# Using Internet technology to map community values & develop management plans for the Victorian Alpine Parks, Australia.

**Delene Weber[1], Greg Brown[2], Louise Rose[3], Dino Zanon[4],**

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Located in southeast Australia, the Victorian Alpine parks comprise over 860,000 hectares and includes some of the most beautiful and popular protected areas in Australia. The five major national parks, historic sites and a wilderness area contain spectacular mountain scenery, diverse flora and fauna, encompass a rich and colourful cultural heritage, and provide outstanding recreational opportunities including alpine skiing, bushwalking and canoeing. However, the existing plan for this area has not been updated since 1992. Since that time, many significant changes have occurred, including an increase in recreation demand, changing community expectations, changes in administration, climate change, cessation of cattle grazing and wildfires.

This presentation explains the process used to engage the public in the development of a new Greater Alpine National Parks Management Plan. The project used public participatory GIS (PPGIS) to inform the draft management. An interactive website (www.weplan.parks.vic.gov.au) was developed as the centerpiece of an effort designed to engage a broader demographic than has traditionally been drawn to submitting formal comments or attending public information meetings. While traditional approaches were still used, the project used PPGIS, blogs, wikis and twitter to engage the public and try to develop a sense of ownership in the final plan. Previous work with the same park agency suggested visitors wanted to participate in park planning decisions but lacked awareness pertaining to opportunities and demanded flexible, convenient approaches, such as web-based discussion forums and web-based surveys (Weber 2007).

Following interception of on-site visitors, over 350 respondents provided information about their experiences and impacts they had observed through an interactive web-based PPGIS system. Generally participants found the web-site very easy to navigate. Respondents were provided with a virtual demonstration and then proceeded to click on relevant maps and drag and drop icons representing various experiences and impacts onto the appropriate location. Key objectives of this part of the study were to:

- Increase knowledge and understanding about the types of experiences and perceived resource impacts that can be effectively mapped using an internet based PPGIS system for a large geographic area.
- Identify the spatial location of park experiences, impacts, special places, and concerns with facilities/services in the Greater Alpine Region.
- Increase knowledge about the relationships between perceived impacts and experiences
- Increase understanding of the differences and similarities between visitor and Parks Victoria staff perceptions of resource impacts.
- Assess the cost effectiveness of developing additional PPGIS systems for other parks in Victoria.

The results revealed that aesthetics/scenery and overnight experiences are an important part of the visitor experience in all parks. The mix of park experiences differed between national parks and historic areas, with national parks providing higher levels of scenery, solitude, and opportunities for

[1] University of South Australia, School of Natural and Built Environments, Mawson Lakes SA 5095, Australia, Delene.weber@unisa.edu.au
[2] University of Queensland, School of Geography, Planning and Environmental Management, Brisbane, QLD 4072, Australia, g.brown@uq.edu.au
[3] Team Leader Visitor Research and Development, Parks Victoria, Level 10 535 Bourke St, Melbourne, VIC 3000, Australia, dzanon@parks.vic.gov.au
[4] Planner, Parks Victoria, Level 10 535 Bourke St, Melbourne, VIC 3000, Australia, lrose@parks.vic.gov.au

physical activity and historic areas providing opportunities for social interaction, learning/discovery, and higher levels of crowding. National parks in the region tended to provide similar experiences. Historic areas were relatively high in the learning/discovery and crowding experiences relative to national parks. Park experiences were mapped at a much higher rate (an average of 13 markers per respondent) than perceived environmental impacts (an average of 2 markers per respondent). The mapping of perceived impacts differed between visitors and Parks Victoria staff. Staff identified more track and campsite impacts while visitors identified relatively more noise, rubbish, wildlife, and water impacts. The methodology was very successful in establishing the types of experiences visitors were getting and where their concerns were. In terms of cost effectiveness, the large geographic area did mean the on-site surveying was expensive, but use of park staff to collect information, or using panels or pre-existing email lists to contact users would make this methodology considerably less expensive. It provides excellent visual data such as maps and radar charts to show precise locations of where additional attention may be warranted, or how visitor differ according to specific localities.

Parks Victoria used the PPGIS data to provide some base information and a table of contents for the first draft which was then created by a wiki, thus allowing multiple stakeholders to collaborate on editing it. The draft document was open for public comment for a period of 60 days before the final draft, also created by wiki, was made available for comment. Blogs were used throughout the project to allow any stakeholders to express their thoughts, ideas and opinions. With over 10,000 reads of the blogs posts, this method has proven to be a popular means of expression. While the public were still encouraged to speak to rangers and attend community open houses, the use of technology improved our ability to communicate with stakeholders and to better understand their patterns of use of the parks and their vision for its future.

### References

Weber, 2007. Healthy Parks, Healthy People: Improving our understanding of visitors to Wilsons Promontory National Park. Sustainable Environments Research Group, University of South Australia.

### Note

A detailed report on this study can be found at the Landscape Values Institute website: www. http://www.landscapevalues.org/