a motivator for shorter park visits is a picnicking and dining experience.

Touring and sightseeing follows a similar pattern to walking activities. *Touring and sightseeing* is equally prevalent for *day trips* and *overnight trips* (each 15%), but is less common for park visits of *multiple nights* (9%). Not surprisingly, *snow sports* are significantly higher among those visiting an NPWS park as part of a multiple night trip-day trip (11.4%) than for an overnight trip (3.4%) or day trip (1.7% - not shown on chart).

Chart 66: Main Activities at Most Recently Visited NPWS Park by Duration of Trip



Source: NPWS Parks Visitor Surveys 2018
Base: n=1,614

Significantly lower
Significantly higher

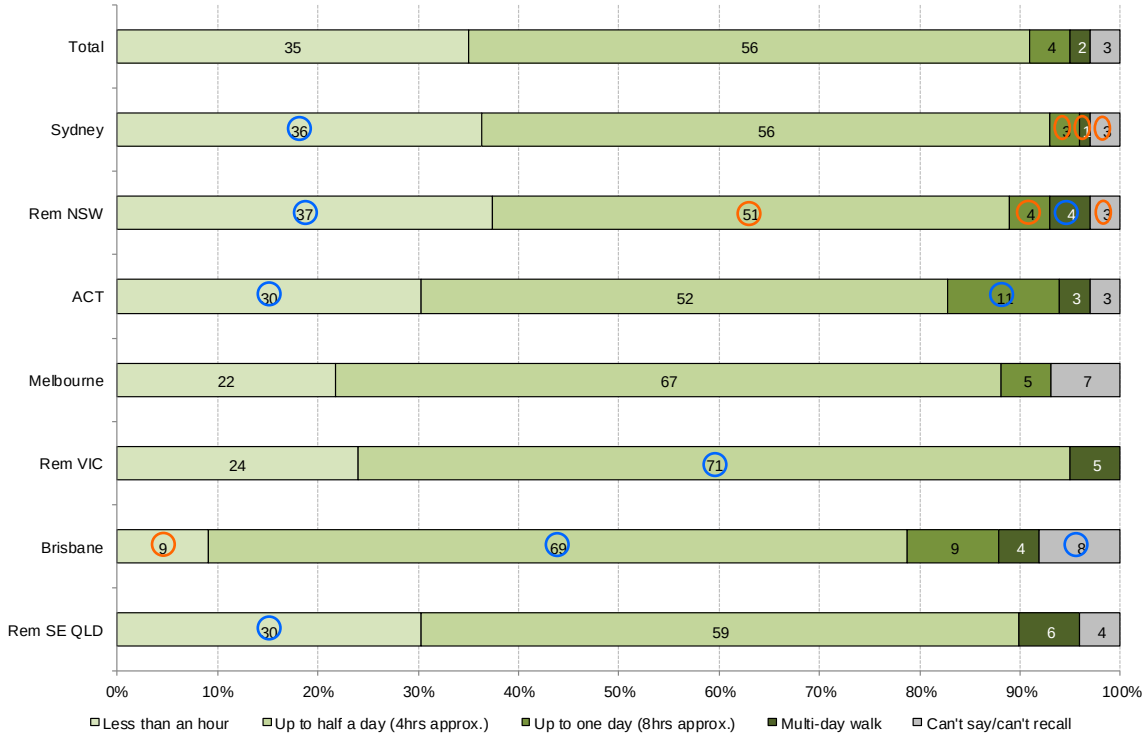
In 2018 a new question was asked in relation to those people who undertook walking, bushwalking or walking the dog.

For how long did you [walk or bushwalk / walk the dog] on this visit? Less than an hour; up to half a day; up to one day; a multi-day walk

Overall, just over one third of those undertaking walking activities walked for *less than an hour* (35%), while more than half walked for *up to half a day* (approximately 4 hours – 56%). Only 4% walked for *up to one day* (approximately 8 hours), while just 2% went on a *multi-day walk* (Chart 101). When analysed by region of origin it is not surprising that walks of *less than an hour* are highest in Sydney (36%) and remainder NSW (37%) where respondents would live in close proximity to NPWS parks. However, residents of the ACT and remainder of southeast and southern QLD also have high proportions for walking for *less than an hour* (each 30%), indicating that an NPWS park must also be in close proximity to their residence.

Incidence of walking for *up to half a day* is highest for residents living in remainder Victoria (71%), Brisbane (69%) and Melbourne (67%) indicating that visitors to parks from these locations spend some time walking in the park. Walks of *up to one day* are highest for ACT residents (11%), most likely exploring the parks in the Southern Ranges and South Coast. No region has a markedly high proportion undertaking *multi-day walks*.

Chart 67: Length of Walk by Region of Origin

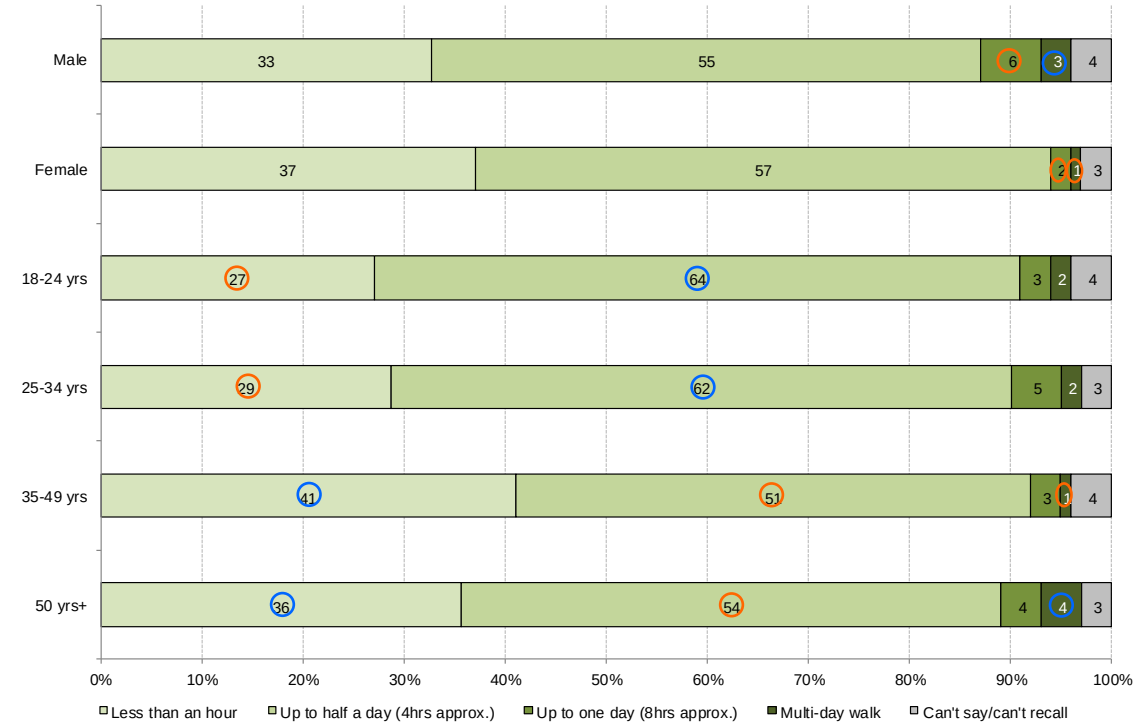


Source: NPWS Parks Visitor Surveys 2018
Base: n=1,016

Significantly lower
Significantly higher

Males trend to have higher proportions than females taking *walks of up to one day* (6% c.f. 2% and *multi-day walks* (3% c.f. 1%), as do, perhaps surprisingly, people aged 50 years and over (each 4%), while 25-34 year olds had the highest proportion taking trips of *up to one day* (5%). Those aged 35-49 had the highest proportion walking for *less than an hour* (41%), while 18-24 year olds had the highest proportions walking for *up to half a day* (64%) (See Chart 102).

Chart 68: Length of Walk by Sex and Age



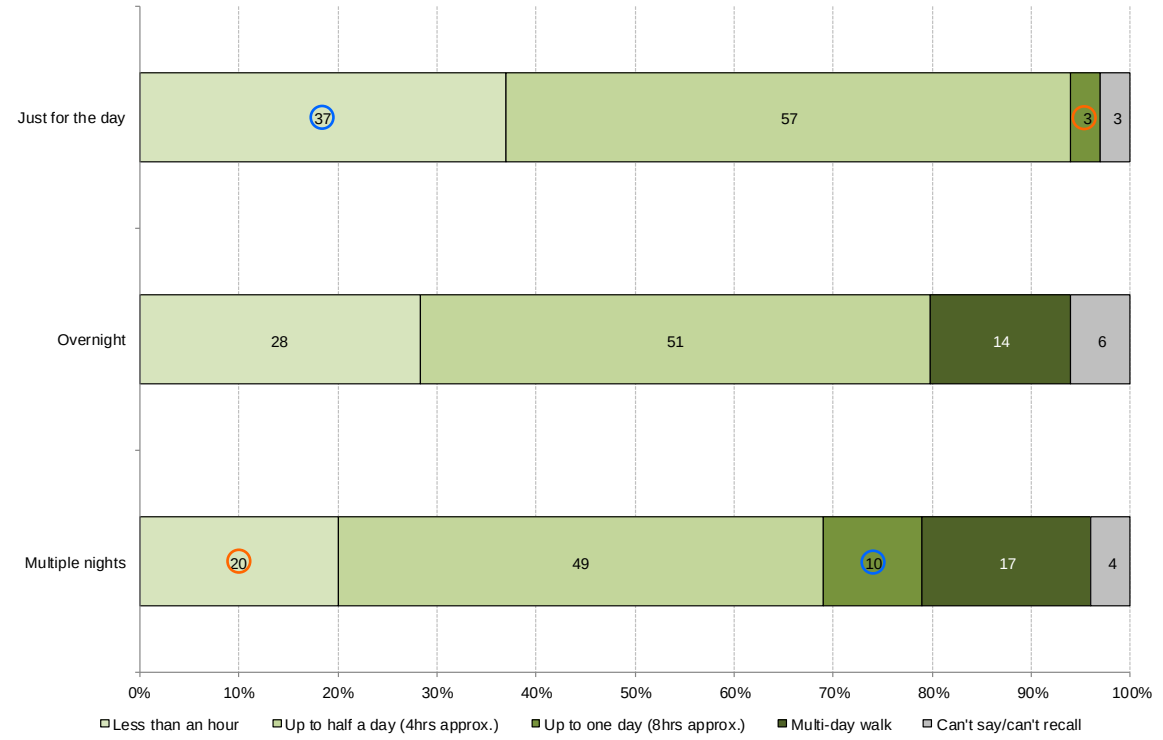
Source: NPWS Parks Visitor Surveys 2018
Base: n=1,016

Significantly lower
Significantly higher

Not surprisingly duration of visit to an NPWS park impacted on length of walk (Chart 103). The highest proportion walking for *less than one hour* were those visiting for just the day (37%). Those visiting for multiple nights had the highest proportions going on *multi-day walks* (17%).

Interestingly, the highest proportions taking walks of *up to half a day* were those visiting *just for the day* (57%), indicating that the walk was a prime motivator for the visit. Whilst those visiting for *multiple nights* had the highest proportion taking walks of *up to one day* (10%), no-one visiting an NPWS park for an *overnight visit* walked for *up to one day*. It may be that a full day walk (i.e. a 4 to 8 hour walk) is too difficult to accommodate into a single overnight trip.

Chart 69: Length of Walk by Duration of NPWS Park Visit



Source: NPWS Parks Visitor Surveys 2018
Base: n=1,016

Significantly lower
Significantly higher

8.8 Satisfaction with Most Recent Visit to a NPWS Park

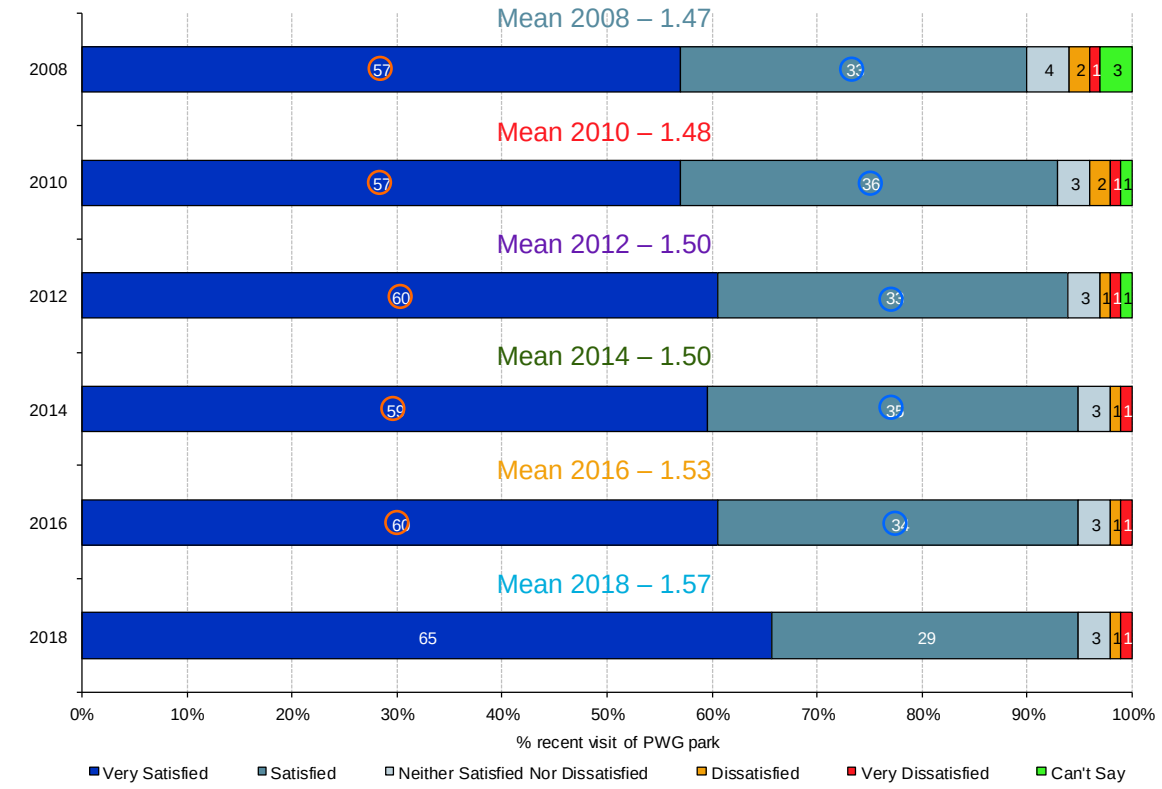
Respondents who had visited a NPWS park were asked to give an overall satisfaction rating based on the experience of their most *recent* visit. Chart 104 shows that in both 2008 and 2010 57% of visitors indicated that they very satisfied with the park experience on their most recent visit, while from 2012 and 2016 the proportion very satisfied increased to around 60% (59% in 2014). In 2018, the proportion very satisfied increased to 65%, significantly higher than in all previous years. In 2008 nine in ten were at least satisfied with their park visit (i.e. sum of those satisfied or very satisfied), with the proportion increasing to 93% in 2010 and 2012, and increasing again to 94% from 2014 to 2018. The 2008 figure of 90% is significantly lower than all other years.

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 rose to 1.50 and in 2016 it again rose to 1.53. In 2018 the mean satisfaction score increased again to 1.57, which is significantly higher than the 2008 to 2014 mean scores.

Chart 70: Satisfaction with Experience at Most Recently Visited NPWS Park



Source: NPWS Parks Visitor Surveys – NPWS park most recently visited 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

Significantly lower than 2018 estimate
Significantly higher than 2018 estimate

The proportion *very satisfied* with their park experience is the highest recorded in 2018 amongst visitors from Sydney (66%), remainder NSW (64%), ACT (71%) and Melbourne (75%). In 2018 the proportion '*total satisfied'* was the highest or equal highest recorded for visitors from Sydney (95%), Melbourne (98%) and remainder VIC (100%). However, the lowest proportion *very satisfied* was recorded in remainder southeast and southern QLD in 2018 (48%) along with *'total satisfied'* (89%) (Table 28).

In general, *mean scores* for satisfaction in 2018 higher than previous years across all survey regions except Queensland – Sydney (1.59), remainder NSW (1.52), ACT (1.63), Melbourne (1.74), Remainder VIC (1.65). However, remainder southeast and southern QLD attained the lowest mean score for the region in 2018 (1.35), while for Brisbane it was the second lowest (1.48).

Table 28: Satisfaction with Most Recently Visited NPWS Park by Region of Origin

Region of Origin	Year	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dis-satisfied	Very Dissatisfied	Can't Say	Total Satisfied	Mean
Sydney	2008	57%	34%	4%	1%	1%	3%	91%	1.50
	2010	57%	38%	3%	1%	*	1%	95%	1.51
	2012	62%	32%	4%	1%	1%	1%	93%	1.54
	2014	59%	36%	3%	1%	*	*	95%	1.53
	2016	59%	35%	3%	2%	*	*	95%	1.53
	2018	66%	29%	3%	1%	1%	*	95%	1.59
Remainder NSW	2008	56%	31%	4%	3%	2%	4%	87%	1.42
	2010	57%	33%	4%	3%	1%	*	91%	1.43
	2012	57%	35%	3%	2%	3%	*	92%	1.42
	2014	59%	32%	4%	1%	3%	*	91%	1.43
	2016	62%	31%	3%	2%	2%	1%	93%	1.51
	2018	64%	28%	4%	2%	2%	*	92%	1.52
ACT	2008	56%	32%	5%	2%	2%	3%	88%	1.42
	2010	56%	37%	4%	2%	1%	-	93%	1.45
	2012	60%	34%	3%	3%	1%	-	94%	1.50
	2014	66%	27%	5%	*	2%	-	93%	1.54
	2016	62%	33%	2%	2%	*	-	95%	1.55
	2018	71%	23%	4%	2%	*	-	94%	1.63
Melbourne	2008	53%	34%	3%	-	3%	6%	87%	1.41
	2010	50%	35%	5%	5%	5%	-	85%	1.20
	2012	55%	36%	6%	3%	-	-	92%	1.44
	2014	67%	25%	-	-	8%	-	92%	1.44
	2016	54%	35%	11%	-	-	-	89%	1.43
	2018	75%	23%	2%	-	-	-	98%	1.74
Remainder VIC	2008	43%	40%	4%	13%	-	-	83%	1.12
	2010	49%	32%	7%	-	-	12%	81%	1.48
	2012	57%	31%	6%	-	-	6%	88%	1.55
	2014	31%	66%	4%	-	-	-	96%	1.27
	2016	67%	29%	4%	-	-	-	96%	1.63
	2018	65%	35%	-	-	-	-	100%	1.65
Brisbane	2008	57%	37%	4%	-	-	2%	94%	1.55
	2010	56%	38%	2%	2%	2%	-	93%	1.43
	2012	73%	22%	2%	2%	-	-	95%	1.67
	2014	58%	39%	-	3%	-	-	97%	1.52
	2016	62%	37%	1%	-	-	-	99%	1.61
	2018	57%	39%	-	-	3%	-	97%	1.48
Remainder SE QLD	2008	55%	38%	1%	2%	1%	3%	93%	1.47
	2010	54%	36%	5%	4%	-	-	91%	1.41
	2012	49%	50%	2%	-	-	-	98%	1.47
	2014	69%	19%	6%	5%	-	-	89%	1.53
	2016	65%	29%	3%	2%	1%	-	94%	1.55
	2018	48%	41%	10%	-	1%	-	89%	1.35
Total NSW	2008	57%	33%	4%	2%	1%	3%	90%	1.47
	2010	57%	36%	3%	2%	1%	1%	94%	1.49
	2012	60%	33%	3%	1%	2%	1%	93%	1.50
	2014	59%	35%	3%	1%	1%	*	94%	1.50
	2016	60%	34%	3%	2%	1%	*	94%	1.52
	2018	65%	29%	3%	1%	1%	*	94%	1.57
Total Interstate	2008	54%	36%	3%	2%	2%	3%	90%	1.42
	2010	54%	36%	4%	3%	2%	1%	90%	1.39
	2012	59%	35%	4%	2%	*	1%	94%	1.51
	2014	60%	33%	2%	2%	2%	-	93%	1.47
	2016	61%	33%	5%	1%	*	-	95%	1.55
	2018	64%	32%	3%	*	1%	-	96%	1.58

Source: NPWS Parks Visitor Surveys – NPWS park most recently visited 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

Table 29 shows that females have higher levels of satisfaction with their recent experience at a NPWS park than do males. While the mean satisfaction rating for males has hovered around 1.44 across from 2008 to 2016, but increased to 1.52 in 2018, the mean for females hovered around 1.53

from 2008 and 2018 and increased to 1.62 in both 2016 and 2018. The proportion of males being *satisfied overall* (i.e. very satisfied + satisfied) with their park visit was at its highest level in 2016 and 2018 (93%); as was the proportion of females over the same period, with 96% *satisfied overall*.

Table 29: Satisfaction with Most Recently Visited NPWS Park by Sex

Region of Origin	Year	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dis-satisfied	Very Dissatisfied	Can't Say	Total Satisfied	Mean
Males	2008	53%	36%	4%	2%	1%	3%	89%	1.43
	2010	54%	38%	3%	2%	1%	1%	92%	1.44
	2012	56%	36%	4%	2%	1%	1%	91%	1.44
	2014	59%	34%	4%	2%	2%	*	92%	1.47
	2016	55%	38%	4%	2%	1%	1%	93%	1.44
	2018	62%	31%	4%	2%	1%	*	93%	1.52
Females	2008	61%	30%	3%	2%	1%	3%	90%	1.51
	2010	60%	34%	4%	2%	*	*	94%	1.52
	2012	65%	29%	2%	1%	2%	*	95%	1.57
	2014	60%	36%	2%	1%	1%	*	95%	1.53
	2016	67%	29%	3%	1%	*	*	96%	1.62
	2018	69%	27%	2%	1%	1%	*	96%	1.62

Source: NPWS Parks Visitor Surveys – NPWS park most recently visited 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

Table 30 shows that the general trend by age for satisfaction with one's park visit experience from 2008 to 2016 is that satisfaction increases with age (2012 being the only exception). 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). However in 2016 the original trend prevailed with 18-24 year olds having the lowest level of mean satisfaction (1.40).

The overall age trend appeared to reverse in 2018 with the mean score for satisfaction being highest among 18-24 year olds (1.63), with the proportion *very satisfied* being a significantly high 65%. 25-34 year olds also attained their highest mean score in 2018 (1.55), with the proportion *very satisfied* also significantly high at 61%. The proportion *very satisfied* was also the highest for 35-49 year olds in 2018 (66%), with the mean increasing to 1.54 from 2016 levels.

Table 30: Satisfaction with Most Recently Visited NPWS Park by Age

Region of Origin	Year	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dis-satisfied	Very Dissatisfied	Can't Say	Total Satisfied	Mean
18-24 yrs	2008	41%	52%	2%	2%	1%	3%	93%	1.34
	2010	45%	49%	6%	-	-	-	94%	1.39
	2012	51%	43%	3%	-	1%	2%	94%	1.46
	2014	59%	34%	5%	-	2%	-	93%	1.48
	2016	51%	43%	4%	1%	2%	-	94%	1.40
	2018	65%	35%	-	1%	-	-	99%	1.63
25-34 yrs	2008	48%	40%	5%	1%	1%	5%	88%	1.39
	2010	54%	40%	2%	2%	1%	*	94%	1.44
	2012	52%	41%	4%	1%	1%	-	93%	1.41
	2014	48%	43%	5%	2%	1%	*	92%	1.35
	2016	52%	42%	4%	2%	-	1%	94%	1.45
	2018	61%	35%	3%	1%	1%	*	96%	1.55
35-49 yrs	2008	63%	26%	4%	3%	2%	2%	90%	1.50
	2010	58%	35%	3%	3%	*	*	94%	1.50
	2012	61%	31%	4%	1%	1%	1%	92%	1.51
	2014	65%	30%	3%	2%	1%	-	94%	1.55
	2016	61%	34%	3%	2%	1%	-	94%	1.52
	2018	66%	27%	4%	1%	2%	*	93%	1.54
50+ yrs	2008	60%	30%	4%	2%	1%	4%	90%	1.51
	2010	61%	30%	4%	2%	1%	1%	91%	1.50
	2012	66%	28%	2%	2%	2%	1%	94%	1.55
	2014	61%	34%	2%	1%	1%	1%	95%	1.54
	2016	67%	27%	3%	1%	*	1%	95%	1.60
	2018	68%	26%	3%	2%	1%	*	93%	1.58

Source: NPWS Parks Visitor Surveys – NPWS park most recently visited 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

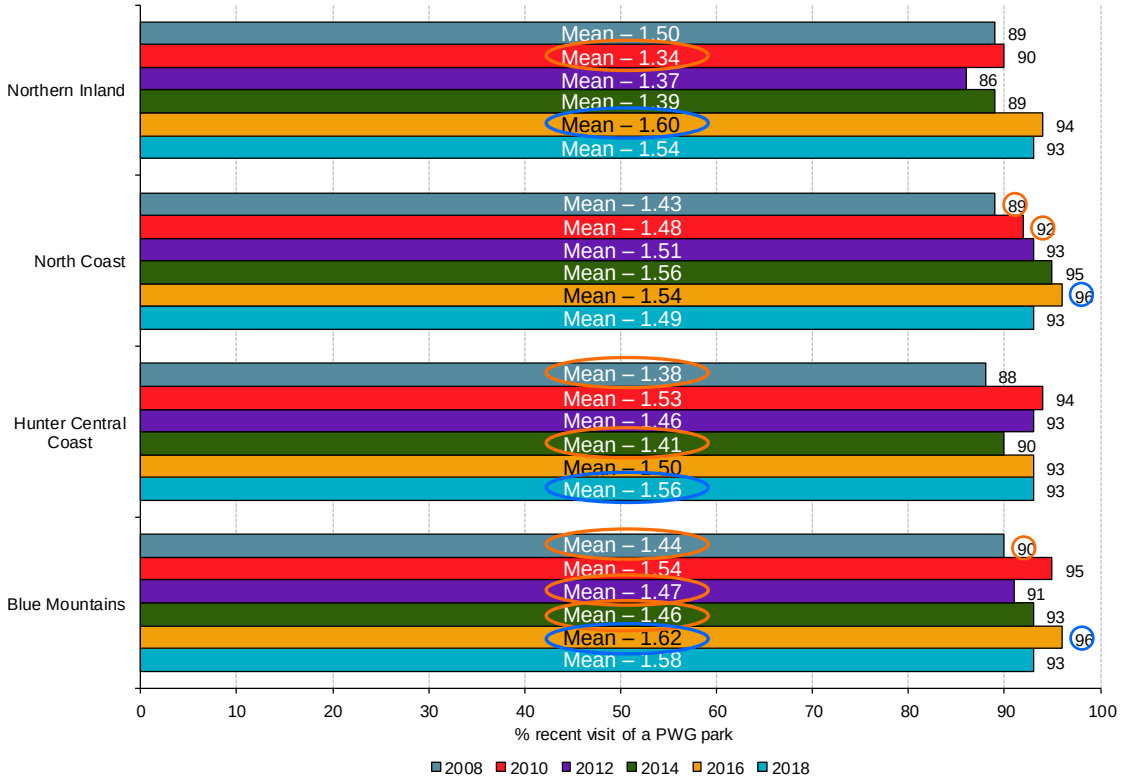
Analysis by NPWS Branch has only been provided for *overall satisfaction* (i.e. satisfied + very satisfied) and is detailed in Chart 105 and Chart 106.

Only two Branches increased their *overall satisfaction* score in 2018 – South Coast Branch (95%) and Southern Ranges Branch (97%), with Southern Ranges Branch significantly so.

The increasing trend in *overall satisfaction* over time ceased in 2018 for the North Coast and Greater Sydney Branches (where the trend ceased in 2016). There is a general increasing trend in *overall satisfaction* observed for the South Coast Branch,

Mean scores for South Coast Branch (1.58), Hunter Central Coast Branch (1.56) and Southern Ranges Branch (1.67) were the highest recorded, with the mean score for Southern Ranges Branch being significantly high. However, the *mean score* for the West Branch in 2018 was significantly low (1.30).

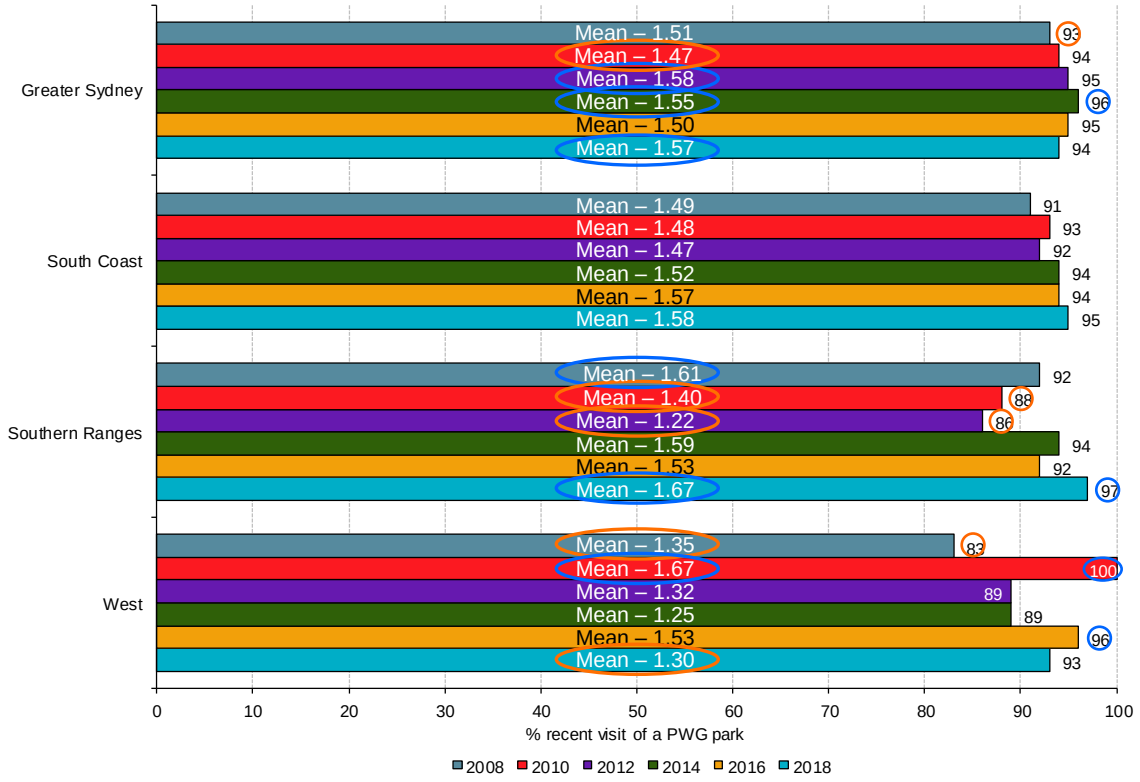
Chart 105: Satisfaction with Most Recently Visited NPWS Park by Branch (Part 1)



Source: NPWS Parks Visitor Surveys – NPWS park most recently visited 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

Significantly lower
Significantly higher

Chart 106: Satisfaction with Most Recently Visited NPWS Park by Branch (Part 2)



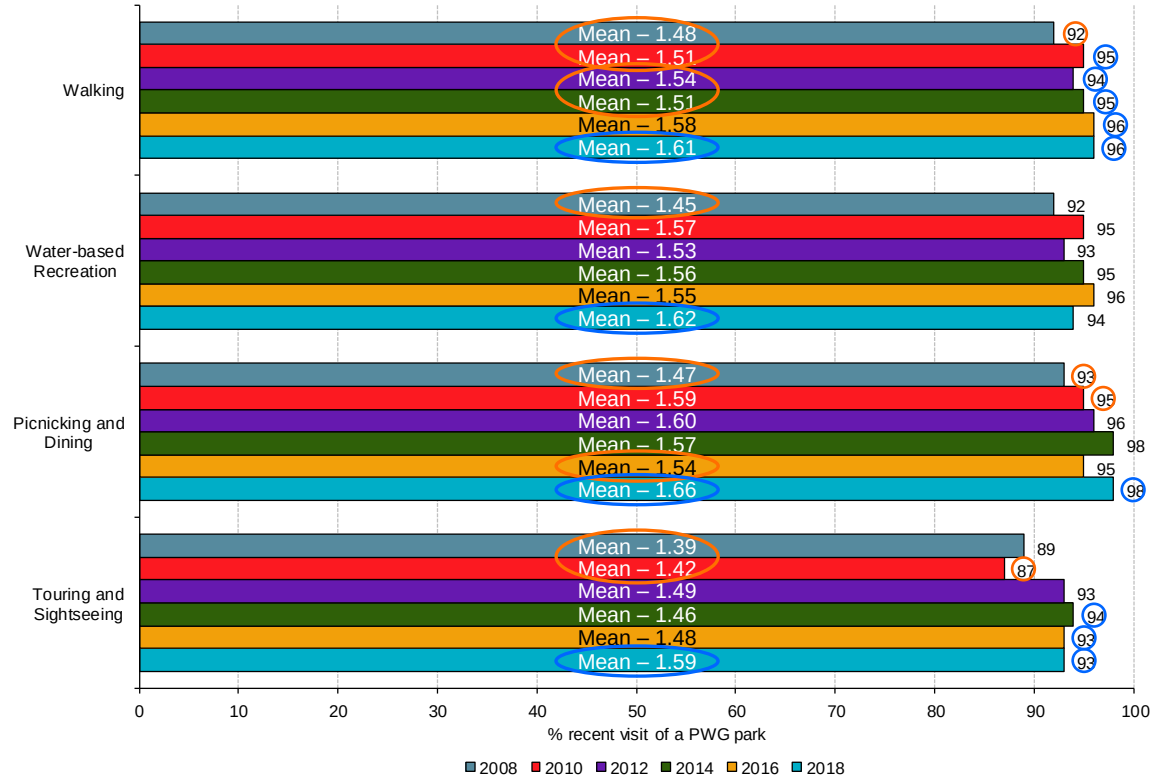
Source: NPWS Parks Visitor Surveys – NPWS park most recently visited 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

Significantly lower
Significantly higher

Overall satisfaction with one's NPWS park visit was highest in 2018 for people who undertook *picnicking and dining* activities (98% - in line with 2014 results), while for those undertaking *walking* activities overall park satisfaction in 2018 was equal highest with the 2016 score of 96%. *Overall satisfaction* for respondents undertaking *touring and sightseeing* maintained 2016 levels in 2018 (93%), marginally lower than the high observed in 2014 (94%). *Overall satisfaction* for with one's visit for those undertaking *water-based recreation* declined to 94% in 2018 from 96% in 2016. (see Chart 107).

For all four major activities the mean score for satisfaction with one's park visit was the highest recorded, being significantly higher than in previous years – walking 1.61; water-based recreation 1.62; picnicking and dining 1.66; and touring and sightseeing 1.59.

Chart 71: Satisfaction with Most Recently Visited NPWS Park by Main Activity



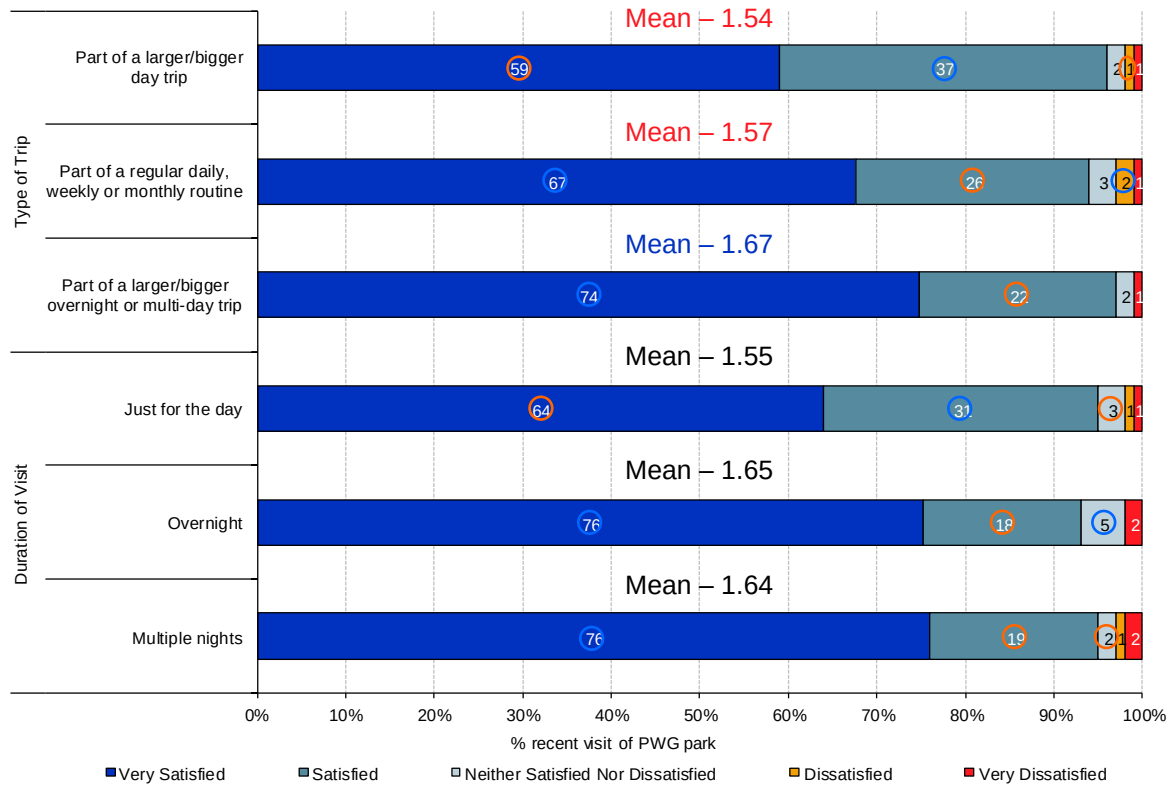
Source: NPWS Parks Visitor Surveys – NPWS park most recently visited 2008 – 2018
Base: 2008 n=1,487; 2010 n=1,341; 2012 n=1,357; 2014 n=1,555; 2016 n=1,582, 2018 n=1,614

Significantly lower
Significantly higher

When analysing satisfaction of NPWS park visit by *type* of trip to the park in 2018, those that visited as part of a *larger/bigger overnight or multi-day trip* had the highest mean satisfaction score of 1.67, significantly higher than the mean scores of those whose trip was part of a *larger/bigger day trip* (1.54) or *part of a regular routine* (1.57). The proportion *very satisfied* with their park visit of those whose trip was part of a *larger/bigger overnight or multi-day trip* (74%) was significantly higher than those who visited the part as part of a *larger/bigger day trip* (59%), as was the proportion who visited as part of their *regular routine* (67%). (see Chart 108)

This trend was also observed by the *duration* of one's NPWS park visit, with those visiting for *multiple nights* (76%) and those visiting *overnight* (76%) having significantly higher proportions *very satisfied* with their park visit compared with those visiting the park *just for the day* (64%). The *mean scores* for satisfaction were higher for those visiting the park for *multiple nights* (1.64) and *overnight* (1.65) than the mean score for those visiting *just for the day* (1.55), although the scores were not significantly different.

Chart 72: Satisfaction with Most Recently Visited NPWS Park by Type of Trip and Duration of Park Visit 2018

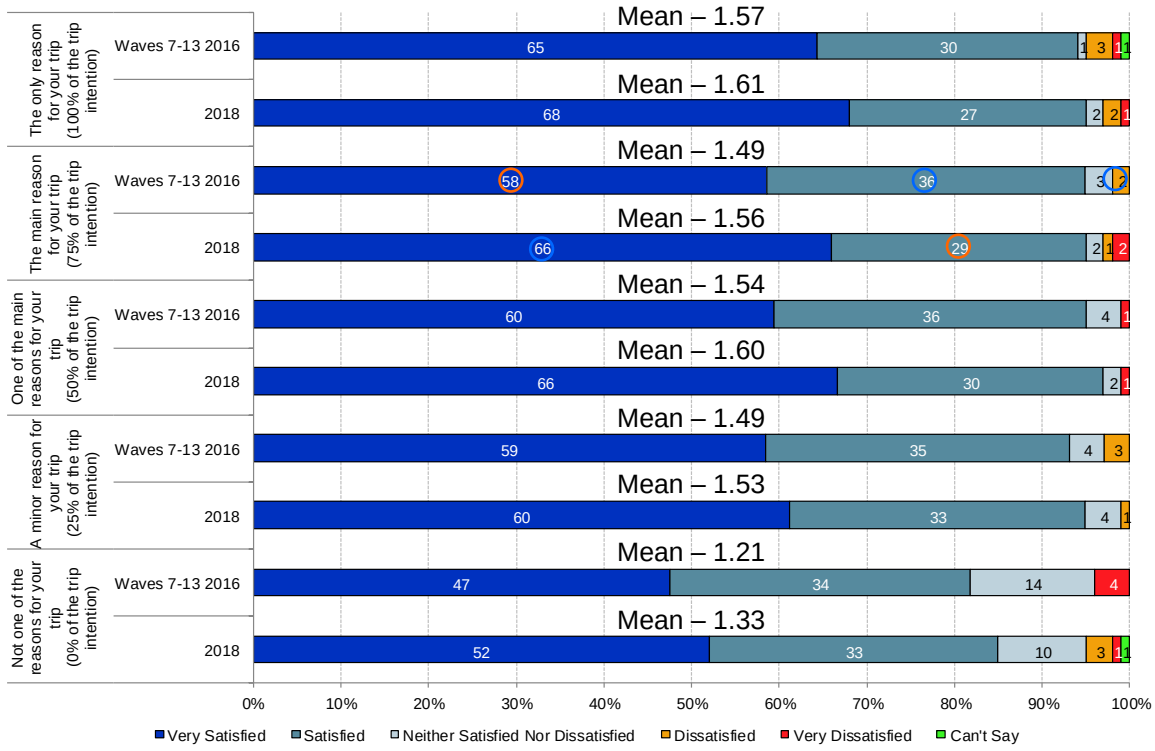


Source: NPWS Parks Visitor Surveys – NPWS park most recently visited 2018
Base: n=1,614

The proportion *very satisfied* with their most recent NPWS park visit has increased from 2016 to 2018 for each category of the park's role in the overall decision to travel, with mean satisfaction scores also increasing on 2016 levels (Chart 109).

In 2018 the proportion *very satisfied* with one's most recent park visit increases with the importance of the role of the park in the trip. The proportion *very satisfied* for those where the NPWS park was the *only reason for the trip* was 68%, while for those where the park was the *main reason* or *one of the main reasons* for the trip the proportion very satisfied was 66% (each). For those where the NPWS park visit was only a *minor reason* for the trip just 60% were *very satisfie*d with the park visit, while for those where the park visit was *not a reason for the trip* the proportion was only 52%. Correspondingly, *mean satisfaction scores* declined as the NPWS park visit declined in importance for the overall trip.

Chart 73: Satisfaction with Most Recently Visited NPWS Park by Role of Park Visit on Overall Trip



Source: NPWS Parks Visitor Surveys – NPWS park most recently visited 2016 and 2018
Base: waves 7-13 2016 – n=779' 2018 - n=1,614

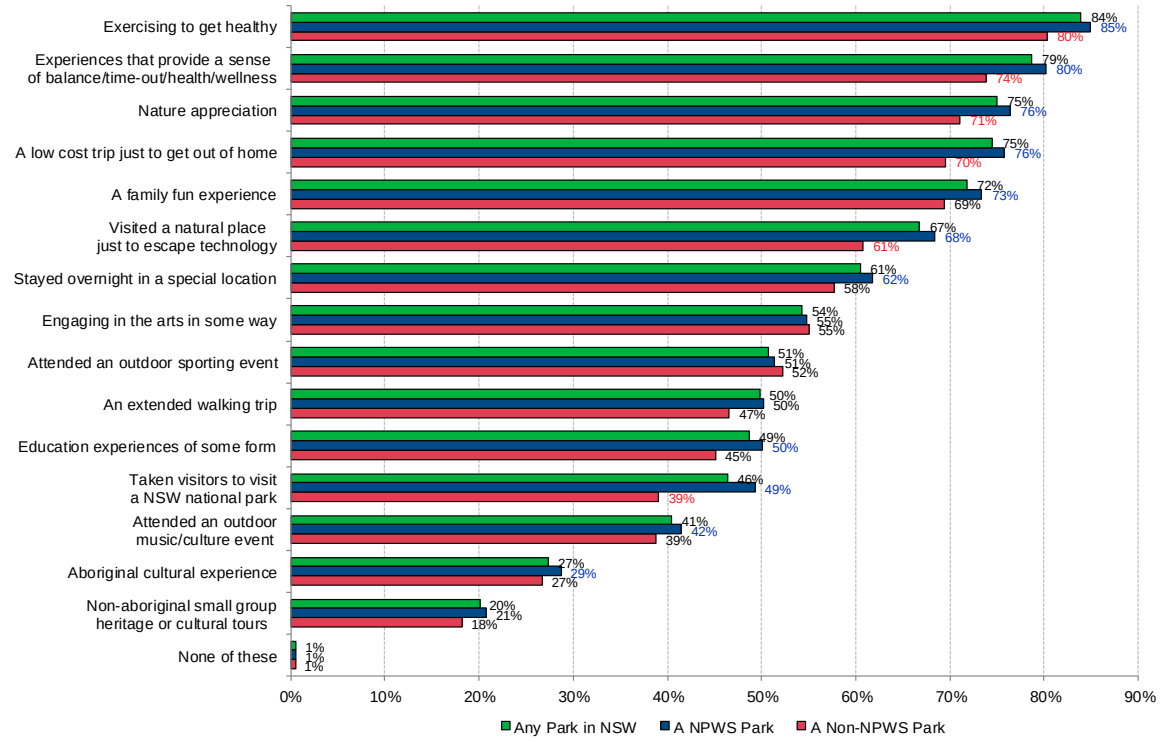
Significantly lower
Significantly higher

9. Park Visitor Needs Based Segmentation

In 2016 the research agency Instinct and Reason undertook a needs-based segmentation for OEH. Originally a four-segment model was devised and then enhanced by breaking down the four segments based on whether people were open or not open to an overnight stay in a national park. The basis for this segmentation was two questions – incidence of undertaking selected activities in the last 12 months and likelihood of visiting a NSW National Park for an overnight stay in the next 12 months. For the 2018 NSW Parks Visitor Survey, these questions were asked of all visitors to a park in NSW in the last 4 weeks (along with another to assess likelihood of day trip to NSW National Parks in the next 12 months) to enable a comparison of park visitors with the general population.

Chart 110 shows the proportion of leisure activities undertaken in the last 12 months by those visiting any park in NSW, those visiting an NPWS park and those visiting a non-NPWS park. Note that a respondent can visit both an NPWS park and a non-NPWS part in the same visitation period. *Exercising to get healthy* was the only activity to attract 80% response or more across the three visitor types analysed.

Chart 74: Activities Undertaken for Leisure Purposes in the Last 12 months



Source: NPWS Parks Visitor Surveys 2018 – Visited a park in NSW in the last 4 weeks
Base: 2018 - n=2,094

Significantly lower than total
Significantly higher than total

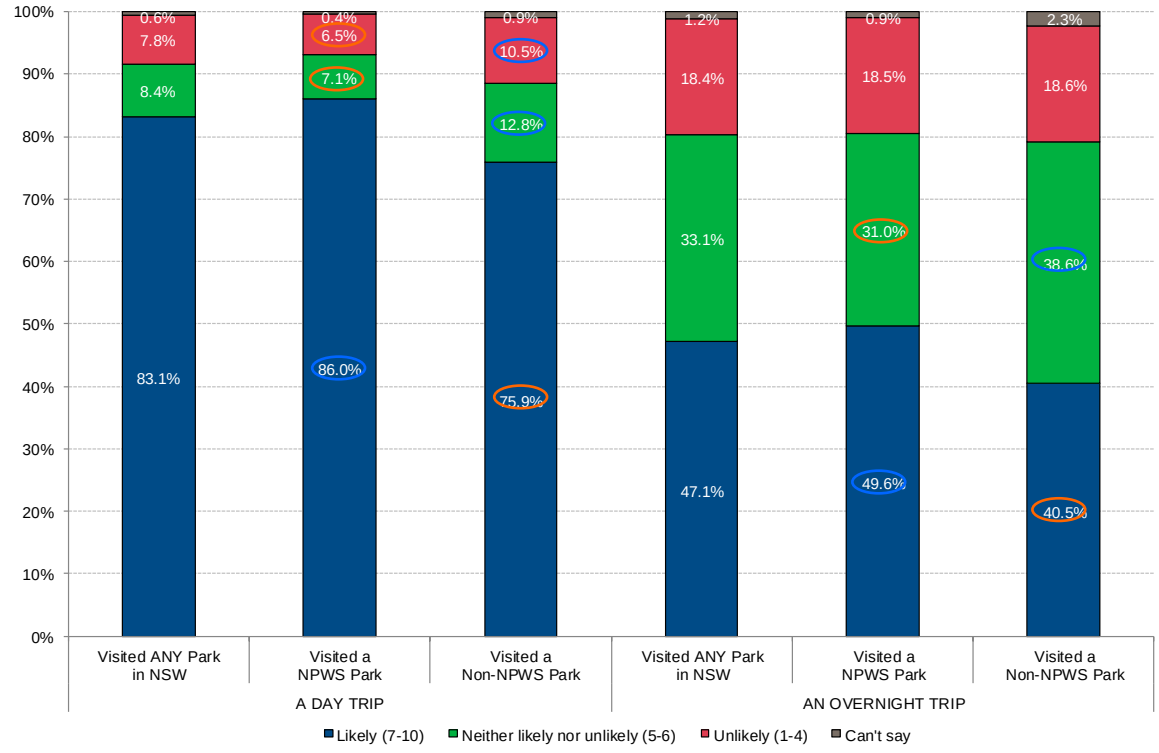
NPWS Park visitors had significantly higher proportions nominating the following activities compared with visitors to any park in NSW – Exercising to get healthy (85%), experiences that provide a sense of balance/time-out/health/wellness (80%), nature appreciation (76%), a low cost trip just to get out of home (76%), a family fun experience (73%), visited a natural place just to escape technology (68%), stayed overnight in a special location (62%), education experiences of some form (50%),

taken visitors to visit a NSW national park (49%), attended an outdoor music/culture event (42%) and had an aboriginal cultural experience (29%).

Non-NPWS Park visitors were significantly less likely to nominate Exercising to get healthy (80%), experiences that provide a sense of balance/time-out/health/wellness (74%), nature appreciation (71%), a low cost trip just to get out of home (70%), visited a natural place just to escape technology (61%), and taken visitors to visit a NSW national park (39%).

In relation to likelihood of visiting a NSW National park in the next 12 months (Chart 111), it is not surprising that those who had visited a NPWS park in the last 4 weeks had significantly greater proportions claiming that were likely to visit for both *a day trip* (86.0%) and for *an overnight trip* (49.6%).

Chart 75: Likelihood if taking a day trip or an overnight trip to a NSW National Park in the next 12 months

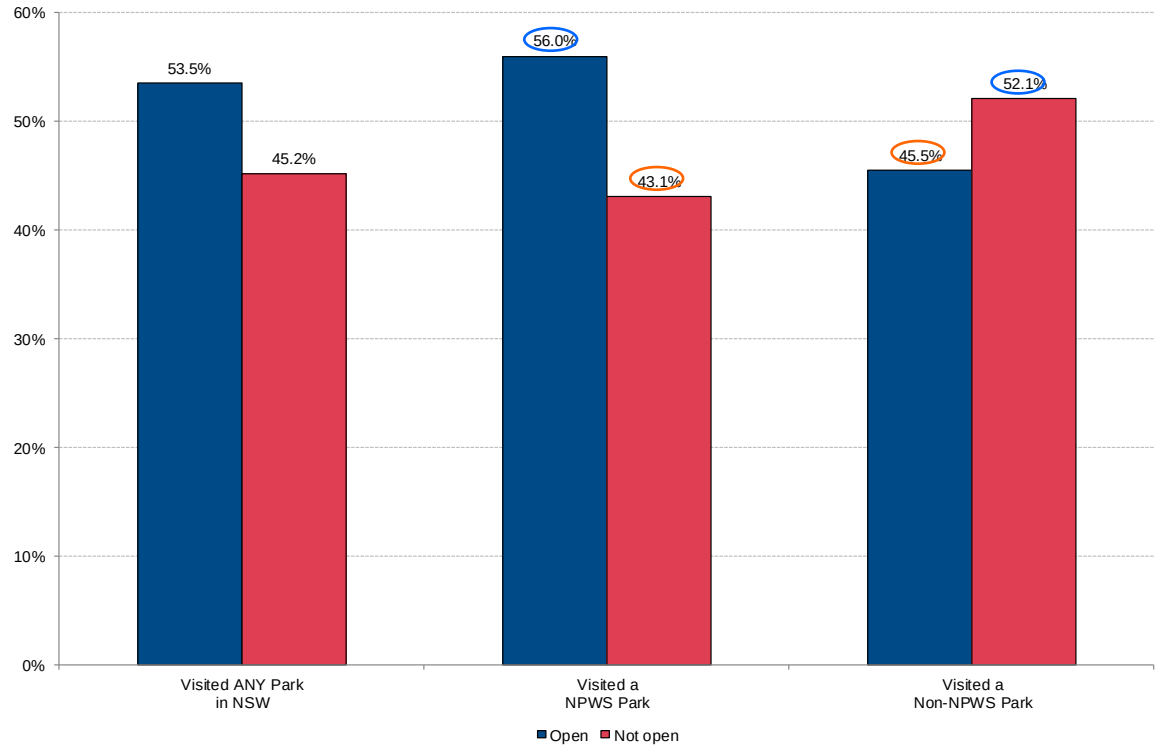


Source: NPWS Parks Visitor Surveys 2018 – Visited a park in NSW in the last 4 weeks
Base: 2018 - n=2,094

Significantly lower than total
Significantly higher than total

To replicate the needs-based segmentation the question on likelihood of visiting a NSW National Park overnight was re-categorised so that those 'open' to visiting gave scores of 6-10 out of ten and those 'not open' to visiting scores of 1-5 out of ten. Chart 112 shows that those that have visited an NPWS park in the last 4 weeks (56.0%) were significantly more likely than those who had visited a non-NPWS park (45.5%) to be *open* to an overnight trip to a NSW National park in the next 12 months.

Chart 76: Open or not open to overnight trip to a NSW National Park in the next 12 months



Source: NPWS Parks Visitor Surveys 2018 – Visited a park in NSW in the last 4 weeks
Base: 2018 - n=2,094

Significantly lower than total
Significantly higher than total

9.1 Segment Profile

When comparing the 4 core segments from the original segmentation study with the NPWS parks Visitor Survey, NPWS park visitors have significantly higher proportions categorised as *Adventurers* (38.4%), as do those who visited non-NPWS parks (32.2%) or any park in NSW (37.5%). Correspondingly, significantly fewer NPWS park visitors are categorised as *Explorers* (17.4%), as are non-NPWS park visitors (17.5%) and visitors to any park in NSW (17.3%). The ***can't say*** response was also significantly low across the three survey visitor categories (see Chart 113).

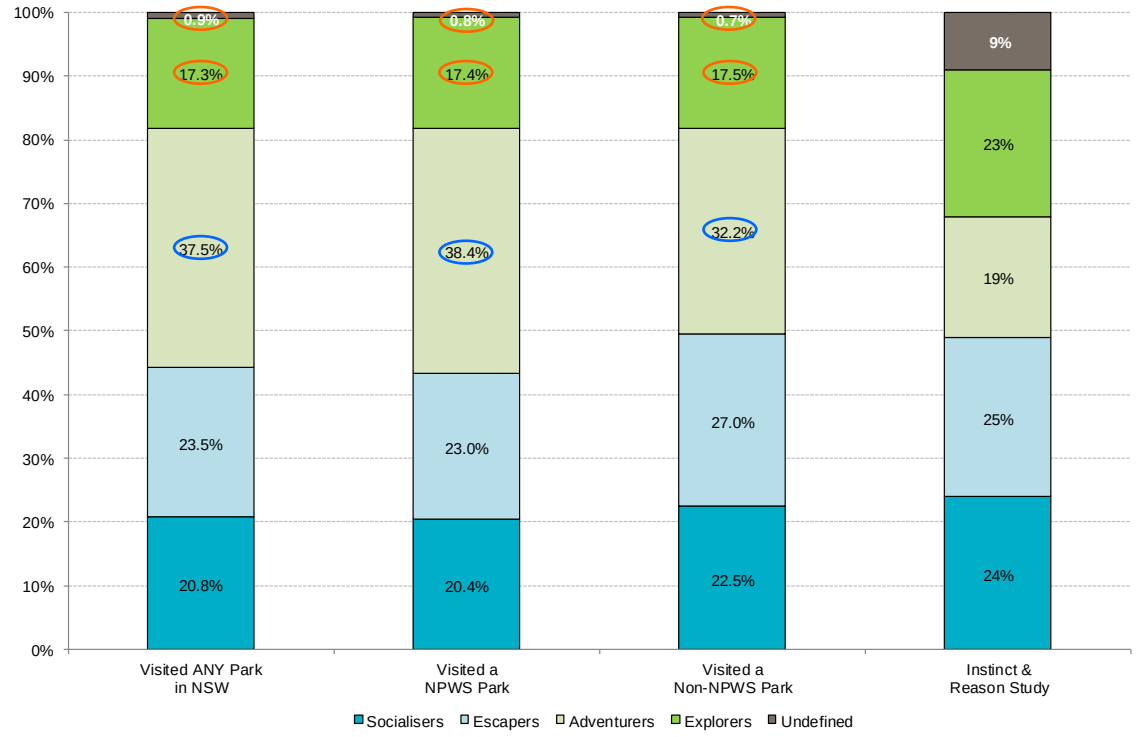
Adventurers are looking for parks to provide venues where they can do their own thing, be spontaneous and independent, where they can be with nature and where walking is great.

Explorers don't want to go to the same place twice, like to do the same activity in different places (fish, surf etc.) and are enticed with special deals, events and word of mouth recommendations.

Socialisers are groups for whom the park is a backdrop – a low cost venue or a venue where they can exercise, or where they'd want to take children to see the natural world.

Escapers are looking for nature to provide a venue to slow the pace down and allow them to put life into context. A venue that has arts, where there is no pressure and does not require walking.

Chart 77: Core Segments



Source: NPWS Parks Visitor Surveys 2018 – Visited a park in NSW in the last 4 weeks; Instinct & Reason Need-based Segmentation
Base: NPWS Parks Visitor Survey 2018 - n=2,094; Instinct and Reason Study – n=2,542

Significantly lower than I&R
Significantly higher than I&R

Split into the 8 sub-segments based on openness to an overnight visit to a NSW National park the following characteristics were evident from the initial segmentation study.

Adventurers open to an overnight stay are married or de facto, working full time, motivated by cultural and educational experiences, and wanting family friendly activities (especially for under 5 year olds).

Adventurers not open to an overnight stay have a lack of knowledge of national parks, needing parks to deliver experiences for slightly older children (11-14 years) that really engage them and encourage parents to take them. However, they generally have one child aged 15-24 and do not work.

Explorers open to an overnight stay are aged 18-34 with children. The have completed tertiary education and work full time. They are passionate about the NPWS and seek balance and wellness activities. They want nature-based escape experiences that encompass adventure/outdoor activities that can be done as couples and young adult singles leveraging varied accommodation.

Explorers not open to an overnight stay have an older skew (aged 65+, retirees) with more entrenched views of parks based on infrequent and uninspiring visits over the years. They need new balance and wellness style activities that are convenient and non-challenging.

Socialisers open to an overnight stay are married/de facto, working full time with younger children and are interested in overnight camping/bushwalks, adventure, plus guided tours that open up adventure experiences.

Socialisers not open to an overnight stay have past experiences that have been uninspiring. They have one child aged 11-14 years. They visit national parks for 1-2 hours, taking very short walks, mainly socialising with family/friends. They need soft adventure experiences that inspire.

Escapers open to an overnight stay are couples and singles aged 25-29 and families with older children. They are well educated and generally work full time. The have a keen desire to visit, but need reasons to get parks into the diary. They need great accommodation options with associated discovery experiences.

Escapers not open to an overnight stay are aged 50-54, retired, poorer with lower education and lower interest and knowledge of national parks. The need low cost discovery experiences that last a day or less and are easy to take part in.

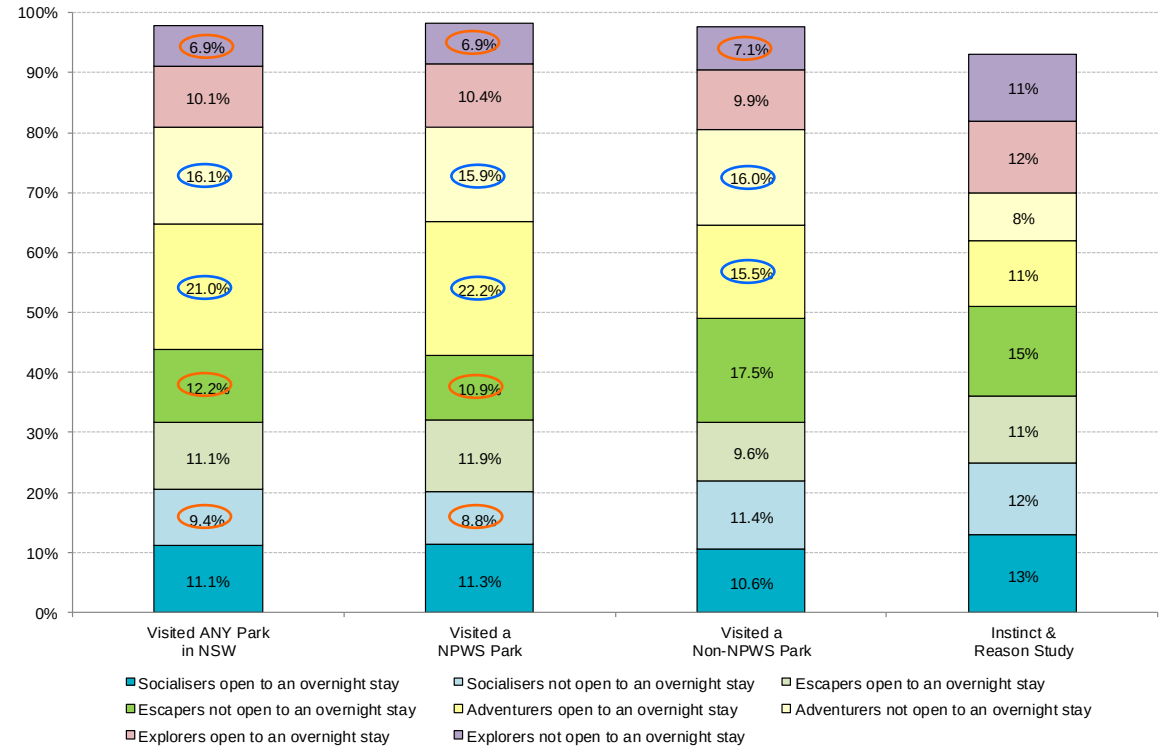
Chart 114 shows that *Adventurers open to an overnight stay* at a NSW National Park have significantly higher proportions in the NPWS Parks Visitor Survey than in the original segmentation (22.2% NPWS visitors, 15.5% non-NPWS visitors and 21.0% visitors to any NSW park c.f. 11% for the Instinct and Reason study). So too are *Adventurers not open* to an overnight stay (15.9% NPWS visitors, 16.0% non-NPWS visitors and 16.1% visitors to any NSW park c.f. 8% for the Instinct and Reason study).

Explorers not open to an overnight stay have significantly lower representation in the NPWS Parks Visitor Survey than in the original segmentation (6.9% NPWS visitors7.1% non-NPWS visitors and 6.9% visitors to any NSW park c.f. 11% for the Instinct and Reason study).

Significantly lower representation is found among NPWS visitors than in the original study for *Escapers not open* to an overnight visit (10.9% c.f. 15%) and *Socialisers not open* to an overnight stay (8.8% c.f. 12%).

Based on the original segmentation, NPWS park visitors would therefore tend to be (a) motivated by cultural and educational experiences, wanting family friendly activities; or alternatively (b) needing parks to deliver experiences that really engage tweens (11-14 year olds) and encourage their parents to take them.

Chart 78: Core Sub-segments



Source: NPWS Parks Visitor Surveys 2018 – Visited a park in NSW in the last 4 weeks; Instinct & Reason Need-based Segmentation
Base: NPWS Parks Visitor Survey 2018 - n=2,094; Instinct and Reason Study – n=2,542

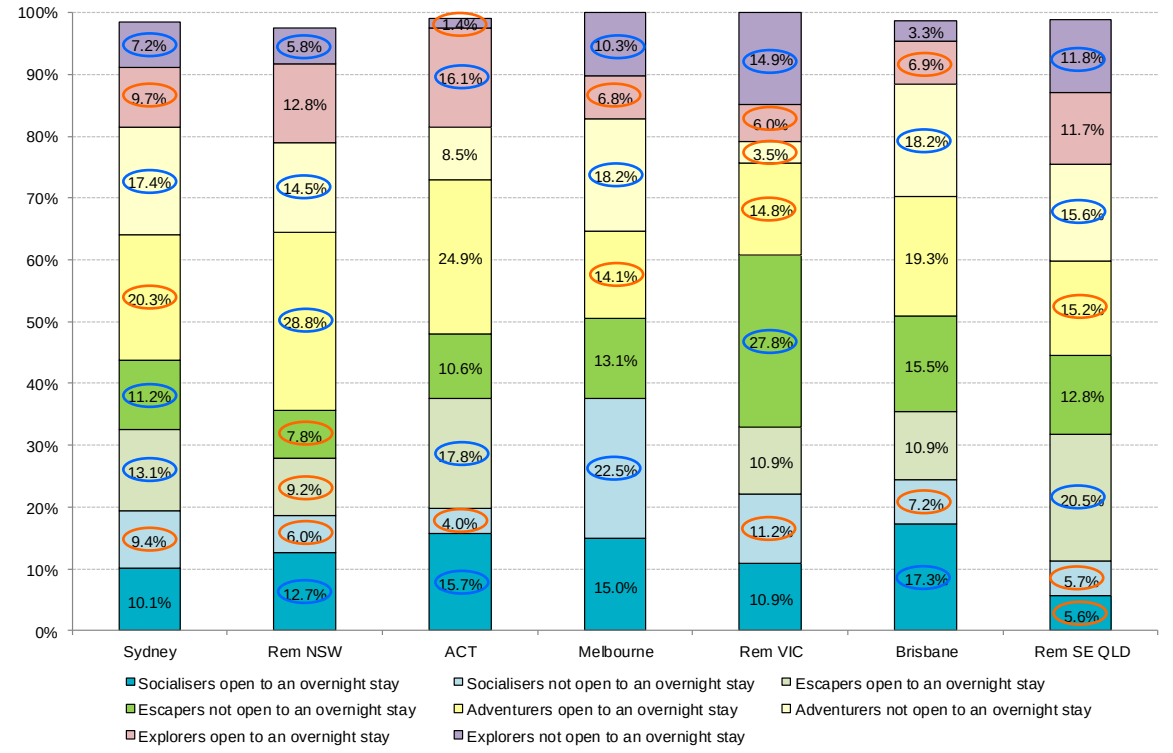
Significantly lower than I&R
Significantly higher than I&R

When analysed by region of origin *Socialisers open to an overnight stay* are more likely to come from Brisbane (17.3%) and the ACT (15.7%). *Socialisers not open* to an overnight stay are more likely to come from Melbourne (22.5%). *Escapers open to an overnight stay* are more likely to reside in remainder southern and southeast QLD (20.5%) and the ACT (17.8%). *Escapers not open* to an overnight stay are more likely to visit from remainder VIC (27.8%).

The largest segment for NPWS visitors is *Adventurers open to an overnight stay*. Members of this segment are more likely to come from remainder NSW (28.8%), ACT (24.9%) and to a lesser extent, Sydney (20.3%), which has a significantly lower proportion than remainder NSW residents.

Adventurers not open to an overnight stay are more likely to be Sydneysiders (17.4%), Melbournians (18.2%) and Brisbanites (18.2%). *Explorers open to an overnight stay* are more likely to reside in the ACT (16.1%), while Explorers not open to an overnight stay are more likely to reside in remainder VIC (14.9%). These results can be seen in more detail on Chart 115.

Chart 79: Core Sub-segments by Region of Origin (NPWS Park Visitors)



Source: NPWS Parks Visitor Surveys 2018 – Visited a NPWS park n the last 4 weeks
Base: n=1,687. Caution – small sample size for Melbourne and Remainder VIC

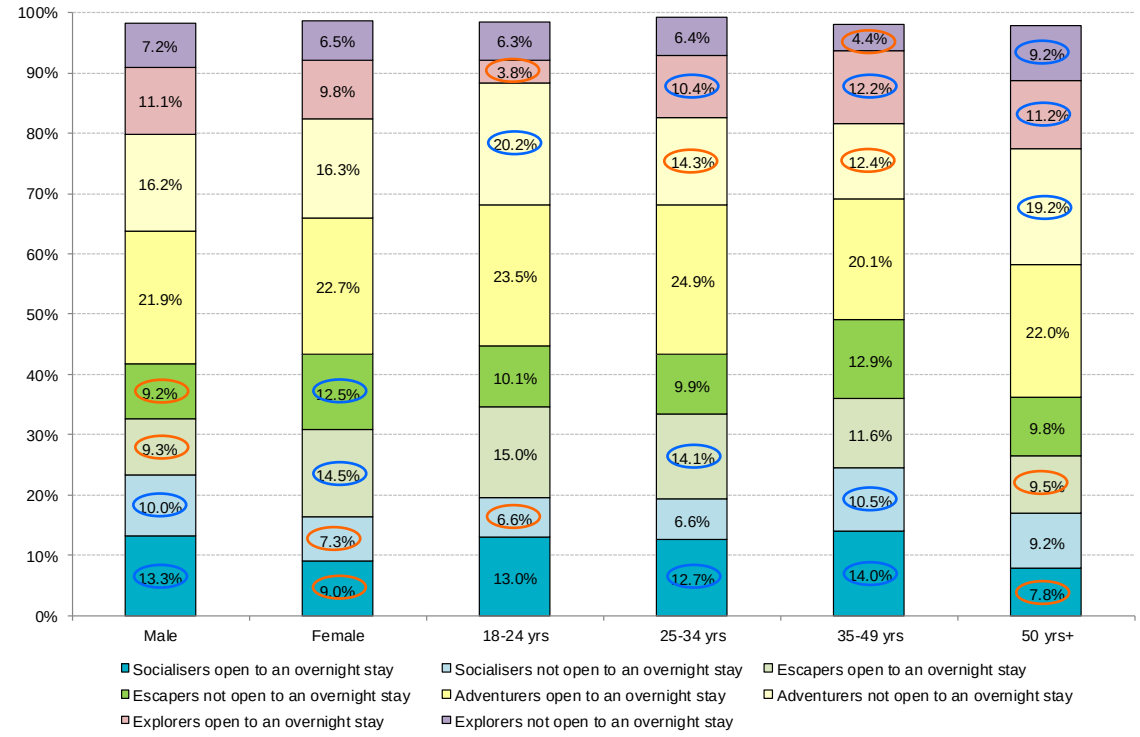
Significantly lower
Significantly higher

While *Adventurers open to an overnight stay* and *Adventurers not open* to an overnight stay are the generally two largest segments when analysed by but sex and age, some prominent differences emerge. Males had significantly higher proportions than females of *Socialisers*, both those *open to an overnight stay* (13.3% c.f. 9.0%) and those not open (10.0% c.f. 7.3%). Conversely, females had significantly higher proportions of *Escapers*, both those *open to an overnight stay* (14.5% c.f. 9.3%) and those *not open* (12.5% c.f. 9.2%).

In terms of age, 25-34 year olds (12.7%) and 35-49 year olds (14.0%) had significantly higher proportions of *Socialisers open to an overnight stay*, while only 35-49 year olds had significantly higher proportions of *Socialisers not open* (10.5%) (see Chart 116).

Males aged 18-24 years had significantly high proportions classified as *Socialisers open to an overnight stay* (20.4% - not shown on chart).

Chart 80: Core Sub-segments by Sex and Age (NPWS Park Visitors)



Source: NPWS Parks Visitor Surveys 2018 – Visited a NPWS park n the last 4 weeks
Base: n=1,687

Significantly lower
Significantly higher

In relation to respondent lifecycle (Chart 117), significantly high proportions were found for the following segments among visitors to NPWS parks:

Socialisers open to an overnight stay – Married 18-34 yrs, no children (24.3%)

Socilialisers not open to an overnight stay – Married 18-34 yrs, children (15.2%); Married 35 yrs+, children (13.5%)

Escapers open to an overnight stay – Single 18-34 yrs, no children (17.8%)

Escapers not open to an overnight stay – Single 35 yrs+, no children (16.3%)

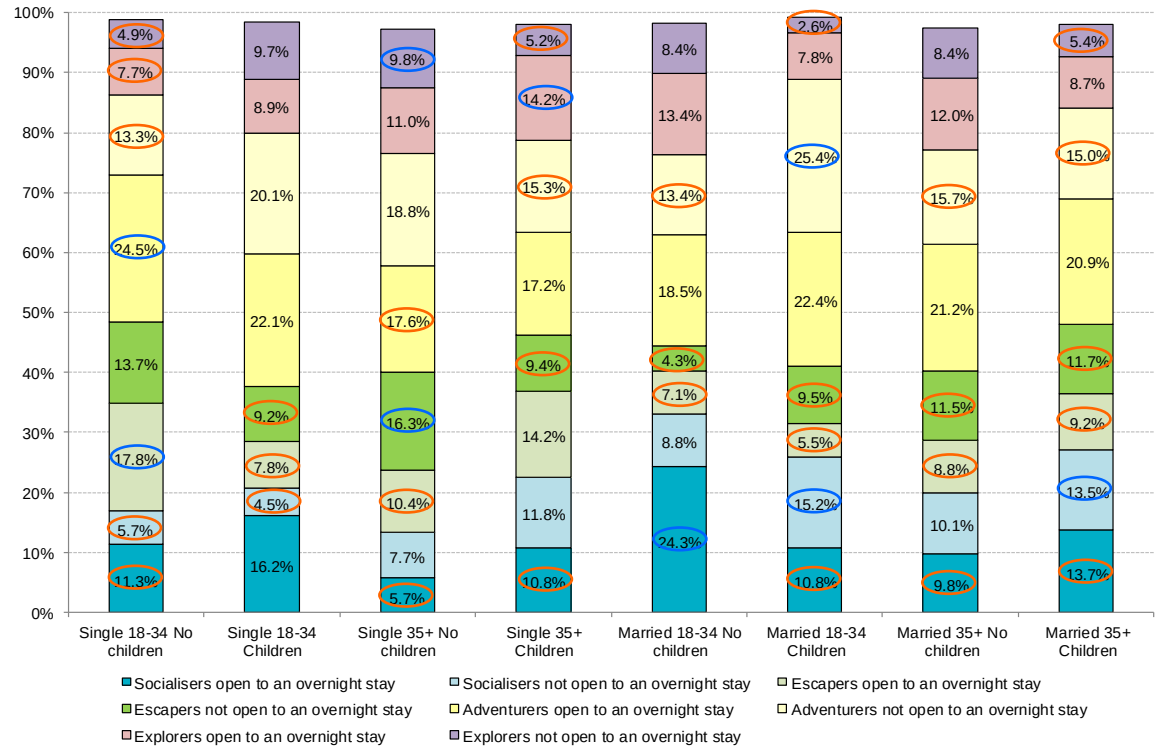
Adventurers open to an overnight stay – Single 18-34 yrs, no children (24.5%)

Adventurers not open to an overnight stay – Married 18-34 yrs, children (25.4%)

Explorers open to an overnight stay – Single 35 yrs+, children (14.2%)

Explorers not open to an overnight stay – Single 35 yrs+, no children (9.8%)

Chart 81: Core Sub-segments by Respondent Lifecycle (NPWS Park Visitors)



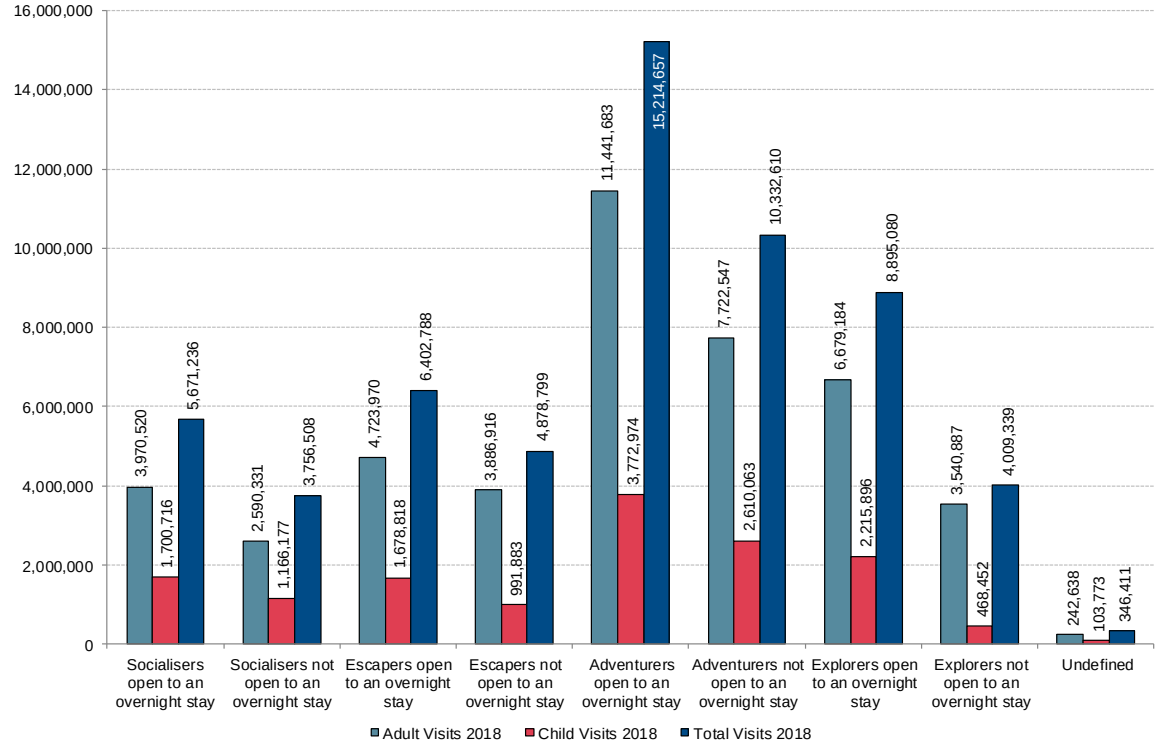
Source: NPWS Parks Visitor Surveys 2018 – Visited a NPWS park in the last 4 weeks
Base: n=1,687

Significantly lower
Significantly higher

9.2 NPWS Park Visits by Segment

Of the total 59.5m NPWS park visits made in 2018 from survey regions (i.e. excluding visits from non-survey regions) *Adventurers open to an overnight stay* contribute 15.2m, comprised of 11.4m adult visits and 3.8m child visits (Chart 118). The second highest contribution to visits was from *Adventurers not open to an overnight stay* with 10.3m visits (7.7m adult visits; 2.6m child visits). The third most visits came from *Explorers open to an overnight stay*, contributing 8.9m visits (6.7m adult visits; 2.2m child visits). These three segments contributed almost 60% of all visits to NPWS parks in 2018 (57.9%).

Chart 82: NPWS Visits by Sub-Segment



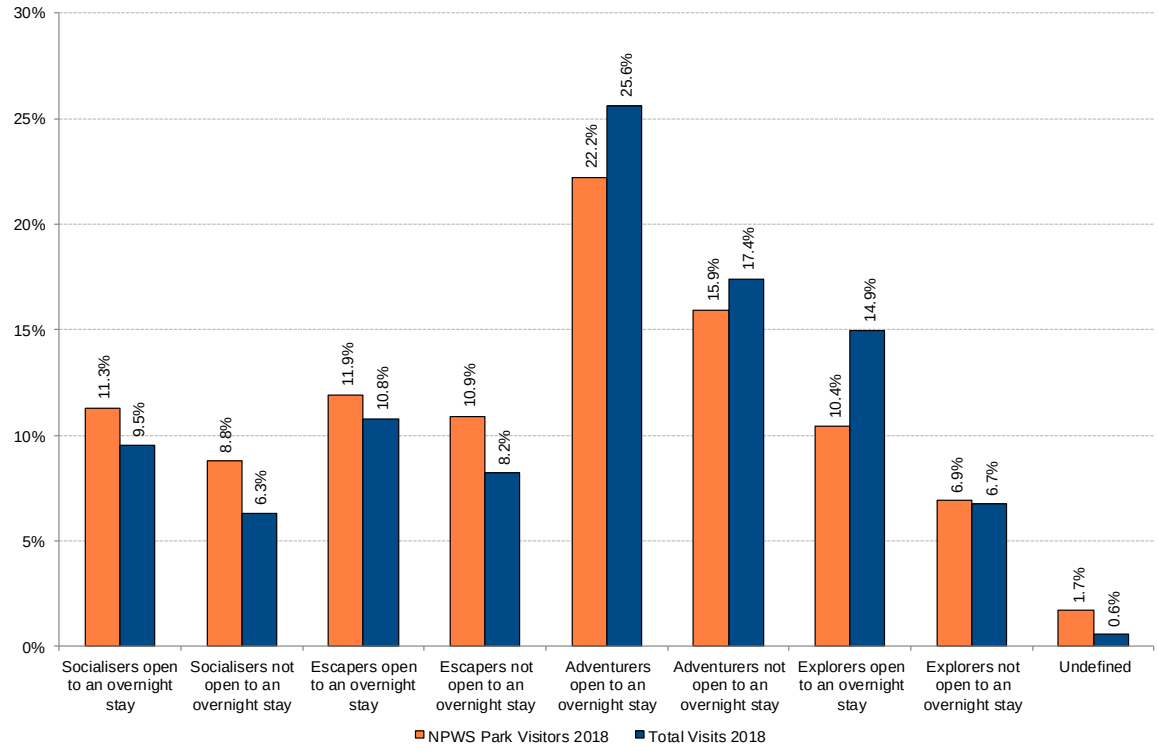
Source: NPWS Parks Visitor Surveys 2018 – Visited a NPWS park in the last 4 weeks
Base: n=1,687

Chart 119 compares the percentage contribution of the eight visitor sub-segments with their contribution to total NPWS park visits. *Adventures open to an overnight stay* contribute a greater proportion of visits than they represent among visitors (25.6% c.f. 22.2%), which means that they average more visits to parks than does the typical visitor (i.e. 3.20 visits c.f. 2.79 visits). *Adventurers not open to an overnight stay* also contribute more to visits than the represent among visitors (17.4% c.f. 15.9%) averaging 3.06 visits. *Explorers open to an overnight stay* also over-contribute to visits compared with their representation among visitors (14.9% c.f. 10.4%) averaging 3.80 visits.

Average visits per sub-segment are as follows:

2018 Average	2.79	Adventurers open to an overnight stay	3.20
Socialisers open to an overnight stay	2.13	Adventurers not open to an overnight stay	3.06
Socialisers not open to an overnight stay	1.78	Explorers open to an overnight stay	3.80
Escapers open to an overnight stay	2.54	Explorers not open to an overnight stay	3.08
Escapers not open to an overnight stay	2.16	Undefined	2.48

Chart 83: NPWS Visit Contribution by Sub-Segment



Source: NPWS Parks Visitor Surveys 2018 – Visited a NPWS park in the last 4 weeks
Base: n=1,687

Adventurers open to an overnight stay remain the major sub-segment across all Branches, with significantly high proportions evident for the Southern Ranges (35.3%) and North Coast (28.7%) Branches.

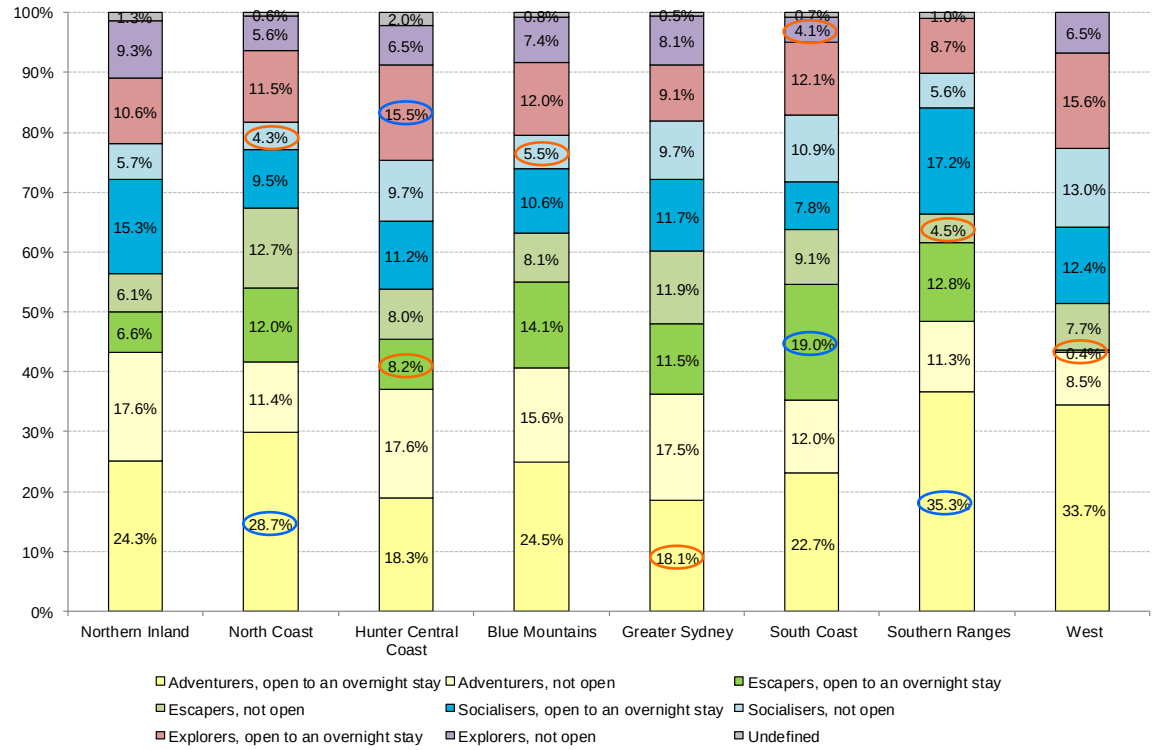
Significantly high proportions were evident for other sub-segments in the following Branches:

Escapers open to an overnight stay – South Coast Branch (19.0%)

Explorers open to an overnight stay – Hunter Central Coast Branch (15.5%)

More detail can be found in Chart 120.

Chart 84: Core Sub-segment by NPWS Branch



Source: NPWS Parks Visitor Surveys 2018 – Visited a NPWS park in the last 4 weeks
Base: n=1,610. Caution – small sample size for West Branch

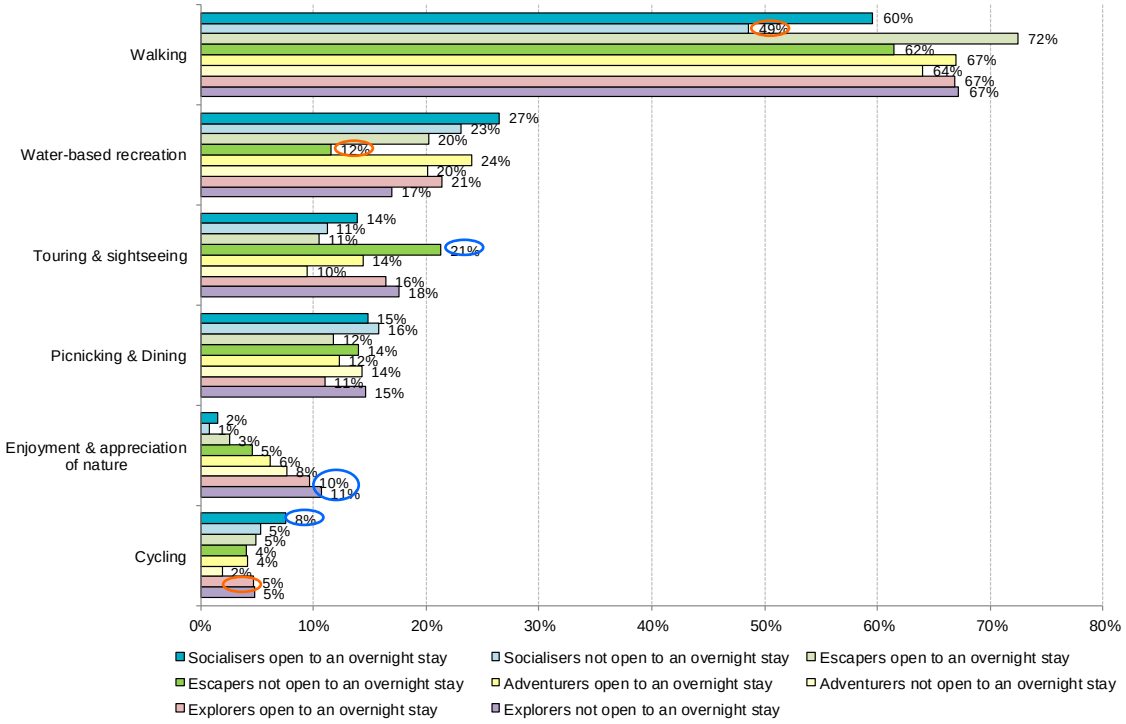
Significantly lower than the total
Significantly higher than the total

9.3 Segments by Visit Attributes

Walking activities in one's most recently visited NPWS park was significantly low for *Socialisers not open to on overnight stay* (49%), while *water-based recreation* was significantly low for *Escapers not open to an overnight stay* (12%). (Chart 121)

Touring and sightseeing was significantly high for *Escapers not open to an overnight stay* (21%), while *enjoyment and appreciation of nature* was significantly high for *Explorers*, both *open* and *not open* to an overnight stay (10% and 11% respectively). *Cycling* was significantly high for *Socialisers open to an overnight stay* (8%).

Chart 85: Major Activities undertaken when visiting most recent NPWS park by Core Sub-segment

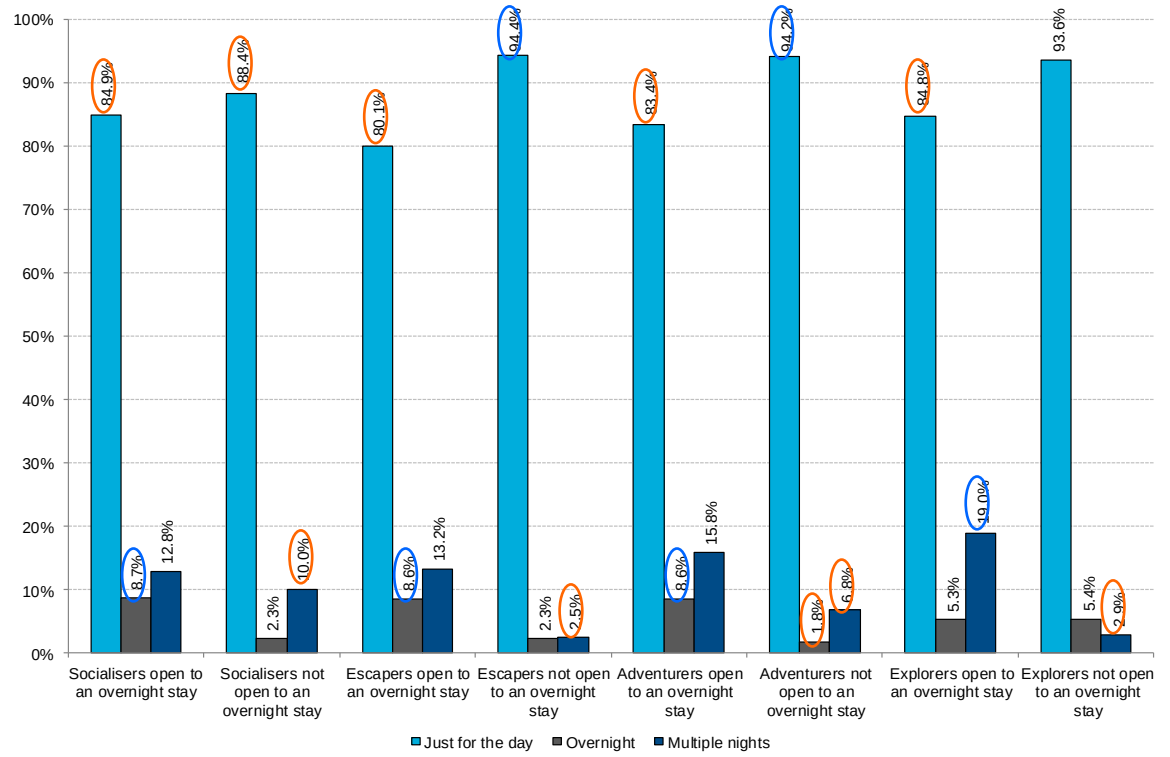


Source: NPWS Parks Visitor Surveys 2018 – Visited a NPWS park in the last 4 weeks
Base: n=1,687

Significantly lower
Significantly higher

Escapers not open to an overnight trip and *Adventurers not open to an overnight trip* had greater proportions indicating that their NPWS visit was *just for the day* (94.4% and 94.2% respectively). Sub-segments with high proportions claiming that their park visit was for an *overnight stay* were *Socialisers open to an overnight trip* (8.7%), *Escapers open to an overnight trip* (8.6%) and *Adventurers open to an overnight trip* (8.6%). The segment with high proportions visiting an NPWS park for *multiple nights* was *Explorers open to an overnight stay* (19.0%). Chart 122 provides more detail.

Chart 86: Duration of Visit to NPWS parks by Core Sub-segment



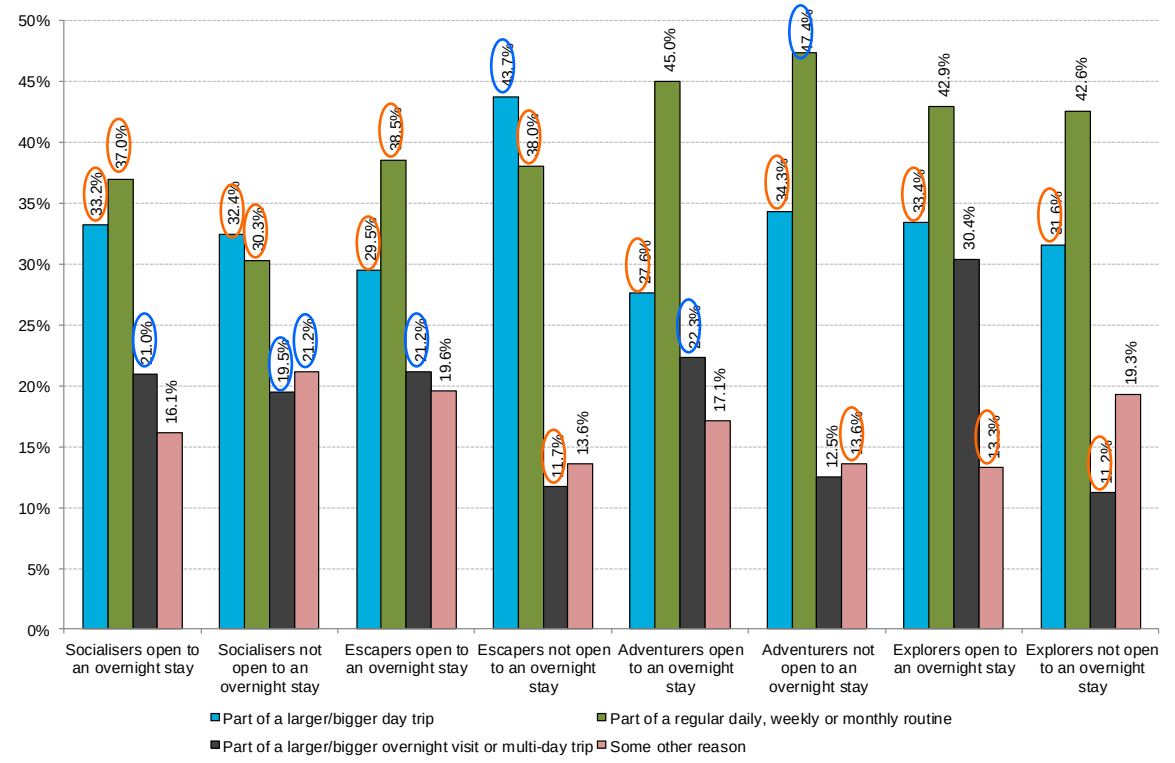
Source: NPWS Parks Visitor Surveys 2018 – Visited a NPWS park in the last 4 weeks
Base: n=1,741.

Significantly lower
Significantly higher

Escapers not open to an overnight stay had the highest proportions indicating that their visit to an NPWS park was *part of a larger/bigger day trip* (43.7%). *Adventurers not open to an overnight stay* had the highest proportion claiming that their NPWS park visit was part of a *regular routine* (47.4%).

Explorers open to an overnight stay had the highest proportions visiting an NPWS park as *part of a larger/bigger overnight visit or multi-day trip* (30.4%), while *Socialisers not open to an overnight stay* had the highest proportion claiming that their park visit was for *some other reason* (21.2%). See Chart 123 for more detail.

Chart 87: Type of Trip by Core Sub-segment

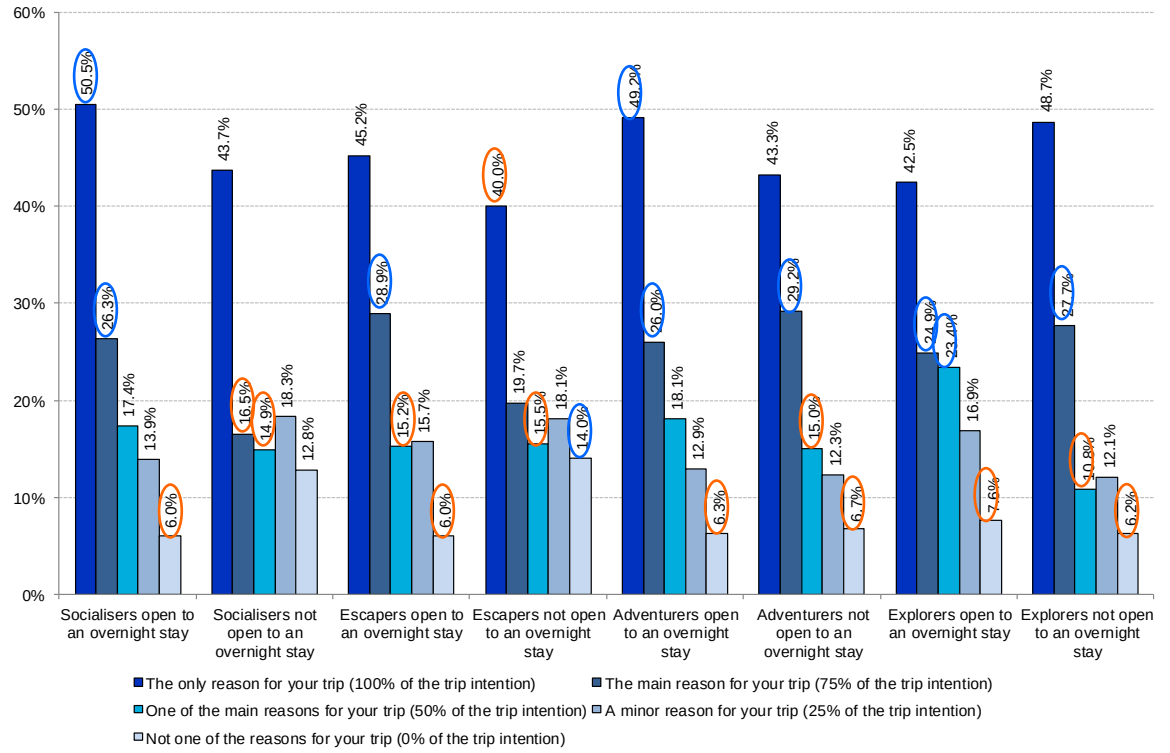


Source: NPWS Parks Visitor Surveys 2018 – Visited a NPWS park in the last 4 weeks
Base: n=1,741.

Significantly lower
Significantly higher

Sub-segments with high proportions claiming that their park visit was their *only reason for their trip* were *Socialisers open to an overnight stay* and *Adventurers open to an overnight stay* (50.5% and 49.2% respectively). *Escapers not open to an overnight stay* had the highest proportions indicating that their NPWS park visit was *not one of the reasons for their trip* (14.0%). Chart 124 provides more detail on the role of the park visit in one's overall travel plan.

Chart 88: Role of NPWS Park in Travel Decision by Core Sub-segment



Source: NPWS Parks Visitor Surveys 2018 – Visited a NPWS park in the last 4 weeks
Base: n=1,741.

Significantly lower
Significantly higher

10. APPENDIX – QUESTIONNAIRE

R09635 *OEH - NATIONAL PARKS VISITOR MONITOR* 2018

STARTTIME

IF LANDLINE PHONE NUMBER, ASK:

Good [Morning/ Afternoon/ Evening]. I'm (SAY NAME) from Roy Morgan. 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. 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, say: If you would like any more information about this project or Roy Morgan, 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'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.

1 YES

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

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.

REFQ 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.

REFQ 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?

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

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

1	New South Wales
2	Another Australian State or Territory
3	Overseas
4	(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]?

1 YES

2 NO

3 CAN'T SAY

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 Office of Environment and Heritage. 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, 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

ENDTIMEQPARK

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 Office of Environment and Heritage. 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, 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

1		ABBEY CREEK (CROWDY BAY)
3856		CRONULLA
9997	Fixed Openend	OTHER (SPECIFY)
9998	Fixed	CAN'T SAY

** 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 Q1N1

[Single]

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

1021		BANYABBA NATURE RESERVE AND STATE CONSERVATION AREA
3690		MILLEWA STATE FOREST
9998	Fixed	CAN'T SAY

ENDTIMEQ1N1

TIMING3 - Q1N1 (ENDTIMEQ1N1-STARTTIMEQ1N1)

ENDIF

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

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

1		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". **

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}

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

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE

1	Abbey Creek (Crowdy Bay)
↓	↓
3852	Cronulla

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

ENDTIMEQ2

TIMING4 - Q2 TO Q2B (ENDTIMEQ2-STARTTIMEQ2)

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?

1	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.

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 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 Openend	OTHER (SPECIFY)
998	Fixed Single	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?

1	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/ NPWS (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

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

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/ NPWS (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

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

IF WALKING/BUSHWALKING AND/OR WALKING THE DOG (CODES 61 TO 62 ON Q8), ASK:

[Single]

1	LESS THAN AN HOUR
2	UP TO HALF A DAY (FOUR HOURS APPROX.)
3	UP TO ONE DAY (EIGHT HOURS APPROX.)
4	MULTI DAY WALK
5	CAN'T SAY/CAN'T RECALL

IF MOST RECENT VISITED PARK IS OEH/ NPWS (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:

[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/?

1	VERY SATISFIED
2	SATISFIED
3	NEITHER SATISFIED NOR DISSATISFIED
4	DISSATISFIED
5	VERY DISSATISFIED
6	CAN'T SAY

[Single]

QDN1. On this occasion was your visit to this park just for the day or did ou stay in it overnight or for multiple nights ?

1	JUST FOR THE DAY
2	OVERNIGHT
3	MULTIPLE NIGHTS
4	CAN'T SAY/CAN'T RECALL

[Single]

QVISPART1. Was visiting this park … ?
READ OUT

1	Part of regular daily, weekly or monthly rountine
2	Part of a larger/bigger day trip
3	Part of a larger/bigger overnight visit or multi-day trip
4	(DO NOT READ) FOR SOME OTHER REASON
5	(DO NOT READ) CAN'T SAY

[Single]

QVISRESN1. Was visiting this park … ?
READ OUT

1	The only reason for your trip (100% of the trip purpose or intention)
2	The main reason for your trip (75% of the trip prupose or intention)
3	One of the main reasons for your trip (50% of the trip prupose or intention)
4	A minor reason for your trip (25% of the trip prupose or intention)
5	Not ine of the reasons for your trip (0% of the trip prupose or intention)
6	(DO NOT READ) 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

1		ABBEY CREEK (CROWDY BAY)
↓		↓
3856		CRONULLA
9997	Fixed Openend	OTHER (SPECIFY)
9998	Fixed	CAN'T SAY
9999	Fixed	NONE/ NO OTHER PARK

** 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.?

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

1		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". **

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.

[Single] {Sort}

Q11AB. Would it have been...?
READ OUT

IF OTHER, HIGHLIGHT OTHER AND TYPE IN RESPONSE

1		Abbey Creek (Crowdy Bay)
3856		CRONULLA
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 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?

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 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.

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 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?

1	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]

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?

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/ NPWS (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?

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

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

ENDIF

ENDIF

[Single]

QDN2. On this occasion was your visit to this park just for the day or did ou stay in it overnight or for multiple nights ?

1 JUST FOR THE DAY

2 OVERNIGHT

3 MULTIPLE NIGHTS

4 CAN'T SAY/CAN'T RECALL

[Single]

QVISPART2. Was visiting this park … ?
READ OUT

1 Part of regular daily, weekly or monthly rountine

2 Part of a larger/bigger day trip

3 Part of a larger/bigger overnight visit or multi-day trip

4 (DO NOT READ) FOR SOME OTHER REASON

5 (DO NOT READ) CAN'T SAY

[Single]

QVISRESN2. Was visiting this park … ?
READ OUT

1 The only reason for your trip (100% of the trip purpose or intention)

2 The main reason for your trip (75% of the trip prupose or intention)

3 One of the main reasons for your trip (50% of the trip prupose or intention)

4 A minor reason for your trip (25% of the trip prupose or intention)

5 Not ine of the reasons for your trip (0% of the trip prupose or intention)

6 (DO NOT READ) CAN'T SAY

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

1		ABBEY CREEK (CROWDY BAY)
↓		↓
3856		CRONULLA
9997	Fixed Openend	OTHER (SPECIFY)
9998	Fixed	CAN'T SAY
9999	Fixed	NONE/ NO OTHER PARK

** 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.?

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 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

1		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". **

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

1		Abbey Creek (Crowdy Bay)
↓		↓
3856		CRONULLA
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.

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?

1		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]

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?

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/ NPWS (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]?

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?

1	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

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?

1	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

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?

1	YES
2	NO
3	CAN'T SAY

IF NO OR CANT SAY (CODES 2 OR 3 ON Q14BB.), SAY:

[Multiple] {Spread:10 }

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

[Single]

QDN3. On this occasion was your visit to this park just for the day or did ou stay in it overnight or for multiple nights ?

1	JUST FOR THE DAY
2	OVERNIGHT
3	MULTIPLE NIGHTS
4	CAN'T SAY/CAN'T RECALL

[Single]

QVISPART3. Was visiting this park … ?
READ OUT

1	Part of regular daily, weekly or monthly rountine
2	Part of a larger/bigger day trip
3	Part of a larger/bigger overnight visit or multi-day trip
4	(DO NOT READ) FOR SOME OTHER REASON
5	(DO NOT READ) CAN'T SAY

[Single]

QVISRESN3. Was visiting this park … ?
READ OUT

1	The only reason for your trip (100% of the trip purpose or intention)
2	The main reason for your trip (75% of the trip prupose or intention)
3	One of the main reasons for your trip (50% of the trip prupose or intention)
4	A minor reason for your trip (25% of the trip prupose or intention)
5	Not ine of the reasons for your trip (0% of the trip prupose or intention)
6	(DO NOT READ) CAN'T SAY

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

1	ABBEY CREEK (CROWDY BAY)
↓	↓
3856	CRONULLA

9997	Fixed Openend	OTHER (SPECIFY)
9998	Fixed	CAN'T SAY
9999	Fixed	NONE/ NO OTHER PARK

** 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.?

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 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

1	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". **

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

1		Abbey Creek (Crowdy Bay)
3856		CRONULLA
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 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?

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.

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 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?

1		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]

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?

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/ NPWS (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?

1	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 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 (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?

1	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

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

[Single]

QDN4. On this occasion was your visit to this park just for the day or did ou stay in it overnight or for multiple nights ?

1 JUST FOR THE DAY

2 OVERNIGHT

3 MULTIPLE NIGHTS

4 CAN'T SAY/CAN'T RECALL

[Single]

QVISPART4. Was visiting this park … ?
READ OUT

1 Part of regular daily, weekly or monthly rountine

2 Part of a larger/bigger day trip

3 Part of a larger/bigger overnight visit or multi-day trip

4 (DO NOT READ) FOR SOME OTHER REASON

5 (DO NOT READ) CAN'T SAY

[Single]

QVISRESN4. Was visiting this park … ?
READ OUT

1 The only reason for your trip (100% of the trip purpose or intention)

2	The main reason for your trip (75% of the trip prupose or intention)
3	One of the main reasons for your trip (50% of the trip prupose or intention)
4	A minor reason for your trip (25% of the trip prupose or intention)
5	Not ine of the reasons for your trip (0% of the trip prupose or intention)
6	(DO NOT READ) CAN'T SAY

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

1		ABBEY CREEK (CROWDY BAY)
3856		CRONULLA
9997	Fixed Openend	OTHER (SPECIFY)
9998	Fixed	CAN'T SAY
9999	Fixed	NONE/ NO OTHER PARK

** 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.?

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 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

1		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". **

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

1		Abbey Creek (Crowdy Bay)
3856		CRONULLA
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 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.

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?

1		ABBOTSBURY
489		SAMURI BEACH
997	Fixed	OTHER (SPECIFY)

	Openend	
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/ NPWS (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]?

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?

1	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?

1	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
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

97	Openend	OTHER (SPECIFY)
98	Single	CAN'T SAY

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

ENDIF

ENDIF

[Single]

QDN5. On this occasion was your visit to this park just for the day or did ou stay in it overnight or for multiple nights ?

1	JUST FOR THE DAY
2	OVERNIGHT
3	MULTIPLE NIGHTS
4	CAN'T SAY/CAN'T RECALL

[Single]

QVISPART5. Was visiting this park … ?
READ OUT

1	Part of regular daily, weekly or monthly rountine
2	Part of a larger/bigger day trip
3	Part of a larger/bigger overnight visit or multi-day trip
4	(DO NOT READ) FOR SOME OTHER REASON
5	(DO NOT READ) CAN'T SAY

[Single]

QVISRESN5. Was visiting this park … ?
READ OUT

1	The only reason for your trip (100% of the trip purpose or intention)
2	The main reason for your trip (75% of the trip prupose or intention)
3	One of the main reasons for your trip (50% of the trip prupose or intention)
4	A minor reason for your trip (25% of the trip prupose or intention)
5	Not ine of the reasons for your trip (0% of the trip prupose or intention)
6	(DO NOT READ) CAN'T SAY

ENDIF

ENDTIMEQ10D

TIMING14 - Q10D TO Q16DB (ENDTIMEQ10D-STARTTIMEQ10D)

ENDIF

[Multiple]

QSEGMENT. Which of the following activities have you undertaken in the last 12 months FOR LEISURE PURPOSES?
READ OUT

1. Education experiences of some form?
2. Aboriginal cultural experience? [*Keep position*]
3. Non-aboriginal small group heritage or cultural tours? [*Keep position*]
4. Experiences that provided you with a sense of balance/time out/health/ wellness?
5. Nature appreciation?)
6. A low cost trip just to get out of home?)
7. Taken visitors to visit a NSW national park?
8. Visited a natural place just to escape technology?
9. A family fun experience?

10. Exercising to get healthy?
11. Engaging with the arts in some way?
12. Attended an outdoor music/culture event?
13. Attended an outdoor sporting event?
14. Stayed overnight in a special location ?
15. An extended walking trip?

98 [DO NOT READ] NONE OF THESE [*Keep position ◆ Exclusive*]
99 [DO NOT READ [CAN'T SAY/CAN'T RECALL [*Keep position ◆ Exclusive*]

[Multiple]

QLIKELY. Using a scale of 1 to 10 where 1 means not at all likely and 10 means very likely, how likely are you to consider each of the following types of trips in NSW to a NSW national park IN THE NEXT 12 MONTHS?
READ OUT

1. A day trip to a NSW national park
2. An overnight trip to a NSW national park

DEMOGRAPHICS

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	Open end	OTHER (SPECIFY)
98	Single	CAN'T SAY/REFUSED

[Single]

Q18. What is the highest level of education you have reached?

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?

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?

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?

1	YES
2	NO
3	CAN'T SAY

ENDIF

[Single]

Q22. RESPONDENT LIFECYCLE - COMPUTED FROM QAGE, QCHILDREN, Q20 AND Q21

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

FROM WAVE 11 – ASK EVERYONE

[Single]

QHHINCPV1. What is the approximate ANNUAL IINCOME of your household (i.e. all income earned before any expenses, including tax, are deducted)?

1	$33,800 or less per year ($650 per week or less)
2	$33,801-$65,000 per year ($651-$1,250 per week)
3	$65,001-$104,000 per year ($1,251-$2,000 per week)
4	$104,001-$197,600 per year ($2001-$3,800 per week)
5	More than $197,600 per year (more than $3,800 per week)
6	(DO NOT READ) CAN'T SAY
7	(DO NOT READ) PREFER NOT TO SAY

IF CAN'T SAY/PREFER NOT TO SAY HOUSEHOLD INCOME (CODES 6 OR 7 ON QHHINCPV1), ASK:

[Single]

QHHINCPV2. Well would you say that your approximate annual household income is $65,000 or less per year or more than $65,000 per year?

1	$65,000 or less per year ($1,250 per week or less)
2	More than $65,000 per year (more than $1,250 per week)
3	(DO NOT READ) CAN'T SAY
4	(DO NOT READ) PREFER NOT TO SAY

ENDIF

ENDIF

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, you can phone us on 1800 337 332

ENDTIMEQ17

TIMING15 - Q17 TO END (ENDTIMEQ17-STARTTIMEQ17)

END-OF-QUESTIONNAIRE

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Prepared by:
<Insert your name>

For Further information contact:

Roy Morgan
Tonic House
386 Flinders Lane, Melbourne
Ph: +61 (3) 9629 6888
E: askroymorgan@roymorgan.com

File Reference: