



Identifying & Mapping the Values of Victorian Public Lands



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June 2014

This report was produced for the use of Parks Victoria. The Authors would like to acknowledge the help of Kelly De Bie in the project and also Tony Varcoe for his support. Photos have been provided by Parks Victoria or the authors

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1 Summary

Summary

This project was undertaken to provide public input to assist Parks Victoria in better understanding the values and management preferences of Victorians in relation to public lands. A total of 1905 respondents provided information about the values they associated with public lands and their preferences for future management via an interactive, web-based public participatory geographic information system (PPGIS).

Landscape values are perceptions about places that determine land use aspirations and conflict. When landscape values are scientifically identified and mapped, they provide for a wide range of land use suitability and social impact analyses. This project developed a state wide geospatial database of people's values and preference for public lands using public participation geographic information systems (PPGIS). This research will relate landscape values to biophysical land features to identify patterns, processes, and potential areas of land use conflict. The project will provide a comprehensive, internet-based geospatial database of values for Parks Victoria that can be used in conjunction with their existing GIS layers.

1.1 Objectives of Study

Overall Objective: The development of a public participation GIS system for collecting information on public values and preference related to Victoria's public land and in particular those lands managed by Parks Victoria.

Specific research objectives:

1. Identify the abundance and distribution of public land values and management preferences in Victoria. .
2. Create an internet-based database of landscape values and preferences for Victorian protected areas and public land
3. Identify the relationship between landscape values and landscape management preferences with physical landscape features
4. Demonstrate how landscape values can be used to predict future land use conflict based on patterns and distributions of values and preferences.

1.2 Overview of Methods

In collaboration with Parks Victoria, the researchers designed and promoted an interactive website (<http://www.landscapemap2.org/pvictoria/> or <http://www.parksvictoria.net>) that allowed the general public to identify and map the values they associated with public lands and their preferences for future management. Public participation GIS (PPGIS) is an approach to geospatial technology that was conceived in 1996 at the meeting of the National Center for Geographic Information and Analysis (NCGIA) in the U.S. to describe how GIS technology could harness local spatial knowledge to empower marginal populations and improve decision-making processes. In PPGIS, participants are requested to identify locations on a map, either hardcopy or digital, using stickers, markers, or digital annotations. Since the 1990s, the range of PPGIS applications has been extensive, ranging from community and neighbourhood planning to environmental and natural resource management to mapping traditional ecological knowledge. A detailed description of the methods used is provided in Chapter 3. The PPGIS data together with the survey data were analysed and these results are presented in Chapters 4 and 5.

1.3 Key Results

- The web-based PPGIS interface for identifying values people associate with public lands and their preferences for future management attracted respondents 1,905 who mapped 35,347 markers.
- The geographic distribution of participants was considered reasonably representative of the general population distribution of Victoria.
- The mapping effort of respondents was good. On average people mapped 18.8 markers. The largest number of locations mapped was 426. It appeared having less variables to map compared to previous studies was a good trade-off in terms of respondents mapping a greater diversity of variables. Based on this and previous studies it appears that the total number of points mapped and the average amount of time spent on a survey is a relatively stable trait.
- The most frequently mapped values were recreation (n=5,939/20% of all markers), scenic/aesthetic (4,904/16%), biological (3,397/11%), life sustaining (2,051/7%), and wilderness (2,030/7%). The least frequently mapped values were economic (644/2%),

spiritual (845/3%), and therapeutic (1197/4%). It should be noted that this does not reflect the sequence in which the variables were presented to respondents.

- The mapping of management preferences, in aggregate, totalled 4,446 markers or about 15% of all markers mapped. The most frequently mapped preferences were to prohibit future development and/or land use change (1439/32%), to increase conservation and protection (1277/29%), and to improve vehicle access (415/9%). These results were reflected in the content analysis of additional comments provided by respondents, although issues and concerns related to access, followed by development received more attention than conservation. The least frequently mapped preferences were to increase extractive activities (e.g., mining, logging) (57/1%), to increase resource use (e.g., grazing) 105 (2%), and to increase tourism development (118/3%).
- There was a statistically significant association between public land type and landscape value ($X^2=1160.4$, $df=100$, $p < .001$). Details are provided in Chapter 4 and are consistent with expectations.
- Two metrics measuring the frequency of mapped values were used to identify those public lands respondents valued most highly. There were four standouts in this area - Alpine, Wilsons Promontory, Grampians, and Great Otways National Parks. These four national parks were mapped more than twice as often as any other park/reserve in Victoria.
- Trail users comprised the largest segment of the respondents.
- The data suggests some similarities with the visitor type typology derived from previous Parks Victoria visitor segmentation research (Zanon et al. (in press)), although notably the trail user segment compared to the sightseeing segment was much larger in this study.
- Respondents were typically high users of public lands with 87% indicating they used public lands at least monthly. The use of Parks Victoria lands was lower and quite typical, with two being the most common number of visits per year. .
- Approximately 45% of PPGIS participants self-identified as having good or excellent knowledge of Victorian public lands.
- To examine whether a large sample could be achieved in a small time frame, small incentives were offered to each participant. Although this consumed effectively the entire budget of the project, the incentive was considered instrumental in the high response rate. Other notable influences on the success of the project included Parks Victoria who played a more active role in marketing the survey than in previous projects, Market Equity who assisted in distributing the postcards, as well as the Victorian National Parks Association and other organised groups who promoted the website to their member lists. Participants received a Hoyts movie voucher, a \$10 Amazon voucher or they could choose one of three non-profit organisations and we made a \$10 donation on their behalf and tax invoices were

provided to the participant. It is concluded that although the study was reliant on considerable support from the university researchers and other collaborators, the methods were both cost and time effective



2 Introduction

2.1 Background

This project is part of an on-going commitment from Parks Victoria to improve public engagement and understanding of how the public value parks and their preference for future development. While much work has been dedicated to economic valuation, there has been little systematic research to assess the social and cultural values attributable to public lands across the range of different public land types. These less tangible values of public lands are considered to be undervalued despite suggestions they are likely more important to the general public than many material values associated with public lands (Harmon & Putney, 2003). The true value of public lands should account for multiple, interacting values including environmental services, personal values associated with learning, the psychological benefits of visiting a site, the cultural and spiritual values associated with particular landscapes, and the social value of bringing families and friends together through recreation. To the best of our knowledge this is the first international study whose purpose was to comprehensively identify and compare the mix of social and cultural ecosystem values associated with the different types of public lands and protected areas within an entire state.

2.2 Overview of the Process

This project implemented a web-based public participation GIS (PPGIS) system to collect place-based spatial data about perceived values of public land and preferences for future development in Victoria. The website <http://www.landscapemap2.org/pvictoria/> was promoted to local residents and tourists via standard media, organized groups (including the Victorian National Parks Association) and through distribution of postcards as part of the annual visitor satisfaction surveys. Respondents visited the website, requested an access code (or used a given one if they received a postcard onsite), and mapped their park experiences and perceived environmental impacts by placing markers on a map of the study area. Several different map views of the study area (road, relief, satellite) were provided in the PPGIS system to orient participants. Further detail on the history and relevance of PPGIS as a method is available at the Landscapes Values Institute (www.landscapevalues.org). The researchers then analysed the results and

in addition to report have also published a scientific journal article on this study which is also available on the Landscape Values Institute website.

This report describes: 1) the methods used; 2) the spatial distribution of values and preferences 3) the relationship between values and preferences, and 4) the relationships between respondent characteristics and values. The report concludes with recommendations pertaining to this and future PPGIS studies.



3 Methods

3.1 Study Location

The study was conducted in the state of Victoria. Victoria has a public land system covering 35% of the terrestrial land area with the largest contiguous areas located in the mountainous eastern third of the state, and the northwest sector. Parks and conservation reserves make up 3.98 million hectares (approximately 50% of all Crown land), state forests comprise 3.14 million hectares (approximately 40%), and other Crown lands cover 796,000 hectares (10%) including Commonwealth Government land, metropolitan parks, and land held under lease from the Crown (DEPI, 2013). Approximately 90% of Victorian parks and conservation reserves by area have been assigned protected area status category I or II, under the International Union for Conservation of Nature (IUCN) system, which is arguably quite typical for park systems established in the pre-1900s.

The public land estate in Victoria is presumed to collectively contain the full range of values described in the landscape values typology in Table 1. However, the legislative intent of the public land reservation, in combination with regulatory policies and management guidelines, suggest that certain categories of public lands may exhibit stronger association with certain types of landscape values expressed by the public. In Table 1, we provide some presuppositions about expected value associations with public land types based on our reading of the enabling legislation and contemporary regulatory and management policies. The purpose here is not to examine the legislative rationality behind the original reservation of the public land, but to determine the extent to which the public perceives public land values to be consistent with the purposes of the reservation. One would not expect landscape values to be distributed proportionately across the highly variable biophysical landscapes associated with public lands, but rather exhibit differentially important associations based on the features and qualities of the area and the characteristics of the people that express values for the different types of public land.

Table 1: Variables respondents could map on the PPGIS website including operational definitions and expected associations of values with public lands in Victoria.

Values	Operational definition	Expected association by public land type
Scenic/aesthetic	These areas are valuable because they contain attractive scenery including sights, smells, and sounds.	National parks, state forests, coastal reserves
Recreation	These areas are valuable because they are where I enjoy spending my leisure time – with family, friends or by myself, participating in outdoor recreation activities (e.g., camping, walking, or fishing).	National parks, state forests, state parks, and community/metro/regional parks
Economic	These areas are valuable because they provide natural resources or tourism opportunities.	State forests, national parks
Life Sustaining	These areas are valuable because they help produce, preserve, clean, and renew air, soil, and water.	State forests, reservoirs
Learning /education/research	These areas are valuable because they provide places where we can learn about the environment through observation or study.	National parks, state forests
Biological/conservation	These areas are valuable because they provide a variety of plants, wildlife, and habitat.	National parks, state forests, marine sanctuaries, nature conservation reserves
Heritage/cultural	These areas are valuable because they represent natural and human history or because they allow me or others to continue and pass down the wisdom and knowledge, traditions, and way of life of ancestors.	National parks, heritage/cultural reserves
Therapeutic/health	These places are valuable because they make me feel better, physically and/or mentally.	Community/metro parks, state forests
Spiritual	These areas are valuable because they are sacred, religious, or spiritually special places or because I feel reverence and respect for nature here.	National parks
Intrinsic/existence	These areas are valuable in their own right, no matter what I or others think about them.	National parks, natural features reserves
Wilderness/pristine	These areas are valuable because they are wild, uninhabited, or relatively untouched by European activity.	National parks, wilderness areas
Preferences	Operational definition	
Increase conservation/protection	Increase conservation and protection here (e.g., due to encroaching development, feral animals/weeds, illegal use).	
Add recreation facilities	Add more recreation facilities (e.g., walking trails, playgrounds, picnic ground) here.	
Add tourism services/development	Add new tourism services (e.g., guided tours, signs, brochures, apps) or development (e.g., trail head, toilet block, visitor centre) here (Please specify).	

Improve access	Improve vehicular access (i.e., from no access to 4WD access or from 4WD road to 2WD road). Note: please map increased walking trail access under the recreation facilities icon.
Improve bushfire protection	Improve bushfire protection here.
Resource extraction	Engage in resource extraction such as logging or mining here.
Resource use	Engage in resource use such as grazing, hydroelectric energy, or wind energy here.
Decrease or limit access	Decrease or limit access here (e.g., close to vehicles or 4WD).
No development or change	No development or change to land use here.

3.2 Survey Procedure

After consultation with Parks Victoria staff and based on current literature, key values and preference variables for investigation were determined and human ethics approval was sought and gained. The PPGIS survey website that was developed and implemented used a combined Google® Maps and Earth application interface (see <http://www.parksvictoria.net>). The research team pre-tested the site in November 2013 and made several changes to improve the ease of navigation and reduce the number of markers we requested participants to map. The study website consisted of an opening screen for participants to either enter or request an access code, followed by an informed consent screen for participation, and then a Google® maps interface where participants drag and drop digital markers onto a map of Victoria. The interface consisted of two different panels with the first panel containing markers representing 11 landscape values and the second panel consisting of nine management preferences (see definitions in Table 1). Figure 1 shows the mapping interface. The instructions requested the participant to “drag small icons onto a map of Victoria to identify places you value and your public land preferences...although you can place markers anywhere, the focus of this study is on public lands”. The different types of markers placed and their spatial locations were recorded for each participant on the web server in a database, along with other information including a timestamp of when the marker was placed, the Google® map view at time of marker placement, and the Google® map zoom level (scale) at which the marker was placed. Participants could place as few or as many markers as they deemed necessary to express their values and management preferences.

Standard Google Maps navigational tools were available to pan and zoom the map to different locations to place the markers. Respondents entered their postcode before they began the mapping exercise and the postcode allowed respondents to begin the mapping exercise at an appropriate map scale (Google Maps zoom level 13) but they could zoom in to a higher scale. This presumed they would begin mapping in the area they resided (and it defaulted to Melbourne if they didn't put in a postcode). To aid navigation a quick navigation tab was included which allowed

respondents to quickly move to 6 parks chosen because of their high visitation.

These were:

- Mornington Peninsula National Park
- Port Campbell National Park
- Dandenong Ranges National Park
- Grampians National Park
- Yarra Ranges National Park
- Otways National Park
- Wilson Promontory National Park
- Alpine National Park
- Mt Buffalo National Park
- Melbourne Area

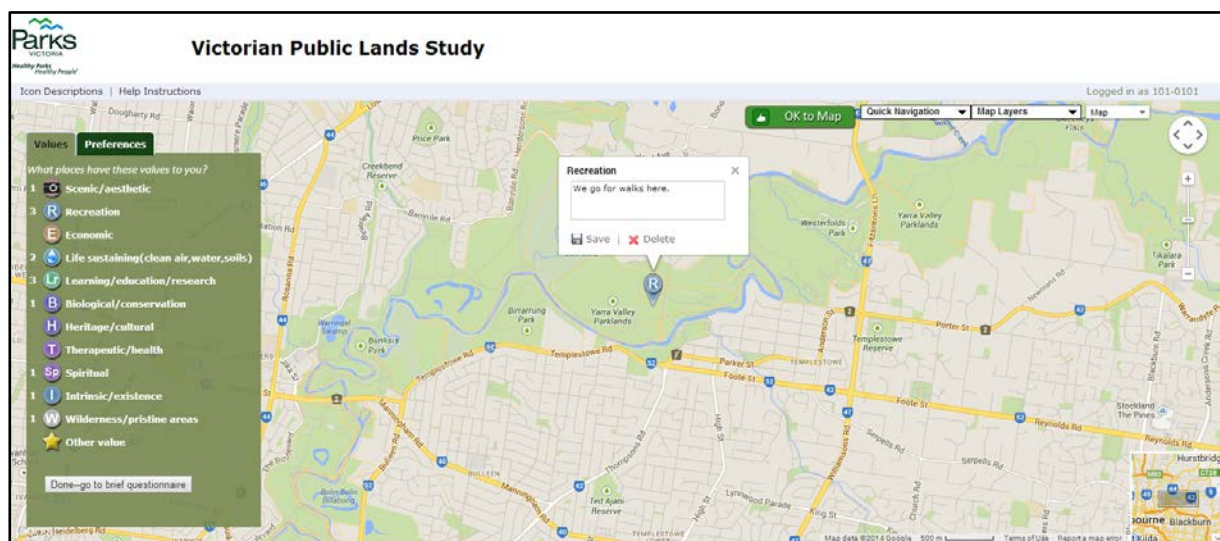


Figure 1: Screen image of PPGIS interface

Following completion of the mapping activity (placing markers), participants were directed to a new screen and provided with a set of 15 text-based survey questions to assess general, non-spatial public land management preferences and to measure respondent socio-demographic characteristics (These results are presented in Chapter 5 and the survey used together with a summary of results is presented as Appendix 1). PPGIS data collection ended with completion of the survey questions.

Study participants had the option to return to the PPGIS website later to use their access code to add new markers or to adjust previously-placed markers.

3.3 Sampling and recruitment

From December 2013 to February 15, 2014, study participants were recruited using both purposive and convenience sampling methods: (1) visitors to 16 national parks, 5 state parks and 9 metropolitan parks were contacted on site as part of the Parks Victoria's annual visitor satisfaction survey and provided with an invitation card describing the study, along with the study URL and an access code (see Appendix 2 for the card and appendix 3 for the dates of surveying); (2) Parks Victoria prepared and distributed a press release about the study, placed a link to the study URL on the agency's website, and an agency spokesperson promoted the study in an Australian Broadcasting Corporation radio interview; and (3) a recruitment letter was distributed to members of the Victoria National Parks Association (VNPA), a non-governmental organization (NGO) that promotes nature conservation in Victoria. Participants in the study were also encouraged to refer friends, relatives, and acquaintances to the study website. Any member of the public could request an instant access code to participate in the study. To encourage participation, three incentive options were provided to the first 1,500 study participants: (1) a \$10 electronic voucher redeemable at Amazon.com, (2) a free movie pass, or (3) the donation of \$10 in the participant's name to one of three pre-selected charities. These were chosen by the researcher, and included a non-profit with a Victorian park focus; one with a national wildlife focus and one with an international focus that was rated Australian charity of the year for its record of getting funds on the ground.

3.4 Data analysis

3.4.1 Participant characteristics

We assessed the representativeness of study participants with census data on the variables of age, gender, education, income, and family structure. We also asked participants to self-identify their level of knowledge about public lands in Victoria, their frequency of use of public lands, and the number of times they had visited national or state parks in the past 12 months. We also examined the geographic distribution of participants within Victoria based on postcode to assess the participant distribution relative to population distribution.

3.4.2 Association of mapped values with public lands

Summary statistics were generated to describe the frequency distribution and general location of the PPGIS mapped values. The mapped point data was then intersected (with 100 metre tolerance) with the public land classification (PLMGEN) geodatabase (polygons) maintained by the Victorian Department of Environment and Primary Industries (DEPI)

(<http://services.land.vic.gov.au/catalogue/metadata?anzlicId=ANZVI0803004213&publicId=guest&extractionProviderId=1>). We selected 11 major categories of public lands (coastal reserves, community/metro/regional parks, state forests, marine parks and sanctuaries, national parks, natural features reserves, nature conservation reserves, wilderness parks, state parks, and water production and reservoir areas) that accounted for over 90% of Victorian public lands, and cross tabulated point counts with the categories. We generated chi-squared statistics and standardized residuals to determine whether the number of mapped value points differed significantly from the number of points that would be expected in each public land category.

We also conducted correspondence analysis of the two categorical variables to visualize the value and public land type relationships. Correspondence analysis computes row and column scores and produces normalized plots based on the scores. In the plot, the distances between category points reflect the relationships between the categories with similar categories plotted close to each other.

Interpretation of the plot is done by rows (public land types) and columns (values). If two public land types have very similar profiles, their points in the plot will be close together. Similarly, if two values have similar profiles, their points will be proximate. The distance between a row point and a column point has no direct interpretation but the directions of columns and rows from the plot origin are meaningful.

3.4.3 Association of mapped values with public lands by IUCN category

To determine the association between landscape values and protected areas classification, we identified all public lands in Victoria that had been classified according to the IUCN scheme. We intersected these polygons with the mapped PPGIS data. We cross-tabulated the point counts with the categories and generated chi-squared statistics and standardized residuals to determine whether particular types of values are associated with different IUCN protected area categories. We also ran correspondence analysis to visually display the associations of values by IUCN categories in a normalized plot.

Association of mapped values with Parks Victoria Level of Protection (LoP)

The mapped values were intersected with national parks and reserves classified by Parks Victoria using their management classification system, the Levels of Protection (LoP). LoP groups parks according to biodiversity criteria and allocates broad conservation objectives to each group. Parks are classified into terrestrial (A1, A2, B, C, D and E1 and E2) and marine (A, B and C) groups. Parks and reserves in the A group are generally large, intact, and protect the most species and habitats. These parks are assigned a “high priority for active management”. At the other end of the spectrum, level E parks are generally small with few natural assets where the management objective is to maintain assets and give priority only to emerging threats. The PPGIS point data was cross tabulated with the LoP categories to generate chi-squared statistics and standardized residuals to determine whether values have significant association with the Parks Victoria management scheme.

Quantifying park/reserve qualities with social landscape metrics

We examined the distribution of park/reserve values using multiple social landscape metrics described by Brown and Reed (2012). The purpose of social landscape metrics is to better understand the structure and distribution of common and unique values across the park/reserve system. In addition, metrics provide the foundation for value compatibility analysis (Brown & Reed, 2012) that assesses the consistency of potential management actions with values located within a park/reserve. To provide sufficient data to assess the park/reserve, we selected parks and reserves with a minimum of 30 mapped values to calculate the metrics. The *value count* (**P0**) metric counts the number of value point locations within the park/reserve unit while the *value percent* (**P1**) metric calculates the percent of mapped points in the unit relative to the total number of mapped points across all units. The *dominant value* (**D**) metric is simply the landscape value with largest count of points within the park/reserve unit. The *value dominance index* (**D1**) metric quantifies the dominance relationship between the dominant value within the park/reserve unit and the next most common landscape value on a scale that ranges from 0 (i.e., there is no difference in dominance among values) to 1.0 (there is only one landscape value in the park/reserve unit). The *value density* (**D2**) metric calculates the density of landscape values per park/reserve area while the *value diversity index* (**D3**) metric is the standard Shannon diversity index commonly used in ecological studies calculated within a park/reserve unit. The *value richness* metric (**R**) is the number of different value types mapped in the park/reserve unit and can range from 0 to 11 in this study. The *conflict potential index* (**C**) metric can be calculated many ways, but here we follow one of the methods suggested by Brown and Raymond (2014) where the conflict index is derived from a mathematical combination of mapped preferences and values where differences in preferred land use, in this case conservation versus development, are amplified by the intensity of values located in the park/reserve unit. Specifically, we operationalized the conflict index as follows:

$$C = \frac{MAX(MIN(P_s, P_o), 0.1)}{MAX(P_s P_o)} * V_c$$

where **C** is conflict index (higher values indicate greater conflict potential, **P_s** is the number of mapped preferences supporting greater conservation and protection in the park unit, **P_o** is the number of mapped preferences supporting additional

development in the park unit (extraction, resource use, tourism, or recreation facilities), and V_c is the total count of all values in the park unit.



4 Mapping Results

4.1 Overview of Results

A total of 1,905 participants accessed the study website and placed one or more markers from December 2013 to February 15, 2014. . This chapter highlights the spatial distribution of the values and preferences that respondents mapped. Chapter 5 provides an overview of the survey results.

4.2 Distribution of Markers

Table 2 provides a summary of participation statistics. A total of 1,624 (85%) fully or partially completed the survey questions that followed the mapping activity. A total of 35,347 markers were mapped during data collection, with 30,194 (85%) of these attributable to public lands in Victoria. The number of markers placed per participant ranged from 1 to 426 with the average number of numbers placed being 18.8. Approximately 85% of the markers placed were *value* markers with the remaining 15% being *preference* markers.

Table 2. Participation statistics and respondent characteristics with comparison to Victoria census data (ABS, 2011).

Participation Statistics	
Number of participants (one or more locations mapped)	1,905
Number completing post-mapping survey	1,624
Number of locations mapped	35,347
Number of locations attributable to public lands	30,194
Range of locations mapped (min, max points)	1 to 426
Mean, median of all locations mapped	18.8, 14
Mean, median of values mapped	16.8, 10.5
Mean, median of preferences mapped	6.3, 3
How participants learned of study	
Parks Victoria website	423 (23%)
From relative, friend, acquaintance	477 (26%)
On-site recruitment at parks	179 (9%)
Other (major identifiable sources)	826 (43%)
Bushwalking clubs	127
Victoria National Parks Association (VNPA)	306
4WD clubs	79
Conservation group	49
Outdoor recreation group	45
ABC Radio interview by Parks Victoria	35
Non-disclosed or indeterminate	184

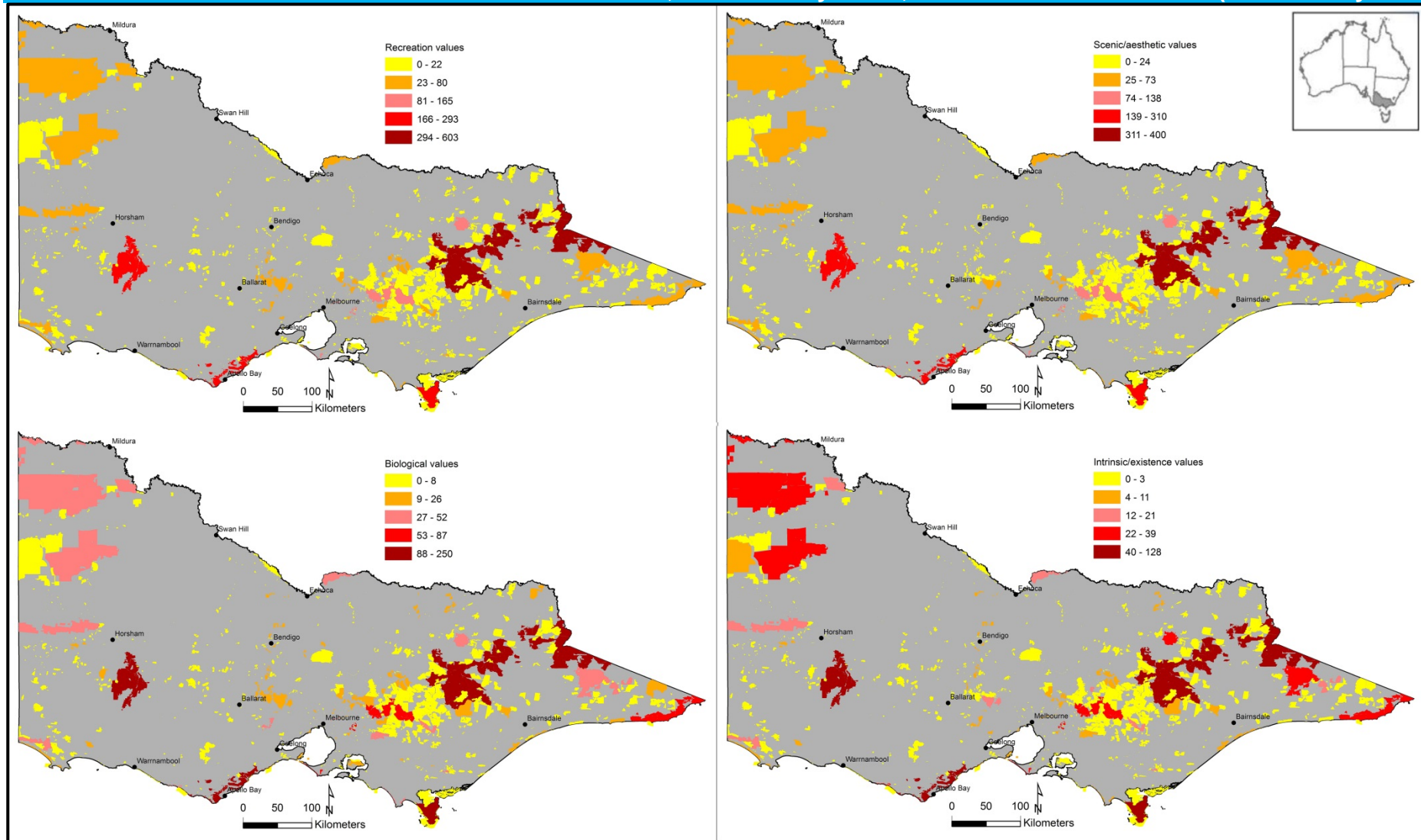
The participants learned of the study through multiple information channels. About 26% learned of the study through referral from a relative, friend, or acquaintance. Other non-referral sources of recruitment were the Parks Victoria

website (23%), on-site recruitment at parks (9%), and other groups with interests in Victoria public land issues. Key contributing groups were the Victoria National Parks Association (n=306), various bushwalking clubs (n=127), four-wheel drive clubs (n=79), conservation groups (n=49), and outdoor recreation groups (n=35).

4.2.1 Frequency of mapped values and management preferences on public lands

We generated frequency counts of the PPGIS mapped values and preferences on public lands. The most frequently mapped values were recreation (n=5,939/20% of all markers), scenic/aesthetic (4,904/16%), biological (3,397/11%), life sustaining (2,051/7%), and wilderness (2,030/7%). The least frequently mapped values were economic (644/2%), spiritual (845/3%), and therapeutic (1197/4%). Falling in the middle of the distribution were heritage (1596/5%), learning/education (1491/5%), and intrinsic/existence values (1391/5%). The spatial distribution of the three most frequently mapped values—recreation, scenic/aesthetic, and biological value—and for comparison, intrinsic/existence value, are provided in Figure 2. The images do not reveal significant contrast between recreation and scenic/aesthetic values, with the same public lands having larger value counts. There is greater contrast in the maps of biological and intrinsic values with relatively higher frequencies of these values in the western mallee lands, the Murray River lands, and the eastern coast of Victoria.

Figure 2 Frequency distribution of mapped values in public land units: (a) Recreation, (b) scenic/aesthetic, (c) Biological, and (d) intrinsic/existence values. Recreation and scenic values indicate similar spatial distribution while biological and intrinsic/extrinsic values deviate in western mallee lands, River Murray lands, and the eastern coastline (indicated by arrows).



The mapping of management preferences, in aggregate, totalled 4,446 markers or about 15% of all markers mapped. The most frequently mapped preferences were to prohibit future development and/or land use change (1439/32%), to increase conservation and protection (1277/29%), and to improve vehicle access (415/9%). The least frequently mapped preferences were to increase extractive activities (e.g., mining, logging) (57/1%), to increase resource use (e.g., grazing) 105 (2%), and to increase tourism development (118/3%). Other management preferences mapped were to improve bushfire protection (390/9%), add recreation facilities (308/7%), and decrease or limit vehicle access (234/5%).

4.2.2 Association of mapped values with public land categories

There was a statistically significant association between public land type and landscape value ($X^2=1160.4$, $df=100$, $p < .001$) with cross-tabulated frequencies appearing in Table 3. Adjusted standardized residuals more than 2.0 or less than -2.0 indicate the number of cases in the cell is significantly larger or smaller than would be expected. The larger the absolute value of the standardized residual, the greater the deviation from expected counts. Especially large standardized residuals command particular attention. For example, larger, disproportionate associations were found between scenic/aesthetic values and coastal reserves (residual=6.5); recreation values and metro/community/regional parks (9.9), state forests (7.0), and water reservoirs (5.9); life sustaining values and water production/reservoirs (5.5); biological values and nature conservation reserves (11.8); heritage values and historic/cultural reserves (8.3); intrinsic/existence values and national parks (5.9); and wilderness values in national parks (18.0) and wilderness parks (5.0). Larger, under-representative associations were found between recreation values and national parks (-12.3); biological values and metro/community/regional parks (-5.9); and wilderness values with natural features reserves (-6.1) and historic/cultural reserves (-4.5). The majority of these findings appear logically consistent with what would be expected based on legislative and management purposes.

The normalized plot of the two variables from correspondence analysis appears as Figure 3a. From the plot, metro/community/regional parks have a similar profile to

heritage and cultural reserves, nature conservation reserves and marine parks/sanctuaries are similar, and wilderness parks are the least similar to other public land types. The public land types of state parks, state forests, coastal reserves, and natural feature reserves appear clustered in the plot and thus are more similar than different. National parks lie in-between this cluster and wilderness parks. Plots of the values indicate that biological and wilderness values are most distinct from the other values types. Recreation, heritage, and economic values appear most similar, as do therapeutic, life sustaining, and spiritual values. Biological values align with marine parks/sanctuaries and nature conservation reserves while wilderness values are in the same region as wilderness parks.

Table 3. Association of mapped values with public land type. Overall association is significant ($X^2=1160.4$, $df=100$, $p < .001$) with residuals less than -2.0 (pink) or greater than 2.0 (green) highlighted.

Public land type		Scenic	Recreation	Economic	Life	Learning	Biological	Heritage	Therapeutic	Spiritual	Intrinsic	Wilderness	Totals
Coastal reserve	Count	257	223	21	72	45	121	43	41	34	38	43	938
	%	27.4%	23.8%	2.2%	7.7%	4.8%	12.9%	4.6%	4.4%	3.6%	4.1%	4.6%	100.0%
	Residual	6.5	.2	-.1	-.4	-1.3	-.5	-2.1	-.3	.7	-2.0	-4.2	
Metro/community/regional park	Count	622	987	105	235	191	331	262	188	122	137	76	3256
	%	19.1%	30.3%	3.2%	7.2%	5.9%	10.2%	8.0%	5.8%	3.7%	4.2%	2.3%	100.0%
	Residual	-.2	9.9	3.9	-1.8	.3	-5.9	4.8	3.4	1.7	-3.6	-13.2	
State forest	Count	253	469	40	144	58	239	80	48	34	54	100	1519
	%	16.7%	30.9%	2.6%	9.5%	3.8%	15.7%	5.3%	3.2%	2.2%	3.6%	6.6%	100.0%
	Residual	-2.6	7.0	1.0	2.2	-3.4	2.7	-1.5	-2.8	-2.3	-3.5	-2.4	
Historic/cultural reserve	Count	74	109	15	20	20	43	63	18	4	13	8	387
	%	19.1%	28.2%	3.9%	5.2%	5.2%	11.1%	16.3%	4.7%	1.0%	3.4%	2.1%	100.0%
	Residual	-.1	2.2	2.1	-2.1	-.5	-1.4	8.3	.0	-2.5	-1.9	-4.5	
Marine park/sanctuary	Count	76	48	9	22	21	63	25	9	12	24	33	342
	%	22.2%	14.0%	2.6%	6.4%	6.1%	18.4%	7.3%	2.6%	3.5%	7.0%	9.6%	100.0%
	Residual	1.4	-4.1	.4	-1.1	.3	2.7	.9	-1.8	.3	1.2	1.0	
National park	Count	2650	2896	286	1159	816	1838	830	671	480	881	1536	14043
	%	18.9%	20.6%	2.0%	8.3%	5.8%	13.1%	5.9%	4.8%	3.4%	6.3%	10.9%	100.0%
	Residual	-1.7	-12.3	-2.9	1.7	.4	-1.9	-2.0	1.5	1.7	5.9	18.0	
Natural features reserve	Count	155	247	28	60	73	156	62	40	39	47	27	934
	%	16.6%	26.4%	3.0%	6.4%	7.8%	16.7%	6.6%	4.3%	4.2%	5.0%	2.9%	100.0%
	Residual	-2.1	2.2	1.5	-1.8	2.7	3.0	.6	-5	1.6	-7	-6.1	
Nature conservation reserve	Count	114	127	11	36	61	196	29	21	14	37	39	685
	%	16.6%	18.5%	1.6%	5.3%	8.9%	28.6%	4.2%	3.1%	2.0%	5.4%	5.7%	100.0%
	Residual	-1.8	-3.1	-1.2	-2.7	3.6	11.8	-2.1	-1.9	-1.8	-2	-2.5	
Wilderness park	Count	21	27	1	12	1	18	2	5	2	13	26	128
	%	16.4%	21.1%	0.8%	9.4%	0.8%	14.1%	1.6%	3.9%	1.6%	10.2%	20.3%	100.0%
	Residual	-.8	-.6	-1.1	.6	-2.4	.2	-2.2	-.4	-1.1	2.3	5.0	
Water production/reservoir	Count	69	129	9	56	17	22	15	8	8	10	9	352
	%	19.6%	36.6%	2.6%	15.9%	4.8%	6.2%	4.3%	2.3%	2.3%	2.8%	2.6%	100.0%
	Residual	.2	5.9	.4	5.5	-.8	-4.0	-1.5	-2.1	-1.0	-2.2	-3.9	
State park	Count	367	422	25	120	92	229	85	65	38	85	97	1625
	%	22.6%	26.0%	1.5%	7.4%	5.7%	14.1%	5.2%	4.0%	2.3%	5.2%	6.0%	100.0%
	Residual	3.5	2.5	-2.1	-.9	-.2	.8	-1.6	-1.2	-2.1	-.5	-3.4	
Total	Count	4658	5684	550	1936	1395	3256	1496	1114	787	1339	1994	24209
	%	19.2%	23.5%	2.3%	8.0%	5.8%	13.4%	6.2%	4.6%	3.3%	5.5%	8.2%	100.0%

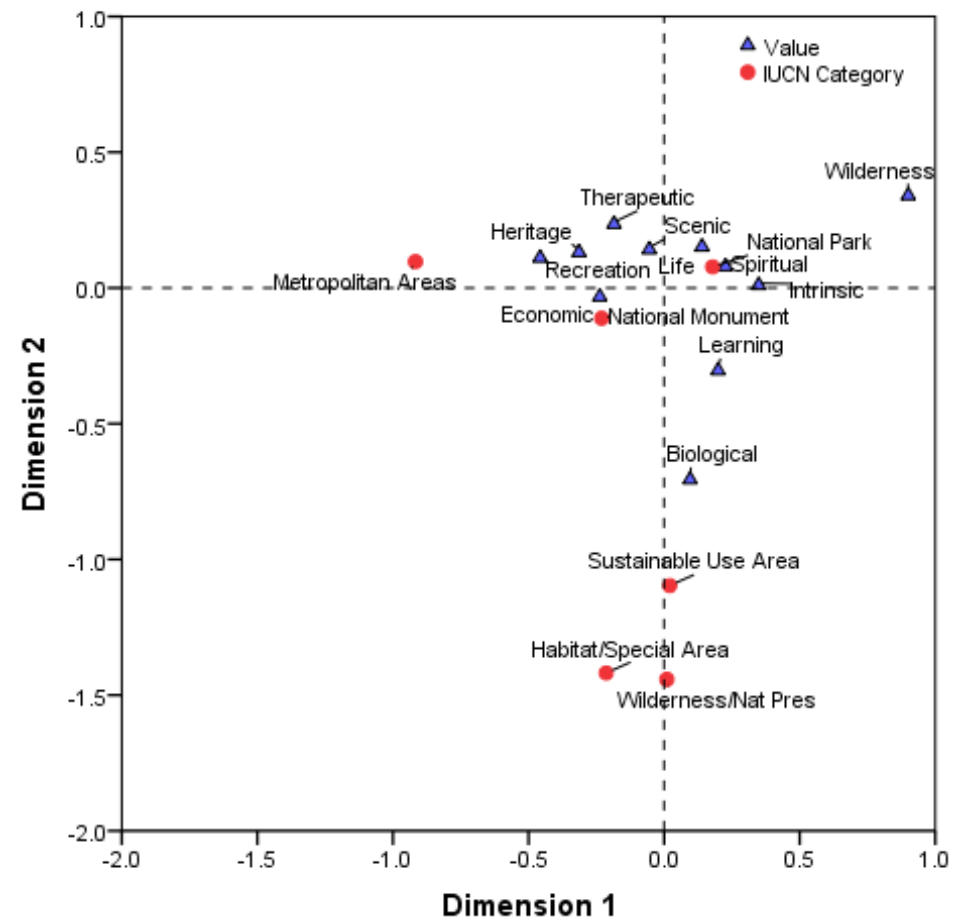
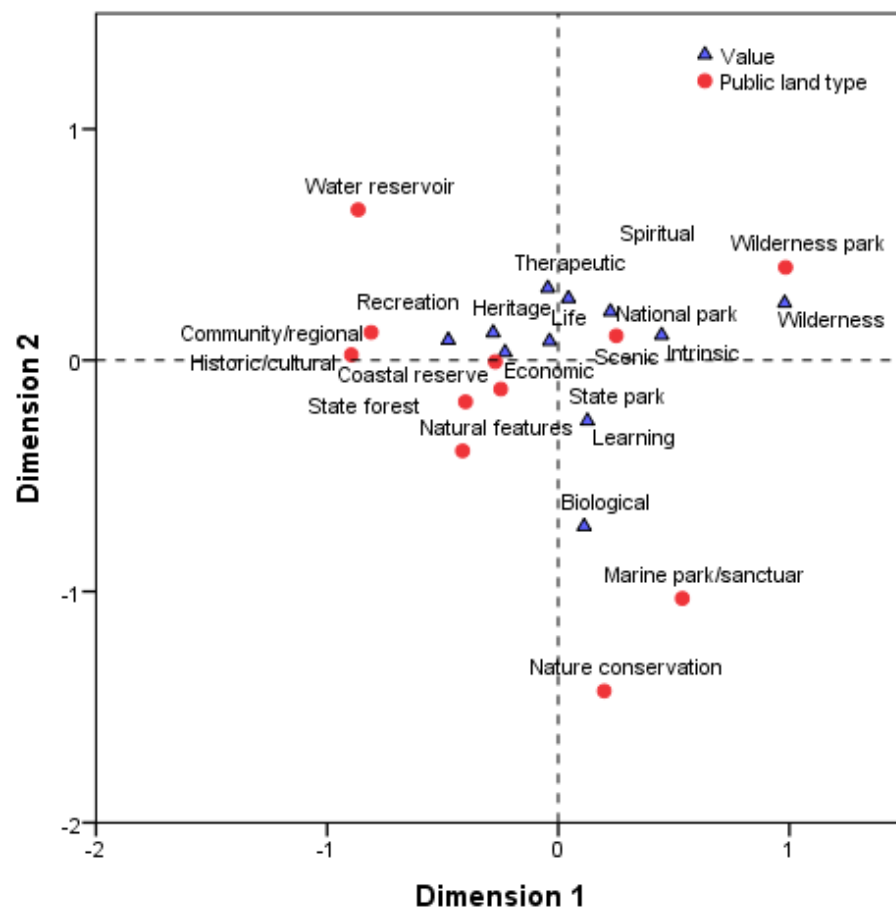


Figure 3 Symmetrical normalised plots from correspondence analysis of values by (a) public land type and (b) IUCN classification

4.2.3 Association of mapped values with IUCN categories

There was a statistically significant association between public land type and IUCN protected area classification ($X^2=651.2$, $df=50$, $p < .001$). The cross-tabulated frequencies appear in Table 4 and the normalized plot from correspondence analysis appears in Figure 3b. Larger, disproportionate associations were found between scenic/aesthetic values and national monuments (IUCN III) (residual=4.7); biological values and strict nature preserves/wilderness areas (IUCN Ia and Ib) (10.6), sustainable use areas (IUCN VI) 4.9, habitat/species areas (IUCN IV) (3.9); and wilderness values and national parks (IUCN II) (15.4). Larger, under-representative associations were found between recreation values and national parks (IUCN II) (-9.6); and wilderness values and national monuments (IUCN III) (-3.7). Thus, the aggregation of public land types into broader IUCN classifications produced relatively weaker associations with values. In the normalized plot (Figure 3b), IUCN categories I, IV, and VI were most similar to each other while categories II and III were similar.

Table 4. Association of mapped values with IUCN protected area categories. Metropolitan parks are not classified within the IUCN system, but were included in the analysis for contrast. The overall association is significant ($X^2=651.2$, $df=50$, $p < .001$) with standardized residuals less than -2.0 (pink) or greater than 2.0 (green) highlighted.

IUCN Category		Scenic	Recreation	Economic	Life	Learning	Biological	Heritage	Therapeutic	Spiritual	Intrinsic	Wilderness	Total
Strict Nature Preserve or Wilderness (Ia and Ib)	Count	90	114	11	37	45	171	28	20	14	33	31	594
	%	2.3%	2.6%	2.9%	2.3%	3.9%	6.2%	2.3%	2.1%	2.2%	2.8%	1.7%	3.0%
	Residual	-2.6	-1.8	-.1	-1.6	1.9	10.6	-1.4	-1.6	-1.2	-.3	-3.3	
National Park (II)	Count	2927	3150	285	1257	886	2049	890	707	506	953	1637	15247
	%	75.9%	71.2%	74.4%	79.6%	77.0%	73.8%	73.6%	75.6%	79.2%	81.8%	91.2%	76.5%
	Residual	-1.1	-9.6	-1.0	3.0	.4	-3.7	-2.5	-.7	1.6	4.4	15.4	
National Monument (III)	Count	232	205	9	63	60	132	45	43	39	36	51	915
	%	6.0%	4.6%	2.3%	4.0%	5.2%	4.8%	3.7%	4.6%	6.1%	3.1%	2.8%	4.6%
	Residual	4.7	.1	-2.1	-1.2	1.0	.4	-1.5	.0	1.9	-2.5	-3.7	
Habitat/Species Area (IV)	Count	8	16	3	7	5	23	4	5	3	2	3	79
	%	0.2%	0.4%	0.8%	0.4%	0.4%	0.8%	0.3%	0.5%	0.5%	0.2%	0.2%	0.4%
	Residual	-2.1	-.4	1.2	.3	.2	3.9	-.4	.7	.3	-1.3	-1.6	
Sustainable Use Areas (VI)	Count	55	66	8	21	33	80	22	7	11	27	17	347
	%	1.4%	1.5%	2.1%	1.3%	2.9%	2.9%	1.8%	0.7%	1.7%	2.3%	0.9%	1.7%
	Residual	-1.7	-1.4	.5	-1.3	3.0	4.9	.2	-2.4	.0	1.5	-2.7	
*Metropolitan parks	Count	545	876	67	194	122	323	221	153	66	114	55	2736
	%	14.1%	19.8%	17.5%	12.3%	10.6%	11.6%	18.3%	16.4%	10.3%	9.8%	3.1%	13.7%
	Residual	.8	13.3	2.2	-1.7	-3.2	-3.5	4.7	2.4	-2.5	-4.0	-13.8	
Totals	Count	3857	4427	383	1579	1151	2778	1210	935	639	1165	1794	19918
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

4.2.4 Association of mapped values with Parks Victoria Level of Protection (LoP)

There was a statistically significant association between public land type and LoP classification ($X^2=467.4$, $df=50$, $p < .001$). The cross-tabulated frequencies appear in Table 5. Larger, disproportionate associations were found between recreation values and LoP class B (residual=8.8) and class C (5.0); economic values and LoP class E1/E2 (4.0); heritage values and LoP class D (4.1); and wilderness values and LoP class A1/A2 (15.1). Larger, under-representative associations were found between recreation values and LoP class A1/A2 (-10.4) and Marine A/B (-4.0); and wilderness values and class B (-7.8), C (-8.0), D (-5.6) and E (-6.0).

These results are generally consistent with the IUCN results. The A1/A2 LoP classes contain predominantly national parks (82%) with high levels of species diversity and numbers of threatened species. The B to E classes contain conservation reserves, regional parks and metro parks that are smaller in size (<140,000ha) and are thus more fragmented with fewer wilderness values. The D and E classes include historic and natural features reserves so their stronger association with heritage values would be expected.

Table 5. Association of mapped values with Parks Victoria designated *Level of Protection* (LoP) classifications. The overall association is significant ($X^2=467.4$, $df=50$, $p < .001$) with standardized residuals less than -2.0 (pink) or greater than 2.0 (green) highlighted.

Level of Protection		Scenic	Recreation	Economic	Life	Learning	Biological	Heritage	Therapeutic	Spiritual	Intrinsic	Wilderness	Total
A1 or A2	Count	2503	2644	248	1080	756	1756	798	613	460	826	1468	13152
	%	19.0%	20.1%	1.9%	8.2%	5.7%	13.4%	6.1%	4.7%	3.5%	6.3%	11.2%	100.0%
	Residual	-1.8	-10.4	-.1	1.8	.1	-2.6	-.4	-.5	3.2	3.4	15.1	
B	Count	706	1031	56	307	194	541	182	191	89	204	209	3710
	%	19.0%	27.8%	1.5%	8.3%	5.2%	14.6%	4.9%	5.1%	2.4%	5.5%	5.6%	100.0%
	Residual	-.6	8.8	-1.9	.8	-1.5	1.5	-3.4	1.4	-3.1	-1.1	-7.8	
C	Count	384	502	36	135	109	265	130	90	55	85	73	1864
	%	20.6%	26.9%	1.9%	7.2%	5.8%	14.2%	7.0%	4.8%	3.0%	4.6%	3.9%	100.0%
	Residual	1.4	5.0	.1	-1.2	.2	.5	1.6	.2	-.7	-2.5	-8.0	
D	Count	118	145	13	40	51	91	61	26	18	30	16	609
	%	19.4%	23.8%	2.1%	6.6%	8.4%	14.9%	10.0%	4.3%	3.0%	4.9%	2.6%	100.0%
	Residual	.0	.9	.4	-1.3	2.8	.8	4.1	-.5	-.4	-1.0	-5.6	
E1 or E2	Count	136	145	23	31	29	78	42	24	15	20	10	553
	%	24.6%	26.2%	4.2%	5.6%	5.2%	14.1%	7.6%	4.3%	2.7%	3.6%	1.8%	100.0%
	Residual	3.1	2.2	4.0	-2.1	-.5	.2	1.5	-.4	-.7	-2.3	-6.0	
Marine A or Marine B	Count	62	33	5	13	18	53	20	7	10	19	28	268
	%	23.1%	12.3%	1.9%	4.9%	6.7%	19.8%	7.5%	2.6%	3.7%	7.1%	10.4%	100.0%
	Residual	1.6	-4.0	.0	-1.9	.7	2.8	.9	-1.6	.5	.9	.9	
Total		3909	4500	381	1606	1157	2784	1233	951	647	1184	1804	20156
		19.4%	22.3%	1.9%	8.0%	5.7%	13.8%	6.1%	4.7%	3.2%	5.9%	9.0%	100.0%

4.2.5 Social landscape metrics by park/reserve

Social landscape metrics were calculated for all parks and reserves containing 30 or more mapped values (n=93). Results for the 50 most frequently mapped parks appear in Table 6. Landscape metrics identify distinctive or unusual value distributions that can provide a focal point for managerial attention. The two metrics that measure the frequency of mapped values (P0, P1) indicate that four national parks in particular—Alpine, Wilsons Promontory, Grampians, and Great Otway—are most important to residents of Victoria. These four national parks were mapped more than twice as often as any other park/reserve in Victoria. In terms of visitor numbers, these parks are among the most popular of Victoria's National Parks and appear deserving of the title of the "People's Choice Award" for Victoria's most valuable national parks.

Scenic/aesthetic and recreation values were the most frequently mapped in all but two of the park/reserves and thus were the dominant (D) values. In contrast, Croajingolong NP and Mount Worth State Park appear distinctive because wilderness and biological values were dominant respectively. Croajingolong NP is a remote park that follows the eastern coastline of Victoria for 100 kilometres and contains eucalypt forest, rainforest, and heathland with several secluded, coastal camping spots. The biological values of Mount Worth State Park appear dominant. The park includes an ancient Mountain Ash (*Eucalyptus regnans*) forest, including the Standing Giant, a tree seven meters in circumference and more than 300 years old.

The dominance index (D1) indicates whether the dominant value is truly dominant or only slightly more common than other values in the park/reserve. A key finding in Table 6 is that the smaller metropolitan and regional parks such as Yarra Valley (D1=.68) and Dandenong Valley Parklands (D1=.73) are heavily dominated by recreation values, even though the parks contain most of the other value types as indicated by the richness (R) index. Although these smaller parks contain multiple values, recreational use values were much more frequently mapped than the other values.

The density metric (D2) controls for the size of the park/reserve under the assumption that larger landscape parks/reserves should have more mapped values.

Table 6. Social landscape metrics for most frequently mapped values in park/reserve units in Victoria. Highlighted cell (green) indicate park/reserve metrics that merit special attention.

Name	Area (Hectares)	Dominant Value (D) ^a	Count (P0) ^b	Percent (P1) ^c	Richness (R) ^d	Dominance (D1) ^e	Density (D2) ^f	Diversity (D3) ^g	Conflict index (C) ^h
Alpine NP	661934.5	Recreation	2411	0.11	11	0.34	3.64	2.13	383.4
Wilsons Promontory NP	48244.2	Scenic	1722	0.09	11	0.07	35.69	2.21	220.1
Grampians NP	168112.6	Scenic	1398	0.08	11	0.08	8.32	2.25	145.8
Great Otway NP	104084.8	Scenic	1218	0.08	11	0.06	11.71	2.17	139.0
Dandenong Ranges NP	3542.1	Recreation	675	0.05	11	0.13	190.58	2.12	143.2
Yarra Ranges NP	77218	Scenic	666	0.05	11	0.11	8.62	2.19	191.6
Mount Buffalo NP	27471.8	Scenic	587	0.04	11	0.10	21.37	2.25	232.6
Croajingolong NP	88470.7	Wilderness	502	0.04	11	0.15	5.67	2.12	20.5
Mornington Peninsula NP	2685.4	Scenic	474	0.04	11	0.11	176.52	2.08	41.8
Port Campbell NP	2407.1	Scenic	342	0.03	11	0.44	142.17	2.21	16.3
Snowy River NP	114674	Scenic	311	0.03	11	0.04	2.71	2.16	55.5
Baw Baw NP	12796.7	Recreation	306	0.03	11	0.13	23.91	2.09	91.8
Wyperfeld NP	360365.6	Recreation	293	0.03	11	0.17	0.81	2.15	19.1
Little Desert NP	131583.4	Recreation	282	0.03	11	0.19	2.14	2.15	56.4
Murray - Sunset NP	666615.1	Recreation	277	0.03	11	0.07	0.42	2.14	63.9
Lerderderg SP	20560.2	Recreation	255	0.03	11	0.29	12.40	2.01	110.9
Point Nepean NP	533.3	Scenic	243	0.03	11	0.18	455.65	2.19	77.3
Yarra Bend Park	247.7	Recreation	232	0.03	11	0.36	936.62	2.04	61.9
Yarra Valley Parklands	922.3	Recreation	231	0.03	11	0.59	250.46	1.80	46.2
Lower Glenelg NP	26448.5	Recreation	231	0.03	11	0.06	8.73	2.17	12.2
Hattah - Kulkyne NP	50059.8	Recreation	222	0.03	11	0.20	4.43	2.21	38.3
Brisbane Ranges NP	8855.1	Recreation	217	0.03	11	0.18	24.51	2.03	37.7
Bunyip SP	16646.4	Recreation	211	0.03	11	0.38	12.68	1.99	58.2
Cathedral Range SP	3598.4	Recreation	210	0.03	11	0.11	58.36	2.02	11.7
Tarra-Bulga NP	2017.9	Scenic	195	0.03	11	0.22	96.64	2.22	0.8
Barmah NP	28502.4	Recreation	189	0.03	11	0.16	6.63	2.23	40.1
Lysterfield Park	1434.6	Recreation	186	0.03	11	0.50	129.65	1.82	65.6
Kinglake NP	23173.1	Recreation	168	0.02	10	0.32	7.25	1.87	93.3
Discovery Bay Coastal Park	10642.4	Scenic	161	0.02	10	0.42	15.13	1.96	8.1
Cape Liptrap Coastal Park	4323	Scenic	155	0.02	10	0.17	35.85	1.99	8.9
Errinundra NP	40090.3	Scenic	151	0.02	10	0.14	3.77	2.15	7.6
Warrandyte SP	682	Scenic	148	0.02	11	0.26	217.01	2.05	49.3
Mount Arapiles-Tooon SP	7455.1	Recreation	139	0.02	11	0.26	18.64	2.15	11.6
Mitchell River NP	14346.5	Recreation	138	0.02	11	0.10	9.62	2.11	63.7
Lake Eildon NP	27853.5	Recreation	137	0.02	11	0.33	4.92	2.02	137.0
Castlemaine Diggings NHP	7585.2	Recreation	124	0.02	9	0.30	16.35	1.95	56.4
Yarra Valley Parklands	140.7	Recreation	115	0.02	10	0.68	817.34	1.60	38.3
Dandenong Valley Parklands	810.7	Recreation	114	0.02	10	0.73	140.57	1.67	76.0
Chiltern-Mt Pilot NP	21598.2	Scenic	101	0.02	11	0.00	4.68	2.04	13.5
Howqua Hills H.A	1093.5	Recreation	100	0.02	11	0.26	91.45	2.06	50.0
Port Phillip Heads Marine NP	3474	Scenic	100	0.02	11	0.09	28.79	2.10	16.7

Wilsons Promontory MP	5566	Scenic	97	0.02	10	0.39	17.43	1.93	0.9	^a D = max $(\sum v_i)$ where: v _i = number of mapped landsc ape value
Albert Park	314.5	Recreation	94	0.02	11	0.53	438.84	1.91	25.6	
Arthurs Seat SP	558.7	Scenic	90	0.02	11	0.23	161.09	1.85	90.0	
Mount Worth SP	1032.1	Biological	90	0.02	11	0.06	87.20	2.11	12.9	
Werribee Gorge SP	564.9	Recreation	88	0.02	9	0.04	155.78	1.83	1.1	
Mount Eccles NP	8378.3	Scenic	84	0.02	10	0.24	10.03	2.16	28.0	
You Yangs RP	1966.8	Recreation	83	0.02	10	0.63	42.20	1.78	51.9	
Cape Conran Coastal Park	11576	Scenic	83	0.02	11	0.15	7.17	2.04	1.0	
Greater Bendigo NP	17325.6	Recreation	81	0.02	11	0.26	4.68	2.04	6.8	
Avon Wilderness Park	39558.4	Wilderness	80	0.02	10	0.35	2.02	2.01	53.3	

points for a given value v in a given landscape unit *i*.

^b P0 = $\sum p_i$ where: p_i = number of landscape value points mapped within landscape unit *i*.

^c P1 = $\frac{\sum p_i}{P}$ where: p_i = number of landscape value points mapped within landscape unit *i* and P = total number of mapped landscape value points.

^d R = number of landscape value types mapped within the landscape unit. Range is from 0 to 11 values.

^e D1 = $\frac{\max(\sum v_i) - \max(\sum v_i)^{(2)}}{\max(\sum v_i)}$ where: v_i = number of mapped landscape value points for a given value v in a given landscape unit *i*.

^f D2 = $\frac{\sum p_i}{h_i}$ where: p_i = number of landscape value points mapped within landscape unit *i* and h_i = number of hectares within landscape unit *i*.

^g D3 = $-\sum_{i=1}^v p_i \ln p_i$ where: p_i = the proportional abundance of the *i*th landscape value = (n_i/N); n_i = the number of mapped landscape values in the *i*th landscape value category;

N = the total

number of all mapped landscape values; ln = natural logarithm; v = the number of landscape value categories.

^h see formula in body of article.

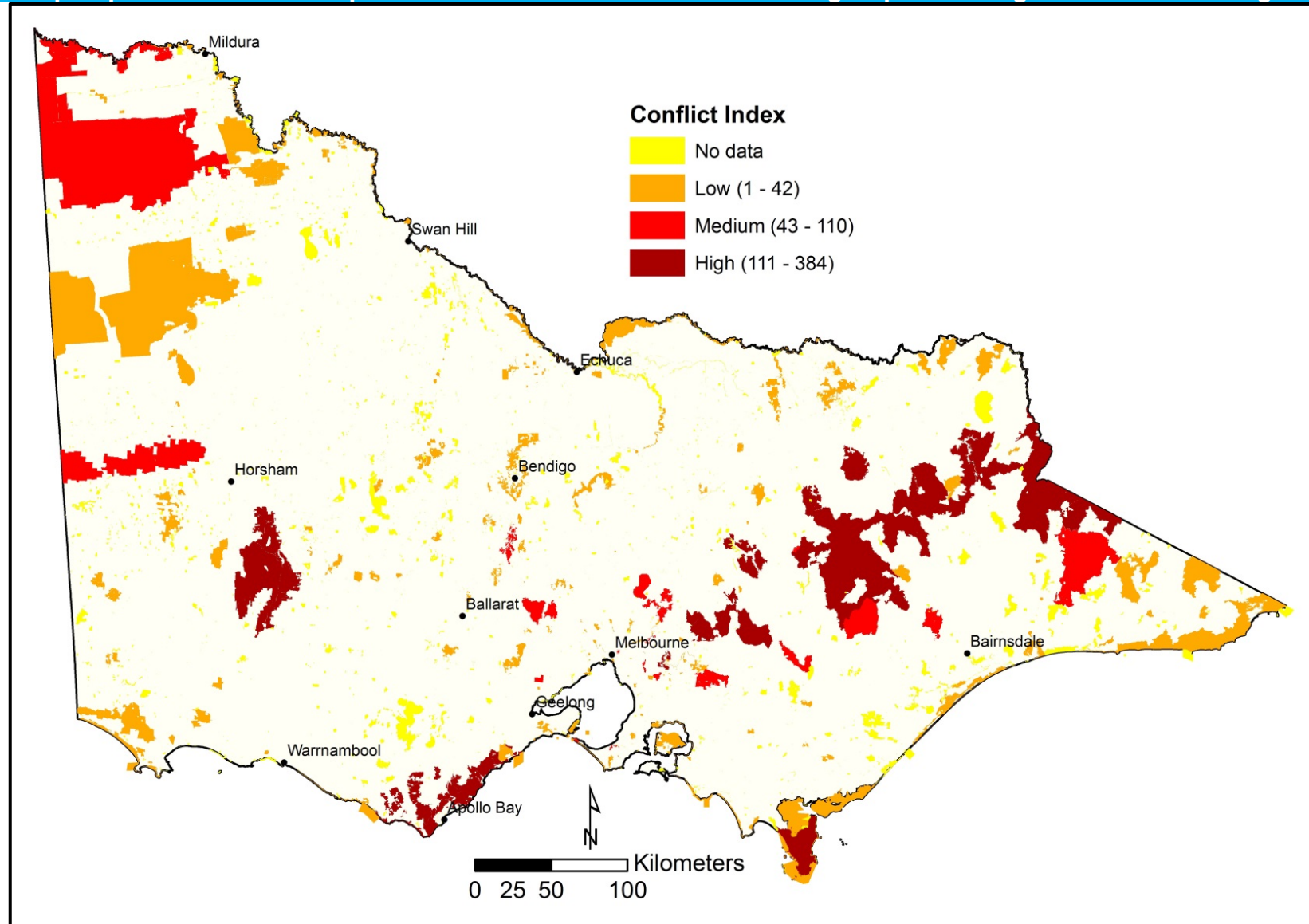
But some parks/reserves are highly valued despite their relatively small size. For example, Yarra Bend Park, Yarra Valley Parklands, Albert Park, and Point Nepean NP contain the highest densities of mapped values, exceeding other parks/reserves on a per hectare basis.

The diversity metric (D3) measures the number of different value types mapped in the park/reserve and also accounts for the evenness of the mapped values. One would expect larger parks to contain a higher diversity of mapped values as found previously by Brown (2008) and the results support this supposition. However, the diversity metric also reveals a few surprises. For example, two smaller national parks (Tarra-Bulga and Barmah) also have a high diversity of values. Tarra-Bulga, where scenic value is dominant, is known for its giant Mountain Ash trees, fern gullies, and ancient myrtle beeches. There is a suspension bridge through the forest canopy that provides visitors with spectacular views to the forest floor. Thus, this park provides a diversity of values across the spectrum from scenery and recreation to biological and spiritual values. Barmah, where recreation value is dominant, also provides a diversity of biological and life sustaining values. The riverine forest in the park is part of the largest River Red Gum (*Eucalyptus camaldulensis*) forest in the world where seasonal flooding of the Murray River creates a diverse natural habitat for wildlife. The park receives significant recreation use from camping, fishing, horse riding, bushwalking, swimming, and canoeing. Prior to 2010, Barmah was a state park with a long history of recreational use under a less regulated regime.

The conflict index metric (C) measures the potential for conflict under the assumption that some public land uses and values are competitive rather than complementary. The greatest potential for land use conflict is found in parks/reserves where there is conservation or development disagreement and where the park/reserve has high value. In this study, conflict potential is operationalized by the spatial concurrence of preferences for more conservation or protection and preferences for additional development activity (extraction, resource use, tourism development, vehicular access, or additional recreation facilities) that are amplified by the number of mapped values. The parks/reserves with the highest potential for conflict were several of the more popular national parks such as Mount Buffalo and Wilsons Promontory National Parks. The park with the largest conflict index was Alpine National Park. This is Victoria's largest national park and has a history of conflict over grazing (Fraser &

Chisholm, 2000) and recreational use (Mckercher, 1996). Several less iconic parks such as Lerderberg State Park, Lake Eildon National Park, and Kinglake National Park were also identified as having relatively high potential for conflict. The potential conflict at Lerderberg was the result of contrasting preferences on whether to provide greater vehicular access to this park which offers a primitive recreation experience, while the higher potential conflict at Lake Eildon and Kinglake National Parks derive from preferences for increased vehicle access and the provision of more recreational facilities. The conflict potential for parks and reserves in Victoria is graphically illustrated in Figure 4 where the conflict index was grouped using natural breaks into high, medium, and low categories.

Figure 4 . Map of potential conflict in parks/reserves based on conflict index grouped into high/medium/low categories.





5 Overview of Respondents

5.1 Overview of Respondents

A total of 1905 participants accessed the PPGIS website, resulting in over 35,000 mapped points. Following completion of the mapping activity, participants were asked 14 socio-demographic questions to help understand the characteristics of the study participants and to examine whether some of these characteristics might be related to the type of values and preferences identified in the study. The survey together with a summary of results is presented as Appendix 1. Respondents were also provided an opportunity to provide additional comments. A summary of these results of are provided in appendix 4.

A total of 92.7% of respondents indicated they were residents of Victoria with the mean length of residence being 34.13 years and the range being 1 month to 89 years. Appendix 5 shows the city or town the resident resided in. We assessed the geographic distribution of participants in Victoria by comparing the expected counts of participants per postcode based on census data with the actual number of study participants from each postcode. An important question, given the dominant volunteer sampling method used in the study, was whether regional Victoria was under-represented in study participation compared to the capital city, Melbourne. One might presuppose a potential digital divide between urban and regional Victoria but we did not find strong evidence. The central Melbourne postcode (3000) was significantly over-represented in response compared to census data, but there were multiple other Melbourne suburbs that were significantly under-represented. The over-representation of central Melbourne was offset by multiple regional postcodes that were over-represented compared to census data. On the whole, the geographic distribution of participants was roughly proportional to the general population distribution in Victoria.

5.2 Respondent Characteristics

5.2.1 Knowledge of public land in Victoria

Table 7 shows most often respondents considered their knowledge of Victorian public lands to be good. A total of 97.9% of respondents believed they had average or better knowledge (self-identified) of Victorian public lands. This result is very high - for comparison in the 2012 SW Parks study the equivalent figure was 76.4%.

Table 7: Self-identified knowledge of public lands in Victoria

	Knowledge of public lands in Victoria					
	Excellent	Good	Average	Below Average	Poor	Total
Count	406	873	322	873	8	1634
%	24.8%	53.4%	19.7%	1.5%	0.6%	100.0%

5.2.2 Perceived level of ease to access Victorian public lands

Table 8 suggests respondents felt it was easy to access public lands. That said, additional comments (Appendix 4) people provided suggest this is a contentious issue, especially amongst some 4WD issues. Specifically, there were numerous comments regarding a desire to access gated management areas.

Table 8: Perceived Ease of Access to Victorian Public Lands

	Perceived Ease of Access to Victorian public lands					
	Very Easy to Access	Easy to Access	Neither Difficult Nor easy to Access	Difficult to Access	Very Difficult to Access	Total
Count	519	788	284	36	2	1629
%	31.9%	48.4%	17.4%	2.2%	0.1%	100.0%

5.2.3 Frequency of use of Victorian public lands

Participants were asked to indicate which statement best described their frequency of use of Victorian public lands. Table 9 shows that respondents were very high users of public lands. A total of 86.8% indicated they used public lands at least monthly.

Table 9: Frequency of use of public lands in Victoria

Number of visits	Count	Percent
Use public lands every day	227	13.8
Use public lands at least once per week	483	29.5
Use public lands at least once per fortnight	388	23.7
Use public lands at least once per month	325	19.8
Use public lands once every few months	151	9.2
Use public lands about twice per year	43	2.6
Use public lands about once per year	15	0.9
Use public lands less than once per year	7	0.4
Total	1639	100

Certainly it was clear from results that people do access public lands frequently. However, when asked about the frequency of visits to National Parks or State Parks in the past year, the most frequent response was 2 (i.e. mode). The mean was 19.73 (SD 44.89) reflecting the very large range of 1 – 700 visits per year. This result is consistent with previous research. For example, Weber et al. (2010) investigated 4 parks (two each in Victoria and South Australia) and through 1429 interviews found the mode to be 2 with 20.23% of people visited public lands less than once per year and 17.64% reported they visited about once per year. Similarly in the SW PPGIS study (2012), one fifth of respondents visited parks once per year and a total of 40% visited parks at least four times of year. Again, the mode was two. It is reasonable therefore to assume that public lands other than parks attract more frequent use, despite National Parks being the most valued type of public land.

5.2.4 Motivation for visits

Participants were asked to indicate their most common reason for visiting public lands. Results shown in Table 10 suggests engaging in trail-based activities is the most

common motivation followed closely by sightseeing. These two motivations account for 59.3% of respondents. Interestingly, despite the focus on all public lands, rather than just parks, Table 11 shows these results are still similar to previous studies looking at the segments developed by Zanon et al (in press). In each of the three studies, the segments “activity centrics”; “access made easy” and “vacation campers” constitute less than 10% of the sample. Similarly, in all studies “nature admirers” account for more than 25%; “urban socials” are above 10%; and “passive users” are between 9 -12%. Notably in this study, there is a much higher percentage of trail users, possibly reflecting the importance of this activity on other types of public lands and also the high participation of members of the Victorian National Parks Association.

Table 10: Primary motivation for public land visits

	Primary motivation for visiting parks							
	Sightsee, tour & appreciate nature &/or culture	Socialise with family &/or friends	Engage in trail-based activity	Relax, rest, engage in low energy activities	Engage in high energy or adventure activities	Engage in variety of parks activities/convenient/easy access	Spend weekend/substantial time in parks (eg. camping)	Total
Count	465	182	506	198	91	56	140	1638
%	28.4	11.1	30.9	12.1	5.6	3.4	8.5	100.0

Table 11: Comparison of motivations for visits between this study and two previous studies

		Sightsee, tour & appreciate nature &/or culture "Nature Admirers"	Socialise with family &/or friends "Urban Socials"	Engage in trail-based activity "Trail Users"	Relax, rest, engage in low energy activities "Passive and other Users"	Engage in high energy or adventure activities "Activity Centrics"	Engage in variety of parks activities/convenient/easy access "Access made Easy"	Spend weekend/substantial time in parks (eg. camping) "Vacation Campers"	Total
Current Study (n=1638)	% (rank)	28.4(2)	11.1 (4)	30.9(1)	12.1(3)	5.6 (6)	3.4(7)	8.5 (5)	100.0
Comparison to Zanon et al (in press) paper n=11,387	%(rank)	26.1 (1)	25.9 (2)	14.4 (3)	9.4 (4)	8.5 (5)	8.1 (6)	7.5 (7)	
Comparison to SW data (n=445)	% (rank)	48.9 (1)	19.4 (2)	8.9 (4)	9.4 (3)	4.2 (7)	4.4 (6)	4.7 (5)	100.0 %

5.2.5 Preferences regarding public lands

Respondents were asked to indicate where they would place themselves on a scale of 1 – 7 where number four indicated they didn't have a preference leaning either direction on the scale, whereas positions 1 -7 suggested a strong preference. It is important to note that peoples preferences may vary dramatically depending on the type of public land, but these results provide a general indication of people recreation experience preferences, their preferences for resource extraction, resource use, , access and facilities. These results are presented as Tables 13.

Interestingly, with the exception of preferences related to resource extraction (logging of native forests, mining on public lands) and preference to recreate in natural or built environments, the mean for most items were mid-range (>3 - <5).

Table 12: Preferences regarding public land management

Recreation Experience Preferences *I prefer to recreate in an environment that has...*

Primarily natural environment <i>n=1631</i> <i>x=2.99 (SD: 2.09)</i>	*						Primarily built environment
	1	2	3	4	5	6	7
%	36.9	16.1	12.6	8.5	6.8	9.8	9.3
Little social interaction <i>n=1624</i> <i>x=3.69(SD: 1.90)</i>	*						Lots of social interaction
	1	2	3	4	5	6	7
%	14.0	20.6	15.6	14.0	10.5	18.7	6.6
High risk/adventure activities <i>n=1629</i> <i>x=4.33 (SD: 1.74)</i>	*						Safe/secure activities
	1	2	3	4	5	6	7
%	6.6	10.9	14.3	20.4	18.9	16.8	12.2

Minimal motorised access (exploration requires walking, canoeing etc), <i>n=1630</i> $\bar{x}=3.63$ (SD=1.97)				*				Extensive motorised access (eg. 2WD and 4WD roads)
	1	2	3	4	5	6	7	
%	19.0	16.6	13.5	17.1	9.6	15.7	8.5	
Opportunities to do the activities I enjoy <i>n=1627</i> $\bar{x}=4.64$ (SD:1.65)					*			An attractive setting is most important
	1	2	3	4	5	6	7	
%	4.2	6.9	13.8	21.2	17.8	21.6	14.4	
If staying overnight, prefer hotel/motel <i>n=1624</i> $\bar{x}=4.82$ (SD 1.82)					*			If staying overnight, prefer camping
	1	2	3	4	5	6	7	
%	3.9	11.0	8.4	14.8	15.7	20.7	25.5	
Minimal signs of management (e.g., signs, information, staff) <i>n=1624</i> $\bar{x}=4.01$ (SD 1.86)				*				Obvious management presence (e.g., signs, information, and staff)
	1	2	3	4	5	6	7	
%	3.9	11.0	8.4	14.8	15.7	20.7	25.5	%

My preferences for resource extraction...

Mining allowed <i>n=1624</i> $\bar{X}=5.35$ (SD 1.82)					*			No mining at all
	1	2	3	4	5	6	7	
%	4.4	5.5	8.4	11.7	11.7	18.5	39.8	
Logging of native forests allowed <i>n=1618</i> $\bar{X}=5.21$ (SD 1.70)					*			No logging of native forests
	1	2	3	4	5	6	7	
	2.69	7.9	10.6	12.1	13.1	18.4	35.3	

n=number of respondents

x=mean

SD= standard deviation

My preferences for resource use...

Grazing livestock allowed <i>n=1628</i>				*				No grazing allowed	
X=4.84 (SD 1.93)	1	2	3	4	5	6	7		
%	6.0	7.7	14.1	16.6	12.2	11.7	31.8		
Wind energy opportunities maximised <i>n=1631</i>				*				No wind energy considered	
X=3.87(SD 1.91)	1	2	3	4	5	6	7		
%	14.7	13.4	15.1	18.8	13.7	13.5	10.9		
Forestry plantations in appropriate areas <i>n=1622</i>				*				No forestry plantations	
X=4.32 (SD 1.88)	1	2	3	4	5	6	7		
%	8.8	10.5	16.3	16.9	16.5	13.7	17.3		

My preferences for access...

Limited access <i>n=1624</i>				*				High/easy access	
X=4.24 (SD 1.71)	1	2	3	4	5	6	7		
%	5.9	11.7	16.8	21.8	17.2	14.8	11.8		
Government control of lands <i>n=1615</i>				*				Private leases of land, less government control	
X=3.04 (SD 1.78)	1	2	3	4	5	6	7		
	27.3	18.8	13.6	19.0	8.8	9.5	3.0		

n=number of respondents

x=mean

SD= standard deviation

My preferences for facilities...

Many tourism services (e.g., visitor centres, education programs, large tours) <i>n</i>=1629 $X=4.57$ (SD 1.83) %				*				Few tourism services (e.g., small tour groups or emphasis on self-sufficient travel)
	1	2	3	4	5	6	7	
	5.4	10.9	14.6	15.7	15.9	18.7	18.8	
Large range of tourism accommodation <i>n</i>=1622 $X=4.65$ (SD 1.79)				*				Minimal tourism accommodation
	1	2	3	4	5	6	7	
	4.2	10.7	14.1	15.8	16.3	20.1	18.9	

n=number of respondents

x=mean

SD= standard deviation

5.2.6 Gender of study participants

About 60 percent of respondents were male and 40 percent female (Table 14). This result is very similar to the PPGIS study in the Alpine parks (2008) and the one in the southwest parks (2012). The higher percentages of male respondents compared to many park surveys may be related to the technology used in the survey design. It is not reflective of the actual population of Victoria, which is much closer to 51:49. (See Australian Bureau of Statistics site for breakdowns <http://www.abs.gov.au/AUSSTATS/abs@nrf.nsf/Latestproducts/2Population/People12007-2011?opendocument&tabname=Summary&prodno=2&issue=2007-2011>)

Table 13: Gender of study participants by sampling group

	Gender		
	Female	Male	Total
Count	697	929	1626
% within Sampling Group	42.9%	57.1%	100.0%

5.2.7 Age of study participants

Table 15 presents the frequency of age ranges of respondents in the study. It shows the respondents in this study were dominated by people 26 - 45 years old (61.8%). The average age of study participants was 43.5 years (SD=14.45). The oldest participant was 90 years.

Table 14: Average age of respondents

		Frequency	Valid Percent
Age Categories	<20 years	31	1.9
	21 - 25 years	60	3.6
	26 – 35 years	616	37.4
	36 – 45 years	406	24.4
	46 – 55 years	155	9.5
	56 – 65 years	215	13.1
	>65 years	165	10.1
	Total	1648	100.0

These results suggest additional attention needs to be paid to recruiting young people, especially young singles (Table 16) in future studies.

5.2.8 Lifecycle category.

The majority of respondents (57.5%) identified themselves as a family group (Table 16).

Table 15: Breakdown of sample by lifecycle category (n=1642)

Lifestyle category	Count	Percent
Young single	81	4.9
Mature single	116	7.0
Young couple/no children	169	10.3
Older couple/no children at home	272	16.5
Young family (youngest child <6 years)	322	19.5
Middle family (children 6 -15 years)	327	19.8
Mature family	305	18.5

5.2.9 Level of formal education of study participants

Table 17 shows the clear majority of respondents (54.1%) had completed a tertiary education.

Table 16: Self-identified highest level of formal education (n=1645)

		Frequency	Valid Percent
Categories	primary	13	.8
	secondary	73	4.4
	some tertiary	416	25.3
	vocational	205	12.5
	bachelors	631	38.4
	postgraduate	258	15.7
	none selected	49	3.0
Total		1645	100.0

5.2.10 Household income of study participants

Respondents in this study were dominated by people with higher than average incomes. Although Table 18 suggests a reasonable representation of respondents based on income, over 60% of respondents have a household income above \$80,000.

Table 17: Household income of respondents

		Count	Percent
Income categories	\$20,000 or less	37	2.3
	\$20,001-\$40,000	96	5.8
	\$40,001-\$60,000	126	7.7
	\$60,001-\$80,000	143	8.7
	\$80,001-\$100,000	193	11.8
	\$100,001-120,000	215	13.1
	\$120,001-140,000	157	9.6
	\$140,001-160,000	217	13.2
	\$160,001-180,000	135	8.2
	\$180,001-200,000	72	4.4
	\$200,000+	42	2.6
	Total	1642	100

A comparison of these demographics with Australian Bureau of Statistics (ABS) figures are shown below. (Table 19). It highlights that the medium income and level of education is higher among study participants than the general public.

Table 18: Comparison of Study Participants with ABS Census Data

	Study Participants		ABS Census 2011	
Age (median)		36		37
Gender	Male	57%	Male	49%
	Female	43%	Female	51%
Education (highest level completed)				
	Bachelors degree	39%		16%
	Postgraduate education	16%		11%
Household income (annual)				
	Median	\$110,000		\$63,200
	Less than \$20,000	2.6%		3.1%
	\$140,000 - \$160,000	15.1%		7.3%
	\$160,000 - \$180,000	9.4%		4.2%
	\$180,000 - \$200,000	5.0%		1.9%
	\$200,000+	2.9%		3.1%
Families with children		41%		46%

Note: ABS income percentages are estimates to match survey income categories.

5.2.11 Further comments provided by participants

An opportunity was provided for people to include additional comments and these ranged from general comments such as:

The more people who get out and enjoy our public lands the more valuable they will become. :)

to very specific and detailed comments. A total of 312 comments were recorded by respondents. These are listed verbatim in Appendix 4. They were analysed for content and grouped into one 9 sub-categories:

- Comments related to access (60 comments)
- Comments related to development (27 comments)
- Comments relating to funding (14 comments)
- Comments on camping fees (8 comments)
- Comments and perceptions related to conservation or natural resource management (24 comments)
- Comments on walking trails/Mt Biking trails/Information on trails (11 comments)
- Frustration with survey instrument/suggestions for improvement (81 comments)
- General compliments (46 comments)
- General comments (41 comments)

The largest group of comments related to the mapping component of the data collection. Many people expressed frustration with the mapping exercise or found it tedious. The comments also suggested knowledge of google maps and the ability to zoom in is perhaps not as good as assumed and despite instructions numerous comments suggested people couldn't use the zoom functions. This has to be taken into context given over 1900 people responded but 81 comments does suggest further attention to making this method easy for people to use is

warranted. There were also some cautionary comments in terms of the interpretation of the data

Peoples values are important when government organisations need to make management decision. However, this needs to be carefully balanced with current science findings and discussion with relevant scientists regarding scientific values.

There were few comments on the questionnaire itself, although some did mention question nine was difficult because preferences are dependent on the public land type – a problem we acknowledged before we begun but it was considered a trade-off compared to a much longer question. There were also numerous positive comments about the survey instrument.

We need more public input on the use of public lands (NAT PARKS), this is a start

Thank you for the opportunity to have our say

The largest group of comments related to a specific management preference were on the topic of access. Some of these comments related to access for people with disabilities.

I am also interested in providing access to places that are more difficult to reach independently by people with disabilities. This does not mean open slather, freeway style access to place worth preserving, but making sure that those with less independence can also get there.

However, the majority related to four wheel drive access, typically with a theme of responsible 4WD groups would like access to more of the gated management roads managed by Parks Victoria. There was acknowledgement within several of these comments that they believe there is a segment of 4WD users who damage the environment and that additional access would need to be managed carefully.

Thank you for providing this survey, my primary interests are 4wd touring, bushwalking and canoeing, to this end I would like to see a lot

more access to areas that are currently gated, with the tracks reasonably maintained to allow 4wd and fire crew access, maybe with some form of key access for a permit fee to some tracks to keep the bogan element out or at least identify who they are. I am all for access to as many areas as possible for 4wds but at the same time creating minimal damage to the tracks.

I am a great advocate of the Memorandum of Understanding that has recently been introduced in the Northern Territory. Unlock the Parks and give access to responsible 4WDers/Clubs. Thank you

Public land should always be open to all walks of life even the 4x4 community for social and group activities as a member of 4x4 earth we push a lot on tread lightly so others may have a chance to come and enjoy what we have, some easy tracks and some not so easy and then you have the mapped tracks around lake eildon fantastic and a lot of fun for a good well setup 4x4 group for sightseeing & camping

Another large group related to development, with a clear message being to minimise commercial developments in National Parks and to areas adjacent National Parks for any development.

Parks are for people, not for profit. Commercial development will eventually destroy the very reason parks are set up to preserve the natural environment.

Wilderness areas are just that and should not be used as money making ventures for private enterprises, that will essentially destroy "wilderness"

If tourist infrastructure is required in some new parks it should be built outside the park

There is plenty of space on the edge of national parks for development of fancy accommodation - keep commercial development out of our parks

However, some comments reflected a middle ground on this issue and many others pointed to the challenge Parks Victoria is faced as a result of insufficient funding.

Allowing tightly regulated commercial activities in some parks with lower conservation values may help improve funding for basic maintenance of facilities. Parks with high conservation values must be protected from commercial activities.

In terms of comments pertaining to conservation and natural resource management, there were many comments relating to a perceived need for better weed and feral animal control.

Feral animal and plant control measures seem to be failing. Deer and rabbits in particular need to be culled.

Management of feral animals in parks falls well short of worlds best practice. Grazing in parks is can result in severe damage which is not reinstated

Other key topics included fire and cattle grazing in the high country, put simply by one respondent as:

NO CATTLE GRAZING IN THE ALPINE NATIONAL PARK

Overall, there were many comments supporting Parks Victoria and complimenting the system of parks. However, there was also a clear group of comments related to the need for better funding for the organisation and also some that questioned overall governance structures.

Public lands are grossly underfunded. All political parties think they can do this on the cheap. Anyone seen a ranger recently?

I believe that Parks Victoria needs more money and staff to manage and improve the environment of its public lands from invasive species and those who would exploit them / damage them for personal gain.

Finally, several comments related to requests not to increase camping fees and requests for better online information and park maps.



Conclusions & Recommendations

6.1 Discussion & Conclusions

This study was the first statewide PPGIS study commissioned by Park Victoria, following two regional studies (Alpine and Southwest regions). This study introduced a new mechanism by which participants started at a zoom level suitable for mapping. It also included quick reference tabs to allow fast navigation around the state and following the pilot work we significantly reduced the number of attributes being mapped. Pilot testing revealed these changes made the exercise much less onerous for participants. The number of respondents completing the survey suggested it was a suitably engaging instrument but it should be noted that 85% of points were associated with the first tab and only 15% for the second tab, so an on-going issue is the balance of starting with a cognitively less challenging task yet making sure the most important issues are addressed through the first tab.. The data presented within this report provides a benchmark for future comparison. We acknowledge the exercise was challenging for respondents (hence they were provided with a small reward) and it is assumed that people have a finite amount of time and willingness to engage in such a process and as such they probably mapped their favourite parks, rather than all the parks they consider valuable.

Recruitment remains a key issue. In this study we acknowledge further thought is required regarding ways to recruit younger public land users. We also note that the study was reliant on assistance from a number of groups and that the sample was a convenience sample. Only 9% of respondents completed the study as a result of a traditional park intercept. We believe the incentives were a major factor in the success of the project and that such a program needs to be budgeted in future projects. Only one respondent complained about one of the non-profits chosen and many complimented the initiative. Despite several areas for future improvement, the study provides some robust metrics on which to base future

decisions. Values do change over and it is recommended the process be repeated on a five year cycle and that Parks Victoria continue to collect more detailed data in each region during the interim periods. The following offers a discussion of the results.

Understanding social and cultural values of public land is an important and underdeveloped component of ecosystem services valuation. Identifying social and cultural values is also increasingly important for public land planning and management (Ives & Kendal, 2013). Our assessment of public land values—the first comprehensive assessment across an entire public land estate—used two analytical focal lengths, a wide-angle, state-wide lens that examined broad associations between values and public land types, and a zoom lens that used social landscape metrics to examine the distribution of values in individual park/reserve units. The two analyses provide alternative, but complementary assessments of public lands.

As a system, public lands in Victoria provide the full spectrum of social and cultural ecosystem values with recreation, scenic/aesthetic, and biological values being most recognized by study participants. The larger, most highly visited national parks appear disproportionately important in providing these values, but the social landscape metrics also reveal that on a per hectare basis, metro and regional parks provide higher intensities of values centred on recreation. Despite the uneven spatial distribution of public lands within Victoria, these lands comprise a complementary and representative system of social and cultural values that are abundant, rich, and diverse. National and wilderness parks provide relatively pristine natural settings that are differentially important for wilderness and intrinsic/extrinsic values, state forests provide biological and life sustaining values combined with nature-based recreation, and metropolitan and regional parks provide important recreation opportunities proximate to urban and suburban populations. The Victorian coast further augments the system by providing exceptional scenic values in combination with abundant marine life.

The analysis of specific park/reserve units using social landscape metrics reveals special and unique places. For example, Port Campbell National Park on the southern coast of Victoria contains the scenic “Twelve Apostles”, an iconic coastline that features golden cliffs and crumbling pillars where scenic values dominate other mapped values. The metrics also reveal that Wilsons Promontory, another coastal national park, is similarly dominated by scenic values. The conflict metric indicates some of the larger national parks such as Alpine National Park will continue to be challenged to find the right balance between conservation and development preferences in future management.

The validity and reliability of PPGIS to assess the values associated with public lands depend on the data collection methods and representativeness of the sampling. The value and preference typologies, as operationalized in PPGIS, have a relatively high degree of construct validity given their replication across multiple studies involving public lands. For example, the relative frequency of mapped values in this study was consistent with the values found in a recent PPGIS study of Hinchinbrook Island National Park in Australia (van Riper et al., 2012). We are more ambivalent about the sampling design and implementation that necessarily relied on purposive and to a greater extent, convenience sampling, the latter being termed *volunteered geographic information* or VGI. The sampling method, especially probability vs. non-probability sampling, represents a potential, but not definitive point of distinction between PPGIS and VGI systems (Brown & Kytä, 2014).

By the standards of science, the lack of random sampling of households in Victoria due to budget constraints must be considered a study limitation. The participant profile is biased toward individuals that are familiar and use public lands on a fairly regular basis. Further, we estimate that about half of the participants likely have memberships or other affiliations with organizations that span a variety of public land advocacy interests ranging from greater conservation to increased access.

As a cautionary tale, Brown, Kelly, and Whittall (2012) observed that PPGIS participants that were mobilized by advocacy groups can influence the types of markers that are mapped in the PPGIS process, with the potential ideological bias more apparent when mapping land use preferences.

Despite limitations in the sampling design, there were encouraging aspects of the sampling response that merit further consideration for future public land assessments using PPGIS and VGI methods. With over 1,900 study participants, this study achieved nearly double the response of the largest previous study to map cultural ecosystem values (Brown & Fagerholm, in press). Prior research by this research team that used social media and volunteer networks to recruit PPGIS participants were far less effective. We speculate that the affinity of the study topic with participants—parks and public lands—in combination with an innovation in monetary incentives that offered participants the option to donate money to selected charities on their behalf, resulted in participation rates that exceeded our expectations. The high participation rate should be considered in light of previous PPGIS studies that used random household sampling, but consistently reported very low response rates as well as sampling bias (Brown & Kyttä, 2014). Ideally, a comprehensive public lands assessment would follow the approach of Brown and Reed (2009) who advocate a PPGIS sampling design that combines regional random household sampling, volunteer opportunities for non-regional residents to participate, and the targeting of public land stakeholder groups.

In a recent review of empirical mapping of ecosystem values using PPGIS, Brown and Fagerholm (in press) found little evidence that mapped data had actually been used for decision support in land use planning and that best practice had yet to emerge from research dominated by methodological pluralism and case study research. This particular study adds yet another case study, albeit the first to map social and cultural ecosystem values across a system of public lands. Whether this assessment will influence resource allocations and management decisions

from Parks Victoria and DEPI, the agencies responsible for over 90 percent of the public lands in Victoria, remains to be seen. The most important outcomes for this study were to establish the methodological viability of system-wide assessment of public lands using PPGIS/VGI methods and to establish a baseline inventory of public land values in Victoria that can be used to compare with future biological and social assessments. The system developed was both cost and time efficient and the results allow small-scale data interrogation to occur. The challenge that remains is to evaluate the use of this data by Parks Victoria and further refine the method accordingly.



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Appendices

Appendix 1: Survey with results

1. Are you a resident of Victoria?

Sample/number of respondents (n)=1905

- ☒ Yes (92.7%) ☐ No (7.3%)

2. If yes, how long have you lived in Victoria?

n=1496

- Years Months (mean: 34.13 years, range 1 month – 89 years)
:

3. In which city or suburb do you live? (Please type the name in the box)

n=1629

- City/suburb Provided as appendix C

4. How would you rate your knowledge of public lands in Victoria? (Please check one response.)

n=1634

- ☒ Excellent (24.8%)
- ☒ Good (53.4%)
- ☒ Average (19.7%)
- ☒ Below average (1.5%)
- ☒ Poor/little knowledge (0.5%)

5. Personally, how difficult or easy is it for you to access public lands in Victoria? (Please check one response.)

n=1629

- ☒ Very easy to access (31.9%)
- ☒ Easy to access (48.3%)
- ☒ Neither difficult nor easy to access (17.4%)
- ☒ Difficult to access (2.3%)
- ☒ Very difficult to access (0.1%)

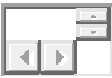
6. Which statement best describes your frequency of use public lands in Victoria? (Please check one response.)

n=1639

- ☒ I use public lands every day **(13.8%)**
- ☒ I use public lands at least once per week **(29.5%)**
- ☒ I use public lands at least once per fortnight **(23.7%)**
- ☒ I use public lands at least once per month **(19.8%)**.
- ☒ I use public lands at least once every few months **(9.2%)**
- ☒ I use public lands about twice per year **(2.6%)**
- ☒ I use public lands about once per year **(0.9%)**
- ☒ I use public lands less than once per year **(0.4%)**

7. About how many times have you visited national or state parks in Victoria in the last 12 months? (Please write a number in the box)

n=1589

- Estimated Number of Visits 
 - Range 1 -700 visits per year.
 - Mode (most frequently reported) =2,
 - median 10 (in this case we suggest may be meaningful than mean which is skewed by large number of people using parks everyday)
 - mean 19.73 (standard deviation 44.89).

8. Although you likely have a specific reason for visiting a particular park, reserve, forest, or other public land, how would you describe your most common reason for visiting public lands? (Please check **one** response)

n=1638

- ☒ To sightsee, tour, and appreciate nature and/or culture **(28.4%)**
- ☒ To socialise with family and/or friends **(11.1%)**
- ☒ To engage in a trail-based activity (e.g., hiking, cycling, jogging) **(30.9%)**
- ☒ To relax, rest, and engage in low energy activities (e.g., reading, painting, drawing) **(12.1%)**
- ☒ To engage in a particular high energy or adventurous activity (e.g., surfing, swimming, exercising, fishing, rock climbing, yachting) **(5.6%)**
- ☒ To engage in a variety of park activities that are convenient with easy access **(3.4%)**

- To spend a weekend or substantial period of time, typically camping (8.5%)
-

9. Public lands can be managed many different ways. Below are some contrasting views about public land management. Thinking about your own preferences for public lands, where would you place your preferences on the scales below? There is no right or wrong answer--we are simply interested in how people see themselves on these scales. A position in the middle (number=4) indicates you don't have a preference leaning either direction on the scale, whereas the positions 1 and 7 suggest you have a very strong preference. (Please check one response per item)

Recreation Experience Preferences
I prefer to recreate in an environment that has...

Primarily natural environment <i>n=1631</i> <i>x=2.99 (SD: 2.09)</i>			*					Primarily built environment
	1	2	3	4	5	6	7	
%	36.9	16.1	12.6	8.5	6.8	9.8	9.3	
Little social interaction <i>n=1624</i> <i>x=3.69(SD: 1.90)</i>				*				Lots of social interaction
	1	2	3	4	5	6	7	
%	14.0	20.6	15.6	14.0	10.5	18.7	6.6	
High risk/adventure activities <i>n=1629</i> <i>x=4.33 (SD: 1.74)</i>				*				Safe/secure activities
	1	2	3	4	5	6	7	
%	6.6	10.9	14.3	20.4	18.9	16.8	12.2	
Minimal motorised access (exploration requires walking, canoeing etc), <i>n=1630</i> <i>x=3.63</i> <i>(SD=1.97)</i>				*				Extensive motorised access (eg. 2WD and 4WD roads)
	1	2	3	4	5	6	7	
%	19.0	16.6	13.5	17.1	9.6	15.7	8.5	
Opportunities to do the activities I enjoy <i>n=1627</i> <i>x=4.64 (SD:1.65)</i>					*			An attractive setting is most important
	1	2	3	4	5	6	7	
%	4.2	6.9	13.8	21.2	17.8	21.6	14.4	

If staying overnight, prefer hotel/motel <i>n=1624</i> <i>x=4.82 (SD 1.82)</i>				*				If staying overnight, prefer camping	
	1	2	3	4	5	6	7		
%	3.9	11.0	8.4	14.8	15.7	20.7	25.5		
Minimal signs of management (e.g., signs, information, staff) <i>n=1624</i> <i>x=4.01 (SD 1.86)</i>				*				Obvious management presence (e.g., signs, information, and staff)	
	1	2	3	4	5	6	7		
%	3.9	11.0	8.4	14.8	15.7	20.7	25.5	%	

n=number of respondents

x=mean

SD= standard deviation

My preferences for resource extraction...

Mining allowed <i>n=1624</i> X=5.35 (SD 1.82) %	1	2	3	4	5	6	7	No mining at all
	4.4	5.5	8.4	11.7	11.7	18.5	39.8	
Logging of native forests allowed <i>n=1618</i> X=5.21 (SD 1.70)	1	2	3	4	5	6	7	No logging of native forests
	2.69	7.9	10.6	12.1	13.1	18.4	35.3	

My preferences for resource use...

Grazing livestock allowed <i>n=1628</i> X=4.84 (SD 1.93) %	1	2	3	4	5	6	7	No grazing allowed
	6.0	7.7	14.1	16.6	12.2	11.7	31.8	
Wind energy opportunities maximised <i>n=1631</i> X=3.87 (SD 1.91) %	1	2	3	4	5	6	7	No wind energy considered
	14.7	13.4	15.1	18.8	13.7	13.5	10.9	
Forestry plantations in appropriate areas <i>n=1622</i> X=4.32 (SD 1.88) %	1	2	3	4	5	6	7	No forestry plantations
	8.8	10.5	16.3	16.9	16.5	13.7	17.3	

My preferences for access...

Limited access <i>n=1624</i> X=4.24 (SD 1.71) %	1	2	3	4	5	6	7	High/easy access
	5.9	11.7	16.8	21.8	17.2	14.8	11.8	
Government control of lands <i>n=1615</i> X=3.04 (SD 1.78)	1	2	3	4	5	6	7	Private leases of land, less government control
	27.3	18.8	13.6	19.0	8.8	9.5	3.0	

My preferences for facilities...

Many tourism services (e.g.,	Few tourism services (e.g.,
-------------------------------------	------------------------------------

visitor centres, education programs, large tours) $n=1629$ $X=4.57$ (SD 1.83) %	1	2	3	4	5	6	7	small tour groups or emphasis on self-sufficient travel)
	5.4	10.9	14.6	15.7	15.9	18.7	18.8	
Large range of tourism accommodation $n=1622$ $X=4.65$ (SD 1.79)	1	2	3	4	5	6	7	Minimal tourism accommodation
	4.2	10.7	14.1	15.8	16.3	20.1	18.9	

n =number of respondents

x =mean

SD= standard deviation

10. What is your gender?

$n=1626$

- ☒ Male (42.9%)
- ☒ Female (57.1%)

11. In what year were you born?

-
-

		Frequency	Valid Percent
Age Categories	<20 years	31	1.9
	21 - 25 years	60	3.6
	26 – 35 years	616	37.4
	36 – 45 years	406	24.4
	46 – 55 years	155	9.5
	56 – 65 years	215	13.1
	>65 years	165	10.1
	Total	1648	100.0

12. Which lifecycle category best describes you? (Please select one category)

No response

Lifestyle category	Count	Percent
Young single	81	4.9
Mature single	116	7.0
Young couple/no children	169	10.3
Older couple/no children at home	272	16.5
Young family (youngest child <6 years)	322	19.5
Middle family (children 6 -15 years)	327	19.8
Mature family	305	18.5

13. Which of the following best describes the highest level of formal education you have completed? (Please check one response.)

• None selected

		Frequency	Valid Percent
Categories	primary	13	.8
	secondary	73	4.4
	some tertiary	416	25.3
	vocational	205	12.5
	bachelors	631	38.4
	postgraduate	258	15.7
	None selected	49	3.0
	Total	1645	100.0

14. Which category best describes your pre-tax (gross) household income last year? (Please check one response)

None selected

		Count	Percent
Income categories	\$20,000 or less	37	2.3
	\$20,001-\$40,000	96	5.8
	\$40,001-\$60,000	126	7.7
	\$60,001-\$80,000	143	8.7
	\$80,001-\$100,000	193	11.8
	\$100,001-120,000	215	13.1
	\$120,001-140,000	157	9.6

	\$140,001-160,000	217	13.2
	\$160,001-180,000	135	8.2
	\$180,001–200,000	72	4.4
	\$200,000+	42	2.6
	Total	1642	100

15. Would you like the study results sent to you? If so, put your email address below.

- Email address

This completes the questionnaire! Thank you so much for your participation. As a small token of our appreciation for your time in completing this survey, please select one of the following options:

- **\$10 Amazon Gift Voucher.** This voucher will be emailed to you (mailing dates are: Dec 13 for completions before that date, Jan 15 and Feb 10) Amazon.com Gift Cards are redeemable for millions of items storewide and do not expire.
Provide email address-->
- **Hoyts Movie Pass.** These will be mailed to you and provides one free entrance into a regular movie. The mailing dates are: Dec 13 for completions before that date, Jan 15 and Feb 10.
Provide postal address-->
- **\$10 donation to the Victorian National Parks Association.** Established in 1952, the VNPA is a leading voice for conservation in Victoria. VNPA is an independent, non-profit, membership-based group, which exists to protect Victoria's unique natural environment and biodiversity through the establishment and effective management of national parks, conservation reserves and other measures. For more information on the Victorian National Parks Association see <http://vnpa.org.au> Provide an email address if you would like to receive confirmation of the donation.
Provide email address-->
- **\$10 donation to the Australian Wildlife Conservancy.** AWC is an independent, non-profit organisation dedicated to the conservation of Australia's threatened wildlife and ecosystems. AWC owns 23 sanctuaries covering more than 3 million hectares (7.4 million acres) around Australia. They acquire land for conservation, implement practical conservation programs (e.g. Eradication of feral animals), conduct scientific research and undertake public education. For more

information on the Australian Wildlife Conservancy, see <http://www.australianwildlife.org>. Provide an email address if you would like to receive confirmation of the donation.

Provide email address-->

- **\$10 donation to the Fred Hollows Foundation.** Give the gift of sight. The vision of the Fred Hollows Foundation is a world where no one is needlessly blind, and Indigenous Australians enjoy the same health and life expectancy as other Australians. Through reducing the cost of cataract operations to as little as \$25 in some developing countries, they have helped to restore the sight of more than 1,000,000 people worldwide. For more information on the Foundation see <http://www.hollows.org.au>. Provide an email address if you would like to receive confirmation of the donation.

Provide email address-->

Thank you again for your assistance in this survey. If you have any further comments, you can write them here (up to 250 words maximum).



Appendix 2: The postcard distributed in parks.



As a visitor to Victoria's parks, we would like to hear your thoughts on their future.

Please help us by participating in a short survey. Go to www.parksvictoria.net and use this unique code: **741**

Everyone completing the survey by 31 January 2014 will receive a \$10 Amazon voucher, a Hoyts movie pass or \$10 credit to donate to a selection of charities.

Thank you for helping us with this important research.

This study has been approved by the UniSA Human Research Ethics Committee (protocol #032290). The information you provide is confidential and will not be individually identifiable. If you have any questions about this study please contact Dr Greg Brown (greg.brown@uq.edu.au) or Dr Delene Weber (delene.weber@unisa.edu.au).



Appendix 3: Onsite survey dates

Interview		Park	Interview Location/Visitor Site	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Wed	Thu	Fri	Fri	Sun	Wed	Thu	Fri
Month				23-Nov	24-Nov	30-Nov	1-Dec	7-Dec	8-Dec	14-Dec	15-Dec	20-Dec	21-Dec	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	8-Jan	9-Jan	10-Jan		
NOVEMBER 2013 URBAN PARKS	85	1 Yarra Bend Park	Westfield Picnic Area			11	11	11																								
	14	1 Yarra Bend Park	Golf Course Loop			11	11	11																								
	8	1 Jells Park	South			11	11	11																								
	7	1 Jells Park	The Pines picnic area			11	11	11																								
	13	1 Westerfolds Park	Porter St			11	11	11																								
	12	1 Westerfolds Park	Main Car Park			11	11	11																								
	11	1 Wattle Park	The Chalet			11	11	11																								
	4	1 Braeside Park	Telford Picnic area			11	11	11																								
	64	1 Lysterfield Lake	Main Picnic Ground			11	11	11																								
	57	1 Point Cook Coastal Park	Beach Picnic Area						11	11	11																					
	21	1 Cardinia Reservoir	Crystal Brook						11	11	11																					
	1	1 Albert Park	Swan Picnic Area						11	11	11																					
	50	1 Albert Park	Lake Path						11	11	11																					
	2	1 Albert Park	Community Playground						11	11	11																					
	6	1 Brimbank Park	Car Park B						11	11	11																					
	5	1 Brimbank Park	Car Park A						11	11	11																					
	55	1 St Kilda Pier	St Kilda Pier						11	11	11																					
	54	1 Gem Pier	Gem Pier - Williamstown						11	11	11																					
DECEMBER 2013 PERI URBAN PARKS	17	2 Dandenong Ranges NP	Grants Picnic Ground									11	11	11																		
	19	2 Dandenong Ranges NP	Ferntree Gully Picnic Ground									11	11	11																		
	58	2 Maroondah Reservoir Dam	Main Car Park									11	11	11																		
	60	2 Yarra Ranges NP	Mt Donna Buang Summit									11	11	11																		
	61	2 You Yanges RP	Turntable Carpark									11	11	11																		
	59	2 Macedon RP	Harbison Picnic Area									11	11	11																		
	53	2 Queenscliff Pier	Queenscliff Pier									11	11	11																		
	83	2 Hastings Pier	Hastings Pier									11	11	11																		
	51	2 Mornington Pier	Mornington Pier									11	11	11																		
	56	2 Arthurs Seat SP	Summit Picnic Area Precinct																11	11	11											
	22	2 Mornington Peninsula NP	Sorrento Back Beach Car Park																11	11	11											
	23	2 Mornington Peninsula NP	Gunnammatta Beach Car Park																11	11	11											
JANUARY 2014 COUNTRY PARKS	69	3 Port Campbell NP	Loch Ard Gorge																		11	11	11									
	40	3 Port Campbell NP	12 Apostles																		11	11	11									
	39	3 Great Otway NP	Maits Rest																		11	11	11									
	68	3 Great Otway NP	Blanket Bay (Great Ocean Walk)																		11	11	11									
	65	3 Great Otway NP	Sheoak Picnic Area																		11	11	11									
	28	3 Great Otway NP	Erskine Falls																		11	11	11									
	66	3 Bay of Islands CP	Bay of Islands																								11	11	11			
	71	3 Tower Hill SGR	Main Picnic Ground																								11	11	11			
	32	3 Croajingolong NP	Wingan Inlet																								11	11	11			
	67	3 Lower Glenelg NP	Pritchards Visitor Site																								11	11	11			
	42	3 Wilsons Promontory NP^A	Tidal River																								11	11	11			
	43	3 Wilsons Promontory NP^A	Oberon Car Park																								11	11	11			
	84	3 Cape Liptrap CP	No. 1 Beach																								11	11	11			
	62	3 Cape Conran CP	East Cape/Sailor's Grave Day Visitor Area																								11	11	11			
	70	3 Alpine NP (summer)	Wallaces Hut (summer)																								11	11	11			
	37	3 Mount Buffalo NP (summer)^A	Lake Catani (summer)																									11	11	11		
	36	3 Mount Buffalo NP (summer)^A	Gorge Day Visitor Area (summer)																									11	11	11		
	34	3 Grampians NP	Brambuk th NP & Cultural Centre Carpark																									11	11	11		
	35	3 Grampians NP	Mackenzie Falls																									11	11	11		
		3 Grampians Additional Site?	TBC																										11	11	11	
	INTERVIEWERS REQUIRED			0	0	18	18	18	18	18	18	18	18	18	18	0	0	0	0	6	18	18	12	0	0	18	18	18	8	8	8	8

2 interviewers at each park for each rostered day (public holidays shaded)

Appendix 4: Additional Comments provided by respondents

(312 comments)

This appendix consists of a total of xx verbatim comments.

They have been analysed for content and grouped into the following sub-groups based on what was considered the salient issue. There is some professional judgement in this grouping. .

- Comments related to access (60 comments)
- Comments related to development (27 comments)
- Comments relating to funding (14 comments)
- Comments on camping fees (8 comments)
- Comments and perceptions related to conservation or natural resource management (24 comments)
- Comments on walking trails/Mt Biking trails/Information on trails (11 comments)
- Frustration with survey instrument/suggestions for improvement (81 comments)
- General compliments (46 comments)
- General comments (41 comments)

Comments relating to funding (14 comments)

I am very angry that the current government has cut funding and staff to manage our national parks and reserves. I am very angry that they are now facilitating development in national parks - the complete opposite of their intended purpose of protecting these precious places. I am very angry the government is pressing for mining and other resource development in parks and reserves. I am angry they are opening up new areas for destructive gold prospecting. I am angry they are opening up new areas for logging, such as the beautiful Mt Cole near Ballarat. I am angry they are turning a chunk of Royal Park into a freeway entrance. I am angry they are rewriting vegetation clearing laws to allow developers and farmers a free kick to destroy native vegetation. Public land is PUBLIC. It is not for politicians to reward their mates or play ideological games with. Preserve it for your children's, children's, children.

Our Parks are under threat from this State Government. As an active Parks Victoria Volunteer I want to see Parks staffing reinstated (they can then manage the weed and fire risks) and the natural values of our parks respected. I do not want 100 year private leases, cattle grazing or shooting in my National Parks. Our natural heritage is important and needs to be preserved for future generations. The mix of wilderness areas and active tourism is working well.

Strongly against Government control--never enough resources, poor management, poor local knowledge, little assistance to 'friends' groups. Strongly support local community control and management.

Please make sure reserves stay in public hands. All coastal shorelines must be commonwealth owned. Highest points should also be commonwealth owned to preserve our heritage. All key 'monopoly estates' need to be left in Commonwealth, eg railways, post office, ambulance, hospital.. as they represent security. Unions should be banned from the National service industries, Police, Nursing, Doctors, Port, Teaching, .. as they represent the key service industry. We cannot afford to have these people strike.

Increase funding to adequately staff Parks Vic officers in the Bellarine Peninsula area and amend state government legislation to provide Parks Victoria officers with increased enforcement ability.

I support more user pays or the introduction of a pass system to enter the parks. Message to Vic Gov't - stop slashing Parks budget!! They are delicate, vulnerable and fragile resources that need more management not less!

More resources are needed to maintain parks which are not major parks. Mt Worth Park is a good example. Voluntary committee, few resources, not much known about park and what animals are in there.

Spend money on crown land - assets with the visage to invest, not band aid. Spend money on maintenance to prolong, not to replace.

I believe that Parks Victoria needs more money and staff to manage and improve the environment of its public lands from invasive species and those who would exploit them / damage them for personal gain.

As usual, my preferred answer to many questions would be, not 'should this be done' but 'how is it done'; that is, how is it managed. Given lack of adequate resources for management of public land, weak laws and even weaker law enforcement, I am forced to prefer a very conservative approach. 'Management' of potentially damaging activities to prevent this damage simply often does not happen. Minimum legislated standards become, at best, the maximum management applied. Often required management is avoided. The 'Code of Forest Practices' is a case in point. It is frequently violated even where a government agent is in charge: slope limits and soil protection are in the hands of people with little or no inadequate training to implement regulations, the two cultural heritage acts are not enforced due to totally inadequate staffing, return times for harvesting are too short to allow recovery of tree stocks let alone ecosystems and soils. Yet practices under government agency are excellent compared with those where native forest and plantation exploitation have been handed over to private companies. So, while 'how' something is done should be regarded as at least as important as 'what' is done, restrictions and prohibition of uses seem to be the only way to go until there is a genuine will to think of our natural world as something more than a means of making a quick buck and political again.

public lands are grossly underfunded. all political parties think they can do this on the cheap. Anyone seen a ranger recently?

there needs to be a better way of funding Parks so adequate money is spent on management. I do not know how to get Govt to keep an environmental head on their shoulders but this area of spending of public money is all too often relegated to last on the list in favour of BIG business. This model is broken. All too often those who earn most are required to contribute least or even manage to do a complete dodge. ????? I realise that we have to be thrifty but some things are not well managed by bureaucracy. Too few in the Depts. have little or no practical experience or really know what it is like on the ground. Too many bean counters Parks Victoria need adequate funding to ensure ecologically appropriate management, esp. pest plant and animals. Fuel reduction burning needs to be appropriate to the ecosystem being burnt and more research into this needs to be undertaken. Grazing should NOT be allowed in ANY national park. More research and better parks planning (e.g. corridors etc) to help ecosystems deal with climate change.

Camping Fees (8 comments)

I want to reiterate my disagreement with the proposed parks camping fees. They put the cost of facilities shared with day visitors unfairly on campers and are much greater than private campsite fees. The expense will encourage people to camp out of site, clearing new areas and spreading impact. The 6 person site fee also discriminates against individuals and small groups. I support a reasonable per person fee such as at Mt Arapiles across all parks and an on site payment system. I believe this will greatly increase compliance and reduce rogue camping. I do not wish to see NP campsites developed into caravan park like facilities and support low resource options such as composting toilets and rainwater only.

I really appreciate the work of Parks Victoria, ensuring that we have access to those wonderful places. Although, given the recent camping fee proposal, I feel that park isn't going in the best direction. Hopefully, my and other input will help.

Please reconsider recent thoughts and review of camping fees around Victoria. User pays I understand however up to \$60 dollars per night for a camp site that has no running water, power or in some cases toilets is just too much. Particularly if like me camping is a solitary thing. It truly is encouraging people to do the wrong thing and set up bush camps. It's about compliance if 1000 people pay a small fee it is much better than 100 of 1000 paying a large fee. Also if only 100 people register and pay, Parks Victoria is only aware of 1/10th of the park users (in this example). Not an accurate indicator of a park's human traffic. Thanks Parks for this opportunity.

we should base our ecotourism on the New Zealand model, keeping costs to a level where non high income individuals/groups can afford to use the proposed facilities

Please do not increase camping fees

Keep camping in National Parks affordable.

Please do not raise the camping fees as high as recently indicated. People like myself who enjoy camping, require few facilities and have a low impact on the park will not be able to afford it. Camping is supposed to be a cheap alternative for travellers/tourists. Now it will be cheaper to stay in a hostel/backpackers, which is just ridiculous. We should not be forced to suffer the consequences of previous poor management plans regarding park access and fees. Thank you.

Also DONT introduce the fees proposed late last year for park use. They are bullshit. you can stay at a service caravan park for less.

Comments re Access (60 comments)

While the above responses mainly reflect my own personal preferences, I am also interested in providing access to places that are more difficult to reach independently by people with disabilities. This does not mean open slather, freeway style access to place worth preserving, but making sure that those with less independence can also get there.

Forgot to mention need regular maintenance on forest roads for easy access, as not everyone has a 4 wheel drive.

I honestly hope that state\NAT parks, stay open for all, including.... 4wd Horses Bikes Walkers And any one else who use them, in a responsible manner

I find Parks Vic rules sometimes lack reason. For example in Wilson's Promontory NP you can't ride bicycles on any of the tracks even though some of the tracks are used by management vehicles. I live on Phillip Island where all tracks are dual use (walk / ride) and it works really well. I would like to know why? All the reasons I've been given such as track maintenance and walker / rider collisions are not a problem on Phillip Island. This is why I ticked less Govt control in the survey.

Parks - State and National - are a vital part of our lifestyle. Good management is essential, as is having the parks available to all citizens and visitors. Varying degrees of access are important with parks closer to Melbourne being more suitable for day trippers and casual visits, while the likes of more remote/isolated Yarra Ranges SP and ANP being suitable for experienced hikers, campers, 4wders and photographers. Keeping parks open and tracks in good condition encourages responsible use of them. Closing camping areas and tracks frustrates visitors and certainly does nothing for park management's reputation as responsible carers of parks.

We love our wilderness in Vic, but it needs to remain accessible. this includes keeping camping fees low and ensuring tracks remain open for hikers and 4wders. the more tracks that close, the more people are funneled into a smaller number of overcrowded camp grounds.

Thank you for providing this survey, my primary interests are 4wd touring, bushwalking and canoeing, to this end I would like to see a lot more access to areas that are currently gated, with the tracks reasonably maintained to allow 4wd and fire crew access, maybe with some form of key access for a permit fee to some tracks to keep the bogan element out or at least identify who they are. I am all for access to as many areas as possible for 4wds but at the same time creating minimal damage to the tracks.

I really enjoy our parks and recently when we were travelling around Australia we visited and camped in many parks in the Northern Territory and Western Australia. We need access but not at the expense of ruining what we love. We have also enjoyed Parks in Tasmania and for many years camped at Wilsons promontory. As we age access can be a bit more difficult. Parks Victoria needs to keep this in mind.

I visit Brimbank Park regularly. Now that it has automatic gates I wonder why it can't be opened earlier. In summer it can be too hot to enjoy a long walk by the time it opens at 8.30 a.m.

I am very disappointed that access to one of the smaller parks has been zero for several years. (I will also bet that I will be the only person who cares!!) Please reinstate access to Lind National Park.

I am constantly irritated by the way many land managers look after their areas, and the lack of flexibility that is offered to those who undertake a recreation that is not understood by others. Mine is Trailbike riding. Experienced Trailbike riders do not want or need good tracks and open areas. They are dangerous due to high speeds creating a mechanism for injury and traffic coming the other way. I would be more than happy to discuss Trailbike riders needs at any time (no one ever does). It won't be hard to find me, I am a licensed Trailbike Tour Operator in Victoria, or simply call (Name and contact details withheld)

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Access is paramount to enjoying our parks. Please don't reduce our access by closing tracks. A poorly maintained track is better than no track.

Love getting out into the parks in our 4x4, we wouldn't be able to do it any other way so safe graded tracks and easy access is very important to us.

I am a great advocate of the Memorandum of Understanding that has recently been introduced in the Northern Territory. Unlock the Parks and give access to responsible 4WDers/Clubs. Thank you

More 4WD access, less 2WD access. Keep the city cowboys in the city and leave the bush for those of us up for the challenge to be rewarded with some peace.

Public land should always be open to all walks of life even the 4x4 community for social and group activities as a member of 4x4 earth we push a lot on tread lightly so others may have a chance to come and enjoy what we have, some easy tracks and some not so easy and then you have the mapped tracks around Lake Eldon fantastic and a lot of fun for a good well setup 4x4 group for sight seeing and camping

My love is the Victorian high country. We 4wd all over Australia and keep coming back to the high country where you can set a tent up at your car, not 50m away behind logs. Love the freedom. We just have to stop these idiots vandalising structures in the bush

It really disappoints me the amount of tracks that get blocked off from public access to stop 4WD access. I would prefer better relations with the 4WD clubs and joint management rather than autocratic decision making by governmental authorities restricting our access to our own areas of bushland.

Additional 4x4 tracks of all levels of difficulty would be appreciated. A summary of highlights on these tracks would be great to have available via a website.

Public lands should be accessible to all Australians and visitors. They should be strictly controlled by the government to ensure the environment is properly cared for and the appropriate activities are done in the correct place. We all need places of peace to go and relax whether it be on the banks of a river or the middle of the bush. It is inappropriate to have engines and noisy activities allowed in these areas. We need to protect what natural beauty and wonder is left in this fragile world of ours.

It is very important to me that access to our National Parks and state forest remain open to all and that access for vehicles is essential for the full enjoyment of our fantastic wilderness and forest/mountain areas by all. Do not lock up tracks to trail bikes and 4WDs which denies access to enjoy what is ours! I have travelled extensively through the Victorian High Country and the only real way to have access to this fantastically scenic part of Australia is on a trail bike or in a 4WD. I want to be able to continue to enjoy such trips and that my children and their children can also experience it via independent travel.

I believe that the Victorian Public Lands is generally managed well, and I hope this continues. Access for recreational users such as 4WD's need to be maintained, and this will assist with the overall management of the area.

I would visit public lands more, but I only have access to public transport. I used to camp, using a pushbike and a tent, but now am fairly restricted due to age and infirmity to places that are close to transport, with proper beds. I have mostly identified places that I have been to in recent times.

I do not want to see more speed boats in the Murray or 4WDs in the mountains. I am not elitist, but better access can lead to more litter and damage. I like quiet contemplation.

Love the green grass lands,trees and natural environments around Melbourne. Would love there to be more dog beach access around mornington peninsular during daylight savings, as currently have to travel out of sorrento to get to a dog part of the beach further down in frankston.

Access for 4 wheel driving should be significantly increased. 4x4earth.com.au runs Australia's largest completely free 4 wheel drive weekend away, and it has a significant economic impact on the nearby towns. 4x4earth has over 40,000 members Australia wide and actively contribute to maintaining the areas that we love, including building a Gazebo at O'Tooles and bollarding to minimise vandalism. Far too many tracks have been shut, to the detriment of our enjoyment of our magnificent country and also to the detriment of the small towns that provide the infrastructure to support camping and driving in the areas. The fuel, food and alcohol, accommodation, and goods purchased make a significant difference to country towns that are often struggling to survive economically. The 4 wheel drive community has already demonstrated that it is very keen to protect our environment, not only for our enjoyment, but also for the enjoyment of our children and generations to come. The Australian Bush has a significant cultural heritage value that is significantly downplayed and undervalued by Government. Talbotville campground is built on the foundations of the old township and yet there is just one sign to point out the significant history that is attached to the area. It is representative of the sad state of much of our cultural heritage today and something that the 4 wheel drive community is keen to address. Please contact me at (contact details withheld) if you would like more information. Thanks James

I have to comment that a massive user group of public lands seems to have been ignored in many of the categories.... the 4WD user. We do not want Victoria's public land turned into a theme park... we want it left as it is - with some good roads and other genuine 4WD tracks with ruts, mud rocks etc. The current attitude of micro managing state forests, gating every track, unpredictable / unnecessary track closures etc et creates enormous ill feeling and severely restricts user legitimate forest access. Agreements with user groups like 4WD Victoria need to be honored buy management authorities otherwise the climate of mutual respect is destroyed to the detriment of all.

I would love more 'working in conjunction' between 4x4 groups and Parks. From my experience, the relations between our group and Rangers is fantastic, with both parties learning from each other. If only the next tier or so above the rangers looked at the bush as a valuable resource, worthy of money and time being spent to preserve and/or improve certain areas. Perhaps if some senior Parks people actually used the bush (we would gladly lead groups) and saw the reality, it could change the way they look at their position - custodians of a fantastic asset, instead of just a job about crunching numbers.... Access for 4 wheel driving should be significantly increased. 4x4earth.com.au runs Australia's largest completely free 4 wheel drive weekend away, and it has a significant economic impact on the nearby towns. 4x4earth has over 40,000 members Australia wide and actively contribute to maintaining the areas that we love, including building a Gazebo at O'Tooles and bollarding to minimise vandalism. Far too many tracks have been shut, to the detriment of our enjoyment of our magnificent country and also to the detriment of the small towns that provide the infrastructure to support camping and driving in the areas. The fuel, food and alcohol, accommodation, and goods purchased make a significant difference to country towns that are often struggling to survive economically. The 4 wheel drive community has already demonstrated that it is very keen to protect our environment, not only for our enjoyment, but also for the enjoyment of our children and generations to come. The Australian Bush has a significant cultural heritage value that is significantly downplayed and undervalued by Government. Talbotville campground is built on the foundations of the old township and yet there is just one sign to point out the significant history that is attached to the area. It is representative of the sad state of much of our cultural heritage today and something that the 4 wheel drive community is keen to address.

I and my partner are 4wd camping enthusiasts and love to come down from Queensland and explore the parks in Victoria as they are so different from the parks at home. We love to get to remote areas and camp this is getting harder to do but is still very enjoyable. Please don't change the access to these parks as we both enjoy the scenery and love to take other people into the bush to experience just what we have been talking about. Thank you.

Regarding question 5 - access difficulty rated high because of increasing seasonal track closures which restrict access to recreational areas.

As a 4wd driver, camper, hunter, fisherman, natural landscape photographer and lover of the Australian country I see the need to improve the 4wd tracks of the parks to assist travel and increase access for all including fire fighting vehicles. The bushfires of recent years have increased regrowth and vegetation that will provide fuel in the coming drought years and must be addressed or we will have no native animals left to enjoy.

The new drop toilets and fire pits in the Jamieson, area has been a great improvement to the camping grounds in the area. Thank you. Four wheel drive clubs would like to see the closed gates to tracks to be opened again. But this would require help from 4WD Victoria club members to get involved in more track clearing and repairs. With the access to closed tracks will allow four wheel drivers to keep track clear, by cutting downed trees across tracks. Also would reduce dead wood on ground with the increasement in camping in areas. It is Public Land and the general public that like to camp/hike and explore these areas should be able to. But the public also need further education to look after our public land, so we all can enjoy it for free and not have to pay for the privilege.

Increased or maintain 4x4 access Far too many tracks have been shut, to the detriment of our enjoyment of our magnificent country and also to the detriment of the small towns that provide the infrastructure to support camping and driving in the areas. The goods and services, fuel, food , accommodation, purchased make a significant difference to the country towns that are frequented and are often struggling to survive economically.

Greater access should be given to responsible groups. There are too many locked gates and blocked trails for which access cannot reasonably be obtained. As a member of the Southern Tablelands Four Wheel Drive Club based in ACT we access Victorian high country 2-4 times per year in a shared love of Australia's wild areas, travelling responsibly, often removing fallen trees from tracks, putting out abandoned fires, cleaning up camp grounds etc. Like other clubs and interest groups, driver training and bushcraft is an intrinsic part of membership. Granting improved/privileged access to registered groups and individuals in return for nominated tasks or projects or reporting is a means of tapping into the enthusiasm of those who care and act responsibly. You are also promoting ongoing club membership that provides training, reducing the risk of vandalism and emergency rescues. Imagine a website where registered associations and individuals can upload photos and reports of completed projects and tasks, or sightings of feral and indigenous species. Condition reports of fire trails, illegal dumping... anything. Those who care are the extended eyes, ears and hands for park and forest rangers. Reward the behaviour you wish to see repeated. Improved access also boosts the economy of remote townships in need of both Victorian and interstate dollars. Providing better access to responsible groups and individuals who are keen to maintain privileged access is a strategic win/win which greatly assists the ongoing health and viability of our beautiful wild places.

less control ie signs, bollards, fences. freedom to camp and 4WD and enjoy the bush. As far as making natural areas less dangerous ie removing trees, etc to make places safe it should be left to the individual to carry the responsibility for their actions.

I know i live in Queensland now but i was a long term victorian resident and still have relatives there so i visit 3 to 4 times a year and we love driving to the old places we used to take the kids camping etc and it is a shame to see so many places closed off to the public now and for no good reason. I hope to see more of these parks and tracks reopen what is the use of locking

something up for the future when nobody see's what it is we are locking up, people will appreciate it more if we can use it. Thank You Frank

Greater Park Access (ie MVO Tracks) should be granted to those who demonstrate a responsible and caring attitude to the bush. These groups may include volunteers who assist Parks Vic, Recognized responsible 4 wheel drive clubs and other interest groups and associations. EG.MVO tracks could be checked and cleared by 4WD clubs, to assist with fire access, amongst other tasks. This would be mutually beneficial to both parties. Public Lands are for the Public and as such need to be managed in such a way to allow 'responsible' use while restricting those who do not have a passion for the 'bush' and would disrespect the bush and any infrastructure.

Please. Allow better access for 4WD vehicles, so we can show our families some of these areas. Also, review proposed VERY HIGH camping fees, allow wilderness camping at sites with no facilities at no charge, or a very small annual pass cost. The proposed fees WILL restrict people being able to come the the ANP for example, walking through tracks like the AAWT should have no cost where bush camping.

Keep public land open for camping and 4WDing.

Please consider allowing access to areas/tracks that have been closed off to responsible users who have completed govt training or approval. These users can not only responsibly enjoy the natural environment but can keep track access open and clear for emergency use.

I believe that closing off 4wd/motorbike tracks creates unnecessary pressure/traffic on the open tracks, which inturn makes these tracks overused and needing more repair.(especially in smaller parks i.e. Bunyip). Also I believe that alpine grazing should return to the high country. It has been not only a tradition for many generations but the amount of foreign and invasive matter these cattle feed can only be beneficial in my point of view (incl. reducing bushfire loads)

Access for 4 wheel driving should be significantly increased. Far too many tracks have been shut, to the detriment of our enjoyment of our magnificent country and also to the detriment of the small towns that provide the infrastructure to support camping and driving in the areas. The fuel, food and alcohol, accommodation, and goods purchased make a significant difference to country towns that are often struggling to survive economically. The 4 wheel drive community has already demonstrated that it is very keen to protect our environment, not only for our enjoyment, but also for the enjoyment of our children and generations to come. The Australian Bush has a significant cultural heritage value that is significantly downplayed and undervalued by Government. Access to the bush seems to have greatly diminished in recent years and to the detriment of the communities living around these areas. These areas should be accessible to the public rather than locked up for no one to enjoy. I acknowledge there needs to be a balance in this, but currently it seems the balance has been based on keeping people out of the environment they are entitled to partake in.

We love the access in Victoria and would love to see it continue and hopefully expand. As a member of Four Wheel Drive Victoria via the Pajero Four Wheel Drive club of Victoria we access Victorian high country about 10 times per year in a shared love of Australia's wild areas, travelling responsibly, often removing fallen trees from tracks, putting out abandoned fires, cleaning up camp grounds etc. Like other clubs and interest groups, driver training and bushcraft is an intrinsic part of membership and encouraged during all club meetings and driver training. In addition, granting improved/privileged access to registered groups and individuals in return for nominated tasks or projects or reporting is a means of tapping into the enthusiasm of those who care and act responsibly. You are also promoting ongoing club membership that provides training, reducing the risk of vandalism and emergency rescues. Those Clubs and individuals who care are the extended eyes, ears and hands for park and forest rangers. Reward the behaviour you wish to see repeated. Improved access also boosts the economy of remote townships in need of both Victorian and interstate dollars. Providing better access to responsible groups and individuals who are keen to maintain privileged access is a strategic win/win which greatly assists the ongoing health and viability of our beautiful wild places. We love our parks and our Rangers!!

Access for 4 wheel driving should be significantly increased. it will have a significant economic impact on the nearby towns. Far too many tracks have been shut, to the detriment of our enjoyment of our magnificent country and also to the detriment of the small towns that provide the infrastructure to support camping and driving in the areas. The fuel, food and alcohol, accommodation, and goods purchased make a significant difference to country towns that are often struggling to survive economically. The 4 wheel drive community has already demonstrated that it is very keen to protect our environment, not only for our enjoyment, but also for the enjoyment of our children and generations to come. The Australian Bush has a significant cultural heritage value that can and is significantly downplayed and undervalued by some individuals in Government. 4x4ers are responsible and ready, willing and able to keep the uniqueness of our natural areas and wonders, and can be utilised to assist government agencies as the eyes and ears and arms and legs in keeping our bush for future generations to be enjoyed for those who love it don't shut us out, include us in the management of our forests and wilderness and we will help sustain our heritage for all Australians

The questions about access are poorly framed and do not allow you to indicate that access to public land should be possible but, for instance, subject to the terrain. For example on the 'preference scale' on access in Q9 I do not want to have roads built/modified so that access for 2WD cars is 'easy' (to quote your question) but 'Limited public access' is the opposite of my view of how the public should be able to access our public lands - so where on that continuum do I sit? Similarly Q5 is simplistic - respondents giving the same answer will in many case be saying very different things in my view, which could have been avoided by using 2 or 3 questions qualifying the various and very divergent aspects of the 'access question' in the public lands context. I understand you are trying to cover a broad scenario but, with much of our public lands being bush and/or 'remote', access and the method and availability of access are topics which deserve more space in this survey. Creating easy 2WD access is very different to not further restricting 4WD access beyond the current regime yet your survey effectively suggests it is the same thing.

I am a member of the Ballarat District 4wd Club and do a lot of camping and driving in the High Country. We like to camp out in remote areas with campers. All we need is pit toilets and room to park our campers. PLEASE GET RID OF BOLLARDS!! Most users now have campers not tents. We do not need or want fancy facilities. We do not want to pay for using public property. The free access to these areas is what makes Victoria such a great place to live. We often get comments from interstate visitors about how good our parks are compared to theirs, where charges and restricted access have made usage impossible. The suggested prices are outrageous! It would be cheaper to go to a caravan park. I could live with the following: Pit toilet - free Flushing toilet, water - \$5/night/site Flushing toilet & hot showers - \$10/night/site I understand that vandalism is a great problem. Do not blame and charge the majority of users for the stupidity of a few.

Lands need to be managed by the land managers. Not locked up. The public lands belong to the public. Access should only be granted to responsible groups, ie volunteer groups and associations who have a proven caring record (this includes all interest groups from hunters, pushbikers to 4wd'ers). No fees should be charged as the lands are public lands which we pay taxes for so that the managers can manage them. If facilities exist, then minimal fees (\$5.00pp) may be applied but needs to be balanced with cost of policing.

hi my name is (Name withheld) i love camping with my family in different parks around victoria yes i do own a normal 4wd also a member of 4x4 earth which i am proud to say we done alot of work up at Ootoles flat fixing it up from been wrecked and turned into a mud pit. to now having planted over 150 native trees and grassed areas. the problem i think is education young people dont care about the bush they all put big tyres on their 4wds and seem to get a buzz out of wrecking the tracks for others. so please do not close the park for people that do the right things stop the one that dont by not letting them enter . regards (Name withheld).

I am a member of a 4WD Club and we consciously try to maintain and improve our natural environment. Our club often works with National Park groups to keep our Parks open and accessible to all. When traveling we often assist in track clearing etc. I believe that National Parks are the heritage of our Nation for all to enjoy, but it must be allowed to evolve with nature as our country evolves. It must not be allowed to become a scientific experiment to be locked away. Nature itself can do more damage in a few days than vehicles on tracks can do in years. Access must be allowed for all to enjoy as it is and as it evolves.

I believe that registered 4WD clubs are the way by doing camp host in parks on long weekends to keep the lid on hoons that vandalize the parks. Keep grass short around camp areas. Access for 4 wheel driving should be significantly increased. 4x4 members Australia wide and actively contribute to maintaining the areas that we love, including building a Gazebo at O'Tooles and bollarding to minimise vandalism. Far too many tracks have been shut, to the detriment of our enjoyment of our magnificent country and also to the detriment of the small towns that provide the infrastructure to support camping and driving in the areas. The fuel, food and alcohol, accommodation, and goods purchased make a significant difference to country towns that are often struggling to survive economically. The 4 wheel drive community has already demonstrated that it is very keen to protect our environment, not only for our enjoyment, but also for the enjoyment of our children and generations to come. The Australian Bush has a significant cultural heritage value that is significantly downplayed and undervalued by Government. Talbotville campground is built on the foundations of the old township and yet there is just one sign to point out the significant history that is attached to the area. It is representative of the sad state of much of our cultural heritage today and something that the 4 wheel drive community is keen to address. Another survey that limits responses and has an agenda that I do not agree with. ALL Public lands should be accessible by ALL!! members of the public.

I really value our national parks, and enjoy going out in them, camping with my children, and enjoying 4wding. It annoys me that some people abuse the bush, and think we should allow easy access to tracks for vehicles to prevent more damage being done. Continual track management, to allow access in case of fire is really important.

Ensure 4WD access

give greater vehicle access(4wd OK) to points of interest and consider those who have limited physical ability eg; the very young, the older folk and those with physical limitations. disabilities are never considered on most public lands, but are mandatory in the private sector. Parks are for all not just the healthy.

Hi, I believe that access to public lands should be unrestricted and more onus placed on the user to be safe and responsible, rather than government agencies placing restrictions on access. In particular this applies to 4WD drive tracks that may require higher skill or equipment levels. The economic benefits to the local areas from increased activity should be measured and local communities should be encouraged to create and market events and attractions and accommodation based on nearby public lands. I would also like to see a recreational motor bike license for under age 18 age riders accompanied by a licensed responsible adult (or guardian) to enable younger kids to participate under supervision and get outdoors. Thanks Michael.

With restricted mobility some form of four wheel drive access to sites is important. Four wheel driving and trail bikes don't seem to appear much in options yet they are a major uses of public lands. As a general comment on park access, little consideration is given to access for those with limited mobility. With an ageing population increasing consideration needs to be given to accessibility - rather than the current trend of restricting access unnecessarily (e.g. Blairs Hut)

Difficult to answer some questions due to presumptive or vague wording. e.g. I want unrestricted access (no closures except for a limited time for particular purpose like winter closures of dirt tracks to avoid excessive damage) but not 'easy' access - don't turn dirt tracks into bitumen highways. This survey is in general biased against 4wd activity - it is one of the more popular uses of public land, yet is difficult to answer due to the way the survey is framed. There is no substitute for letting people experience the bush for themselves to generate a desire to preserve it. Seeing a sanitised version will not foster the love of nature. Take a look at the allocation of land, not just public land, but all land in Victoria and compare with other countries. In the UK and continental Europe, where people had access to land for multiple uses for generations, there are rights of way over land, there are public paths, there are community owned forests, there are all sorts of different ways land can be used and there is a multitude of different uses accommodated. In Australia, the squatocracy arrived in the 1800's and saw an opportunity to prevent all that happening, and to lock up land for private use as much as possible. Now land is split between either public or private, with no in between, and there is increasing pressure to privatise the small amount of land that remains public. Imagine if we had the same laws as Scotland! No law of trespass, so long as you don't go within 200m of a house (which means you can't trespass in built up areas) and you can't interfere with stock. Simple! But no, we have increasing pressure for private use of public land, from timber harvesting and collecting, to cattle grazing in the Alpine National Park and along the Murray, to proposed tourism development in National Parks, to leaseholds on state forest for various resource extraction activities. It's not private land, it's our land.

I would like to see more access to public lands for 4wding and camping. Too much public land is being restricted to uses that many Victorians enjoy. We have some of the most beautiful scenic areas of the country but more and more of them are being closed to the public. It does seem that the favoured way to 'manage' public land over the last 10-20 years has been to lock the gates and restrict access. Allow clubs to adopt areas of public lands to maintain tracks,

paths etc similar to adopt-a-highway.

Development (27 comments)

Any political party which advocates commercial development of National Parks etc will not be receiving my vote at the next election.

We strongly oppose commercial development such as for-profit accommodation, logging and/or cattle grazing in national parks. Parks are for people to enjoy as unspoilt wilderness areas.

Parks are for people, not for profit. Commercial development will eventually destroy the very reason parks are set up to preserve the natural environment.

Allowing tightly regulated commercial activities in some parks with lower conservation values may help improve funding for basic maintenance of facilities. Parks with high conservation values must be protected from commercial activities.

While I believe that everyone should have access to public land, I do not support development in National Parks. I believe that tourist accommodation should be built outside National Parks. In sensitive areas road access should be restricted. I do not support commercial activities such as mining, logging or cattle grazing in any sensitive area, particularly National Parks. I think that our endangered flora and fauna needs much more protection than we provide at the moment. I would like to see much better protection in the Yarra ranges for Leadbeaters Possum and if the habitat suitable for this animal was improved there would be benefits for so many other forms of wildlife as well. Victoria is the most cleared state in Australia and I would like to see much more tree planting on roadsides, along rivers and around campsites in National Parks to create more wildlife corridors.

Wilderness areas are just that and should not be used as money making ventures for private enterprises, that will essentially destroy "wilderness"

I strongly disagree with recent changes to permit low level development in our Parks

Public lands should be preserved for their nature and conservation values, not primarily for tourism dollars or damaging short term gain and resource extraction. We need to collectively protect what we have left of our natural environment in Victoria for the future and for our kids. I want my kids to grow up and still be able to enjoy the wonders of the wilderness, camping and walking in a pristine environment - to be able to enjoy nature and getting away from it all. Our parks preserve the world as it should be, and great health and mental health benefits come from people seeing and spending time in a natural untouched environment. Access to high conservation and wilderness areas should remain restricted to walk in. It is making the effort to get there that also makes these places special.

Would have liked the option of "No tourism accommodation". I very strongly believe that there should be NO PRIVATE DEVELOPMENT OR RESOURCE EXTRACTION IN NATIONAL, STATE, COASTAL, REGIONAL PARKS!!!!

I would like legislation to be created to protect our national parks from ignorant politicians and greedy graziers and developers. I want our government to listen to the expertise and knowledge of our scientists instead of using subjective and ill educated opinions on which to manage our parks. I do not understand why politicians can over ride years of study and evidence when they form policies for our national parks. I have not placed icons of the Alpine National Park and Toolangi-and have been unable to navigate back to the map. Please add the same icons that I used for the Prom and Tarra-Bulga to the these national parks as well.

Conserving natural values of public lands are very important and survey showing interest in recreation should not be an argument to weaken conservation protection. Keep accommodation and large scale facilities out of national parks and other conservation lands. Provide it instead on adjacent lands. No overdevelopment of parks. We live in an environmentally rich area as yet fairly undeveloped and would like to see development under strict control so as not to lose the natural beauty. For economic reasons, development is important.

Thank you for the opportunity to respond. I do want to emphasize that I am not against development as such, indeed I am very much for it. But our national public spaces and particularly parks are inappropriate places for this to occur. And surely in Australia there is a good case for special places like the Mornington Peninsula and Western Port Biosphere Reserve; this deserves, no demands special protection and suitable combined use and development.

I AM VERY MUCH AGAINST PRIVATE COMMERCIALIZATION OF OUR SIGNIFICANT NATIONAL & STATE PARKS TO THE DETRIMENT OF EVERY DAY AND LOCAL FAMILY TOURIST USE.

The National Parks are the lungs of our country - do not develop them!

National Parks are such important places for our natural heritage. They are often last refuges for endangered species and provide us with special places to escape to and be close to nature. Don't let short sighted financial gains ruin our invaluable natural resources. Keep National Parks for nature conservation and passive recreation - PLEASE!

Many of my responses would be location dependent... some locations need more tourist/education facilities, some need less. The primary goals should be to protect and enhance the natural environment and to engage the public.

If tourist infrastructure is required in some new parks it should be built outside the park there is plenty of space on the edge of national parks for development of fancy accommodation - keep commercial development out of our parks

No mining / fracking on public land!

I don't believe that mining, forestry or grazing cattle have any place in our public parks. Also developers need to be kept away from our parks - they should be left natural and free to all. I am strongly opposed to logging, grazing, mining and other destructive commercial activities in land managed by Parks Victoria. The other values of these parks are much more important. I am also opposed to construction of built accommodation or commercial structures in parks, except at entrances, with the exception of existing huts in alpine areas or new/rebuilt huts of similar basic design in the Alpine National Park, for safety reasons only. It is the wild and natural character of parks which is a large part of their attraction. For the same reason, care is needed to design tracks, boardwalks, bridges, lookouts, etc to be unobtrusive and made with local materials. The therapeutic value of wilderness and wild and natural places is often overlooked. Even urban parks can be refuges from the pressures of daily life in a metropolis if they are carefully managed to have a wilderness feel about them.

I do not want ANY high-level development in National Parks eg Hotels, resorts restaurants etc. I DO want easy access to simple family-based facilities - cabins in a few high-use areas, otherwise camping some with simple facilities, others for largely self-sufficient campers. I DO NOT AGREE WITH CHARGES FOR CAMPING IN UNDEVELOPEDE AREAS.

Please extend and maintain National Parks cow-free/ mine-free/ logging-free and hotel-free. They are a priceless community asset for all to enjoy and benefit from now and in the future. Damage from cows and other commercial operations is too costly to fragile ecosystems. I'd like to see more conservation in my local area - less expansion of unnecessary factories & warehouses & the 'Green Wedge' project to take place. I'd also like any new housing developments to have an environmental natural feature, such as 'Waterways', which created new wetland areas. It's also a shame that small water courses that run behind factories in the Braeside & Dandenong areas have been concreted & turned into ugly drains. How nice it would be if the concrete was removed, the water allowed to filter more naturally & there could be paths that you walk or cycle along.

National Parks should be for preserving what little natural environment we have left and there is NO room for economic/business interests to be involved in management decisions in national parks!

Hanging Rock is a very special space which will be destroyed if the planned development goes ahead. Conference facilities and accommodation are available locally and not needed at the Rock.

General comments (41 comments)

There is generally a lack of public water fountains in metropolitan parks.

Concentrate high activity/ multi activity use of parks close to major population centres. Allow moderate development of facilities in those areas. In other areas such as the Alpine National Park, leave it as it is. Undertake Road and Track maintenance to the extent required for fire control. Use 4WD Clubs to help maintain tracks in place of the ever decreasing numbers of Parks staff on the ground. Dont put huge camping fees on undeveloped natural bush camps. Many people are happy to be self reliant and dont need electricity, running water, brick bbq, and heaps of other people around them AND THEY ARE HAPPY TO TAKE THEIR RUBBISH HOME.

I am a member of the Friends of Mount Worth State Park

I have only indicated Gunbower Island as it is close to where I live and spend a lot of time at and enjoy taking my grand children to explore aboriginal history and show them such a large verity of plants and animals, it really is a wonderful example of pre white settlement and a balance of now water managed by us and not nature it shows it can be done and now with the completion of Hipwell road weir it can only become a better place for both nature and and us to learn so much. Thank you.

Regards Shieldsy

I prefer public lands to be free public access, natural environment with minimal development - including tourism. Minimal intervention by bureaucracy. Minimal camping fees where minimal facilities are provided. Freedom to bush camp, hike and explore the natural environment.

I realize funding is a constant headache for these areas and watched NT Parks and Wildlife erect pine logs and other foreign materials to herd people into small areas for camping etc. This I believe creates most of your problems as the concentration of people quickly reduces the area to that tired trampled look and the don't care factor quickly takes over so I believe spread the visitors over the largest areas and cut down on your picking up peoples rubbish and the spread of weeds killing of wild life erosion etc will decrease due too the fact that you had to find that spot and will want to take ownership of it. Most 4x4 people will not hesitate to tell others to pick up their rubbish because if they had enough room to bring it they have the same room to take it home .I'm not a member of any 4x4 club but follow their tread lightly

program and have travelled extensively through the deserts and tropics over the years and love a couple of nights out bush to unwind. Thanks for reading .

Public lands, and especially national parks, should primarily be focused on conservation. As our wilderness areas shrink, providing room for nature untamed to flourish is essential.

Preservation of our suburban parks, national parks, reserves and habits together with our wildlife for the well being and enjoyment of future generations is essential, which unfortunately is not a prerequisite for the Governments of the day.

I welcome the opportunity to comment - thankyou. I have put emphasis on the Agnes Falls Scenic Reserve as this is only a 10 minute drive from where I live. It is a very popular place for us to take all our visitors, and it seems to be ore and more popular every year. It is important to raise the profile of he Agnes Falls Scenic Reserve so that nearby towns benefit from the increase in visitation in the future, especially once the proposed improvements have been completed. IN our area, visitors staying at Wilsons Prom often look for another place to visit, especially during a lengthy stay, or on "non-beach" days, sot he Falls are a wonderful alternative attraction. I also live close enough to visit Wilsons Prom. and enjoy the facilities already provided. I am NOT in favour of any large 4 star hotel/resort style complex being built at the Prom, or any other National Park. This type of accommodation would be better situated outside of Park boundaries, and, perhaps, a courtesy bus supplied by the operator. Small towns nearby to these Parks, such as Yanakie, Foster, Fish Creek, Toora, Welshpool, in the Prom area, rely on visitors to these Parks for some of their income, by way of accommodation and meals, during the tourist seasons, and throughout the year. Large complexes will take away from locals, in this regard. I have also visited the Grampians a couple of times over recent years, and would like to thank Parks Vic for all their work in that area, particularly over recent fires and flood events. Like our Prom this area is magnificent, and should not have any "resort complexes" within the Park boundaries. Small towns like Halls gap rely on the tourist dollars fro much of their existence. As far as cattle grazing is concerned, I am strongly of the opinion that this SHOULD be allowed, for short periods - especially in the High Country where the Mountain Cattlemen have, through their knowledge and cattle care, helped to keep the environment safe from bushfires over many many decades.

I am indebted for the opportunity to use public lands. My life would be substantially impoverished if the parks of Victoria had not been created and maintained. I endorse the work associated with this study and have welcomed the opportunity to participate. It is essential to expand an maintain national parks to protect biodiversity and have a healthier environment.

Comments relating to firewood collection in box-ironbark forests relate to all public land areas. Preference relating to wind energy and timber plantations relate to public land with intact or near intact native vegetation. Infrastructure such as hotels/resorts should be built outside national parks, preferably close to local towns where flow-on benefits to the community can be maximised. Fire prevention activities should recognise that biodiversity is also an asset. Burning large areas of remote country does not provide fire relief for population centres.

Re wind energy: I fully support the introduction of wind turbines but location needs to be considered in relation to scenic values. Existing accommodation in NPs (e.g. Wilsons Prom) should have solar panels/hot water systems installed on the roofs. Accommodation for National Parks should be placed outside the park boundary and shuttle buses used to transport visitors into the park, as in the United States NPs.

After 20 years we are still disgusted that Albert Park is still subject to an annual Grand Prix F1 race and cannot be enjoyed for a period of 4 months every year. Royal Park is facing yet another intrusion with the tunnel project.

balancing environmental protection with growth in a country (x2)

That you need to conduct this study is a concern

I am a regular bushwalker and I take part in many weekend and extended walks throughout Victoria's public lands, particularly the alpine areas. Therefore I found it difficult to be specific about preferred places, as I use them all. I believe that the state and national parks are undervalued and that we should spend more money on track maintenance and on weed and feral animal control. For example the AAWT could be a much better asset if it was looked after, at present it is a disgrace.

Note the Lower Goulburn National Park does not appear to be mapped on the North side of the Goulburn River. The removal of grazing licences along the Goulburn River should be a top priority. Alpine grazing should not be considered.

We are generally happy with the Parks Management in Victoria, we do not favour any increase in commercial activity within Parks, nor do we want to see cattle grazing in the Alpine National Park.

I live near Bundoora Park and frequently visit on a weekly with my 2 kids and love the park and its facilities.

I was disappointed & disgusted last year when visiting the old Knox and Ford families former residences in Laughing Waters and Overbank Roads Eltham (in conjunction with Nillumbik Artists In Residence Program) to see the dereliction of the houses and the unkempt nature of the vegetation. No wonder it is a fire hazard! It was all MUCH BETTER when I lived in Eltham the first time in the 70s and early 80s, when the houses and the area generally was inhabited. What is there now IS NOT AN IMPROVEMENT. I love parks but some situations are better left as Rural/Residential with permanent residents, grazing animals etc. Some land was compulsorily acquired (also rear of properties Kent Hughes and Banoon Roads and the result is hopeless and misguided. Thank you, (Name and contact details withheld)

There are many issues that need to be addressed by public land managers in Victoria. Blackberries, ragwort, thistles and other weeds are not adequately controlled. Roads, tracks and trails are poorly maintained. Illegal bike, 4WD and shooting activities are not policed. In other states or in New Zealand there are environmentally friendly public toilets near tracks and trails. Victoria's lack of clean, well maintained toilets in most areas of the bush is a disgrace.

Victoria's National Parks are I believe a greatly underused tourist attraction. In my view it is a case of use them or lose them. For example a night in the Australian bush is very popular with German exchange students. However only a few experience this. There is, I suggest, a need for volunteers to have a bigger role in managing parks.

As a trailrunner, I am concerned with the amount of red tape that race organisers must sift through to put on events. I understand that there is a great deal of requirements to be met but these seem to be getting out of control. Events may not go ahead in future meaning that hundreds of potential users may not get to experience our parks, which is a major part of their existence. Personally I know that runs from Great Ocean Walk, the Prom, Mount Macedon, You Yangs, Yarra Ranges and Alpine National Park assist me with teaching Outdoor Education to students in the outer eastern suburbs.

I grew up in the country but now live in the city, so I really enjoy our parks for the solitude. Australia is one of the few countries which allows a lot of freedom in their conservation areas. This is something unique and special about our country. I think the parks should be maintained for future generations but also enjoyed now. This is a difficult balance. The more people who get out and enjoy our public lands the more valuable they will become. :)

Please help ensure public land remain public. This is for public health and recreation.

Thank you for this wonderful opportunity to express an opinion. I was a resident of Victoria till age 17. I love the Victorian bush, rivers and areas like the Great Ocean Road. There is only one thorn in my side.....the law regarding pets in the areas like Great Ocean Road, I realise we need to conserve our native wildlife, however, the wild dogs, dingos, feral cats etc that roam wild leave a lot of scent and would have a bigger impact on the wildlife than my leashed dog, they also hunt the native wildlife. I can never understand why this law applies. My wife and I live in a camper trailer and cannot leave the dog behind when we go sight seeing and certainly can't leave him in the ute when we go so what do we do???

Although this is parks based, the best parks and forests for most general recreation other than passive options is state forest or parks that have no fees and minimal management. The more management costs more, which then costs tax payers more.

Environment quality is the lifeline of forest park and so it is to the suburb forest park. We have travelled to your beautiful state three times in the last eight years, we have enjoyed your parks, waterfalls, (even buying a book giving me over 250 waterfalls in Victoria, even getting to a good proportion of them last time we were down there,). Caves and the great Wilson's Prom. We prefer natural things and steer away from tourist style towns and development.

Hi, I do help this study allows for a greater appreciation of the users of Victoria's fine public lands. As a hunter who also fishes, bush walks/hikes, camps, 4wds, and has a great love for the outdoors it is critical to see outcomes that support those who have the bush at heart. Many fear that it is all too easy to listen to a vocal minority, while a majority can suffer in silence. There is plenty of park land for all of Victorians, improved access for 4wds will only bring greater benefits to the state and anyone who decides to utilize our great parks. Should you wish I do not mind being contacted for any further input you may wish to ask of me. Thank you. (contact details withheld)

thankyou for parks Victoria

I like parks Victoria

I love to visit our parks, regardless if they are in the city or forest. I love to teach my children about respect for the natural environment and the animals that call it home. I don't think that they should be mined or logged or have cattle grazing in them and I do not agree with hunting. I hate the fact that you put out baits for the dingoes, if the farmers have a problem, they should solve by passive means (donkeys etc). Dingoes are here for a reason, they can keep the rabbit and fox population down, if you would let them, they are also part of the eco system which help keep the animal population healthy and in check.

We love Australia's Parks and spending time in them. We also love travelling with our small, well behaved & controlled dog. She gives us much pleasure. We would love to be able to take her into ALL parks similar to other countries.

Love the parks in Victoria, well done to all concerned!

Thankyou. I would find it difficult to live in a city such as Sydney without the ability to commune with nature in an adventurous way. 4WDing and camping with friends is my preferred way, my children have been brought up with this exciting and beautiful way of being with nature and my belief has helped them to be balanced in their life. My work positions have been in high stress senior management and communing with nature has helped me to continue in this career by allowing me to relax and enjoy the beauty of nature..

Although I Have to currently reside in an URBAN enviornment, By choice I would live as close as possible to Forest and Woodlands, regardless of where I am, I care about all open space, from the smallest drain to the pristine forest.

I am disappointed that cape liptrap national park is not listed as a national park in your survey The government has the same attitue towars this important park. The conditions there over the summer public holidays and weekends are disgraceful Day trippers whose sole purpose is to dig for shellfish, ignore all legal and social conventions and despite years, of people who value the park, requesting action, there is a minimal response from the 3 government agencies involved in management . Ignoring catch limits, illegal use of tools to dig, illegal parking, urinating in public places, littering, speeding, blocking road access to emergency(and other road) vehicles can all be observed within an hour of visiting the park. The government agencies cannot manage the park over the peak period due to "lack of resources" and this is why I start to think that there is a role for private management. This behaviour would never be tolerated at a private resort, or indeed in any public metropolitan venue, but eviently Cape Liptrap national park is a " no go" zone for law enforcement over the summer period and the park and other visitors suffer.

Comments and Perceptions Related to Conservation or Natural Resource Management (24 comments)

Cattle MUST NOT be allowed back into the high country. Cattle and feral horses ruin pristine areas and water courses.

Stop logging of all old growth forests. No grazing of domestic livestock in national parks. No commercial developments in national parks. Removal of all hard hooved animals from national parks. Creation of new national parks which consolidate and connect existing national parks and refugia. Protect all marine ecosystems along the Victorian coastline. Add Mount Stirling and all State forest to the north and east to the Alpine National Park. Protect native grasslands and green edge ecosystems on the outer edges of Melbourne. Consolidate all existing parks and reserves south of Wyperfeld National Park, plus some connecting private land, to create the Greater Glenelg National Park. A management plan for every national park, consistent with ISO 14001. Employ more park rangers and scientists so that national parks can be protected and studied more effectively.

Recent studies of wilderness areas where grazing animals exist have noted an improvement in re-vegetation when prime predators are allowed to develop and establish mature packs (dingoes). This could be a method of reducing feral cats in parks. Also mature packs affect cattle numbers in a minimal way. I refer to last night's 60 minutes programme. I support the reintroduction of dingoes in our parks.

NO CATTLE GRAZING IN THE ALPINE NATIONAL PARK

The last part of the survey is difficult to answer on such a broad scale as every park differs in terms of its size, remoteness, environmental value etc. and therefore management needs to be tailored accordingly. For example, strong feelings against particular economic or resource management strategies in a wilderness area may not be felt the same way in an area of far less environmental significance.

I believe that maintenance of biodiversity should be a key non negotiable factor in any use of public lands, in particular National Parks. People do need to be educated to understand the importance of our natural environment, however large scale, long term leasing of our National Parks for commercial development should not be allowed. It is effectively 'selling them off' and is not consistent with conservation of these areas. Large scale resort or hotel style commercial developments should be located outside park boundaries. Transporting guests into the parks could create jobs. Siting such accommodation outside the parks will stimulate local economies. Mining, recreational shooting, grazing and other such destructive activities should be banned from state and National Parks, because of the negative impacts on people, the terrain and the flora and fauna.

No cattle in National Parks No mining in National Parks

I believe that national parks should exist to protect flora and fauna from humans and industries even to the extent of refusing access to humans other than rangers.

Please please stop burning our natural heritage. Bill Gammage (author) has shown that burning by traditional owners was not the forests in the Box Ironbark. Burning has a very negative impact on these forests. Please stop this destructive practice.

Other opinions I have an open mind on whether or not fire increases plant diversity
Management of feral animals in parks falls well short of worlds best practice. Grazing in parks is can result in severe damage which is not reinstated

As Vice President and Conservation Officer for BirdLife East Gippsland and a long time user of public lands for outdoor activities including bird watching and photography I am concerned that Government management of our public lands does not afford a high enough priority and budget for management of the natural/biological resources on Public Lands across Victoria. While I acknowledge the need to manage appropriate access to and use of Public Lands by the public this should not be done at the cost of adequate management of biodiversity conservation.

Feral animal and plant control measures seem to be failing. Deer and rabbits in particular need to be culled.

parks are not funded nearly enough - more needs to be done on weed and vermin control - more needs to be done on getting to a point where fauna extinction is reversed in national parks and re-introduction is the goal

I am concerned that National Parks do not provide the protection to their natural habitat they once did. Feral animals such as deer, brumbies, and goats are not dealt with adequately because animal lib people and other groups think these animals have rights, (they ignore the rights of the native animals to live in their natural environment). Also the 5% burn prescription enforced by the government will lead to plant extinctions through burning at the wrong time of year and burning at too frequent intervals. Also much of the tourist industry see National Parks as a resource for them to profit from without putting conservation first.

Important Bird Areas should be managed primarily to best support the birds, public use being secondary to this. Freshwater flow to inland wetlands is crucial and should be re-instated urgently on a level that is sustainable for the eco-systems. Fire management has to be designed for the eco-systems. Reduction of fire danger to humans and assets is not achieved by burning remote Mallee country even though it ticks the 5 % surface controlled burn box of the Royal Commission. The 5 % surface burnt each year to reduce fire danger to humans is not scientifically supported and should not be applied in National and State Parks. When managing National and State Parks it is important to keep them as natural as possible, no mining, timber extraction, grazing, duck shooting, hunting etc. Tourist infrastrucutur should be kept to a minimum, although catering for a variety of tastes is important - people are only willing to protect what they love and they only love what they know.

We believe that Parks are doing a great job given the limited budget they receive. Our dealings with the staff has always been positive and quite often encouraging when met in the parks themselves. We have been keen bushwalkers and are still tempted to go on the occasional overnighiter but have now also turned to 4WD touring and camping. I am embarrassed to say that I think the 'hoon' element within the 4x4 fraternity posses one of the big threats to our parks, and is a greater threat to law abiding 4WD clubs and users by the introduction of unnecessary legislation. Having visited the High Country over several decades, we have also come to the conclusion that cattle grazing was better for the environment after seeing how the weeds have taken over in many of the areas, making walking and camping very difficult. I would like to see more attention given to asset maintenance/weed control in national parks. Also, I am concerned about deer exploding in population - they need to be culled. Finally, given the number of forest fires we are having, I wonder if there could be a Summer ban on campfires? Very romantic, but dangerous!

Need for proper scientific evidence of the processes and extent of the impact of various exotic species are having on our areas of pristine and rehabilitated terrestrial and aquatic environments for adaptive management intervention. Provide a cycle of management effectiveness auditing and review priority intervention programs so that successive governments are committed to by-partisan stewardship. Close the gap or disconnect with younger urban generations understanding and value of ecosystem protection.

The primary function of national parks should be for nature conservation and commercial activities such as grazing, mining and high-end tourism, should be strongly opposed. National parks should be adequately funded via the taxation system.

Allow the grazing of stock back in the high country to help control the spread of wild fire and maintain the tracks for greater access for fighters

I believe that Parks provide critical habitat for flora & fauna and that all other activities should be managed in accordance with the aim of biodiversity conservation. I believe we should budget more appropriately to achieve this. More attention and funding should be applied to feral plants and animals. Thank you for the opportunity to participate in the survey

No grazing the Alpine national park. All feral horses should be destroyed. Conservation of ecosystems and their integrity should always trump private interests or supposed 'cultural values' that are less than 200 years old and mostly fiction. The advice of relevant qualified scientists should be taken as more valuable than that of local land owners or industry or anyone for that matter..

Our National Parks are Wilderness Zones, not paddocks. Keep the cattle out of the high country. They provide no benefit, encourage the spread of weeds and irreversibly damage the environment.

My belief is that the public lands of Victoria should be well managed with a balanced and sustainable approach and accessible to the public. Abuse of public land should be penalised however people should be educated and encouraged to experience what our environment has to offer from a position of respect for that environment and its longevity so that it may enjoyed for generations to come.

Walking Trails / Mt Biking Trails/Information on Trails (11 comments)

I would be grateful if you an guide me with websites where I can download detailed bush walking trail routes and cycling routes. Also, it would be great if physical signs can be made clearer. I try to follow the Melways, come out to a road intersection, there is no further sign as to where to go next and we got lost!

I am a keen bushwalker and would like to see tracks such as the AAWT clearly marked. Tracks such as these well managed would encourage more walkers. eg such as bibbulmun track

I support and encourage the sport of mountain biking. I'd like to see extensive high quality, sustainable development of Victoria's mountain bike trail networks, most of which are on public lands. There are massive health, economic & tourism benefits to be had and we need to expand the trail network to cope with the current level and future growth of the sport.

I was running with my son in the Montrose Reserve/Dandenong Ranges National Park, and we saw a mountain bike trail. My son was very excited as we are keen riders. We then noticed the sign saying that it was illegal and even so much as being on the trail was illegal. I don't see how being on a trail is illegal and how you can enforce that.

I am very happy to see a more open approach being taken towards mountain-biking in public parks lately. I am actively involved in advocacy for mountain-bikers and I am greatly encouraged by the directions being taken by Rangers recently.

I was unable to leave feedback related to the You Yangs for some reason. The cooperative model established between PV and the local mountain biking groups at that location is fantastic. It should be used as a model for other parks around the state. Contrast this with a sometimes antagonistic attitude taken by park management at Lysterfield lake park. I wonder if the main difference is management at one park leads an active lifestyle and appreciates the net positive to society despite the odd accident, while at Lysterfield a sedentary lifestyle promotes a very different viewpoint and attitude.

ONe BIG thing I wanted to mention is the poor information available online on directions, maps, routes to most Nat Parks and State Parks. It's often out of date, poor, incomplete; the maps are often hopeless and not detailed enough, Signage in the parks and on trials often woeful. We try to get out of Melbourne every few weeks and do a day walk somewhere

however we are never helped much by the Parks Victoria website - the information as I said could be VASTLY improved.

Please include more detailed walking tracks so we do not get lost

Information for some parks on the internet is poor because multiple government departments manage them and provide different levels of information. Consideration to allowing dogs in some national parks (highly managed ones) should be considered

More activities for youth, please grade of walks, by distance, by level of difficulty. proper signs disappointed with parks victoria websites and lack of updated information when looking for camping spots/ ability to access rangers or someone when in camping sites

Frustration/problems with Survey Instrument / suggestions for improvement (81 comments)

I felt that the scope of the mapping activity was not clearly explained and as I perceived the task to be open ended, I stopped when it became tedious. I might have rated areas in states other than Victoria if there had been an encouragement to do so but I stuck to my local area.

The computer program seemed to stop me from adding more places that I love! I think the whole premise of this study is flawed - I value all public lands in Victoria, particularly the National Parks and other biologically rich lands.

The site only allowed me one park before it switched to the questionnaire. We have many parks for which we could comment, ranging across the whole of Victoria, from Wyperfeld and Hattah Lakes, to the Wonnangatta Valley and Mallacoota.

This section seemed to clear itself of my previous comment!? As I have enjoyed and continue to enjoy Victoria's wilderness all my 77 years covering a large area of the state with a range of activities (hiking, rock climbing, canoeing, sailing, scuba diving, fishing, camping, photographing, etc.) I would have liked to complete icons to more areas (e.g. Grampians, marine areas), but time limits me at present and there does not seem to be a way to save and return to complete the survey. Though I am now somewhat limited physically, which restricts areas I can access, my strong preference is for conservation of the natural environment for future generations - i. e. not making access easy for those of us who cannot get to places at the expense of destroying the environment and the experience of those who are physically able, keeping out commercial development (such as large obtrusive accommodation, roads / carparks in remote / natural wilderness locations of parks). There also seems to be a critical need to control feral animals (cattle, horses, deer, cats, etc.) as well as weeds to protect our natural wilderness environment and native species. Thanks for the opportunity to participate in the survey. Regards (name withheld)

I found the task of navigating and marking your map quite daunting and I "chickened out" by putting just one icon somewhere. Life, at least mine, is not meant to be spent at a computer screen. However, I have seriously considered my survey responses. I found the map difficult to use due to sheer size and hence, I don't think my responses are very complete.

Qn 12: we are a middle aged couple with no children (40's) You have no questions re wildlife preservation or dogs I run/ride with the dog - for personal safety and for fun - this is not captured thanks

Please make the start a bit easier. Also the Question 9 is not clear.

The mapping part of this survey is absurdly complicated. I managed to make the one entry required in order to progress further. To make entries regarding the very many locations which are of relevance to me would take all day to complete! You need to have a more user-friendly way to collect this data.

Terrible survey. I hope a score of 1 suggests a negative preference???? It has been suggested by many that Parks Vic would have to be the worst land managers in the state. Weeds, pest animals, fires etc etc

The map at the beginning of the survey was difficult to use.

Please allow for searching the Google Map. This would have allowed me to be more specific. I could not locate Howqua river on the map without looking it up (keep it as it is I say.. :) Please keep up the good work, I love the parks we have in Victoria.

Sending email - not enough room for extra comments

Difficult to use the map - could not add icons unless large scale and so difficult to locate places.

The grid section of the survey should also provide an optional option to provide explanations as to why we selected various responses. I visit parks all across Victoria from time to time, but have only listed the larger ones regularly visited.

Map too difficult and time and internet time consuming to complete

Some problems with final set of questions. One size does not fit all and information should ideally be more generically site specific. eg How can you compare an already developed, or historic urban park with pristine wilderness of a National Park. It's like making blanket statements in relation to apples and oranges! I fear this section may lead to over development of wild places, or the total opposite. I do not want heavy commercial development at any Park sites!

Marine Protected areas were not shown clearly - were they not included? I thought some areas of public land were not indicated in green- Hallston Bush? Lyrebird Walk near Mirboo Nth? Could I return and add more at a later date?

Was the You Yangs on that map - I could not see it and the park is IMPORTANT - particularly koala habitat and cultural significance.

Lack of detail on the maps made it difficult to identify areas I wanted to pinpoint, especially in the Grampians.

I minimised my mapping activities. Most areas have environmental problems that need dealing with; foxes, cats and other feral animals, serious weed infestations in some parks, especially smaller ones. Too much burning in many areas, while some could do with more. Burning needs to be to be habitat and environmentally directed. Serious consideration needs to be given to fauna conservation, especially mammals. Nature conservation and protection the priority on public land.

The mapping and tagging interface and functionality was painful to use so I didn't tag every area I have an opinion on. My responses on the survey can be taken to apply to all national parks and public land of environmental significance.

Got tired moving around map selecting sites and then values. Then got frustrated trying to add comment each preference. I value a lot of places - more than have included on the map. I don't go regularly to same places and over years have been to many and have fond memories of them all. I don't want all places opened to people who don't value the effort required to see them. There are places I may never see but value that are there for those who can see them. I would appreciate having more shelters for people who are caught out whilst walking but I don't want to see 1 star plus accommodation in natparks. Nat parks

different to state parks so difficult to answer some questions so interested to see how you report the results.

I couldn't spend the substantial time necessary to do the mapping exercise. Great tool for your purposes, shocking for a user. Will certainly skew your results. It is very important to me and my family to preserve Victoria's national parks. We use those in the north east sector to the NSW border and Gippsland a great deal. We have seen the excellent ecological consequences of keeping cattle out of the high country, and are very concerned about the prospect of additional development in areas of high natural value.

I feel I have cherry picked in the survey and the pick a dot responses at the end did not allow for variation. ie managing public lands around Wonthaggi requires a different set of priorities to the Prom. However it is my strongly felt view that our public lands are a priceless resource that must not be allowed to be exploited merely for short term economic profit. In some cases - Wonthaggi my local area an example - economic concerns are appropriate and beneficial, so long as the land is held in public ownership and not sold off. If maintained in the public estate towns like Wonthaggi can become greatly improved centres for the ready access to walking, cycling, birdwatching, swimming etc, not to forget the sheer joy of life spent surrounded by a natural environment that buffers and softens the built environment. Our environmental oases such as the Prom, Grampians, alpine parks, coastal parks must be maintained for their wild values which provide us with a spiritual as well as physical connection to the natural world. Anything that reduces the wildness of our wild places diminishes us all.

Had lots of problems early with the map- a practice run would have helped. Only did local parks (because of time) not that I don't value other areas in the state. Reasons for visits - only one option allowed! I'm a field naturalist and keen birdwatcher (low energy activities) or appreciation of nature?

There were other places I would like to mark, but couldn't find them.

The questions on access and facilities were too simplistic - I think horses for courses. Tidal River, the Twelve Apostles etc - need ranger presence and lots of interps. Wonangatta Moroka needs none = except perhaps at the camp sites and perhaps trail markers. Major tourism accommodation and built major facilities should be outside the parks. I can see a place for board walks, treetop walks and other facilities to assist interpretation and experience but not built mountain bike tracks, horse trails, built excitement venues (car rally, helipads etc). Tourism: I would like to see maximum tourism developed at strategic locations adjacent to parks - Halls Gap, Bright, Port Campbell, Yanake etc, but not in the parks themselves. However cynically, I am sure economic viability will determine otherwise. Also, grazing has a place where it is not driven by commercial interests but rather is used by the management authority for ecological outcomes - strategic pulse grazing of grasslands of grassy woodlands. Commercial interests such as the MFC (Mountain cattlepersons) should not determine the grazing strategy. Similarly with strategic regrowth thinning where scientific assessment determines the need and the regime.

Apologies for combining all of my map markers into one "all of the above" category, but I truly believe that any parkland, State or National Park that has hiking routes, cycling routes, campgrounds and toilet facilities, as well as nearby townships to provide food and accommodation (in some cases) brings untold riches in terms of scenery, biodiversity, conservation, rest and relaxation, understanding of history and understanding of ourselves as well as significant economic benefit to the surrounding towns. Even though I live almost adjacent to a State Park, I treasure my regular camping holidays in Victoria's National Parks above almost everything. However we would not travel/hike/cycle/camp/canoe in Victorian Parks if their relatively pristine nature were to be degraded or commercialized, nor would most of our friends and our/their families. There are plenty of alternatives if people want resorts etc. outside the park boundaries - please keep nature conservation the No. 1 priority in our Parks!

please note the mapping tool was not working properly. I was unable to save detail on each icon I added to the map. I made several attempts and each time the data was lost and disappeared.

I wrote comments on map values and preferences, and clicked save; when I re-opened them the windows were vacant; this may lead to misunderstandings about the exact nature of values and preferences

Map was awful to try and use, too slow and cumbersome to locate areas. Surely it would have been simpler to just list names of Parks. I gave up after a couple. My comments in the survey apply to all Parks.

I found that the mapping exercise didn't work well. Not sure if the slow internet speed we have here in the country was the problem or that the program was too complicated for a short survey.

Interesting exercise but not as easy as putting pins in a map. would have done more if it could have been more efficient to navigate and zoom.

it would be good to be able to add values to State Forest also. Other information that would be good to see across the public land would be existing recreation, historical, conservation areas etc. so the public are able to see where some recreation sites or access may be restricted.

Please note, The map of the Mitchell River is very wrong. Approximately half of the park is not shown on the map. The park area to the east of the Mitchell river is not shown as well as areas to the north.

I don't think the layers options worked when using Chrome

I would in surveys like this a question of how much time would you in an average year put back into the parks system ie: cleaning or maintaining a campground or other facility or similar.

map section not completed JUST TOO HARD TO UNDERSTAND

I could not seem to place map icons in areas that I regularly visit and value but which are not close to home. And the placement did seem limited to one of each icon. We are on a slow internet connection, dialup speed only so maybe that was an influence here? I found the first part of this survey dragging and dropping very tedious and would have done a lot more icons if it had not been so difficult to use. It is vital for the future of this State that large open space are retained, since colonisation huge tracts of indigenous forests, grasslands and wetlands have gone. The lungs of Melbourne are under threat from development and Victoria will lose its Garden State image if more is not done to retain and improve what we have left.

I did not complete the first section because it was very difficult to manage.

Hi. I am a QPMR accredited market researcher with over 25 years experience. Please, please, please get some professional help with this survey. It breaks just about every rule in the questionnaire design book and your findings will not be valid. To take three examples: 'Public Lands' are diverse. How do I answer the question about logging native forests? I am in favour of it in public forest reserves, but opposed to it in national parks. Take Q5 and Q6. Do you mean to include public suburban parks, which I easily access every day, or do you mean national parks or wilderness areas? Finally, in the bizarre mapping exercise: If I add the icon for 'Resource Extraction' does it mean I am for it or against it? Regards (Name withheld)

the question about logging was not clear enough. I support forestry and logging on land that is already cleared or operating as sustainable forestry. I do not support further clearing of old growth forest to make way for new plantations.

Hi, regarding the mapping element, I actually visit other areas of public land in addition to the ones I've marked, but these are the ones I use most frequently.

I could have entered dozens of places - but format chosen was tiring ! In Alpine Park, I have at least 6 favorite places - but map not detailed enough to show them. Likewise on mornington peninsula - about 5 ! Mt Buffalo and the grampians - also many different places. I assume an entry for one of these parks covers the whole of it, not just the specific area tagged. I am a keen bushwalker and backpacker. Am happy to respond to further surveys, answer further questions ! thanks, (Name withheld)

- Mapping experience was a nightmare. I'd have flagged all nat/state parks if I had 3 hrs to spare. - Parks should be kept free for public use. - Over commercialisation of parks is rubbish. - Open more 4wd tracks, don't bother to grade them, BTW like bush I found it a little time consuming to complete the map-based survey and therefore focused my attention on the Western District, the area I visit most frequently and which I feel most strongly about. My responses to the survey for the Western District, however, can be generalised across the state.

Map of crown land along Mt William Creek is way off. Placing a million points on a park at the scale you require is a waste of time: why not by Park. I had to give up due to other time commitments (like work), so many places not noted on map. But for all Public land I request more conservation. Keep private development to private land. the map idea is interesting but an absolute pain to use- therefore I have only partially completed it I have many ideas about conservation/ land use / land management / human impacts / feral animal control, but your survey strategy presents too blunt a tool to explore those.

Not all the comments I tried to add on markers on the map would save. Perhaps because some of the names on the maps (eg Feiglin) were shown as spelling errors. I repeat the comments here: Feiglin track (north of Powelltown) has been blocked off. This is a shame as it provided a very pretty alternate or return journey to the Worlley track for a Powelltown to 7 Acre Rock walk. Ada River Road (south of the Ada Tree Reserve, east of Powelltown) has been blocked off and is no longer accessible for walking. This old road provided a very pretty alternate to the Ada #2 and New Federal Mill tramway tracks when walking from the Dowey Spur Road to the Ada Tree.

I enjoy both 4x4 Driving, camping and bush walking so some of your questions did not let me choose both options.

Plotting points on this map is tedious and not complete. I prefer accessing the states parks and forests by 4WD using existing roads and tracks. In the last 40 years I have visited most parks and forests in the state and do not wish to see over development especially resorts and hotels etc. I have bush walked in many parks when younger and enjoy the peace and quiet of the bush and the good company around a campfire. I actively support Parks Victoria and 4WD Victoria in the ongoing access to our public lands.

I did not find the initial mapping a very productive tool. Trying to allocate icons to all the parks I have been to (and could remember being to) to me served little purpose and frustratingly I ignored. I'm not sure what was trying to be achieved and whatever it was it seems it could have been done in a far better way. I believe the current four main areas I'd like to see Parks Victoria improve are (a) ensuring there is no further 'development' (particularly private development) of our parks (b) improving the turn around time when parks or parts there of are closed after weather damage (c) make the Parks Victoria website more user friendly when searching for and on parks and (d) improving the park notes. I found placing the icons on the map tedious and time consuming and I got sick of it, so only put them on some of the areas I visit. As a Field Naturalist I visit all of the public spaces around the Latrobe Valley and beyond looking at plants and birds. I do not support any commercial development in Parks and reserves.

I found the map interface very difficult to use, constantly having to zoom in and out to identify all the parks in Victoria that I have used, and the reasons I use them/values associated with them. In the end I gave up on adding the individual preferences for the parks, because it was just too hard. But in general, I believe the main shortcoming of all parks is the poor signage of tracks and poor maps supplied in the Park notes, which often makes it difficult to identify walks and walking trails. Also there is clearly not enough funds provided to parks as often after floods, storms, fires etc, trails can be out of action for months if not years, which is disappointing. I think all parks should be protected from development and any commercial use and kept pristine, and state forests should also be protected from logging.

This survey took me quite a lot of time to complete and I therefore did not enter nearly all the areas I would have liked to comment on. The main reason for this was that I made some quite detailed comments in boxes regarding forest areas around Errinundra Plateau in East Gippsland, only to find that these comments disappeared when I closed the box. When I repeated some of them more briefly, and pressed save, the comments still seemed to disappear. My answers therefore became more cursory, because I didn't mind taking the time to make constructive comments, but got frustrated when they weren't saved. Overall, I am concerned that state governments are not providing sufficient resources to manage national and state parks properly for their biological and conservation values. This is the primary purpose of these parks - to conserve the biodiversity for future generations. Other values, e.g., recreation, nature appreciation, education, camping are important and should be encouraged where they do not not conflict with the primary purpose of nature conservation

Q9 is a bit awkward. For example I would like to see much better offerings for education, ranger led tours etc - but I don't want to see large scale hotels or casinos. I also think all public lands have great potential for education but that potential is not met if we keep cutting back budgets for environmental education and interpretation. In the end the public love what they understand - and Parks Vic have a role in teaching people that. It seems the interpretive ranger should be listed as highly endangered. Can we please have more of them and less business managers! Thanks

The markings on the map are only a small sample of places I have visited and only those near home. I literally could spend many hours marking the places I've visited in this State. Time prevented me from doing it more thoroughly,.

question 8 should have a box "all of the above"

I found moving around the map difficult. Movements were gross and I couldn't get rid of writing to obtain more map coverage. Therefore I only marked a few visited places. I actually visit more.

The computer access frequently "froze" - making it impossible for me to place icons on many of the parks that I have visited, and about which I feel strongly. This was not satisfactory.

I stopped plotting on the survey when the application started misbehaving - finally non-responsive except for the "done" button.

Ref question 8 It may seem odd that I and others in our group visit the park so often. There was no option to indicate volunteer/support activities involvement. A question such as "Are you a volunteer in a Friends Group" or something along those lines would give an idea of just how many people are involved in hands on activities.

I had a problem with the map, it did not seem to like my iPad , so I could not drop the pins. The areas most visited are the Alpine Park NE Vic and the area around Bright. Hope this is helpful. Cheers Rob

Although saved, when I checked the comments on management suggestions, the comment section was blank so not confident that the comments were retained. In case this has happened: Cathedral Range : Feral goats, deer and rapid spread of St John's Wort from adjoining properties threaten important conservation values, including *Sminthopsis* habitats. Also, pine plantation inholdings and activities, including spread of pine wildlings, have major impacts on Park values. Alpine NP: Proposal for cattle grazing trials and deer have significant impacts on conservation values. Mt Piper: Feral goats and weeds threaten significant butterfly populations and their habitats.

I think Question 9 oversimplifies things. There are some parks where logging/mining/grazing may be appropriate (indeed there are parks with a long history of these activities), but others where these activities would be highly damaging. The same goes for most of the other choices in Question 9. I really feel as though this question is a poor tool for management and much more informative responses (park specific) would provide more value from the survey results.

I would have liked blanket choices of landscape values for listed national parks, instead of having to drag multiple icons for each, perhaps I missed the idea of electing special sites within the parks etc. In the end I gave up.

I gave up putting symbols on the map as I had too many to put on in so many different places. I only put on some symbols in some of the large parks in eastern Vic. I believe all large national parks should have fewer man-made intrusions and a greater conservation management emphasis. Many areas outside parks should be made national parks, particularly ash forests in the Central Highlands. All large parks have recreation, spiritual, therapeutic, scenic, and pure water/soil/etc. values and the less disturbed ones also have wilderness values.

Question 8. I think should have been divided into 2 questions: 1. To sightsee and tour 2. To appreciate nature and / or culture thank you!

I could have made many more entries on the map but it was pitched at a level that was too general to let me do that.

I recognise the difficulties re collation, but limiting response to one answer only (e.g., Q8) distorts the response to the survey.

The survey was good except for the map bit at the start. I love mapping and found it difficult to get any message across.

I would have included more icons, but I found it a bit cumbersome to move around the Victorian map, so that is why it is somewhat limited considering the many places I would otherwise have nominated!

The map didn't load properly despite two attempts so I was unable to meaningfully contribute to that part of the survey.

I don't like VNPA being listed on this survey. VNPA is not an independent, non-profit, membership-based group and hasn't been for years but obviously they are heavily connected with Park Victoria. This survey is obviously nothing more than an expensive public relations exercise.

I have placed the icons on just a single reserve with which I am familiar. However, I would like to responses to be applied to all of the road reserves and small bushland reserves in that part of the Wimmera. The questionnaire is difficult to answer because public lands includes "other public land" such as river frontages and flora reserves to which many of the questions such as those orientated towards tourist accommodation are irrelevant. To give meaningful results, the questions should be more focused on specific parks or categories of public land. For example, should grazing be allowed on water frontages? Should logging be allowed in the Alpine National Park? Otherwise the results can give only a very coarse insight into the views of respondents. (name withheld)

I only put info on Beechworth map but I would put all your icons on every park in the state. Many of the icons could be put on non park areas eg highland areas around water catchments. Thankyou and good luck Merry Christmas Ian Threadgold
Purpose of initial icon / map exercise poorly explained. Should have limited to 10(?) icons per person, to catch participants' priorities. I also think the survey is seriously ambiguous in several areas; since public lands differ so much in type/purpose, how can one say 'wind-farms (or plantations) yes/no'???

1. Mapping difficult to control - in the end I simply placed comments in ANY area of relevant park. I could not get state forests etc up at all. 2. I regard this survey as a disgrace simply because our national parks are supposed to be mainly about conservation of biodiversity, not private profits for a few. This survey, in the context of other actions by the State Government, indicates to me the government is still trying to renege on its conservation responsibilities. The recent state of the environment report shows Victoria has still not learnt much from its history of excessive land clearing and fragmented natural areas - let alone trying to allow for global warming. Science not politics should determine conservation decisions- which all too often are too greatly influenced by lobby groups for private profit. There are times when I wish I hadn't majored in the biological sciences as it is so depressing to see what is occurring.

Peoples values are important when government organisations need to make management decisions. However, this needs to be carefully balanced with current science findings and discussion with relevant scientists regarding scientific values. Scientific values that i see as relevant are those that have considered conservation of our ecology in particular, but also climate science and how natural areas contribute to our adaptation to changes in the climate, such as heat increase.

As the questions applied to public land in general it was difficult to answer some questions correctly. Management would, (or should), vary between different national and state parks and other public lands depending on the conservation value (and other values) of each site. Even within a park preferred management might vary depending on various factors. An example would be fire management in the Grampians, where protection burns should focus on areas close to townships. Also, I might find wind turbines acceptable on some public land (as I do on private land), but not in pristine natural environments within a national park. Generally private development should be on private land. I regularly use parks, both state and national, for non-obtrusive recreation. I don't want them spoilt just to bring in a bit of extra revenue. That is what taxes are for.

Many of your questions would prompt completely different answers from me for each of the areas of public land I use. For example I would not like to see easy public access for cars in areas like Mt Bogong but I would like to see easier access for cars to some of the sites in other public land (my partner likes to explore these areas but he has mobility issues so some easier access would be nice. ie. not having to walk 3km, which he can't do, to see a waterfall when the park staff can use another access road which gets them to within 20m of the waterfall). Logging of native forest. If it is selected, one tree at a time lifted out by helicopter for instance it could be fine but widespread logging may not be suitable. Grazing...some areas like Barmah state forest it is good as it reduces the fire risk. Not a relevant question if talking about semi residential areas.

I found the multiple choice questions very difficult to answer, because my answers in relation to national parks would be very different from my answers in relation to other public lands. For example, I'm opposed to all cattle grazing in national parks, but not necessarily elsewhere. I'm opposed to tourism infrastructure development within national parks, but not necessarily on other public lands. And even within national parks, I'd support infrastructure development in some areas in some parks, but not in others. The questions don't allow for answers that take these differences into account.

General Compliments (46 comments)

Keep up the great work!

Good or Very good (x18)

Investigation is very meaningful (x2)

Very nice (x 2)

We need more public input on the use of public lands (NAT PARKS) This is a start

Thank you for the opportunity to have our say

well done on the initiative to seek feedback on the use of public land. Hopefully the information gained will be valuable.

Good to have this opportunity to provide thoughts and comment. I am a volunteer in - Friends of Chiltern-Mt Pilot National Park - Friends of French Island National Park - The Regent Honeyeater Project

Thank you for the opportunity to express my opinion about some of Victoria's national parks.

I'm looking forward to the prize.

Great survey, interactive map was difficult to use on ipad

Great survey, I had difficulty though moving to other areas in Victoria, even the Mitchell River National Park... and I use lots of parks. So if I can redo it if you know how to fix this problem then let me know. Thanks

Living on the NSW / VIC border I use recreational facilities in both states. Parks Victoria personnel are much more friendly and easier to deal with than NSW. In Victoria I get the feeling that the park is there for me and my family and we are made most welcome and the access is either free or low cost. In NSW the feeling is more of lock it all up and keep people out. If we are let in it is usually at a considerable cost. I would like my grandchildren to experience the parts of Australia that I have - without the unnecessary controls, regulations and costs. Victoria is doing it fairly well at the moment. Keep it open and keep it free.

Please do this survey regularly, thank you

It is a good survey

it is a good survey, it can help me

This is the type of survey in which I enjoy participating esp the topic Also well constructed and ease of use I used to be much more active than I am now. I had to be disciplined here EG I wanted to say that I participated in adventure type activity eg I used to hike many kms but sadly now I walk day walks and not nearly as far. But I STILL prefer isolation and Hands Off Our Parks (govts that prefer developers I am talking to) Well done

Thank you for the opportunity to respond/provide feedback (x4)

I look forward to the results! Hopefully the data I have provided is useful. Thanks, Gus

Thank you for this wonderful opportunity to express an opinion

Thank you (x 2)

Thanks for opportunity. Best wishes for your research!

Great mapping tool !

Many thanks for organising the survey - although i had some trouble with placing the icons on the map. Also, I am surprised the chosen universities are based interstate - is this to minimise bias or is there another reason why Victorian universities and research staff were not selected?

I like that you could donate to a charity. I do not require a tax receipt as there was no financial outlay on my part, but I would like you to donate to the Fred Hollows foundation on my behalf. I chose this charity as I think what they do is great, and the more people that can see and explore this beautiful and wild country of ours the better!!! Cheers Ian



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