

Hydropower and Tourism: Visitor and Operator perspectives on preferred use of natural areas

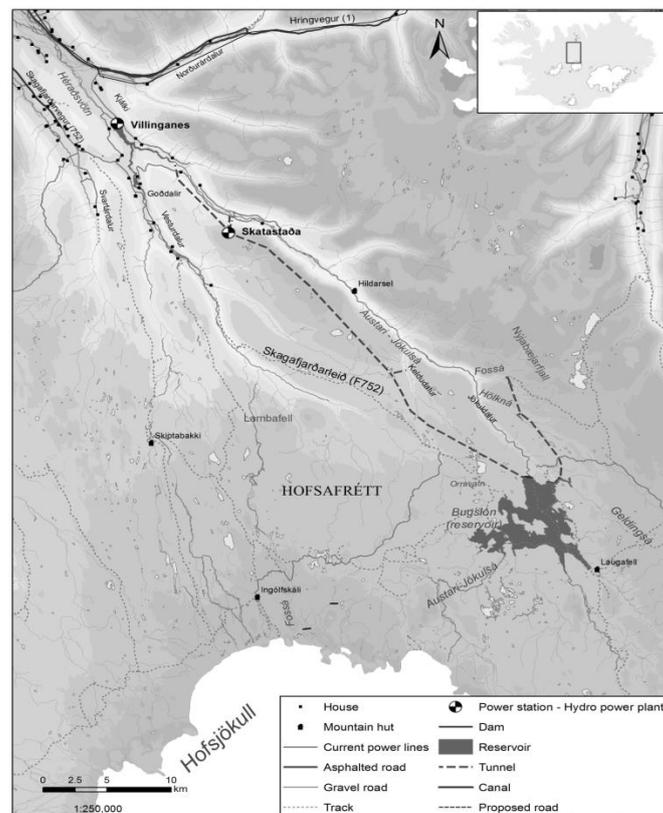
Georgette Leah Burns, Environmental Futures Research Institute and Griffith School of Environment and Science, Griffith University, Australian, leah.burns@griffith.edu.au

Laufey Haraldsdóttir, Department of Rural Tourism, Hólar University College, Icelandic, laufey@holar.is

Introduction

Tourism and power generation have grown rapidly in Iceland over the last few decades (Sæþórsdóttir & Saarinen, 2015). Both are critical to the Icelandic economy (Sæþórsdóttir, Ólafsdóttir, & Smith, 2017), and the natural features exploited for power generation are often the same features foreign visitors come to see. Natural places are also highly valued as sites for recreation for Icelanders.

This research aimed to understand visitor and tourism operator perspectives of a recreation destination in the face of competing land use. During the research, three proposals for hydroelectricity development, at two locations in Austurdalur valley, were under consideration by the Icelandic Ministry for the Environment and Natural Resources (Map One). We investigated what visitor activities existed in the area, who uses the area for recreation and why, and the attitudes of both visitors and tourism operators toward the area and the power plant proposals. Results were used to compile a government report (Burns & Haraldsdóttir 2016) that assisted the decision on how best to manage the future of this natural area.



Methodology

Data were collected during the second half of 2015 through questionnaires with visitors and interviews with tour operators.

Visitor questionnaires

Purposive sampling targeted visitors who had been into the areas likely to be affected by the power plants. The questionnaire contained 26 questions and was available in four languages. Questions covered visitor demographics (gender, age, nationality, occupation), visit characteristics (type of activity, length of time in the area, number of times visited), satisfaction with and importance of environmental features, and attitudes toward development in the area. 223 valid responses were collected. Results were compiled using version 22 of the IBM Statistical Package for the Social Sciences (SPSS).

Operator interviews

Interviews were conducted with 20 purposefully chosen tourism operators: including those with businesses closest to the proposed power plant sites, those expected to be most affected, as well as other prominent businesses in the region. Content analysis of the qualitative interview data was conducted through semantic mapping to identify central themes embedded within each narrative. Concepts emerged through an analysis of frequency, and the comparison of phrases and words with similar usage.

Results

Visitor perspectives

The average visitor to the area was most likely a professional, 42 year old female from Europe, travelling in a rental car with friends or family, staying for 2-4 days, and taking part in rafting, horse riding or walking activities. Eighty five percent of respondents said they visited the area specifically to experience wilderness and 89% said that they chose destinations like this for reasons of escapism, to rest and recover, and to put their everyday worries aside. Visitors ranked highly the importance of enjoying unspoiled nature (97%) and peace (91%) as part of their experience. Far less importance was placed on the provision of introduced facilities, such as picnic benches and tables (19%) and designed footpaths (25%). These results demonstrate a link between visitor perceptions of relaxation and naturalness. Potential benefits of a power station in the region include increased road infrastructure and improvement of existing roads. However, improving roads was not strongly supported by visitors. The majority of respondents (77%) agreed that any of the three power plant proposals would negatively affect their decision to visit the area. Findings from the questionnaire demonstrate that perception of wilderness or unspoiled nature is critical to the value of this area as a destination for visitors and that the presence of structures, even ones that are unseen but known about, distracts from this value.

Operator perspectives

Tourism operators considered the Austurdalur valley, and the highland above it, special because of "the rivers", "quietness and peacefulness", "nature and vegetation" and "access to the highlands", and were concerned that potential changes from hydropower could negatively affect this. This opinion was common to most businesses, regardless of their type and distance from the proposed power plant sites.

Only two operators strongly supported increased accessibility to Austurdalur by improving the condition and network of roads. While other operators said accessibility to Austurdalur

could be improved, most also acknowledged that the types of tourists visiting the region were satisfied with the existing level of accessibility.

Four of the 20 operators interviewed were in favour of power stations and 16 were against, with most interviewees believing that the presence of the power stations would have a negative effect on future tourism development. Concerns were mostly based around the perception that the associated infrastructure would destroy the natural environment, thus remove a key attraction for tourists and cause suffering for operators reliant on the area and the rivers as a resource.

Discussion and Conclusions

Tourism is a large income earner for Iceland, who cannot afford to neglect the wishes of both foreign visitors and locals in destinations like Austurdalur. A recommendation to the Ministry to not proceed with hydropower in this region, instead declaring it a protected area, ratifies the claim by Sæþórsdóttir and Saarinen (2015, p.1) that the tourism industry "has become an important stakeholder in terms of defining the use and management of wilderness areas". Effective planning for sustainable management of visitation is now necessary. The tourist voice is often missing from national and local planning, even when that planning directly effects recreational user's facilities and experiences in an area. In Iceland, where the number of foreign tourists annually visiting the country surpasses the total resident population by seven to one, addressing this is necessary.

Satisfaction with environmental conditions is an essential contributor to positive visitor experiences in natural areas (Ryan & Cessford, 2003; Tonge & Moore, 2007); therefore, monitoring satisfaction at a destination over time is a crucial component of policy and planning (Bernini & Cagnone, 2014). This study revealed that both visitors and operators were satisfied with their experience in Austurdalur and did not want it to change. The results provide baseline data that can be used for future monitoring and management of recreation in the area. For Iceland more broadly, they demonstrate the importance of understanding the range of stakeholder opinions and experiences to ensure sustainable management.

References

- Bernini, C. & Cagnone, S. 2014 Analysing tourist satisfaction at a mature and multi-product destination. *Current Issues in Tourism*, 17(1):1-20.
- Burns, G. L. & Haraldsdóttir, L. 2016 *Potential Effects of Proposed Power Plants on Tourism in Skagafjörður, Iceland*. <http://www.ramma.is/media/rannsoknir-f2-a3/SkagafjordurTourismReport20April2016.pdf>. Accessed 5.2.2018.
- Ryan, C., & Cessford, G. 2003 Developing a visitor satisfaction monitoring methodology: Quality gaps, crowding and some results. *Current Issues in Tourism*, 6, 457–507.
- Sæþórsdóttir, A. D., Ólafsdóttir, R. & Smith, D. 2017 Turbulent times: tourists' attitudes toward wind turbines in the Southern Highlands in Iceland. *International Journal of Sustainable Energy*, DOI: 10.1080/14786451.2017.1388236
- Sæþórsdóttir, A. D. & Saarinen, J. 2015 Changing ideas about natural resources: tourists' perspectives on the wilderness and power production in Iceland. *Scandinavian Journal of Hospitality and Tourism*, 16, 404-421. DOI: 10.1080/15022250.2015.1108866
- Tonge, J. & Moore, S. 2007 Importance-satisfaction analysis for marine-park hinterlands: A Western Australian case study. *Tourism Management*, 28:768-776.