

GOVERNANCE FOR SUSTAINABLE HERITAGE AREAS

Sustainable Heritage Areas: Partnerships for Ecotourism
Deliverable DT 3.1.1

Laura Ferguson, University of the Highlands and Islands, Scotland

April 2018

SHAPE, 2018

Contents	Page
List of Tables	4
List of Figures	4
Background	6
1. Defining Governance	8
Section 1 Key Points	9
2. Governance Models in SHAs in the NPA Region	9
2.1 UNESCO World Heritage Sites	11
2.2 UNESCO Biosphere Reserves	14
2.3 UNESCO Global Geoparks	17
2.4 Natura 2000 Sites	18
2.5 National Parks	19
2.6 Regional Parks	21
2.7 Private Conservation Areas/Private Protected Areas	22
2.8 Public-Private Partnerships	23
2.9 Commons	25
2.10 Conclusion on Governance Structures	26
Section 2 Key Points	28
3. Key Issues and Challenges for Governance in Sustainable Heritage Areas	29
3.1 Sustainability/Sustainable Development	29
3.2 Acquisition of Funding and Resources	30
3.3 Branding and Communications	31
3.4 Effective Stakeholder Participation	36
3.5 Uncertainty Surrounding Effects of Increasing Involvement of the Private Sector	39
3.6 Social Enterprise	40
3.7 Conflict Management	42
Section 3 Key Points	43

4. Principles for Good Governance	44
4.1 Participation/Inclusiveness	45
4.2 Rule of Law	46
4.3 Transparency	46
4.4 Performance/Responsiveness	46
4.5 Conflict Management/Consensus Orientation	47
4.6 Fairness/Equity	47
4.7 Efficiency and Effectiveness/Capability	48
4.8 Accountability	48
4.9 Direction/Strategic Vision	49
4.10 Legitimacy	49
4.11 Resilience/Adaptability	51
4.12 Communication/Connectivity	51
4.13 Integration	52
4.14 Learning Mechanisms	52
Section 4 Key Points	52
5. Establishing and Evaluating Governance	53
5.1 Establishing SHAs and Their Governance	53
5.2 Monitoring and Evaluating the Effectiveness of Governance	57
5.3 Monitoring	58
5.4 Evaluating	61
Section 5 Key Points	62
6. References	63
7. Appendix: SHAPE Governance Survey	77

List of Tables

Page

Table 1: Governance types and structures of a selection of natural and cultural heritage conservation areas.	10
Table 2: Examples of market positioning for a protected area (Hall and McArthur, 1998).	34
Table 3: Aspects of media management requiring consideration by SHAs (adapted from Cohen et al., 2015).	36
Table 4: Characteristics of adversarial and cooperative behaviour (Pound, 2015, p.247).	42
Table 5: Characteristics and principles for good governance identified in the literature.	44
Table 6: Planning indicator questions	59
Table 7: Input indicator questions.	59
Table 8: Process indicator questions.	60
Table 9: Sources of output indicators.	60
Table 10: Suggested formats for generating outcome indicators.	61
Table 11: Commonly used data sources for answering indicator criteria.	62

List of Figures

Page

Figure 1: World Heritage Site governance structure.	11
Figure 2: Ruin No.5, Kujataa UNESCO World Heritage Site, Greenland. Image: Greenland National Museum & Archives: Georg Nyegaard.	13
Figure 3: Hierarchy of Governance and division of responsibility at Kujataa UNESCO World Heritage Site, Greenland. Image: The Greenlandic Ministry of Education, Culture, Research and Church et al. (2016).	13
Figure 4: SHAPE Governance Survey Responses: How would you describe your governance structure?	15
Figure 5: SHAPE Governance Survey Responses: What type of stakeholders are involved?	15
Figure 6: UNESCO Global Geoparks global structure.	17
Figure 7: General network governance model showing linkages and tasks in Natura 2000 sites, based on description by Beunen and de Vries (2011).	19
Figure 8: Typical National Park governance structure.	
Figure 9: The Ettrick and Yarrow Valleys area, where the Southern Uplands Partnership lead a community regeneration project.	20

Figure 10: Cumbria, England, where commons remains an important form of land governance.	24
Figure 11: An economic model of tourism in protected areas (Font et al., 2004).	26
Figure 12: SHAPE Governance Survey responses: What are the sources of funding/support for your area?	31
Figure 13: Brand pyramid for Ningaloo-Shark Bay in Australia ((Spenceley et al., 2015).	32
Figure 14: The Campelo et al. (2014) model for branding a destination from sense of place.	33
Figure 15: SHAPE Governance Survey responses: What means have you used to establish the local/regional identity of your area?	33
Figure 16: SHAPE Governance Survey responses: How well is your area known, on a scale of 1 (not known) to 5 (well known) by local citizens?	35
Figure 17: SHAPE Governance Survey responses: How well is your area known, on a scale of 1 (not known) to 5 (well known) by local businesses?	35
Figure 18: SHAPE Governance Survey responses: How well is your area known, on a scale of 1 (not known) to 5 (well known) by visitors?	35
Figure 19: SHAPE Governance Survey responses: Please rate the success of participatory processes for engaging stakeholders in the governance of your area, where one is not at all successful and 5 is highly successful.	38
Figure 20: Social Enterprise Model (Campbell, 2013).	41
Figure 21: SHAPE Governance Survey: What type of stakeholders were involved in the establishment of your area?	55
Figure 22: Lockwood's (2010) framework for governance effectiveness (including elements of the Hockings et al. (2006) management effectiveness framework) (p.756).	57

Background

This report presents the findings of a review of literature and survey on governance for Sustainable Heritage Areas (SHAs) that was conducted between October 2017 and April 2018 as part of the Sustainable Heritage Areas: Partnerships for Ecotourism (SHAPE) project funded by the EU's Northern Periphery and Arctic (NPA) Programme. It presents findings on governance models applied in relevant SHAs in the Northern Periphery and Arctic (NPA) region, current issues in conservation area governance, and theories on principles and characteristics of good governance. The findings are then used to inform guidance on the establishment and evaluation of governance in SHAs. This report is intended to help aspiring SHAs select the most suitable form of governance for their circumstances.

The academic literature review was conducted online through the search engines Google and Google Scholar, as well as using the University of the Highlands and Islands electronic journal database. Relevant citations contained within these publications were subsequently obtained directly. In addition, printed literature was sourced from collections in the University of the Highlands and Islands Library and the Centre for Mountain Studies.

The initial academic literature search focused on searches for documents using keyword searches for the area type and the word 'governance.' Other searches were performed using key terms such as 'principles good governance,' 'governance heritage,' 'challenges environmental governance,' 'conflict management governance,' and 'dimensions of governance.' Later searches focused on the establishment of governance structures and development of key performance indicators for monitoring and evaluating governance, using search terms such as 'evaluating governance,' 'monitoring governance,' 'establishing governance conservation,' and 'establishing governance heritage.' The academic searches were conducted with a conservation focus, but also included research in general governance and management material from business studies journals.

The Google electronic search focused on non-academic literature containing the same keywords as the academic search. Governance resources from organisations such as the EUROPARC Federation and the World Resources Institute were also explored, particularly in the later stages of the research for material on establishment and evaluating governance.

The survey invited those responsible for UNESCO Biosphere Reserves in the NordMAB region to contribute their knowledge and experiences of natural and cultural heritage governance. It was developed through consultation with the SHAPE Governance Working Group. The survey was placed on Bristol Online Surveys and distributed via email invitation to the designated contacts for each Biosphere Reserve, as listed on the UNESCO Man and the Biosphere website, for the following countries: Canada, Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, Sweden and the United Kingdom. Invitations to participate were circulated on 19th February 2018, with responses closing on 19th March 2018. The questionnaire comprised 25 questions on the origins, governance and management of their Biosphere Reserves. The full survey can be found in Appendix 1. There were 13 responses, equating to a 33% response rate. These were from the following Biosphere Reserves: Redberry Lake Biosphere Reserve (Canada), Mount Arrowsmith Biosphere Region (Canada), Manicouagan-Uapishka Biosphere Reserve (Canada), Long Point Biosphere Reserve (Canada), West Estonian Archipelago Biosphere Reserve (Estonia), The Archipelago Sea Biosphere Reserve (Finland),

North Karelia Biosphere Reserve (Finland), Dublin Bay Biosphere Reserve (Ireland), Biosphere Isle of Man (Isle of Man), Nordhordland Biosphere Candidate (Norway), Galloway and Southern Ayrshire Biosphere Reserve (United Kingdom), Wester Ross Biosphere Reserve (United Kingdom) and North Devon Biosphere Reserve (United Kingdom).

The report is structured to guide the reader through an understanding of the practice of governance towards its application in their own SHA. It begins with a brief introduction to the concept of governance with a discussion on the definition of governance for SHAs in **Section 1**. **Section 2** outlines governance structures used in areas comparable to SHAPE SHAs, to provide the core knowledge of governance models on which to base explorations of the concepts required for them to function effectively. It presents governance models in the following types of SHA in the NPA region: UNESCO World Heritage Sites, UNESCO Biosphere Reserves, National and Regional Parks, Natura 2000 sites, UNESCO Global Geoparks, Landscape Partnerships, Private Conservation Areas, Public-Private Partnerships, and Commons. Though not an exhaustive list, these models represent the significant institutions relevant to SHAs and cover the full range of governance structures: hierarchical top-down, network and participatory bottom-up. **Section 3** discusses some of the major issues and challenges in SHA governance. The characteristics of good governance are then discussed in **Section 4**, with the dual purpose of informing and then building on them in Section 5 to define process indicators for monitoring governance specifically in SHAs. Finally, **Section 5** draws on the findings of the survey to discuss establishing SHAs and their governance, and provides a selection of indicator criteria for monitoring and evaluating the effectiveness of governance in SHAs. A template for the forthcoming SHAPE case studies and guidance for stakeholder engagement in identifying and applying designations are also included at the end of the report.

1. Defining Governance

There is no widely agreed definition of governance (Keefer, 2009; Kaufmann et al., 2011), and there are a large number of definitions in use. The OECD (2009), for example, lists seventeen definitions of governance. Krahmman (2003) also refers to the multiple definitions and uses of the term governance, claiming they are “as varied as the issues and levels of analysis to which the concept is applied” (Krahmann, 2003, p.323). This can make it difficult to understand and analyse governance (Kooiman, 1999).

Graham et al. (2003) in a report for Canada’s Institute on Governance, provide a useful general definition of governance as “the interaction among structures, processes and traditions that determine how power and responsibilities are exercised, how decisions are taken, and how citizens or other stakeholders have their say” (Graham et al., 2003, p.ii). This report shall adopt a definition of governance based on this for SHAPE, as it covers both the key structural and process elements that are of importance to the functioning of governance in SHAs in a clear and concise manner. The SHAPE Governance Working Group has agreed that governance for SHAPE is described as the structures and processes that determine how power is exerted, how decisions are taken and how stakeholders are included.

It is important to remember that governance is not synonymous with government (Rhodes, 1996; Graham et al., 2003). Bonnafous-Boucher (2005) describes governance as “a conception of the act of government for which the search for rules of action and a process of compromise between various parties is more important than the identification of the entity which exercises the act of governing” (Bonnafous-Boucher, 2005, p.524). Paavola et al. (2009) also draw the distinction between governance frameworks, interventions formed in pursuit of a specified goal, and governance regimes that are the norms and rules. Furthermore, they highlight the importance of multiple spatial, political and time (short-term, mid-term, long-term) scales relating to environmental governance in coupled socio-ecological systems. Governance, therefore, is a complex process that extends far beyond a single government institution.

Governance is also not synonymous with management. Lockwood (2010) makes a distinction between the two by describing governance as concerning the powers, authorities and responsibilities, while management concerns the resources, plans and actions. IUCN provides further clarification of this in its description of governance as being about who decides what the objectives are, what to do to pursue them, and with what means, how these decisions are taken, who holds power, authority and responsibility, and who is (or should be) held accountable (IUCN, 2013, p.11). It then describes management as what is done in pursuit of given objectives and the means and actions to achieve such objectives (IUCN, 2013, p.11). Nevertheless, governance is one of the main factors influencing management effectiveness and efficiency (IUCN, 2013), as well as being a critical aspect of conservation (Dearden et al., 2005).

As the variety of definitions suggests, governance is a “rich and multifaceted” concept (IUCN, 2013, p.xiii). Schmitt (2009) distinguishes five dimensions of governance:

- The sectoral dimension (i.e. the issue-orientation, e.g. environmental governance or risk governance)

- The structural dimension (i.e. the institutional framework)
- The processual dimension (i.e. manner of political negotiation and control, e.g. top-down, collaborative)
- The dimension of scale (i.e. global scale, local scale, etc. and their interactions with each other in multilevel governance)
- The normative dimension (i.e. the assessment of governance according to general principles)

Section 2 will focus on the structural and processual dimensions, and to a lesser extent, the dimension of scale, while Section 4 examines the normative dimension in detail. Governance for SHAPE works across multiple sectoral dimensions, primarily environmental, cultural and tourism. Schmitt (2009; 2011) argues that cultural governance differs from environmental governance in more than just the sectoral dimension due to the social negotiation and control of meaning around culture. This affects the structural and processual dimensions, as well as the normative dimension. It is likely, therefore, that governance for SHAs will be a complex subject, incorporating differences across many of the dimensions of governance.

Section 1 Key Points

- There are multiple definitions and uses of the term governance.
- Governance for SHAPE is defined as the structures and processes that determine how power is exerted, how decisions are taken and how stakeholders are included.
- Governance is not synonymous with government and is also not synonymous with management.
- Governance is comprised of five dimensions: sectoral, structural, processual, scale and normative (Schmitt, 2009).

2. Governance Models in SHAs in the NPA Region

Establishing and practicing good governance in SHAs requires an understanding of governance models and the issues surrounding them in their application in heritage areas. There are many different models of governance currently in operation in SHAs. Traditional hierarchical forms of governance are still in use in some areas, while in others new collaborative forms of governance are blurring the boundaries between the state and civil society, as well as the boundary between public and private (Gunningham, 2009). This section describes these models, focusing on the structural dimension of governance in SHAs, as well as the processual dimension that describes the style of governance in which they operate.

IUCN (2013) defines four broad types of governance structure that are applicable in protected areas:

- Governance by government can be at the national, regional or local level and includes situations where management is delegated to a third party, such as an NGO.
- Shared governance involves various actors sharing authority, responsibility and accountability for an area. Shared governance arrangements include transboundary governance, collaborative governance and joint governance.
- Private governance includes conservation areas established and run by individual owners, non-profit organisations and for-profit organisations.
- Governance by indigenous peoples and local communities is comprised of conserved territories and areas established and run by indigenous peoples and community conserved areas that have been established and run by local communities, both of which can be operated under formal or informal institutions and rules.

These definitions are relevant to forthcoming discussions on the structural dimension of governance in the various types of area.

Bouwma et al. (2010) outline three main styles of governance: hierarchical top-down approaches, communicative policy based on participatory bottom-up approaches, and network governance. These comprise Schmitt's (2009) processual dimension. **Hierarchical** refers to the classic modern government practice of policy-making by a small group of dominant actors who impose the plans directly on others. **Participatory bottom-up** approaches are based on active involvement of communities collaborating in governance of their area. **Network** governance involves various groups of actors with a stake in the area working together to negotiate and achieve consensus on decisions. This style includes, but is not restricted to, co-governance and self-governance. There may still be a dominant government actor (Bouwma et al., 2010), as network governance is not necessarily non-hierarchical (Carlsson and Sandstrom, 2008). Network governance disregards the polarizing ideas of top-down and bottom-up, instead utilising complementary capabilities across scales (Wyborn and Bixler, 2013). Policies are the result of bargaining between members of the network (Rhodes, 1997).

Table 1, below, summarizes the types of governance structures and processes of the areas involved in conservation of natural and cultural heritage that are discussed in this report.

Type of Area	Governance Structure (IUCN, 2013)	Governance Process (Bouwma et al., 2010)
UNESCO World Heritage Sites	Government	Hierarchical
UNESCO Biosphere Reserves	Shared Government	Participatory
National Parks	Government	Hierarchical
Regional Parks	Government	Hierarchical
Natura 2000	Government/Shared	Network
UNESCO Geoparks	Shared Government	Participatory
Private Conservation Areas	Private Governance	Various governance styles
Public-Private Partnerships	Shared Governance	Various governance styles
Commons	Community Governance	Network

Table 1: Governance types and structures of a selection of natural and cultural heritage conservation areas.

The governance structures and processes of each of these areas is described in the remainder of this section. This section is comprised of information gathered from appropriate literature sources, and

also findings from the survey on governance models conducted among UNESCO Biosphere Reserves and Regional Parks in the NordMAB region.

2.1 UNESCO World Heritage Sites

UNESCO World Heritage Sites are a diverse range of natural and cultural heritage sites deemed to be of “outstanding universal value” (UNESCO, 2005) that are under the governance of possibly the best known organisation for the protection of such places (Schmitt, 2015). The World Heritage Convention was adopted in 1972, and since then the number of sites on the World Heritage List has increased significantly from 12 sites inscribed on the original list in 1978, to 1073 sites by the end of 2017 (UNESCO World Heritage Convention, 2017a). While World Heritage Sites are managed by the national government of their country (UNESCO, 2005; Schmitt, 2011), the overarching governing body which implements the World Heritage Convention is the Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, known as the World Heritage Committee.

The World Heritage governance structure is illustrated in Figure 1, below. As Figure 1 shows, the World Heritage Committee’s 21 members are elected by the General Assembly of States Parties. Members are elected for a six-year term but typically serve only a four-year term due to a voluntary reduction that most choose to observe. The World Heritage Committee normally meets once a year, when it controls and allocates funds, decides on properties to be inscribed on the World Heritage List and the list of World Heritage in Danger, and examines reports on the state of conservation of sites in order to assess where management intervention is required (UNESCO World Heritage Convention, 2017). In addition to the annual meetings, an extraordinary session can be called at the request of a minimum of two-thirds of the States members in order to discuss only the particular matter for which the session has been convened (UNESCO World Heritage Committee, 2015). The Bureau of the World Heritage Committee is elected by the Committee on an annual basis, and consists of a Chairperson, five Vice-Chairpersons and a Rapporteur. The Bureau coordinates the Committee’s work and arranges the meetings.

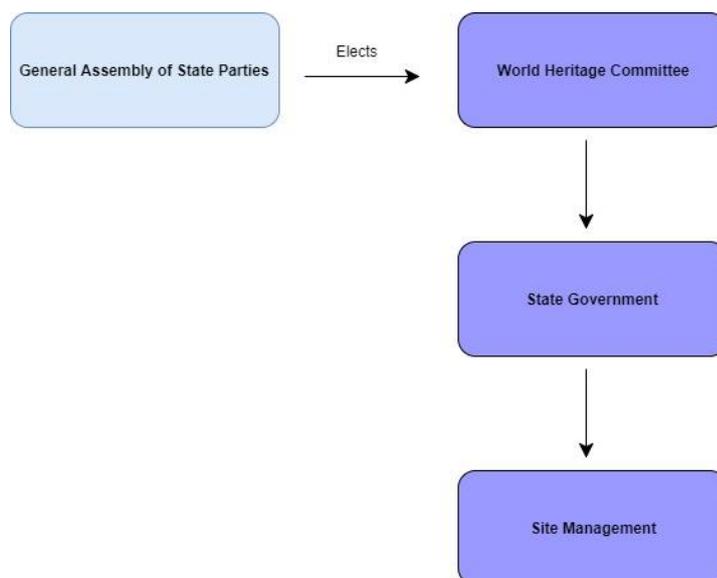


Figure 1: World Heritage Site governance structure.

World Heritage Site governance takes the form of hierarchical governing. In a hierarchical structure, actors are arranged by superordinate and subordinate ranks, and rights and duties are assigned according to the responsibilities at each level (Kooiman, 1999). It is the most centralised and bureaucratic, as well as the least flexible, form of SHA governance (Stevic and Breda, 2014). World Heritage governance operates at the global level (Schmitt, 2009) and conforms to the procedures and settings of international diplomacy (Schmitt, 2009). Once inscribed on the World Heritage List, sites are subject to guidelines and conventions from UNESCO (Stevic and Breda, 2014), and interventions when the sites are in danger (Schmitt, 2015). International-level World Heritage Site governance has the strength of scale and firm structure that results in a high level of influence over national governments (Schmitt, 2015).

The distance from which World Heritage governance operates and associated issues with its global-local relationships have, however, caused difficulties. World Heritage governance has been criticised for conflicting with local priorities for the preservation and development of sites (Su and Wall, 2012). Indigenous groups, for example, have complained that their interests were not adequately considered in Committee decisions (Schmitt, 2015). It is a principle of the World Heritage Convention that World Heritage Sites ought to retain their function in community life while being preserved (UNESCO, 1972). The Operational Guidelines for the Implementation of the World Heritage Convention (UNESCO, 2005) require that individual sites have a management plan that incorporates managing the economic and social sustainability of the sites. However, an analysis of six cultural World Heritage Sites in the United Kingdom by Landorf (2008) revealed that in most cases these dimensions were not actively planned and managed in the same way as the environmental dimension. Ripp and Rodwell (2018) describe a lack of consistency with these dimensions, stating they are “present in varying degrees” (Ripp and Rodwell, 2018) in World Heritage sites. Landorf (2008) identified the level of stakeholder participation in the planning process and extent of the situation analysis as significant factors in this. While the operational guidelines emphasise the importance of stakeholder participation, Landorf found that in practice this was often weak and ill-defined.

Schmitt (2015) views the devolved responsibilities for protection and management of sites as part of the weakness of the UNESCO World Heritage regime which observes from afar. In any one year the Committee does not even discuss the majority of World Heritage Sites (Schmitt, 2015). The World Heritage Committee also does not intervene to protect from destruction sites that are of confirmed outstanding universal value but do not have “an adequate protection and management system to ensure its safeguarding” (UNESCO, 2005) already in place, as this now forms part of the criteria in the Operational Guidelines.



Figure 2: Ruin No.5, Kujataa UNESCO World Heritage Site, Greenland. Image: Greenland National Museum & Archives: Georg Nyegaard.

Figure 2, above, shows one of the ruins at the UNESCO World Heritage Site of Kujataa in Greenland. This site adheres to the same hierarchy as depicted in Figure 1, although due to the political situation in Greenland there are two national governments representing Danish and Greenlandic involvement. Figure 3, below, depicts this hierarchy in its top-down structure, but also represents the distribution of tasks associated with the site as the width of the sections. This reinforces Schmitt's statement by illustrating the disparity between the level of influence and the responsibility for tasks at, and therefore direct contact with, the site.



Figure 3: Hierarchy of Governance and division of responsibility at Kujataa UNESCO World Heritage Site, Greenland. Image: The Greenlandic Ministry of Education, Culture, Research and Church et al. (2016).

Schmitt (2011) also described World Heritage governance as cultural governance in the narrow sense. It is governance directed explicitly towards a site in its capacity as a cultural object. This disjoint from society is in contrast to the broad sense of cultural governance, in which other conflicting fields of governance and societal interactions overlap and competing interests must be negotiated.

The top-down model employed by World Heritage Sites has, until recent decades, been the dominant form of protected area governance (Lockwood, 2010). There has been a move away from a predominantly state-based system to a decentralised multi-level system (Lockwood, 2010). Such systems have stronger foundations and links at the local level (Oviedo and Brown, 1999) and can be observed in UNESCO Biosphere Reserves, as shall be discussed in Section 2.2.

2.2 UNESCO Biosphere Reserves

Biosphere Reserves are governed using a variety of different mechanisms. All include a pre-existing protected area, such as a National or Regional Park. Nested systems that overlap with one or more pre-existing protected areas have the benefits of decentralisation for robust decision-making while maintaining wider connections through a regional governance system (Wyborn and Bixler, 2013). However, in nested systems, governance arrangements between the nested region and the surrounding area are sometimes in conflict. How a nested system connects to and is influenced by the surrounding governance system has an effect on the governance of the inner area (Bavinck and Vivekanandan, 2011). It has, for example, been suggested that there can be poor recognition of the Biosphere Reserve concept in National Park administrations (Schliep and Stoll-Kleemann, 2010).

In some cases, Biosphere Reserve governance is conducted by a public governing body, such as a municipality or an island government, with an adaptation to the needs of the Biosphere Reserve. Other Biosphere Reserve governance mechanisms include public-private partnerships, which are discussed as a governance model in Section 2.8, and ad hoc structures, such as a grouping of public institutions or private governance.

Participatory conservation is a guiding concept of UNESCO Biosphere Reserves (Stoll-Kleemann et al., 2010, p.227). The vision statement for the World Network of Biosphere Reserves (WNBR) within the Man and the Biosphere (MAB) Programme states: “Our vision is a world where people are conscious of their common future and interaction with our planet, and act collectively and responsibly to build thriving society in harmony within the biosphere” (UNESCO, 2017, p.16). Despite the variety of different governance structures displayed in the WNBR, Biosphere Reserve governance is therefore unlikely to ever be implemented hierarchically by one single authority (Brenner and Job, 2011) but rather by multiple actors in a multi-layer governance scheme (Lemos and Agrawal, 2006). It is most often a bottom-up governance that involves networks and linkages across various levels (Berkes, 2007), with the aim of fostering community involvement in the management of the natural environment within a sustainable rural development context (Prager et al., 2015).

The SHAPE Governance survey asked Biosphere Reserves in the NordMAB region to identify the form of their governance structure. The results are shown below in Figure 4.

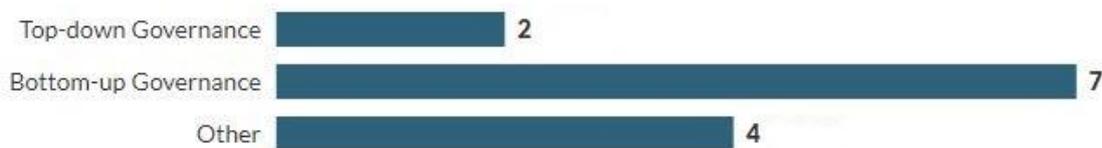


Figure 4: SHAPE Governance Survey Responses: How would you describe your governance structure?

Of ‘other’ structures, two respondents described collaborative network governance models, and two described ‘hybrid’ systems incorporating elements of both top-down and bottom-up structures. Roughly half (6 reserves) had governance structures with a formal legal basis and roughly half (7 reserves) did not have a formal legal basis for their governance structure. As the results show, the majority of these Biosphere Reserves have bottom-up governance structures.

Figure 5 shows the types of stakeholders involved in governance of these Biosphere Reserves. ‘Others’ that were listed were various educational institutions, and First Nations people in Canada. Most respondents report the involvement of a range of stakeholders, which is typical of bottom-up governance. The strong representation of communities involved in Biosphere Reserve governance also demonstrates the bottom-up process at work.



Figure 5: SHAPE Governance Survey Responses: What type of stakeholders are involved?

Bottom-up structures require sustained commitment and good vertical and horizontal linkages to function effectively. Schliep and Stoll-Kleemann (2010) assessed Biosphere Reserves in Central Europe through qualitative interviews with stakeholders and relevant local actors to test the effectiveness of the Man and the Biosphere vision and business plans at the local level. They found weaknesses in the implementation of the Biosphere Reserve concept in all of their case studies, which they attribute to a lack of vertical integration between the MAB institutes and national authorities, and also a lack of trained personnel, funding and political support. They concluded that governance deficits amplified institutional and structural flaws in the system, and that improved stakeholder communication, encouraging active participation and pushing capacity development would address the issues.

The Statutory Framework of the World Network of Biosphere Reserves (UNESCO, 1996) introduced a review procedure for Biosphere Reserves. Emerging from concerns about a lack of conformity to the Biosphere Reserve concept, including the exclusion of community involvement, the Statutory Framework evaluates compliance with specific criteria relating to size, zonation, ecological characteristics, biodiversity importance, and regional sustainable development prospects (Coetzer et al., 2014). Reviews are conducted at 10-year intervals and could lead to a site’s Biosphere Reserve

status being revoked if they do not implement the revisions recommended by UNESCO (Coetzer et al., 2014). In 2013, the MAB Programme's International Co-ordinating Council (ICC) initiated an exit strategy, requiring all Biosphere Reserves to be reviewed (Price, 2017). This required Biosphere Reserves to address such governance deficits and system flaws as were identified by Schliep and Stoll-Kleemann (2010). As a result of the exit strategy, there were 38 voluntary removals of sites that could not meet the criteria (UNESCO, 2017a). Withdrawal was typically due to a lack of human population, lack of appropriate zoning, overriding conservation functions or an inability to expand (Coetzer et al., 2014). The review procedure also led to the re-territorialisation of 66 Biosphere Reserves, which were extended to include all three zones: core, buffer and transition (Price, 2017).

SHAPE Governance Survey respondents Dublin Bay, Galloway and Southern Ayrshire, and Wester Ross Biosphere Reserves underwent re-territorialisation. Dublin Bay Biosphere Reserve described their experience of the process:

North Bull Island was designated as a Biosphere Reserve in 1981. It was a 'first-generation' Biosphere which was managed by Dublin City Council. Communication between Dublin City Council and representatives of EuroMAB was re-initiated in 2012. In September 2013, Dublin City Council notified the Secretariat of the UNESCO Man and the Biosphere Programme of its intention (i) to retain the Biosphere designation and (ii) to submit a Periodic Review. Consultation meetings were held with numerous stakeholders including national government, government agencies, local authorities (staff and elected members), universities and environmental NGOs. Surveys were undertaken with members of the public, site users, local businesses and NGOs. Workshops were delivered to local schools and information days for members of the public were held at various local festivals. The final Periodic Review was submitted in September 2014. It proposed the extension and renaming of the existing Biosphere and the formation of the multi-agency Dublin Bay Biosphere Partnership. Dublin Bay Biosphere was designated by UNESCO in June 2015.

The Biosphere Reserves surveyed for this project were asked in what ways their governance structure could be improved. This provided some interesting answers. Three respondents indicated that they currently had a good model and could not identify any improvements needed. Four suggested that their governance model could be improved through increased participation, either in general or specifically involving groups such as local community members or young people. Two Biosphere Reserves identified more specific needs. North Devon Biosphere Reserve would like a stronger emphasis on communication, and The Archipelago Sea Biosphere Reserve would like stronger support at the national level. Three respondents described their approach as adaptive, where they constantly evolve their model as required. Finally, North Karelia Biosphere Reserve suggested that the best source of answers to this might be to ask those who lived or made a living within the area for their insight on how governance can be improved.

The concept of Biosphere Reserves, linking the aims of conservation and socio-economic development, is closely linked to discussions on forms and strategies of environmental governance (Stoll-Kleemann and Job, 2008; Brenner and Job, 2011). Pollock (2004) suggests that biosphere reserves are suited to place-based governance due to their bioregional and cross-sectoral emphasis.

Research suggests that place-based governance supports sustainable development through linking community identities to the area through engagement, which stimulates social capital and strengthens society (Pollock, 2004). Pollock (2004) follows on from this to claim that a shared sense of place actually appears crucial for collective action to take place. Place-based governance combines social and cultural interpretations of place with political and ecological definitions of space (Pollock, 2004). It represents more fluid boundaries than those politically dictated (Edge and McAllister, 2009). Oviedo and Brown (1999) predict protected areas will drive towards a greater reliance on the biosphere reserve concept, becoming based on ecosystems and working landscapes.

2.3 UNESCO Global Geoparks

Geoparks are geographical areas containing sites and landscapes of geological significance that can be developed with the triple purpose of conservation, education and local socio-economic development (UNESCO, 2006). At the turn of 2018, there were 127 UNESCO Global Geoparks in 35 different countries (UNESCO, 2018).

The designation process for Geoparks is through application by the National Geoparks Forum of that country. These fora meet annually to assess new applications and discuss revalidations. The prospective sites are evaluated and the UNESCO Global Geopark Council may make a recommendation to the UGG Executive Bureau who then make the final decision. Once designated, all Geoparks must join the Global Geoparks Network, an NGO that functions as a dynamic network for exchanging ideas of best practice and joining Geoparks in common projects to raise the standards of all Geopark products and practices (Global Geoparks Network, 2018). The global structure for UNESCO Global Geoparks is shown in Figure 8, which was produced from a sketch supplied by Laura Hamlet of North West Highlands Geopark/ Wester Ross Biosphere Reserve.

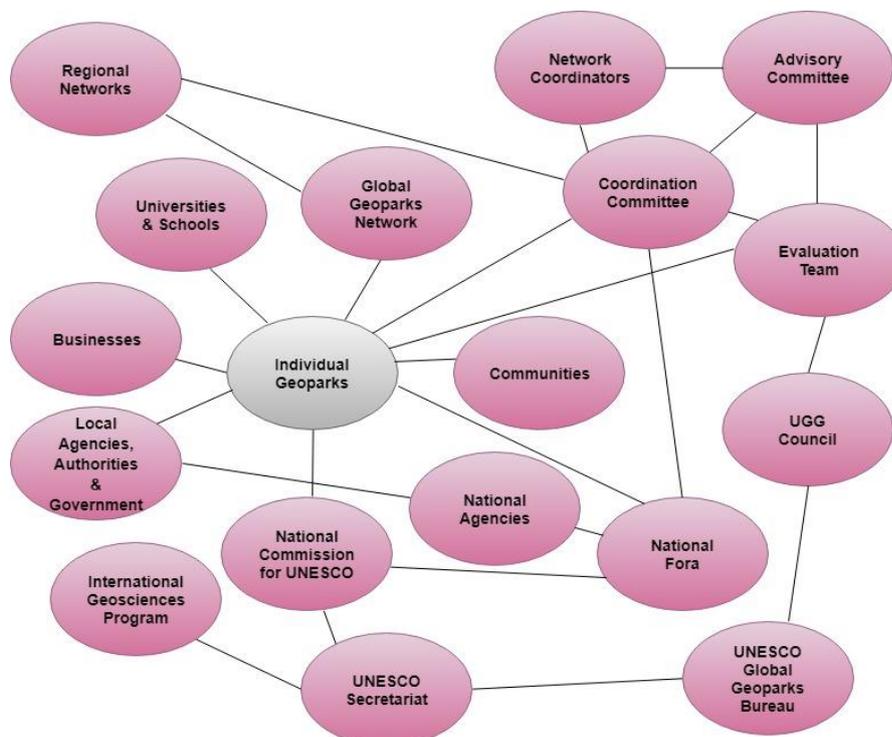


Figure 6: UNESCO Global Geoparks global structure.

Geoparks are overseen by and accountable to UNESCO, but individual Geoparks are governed locally by a bottom-up participatory approach, in a similar way to UNESCO Biosphere Reserves, and begin through a stakeholder-led process involving all relevant local and regional actors (UNESCO, 2018). Management of Geoparks is conducted by a body that legally exists under national legislation. Geoparks must produce a management plan that incorporates governance, development, communication, protection, infrastructure, finances and partnerships (UNESCO, 2017b). Also, like Biosphere Reserves, they may be nested in other governance institutions, such as National or Regional Parks or Biosphere Reserves. As with Biosphere Reserves, Geoparks are subject to periodic review in order to retain their designation, with the revalidation process for Geoparks occurring every four years. Martini et al. (2013) find Geoparks and Biosphere Reserves very difficult to distinguish by their founding definitions, describing Geoparks in theory as like Biosphere Reserves specialising in geological heritage values.

2.4 Natura 2000 Sites

Natura 2000 is the largest network of protected areas in the world (European Commission, 2010). Grouping Special Protection Areas (SPAs) under the Birds Directive (79/419/EEC) and Special Areas of Conservation (SACs) to comply with the Habitats Directive (92/43/EEC), Natura 2000 is based on sites containing species that are recognised as being of community importance (Alphandery and Fortier, 2001). National governments are responsible for the management of the sites, although in practice this is often passed on to regional or local authorities, and, in most countries, national governments are also responsible for overseeing the formal designation of the sites, based on scientific data (Beunen and de Vries, 2011). Beunen and de Vries (2011) describe this as a complex network model of governance, whereby the government retains the ultimate authority, but responsibility is delegated to lower tiers who coordinate the process and maintain the network with stakeholders. Figure 7 shows a general example of a network model.

The Natura 2000 network links authorities to stakeholders through a consultation process. In the past, conflict has been a feature of the designation of Natura 2000 sites in Europe. This is partly because many are on private land and their top-down designation was often perceived by landowners as an imposition or an economic threat (Young et al., 2014), and partly because of conflicts of interest with local stakeholders (Jones-Walters and Cil, 2011). Such conflict between conservation agencies and local communities over the creation of protected areas is one of the most common forms of conservation conflict (Adams, 2015). Many sites were designated with little involvement from communities encompassed by them. People who lived and worked within the sites, and were often reliant on its ecosystem services, reported feeling alienated and disenfranchised (Jones-Walters and Cil, 2011). Bergseng and Vatn (2009) reported major conflicts in Finland between landowners and authorities that culminated in hunger strikes by forest owners in Karvia and a nation-wide contempt for conservation. In France, a group of local residents questioned the legitimacy of Natura 2000 establishment in the country, causing a temporary suspension in its implementation (Alphandery and Fortier, 2001). Such conflict prompted the European Commission to highlight the importance of the support of those living in or depending on the areas, and to stress the need for stakeholder consultation during implementation (Young et al., 2014).

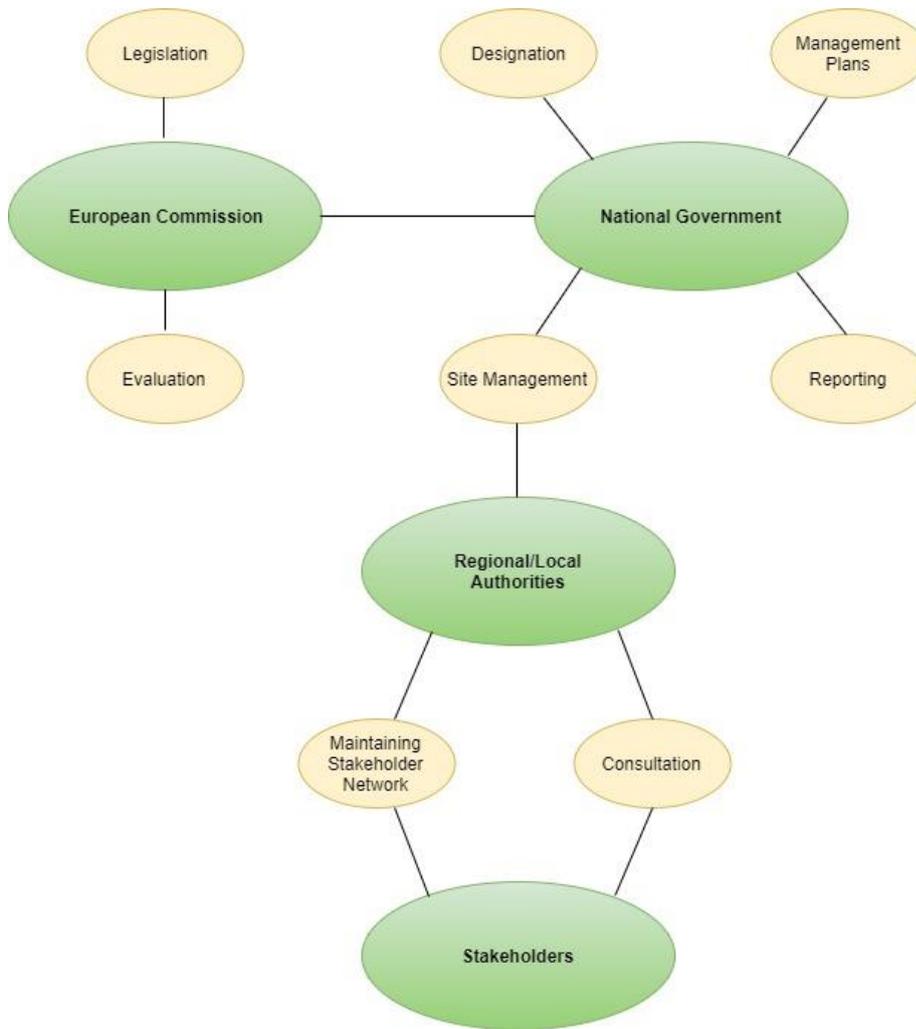


Figure 7: General network governance model showing linkages and tasks in Natura 2000 sites, based on description by Beunen and de Vries (2011).

2.5 National parks

IUCN recognises National Parks as a distinct category of protected area (Category II), although not all National Parks, including the UK's National Parks and Greenland's National Park, meet the IUCN conditions for this category. From a governance perspective, National Parks might be described as government-managed protected areas (Mitchell, 2007) and they are predominantly government-funded (McCarthy et al., 2003). Their governance models typically adhere to national frameworks and are hierarchical (Getzner et al., 2014). Such structures are not as readily conditioned to being open for debate and discussion as flat hierarchies (Getzner et al., 2014), although in recent years there have been attempts to accommodate this. One example of such an attempt is the 2010 National Park consultation in England and Wales (DEFRA, 2011).

Across the United Kingdom, National Park Authorities, funded mainly by central government and comprised of a combination of local and national elected and appointed members (Barrow, 2015), are the main actors in governance of National Parks (Thompson, 2005). The majority of these National

Park Authorities have broadly similar governance arrangements (DEFRA, 2010) that are constituted and operated like a local government (DEFRA, 2011). Figure 6 illustrates this National Park governance structure.

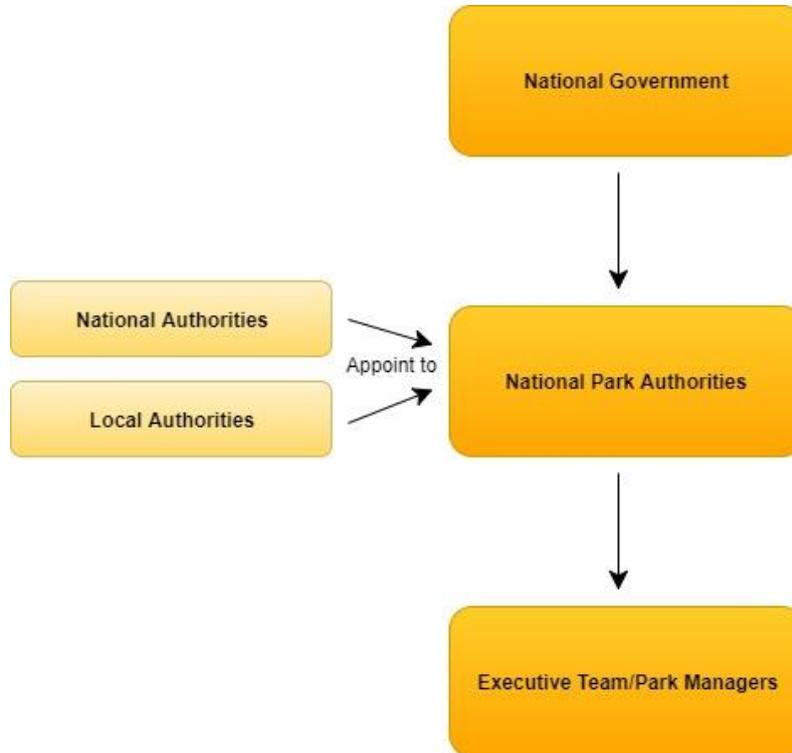


Figure 8: Typical National Park governance structure.

Due to concerns over a lack of local action in National Park governance, the UK Government’s Department for Environment, Food and Rural Affairs (DEFRA) undertook a consultation in 2010 to review the governance arrangements of National Parks in England and Wales with the aim of increasing local accountability. There was strong support for increasing local representation (DEFRA, 2011), leading to recommendations to allow non-councillors to take seats on the National Park Authorities, removing the need for the Secretary of State to confirm parish appointments and freeing local authorities from maintaining political balance when making appointments (DEFRA, 2013). The example of the consultation in England and Wales illustrates that even in hierarchical structures there is an awareness of the importance of participation in governance in conservation areas. This is, however, an example from only one country. Differences between the formality and inclusion surrounding decision-making in National Parks are evident between countries. Getzner et al. (2014), for example, found less formality and more participation in the Norwegian National Park system than the Austrian National Park system.

Scotland’s National Parks were established on a highly localised and participatory basis (Govan et al., 1998; Illsley and Richardson, 2004). In this respect, they diverge from the traditional model of National Parks in the rest of the UK. The focus on sustainable development in Scottish National Parks places greater importance on local interests, which is typically accompanied by the adoption of bottom-up practices and participatory processes (Illsley and Richardson, 2004). In a report on community

participation for National Parks, published prior to the establishment of Scotland's two National Parks, Govan et al. (1998, p.5) stress the importance of participatory processes:

International experience in protected area management over the last decade highlights the dangers of excluding local people and shows that participation is fundamental to the successful management of protected areas with resident populations.

The Cairngorms National Park was developed with this emphasis on community involvement and consultation, with the park's governance structure including advisory and working groups (Illsley and Richardson, 2004). At the time of writing, no studies were found on the effectiveness of participation in the management of Scotland's National Parks. However, Illsley and Richardson (2004) report a lack of consensus over critical aspects in establishing Cairngorms National Park with disputes between competing discourse coalitions emerging, particularly between those at the national and local levels. The risk of tensions between the needs for environmental protection and sustainable development has also been highlighted (McCarthy et al., 2002).

2.6 Regional Parks

Regional Parks are similar to National Parks in concept, in that they are protected areas recognised by governments, with a hierarchical governance structure. However, they differ in that they are dedicated to preserving nature in areas of human use, as opposed to largely natural landscapes, and, often, to supporting regional economic development. In addition, Regional Park land is typically a mixture of publicly and privately owned (Brown et al., 2017). Regional Parks fit the criteria for IUCN Category V Protected Landscape/Seascape, where the defining characteristic is an interaction between people and nature that over time has created an area of distinct character with high ecological, biological, cultural and scenic value (IUCN, 2018). Park managers attempt to maintain or enhance this balanced interaction, securing the recreational, economic and cultural needs of communities while preserving the landscape and ecosystems. Choy and Prineas (2006) argue that Regional Parks are necessary to maintain the quality of life that residents and visitors expect of the region, to provide for the population's outdoor recreational needs, and to maintain connections between people and their landscape. Their four basic areas of work are conservation, sustainable recreation and tourism, sustainable development of rural areas, and environmental and sustainable development education (Europe's Nature Parks, Landscape Parks and Regional Parks, 2018).

Regional Parks allow for the coordination of strategies at a landscape scale, often across local administrative borders (Gerber and Knoepfel, 2008). The governance structure for Regional Parks varies between countries. The structure normally involves a network of regional actors, regional administrative organisations and local communities (Naturparke Deutschland and EUROPARC, 2017). Local authorities play a key role and are often part of the administrative structures. Regional Parks therefore link national, regional and local authorities. They are managed by Park Authorities, typically comprised of a board of elected members from local councils situated within the park boundaries, with Park Managers or an Executive Team responsible for the day to day management of the parks.

Scotland's existing Regional Parks, for example, were designated by regional councils, with support from the Countryside Commission for Scotland, and confirmed by the Secretary of State for Scotland. The enabling legislation for their creation and designation was the Countryside (Scotland) Act 1967,

Section 48A. Regional Parks in Scotland are now designated and managed by local authorities with the support of Scottish Natural Heritage, and managed in partnership with recreation and land management interests (Scottish Natural Heritage, 2017). To date there are three Scottish Regional Parks: Lomond Hills and Pentland Hills Regional Parks, both designated in 1986, and Clyde Muirshiel Regional Park, designated in 1990. Pentland Hills and Clyde Muirshiel are jointly managed by a Park Authority comprised of members from all of the local authorities involved. One of these local authorities has the servicing or managing authority over the park for resource management and administrative purposes. Lomond Hills is only located in one local authority area but is managed as part of a wider landscape partnership that covers a neighbouring local authority (Brown et al., 2017). Funding for the parks comes from local authorities, NGOs and charities, project income and income generated from recreational sources (Brown et al., 2017).

In some countries, Regional Parks also have one or more stakeholder steering groups to bring together stakeholders in collaboration, provide advice and assist with the delivery of park objectives. The involvement of citizens in designation, work and decision-making processes for Regional Parks is particularly important in Norway, which has set a new focus on community participation. Their mission is: “to increase cooperation in respect of the caretaking and further enhancement of natural and cultural values in regions of defined landscape and identity” (Bjørnstad, 2017).

2.7 Private Conservation Areas/Private Protected Areas

Private conservation areas (PCAs) and privately protected areas (PPAs) are regions of land under private ownership and governance that are managed for conservation. They are defined as privately protected areas when they meet the IUCN definition of a protected area, and private conservation areas when they do not (IUCN, 2014). Conserved areas generally have less legal protection, less funding support and greater risk of being appropriated for alternative uses than protected areas (Borrini-Feyerabend and Hill, 2015). The World Database on Protected Areas (WDPA) has details of over 14,000 PPAs in its global database of over 230,000 protected areas. Private conservation areas, however, are not listed on the WDPA, nor are PPAs in countries where PPAs are not officially recognised or reported on (Bingham et al., 2017). There is therefore a large information gap for privately owned and governed areas.

Owners of private areas may be individuals or groups of individuals, non-governmental organisations (NGOs), corporations, for-profit owners, research entities or religious entities (IUCN, 2014). Areas owned by NGOs or research entities are likely to have stronger outside links, clearer objectives and more formal reporting than areas owned by individuals or smaller groups (IUCN, 2014). Many privately protected areas are established through philanthropic motives or as part of development projects, although some may be related to profit, tax benefits, keeping property in the family, or to gain credit for participating in conservation (Mitchell, 2007; IUCN, 2014).

Langholz and Krug (2004) discuss the emergence of privately protected areas as a conservation tool, suggesting there are great variations in private area size, scope and governance, with no single model followed. They identify key strengths and weaknesses of privately protected areas. Key strengths include the protection of biodiversity, as private reserves often protect rare or threatened species or lands under heavy development pressure, and the economic benefits of savings to the public as they

are privately funded and also potentially profitable. IUCN (2014) adds to this by highlighting the benefits of involving private land and landowners in connecting and expanding conservation. They note that privately protected areas tend to be quick to apply as they do not involve the lengthy negotiation period associated with state acquisition of land, they are possible in places where government protection would be difficult to apply, and they open up innovative funding mechanisms that governments could not utilise.

On the negative side, key weaknesses are that privately protected areas are mostly informally protected and are lacking in legislative authorization; they are mostly small in area; there is a potential for conflict of interest between conservation and economics (the authors cite cases of degrading resources for tourism rather than protecting them, and cases of keeping captive animals on reserves to draw in tourists); they contribute to the concentration of land ownership by the wealthy; and they may also be under foreign ownership (Langholz and Krug, 2004). In addition, there may be lack of clarity regarding their definition and management, varying quality and quantity of biodiversity, lack of permanence about the area's future, and poor reporting (IUCN, 2014). Often, PPA/PCA owners have no or limited government support, and little opportunity to engage with wider conservation policy (IUCN, 2014). Those that are dependent on economic activities, such as ecotourism, will also be subject to shifting market trends (Holmes, 2013).

PPAs are gaining international recognition and support, but at the national level their treatment remains highly variable (Bingham et al., 2017). The World Parks Congress (WPC) recognised that privately protected areas were an opportunity to significantly expand the number of protected areas globally, but suggested they best act as supplementary, as opposed to replacements for, publicly protected areas (WPC, 2003).

2.8 Public-Private Partnerships

Public-private partnerships (PPPs) are becoming increasingly common (Bulkeley and Mol, 2003). These partnerships are not merely financial arrangements, but pool together resources and skills, as well as sharing risk in the public service of conservation (Hodge and Greve, 2007; Macdonald and Cheong, 2014). They also represent a great diversity of interests that are affected by conservation and development matters in the area (Lemos and Agrawal, 2006).

The Southern Uplands Partnership (SUP) in Southwest Scotland is an example of a PPP. SUP brings together bodies who do not traditionally engage with each other in order to develop and deliver initiatives that support social, economic and environmental objectives across Southern Scotland. They have worked on a number of social and environmental projects in the area (Southern Uplands Partnership, 2018), such as successful community regeneration in the Ettrick and Yarrow Valleys (Figure 9, below).

Macdonald and Cheong (2014), however, caution that PPPs may not result in the most efficient or high quality outcomes. Hodge and Greve (2007) point to a lack of flexibility for future decision-making in the public interest due to the "lock-in effect (Hodge and Greve, 2007, p.552) of the public-private partnership long-term contracts. The possibility of the private sector focusing on short-term returns over long-term sustainability is another concern with PPPs (Koppenjan and Enserink, 2009).

PPPs follow a wide variety of governance structures (Hodge and Greve, 2007), although they generally follow one of two general models – institutionalized or contractual PPPs (Macdonald and Cheong, 2014). Institutionalized PPPs involve the creation of a third party, known as a special purpose vehicle, as the governing body of the partnership that shelters the partners from risk. Contractual PPPs are based on contracts between the public and private entities regarding financing, responsibilities and duties over an extended period of time. There can be considerable variation in the balance of control between public and private parties, and in the aspects over which they have influence (Macdonald and Cheong, 2014).



Figure 9: The Ettrick and Yarrow Valleys area, where the Southern Uplands Partnership led a community regeneration project.

Public-Private Partnerships can also include Landscape Partnerships as project delivery mechanisms that span specified time periods. Landscape Partnerships are comprised of a number of local, regional and national organisations and businesses, alongside the local community. Boundaries for Landscape Partnerships are typically defined by topographic features, such as rivers, although sometimes administrative borders are used. They generate high levels of participation and coordination by partners, all of whom are invested in the outcome (Williams and Ellefson, 1996) but public benefit is expected to exceed private gain (Heritage Lottery Fund, 2013).

A Landscape Partnership may be organised as a number of separate entities linked as partners by a written agreement and overseen by a lead partner, or it may be an existing partnership body, as with the Purbeck Heritage Committee which established the Purbeck Keystone Landscape Partnership in England. It could also be a similar organisation that has been established specifically for the Landscape Partnership scheme, for example the Dalriada Project Company, established as a not-for-profit

company to develop, manage and deliver the Landscape Partnership scheme for Dalriada in Scotland (Clarke et al., 2011; Heritage Lottery Fund, 2013). Governance of landscape partnerships is collaborative and cooperative, and can have anything from a loose informal structure to a facilitated formalised structure with rules (Williams and Ellefson, 1996). Large partnerships typically have a steering group, made up of partnership members, to coordinate decision-making (Clarke et al., 2011). According to Hahn et al. (2008), the focus of such governance networks is primarily upon forming visions and policies, creating meaning for them, resolving conflict, and developing links with agencies and other organisations for support. The cooperative approach brings local communities, private landlords, businesses and other organisations together to build on common interests on an equal basis (Clarke et al., 2011).

2.9 Commons

The term commons refers to natural and cultural resources owned or utilised by multiple individuals on a group basis (Suga, 2013). The commons have their historical roots in England and Wales, where they still exist today. Figure 10 shows grazing land in Cumbria, a county which contains a third of the current common land in England. There are many forms of commons worldwide, including iriai in Japan, alp in Switzerland and sasi in East Indies (Shimada and Murota, 2013). Commons are also prevalent in Scotland where crofting occurs, including parts of Wester Ross Biosphere Reserve, with more than 1000 common areas covering over 500,000 ha (Crofting Commission, 2018). Crofts comprise of small agricultural units with common hill grazing and are an important part of Scotland's heritage. The common grazings are managed by Grazing Committees, who are elected by the crofters that use the land, and they are recorded with the Crofting Commission (Crofting Commission, 2018).

Inoue (2013) provides a comprehensive definition of commons as “both an institution for the cooperative utilization and management of tangible and intangible goods as well as the tangible and intangible goods that are the subject of that institution” (Inoue, 2013, p.20). Murita and Takeshita (2013) distinguish two types of commons. Closed commons are local commons that have a limited membership, and open commons are open to all members of the general public. The common grazings in Scotland are an example of closed commons as they can only be used by those who hold a right to graze on that land (Crofting Commission, 2018).

Hardin (1968), in his influential article *The Tragedy of the Commons*, argued that the commons was an unsustainable form of governance that would inevitably end in the destruction of the common resource as each user privileged independent gain over the needs of the group as a whole. Subsequent authors have argued that this is not always the case (Ostrom et al., 1999; Dietz et al., 2002; Bodin et al., 2011). Dietz et al. (2002) explain that people do in some cases act beyond self-interest: “Communication, trust, the anticipation of future interactions, and the ability to build agreements and rules sometimes control behaviour well enough to prevent tragedy. So, the drama of the commons does not always play out as tragedy” (Dietz et al., 2002). It has also been argued that Hardin's argument was based on open access conditions, as opposed to closed commons which typically has rules to limit membership and use (Ciriacy-Wantrup and Bishop, 1975).



Figure 10: Cumbria, England, where commons remains an important form of land governance.

Evolved norms are sometimes not enough to prevent overexploitation, requiring the creation and enforcement rules limiting the common-pool resource's use (Ostrom et al., 1999; Dietz et al., 2003; Inoue, 2013). In Norway, the excessive utilization of resources has been prevented by closing the commons through exclusive membership (Shimada and Murota, 2013). This follows the first of Ostrom's (1990) eight design principles for long-enduring commons – defining clear group boundaries.

Ostrom (2012) supports communities freely choosing their own mechanisms, but preferably as part of a polycentric structure that is nested within state or other outside higher-level structures to operate more efficiently and for any necessary enforcement. Without a higher structure it is difficult to hold individuals to account (Giest and Howlett, 2014). Informal strategies are normally used for enforcement in commons situations, relying predominantly on voluntary commitment to the rules and subtle social sanctions when they are broken (Dietz et al., 2003). The involvement of the state in a nested system is to act as a neutral figure to impose solutions where conflict cannot be negotiated, provide neutral information, facilitate an arena for negotiation, and monitor use and enforce sanctions (Mansbridge, 2014). The rules are more likely to be adhered to when decided by local people and adapted to local conditions (Ostrom, 2012), however if enforcement of sanctions remains in local control retribution and feuds can ensue (Ostrom, 1990).

2.10 Conclusion on Governance Structures

Gunningham refers to the “new governance” (p.145), that involves “dialogue and deliberation, devolved decision-making, flexibility rather than uniformity, inclusiveness, transparency,

institutionalized consensus-building practices, and a shift from hierarchy to heterarchy” (Gunningham, 2009, p.146). New styles of governance blur the boundaries between the public and private sectors, and national and international levels (Jordan et al., 2003). Increasing trends towards such participatory governance, involving multiple stakeholders and interaction at the local level, are expected in the coming years (Oviedo and Brown, 1999). In their global surveys on community participation biosphere reserve management, Stoll-Kleemann et al. (2010) concluded that inclusive conservation, including community-based natural resource management (CBNRM), is the current dominant narrative in Biosphere Reserves. This bottom-up governance is argued to be more responsive, legitimate and effective than top-down governance because decisions take into account local circumstances, knowledge and values, as well as creating a greater sense of stakeholder ownership (Gunningham, 2009).

Nevertheless, no single governance model is the best fit for all areas (Graham et al., 2003; Ostrom, 2012; IUCN, 2013). It is important to consider the nature and influence of broader government regimes, economic structures, and social, cultural and psychological issues (Paavola et al., 2009). Such contextual factors will have a role in determining how appropriate and successful a regime may be. Section 3 will progress with a discussion of the major current issues and challenges facing governance in conservation areas.

Section 2 Key Points

- UNESCO World Heritage Sites are governed by the World Heritage Committee, whose 21 members are elected by the General Assembly of States Parties, and are managed by the national government of their country. World Heritage Site governance has a hierarchical structure.
- UNESCO Biosphere Reserves are governed by a variety of different mechanisms, but all are shared governance with participatory processes. Adherence to the concept of Biosphere Reserves is ensured by periodic reviews under the exit strategy.
- UNESCO Global Geoparks are governed locally by participatory processes, similar to Biosphere Reserves. Some Geoparks are nested within National Parks or other protected areas.
- Natura 2000 sites have a network governance model which links authorities and stakeholders. National governments are responsible for overseeing designation of the sites and for their management, although in practice management is often delegated to regional or local authorities.
- National Parks are predominantly funded by central government, who maintain overall control. Their governance structures typically adhere to national frameworks and are hierarchical.
- Regional parks are controlled by local government, typically with a board of elected members from local councils. Like National Parks, their governance structures are hierarchical.
- SHAs that are under private ownership and governance exist in a variety of forms and under different models of governance. There is a large information gap on the structures and processes of these, largely due to their independent operation.
- Public-private partnerships pool finances, resources and skills, as well as sharing risk. They have a wide range of governance structures but generally are either of an institutional or contractual model.
- Commons are self-governed by users, ideally under the supervision of a higher structure. They can be either open to the general public, or closed with a limited membership.
- No single governance model is the best for all circumstances. The chosen structure and processes should be those that are most appropriate for the SHA and the contextual factors affecting it.

3. Key Issues and Challenges for Governance in Sustainable Heritage Areas

3.1 Sustainability/Sustainable Development

Sustainability and sustainable development are major issues for all governance, but particularly for governance of SHAs. Sustainability relates to a state of being sustainable, where all processes and conditions maintain a stable and ongoing state that does not result in the degradation of current resources or conditions. Relating to sustainability is sustainable development, which has been described as one of the major governance challenges of the 21st century (Meadowcroft et al., 2005). Van Zeijl-Rozema et al. (2008) argue that sustainable development can be mapped on the continuum between ecological sustainability and quality of life. It involves the protection of amenities and, equally, it is about advancement or creation (Kemp et al., 2005). This advancement is typically viewed along the triple-bottom-line trajectory of economic advancement, social equity and environmental security (Lawrence, 2005).

Sustainable development is an explicit or implicit goal for many SHAs. In 2015, the 20th General Assembly of the States Parties to the World Heritage Convention adopted the Policy for the Integration of a Sustainable Development Perspective into the Processes of the World Heritage Convention (UNESCO, 2015). Biosphere Reserves are established on the concept of sustainable development. The mission statement (2015-2025) for the UNESCO Man and the Biosphere Programme includes to “develop and strengthen models for sustainable development in the WNBR” and to “help Member States and stakeholders to urgently meet the Sustainable Development Goals through experiences with the WNBR” (UNESCO, 2017). As with Biosphere Reserves, sustainable development is a key aim of National Parks in Scotland (National Parks (Scotland) Act, 2000). Their multi-objective approach that includes conservation and sustainable socio-economic development is a clear departure from the dominant principle of conservation on which National Parks were founded in England and Wales (McCarthy et al., 2003; Barker and Stockdale, 2008). There are very few cases in Europe of socio-economic development being a specific objective of National Parks, let alone given such importance (McCarthy et al., 2003). Sustainable development is also a core objective of Regional Parks. Globally, Regional Parks serve as model regions for sustainable development, as well as contributing to the United Nations Sustainable Development Goals (Naturparke Deutschland and EUROPARC, 2017).

The increase in support for sustainable development in conservation areas led IUCN to create a new Category V designation for protected areas where people and nature interact. The Protected Landscape/Seascape category encompasses the multiple values of social, economic and conservation considerations, encouraging conservation and sustainability (IUCN, 2018). The promotion of the Category V designation was accompanied by the release of IUCN sustainable development guidelines that promote the integration of sustainable development principles within protected areas (Barker and Stockdale, 2008).

There are also two aspects of sustainability relating to governance – sustainability in governance and governance for sustainability. Both of these are required in successful governance of SHAs. Sustainability in governance requires transition away from unsustainable governance structures or processes and along more sustainable pathways (Smith and Stirling, 2008). These sustainable pathways may require substantial changes to existing governance processes and practices

(Meadowcroft et al., 2005). Governance for sustainability requires sustainability-centred decision making in the area being governed (Kemp et al., 2005). This is not something that can be achieved quickly or easily, and may involve sacrificing short-term goals for long-term goals (Kemp et al., 2005). Sustainability also concerns use of resources, as resource-intensive practices are ultimately unsustainable (Kemp et al., 2005). A key challenge in governance for sustainability of an area and the resources within it is ensuring sustainable and fair use of these resources.

Governance for sustainable development is an active process, which according to Meadowcroft et al. (2005, p.7), involves the following key requirements:

- Developing appropriate political frameworks for iterative rounds of ‘future-visioning’, goal identification, policy design and implementation, performance monitoring and policy adjustment.
- Adopting a long-term focus, engaging with changes that will take several generations to see through – for, example, the transition to the carbon-neutral energy system that ultimately will be required to address climate change.
- Developing a better understanding of ecological processes and of social/ecological interactions, as well as of the possibilities of (but also the limits to) their conscious adjustment.
- Integrating different kinds of knowledge into decision processes, particularly understandings drawn from natural and social sciences, as well as establishing an appropriate balance between lay and expert knowledge.
- Structuring engagement as a learning process, so that governments and other social actors can acquire experience, experiment with options, draw lessons from failure, and learn how more sustainable social practices can be generalised.
- Strengthening the resilience of social institutions – their capacity to adapt successfully in response to pressures and unexpected shocks

There is no single ideal form of governance for achieving these elements, and the individual context of the area exerts an influence on the form and procedures that are taken (Kemp et al., 2005). Once sustainable development plans have been agreed, however, van Zeijl-Rozema et al. (2008) suggest that the mode of governance for achieving sustainable development ought to be made explicit to avoid miscommunication between stakeholders and mismatches of approach hampering progress. While headline goals for sustainability are likely to reach broad consensus, some specific goals or actions may be contested and result in conflict (Smith and Stirling, 2008).

3.2 Acquisition of Funding and Resources

The acquisition of funding and resources is a perennial challenge in governance of SHAs, and an issue of the highest level of importance to almost every conservation area manager (Adams, 2012). Sources of funding vary among SHAs. Previous studies have shown that there is a general indication that a smaller proportion of conservation area funding is provided by government agencies and private donors than in the past, and that more is being provided by non-governmental organisations (NGOs) and user fees (Dearden et al., 2005; Brown et al., 2017). The financial security offered by NGOs is dependent on the size and management of the NGOs involved, as well as the funds they are able to generate (Font et al., 2004). The financial input from ecotourism, such as entrance fees or taxes, can help pay for the creation and maintenance of the services required by tourists or for measures to

protect from or repair damage caused by them (de Oliveira, 2005). Some areas raise significant funds by this means (Font et al., 2004). In addition to these direct fees, tourism generates revenue for local economic and social development, through business income and job creation, as is shown in Font et al.'s economic model of tourism in protected areas (Figure 11).

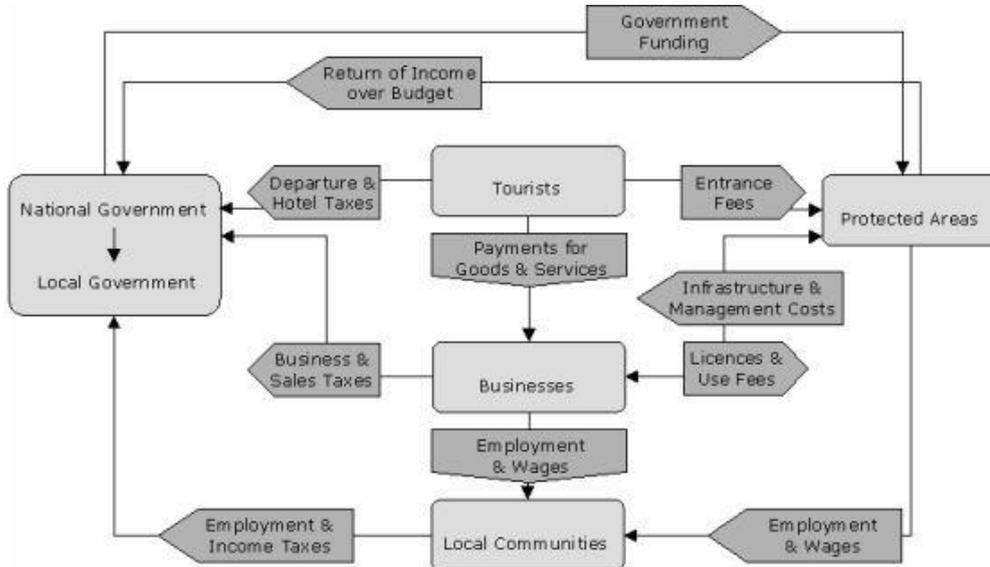


Figure 11: An economic model of tourism in protected areas (Font et al., 2004).

The SHAPE Governance Survey asked respondents to identify the sources of funding or support for their area. The results indicated that many, though not all, Biosphere Reserves received at least some level of financial support from local and national government, and government agencies (Figure 12).

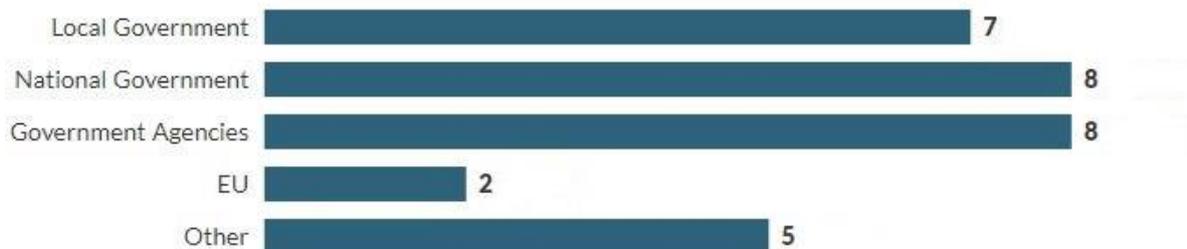


Figure 12: SHAPE Governance Survey responses: What are the sources of funding/support for your area?

The details given for other sources of funding included universities, either directly or through research project funds in several cases; Manicouagan-Uapishka Biosphere Reserve which runs social enterprises to raise funds; Dublin Bay Biosphere Reserve, which receives an annual donation from Dublin Port Company; and other local trust funds, lottery funds and cross-border development funds. Tourism was not specified, either directly or indirectly, as a source of funding or support for any of the reserves.

3.3 Branding and Communications

Branding is now a well-established part of the administrative role of conservation areas (Hankinson, 2009). It is based on portraying a distinctive and appealing image to target audiences (Campelo et al.,

2014). Destination branding for an area is intended to attract investment, businesses and tourists (Kotler and Gertner, 2002).

Papadoupoulos and Heslop (2002) argue that destination branding differs from traditional corporate branding. Traditional branding is a process of creating associations around an artificial brand essence, whereas places already have a brand essence in their sense of place - it just needs to be defined and packaged (Papadoupoulos and Heslop, 2002). Destination branding, therefore, is both an inward and outward process (Urde, 1999). The destination's sense of place comes from a sense of identity within and the promotion of the brand reaches outward to identify with audiences.

As a starting point, an area's brand should primarily be consistent with the protected or conservation area status associated with it (Spenceley et al., 2015). Marketing techniques, based on consultation and research, are thereafter applied to define the individual brand of an area (Hankinson, 2009; Spenceley et al., 2015).

The core task in creating a brand is to understand the identity of a place and what its core attributes are (Campelo et al., 2014). To aide this, Spenceley et al. (2015) suggest creating a brand pyramid, of the style shown in Figure 13, which they completed for Ningaloo-Shark Bay in Australia. This is then used for developing the brand.

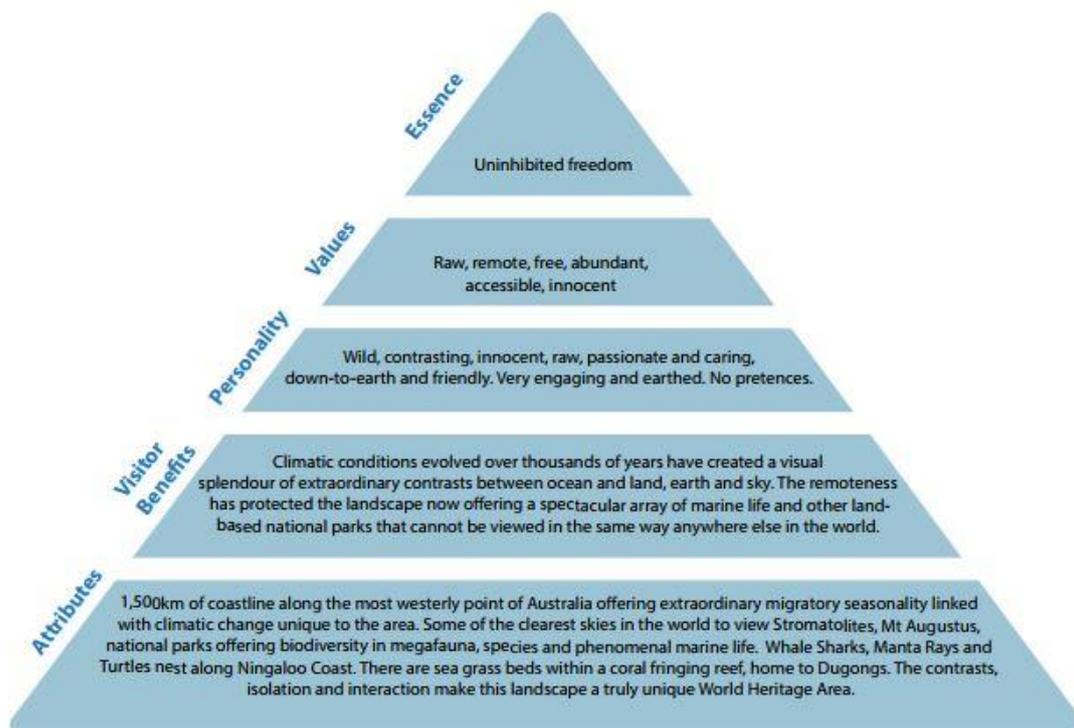


Figure 13: Brand pyramid for Ningaloo-Shark Bay in Australia (Spenceley et al., 2015).

The bottom two layers of the brand pyramid are typically straightforward to describe as they refer mostly to tangible aspects of the destination. The top three layers repeatedly distil the sense of place associated with the area to arrive at the brand essence, described as “the heart and soul of the brand” (Spenceley et al., 2015, p.734). It is also important to consider how these attributes determine the nature of the tourism experience that is offered (Daniels, 2007).

Campelo et al. (2014) argue that branding presents a challenge of representation and inclusivity as it is difficult to document the local understanding of sense of place which comprises the inward perspective. They propose a model that establishes an understanding of sense of place and positions local residents at the centre of the branding strategy for a destination. This model is depicted in Figure 14, below.

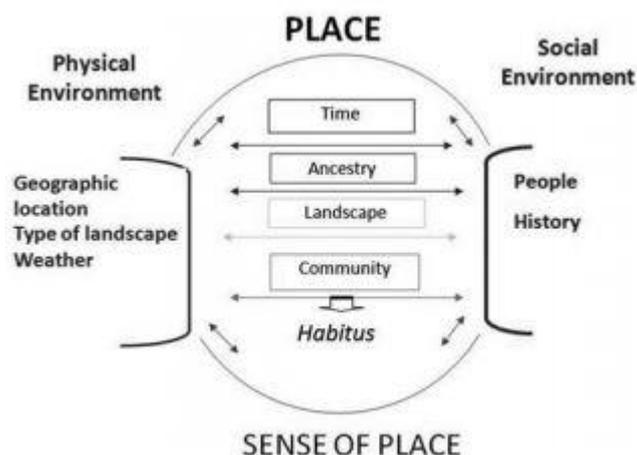


Figure 14: The Campelo et al. (2014) model for branding a destination from sense of place.

The construction of sense of place is a combination of the physical and social environments linked through the constructs of time, ancestry, landscape and community that represent a set of communal meanings that are in perpetual states of reinforcement and flux from reflections of the past and responses to the present. Campelo et al. (2014) suggest that their model is used as a guide for areas to base an investigation of each construct and how they contribute to their sense of place collectively and individually. The model is intended to help identify which elements could be considered in developing an area brand and in understanding how and why these elements are culturally significant. The majority of respondents to the SHAPE Governance Survey used multiple means of establishing the local or regional identity of their area. The number of respondents indicating the use of each of the means listed are represented in Figure 15, below.

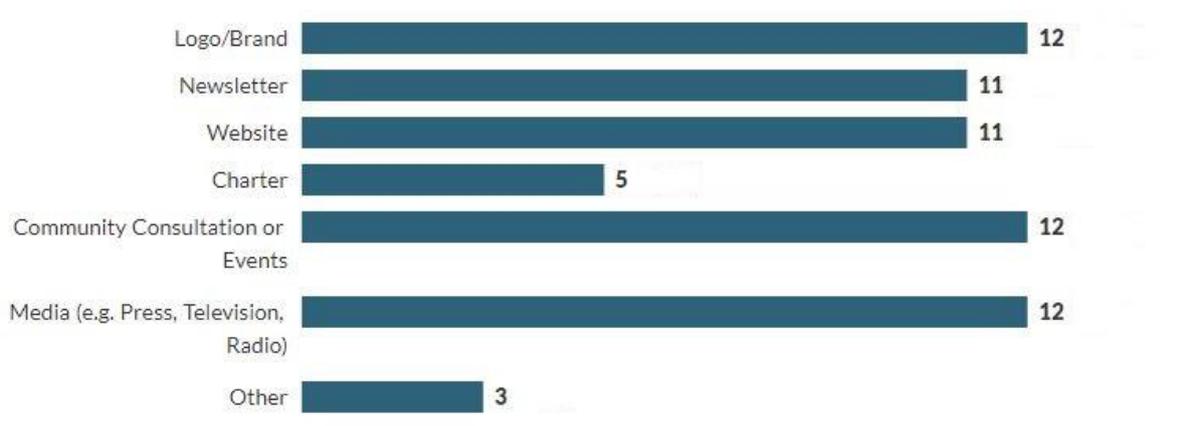


Figure 15: SHAPE Governance Survey responses: What means have you used to establish the local/regional identity of your area?

Those who selected the option to list ‘others’ specified educational platforms and the social media platforms Facebook and Twitter. The popular use of a variety of methods for establishing local/regional identity of SHAs suggests that constructing and promoting a sense of place is of importance to them.

Once the brand has been decided, it needs to be positioned, making the SHA stand out from similar areas pitching to similar target markets (Spenceley et al., 2015). This involves the selection of key attributes on which to base the promotion of the area. Hall and McArthur (1998) provide useful examples of how to use positioning attributes in brand positioning of a protected area (Table 2).

Positioning Alternative	Example of a Protected Area
Uniqueness attribute	A feature that is the biggest, smallest, highest, shortest, oldest, fastest, most prolific, most dangerous, most venomous or an excellent representative of its class, and so on
Scarcity	Rare, vulnerable, endangered Under attack, disappearing
Product class	Use local, regional or national significance listing Use World Heritage inscription
User need or benefit	Clean air or water, lack of crowds, sense of freedom, connection to family heritage
Lifestyle association	Adventurer, confident, risk-taker
Famous contemporary association with the product	Location of a well-known film shoot or event Location where a well-known personality lived or did something significant
Value for money	Compare interpretative experience and price to that of a movie in the cinema or entry to an amusement park
Positive feedback	Use high level of positive feedback to suggest if it worked so well for previous visitors it should for future ones

Table 2: Examples of market positioning for a protected area (Hall and McArthur, 1998).

Brand positioning can be established on one or a combination of several such attributes. Brand management then promotes the area’s brand. Tools used in brand management include visual images, symbols, appealing and memorable slogans, and association with specific events or deeds (Kotler and Gertner, 2002). Images should show the target market participating in the area’s signature experience and reflecting the essence of the brand - all presented in a competitive position to similar areas and brands (Spenceley et al., 2015).

Teruel et al. (2015) divide the interpretation of heritage into intellectual connections and emotional connections. Intellectual connections highlight the value of heritage areas, increases audiences’ interest and promotes a positive image. Teruel et al. suggest that this can be achieved through images that provoke interpretation or through inviting audiences to contribute to polls, events or discussions. Emotional connections can be created through visual elements, such as images of children or appealing animals, or through the use of certain music or phrases that evoke an emotional response. Nostalgic references to past times or storytelling are other appropriate means of establishing an emotional connection.

Strategic image management (SIM) is an ongoing process of positioning a place’s image to its prospective audiences (Kotler and Gertner, 2002). Texts should accompany pictures to anchor them with the message being communicated, and the picture ought to be referenced in or clearly linked to the text (Teruel et al., 2015). Messages must be crafted with the same consideration as images. Excessive information reduces the efficiency of communication, particularly for social media (Teruel

et al., 2015), and messages should always be suited to the different modes of delivery, for example the printed press, television, newsletters and the various forms of social media.

The interpreted success of brand promotion was surveyed as part of the SHAPE Governance Survey. Respondents were asked how well known their SHA was by local citizens, local businesses and visitors. Responses were indicated on a scale of 1 to 5, where 1 is not known and 5 is well-known. The responses for each category are presented below in Figures 16, 17 and 18.



Figure 16: SHAPE Governance Survey responses: How well is your area known, on a scale of 1 (not known) to 5 (well known) by local citizens?



Figure 17: SHAPE Governance Survey responses: How well is your area known, on a scale of 1 (not known) to 5 (well known) by local businesses?

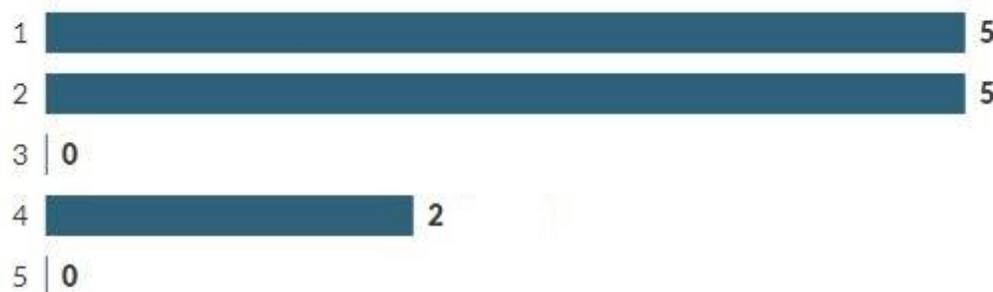


Figure 18: SHAPE Governance Survey responses: How well is your area known, on a scale of 1 (not known) to 5 (well known) by visitors?

These results indicate that the majority of those who responded to the survey generally regard their SHA as not very well known, particularly to visitors. This is despite the clear efforts at establishing the identity of these SHAs, as evident from Figure 15, suggesting a need for improved brand promotion to improve recognition.

Promoting the area’s brand and disseminating messages through the media requires prior media management planning. When establishing media management there are a number of aspects requiring consideration. The main considerations, as described by Cohen et al. (2014) are listed in Table 3.

Aspect of Media Management	Considerations
Objectives	What exactly are you trying to achieve in the process of engaging the media?
Messaging	What key messages do you want to promote?
Resources	What equipment will be necessary to implement effective media management such as office infrastructure, computers, sound recorders and cameras?
Staffing	How many people will be required and what skills will they need?
Spokespeople	Who will be chosen as the primary spokespeople and do they present well? What people will be best able to represent the SHA on specific subjects?
Media policy and protocol	To whom will you delegate the responsibility to talk to the media? What steps should team members take when contacted by a journalist? When should a media issue be escalated to higher authorities?

Table 3: Aspects of media management requiring consideration by SHAs (adapted from Cohen et al., 2015).

In the digital age, conventional mass media is no longer the dominant means of communicating to the public, but is now complemented by digital communication tools. Digital resources are a prominent channel for promotion (Cohen et al., 2015) and a storage area for information on destinations, especially for tourism (Teruel et al., 2015). Digital media, and in particular social media, should be an important part of a SHA’s strategic communication plan.

Communication with the media and outside audiences is not the sole aspect of communications in conservation areas. Local rights holders and stakeholders expect open communication with those in working in governance of their area, therefore communication of anything important to stakeholders or having an impact on them is necessary (Cohen et al., 2015). One recommended means of doing this is through social media, which facilitates direct, simple and efficient sharing of information with stakeholders as needed (Cohen et al., 2015). It also offers the benefit of two-way interaction with audiences (Cohen et al., 2015; Teruel et al., 2015). Other suggested means of communicating with local stakeholders include face to face, events, newsletters, print media, brochures, posters, radio, local television, email, public communication campaigns, meetings, and workshops or presentations (De Lacy et al., 2006).

With a structure and processes in place for media management, stakeholder communication, branding and brand promotion, an area should be able to communicate effectively via the media with its intended audiences. It is important to remember that communication is an ongoing process rather than a final product (De Lacy et al., 2006), requiring effort be maintained and strategy and output monitored as a continual process.

3.4 Effective Stakeholder Participation

Participation is associated with a shift from top-down to bottom-up governance (Backstrand, 2006) and the distinction between governance and government (van Doeveren, 2001). It has become increasingly common since the 1990s (Prager et al., 2015). Dearden et al.’s (2005) survey of 51

protected areas from 41 countries backed up the findings of their literature review that there were marked trends towards increased participation in the decade 1992-2002.

Given their predominantly bottom-up governance structure, it is unsurprising that the majority of Biosphere Reserves who responded to the SHAPE Governance Survey indicated they had some, often a high, level of participation in the governance of their SHA. Even those who do not follow the bottom-up model described stakeholder participation in their governance. Mount Arrowsmith Biosphere Reserve has direct representation on its governance Roundtable from a wide range of stakeholders, including local government, government agencies, NGOs, businesses and the local community. They claim this “sets a model for how people with different interests and mandates can work together in a respectful, collaborative, and effective way.”

Manicouagan-Uapishka Biosphere Reserve did not follow a similar representative model for their governance structure, choosing to appoint on the basis of entrepreneurial talent. They do, however, have an Orientation Table, specially created to address the representation factor. This table functions as a committee and has the mandate to provide orientation to the board about strategic planning and development. They also have an annual citizen forum to ensure their system incorporates wider community concerns and is well-adapted to local needs. Ideas for projects and views on challenges in sustainable development are gathered, after which the Biosphere Reserve tries to implement them in projects.

It is not only important to maximise the extent of participation, but also to consider the effectiveness of it. Previous studies have analysed the relationship between participation and effectiveness in SHAs. Stoll-Kleemann et al. (2010) synthesised the results from two parallel global surveys, involving managers from 276 Biosphere Reserves. The first survey was a large-scale study of factors influencing the success or failure of Biosphere Reserve management as part of the Governance of Biodiversity (GoBi) project. The second survey was undertaken by Stockholm Resilience Centre on the extent of participation by different stakeholder groups in Biosphere Reserve Management and the self-evaluated management effectiveness of the Biosphere Reserves. Their results suggest that Biosphere Reserve managers believe community participation has an important role, but there is less consensus on the effectiveness of it in furthering sustainable development objectives.

Schultz et al. (2010) also struggled to identify a direct link between participation and effectiveness in Biosphere Reserves. They analysed survey responses on participation and management performance from 146 Biosphere Reserves in 55 countries. Unlike Stoll-Kleemann et al. (2010), their analysis found that local participation was associated with effectiveness in sustainable development goals. Political and scientific participation were not. However, their results indicated a positive association between the participation of scientists and the effectiveness of conservation, and a negative association between the participation of volunteers and conservation effectiveness. Schultz et al. (2010) speculate that high involvement of volunteers is an indication of insufficient resources, making it difficult for a Biosphere Reserve to achieve its conservation aims. Therefore while the involvement of volunteers is associated with lower conservation effectiveness, it might not be the cause of it.

Young et al.'s (2013) study empirically tested the links between stakeholder involvement and perceived social and biodiversity outcomes in protected area management. They analysed both qualitative and quantitative data for three case study sites in Scotland. Their results showed that, across case studies, stakeholder involvement led to the social benefits of increased trust and improved

learning. The biodiversity benefits were more difficult to evaluate and the authors concluded they would require long-term investment in initiatives with adaptive monitoring and evaluation.

However, Beierle and Konisky (2001) found “a disjoint between participation and implementation” (Beierle and Konisky, 2001, p.525), though they suggest this lack of success may simply be due to the complexity of implementation and the influence of many other factors on it, or that not enough time has passed to judge success of the implementation. They also consider it a possibility that the stakeholder involvement itself failed in a critical respect. They found that found that, in the cases they reviewed, most stakeholder advisory committees failed to engage the wider public, centring around only a small number of active participants. Furthermore, most stakeholder advisory committees were not socio-economically representative and did not raise all important interests at discussions. Backstrand (2006), likewise, draws attention to a participation gap in environmental politics, where groups such as indigenous people, young people and women are often under-represented. This is not necessarily a deliberate oversight on the part of SHAs. There may be problems in getting public interest and involvement, or excessive pressure from the public to demonstrate immediate and visible results (Sommer, 2000). Gunningham (2009) raises concerns over the limits of voluntarism, burn-out of volunteers, and the disparity in power and resources between different interest groups undermining the aspirations of participatory approaches.

SHAPE Governance Survey respondents were asked to rate the success of their SHA’s participatory processes. As the results in Figure 19 show, most of those who answered this question were positive about the success of their participatory processes, with the majority rating them as 4 (successful).



Figure 19: SHAPE Governance Survey responses: Please rate the success of participatory processes for engaging stakeholders in the governance of your area, where one is not at all successful and 5 is highly successful.

Dublin Bay Biosphere Reserve rate their participatory processes as 5, highly successful, largely due to the success of their active and continuously well-attended Conservation Working Group. This was established in September 2015 to actively participate in developing a Biodiversity Conservation and Research Strategy for the Biosphere Reserve. The group is comprised of representatives of the member organisations of Dublin Bay Biosphere Reserve with individuals and NGOs. Many members continue to be involved in the strategy’s implementation. Dublin Bay Biosphere Reserve would like to extend this model of public participation to future policy development and expand its range of consultees and participants to ensure that governance is representative of the site users and those who have a long-term interest in the conservation of Dublin Bay.

West Estonian Archipelago Biosphere Reserve considered their participatory processes least successful of all survey respondents, rating them as 2. They attribute this to the local community not

recognising the Biosphere Reserve programme, and consider it a primary aim of improving their governance to involve more people from the local community, local businesses and NGOs.

Lockwood (2010) argues the effectiveness of participation can be judged by the level of uptake in participatory activities and the number of partnerships with stakeholders. The above descriptions from those with the highest self-scored participatory processes (Dublin Bay Biosphere Reserve) and those with the lowest self-scored participatory processes (West Estonian Archipelago Biosphere Reserve) suggest this is considered the case by SHA managers.

Lockwood et al. (2010) suggest a range of actions to aide inclusive participation, from targeting participatory processes at all, including underrepresented groups, and maintaining ongoing dialogue, to providing necessary resources (such as childcare during meetings), considering the timing of meetings and using appropriate delivery media. Pollock (2004) emphasises the need for strong facilitation and champions to garner citizen support and promote involvement. Also, stakeholder involvement is not effective in isolation, but should be part of a complex governance structure (Carlsson and Berkes, 2005; Young et al., 2013).

In many cases, stakeholder and community participation were key features of the establishment of Biosphere Reserves. For some SHAs, such as Redberry Lake Biosphere Reserve, the participatory process started years before designation: “In the decade previous to designation by UNESCO, our primary goal was to encourage the academic and research community to engage with, and respect, the local community when undertaking research activities.” In Redberry Lake the designation process was driven by local volunteers, as was also the case for Mount Arrowsmith Biosphere Reserve, placing a particularly strong emphasis on stakeholder participation.

Securing initial stakeholder participation was more of a challenge for Dublin Bay Biosphere Reserve, who cite “a healthy scepticism about what level of change the Biosphere Reserve designation would deliver” as the main reason behind this. They suggest, however, that this attitude is slowly turning to a more supportive one through continued public consultation, active involvement of key stakeholders, publication of clear policy statements, awareness-raising efforts and the delivery of successful projects.

3.5 Uncertainty Surrounding Effects of Increasing Involvement of the Private Sector

Section 2.8 introduced public-private partnerships, which are one of the ways in which the private sector has become increasingly involved in conservation areas. It has been argued that legislated public parks, the dominant means of conservation in the 20th century, are inadequate to meet the needs of conservation in the 21st century (Figgis et al., 2005). Governmental agencies in protected areas and heritage sites, struggling to acquire political and financial support, are turning to the non-governmental and private sectors to play greater roles (Oviedo and Brown, 1999; Dearden et al., 2005; Macdonald and Cheong, 2014).

Dearden et al.’s (2005) survey found a substantial increase in private sector involvement between 1992 and 2002, with more than half of respondents indicating that the private sector was more involved in PA management in 2002 than a decade previously, particularly in the development of tourism operations.

As was discussed previously, private involvement may not result in the most efficient or high quality outcomes (Macdonald and Cheong, 2014), due to a restriction of flexibility (Hodge and Greve, 2007)

or privileging of short-term returns over long-term sustainability (Koppenjan and Enserink, 2009). The combination of economic and environmental goals can lead to a conflict of interests which may affect the durability of the area as a place of conservation (Spaargaren and Mol, 1992).

On the other hand, private sector entrepreneurship can also facilitate the transition to a more sustainable local economy through innovation and wealth creation (Dean and McMullen, 2007). Bottema and Bush (2012) found the private sector was able to contribute positively to marine conservation through entrepreneurial marine protected areas, through increasing awareness and understanding of conservation issues, fostering new income initiatives for local communities and providing the necessary financial capacity to support conservation. This was, however, dependent on wider factors, such as economic and political influence. They concluded that, under certain conditions, the private sector can provide a more effective arrangement for conservation than top-down initiatives.

Private sector involvement in conservation areas is under-documented and under-researched (Bottema and Bush, 2012; Holmes, 2013). Further research in this area is needed to clarify the benefits and risks from the rise in influence of the private sector, and to establish the measures required to protect conservation interests and ensure areas remain sustainable and beneficial for local communities.

3.6 Social Enterprise

Social enterprise has become increasingly prominent in the non-profit sector (Dart, 2004; Child, 2016). Social enterprises are a hybrid form of organisation (Besley and Ghatak, 2017) that balance profit generation with social values and goals. Social Enterprise UK (2016) define social enterprises as businesses that meet the following criteria:

- Have a clear social and/or environmental mission set out in their governing documents
- Generate the majority of their income through trade
- Reinvest the majority of their profits
- Are autonomous of the state
- Are majority controlled in the interests of the social mission
- Are accountable and transparent

Social enterprise can reduce an SHA's dependency on grants and donations (Campbell, 2013), and create jobs and opportunities in local communities (Social Enterprise UK, 2016). They can also lead to increased community efforts towards conservation of the site or natural resource that is lined to the enterprise they are benefiting from (Salafsky et al., 2001; Rodriguez-Izquierdo et al., 2010).

Figure 20 (Campbell, 2013) depicts the social enterprise model, showing how the capital and revenue are fused with the aims and objectives of the organisation.

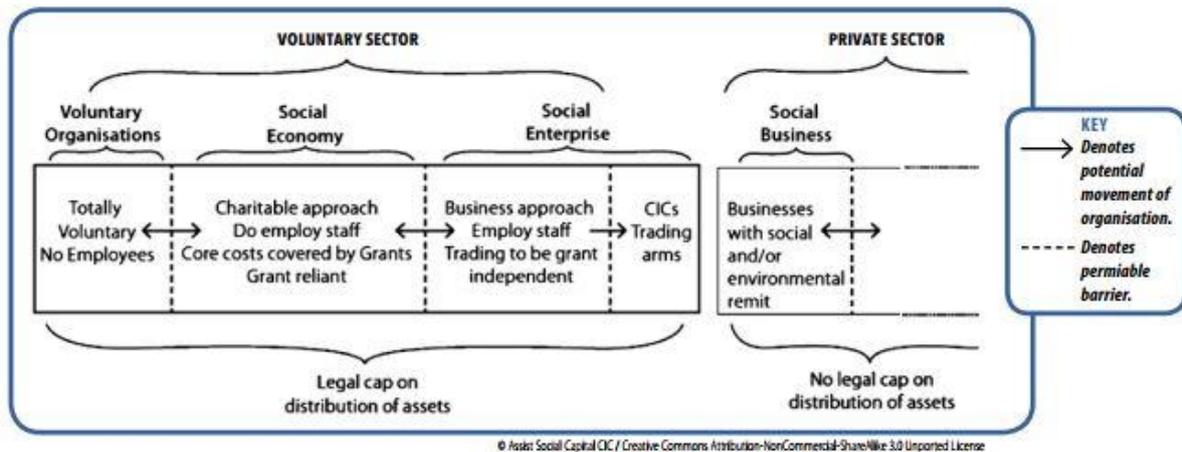


Figure 20: Social Enterprise Model (Campbell, 2013).

There have been successful cases of SHAs implementing a social enterprise approach, such as Manicouagan-Uapishka Biosphere Reserve (RMBMU) in Canada. Social enterprise in RMBMU is based on a voluntary cooperative approach, fostered in an entrepreneurial culture, that integrates all sectors in the region (Campbell, 2013). This has been achieved through appointing a board of talented individuals from diverse backgrounds in business, conservation and society that best serve the entrepreneurial needs of the area, rather than simply a board of representatives, and developing the capacity to take financial risks that would not typically be associated with an NGO (Campbell, 2013). In addition to being responsible for the Biosphere Reserve, RMBMU's board has created two business units: Uapishka Research Station, co-owned with the Innu Council of Pessamit, and the sustainability consultancy company MU Conseils, which is owned entirely by the Biosphere Reserve and run by its board. Each of these businesses has their own staff, but operates under the same Executive Director. The Biosphere Reserve acts as an umbrella organisation and all employees are asked to contribute to it. These social enterprises are generating the majority of funds for the Biosphere Reserve's operation, as RMBMU receives very little funding from local government and no provincial or national governmental funding or contributions from any government agencies.

With a reduction in available grant funding, more SHAs are exploring income-generating enterprises for financial reasons (Campbell, 2013). While this can prove a critical source of funding, there can be consequences from dependency on social enterprise profits. Reliance on income from an enterprise can result in conflict when profitable actions are contrary to social values (Besley and Ghatak, 2017), and can potentially lead to social cost, or "mission drift" (Defourny et al., 2014, p.9).

Social enterprise can also prove difficult to implement. In December 2012, North West Highlands Geopark became an independent social enterprise company. They were awarded three years of Scottish Government funding: two years to establish their business and a further year to implement it. Their goal was to raise at least 50% of the Geopark's funding from 2016 onwards through earned income, sponsorship and advertising or capital funding sources (North West Highlands Geopark, 2015). However, their business plan could not be delivered without further financial support in its early years. Despite recording year-on-year reductions in the proportion of their income derived from government funding (Hamlet, 2016), their request for a lower level of government funding for 2016-2019 was rejected, as the original package was granted on the basis that by 2016 the Geopark was expected to be self-sustaining (Connal, 2017). The short time-period in which they received state

support, however, was not long enough to achieve that goal. Their situation highlights the difficulty in establishing a social enterprise model without sufficient support.

3.7 Conflict Management

Governance can face severe conflict management issues. There can be an assumption that everyone involved in an area has shared interests and will agree on matters of local conservation and development which may not be true in practice (Jeanrenaud, 1999).

Issues often involve matters relating to the use and control of resources, including the constraint of business activities and effects on the ability of rural communities to earn livelihoods (Brenner and Job, 2011). Bavinck and Vivekanandan (2011) take the wellbeing approach to conflict, arguing that conflict derives from competing aspirations of wellbeing. Vatn (2005) expands on this by specifying four types of conflict: conflicts of interest, conflicts of rights, conflicts of facts and conflicts of value. Bavinck and Vivekanandan (2011) add to this by identifying four paths of conflict: conflict between people, processes and events inside and outside of the system; conflict between governing actors both inside and outside the area; problems between groups of people within the area; and conflict between those within the system being governed and governing actors. They suggest that as well as dealing with conflict, actions involved in governance may also contribute to causing conflict, especially in regions with legal pluralism where governing actors adhere to different legal systems.

When conflict escalates, it often results in non-cooperative behaviour such as subterfuge, lies, passive resistance, ridicule, feigned misunderstanding or violence (Bouwma et al., 2010). Table 4, below, shows the contrast between cooperative and non-cooperative behaviour in governance.

Adversarial Behaviour	Cooperative Behaviour
Withhold information	Share information
Make threats	Ask questions
Argue from positions	Explore interest and needs
Attack the others' knowledge or them	Explore knowledge and perspectives
Defend position	Seek solutions
Work on each other	Work on the challenge
Actively seek win/lose	Actively seek win/win

Table 4: Characteristics of adversarial and cooperative behaviour (Pound, 2015, p.247).

It is an important role of governance to manage such behaviour and resolve the underlying issues between parties. Section 4.5 considers approaches to this when discussing conflict management as a characteristic of good governance.

The characteristics or principles associated with theories of good governance are other factors that affect the successful implementation of governance. Unlike many contextual issues, control of these characteristics lies firmly with the actors of governance. As such, understanding of them is pivotal to the successful establishment and practice of governance. The following section focuses on these principles and characteristics, defining them and discussing their importance as well as how they might be realised and evaluated as components of successful governance.

Section 3 Key Points

- SHAs face a wide variety of challenges and issues relating to governance.
- Sustainability and sustainable development are key challenges for the 21st century and are either explicit or implicit goals for many SHAs. The transition away from unsustainable governance structures or processes and along more sustainable pathways may require substantial, and sometimes unpopular changes. Sustainable development is an active process, requiring future visioning and long-term planning.
- Securing funding and resources is a major issue for most SHAs. With a tendency for less funding to be provided by governments and private donors than in the past, many SHAs are seeking funding from activities such as ecotourism.
- Branding and communications are an important part of the administrative role of SHAs. Branding requires the creation and promotion of the specific identity of the area. Communications is important for disseminating messages with stakeholders and wider audiences, and should be guided by a media management plan.
- There has been a shift towards increased participation in SHA governance. Stakeholder involvement can lead to increased trust and improved learning but can be costly and time consuming. The success of participation in SHA governance is dependent on many factors, including the level of uptake, representativeness of participants and quality of facilitation.
- The increasing involvement of the private sector, while bringing political and financial support to SHAs, may restrict flexibility or encourage the privileging of short-term returns over long-term sustainability.
- Some SHAs acquire funding through social enterprise, reducing their dependency on grants and donations. However, reliance on profit from enterprise can result in a conflict of interests or ‘mission drift.’
- Conflict can arise between actors within or out-with a system, typically relating to matters concerning resources or wellbeing. It is an important role of governance to manage adversarial behaviour resulting from conflict and resolve the issues arising from it.

4. Principles for Good Governance

Principles and characteristics of good governance provide guidance for the establishment, best practice and evaluation of governance. These form Schmitt's (2009) normative dimension of governance. This section reviews fourteen of these, as identified in the relevant literature. In Section 5, these characteristics will be used to form process indicators as part of a framework for evaluation of governance in SHAs.

Principles and characteristics of good governance that have appeared in literature relevant to SHAs are listed in Table 5, below. They have been arranged by author in columns in chronological order, with the same or essentially synonymous characteristics grouped by row.

UNDP (1997)	van Doeveren (2001)	Graham et al. (2003)	Lockwood (2010)	Lockwood et al. (2010)	IUCN (2013)	Prager et al. (2015)
participation	participation		inclusiveness	inclusiveness		participation
rule of law	rule of law					
transparency	openness & transparency		transparency	transparency		transparency
responsiveness		performance	performance outcomes		performance	
consensus orientation						conflict management
equity		fairness	fairness	fairness	fairness & rights	
effectiveness & efficiency	efficiency & effectiveness			capability		
accountability	accountability	accountability	accountability	accountability	accountability	
strategic vision		direction			direction	
		legitimacy & voice	legitimacy	legitimacy	legitimacy & voice	legitimacy
			resilience	adaptability		
			connectivity			communication
				integration		vertical & horizontal integration
						learning mechanisms

Table 5: Characteristics and principles for good governance identified in the literature.

The seven publications from which these were taken are a mixture of policy documents, reports, institutional guidance and peer-reviewed academic papers relating to environmental, cultural and sustainable development governance. UNDP (1997) listed nine characteristics of good governance defined in societal terms in its policy document *Governance for Sustainable Human Development*. Van Doeveren (2001), in an academic paper, identified five common principles for good governance in the European Union, derived from lists of characteristics or principles of good governance from several aid donors and scholars. Graham et al. (2003) selected five principles relevant to the full range

of models of protected area governance in a report for the Institute on Governance in Canada. In an academic paper, Lockwood (2010) lists seven principles for good governance in terrestrial protected areas to form a platform for assessing governance quality in individual protected areas. In another paper, Lockwood et al. (2010) provide a similar set of principles, in greater detail, for the evaluation of sustainable natural resource use and management. IUCN (2013) specified criteria that constitute good governance as part of a publication intended to aid the enhancement of governance capabilities in protected areas. Finally, Prager et al. (2015) composed a list of good governance principles for the proposal of an evaluation framework for governance with the aim of fostering community involvement and sustainable development.

In the following sub-sections, each of the criteria listed above will be described with reference to the texts they were identified in and also additional literature on the individual characteristics.

4.1 Participation/Inclusiveness

Lockwood et al. (2010) describe inclusiveness as opportunity for all stakeholders to participate in decision-making and exert influence in it, with particular efforts to engage marginalised or disadvantaged stakeholders. This principle, therefore, has been considered synonymous with the principle of participation as defined by UNDP (1997), van Doeveren (2001) and Prager et al. (2015). Lockwood (2010) states that only the opportunity to participate is critical to this principle, and it is not dependent on stakeholders taking that opportunity. In addition, UNDP (1997) stress that participation need not be direct, but may be through representation by legitimate intermediate institutions.

Pollock (2004) describes collaborative approaches and shared decision making as “the optimum approach” (Pollock, 2004, p.32). The input from multiple sources and increased awareness and valuing of diversity that it brings increases the effectiveness of governance (Lockwood, 2010), one of several benefits of stakeholder participation. Beierle and Konisky (2001, p.515) categorise the range of the potential benefits in four areas:

- Increasing the quality of decisions
- Improving the relationships among important players in the decision making process
- Building capacity for managing environmental problems
- Leading to real improvements in environmental quality

Participation in the decision making process empowers people to have greater control over their lives, and it encourages them to care for their environment (Pollock, 2004). Community involvement increases social capital (Putnam, 1993), which is based on the degree of connectedness and standard of social relations within a community (Liu et al., 2014). The trust, shared norms and common rules resulting from this make governance based on collective action more likely to be sustainable (Healey, 1998), and the collective problem solving can generate more effective conservation (Backstrand, 2006) and foster creativity (European Commission, 1996). Fiorino (1990) specified three main types of argument for increased public participation: normative, to strengthen democracy; substantive, bringing in wider knowledge and opinions in to improve decision-making; and instrumental, for increased legitimacy. Young et al. (2013) view these three types of argument as highly relevant in biodiversity governance.

4.2 Rule of Law

Rule of law has no fixed definition. It has been argued that it is distinct from rule by law, in which the governing body uses law for enforcement, instead referring to the constraints of overarching laws that apply in the area (Fukuyama, 2013). UNDP (1997), however, implies that its definition encompasses rule by law. UNDP states that legal frameworks ought to be fair and impartially enforced. The rules themselves, along with the procedure for establishing, enforcing and changing them, should be clearly communicated to all concerned (UNDP, 1997). Kleinfeld (2006) claims rule of law in governance could either be law and order, property rights and contract enforcement, cultural norms, or constitutional constraints. As the majority of SHAs will not have the power to enforce their own laws, it is therefore more likely that the principle of rule of law will concern adherence to overarching laws and regulations pertaining to the area.

4.3 Transparency

Transparency is an ethical component of governance, based on the right of stakeholders to know about matters and decisions that affect them (Lockwood, 2010). The need for transparency is also based on the premise that knowledge and information are important and empowering (Gupta, 2008) and ought to be free-flowing (UNDP, 2001). Lockwood et al. (2010) consider transparency as comprising three elements: the visibility of the decision-making process, the clarity with which the reasoning behind decisions is communicated, and the ready availability of relevant information about governance and performance in an organisation (Lockwood et al., 2010, p.993). Transparency is realised through direct accessibility of processes, institutions and information for all concerned (UNDP, 2001) and is evidenced through performance reporting (Lockwood, 2010).

4.4 Performance/Responsiveness

Scharpf (1997) argues that democracy would be a hollow process were it not to produce effective outcomes. Performance is therefore an important component of good governance. Responsiveness is included under performance for the purposes of this report. UNDP (1997) was the only publication to include responsiveness individually in its list, which they described simply as institutions and processes that try to serve all stakeholders. The issue of service to stakeholders is linked to performance. Furthermore, Graham et al. (2003) and IUCN (2013) both include responsiveness in their list of elements of performance. In the IUCN (2013) publication it appears alongside seven other criteria: cost effectiveness, capacity, co-ordination, performance information to the public, monitoring and evaluation, adaptive management, and risk management. Their performance criteria therefore also integrate with the governance characteristics of transparency (performance information to the public), efficiency and effectiveness (cost effectiveness/capacity), integration (co-ordination), and adaptability (adaptive management).

IUCN (2013) describes performance activities as: achieving objectives as planned and monitored; promoting a learning culture; engaging in advocacy and outreach; being responsive; ensuring the human capacity for roles is met; using resources efficiently; and promoting sustainability and resilience. Descriptions of performance in both Graham et al. (2003) and IUCN (2013) demonstrate the range of elements contained within it, and emphasise the complexity in defining and evaluating it.

4.5 Conflict Management/Consensus Orientation

Good governance attempts to moderate between conflicting interests and differing views to reach consensus on the optimum outcome for the group as a whole (UNDP, 1997). Reed and Sidoli del Ceno (2015) argue that, in most contexts, bottom-up conflict management approaches are more likely to succeed than top-down approaches. Effective conflict management is based on mediation (Reed and Sidoli del Ceno, 2015), by employing communication, knowledge, participation and incentives or compensatory measures (Bouwma et al., 2010). It can be conducted by ballot or poll, through discussion and negotiation, or even through formalised procedures (Dietz et al., 2003). Bouwma et al. (2010, p.14) describe the process as involving:

- Solving disagreements and rebuilding trust
- Helping the institutional actors and stakeholders to explore a multitude of options for agreements and subsequently selecting an option
- Recognising and intervening in the underlying causes of the conflict, with a view to prevent them in the future

Good network linkages and good communication promote the trust and cohesion required for effective conflict management (Reed and Sidoli del Ceno, 2015). Furthermore, direct participation of citizens and other stakeholders can be a tool in resolving, or even preventing, conflict over governance decisions (Boedeltje and Cornips, 2004; Stoll-Kleemann and Welp, 2006; Bouwma et al., 2010; Reed and Sidoli del Ceno, 2015), although when participatory processes fail they can exacerbate conflict (Adams, 2015). As such, the selection of participants, process design and context in which the participatory process is conducted are all critical to the ability to manage conflict in bottom-up governance (Reed and Sidoli del Ceno, 2015).

4.6 Fairness/Equity

Fairness is based on respect for and attention to stakeholders' views, consistency and absence of personal bias in decision making, and consideration of the costs and benefits of decisions for all those involved (Lockwood et al., 2010). It involves consistent and impartial enforcement of laws and rules, without discrimination (Borrini-Feyerabend and Hill, 2015). Fairness includes absence of corruption or bias, respect for rights of local and indigenous people linked to the area, and the appropriate balancing of objectives and distribution of costs and benefits among those concerned (Graham et al., 2003).

IUCN (2013) further stress the necessity of respecting the rights of indigenous people by requesting strict adherence to the concept of Free, Prior and Informed Consent for rights-holders affected and ensuring that the lives and livelihoods of indigenous and local people are not adversely affected by development. Rights-holders are all those who have legal or customary rights with respect to land, water and natural resources (Borrini-Feyerabend and Hill, 2005). Borrini-Feyerabend and Hill (2005) separate rights-holders from stakeholders who have interests associated with these features (either direct or indirect) but do not possess legal or social entitlement regarding them. Fairness also includes appropriate consideration and consultation with these stakeholders, including fairness in opportunity for involvement in decision making and the respect and attention given to the views of stakeholders (Boedeltje and Cornips, 2004). This links fairness to the principle of participation. Like participation,

fairness increases the likelihood of acceptance of outcomes (Boedeltje and Cornips, 2004; Lockwood et al., 2010).

Similar to fairness, and grouped with it in this case, equity is based on equal treatment and equal opportunities for all to improve or maintain their well-being (UNDP, 1997). Equity in relation to conservation areas is comprised of three dimensions: distribution, procedure and recognition (Dawson et al., 2017). Distribution refers to the distribution of benefits and costs, procedure relates to how decisions are made and who is involved in making them, and recognition is concerned with the status given to the various social groups and the social and cultural values or identities they hold (Dawson et al., 2017). Adaptive management is seen as a pathway to improving equity in conservation areas (Armitage et al., 2009), alongside dialogue with stakeholders based on the establishment of mutual understanding and trust (Dawson et al., 2017).

4.7 Efficiency and Effectiveness/Capability

Lockwood et al. (2010) describe capability as “the systems, plans, resources, skills, leadership, knowledge, and experiences that enable organisations, and the individuals who direct, manage and work for them, to effectively deliver on their responsibilities” (Lockwood et al., 2010, p.996). They closely link it with effective systems, effective implementation and effective communication. As such, capability has been grouped with efficiency and effectiveness in this review.

Efficiency and effectiveness are core features of good governance (van Doeveren, 2001). UNDP (1997) define this principle as producing results that meet needs in a way that makes best use of resources. IUCN (2017) link effectiveness to performance by putting standard effectiveness assessment aside and posing the core question of whether areas are operating well enough that they are actually meeting their objectives. This however, is only a measure of sufficient effectiveness, and does not take into account the efficiency of use of resources in meeting those goals.

There is also a temporal dimension to efficiency and effectiveness where decisions are influenced by time lags and time inconsistency instead of being considered objectively. Long time-lags affect incentive structures by discounting and time inconsistency (Underdal, 2010). Discounting is where lower value is attributed to benefits that will occur in the future than those in the present or near-term. Discounting is especially relevant for elected governmental organisations. Lemos and Agrawal (2006) also refer to contempocentrism resulting from discounting as a tendency to disregard the welfare of future generations, perhaps believing in the ability of future technology to solve problems, in favour of decisions influenced by the short-term. Time inconsistency is where the plan agreed upon for the future is no longer the best option when the time for implementation comes around and parts are abandoned to the point where the original goal is compromised. Both of these factors ought to be taken into consideration in decision-making, and good governance should ensure the needs of the future are not compromised in pursuit of short-term objectives.

4.8 Accountability

Accountability concerns responsibility for decisions and actions, through how this responsibility is allocated, to whom it is allocated, and the demonstration of whether it has been met through reporting (Lockwood et al., 2010; Badia, 2018). Accountability may be weaker when power is held at sub-national and local levels (Rhodes, 1997) as ill-defined responsibilities (Stoker, 1998) or the spreading of risk among too many actors (Lach et al., 2005; Lockwood, 2010) typically result in a lack

of accountability. There is also concern that in devolved systems, responsibilities will be allocated to lower tiers who do not have the resources to meet them (Lawrence, 2005).

Accountability can be vertical (either upwards or downwards) or horizontal between those of equal power (Graham et al., 2003). Downwards and horizontal accountability are sometimes limited in devolved governance systems (Skelcher, 2005; Lockwood, 2010), leading Lockwood (2010) to highlight the need for governance structures to incorporate all directions of accountability as a condition for good governance. Some even argue accountability ought to extend to being accountable to broader concepts, such as the global community, future generations and nature itself (Graham et al., 2003).

Lockwood (2010) identifies two instrumental requirements for effective accountability: the precise identification of roles and responsibilities of governing bodies and their members, and the demonstrated acceptance of these responsibilities to the public. In this way, accountability subjects those in power not only to the rule of law but also to the rule of reason, and this opening to public reasoning is divergent from monologic rule (Schedler, 1999). Accountability and legitimacy are therefore also linked, with any reduction in accountability compromising legitimacy (Stoker, 1998).

Like transparency, accountability is evidenced through performance reporting, although accountability requires the additional criteria that the governing body or somebody within it is answerable to stakeholders for the outcomes (Lockwood, 2010). Enforcement of accountability is also required through the exposure and punishment of improper behaviour (Schedler, 1999): “As a rule, only public accountability can achieve its aim of curbing power, while confidential accountability, exercised behind closed doors, tends to be perceived as a farce, a caricature of accountability” (Schedler, 1999, p.21).

4.9 Direction/Strategic Vision

Direction involves the existence of management plans that set out clear objectives with measurable results that are achievable within specified timeframes (Graham et al., 2003). The objectives should be grounded in agreed values, with an appreciation of the ecological historical, social and cultural complexities of their context, and with due consideration to budgetary allocations and management practice (Borrini-Feyerabend and Hill, 2015). Graham et al. (2003) also specify the need for consistency with relevant international direction, including international conventions (such as the World Heritage Convention), intergovernmental programmes (for example, UNESCO Man and the Biosphere), regional laws or agreements (such as the EU’s Natura 2000), and best practice guidance documents from organisations (such as IUCN).

IUCN (2013) consider part of direction to involve developing and following a strategic vision. Strategic vision has a broad, long-term perspective and an understanding of the direction and actions to take to reach such goals (UNDP, 1997). Plans should incorporate citizen participation and be formally approved by the relevant authorities, as well as being reviewed and updated periodically (Graham et al., 2003). Periodic reviewing is not only an opportunity to monitor progress, but also allows for conscious adaptive management to ensure the direction taken is guided to be the optimal one (IUCN, 2013).

4.10 Legitimacy

Legitimacy in a community is a component of the ethical acceptability of governance systems that is founded on conditions of integrity (Lockwood, 2010). Legitimacy is who makes the rules and how the

authority to enact them is created (Bernstein, 2004; Lockwood, 2010). This requires shared acceptance of the governance structure and rules and norms among relevant members (Skelcher, 2005), although “defining who is a member of a relevant community, on what basis community identification must rest, and to what degree shared norms of appropriateness must be present to achieve legitimacy are all subjects of debate” (Bernstein, 2004, p.144).

Legitimacy is typically decided through democratic election (Graham et al., 2003; Boedeltje and Cornips, 2004; Lockwood, 2010; Lockwood et al., 2010) and is influenced by legislation or regulation (Boedeltje and Cornips, 2004) and trust (Graham et al., 2003). Legitimacy can also be gained through a long association with a particular place through the bond of place attachment or conferred by law or democratic mandate (Lockwood, 2010), or it may be earned through performance or outcomes (Newman et al., 2004). In addition, it can be increased if a variety of stakeholders are involved (Lockwood et al., 2010; Hahn, 2011).

Lockwood et al. (2010, p.991) argue there are three components to legitimacy:

- The validity of an organization’s authority to govern
- That power being devolved to the lowest level at which it can be effectively exercised
- The integrity with which this authority is exercised

Like Lockwood et al., Graham et al. (2003) support decentralization, along with collaborative management with stakeholders and citizen participation at all levels of decision-making as part of their principle of legitimacy and voice. Legitimacy is also increased by fairness and performance (Boedeltje and Cornips, 2004), and so it demonstrates links with several other characteristics of good governance. Such links between characteristics are not always mutually reinforcing, and this creates issues. Legitimacy, for example, can be described as a two-dimensional concept comprising of input and output legitimacy (Scharpf, 2001 cited in Backstrand, 2006; Boedeltje and Cornips, 2004). Input legitimacy requires that the principle of fairness is upheld, while output legitimacy requires competence in reaching a performance outcome. There is, however, an unresolved dilemma between these principles. Stakeholders with specific knowledge about the topic of a policy are particularly useful for increasing the chance that it will be successfully implemented. By the principle of performance, on the basis of competence, this suggests only these stakeholders should be involved or heard, but by the principle of fairness (and the principle of participation) this would be denying the equal chance for all to participate and their views to be paid equal attention. Folke et al. (2005) also refer to what they call a “trilemma” of tensions between the principles of effectiveness, participation and legitimacy (Folke et al., 2005, p.449). In balancing the conflicting principles, Boedeltje and Cornips (2004) suggest that fairness should not be the leading principle in managing interactive policymaking: “If the notion of fairness dominates the notion of competence, effective solutions might not be reached, and makes it impossible to reach legitimacy on the output side” (Boedeltje and Cornips, 2004, p.16). Backstrand (2006) agrees that high output legitimacy can compensate for low input legitimacy. Although this appears to have solved the dilemma in practice, it still has the potential to affect good governance and distort governance evaluation measures when one characteristic has a negative effect on another.

4.11 Resilience/Adaptability

Resilience is the extent to which a system can absorb disruption or change before it is forced to change its inherent form or lose its function (Gunderson and Holling, 2002; Walker et al., 2004). Walker et al. (2004, no pagination) list four crucial aspects:

- Latitude: The maximum amount a system can be changed before losing its ability to recover (before crossing a threshold which, if breached, makes recovery difficult or impossible).
- Resistance: The ease or difficulty of changing the system; how “resistant” it is to being changed.
- Precariousness: How close the current state of the system is to a limit or “threshold.”
- Panarchy: Because of cross-scale interactions, the resilience of a system at a particular focal scale will depend on the influences from states and dynamics at scales above and below. For example, external oppressive politics, invasions, market shifts, or global climate change can trigger local surprises and regime shifts.

As these show, not all aspects of resilience can be controlled within the governance system. It is therefore necessary to build adaptive capacity and resilience in the first three aspects. This ability to respond to change is critical to the sustainability of the governance system (Plummer et al., 2013). Lockwood (2010) describes an organisation as resilient and adaptable when it is “strategic, anticipatory, forward-looking and innovative in approach” (Lockwood, 2010, p.762). A resilient system’s response to change can either be to withstand the disturbance or adapt to it (Lockwood, 2010), and so adaptability is incorporated in this principle. Resilience requires a balance between flexibility and security, provided by law or durable statements (Lockwood, 2010). The other components of resilience in governance, as described by Lockwood (2010) are identical to Lockwood et al.’s (2010) principle of adaptability: incorporation of new knowledge and learning, anticipation and management of threats, opportunities and risks, and systematic reflection on performance. The self-reflection and learning that is required for adaptability then links to Prager et al.’s (2015) principle of learning mechanisms (described below in Section 4.14), and uses systematic processes to incorporate this learning to help change perspectives and adapt practices.

4.12 Communication/Connectivity

Good governance requires effective communication between actors in governance, at the same and different levels of governance, and with other authorities and organisations associated with or having a stake in the area (Lockwood, 2010). Schliep and Stoll-Kleemann (2010) argue that biodiversity governance in Biosphere Reserves is highly dependent on expert-led communication of the programme’s objectives to all stakeholders, and also link it to the principle of participation in governance. Greater accessibility of communications technology speeds up information exchange (Lemos and Agrawal, 2006), allowing for faster and wider dissemination and discussion of policy. Such connectivity in communications also builds shared recognition of links and interdependencies between actors and allows them to address shared problems coherently together (Lockwood, 2010).

4.13 Integration

Both Lockwood et al. (2010) and Prager et al. (2015) explicitly state that integration should be horizontal across the same level of governance and vertical between different governance levels, with consistency in strategic direction. Lockwood et al. (2010) also suggest it should involve the alignment of priorities, plans and activities across governance. The integration of policy initiatives results in efficient use of resources, particularly through avoiding policy duplication among different agents (Lockwood et al., 2010).

4.14 Learning Mechanisms

Prager et al.'s (2015) description of learning mechanisms is predominantly based on social learning and adaptive co-management. Co-management is a shared governance approach that is people-focused and based on user participation (Berkes, 2009), and adaptive management is a systematic iterative learning process (Panel on Adaptive Management for Resource Stewardship, 2004). In adaptive co-management, collective learning is used to build adaptive capacity in a way that largely encompasses the other principles of participation and resilience/adaptability, although has a greater emphasis on the learning process.

The fourteen principles described above demonstrate the characteristics of good governance to guide governance establishment and practice in SHAs. In Section 5.2 these form the basis of process indicator criteria for monitoring the effectiveness of governance.

Section 4 Key Points

- Principles for good governance form the normative dimension of governance (Schmitt, 2009) and provide guidance for the establishment, best practice and evaluation of governance processes.
- Principles and characteristics of good governance from seven papers were gathered, resulting in a combined list of fourteen principles for good governance.
- The principles identified were:
 - 1) participation/inclusiveness
 - 2) rule of law
 - 3) transparency
 - 4) performance/responsiveness
 - 5) conflict management/consensus orientation
 - 6) fairness/equity
 - 7) efficiency and effectiveness/capability
 - 8) accountability
 - 9) direction/strategic vision
 - 10) legitimacy
 - 11) resilience/adaptability
 - 12) communication/connectivity

- 13) integration
- 14) learning mechanisms

- These principles guide governance processes and form the basis of process indicators for monitoring and evaluation.

5. Establishing and Evaluating Governance

5.1 Establishing SHAs and Their Governance

The SHAPE Governance Survey asked respondents to provide details on the establishment of their area, including its origins, the process and the stakeholders involved. Stakeholders can be described as institutions or individuals having a direct, significant and specific stake in the area, which may be the result of geographic proximity, historical association, dependence for livelihood, institutional mandate, economic interest, or any other reason for the association (McNeely, 1999). Jeanrenaud (1999) recommends social mapping of stakeholders, their interests and types of social impact, as well as links in terms of the processes by which the actors operate, sources of power in the system and strategies to reach goals.

When asked about the main aims of establishing their area, the majority of respondents gave answers referring to both conservation and local sustainable development. This is to be expected, given the vision and mission statement of the MAB Programme. As SHAPE partner Galloway and Southern Ayrshire Biosphere Reserve describe:

The aim was to demonstrate that the stewardship of highly sensitive environments can be the driver for economic and social development, and that the communities and commercial interests dependent on it can support its continued protection and appropriate management. The ambition was to see the wider re-designated Galloway and Southern Ayrshire Biosphere Reserve develop and embed approaches to management and partnership that will have powerful lessons for agencies and communities far beyond its boundaries.

Learning and developing new approaches to SHA management were also key aims for SHAPE Associate Partner Manicouagan-Uapishka Biosphere Reserve, who listed logistical support for research as one of their founding aims:

By developing and using a vast network of research stakeholders who carry out or have carried out numerous past, ongoing and planned studies in the territory, creating an opportunity to integrate this scientific, as well as the traditional knowledge, into the regional development policies and processes.

Some respondents also described a sense of pride in the UNESCO World Biosphere “accolade” (Isle of Man Biosphere Reserve), or pride in their local area through celebrating it (Dublin Bay Biosphere Reserve) or preserving its “remarkable elements” (Manicouagan-Uapishka Biosphere Reserve).

The SHAPE Governance Survey then asked respondents to provide details of their establishment process, including time-scales, financing and stakeholders involved. The responding Biosphere Reserves were established between 1976 and 2016, with the establishment process taking between 2 and 7 years. Nordhordland Biosphere Candidate have not yet been designated. They have been working on establishing their Biosphere Reserve since 2013, and hope that it will be designated by UNESCO in 2019.

Responses to the question of available resources for establishing the area showed a significant difference in funding for establishment between Canadian and European reserves. The Canadian Biosphere Reserves received little or no state financial support for establishing their area, and the process was heavily reliant on volunteers and dedicated individuals. The establishment process for all of the European Biosphere Reserves that responded involved significantly more support from the public sector, either through financial resources or staff, or both. West Estonian Archipelago Biosphere Reserve stated they were solely state-funded. Dublin Bay Biosphere Reserve listed annual funding from four of its partners – Dublin City Council, Dun-Laoghaire-Rathdown County Council, Fingal County Council and Dublin Port Company – and staff time and contributions in kind from all its partners. Some European Biosphere Reserves reported an abundance of resources utilised in establishing their area. SHAPE Partner North Karelia Biosphere Reserves provided a detailed example:

- Money from different Ministries, primarily the Ministry of the Environment, with the support of others including the Ministry of Education, Ministry of Agriculture and Forestry and Ministry of Employment
- EU regional funds, cross-border development funds (TACIS; INTERREG and inter-municipal cooperation projects)
- Academy of Finland funds
- University of Eastern Finland funds
- Additional support in time and facilities from regional organisations and individuals, including Mekrijärvi Research Station and the regional stakeholders on the steering committee, City of Ilomantsi, City of Lieksa, village associations, representatives from the University of Eastern Finland, the regional planning association, the Game and Fisheries Institute, Metsähallitus, Finnish Environmental Institute (SYKE), The Karelian Research Centre from Petrozavodk (Russia), and private individuals).

North Karelia demonstrate a multifaceted approach that provided them with a broad resource base on which to establish their SHA. However, as the results of the survey indicate, not all potential SHAs will have access to such a broad range of resource opportunities.

Establishment processes were predominantly based on stakeholder engagement and consultation. Galloway and Southern Ayrshire Biosphere Reserve reported “extensive and substantive consultation with communities, businesses and other stakeholders throughout the area over 3-4 years” prior to their re-designation as an extended Biosphere Reserve in 2012. Their stakeholder and community

engagement was organised by a Steering Group comprised of local councils, Forestry Commission Scotland, Scottish Natural Heritage and the Scottish Environmental Protection Agency. This included raising awareness and understanding, as well as conducting community research to gather local views and gauge support for taking forward an application to UNESCO. A second wave of engagement began in 2010 with an extensive series of consultation exercises. The Biosphere Reserve website was launched and 40,000 leaflets were distributed in the area, seeking the views of communities and other stakeholders. Targeted mailshots to Community Councils and local businesses explained the concept of a Biosphere Reserve and the opportunities that might be presented. In addition, a series of presentations were also given to Community Councils, and public meetings were held in two locations. Many one-to-one discussions with organisations and businesses were also carried out. A comparable process was undertaken for the Wester Ross Biosphere Reserve, as described by Price (2017).

The Isle of Man Biosphere Reserve describe similarly extensive stakeholder engagement activities. They began in 2012, four years prior to their designation, with research into the awareness and understanding of Biosphere Reserves among stakeholders. The Biosphere Reserve idea was then discussed formally with business groups and NGOs, with the final endorsement of their nomination papers being supported by a broad range of these.

Survey respondents were asked to select the types of stakeholders involved in the establishment process from a list provided. The results are displayed in Figure 21. Most respondents reported stakeholder involvement from several groups, particularly those associated with government and community groups. Those who selected ‘other’ identified a selection of NGOs and universities, local businesses and museums; two respondents highlighted the work of dedicated individuals.

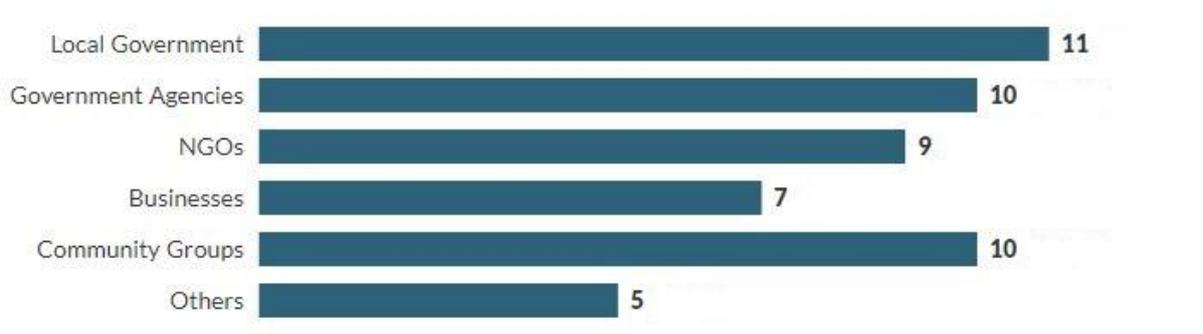


Figure 21: SHAPE Governance Survey: What type of stakeholders were involved in the establishment of your area?

Survey respondents were then asked more specifically about the processes leading to the establishment of their governance structure, and the key actors involved. The main actors in the establishment of governance structures for most respondents were local or regional public sector bodies. In some cases they were wholly responsible, such as with North Devon Biosphere Reserve, which was established by the Countryside Development Officer for the County Council. In others, they were jointly responsible. The governance structures of the Scottish reserves were established by teams from diverse backgrounds that included local councils. Galloway and Southern Ayrshire Biosphere Reserve’s structure was set up by representatives of their Partnership Board, with support

from the public sector, and was later streamlined by the board to clarify the relationship between management and the board and to improve accountability. The governance structure for Wester Ross Biosphere Reserve was determined by an interim committee made up of people from a wide range of backgrounds and experiences, including local government, NGOs, community groups, local businesses and individuals (Price, 2017).

Responsibility for establishment of the West Estonian Archipelago Biosphere Reserve's governance structure lay at the national level with the Ministry of Environment. National government was also a key actor in Finland, through the Ministry of Environment, though not the only one. Local and regional bodies, including the municipalities involved and local universities also played key roles. Following changes to the national administration structure, regional departments have assumed the role previously taken by the Ministry of Environment. Dublin Bay Biosphere Reserve's governance was formed on the basis of a Memorandum of Understanding agreed between Dublin City Council, the two county councils involved, Dublin Port Company, and the National Parks and Wildlife Service.

The Isle of Man Biosphere Reserve began their process of establishing governance with research into reserves in a similar constitutional position. Though none were found directly comparable, the Biosphere Reserves Rhoen, in Germany, and Dyfi, in Wales, provided inspiration for the Manx approach.

The Canadian survey respondents indicated that their governance structures were established by their original partnership boards, with Manicouagan-Uapishka describing this as typical of Canadian Biosphere Reserves. The governance model of Mount Arrowsmith Biosphere Reserve, however, was restructured from the one originally appointed by its board. Mount Arrowsmith's current structure differs from many of the others in that it is a network structure that they describe as roundtable governance. This was created in 2014, as a result of the poor performance of the previous regime. The Biosphere Reserve Coordinator at Mount Arrowsmith describes the establishment of their new structure:

The governance structure was established in 2014 after the MABR was at risk of losing its designation. Vancouver Island University (VIU) and the City of Parksville signed a Memorandum of Understanding to take over governance of the MABR and restructure the existing regime. Upon collaboration with regional partners including First Nations, municipalities, regional districts, industry leaders, university institutions, and private landowners it became clear that a board of foundation members was not the appropriate approach to management in the region. Through these conversations VIU formed a roundtable governance structure that would include all regional stakeholders.

Manicouagan-Uapishka Biosphere Reserve also re-structured their governance model from the one appointed by its initial board, in order to optimise its social enterprise development, as discussed in Section 3.6.

The SHAPE Governance Survey responses demonstrate the broad range of ways in which governance is established in SHAs, varying both between and within countries. The breadth and influence of stakeholders in the process was also demonstrated in the responses received, and indicates the

prevalence and success of bottom-up approaches. The next part of this section describes how the success of SHA governance can comprehensively be monitored and evaluated.

5.2 Monitoring and Evaluating the Effectiveness of Governance

Monitoring and evaluating governance is a necessary part of the process of governance in SHAs. Effective management of conservation areas is based on good governance (Lockwood et al., 2010; Shields, 2016) and it is therefore important to ensure it is functioning as intended. It is also necessary to have systems to monitor actions and conformity to agreed rules, and processes to meet external reporting requirements (Lockwood et al., 2010).

Young et al. (2013) highlight that it is wrong to assume that good processes lead to good outcomes. The evaluation of governance, therefore, involves evaluating both process and outcomes (Abrams et al., 2003). Lockwood (2010) presents a framework that positions governance quality in relation to governance and management effectiveness, shown in Figure 22. He argues the bridge between governance assessment and management effectiveness can be provided by 'governance effectiveness' which is a combination of government quality and institutional capacity, along with a supportive context.

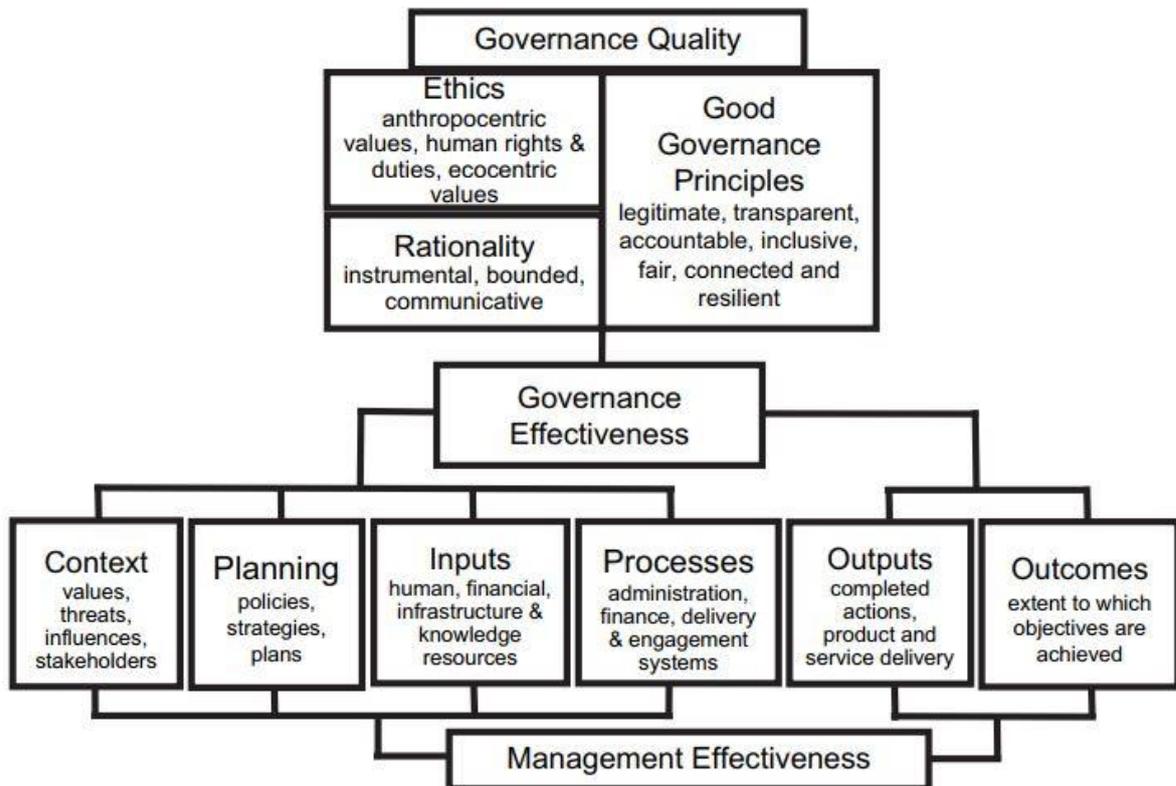


Figure 22: Lockwood's (2010) framework for governance effectiveness (including elements of the Hockings et al. (2006) management effectiveness framework) (p.756).

5.2.1 Monitoring

A common way of assessing governance is through indicators (Deininger et al., 2012; Shields et al., 2016). These need to be relevant, accurate and consistent (Deininger et al., 2012). Indicators are used to evaluate the current state of governance against a target or the ideal. In subsequent evaluations, the level of change towards or away from the baseline can be used to evaluate progress (Church and Rogers, 2006). Lockwood's (2010) framework can be used to define types of indicators for governance effectiveness: context indicators, planning indicators, input indicators, process indicators, output indicators and outcome indicators. These are presented below.

(i) Context Indicators

Success of governance depends on the governing system and the condition of the system to be governed (Bavinck and Vivekanandan, 2011). Governing systems should therefore not be considered in isolation. Context indicators assess the situation within which the process of governance is conducted, and identify the drivers and barriers for progress (OECD, 2017).

Universal indicators for context are difficult to prescribe and speculative in use (Church and Rogers, 2006). Context indicators should be specific to each SHA as they evaluate governance in relation to the specific values, threats, influences and stakeholders associated with it. A set of context indicators should therefore be defined for each SHA. The translation of context into observable and measurable components is likely to be through a series of qualitative questions. Church and Rogers (2006, p.53) provide useful practical guidance on the steps required when indicator criteria must be generated, from which the following have been adapted:

- Brainstorm all related things or dimensions that can be counted, measured or sized.
- Ask relevant parties or stakeholders what they consider to be significant signals of change.
- Break issues into smaller components.
- Use deductive logic. What would we have to see to know that X has been achieved?
- Refine the indicators. Keep focused with the mantra, "What do I need to know and what information will tell me what I need to know?" Once you have a couple of possible indicators, look for ways to make them increasingly simple.
- Experience suggests that it is prudent to test new and newly modified indicators for their utility in decision making as early as possible. Pick hypothetical extremes using fictitious data and consider how the different extremes will influence the outcome. If significantly different information has no influence over the outcome, the indicator is probably not useful and should be changed.

(ii) Planning Indicators

Planning indicators measure the effectiveness of planning processes within governance. They refer to plans, policies and strategies that are in place within the system (Lockwood, 2010). Planning indicators can be generated using the same method described for context indicators, although, as these are less specific to each area, they can also be adopted or adapted from elsewhere. Twelve planning indicator questions listed in Table 6 have been adapted for use in SHAs from planning indicators intended for governance of coastal area management that were published in Ehler (2003).

Planning Indicators
How does the SHA take into account the laws and regulations pertaining to the area?
How are plans linked with wider development and environmental goals?
How have alternative strategies been identified and analysed?
What measurable objectives are specified?
Has the vision been developed jointly?
How are planning processes made transparent?
What are the goals/targets for governance and how are they ranked?
How are plans regularly monitored and evaluated?
What types of information are needed for planning?
Is this information sufficiently available?
Are planning processes effectively implemented?
How are plans designed so that they can be adapted to unpredictable change?

Table 6: Planning indicator questions.

These are presented to guide planning indicator evaluation in SHAs. They might be used as they are, adapted, or supplemented with additional planning indicators specific to the context of the individual SHA.

(iii) Input Indicators

Input indicators refer to the resources that are used in governance, including staff, financial budget and facilities (Ehler, 2003). This step in the evaluation process assesses whether the necessary resources for effective governance are available, when and where they are required (Parsons et al., 2013). Five key questions for input indicators in evaluating governance in SHAs are listed below in Table 7.

Input Indicators
Are resources for management sufficient?
What is the balance between core funding and project funding?
How are resources distributed?
Do staff have the required knowledge and skills?
Are there readily available resources to use in instances of unpredictable change?

Table 7: Input indicator questions.

As with the planning indicator questions in Table 6, the input indicator questions are presented for use in governance evaluation in SHAs, either in their current format, suitably adapted for individual SHAs, or for guidance purposes.

(iv) Process Indicators

The review of literature on good governance, presented in Section 4, provides a set of 14 characteristics from which to understand the principles of good governance of SHAs and derive governance process evaluation indicators. Table 8, below, presents 13 process indicators based on these.

Process Indicators
How have stakeholders been involved in the drafting of strategic vision?
How have new strategies and challenges been incorporated into the existing vision?
How does performance reporting show clear identification of roles and responsibilities, and demonstrated acceptance of these?
What opportunities do stakeholders have to participate in decision-making and influence it?
How is the decision-making process made visible and clear with fair consideration for all?
How are conflicting views and interests moderated?
How is the governance system fully integrated, horizontally and vertically?
How are priorities, plans and activities aligned across the governance system?
How does communication work in the governance system?
What systems, plans, resources, skills, leadership, knowledge and experience are in place to produce effective outcomes?
How is the governance system able to absorb disruption and respond to change, maintaining a good balance between flexibility and security?
How is thorough evaluation and review of governance structures conducted?
Has the evaluation and review of governance been used to incorporate learning and adapt governance practices?

Table 8: Process indicator questions.

These criteria address the key process systems affecting governance effectiveness and quality in SHAs.

(v) Output Indicators

Output indicators assess the delivery of products and services from governance performance (Ehler, 2003). Outputs are distinguished from outcomes as products of governance, as opposed to measures of success of governance (Parsons et al., 2013). It is therefore possible to have positive output indicators with poor achievement of outcome indicators, although it is unlikely that outcome indicators would score highly if output indicators are not satisfactorily met (Parsons et al., 2013). Governance output indicators might include the creation of policies, partnerships forged, or any other steps or initiatives that represent tangible progress towards goals. As with context indicators, output indicators are specific to each area. Some sample output indicators from which to generate a set of output indicator criteria for a specific SHA (adapted from Parsons et al., 2013) are listed below in Table 9.

Output Indicators
Vision and business plan
Clear policy
Representative partnership
Governance evaluation and review process
Resources secured to implement agreed objectives
Level of staff resources
Investment in infrastructure
Delivery mechanism for management actions
Proportion of governance tasks completed
Image strategy in place

Table 9: Sources of output indicators.

(vi) Outcome Indicators

Outcome indicators assess the achievement of on-the-ground results (Ehler, 2003). Outcome indicators reflect whether the governance system has achieved its goals, and should be realistic and achievable given the capacity and resources available (Parsons et al., 2013). Measuring outcome is important because good governance procedures may not correlate with the positive outcomes expected (Fukuyama, 2013). As with context and output indicators, outcome indicators should ideally be specific to each SHA. Sample forms of outcome indicator criteria, adapted from Parsons et al. (2013), for pairing as appropriate with achieved or intended governance goals are presented in Table 10, below. These may be measured quantitatively, qualitatively or both, as befits the outcomes being measured.

Generating Outcome Indicators
Changes in governance goals
Perceptions/experiences of intended beneficiaries
Increased use of...
Reductions in...

Table 10: Suggested formats for generating outcome indicators.

5.2.2 Evaluating

Through the use of these six sets of indicator criteria, governance can be monitored. Periodic feedback on these aspects of governance assesses the impact of governance initiatives, ensures that governance processes are held to standards, and indicates where adaptation is required.

Once the indicator criteria have been decided, the next step is to perform the evaluation. Table 12 provides a summary of commonly used data sources for this. As Table 12 shows, these can be both quantitative and qualitative, and come from a diverse range of sources. Either quantitative or qualitative data can be the best choice for an indicator, depending on the subject matter, the available data and the governance context (OECD, 2017).

Data Source	Description	Quantitative/Qualitative
Administrative Data	Quantitative information that is routinely gathered.	Quantitative
Public Surveys	Information gathered through surveys of the general public, which can be used to generate ratings for indicators based on public perceptions or experiences.	Both
Expert Surveys	Information gathered confidentially from individuals with specialised knowledge. The choice of experts should be relevant to the questions asked.	Qualitative
Focus Groups	Bringing together structured samples of a range of social groups to gather perceptions in an interactive group setting.	Qualitative

Data Source	Description	Quantitative/Qualitative
Observations	Data gathered by researchers or field staff through in-depth case studies or systematic observations of a particular institution or settings.	Both
Documents and Legislation	Information taken from written documents. This can be used to verify the use of certain rules and procedures and to understand the powers of governance.	Qualitative

Table 11: Commonly used data sources for answering indicator criteria (adapted from Parsons et al., 2013).

The final step in the evaluation process is to communicate the results and adapt governance as appropriate (Pomeroy et al., 2005).

Section 5 Key Points

- The SHAPE Governance Survey responses demonstrated the broad range of ways in which governance is established in SHAs.
- There are significant differences in available funding for SHAs in different areas of the Arctic and Northern Periphery. Some have been able to draw on a wide variety of funding and support resources, whereas others have been established on little more than voluntary efforts.
- Establishment processes are typically based on stakeholder engagement and consultation. Social mapping of stakeholders is recommended to identify stakeholders, their interests and the links between them.
- Some SHAs have adapted their governance structures to improve their performance and meet the developing needs of their area.
- Monitoring and evaluation are necessary to ensure governance structures and processes are functioning well.
- Lockwood's (2010) framework is used to define types of indicators for governance effectiveness: context indicators, planning indicators, input indicators, process indicators, output indicators and outcome indicators.
- The evaluation of indicators can be based on a variety of data sources, including administrative data, public surveys, expert surveys, focus groups, observations, and documents and legislation.
- Results should then be reported and communicated, and governance structures and processes adapted as appropriate.

6. References

- Abrams, P., Borrini-Feyerabend, G., Gardner, J. and Heylings, P. 2003. *Evaluating Governance: A Handbook to Accompany A Participatory Process for a Protected Area*. Canada: Parks Canada and TILCEPA.
- Adams, W. M. 2012. Private and Networked: Large Conservation Areas in Scotland. *ECOS*, 33, pp.24-33.
- Adams, W. M. 2015. The political Ecology of Conservation Conflicts. In: Redpath, S. M., Gutierrez, R. J., Wood, K. A. and Young, J. C. eds. *Conflicts in Conservation: Navigating Towards Solutions*. Cambridge: Cambridge University Press, pp.64-75.
- Alphandery, P. and Fortier, A. 2001. Can a Territorial Policy Be Based on Science Alone?: The System for Creating the Natura 2000 Network in France. *Sociologia Ruralis*, 41, pp.311-328.
- Armitage, D. R., Plummer, R., Berkes, F., Arthur, R. I., Charles, A. T., Davidson-Hunt, I. J., Diduck, A. P., Doubleday, N. C., Johnson, D. S., Marschke, M., McConney, P., Pinkerton, E. W. and Wollenberg, E. K. 2009. Adaptive Co-management for Social-ecological Complexity. *Frontiers in Ecology and the Environment*, 7(2), pp.95-102.
- Backstrand, K. 2006. Democratizing Global Environmental Governance? Stakeholder Democracy after the World Summit on Sustainable Development. *European Journal of International Relations*, 12(4), pp.467-498.
- Badia, F. 2018. The Management Plan for World Heritage Sites as a Tool of Performance Measurement and Sustainability Reporting: Opportunities and Limits in the Italian Context. In: Makuva, S. ed. *Aspects of Management Planning for Cultural World Heritage Sites*. London: Springer, pp.25-36.
- Barker, A. and Stockdale, A. 2008. Out of the Wilderness? Achieving Sustainable Development Within Scottish National Parks. *Journal of Environmental Management*, 88, pp.181-193.
- Barrow, G. C. 2015. *Future National Parks in Scotland: Possible Governance Models*. Scotland: SCNP and APRS.
- Bavinck, M. and Vivekanandan, V. 2011. Conservation, Conflict and the Governance of Fisher Wellbeing: Analysis of the Establishment of the Gulf of Mannar National Park and Biosphere Reserve. *Environmental Management*, 47, pp.593-602.
- Beierle, T. C. and Konisky, D. M. 2001. What are we Gaining from Stakeholder Involvement? Observations from Environmental Planning in the Great Lakes. *Environment and Planning C: Government and Policy*, 19, pp.515-527.
- Bergseng, E. and Vatn, A. 2009. Why protection of Biodiversity Creates Conflict – Some Evidence from the Nordic Countries. *Journal of Forest Economics*, 15(3), pp.147-165.
- Berkes, F. 2007. Community-based Conservation in a Globalized World. *Proceedings of the National Academy of Sciences of the United States of America*, 104(39), pp.15188-15193.

- Berkes, F. 2009. Evolution of Co-management: Role of Knowledge Generation, Bridging Organizations and Social Learning. *Journal of Environmental Management*, 90, pp.1692-1702.
- Bernstein, S. 2004. Legitimacy in Global Environmental Governance. *Journal of International Law and International Relations*, 1(1-2), pp.139-166).
- Besley, T. and Ghatak, M. 2017. Profit with Purpose? A Theory of Social Enterprise. *American Economic Journal; Economic Policy*, 9(3), pp.19-58.
- Beunen, R. and de Vries, J. R. 2011. The Governance of Natura 2000 Sites: The Importance of Initial Choices in the Organisation of Planning Processes. *Journal of Environmental Planning and Management*, 54(8), pp.1041-1059.
- Bingham, H., Fitzsimons, J. A., Redford, K. H., Mitchell, B. A., Bezaury-Creel, J. and Cumming, T. L. 2017. Privately Protected Areas: Advances and Challenges in Guidance, Policy and Documentation. *Parks*, 23(1). [Online.] [Accessed 18th December 2017]. Available from: http://parksjournal.com/wp-content/uploads/2017/04/PARKS-23.1-Bingham-et-al-10.2305IUCN.CH_.2017.PARKS-23-1HB.en_.pdf.
- Bjørnstad, K. 2017. Regional Parks: Norway. In: *Naturparke Deutschland and EUROPARC Federation. Living Landscapes: Europe's Nature, Regional, and Landscape Parks – Model Regions for Sustainable Development of Rural Areas*. [Online]. [Accessed 22nd February 2018]. Available from: <http://www.european-parks.org/downloads/living-landscapes.pdf>.
- Bodin, O., Ramirez-Sanchez, S., Ernstson, H. and Prell, C. 2011. A Social Relational Approach to Natural Resource Governance. In: Bodin, O., and Prell, C. eds. *Social Networks and Natural Resource Management: Uncovering the Fabric of Environmental Governance*. Cambridge: Cambridge University Press, pp.3-28.
- Boedeltje, M. and Cornips, J. 2004. Input and Output Legitimacy in Interactive Governance (No. NIG2-01). NIG Annual Work Conference, 19th October 2004, Rotterdam. [Online]. [Accessed 30th November 2017]. Available from: <https://repub.eur.nl/pub/1750/>.
- Bonafous-Boucher, M. 2005. From Government to Governance. Ethical perspectives: *Journal of the European Ethics Network*, 12(4), pp.521-534.
- Borrini-Feyerabend, G. and Hill, R. 2015. Governance for the Conservation of Nature. In: Worboys, G. L., Lockwood, M., Kothari, S., Feary, S. and Pulsford, I. eds. *Protected Area Governance and Management*. Canberra: ANU Press, pp.169-206.
- Bottema, M. J. M. and Bush, S. R. 2012. The Durability of Private Sector-led Conservation: A Case Study of Two Entrepreneurial Marine Protected Areas in Indonesia. *Ocean & Coastal Management*, 61, pp.38-48.
- Bouwma, I., van Apeldoorn, R., Kamphorst, D. and Ferranti, F. 2010. *Current Practices in Solving Multiple Use Issues of Natura 2000 Sites: Conflict Management Strategies and Participatory Approaches*, Wageningen, The Netherlands: Alterra.

- Brenner, L. and Job, H. 2011. Challenges to Actor-Oriented Environmental Governance: Examples from Three Mexican Biosphere Reserves. *Tijdschrift voor Economische en Sociale Geografie* – 2012, 103(1), pp.1-19.
- Brown, A., Hargreaves, J., Smith, R. and Wrightham, M. 2017. Regional Parks: United Kingdom (Scotland). In: Naturparke Deutschland and EUROPARC Federation. *Living Landscapes: Europe's Nature, Regional, and Landscape Parks – Model Regions for Sustainable Development of Rural Areas*. [Online]. [Accessed 22nd February 2018]. Available from: <http://www.european-parks.org/downloads/living-landscapes.pdf>.
- Bulkeley, H. and Mol, A. P. J. 2003. Participation and Environmental Governance: Consensus, Ambivalence and Debate. *Environmental Values*, 12, pp.143-154.
- Campbell, C. 2013. *Social Enterprise & Biosphere Reserves Development Framework*. Edinburgh: Assist Social Capital CIC.
- Campelo, A., Aitken, R., Thyne, M. and Gnoth, J. 2014. Sense of Place: The Importance for Destination Branding. *Journal of Travel Research*, 53(2), pp.154-166.
- Carlsson, L. and Berkes, F. 2005. Co-management: Concepts and Methodological Implications. *Journal of Environmental Management*, 75, pp.65-76.
- Carlsson, L. and Sandstrom, A. 2008. Network Governance of the Commons. *International Journal of the Commons*, 2(1), pp.33-54.
- Child, C. 2016. Tip of the Iceberg: The Nonprofit Underpinnings of For-Profit Social Enterprise. *Nonprofit and Voluntary Sector Quarterly*, 45(2), p.217-237.
- Choy, D. L. and Prineas, T. 2006. Parks for People: Meeting the Outdoor Recreation Demands of a Growing Regional Population. *Annals of Leisure Research*, 9(1-2), pp.86-109.
- Church, C. and Rogers, M. M. 2006. *Designing for results: Integrated Monitoring and Evaluation in Conflict Transformation Programs*. Washington: Search for Common Ground.
- Ciriacy-Wantrup, S. V. and Bishop, R. C. 1975. Common Property as a Concept in Natural Resources Policy. *Natural Resources Journal*, 15(4), pp.713-727.
- Clarke, R., Mount, D. and Anteric, M. 2011. *Evaluation of the Heritage Lottery Fund Landscape Partnership Programme*. London: Centre for European Protected Area Research.
- Coetzer, K. L., Witkowski, E. T. F. and Erasmus, B. F. N. 2014. Reviewing Biosphere Reserves Globally: Effective Conservation Action of Bureaucratic Label? *Biological Reviews*, 89, pp.82-104.
- Cohen, S., Dengate, J., Morrell, L. and Lee, K. 2015. The Media and Protected Areas. In: Worboys, G. L., Lockwood, M., Kothari, A., Feary, S. and Pulsford, I. eds. *Protected Area Governance and Management*. Canberra: ANU Press, pp.441-472.
- Connal, K. 2017. Email to George Farlow, 30th March.

Countryside (Scotland) Act 1967. (Section 48A). [Online]. [Accessed 16th March 2018]. Available from: <https://www.legislation.gov.uk/ukpga/1967/86/contents>.

Crofting Commission. 2018. Common Grazings. [Online]. [Accessed 29th March 2018]. Available from: <http://www.crofting.scotland.gov.uk/common-grazings>.

Daniels, M. J. 2007. Central Place Theory and Sport Tourism. *Annals of Tourism Research*, 34(2), pp.332-47.

Dart, R. 2004. The Legitimacy of Social Enterprise. *Nonprofit Management & Leadership*, 14(4), pp.411-424.

Dawson, N., Martin, A. and Danielsen, F. 2017. Assessing Equity in Protected Area Governance: Approaches to Promote Just and Effective Conservation. *Conservation Letters*. [Online]. [Accessed 31st January 2018]. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/conl.12388/epdf>.

Dean, T. J. and McMullen, J. S. 2007. Toward a Theory of Sustainable Entrepreneurship: Reducing Environmental Degradation Through Entrepreneurial Action. *Journal of Business Venturing*, 22, pp.50-76.

Dearden, P., Bennett, M. and Johnston, J. 2005. Trends in Global Protected Area Governance, 1992-2002. *Environmental Management*, 36(1), pp.89-100.

Defourny, J., Hulgard, L. and Pestoff, V. 2014. Introduction to the “SE Field.” In: Defourny, J., Hulgard, L. and Pestoff, V. eds. *Social Enterprise and The Third Sector: Changing European Landscapes in a Comparative Perspective*. London: Routledge, pp.1-14.

DEFRA. 2010. Consultation on the Governance Arrangements for the National Parks and the Broads. [Online]. [Accessed 8th January 2018]. Available from: <http://webarchive.nationalarchives.gov.uk/20111108222727/http://archive.defra.gov.uk/corporate/consult/nationalpark-governance/101109-nationalpark-governance-condoc.pdf>.

DEFRA. 2011. Consultation on the Governance Arrangements for the National Parks and the Broads: Summary of Responses. [Online]. [Accessed 8th January 2018]. Available from: <http://webarchive.nationalarchives.gov.uk/20111108222730/http://archive.defra.gov.uk/corporate/consult/nationalpark-governance/nationalpark-governance-sumresp.pdf>.

DEFRA. 2013. Review of National Park Governance: Implementation Update. [Online]. [Accessed 9th January 2018]. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/192247/PB13908-review-of-national-park-governance.pdf.

Deininger, K., Selod, H. and Burns, A. 2012. *The Land Governance Assessment Framework. Identifying and Monitoring Good Practice in the Land Sector*. Washington D. C.: The World Bank.

De Lacy, T., Chapman, J., Whitmore, M. and Worboys, G. L. 2006. Obtaining, Managing and Communicating Information. In: Lockwood, M., Worboys, G. L. and Kothari, A. eds. *Managing Protected Areas: A Global Guide*, 1st Edition. London: Earthscan, pp.262-291.

- De Oliveira, J. A. P. 2005. Tourism as a Force for Establishing Protected Areas: The Case of Bahia, Brazil. *Journal of Sustainable Tourism*, 13(1), pp.24-49.
- Dietz, T., Dolsak, N., Ostrom, E. and Stern, P. C. 2002. The Drama of the Commons. In: Ostrom, E., Dietz, T., Dolsak, N., Stern, P. C., Stonich, S. and Weber, E. eds. *The Drama of the Commons*. Washington, D.C.: National Academy.
- Dietz, T., Ostrom, E., and Stern, P. C. 2003. The Struggle to Govern the Commons. *Science*, 302(5652), pp.1907-1912.
- Edge, S. and McAllister, M. L. 2009. Place-based Local Governance and Sustainable Communities: Lessons from Canadian Biosphere Reserves. *Journal of Environmental Planning and Management*, 52(3), pp.279-295.
- Ehler, C. N. 2003. Indicators to measure Governance Performance in Integrated Coastal Management. *Ocean & Coastal Management*, 46, pp.335-345.
- European Commission. 1996. The Cork Declaration: A living Countryside. In: The European Conference on Rural Development of the Communities, Cork, Ireland, 7-9 November 1996.
- European Commission. 2010. Options for an EU Vision and Target for Biodiversity Beyond 2010. [Online]. [Accessed 12th January 2018]. Available from: http://ec.europa.eu/environment/nature/biodiversity/policy/pdf/communication_2010_0004.pdf.
- Europe's Nature Parks, Landscape Parks and Regional Parks. 2018. Europe's Nature Parks, Landscape Parks and Regional Parks website. [Online]. [Accessed 16th March 2018]. Available from: <http://www.european-parks.org/home>.
- Figgis, P., Humann, D. and Looker, M. 2005. Conservation on Private Land in Australia. *Parks*, 15, pp.19-29.
- Fiorino, D. J. 1990. Citizen Participation and Environmental Risk: A Survey of Institutional Mechanisms. *Science, Technology & Human Values*, 15, pp.226-243.
- Folke, C., Hahn, T., Olsson, P. and Norberg, J. 2005. Adaptive Governance of Social-Ecological Systems. *Annual Review of Environment and Resources*, 30, pp.441-73.
- Font, X., Cochrane, J. and Trapper, R. 2004. Pay Per Nature View: Understanding Tourism Revenues for Effective Management Plans. Leeds: Leeds Metropolitan University.
- Fukuyama, F. 2013. What is Governance? *Governance: An International Journal of Policy, Administration, and Institutions*, 26(3), pp.347-368.
- Gerber, J. D. and Knoepfel, P. 2008. Towards Integrated Governance of Landscape Development: The Swiss Model of Regional Nature Parks. *Mountain Research and Development*, 28(2), pp.110-115.
- Getzner, M., Vik, M. L., Brendehaug, E. and Lane, B. 2014. Governance and Management Strategies in National Parks: Implications for Sustainable Regional Development. *International Journal of Sustainable Society*, 6(1-2), pp.82-100.

- Giest, S. and Howlett, M. 2014. Understanding the Preconditions of Commons Governance: The Role of Network Management. *Environmental Science & Policy*, 36, pp.37-47.
- Global Geoparks Network. 2018. Global Geoparks Network website. [Online]. [Accessed 29th March 2018]. Available from: <http://www.globalgeopark.org/>.
- Govan, H., Inglis, A., Pretty, J., Harrison, M. and Wightman, A. 1998. Scottish Natural Heritage Review No. 107: Best Practice in Community Participation for National Parks. Perth: Scottish Natural Heritage.
- Graham, J., Amos, B. and Plumpton, T. 2003. *Governance Principles for Protected Areas in the 21st Century*. Ontario: Institute on Governance.
- Gunderson, L. H. and Holling, C. S. eds. 2002. *Panarchy: Understanding Transformations in Human and Natural Systems*. Washington: Island Press.
- Gunningham, N. 2009. The New Collaborative Environmental Governance: The Localization of Regulation. *Journal of Law and Society*, 36(1), pp.145-66.
- Gupta, A. 2008. Transparency Under Scrutiny: Information Disclosure in Global Environmental Governance. *Global Environmental Politics*, 8(2), pp.1-7.
- Hahn, T. 2011. Self-Organised Governance Networks for Ecosystem Management: Who is Accountable? *Ecology and Society*. [Online]. 16(2):18 [no pagination]. [Accessed 23rd October 2017]. Available from: <https://www.ecologyandsociety.org/vol16/iss2/art18/>.
- Hahn, T., Schultz, L., Folke, C. and Olsson, P. 2008. Social Networks as Sources of Resilience in Social-Ecological Systems. In: Norberg, J. and Cumming, G. eds. *Complexity Theory for a Sustainable Future*. New York: Columbia University Press, pp.119-148.
- Hall, C. M. and McArthur, S. 1998. *Integrated Heritage Management: Principles and Practice*. London: the Stationery Office.
- Hamlet, L. 2016. Email to Gareth Heavisides, 12th December.
- Hankinson, G. 2009. Managing Destination Brands: Establishing a Theoretical Foundation. *Journal of Marketing Management*, 25(1-2), pp.97-115.
- Hardin, G. 1968. The Tragedy of the Commons. *Science*, 162(3859), pp.1243-1248.
- Healey, P. 1998. Building Institutional Capacity Through Collaborative Approaches to Urban Planning. *Environment and Planning A*, 30, pp.1531-1546.
- Heritage Lottery Fund. 2013. Landscape Partnerships Application Guidance. [Online]. [Accessed 20th December 2017]. Available from: <https://www.east-ayrshire.gov.uk/Resources/PDF/L/LPB-Application-Guidance.pdf>.
- Hodge, G. A. and Greve, C. 2007. Public-Private Partnerships: An International Performance Review. *Public Administration Review*, 67(3), pp.545-558.

Holmes, G. 2013. What Role Do Private Protected Areas Have in Conserving Global Biodiversity? SRI Papers No.46. [Online]. [Accessed 18th December 2017]. Available from: <https://www.see.leeds.ac.uk/fileadmin/Documents/research/sri/workingpapers/SRIPs-46.pdf>.

Illsley, D. and Richardson, T. 2004. New National Parks for Scotland: Coalitions in Conflict Over the Allocation of Planning Powers in the Cairngorms. *Journal of Environmental Planning and Management*, 47(2), pp.219-242.

Inoue, M. 2013. Eclectic Collaborative Commons as an Integration of Closure and Openness. In: Murota, T. and Takeshita, K. eds. *Local Commons and Democratic Environmental Governance*. Tokyo: United Nations University Press, pp.19-39.

IUCN. 2002. *Management Guidelines for IUCN Category V Protected Areas*. Gland: IUCN.

IUCN. 2013. *Governance of Protected Areas: From Understanding to Action*. Best Practice Protected Area Guidelines Series No.20. [Online]. [Accessed 19th October 2017]. Available from: http://cmsdata.iucn.org/downloads/governance_of_protected_areas___from_understanding_to_action.pdf.

IUCN. 2014. *The Futures of Privately protected Areas*. Protected Areas Technical Report Series No.1. [Online]. [Accessed 19th October 2017]. Available from: <http://194.158.18.88/drupal/sites/default/files/documents/docs/Privately%20Protected%20Areas.pdf>.

IUCN. 2017. *Quality and Effectiveness*. [Online]. [6th December 2017]. Available from: <https://www.iucn.org/theme/protected-areas/our-work/quality-and-effectiveness>.

IUCN. 2018. IUCN website. [Online]. [Accessed 26th February 2018]. Available from: <https://www.iucn.org/>.

Jeanrenaud, S. 1999. People-Oriented Conservation: Progress to Date. In: Stolton, S. and Dudley, N. eds. *Partnerships for Protection: New Strategies for Planning and Management for Protected Areas*. London: Earthscan, pp.126-134.

Jones-Walters, L. and Cil, A. 2011. Review: Biodiversity and Stakeholder Participation. *Journal for Nature Conservation*, 19, pp.327-329.

Jordan, A., Wurzel, R. K. W. and Zito, A. R. 2003. 'New' Instruments of Environmental Governance: Patterns and Pathways of Change. *Environmental Politics*, 12(1), pp.1-24.

Kaufmann, D., Kraay, A. and Mastruzzi, M. 2011. The Worldwide Governance Indicators: Methodology and Analytical Issues. *Hague Journal of the Rule of Law*, 3, pp.220-246.

Kemp, R., Parto, S. and Gibson, R. B. 2005. Governance for Sustainable Development: Moving from Theory to Practice. *International Journal of Sustainable Development*, 8(1-2), pp.12-30.

Kleinfeld, R. 2006. Competing definitions of Rule of Law. In: Carothers, T. ed. *Promoting the Rule of Law Abroad: In Search of Knowledge*. Washington, D.C.: Carnegie Endowment, pp.31-74.

- Kooiman, J. 1999. Socio-Political Governance. *Public Management: An International Journal of Research and Theory*, 1(1), pp.67-92.
- Koppenjan, J. F. M. and Enserink, B. 2009. Public-Private Partnerships in Urban Infrastructures: Reconciling Private Sector Participation and Sustainability. *Public Administration Review*, 69(2), pp.284-296.
- Kotler, P. and Gertner, D. 2002. Country as Brand, Product and Beyond: A Place Marketing and Brand Management Perspective. *Journal of Brand Management*, 9(4/5), pp.249-261.
- Krahmann, E. 2003. National, Regional, and Global Governance: One Phenomenon or Many? *Global Governance*, 9, pp.323-346.
- Lach, D., Rayner, S. and Ingram, H. 2005. Taming the Waters: Strategies to Domesticate the Wicked Problems of Water Resource Management. *International Journal of Water*, 3, pp.1-17.
- Landorf, C. 2009. Managing for Sustainable Tourism: A Review of Six Cultural World Heritage Sites. *Journal of Sustainable Tourism*, 17(1), pp.53-70.
- Langholz, J. A. and Krug, W. 2004. New Forms of Biodiversity Governance: Non-state Actors and the Private Protected Area Action Plan. *Journal of International Wildlife Law and Policy*, 7, pp.9-29.
- Lawrence, G. 2005. Promoting Sustainable Development: The Question of Governance. In: Buttel, F. H. and McMichael, P. eds. *New Directions in the Sociology of Global Development*. Amsterdam: Elsevier.
- Lemos, M. C. and Agrawal, A. 2006. Environmental Governance. *Annual Review of Environment and Natural Resources*, 31, pp.297-325.
- Liu, J., Qu, H., Huang, D., Chen, G., Yue, X., Zhao, X. and Liang, Z. 2014. The Role of Social Capital in Encouraging Residents' Pro-Environmental Behaviours in Community-Based Ecotourism. *Tourism Management*, 41, pp.190-2001.
- Lockwood, M. 2010. Good Governance for Terrestrial Protected Areas: A Framework, Principles and Performance Outcomes. *Journal of Environmental Management*, 91, pp.754-766.
- Lockwood, M., Davidson, J., Curtis, A., Stratford, E. and Griffith, R. 2010. Governance Principles for Natural Resource Management. *Society & Natural Resources*, 23(10), pp.986-1001.
- Macdonald, S. and Cheong, C. 2014. *The Role of Public-Private Partnerships and the Third Sector in Conserving Heritage Buildings, Sites, and Historic Urban Areas*. Los Angeles: The Getty Conservation Institute.
- Mansbridge, J. 2014. The Role of the State in Governing the Commons. *Environmental Science & Policy*, 36, pp.8-10.
- Martini, G., Zhang, Z., Gu, Y. and Li, W. 2013. Creating a New Strong Geopark Identity in Front of Other World UNESCO Territories: The PPF Concept. *Acta Geoscientica Sinica*, 34(2), pp.1-4.

- McCarthy, J., Lloyd, G. and Illsley, B. 2002. National Parks in Scotland: Balancing Environment and Economy. *European Planning Studies*, 10(5), pp.665-670.
- McNeely, J. A. 1999. Protected Area Institutions. In: Stolton, S. and Dudley, N. eds. *Partnerships for Protection: New Strategies for Planning and Management for Protected Areas*. London: Earthscan, pp.195-204.
- Meadowcroft, J., Farrell, K. N. and Spangenberg, J. 2005. Developing a Framework for Sustainability Governance in the European Union. *International Journal of Sustainable Development*, 8(1-2), pp.3-11.
- Mitchell, B. A. 2007. “Who’s Doing the Protecting in Protected Areas?”: A Global Perspective on Protected Area Governance. *The George Wright Forum*, 3, pp.1-11.
- Murota, T. and Takeshita, K. 2013. *Local Commons and Democratic Environmental Governance*. Tokyo: United Nations University Press.
- National Parks (Scotland) Act. 2000. [Online]. [Accessed 26th February 2018]. Available from: http://www.legislation.gov.uk/asp/2000/10/pdfs/asp_20000010_en.pdf.
- Naturparke Deutschland and EUROPARC Federation. 2017. *Living Landscapes: Europe’s Nature, Regional, and Landscape Parks – Model Regions for Sustainable Development of Rural Areas*. [Online]. [Accessed 22nd February 2018]. Available from: <http://www.european-parks.org/downloads/living-landscapes.pdf>.
- Newman, J., Barnes, M., Sullivan, H. and Knops, A. 2004. Public Participation and Collaborative Governance. *Journal of Social Policy*, 33, pp.203-223.
- North West Highlands Geopark. 2015. *North West Highlands Geopark Business Plan 2015-2019*.
- OECD. 2017. *What’s Out There – Surveying Existing Programmes of Public Governance Indicators*. [Online]. [Accessed 23rd January 2018]. Available from: [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/CERI/CD/RD\(2017\)9&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/CERI/CD/RD(2017)9&docLanguage=En).
- Ostrom, E. 1990. *Governing the Commons: The Evolution of Institution for Collective Action*. Cambridge: Cambridge University Press.
- Ostrom, E. 2012. *The Future of the Commons*. London: The Institute of Economic affairs.
- Ostrom, E., Burger, J., Field, C. B., Norgaard, R. B. and Policansky, D. 1999. Revisiting the Commons: Local Lessons, Global Challenges. *Science*, 284(5412), pp.278-282.
- Oviedo, G. and Brown, J. 1999. Building Alliances with Indigenous Peoples to Establish and Manage Protected Areas. In: Stolton, S. and Dudley, N. eds. *Partnerships for Protection: New Strategies for Planning and Management for Protected Areas*. London: Earthscan, pp.99-108.
- Paavola, J., Gouldson, A. and Kluvankova-Oravska, T. 2009. Interplay of Actors, Scales, Frameworks and Regimes in the Governance of Biodiversity. *Environmental Policy and Governance*, 19, p.148-158.

- Papadopoulos, N. and Heslop, L. 2002. Country Equity and Country Branding: Problems and Prospects. *Journal of Brand Management*, 9 (4/5), pp.294-315.
- Panel on Adaptive Management for Resource Stewardship. 2004. Adaptive Management for Water Resource Project Planning. National Research Council. [Online]. [Accessed 12th February 2018]. Available from: <http://www.nap.edu/catalog/10972.html>.
- Parsons, J., Gokey, C. and Thornton, M. 2013. Indicators of Inputs, Activities, Outputs, Outcomes and Impacts in Security and Justice Programming. United Kingdom: Department for International Development.
- Plummer, R., Armitage, D. R. and de Loe, R. C. 2013. Adaptive Comanagement and Its Relationship to Environmental Governance. *Ecology and Society*, 18(1), pp.21.
- Pollock, R. 2004. Identifying Principles for Place-based Governance for Biosphere Reserves. *Environments*, 32(3), pp.27-42.
- Pomeroy, R. S., Watson, L. M., Parks, J. E. and Cid, G. A. 2005. How is Your MPA Doing?: A Methodology for Evaluating the Management Effectiveness of Marine protected Areas. *Ocean & Coastal Management*, 48(7-8), pp.485-502.
- Pound, D. 2015. Designing and Facilitating Consensus-building – Keys to Success. In: Redpath, S. M., Gutierrez, R. J., Wood, K. A. and Young, J. C. eds. *Conflicts in Conservation: Navigating Towards Solutions*. Cambridge: Cambridge University Press, pp.240-253.
- Prager, K., Nienaber, B., Neumann, B. and Phillips, A. 2015. How Should Rural Policy be Evaluated if it Aims to Foster Community Involvement in Environmental Management? *Journal of Rural Studies*, 37, pp.120-131.
- Price, M. F., Park, J. J. and Bouamrane, M. 2010. Reporting Progress on Internationally-designated Sites: The Periodic Review of Biosphere Reserves. *Environmental Science & Policy*, 13, pp.549-557.
- Price, M. F. 2017. The Re-territorialisation of Biosphere Reserves: The Case of Wester Ross, Northwest Scotland. *Environmental Science & Policy*, 72, pp.30-40.
- Putnam, R. D. 1993. The Prosperous Community: Social Capital and Public Life. *American Prospect*, 13, pp.35-42.
- Reed, M. S. and Sidoli del Ceno, J. 2015. Mediation and Conservation Conflicts: From Top-Down to Bottom-Up. In: Redpath, S. M., Gutierrez, R. J., Wood, K. A. and Young, J. C. eds. *Conflicts in Conservation: Navigating Towards Solutions*. Cambridge: Cambridge University Press, pp.226-236.
- Ripp, M. and Rodwell, D. 2018. Governance in UNESCO World Heritage Sites: Reframing the Role of Management Plans as a Tool to Improve Community Engagement. In: Makuvaza, S. ed. *Aspects of Management Planning for Cultural World Heritage Sites*. London: Springer, pp.241-253.
- Rhodes, R. A. W. 1996. The New Governance: Governing Without Government. *Political Studies*, XLIV, pp.652-667.

Rhodes, R. A. W. 1997. *Understanding Governance: Policy Networks, Governance, Reflexivity and Accountability*. Philadelphia: Open University Press.

Rodriguez-Izquierdo, E., Gavin, M. C. and Macedo-Bravo, M. O. 2010. Barriers and Triggers to Community Participation Across Different Stages of Conservation Management. *Environmental Conservation*, 37(3), pp.239-249.

Salafsky, N., Cauley, H., Balachander, G., Cordes, B., Parks, J., Margoluis, C., Bhatt, S., Encarnacion, C., Russell, D. and Margoluis, R. 2001. A Systematic Test of an Enterprise Strategy for Community-Based Biodiversity Conservation. *Conservation Biology*, 15(6), pp.1585-1595.

Scharpf, F. W. 1997. Economic Integration, Democracy and the Welfare State. *Journal of European Public Policy*, 4(1), pp.18-36.

Schedler, A. 1999. Conceptualizing Accountability. In: Schedler, A., Diamond, L. J., Plattner, M. F. and Rienner, L. eds. *The Self-restraining State*. London: Lynne Rienner Publishers, pp.13-28.

Schliep, R. and Stoll-Kleemann, S. 2010. Assessing Governance of Biosphere Reserves in Central Europe. *Land Use Policy*, 27, pp.917-927.

Schmitt, T. M. 2009. Global Cultural Governance. Decision-making Concerning World Heritage Between Politics and Science. *Erdkunde*, 63(2), pp.103-121.

Schmitt, T. 2011. Cultural Governance as a Conceptual Framework. MMG Working Paper 11-02. [Online]. [Accessed 11th December 2017]. Available from: <http://www.mmg.mpg.de/publications/working-papers/2011/wp-11-02/>.

Schmitt, T. 2015. UNESCO as a Red Cross or as a Notary of World Heritage? Structures, Scale-related Interactions and Efficacy of UNESCO's World Heritage Regime. MMG Working Paper 15-05. [Online]. [Accessed 8th December 2017]. Available from: http://pubman.mpdl.mpg.de/pubman/item/escidoc:2175004/component/escidoc:2175002/WP_15-05_Schmitt_Unesco%20as%20a%20red%20cross.pdf.

Schultz, L., Duit, A. and Folke, C. 2011. Participation, Adaptive Co-management, and Management Performance in the World Network of Biosphere Reserves. *World Development*, 39(4), pp.662-671.

Scottish Natural Heritage. 2017. Regional Parks. [Online]. [Accessed 15th March 2018]. Available from: <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/local-designations/regional-parks>.

Shields, B. O., Moore, S. A. and Eagles, P. F. J. 2016. Indicators for Assessing Good Governance of Protected Areas: Insights from Park Managers in Western Australia. *Parks*, 22(1), pp.37-50.

Shimada, D. and Murota, T. 2013. Multilayered Natural Resource Management in Open and Closed Commons: A Case Study on the Right of Access and the State, Community and Farm Commons in Norway. In: Murota, T. and Takeshita, K. eds. *Local Commons and Democratic Environmental Governance*. Tokyo: United Nations University Press, pp.191-214.

Skelcher, C. 2005. Jurisdictional Integrity, Polycentrism, and the Design of Democratic Governance. *Governance*, 18, pp.89-110.

Smith, A. and Stirling, A. 2008. Social-ecological Resilience and Socio-technical Transitions: Critical Issues for Sustainability Governance, STEPS Working Paper 8. Brighton: STEPS Centre.

Social Enterprise UK. 2016. Social Enterprise UK Website. [Online]. [Accessed 23rd February 2018]. Available from: <https://www.socialenterprise.org.uk/>.

Sommer, F. 2000. Monitoring and Evaluating Outcomes of Community Involvement – the LITMUS Experience. *Local Environment*, 5, pp.483-491.

Southern Uplands Partnership. 2018. Southern Uplands Partnership Website. [Online]. [Accessed 8th January 2018]. Available from: <http://www.sup.org.uk/>.

Spaargaren, G., Mol, A. P. J. 1992. Sociology, Environment and Modernity: Ecological Modernization as a Theory of Social Change. *Society & Natural Resources: An International Journal*, 5(4), p.323-344.

Spenceley, A., Kohl, J., McArthur, S., Myles, P., Notarianni, M., Paleczny, D., Pickering, C. and Worboys, G. L. 2015. Visitor Management. In: Worboys, G. L., Lockwood, M., Kothari, A., Feary, S. and Pulsford, I. eds. *Protected Area Governance and Management*. Canberra: ANU Press, pp.715-750.

Stevic, I. and Breda, Z. 2014. Tourism Destination Governance: The Case of UNESCO World heritage Site of Oporto City. *Revista Turismo e Desenvolvimento*. 3. 189-199.

Stoker, G. 1998. Governance as Theory: Five Propositions. *International Social Science Journal*, 50, pp.17-28.

Stoll-Kleemann, S., De La Vega-Leinert, A. C. and Schultz, L. 2010. The Role of Community Participation in the Effectiveness of UNESCO Biosphere Reserve Management: Evidence and Reflections from Two Parallel Global Surveys. *Environmental Conservation*, 37(3), pp.227-238.

Stoll-Kleemann, S. and Job, H. 2008. The Relevance of Effective Protected Areas for Biodiversity Conservation: An Introduction. *Gaia*, 17, pp.86-89.

Stoll-Kleemann, S. and Welp, M. 2006. *Stakeholder Dialogues in Natural Resources Management*. Berlin: Springer.

Su, M. M. and Wall, G. 2012. Global-local Relationships and Governance Issues at the Great Wall World Heritage Site, China. *Journal of Sustainable Tourism*, 20(8), pp.1067-1086.

Suga, Y. 2013. The Tragedy of the Conceptual Expansion of the Commons. In: Murota, T. and Takeshita, K. eds. *Local Commons and Democratic Environmental Governance*. Tokyo: United Nations University Press, pp.3-18.

Teruel, M. D., Vinals, M. J. and Morant, M. 2015. Interpretative Messages and Social Networks: New Challenges for the Strategic Communication of Protected Areas. In: Mondejar-Jimenez, J., Ferrari, G., Segarra-Ona, M. and Peiro-Signes, A. eds. *Sustainable Tourism: A Collection of Tools and Best Practices*. Oxford: Chartridge Books, pp.173-186.

The Greenlandic Ministry of Education, Culture, Research and Church, The Greenlandic Ministry of Industry, Labour and Trade, Kujalleq Municipality, and Greenland National Museum and Archives. 2016. Kujatta – A Subarctic Farming Landscape in Greenland: Annexes to the Nomination Material. [Online]. [Accessed 18th January 2018]. Available from: <http://naalakkersuisut.gl/~media/Nanoq/Files/Attached%20Files/Kultur/DK/Kujataa%20-%20Annexes%20to%20the%20UNESCO%20nomination.pdf>.

Thompson, N. 2005. Inter-institutional Relations in the Governance of England's National Parks: A Governmentality Perspective. *Journal of Rural Studies*, 21, pp.323-334.

UK National Governance Association. 2015. Monitoring the Strategy. [Online]. [Accessed 11th January 2018]. Available from: <https://www.nga.org.uk/Guidance/Workings-Of-The-Governing-Body/Governance-Tools/Framework-for-Governance/Element-C-Monitoring-the-strategy.aspx>.

Underdal, A. 2010. Complexity and Challenges of Long-Term Environmental Governance. *Global Environmental Change*, 20, pp.386-393.

UNDP. 1997. Governance for Sustainable Human Development. [Online]. [Accessed 23rd November 2017]. Available from: <http://www.pogar.org/publications/other/undp/governance/undppolicydoc97-e.pdf>.

UNESCO. 1972. Convention Concerning the Protection of the World Cultural and Natural Heritage. Paris: UNESCO.

UNESCO. 1996. Biosphere Reserves: The Seville Strategy and the Statutory Framework of the World Network. UNESCO: Paris.

UNESCO. 2005. Operational Guidelines for the Implementation of the World Heritage Convention. [Online]. [Accessed 7th December 2017]. Available from: <http://whc.unesco.org/archive/opguide12-en.pdf>.

UNESCO. 2006. Global Geoparks Network. Paris: UNESCO Division of Ecological and Earth Sciences.

UNESCO. 2015. Policy Document for the Integration of a Sustainable Development Perspective into the Processes of the World Heritage Convention. [Online]. [Accessed 23rd February 2018]. Available from: <http://whc.unesco.org/en/sustainabledevelopment/>.

UNESCO. 2017. A New Roadmap for the Man and the Biosphere (MAB) Programme and its World Network of Biosphere Reserves: MAB Strategy (2015-2025), Lima Action Plan (2016-2025) and Lima Declaration. Paris: UNESCO.

UNESCO. 2017a. Biosphere Reserves Withdrawn from the World Network of Biosphere Reserves. [Online]. [Accessed 26th February 2018]. Available from: <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/withdrawal-of-biosphere-reserves/>.

UNESCO. 2017b. Fundamental Features of a UNESCO Global Geopark. [Online]. [Accessed 29th March 2018]. Available from: <http://www.unesco.org/new/en/natural-sciences/environment/earth-sciences/unesco-global-geoparks/fundamental-features/>.

UNESCO. 2018. UNESCO Global Geoparks. [Online]. [Accessed 16th January 2018]. Available from: <http://www.unesco.org/new/en/natural-sciences/environment/earth-sciences/unesco-global-geoparks/>.

UNESCO World Heritage Committee. 2015. Rules of Procedure. [Online]. [Accessed 7th December 2017]. Available from: <http://whc.unesco.org/en/committee/>.

UNESCO World Heritage Convention. 2017. The World Heritage Committee. [Online]. [Accessed 7th December 2017]. Available from: <http://whc.unesco.org/en/committee/>.

UNESCO World Heritage Convention. 2017a. World Heritage List. [Online]. [Accessed 7th December 2017]. Available from: <http://whc.unesco.org/en/list/>.

Urde, M. 1999. Brand Orientation: A Mindset for Building Brands into Strategic Resources. *European Journal of Marketing*, 37(7/8), pp.1017-1040.

Vatn, A. 2005. *Institutions and the Environment*. Cheltenham: Edward Elgar.

van Doeveren, V. 2011. Rethinking Good Governance. *Public Integrity*, 13(40), pp.301-318.

van Zeijl-Rozeme, A., Corvers, R., Kemp, R. and Martens, P. 2008. Governance for Sustainable Development: A Framework. *Sustainable Development*, 16(6), pp.410-421.

Walker, B., Holling, C. S., Carpenter, S. R. and Kinzig, A. 2004. Resilience, Adaptability and Transformability in Social-ecological Systems. *Ecology and Society*, 9(2), Article 5. [Online]. [Accessed 12th December 2017]. Available from: <https://www.ecologyandsociety.org/vol9/iss2/art5/>.

Williams, E. M. and Ellefson, P. V. 1996. *Natural Resources Partnerships: Factors Leading to Cooperative Success in the Management of Landscape Level Ecosystems Involving Mixed Ownership*. Staff Paper Series Number 113. Minnesota: University of Minnesota Department of Forest Resources.

World Parks Congress (WPC). 2003. Private Protected Area Action Plan. In: Langholz, J. A. and Krug, W. 2004. *New Forms of Biodiversity Governance: Non-state Actors and the Private Protected Area Action Plan*. *Journal of International Wildlife Law and Policy*, 7, pp.9-29. Appendices, pp.23-29.

Wyborn, C. and Bixler, R. P. 2013. Collaboration and nested Environmental Governance: Scale Dependency, Scale Framing, and Cross-scale Interactions in Collaborative Conservation. *Journal of Environmental Management*, 123, pp.58-67.

Young, J.C., Jordan, A., Searle, K. R., Butler, A., Chapman, D. S., Simmons, P. and Watt, A. D. 2013. Does Stakeholder Involvement Really Benefit Biodiversity Conservation? *Biological Conservation*, 158, pp.359-370.

Young, J. C., Watt, A., Jordan, A. and Simmons, P. 2014. Conservation Conflicts in Natura 2000 Protected Areas. In: Redpath, S. M., Gutierrez, R. J., Wood, K. A. and Young, J. C. eds. *Conflicts in Conservation: Navigating Towards Solutions*. Cambridge: Cambridge University Press, pp.190-192.

7. Appendix: SHAPE Governance Survey

This survey is part of the ‘Sustainable Heritage Areas: Partnerships for Ecotourism’ (SHAPE) project, funded by the EU’s Northern Periphery and Arctic (NPA) Programme (see <http://shape.interreg-npa.eu/>).

SHAPE aims to help communities in Northern Europe and sub-Arctic Canada capitalize on their natural and cultural heritage in order to develop sustainable tourism activities. The project is based on Sustainable Heritage Areas (SHAs, e.g. Biosphere Reserves, Regional Parks) pooling their resources, sharing their knowledge and searching for common solutions in order to work more efficiently and develop innovative products and stronger brands.

This survey is being managed by the SHAPE team at Perth College, University of the Highlands and Islands (UHI), Scotland. It is being distributed to all Biosphere Reserves and Regional Parks in the NPA/NordMAB region, and will contribute to a comparative analysis of models of governance in the various types of SHAs in the NPA region. In this context, governance refers to the structures and processes that determine how power is exerted, how decisions are taken and how stakeholders are included.

The results of the survey will be included in a web-based toolkit designed for use not only in the involved SHAs, but beyond in the NPA region and other parts of Europe. Our aim is that this will help aspiring SHAs select the most suitable model for their circumstances.

We would be grateful if you could contribute to the project by answering the following questions about governance in your Biosphere Reserve/Regional Park (referred to below as ‘your area’).

Completing this questionnaire is voluntary. You will be asked to provide some contact details but you are free not to complete these. Your answers will be sent to a link at onlinesurveys.ac.uk where data will be stored in a password-protected electronic format. Survey data is stored on servers located at the University of Bristol in the United Kingdom. All survey responses and communications are collected and sent over encrypted connections. Information about the BOS Security can be found at <https://www.onlinesurveys.ac.uk/help-support/bos-security/>. If you have questions about any aspect of the study, please contact Laura Ferguson at laura.ferguson.perth@uhi.ac.uk.

Clicking the “Next” button below indicates your consent to participate in this questionnaire according to the terms explained above.

Details

1. Your Name:
2. Position / Job Title:
3. Email:
4. Name of Area:
5. Country:
6. Year that your area was formally established:

Establishment

7. What were the aims of establishing your area?
8. Please describe how the area was established, how long this took and how stakeholders were involved.
9. What resources (money, people, etc.) were used to establish the area?
10. What type of stakeholders were involved? Please provide details below.
 - a. Local Government
 - b. Government Agencies
 - c. NGOs
 - d. Businesses
 - e. Community Groups
 - f. Others

Governance

11. Please describe the governance structure of your area. If there is a diagram available on a website, please provide a link to it.
12. How would you describe the governance structure?
 - Top-down Governance
 - Bottom-up Governance
 - OtherIf you selected Other, please specify:
13. Does the governance structure have a formal legal basis?
 - Yes
 - No
 - a. If the governance structure has a formal legal basis, what is the relevant legislation?
14. How was this governance structure established and who were the key actors?
15. What type of stakeholders are involved and how? Please provide details below.
 - a. Local Government
 - b. Government Agencies
 - c. NGOs
 - d. Businesses
 - e. Community Groups
 - f. Others

16. Please rate the success of participatory processes for engaging stakeholders in the governance of your area, where 1 is not at all successful and 5 is highly successful.

	1	2	3	4	5
Success of participatory processes					

Please provide details

17. Please can you give examples of good practice in the governance of your area?

18. What have been the main challenges for governance of your area?

19. In what ways could your governance model be improved?

Management

20. What are the sources of funding/support for your area? Please provide details below.

- a. Local Government
- b. National Government
- c. Government Agencies
- d. EU
- e. Other

21. How many people are employed in the organisation responsible for your area?

22. What means have you used to establish the local/regional identity of your area?

- Logo / Brand
- Newsletter
- Website
- Charter
- Community Consultation or Events
- Media (e.g. Press, Television, Radio)
- Other

If you selected Other, please specify:

23. How well is your area known, on a scale of 1 (not known) to 5 (well known) by each of the following groups?

	1	2	3	4	5
Local Citizens					
Local Businesses					
Visitors					

Correspondence

24. Would you like to receive the results of this survey?

- Yes
- No

25. Would you like to subscribe to the SHAPE newsletter?

- Yes
- No

Thank you!

Thank you for taking the time to participate in this survey. If you have selected to receive the results, they will be distributed when all of the responses have been gathered and analysed.