ROUTE MAP towards developing a Biosphere for the Fens Report for Wildlife Trust BCN & Fens Biosphere Working Group





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ROUTE MAP towards developing a Biosphere for the Fens Report for Wildlife Trust BCN & Fens Biosphere Working Group

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- Part of and feeding into: Heritage Lottery funded project RH-16-07016, 'Developing the concept of Biosphere Reserve status for the Cambridgeshire Fens'





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Executive Summary

This report has been written by Cambridgeshire ACRE, on behalf of the Wildlife Trust BCN (WTBCN). It delivers a key aim of the WTBCN's Heritage Lottery Fund Resilient Heritage grant-funded project, which aims to create a coherent RouteMap for discussion with the UNESCO UK Man and the Biosphere Committee (UK MAB). The delivery of this work has been carried out in close cooperation with the Fens Biosphere Working Group.

The report contains three key sections:

- A comparative analysis of existing statutory and non-statutory alternatives to Biosphere Reserve Status;
- A written appraisal, setting out benefits/ implications/ challenges/ opportunities/ risks of Biosphere Reserve Status, including any lessons learned from interviews held with other existing and candidate UK Biosphere Reserves; and
- A RouteMap, setting out:
- a) What is required to achieve the Biosphere Reserve designation;
- b) How to satisfy and deliver those requirements;
- c) A clear timescale for the delivery of the Routemap, towards submission of a nomination application to UNESCO; and
- d) Potential funding routes to support the submission of an application to UNESCO.

This report starts by setting out the background to this project work (section 1); this is followed by an explanation of what Biospheres are, how they function and what the criteria and processes are for UNESCO Biosphere nomination (sections 2 and 3).

Section 4 provides an overview of the benefits a Biosphere could bring, and why the Fens would make a good candidate for Biosphere status. It is argued that the Fens' unique and significant set of natural and cultural heritage assets, its cutting-edge R&D industry – with strong links between academic and agri-tech worlds -, combined with the need to deliver the many major developments and growth projected for the area in a sustainable way, mean that the Fens would be an ideal candidate for Biosphere status.

Section 5 compares the designation with other, statutory and non-statutory options. It concludes that a 'Biosphere is best for Fens', as it seems to be the best designation solution for the partners' wishes for sustainable development within the Fens basin, having distinct advantages over all of the alternative designations. In particular, Biospheres are the world's only globally recognised designation for demonstrating excellence in sustainable development which would bring potential international recognition for sustainable development 'best practice' and other benefits to the area.

Research in what other Biosphere reserves, in the UK and elsewhere, are doing (section 6) is followed, in section 7, by a description of interviews held with five different UK current, past, and candidate BRs. That section ends with an understanding of the lessons learned around best practice, potential benefits, risks and challenges, as well as opportunities as the other UK BRs have worded and which seem to have direct relevance for further Biosphere development for the Fens.

The information gained through research and discussions culminates in section 8. That section sets out a Routemap towards UNESCO Biosphere nomination, which is a circa two-year process. The section focuses on the 'key 12 challenges' identified, and provides information to what needs to be considered, with recommendations for what to do to overcome each of these challenges, to have a successful nomination process and a successful start to the implementation of a Biosphere post-designation.

In this, it is argued that key challenges are likely to be around the more practical elements of developing a suitable governance model and UNESCO requirements around zonation and Biosphere boundary decisions. But also on critical items such as developing a clear, overarching vision for the area, combined with decisions to be made around the focus for 'sustainable development' and what a Biosphere Management Plan and an associated implementation 'package' should look like. Identifying and engaging stakeholders is also seen as a key challenge to be considered, as well as the associated development of a Communications Plan. Finally, it is argued that working towards a viable, sustainable funding model is going to be vital (and potentially the most challenging aspect) and needs to be looked at from the start of the development towards nomination, to ensure successful Biosphere implementation post-designation.

The final sections, sections 9 and 10 provide a summary of the key steps to be taken next, highlighting also key points around costs and other resource implications, timeline and funding options, were the Fens Biosphere Working Group partners to decide to continue with this work.

It is hoped that the detailed information provided in this report provides the Fenland Biosphere Working Group and WTBCN with a balanced and more realistic understanding of the possibilities, opportunities but also the key challenges and resources input needed, if deciding to go ahead towards UNESCO Biosphere nomination.

Acknowledgements

Compiling this report has been greatly assisted by the numerous useful comments, suggestions and ideas generated by a great number of the members of the Fens Biosphere Working Group, over several meetings, workshops and discussion sessions spread out over the period late 2017 – summer 2018. In addition, a very good amount of feedback and further ideas has been received following consultation on a draft version of this report, and through multiple email and other conversations.

A big thank you to the managers of Biosphere reserves, current, past and future who gave their time generously for telephone interviews and related correspondence. These are Rich Howorth (Biosphere Programme Manager, The Living Coast Biosphere); Estelle Hook (Manager of the Norfolk Coast Partnership); Natasha Hutchison (Project Officer, Wester Ross Biosphere); Andy Bell (UNESCO World Biosphere Reserve Co-ordinator, North Devon Biosphere); and Joel Bateman (AONB Communications and Projects Officer, Isle of Wight AONB).

Thank you also for the generous time and input given by Prof. Martin Price (Perth College; Vice-Chair of the UK MAB Committee; Chair holder, UNESCO Chair in Sustainable Mountain Development; Director, Centre for Mountain Studies UHI.), who has been supportive for the FBWG' ambitions, acting as the project's Resilient Heritage Project Mentor.

Thanks in particular to Kate Carver and the Wildlife Trust for skilfully coordinating the Heritage Lottery funded project through which this consultancy work was made possible, and to Catherine Weightman as Chair of the Fens Biosphere Working Group, coordinating a lot of the partners' input.

Thanks to all for your supportive input in the development of this Route Map report.

1. Introduction

This section sets out the background to this report: how this came about, who this is for and what it is trying to achieve.

1.1 Biosphere idea instigated through WTBCN/ Great Fen's Living Landscape ambitions

"Working in partnerships, working with local communities, and working with all aspects of civil society (including the business and academic sectors) achieves more than the simple sum of the parts"

One of the key conclusions from 8-year HLF-funded Great Fen project; Wildlife Trust BCN application to HLF, September 2017.

The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire (WTBCN) is a Registered Charity. The organisation focuses on natural heritage (including habitats, species and geology) and cultural heritage (cultural traditions, such as stories, crafts; histories of places and events; natural and designed landscapes; people's memories and experiences). It does this through its *Living Landscapes* programme, the organisation's prime landscape-scale conservation focus.

The Living Landscape through which this project was initiated is the Great Fen, a 3,700 ha wetland reserve located in Cambridgeshire. The Great Fen Project Partners (comprising Environment Agency, Huntingdonshire District Council, Middle Level Commissioners, Natural England, and WTBCN) have been working together since 2001 to deliver the 50-year ambitions for the Great Fen. The Great Fen Project Manager, Kate Carver, has been the project's driving force for many years, supported in this by the Great Fen's five Project Partners. Between 2008 and 2017 - largely through a substantial Heritage Lottery Fund (HLF)-funded project 'The Purchase and Restoration of the Holmewood Estate 2008 -2017', transformational change has been achieved for the landscape, the wildlife and local communities.

Long before the HLF funding for the Great Fen project came to an end in late 2017, WTBCN started exploring ways to secure long-term sustainability for their achievements, defining the future strategic direction of the Great Fen and managing the challenges associated with changing external factors. In terms of opportunities, one of the prime lessons the Great Fen has learned over the project's 8 years, is that working in partnerships, working with local communities, and working with all aspects of civil society (including the business and academic sectors) achieves more than the simple sum of the parts; moreover, that

working with disparate partners embracing wide constituencies can create imaginative and innovative solutions. In addition to this, a consensus had formed that organisations in the Fens need to work together, to explore options for delivering step change and how this can be delivered across the wider landscape of the Cambridgeshire Fens. The idea of a UNESCO Biosphere designation as a potential, logical next step for the Great Fen and the wider Fens area came out of this thinking.1

1.2 Formation of the Fens Biosphere Working Group

"Conceptually the Biosphere Reserve approach is the direct international equivalent of the Living Landscape" Fens Biosphere Working Group's conclusion when initially exploring Biosphere designation; Wildlife Trust BCN application to HLF, September 2017

In January 2015, initially from the point of view of considering enhanced protection through additional designation, but with the broader focus outlined above in mind, the Great Fen Project Partners began to look at potential UK and worldwide designations, one of which was the UNESCO Biosphere Reserve.

A small working group, the Biosphere Working Group (BWG) was set up to report on the opportunities Biosphere Reserve status might offer. They soon concluded that Biosphere Reserve status shared many of the same strategic aims as the Great Fen (as stated in the Great Fen's 2010 Masterplan) and that conceptually the Biosphere Reserve approach is the direct international equivalent of the Living Landscape: It was felt that the Great Fen's overarching aim of achieving integrated benefits through partnership, working with local communities and with wider civil society is very much in line with the Biosphere Reserve objective of sustainable development fostered by local communities.

¹ The idea of a Biosphere for the Fens is, however, not entirely new. Historically (in 1970s), a group in NCC considered Biosphere designations for estuaries around Britain including The Wash and its hinterland - though these were never put forward to UNESCO. More recently, a group looking at a potential AONB designation for the Ouse Valley and Washes briefly considered Biosphere as an alternative, but this didn't fit the linear landscape and its present designations. In addition, similar ideas have previously also been discussed in the Fens for the Future Partnership and at the Cambridge Conservation Forum/CCI, all of which are still actively providing input in the current Biosphere working Group's work.

Further advice was initially sought from Professor Martin Price, the then Chair of the UNESCO UK Man and Biosphere Committee. He advised that a larger geographical area would be necessary to deliver Biosphere Reserve zoning requirements and sustainable development ambitions. This chimed with the Great Fen Project Partner's view that Biosphere Reserve status could offer international recognition to its own ambitious vision for the sustainable future of fenland biodiversity and culture; could raise awareness and support for a broader range of projects across the Cambridgeshire Fens; and open new opportunities for EU, other European and international funding streams, increasing prospects for long-term sustainability for the wider area.

Potential partners were therefore approached, initially those with areas of high conservation value in their safekeeping, i.e. the RSPB, National Trust, Wildfowl and Wetlands Trust and the Nene Park Trust. The partnership was further broadened to move beyond ecological benefits to consider broader socioeconomic benefits: other organizations and groups were invited to further exploratory meetings held throughout 2016 and 2017: Cambridge Conservation Forum, Cambridge Conservation Initiative, Peterborough City Council, Peterborough Environment City Trust, National Farmers' Union, Country Land and Business Association, Cambridgeshire County Council and Cambridgeshire ACRE. In 2017 this group expanded further by approaching academic institutions, local businesses (e.g. via the Local Economic Partnership) and Historic England.

The initial working group has since been superseded and broadened to an even larger group of participants representing a wide range of organisations and interests active in the Cambridgeshire (and surrounding) Fens. Since early 2017, the group is now more commonly referred to as 'Fens Biosphere Working Group' (FBWG). At this moment this is not a formal partnership but contains representatives from various sectors of civil society including conservation bodies, academia, landowners and businesses, and is actively growing in membership. The FBWG partnership is made of the following organisations that have been providing input into the work to date:

Key FBWG organisations	Further regular input received (past and present input) from:
Wildlife Trust BCN	Fens for the Future Partnership
Natural England	Historic England
Environment Agency	Natural Cambridgeshire, Local Nature Partnership
RSPB	Cambridge Geological Society, Geosites team
National Trust	Diocese of Ely
WWT	Ramsey Town Council
NFU	Middle Level Commissioners
Country Land and Business Association	Nene Park Trust
Cambridge Conservation Forum	Woodland Trust
Anglia Ruskin University	PECT
Cambridgeshire County Council	Peterborough City Council
Cambridgeshire ACRE	Huntingdonshire District Council
Several Independents	Lincolnshire Wildlife Trust

1.3 Heritage Lottery funding obtained to explore feasibility of UNESCO Biosphere for Fens area

"To create a coherent Routemap for discussion with the UNESCO UK Man and the Biosphere Committee (UK MAB)"

Chief purpose of HLF Resilient Heritage Fund grant funding; Wildlife Trust BCN application to HLF, September 2017.

Following discussions at Fens Biosphere Working Group meetings, and input from a range of partners in the process of developing an Expression of Interest and subsequently a full application, the Wildlife Trust BCN submitted an application to the Heritage Lottery Fund for their <£10K type of Resilient Heritage Fund grant scheme in September 2017. This was subsequently granted, as project RH-16-07016, under the project title of 'Developing the concept of Biosphere Reserve status for the Cambridgeshire Fens'.

A key aim of the HLF's Resilient Heritage funding is for the Wildlife Trust BCN, overseen by the Great Fen Project Partners and through delivery by the Fens Biosphere Working Group and appointed consultants, to "create a coherent Routemap for discussion with the UNESCO UK Man and the Biosphere

Committee (UK MAB)". The chief aim of this work is to be able to explore and develop the Fen Biosphere Reserve concept further, - if considered feasible – working towards nomination stage.

ROUTEMAP development: Key aims for this key output of the HLF-funded project (as defined in the WTBCN application to the HLF, Sep 2017)

The Routemap aims to;

- Identify what is required to achieve the Biosphere Reserve designation;
- Show how to satisfy and deliver those requirements (e.g. consultations, partnerships, governance structures, actions, mapping etc.);
- Set out a clear timescale for the delivery of the Routemap, potentially culminating in the submission of an application to UNESCO by 2020; and
- Identify potential funding routes to support the submission of an application for Biosphere nomination to UNESCO.

1.4 Outcomes of overarching HLF project

In the HLF application (Sep 2017), the outcomes the project is aiming to achieve are summarised as such:

OUTCOMES expected from delivering HLF project (as defined in the WTBCN's application to the HLF, September 2017)

- o Increased understanding of Biosphere Reserves to fully understand benefits/implications/challenges/opportunities;
- o Guidance and learning from Biosphere Community and mentors;
- o New skills to help us manage the natural and cultural heritage in the future;
- o Better informed pool of potential partners/stakeholders;
- New/stronger partnerships and relationships developed through Biosphere scoping;
- o Clear sense of shared opportunity and of further actions to develop Fen Biosphere concept;
- o Alternative ideas for governance of the Cambridgeshire Fens such as strengthening the Fens for the Future partnership.

At the end of the project, WTBCN expects to have all the information necessary to determine whether Biosphere Reserve Status is a useful and viable means of securing improved resilience and sustainability and if a consensus of stakeholders, individuals and communities can be formed to support an application to UNESCO.

If this has been demonstrated, then the Fens Biosphere Working Group partners would expect to begin a process to identify and secure funding to sustain a 2-year period in which an application would be created, for endorsement by all relevant stakeholders in the region, the UK Man and Biosphere Committee, and the UK Government, and submitted to UNESCO. This may be through a second application to the Heritage Lottery Fund's Resilient Heritage Fund for a much more substantial grant.

1.5 Delivery of the HLF project: how this is structured

WTBCN identified some challenges around capacity, skills and governance which had also prompted the application to the HLF. With insufficient capacity at the time within the Wildlife Trust to fully scope the Biosphere some additional capacity was built in the application for attracting external support for two pieces of consultancy work. One of these is around the delivery of a skills training workshop on communication and consensus building (which was facilitated by consultants Clare Hickey & Jeanette Ariano, on 11 June 2018). The other was around the creation of the Routemap, the focus of this report.

The delivery of this project is carried out by WTBCN in close cooperation with the Fens Biosphere Working Group and appropriate input from consultants. The HLF Approved Purposes for this project are listed in the table below, also showing who is the main responsible for each of the 'tasks':

Approved Purpose for HLF project	Key input from
Working with the Cambridgeshire Fens Biosphere Working Group to create a coherent RouteMap to identify what is required to achieve Biosphere Reserve designation	FBWG & This consultancy work
Identify and engage a minimum of 15 key stakeholders to explore the concept with the purpose of securing expressions of interest	FBWG
Identify potential funding routes to support the submission of an application to UNESCO and an identified lead to take the application further	This consultancy work
Appoint consultant(s) to act as researcher and mentor	WTBCN
Deliver training to staff and volunteers on communication and consensus building	External consultancy work 2 (delivered by Jeanette Ariano and Claire Hickey)
Deliver the following outputs: Indicative mapping of geographical and demographical potential	This consultancy work; with FBWG (for e.g. mapping) & Natural England mapping resource
 Comparative analysis of existing statutory and non-statutory alternatives 	
Appraisal report of benefits/challenges/risks/ opportunities	
Evaluate project and provide HLF with Evaluation report at project completion	WTBCN

1.6 Consultancy work by Cambridgeshire ACRE - developing a Routemap

Following the circulation of a brief for the Routemap development, the 'Cambridgeshire Fens Biosphere Scoping Exercise – Researcher Consultancy Services' Cambridgeshire ACRE provided a proposal for delivery of this work to WTBCN in November 2017. Following discussions with WTBCN and at the FBWG Cambridgeshire ACRE's updated proposal (dated 6 Feb 2018) was granted shortly thereafter, for delivery from February until June 2018.

The work plan to be delivered by Cambridgeshire ACRE has been agreed to be:

Objective	Output	Report section
	Researched and written comparative analysis of existing statutory and non - statutory alternatives to Biosphere Reserve Status	Section 5 Appendix 2
challenges, opportunities and risks of Biosphere Reserve Status	Researched and written appraisal, setting out benefits/ implications/ challenges/ opportunities/ risks of Biosphere Reserve Status including lessons learned from other existing and candidate UK Biosphere Reserves This includes; Understanding key characteristics and benefits stemming from UNESCO Biosphere Reserves. A review of selected recent applications to UNESCO. Lessons learned from existing and candidate UK Biosphere Reserves, relevant to the Cambridgeshire Fens area. Compile references to relevant reports and good case studies.	Sections 6 and 7 Appendices 3, 4 & 5
Biosphere Reserve application	This report, setting out Routemap, to - a) Identify what is required to achieve the Biosphere Reserve designation; - b) How to satisfy and deliver those requirements (e.g. consultations, partnerships, governance structures, actions, mapping etc.); - c) Set out a clear timescale for the delivery of the Routemap, potentially culminating in the submission of an application to UNESCO by 2020; and - d) Identify potential funding routes to support the submission of an application to UNESCO by 2020 This includes: O Proposal for developing governance structures and organisational arrangements for developing the application. O Advice on stakeholder involvement and management of relevant	Section 8 Appendix 1

	 stakeholders and local communities. Identification of key requirements for the application. Advice on best practice for identifying and developing: area size; biological significance; sustainable development programme; and Management Plan. Recommendations on actions towards submission of an application to UNESCO, including key steps and timeline towards making an application. Advice on resources necessary to make a future UNESCO Biosphere Reserve application. 	
4. Attendance at six meetings of the Fens Biosphere Working Group (one a month).	Attendance at various meetings and workshops between February and June 2018. This includes: Presentation given and discussion facilitated at 2 March 2018 FBWG meeting (following draft output objective 1) Presentation given and discussions facilitated at 12 June 2018 FBWG meeting (Following draft output objective 2) Presentation given, summative workshop and discussions facilitated at 28 June 2018 FBWG meeting (Following draft output objective 3)	N/A

This report brings together all evidence and information gained to date. The resulting 'Route Map' is intended as a working document and may well evolve further over time with the Fens Biosphere Working Group taking the recommendations forward.

2 About UNESCO Biosphere Reserves

There are currently 669 biosphere reserves in 120 countries

A UNESCO Biosphere Reserve is an area designated by the Man and the Biosphere (MAB) Programme of the United Nations Educational, Scientific and Cultural Organisation (UNESCO) as a member of the World Network of Biosphere Reserves (WNBR). The WNBR was launched in the early 1970s, and there are currently 669 biosphere reserves in 120 countries. In the UK, Biosphere Reserves are commonly referred to as 'Biospheres', particularly given potential negative connotations of the world 'Reserve'.

Oversight of Biospheres is through the International Coordinating Council of the MAB Programme. The UK Man and the Biosphere (UK MAB) Committee oversees UNESCO's MAB Programme in the UK. There are currently six Biospheres in the UK.



Find out more - about UNESCO BIOSPHERE RESERVES (see also Appendix 1):

- http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/
- http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/world-network-wnbr/
- http://www.unesco-mab.org.uk/
- http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/images/MAB_leaflet_2016_2017_en.pdf

2.1 What makes an area a Biosphere Reserve?

"It is the world's only internationally recognised accolade for demonstrating excellence in sustainable development practice"

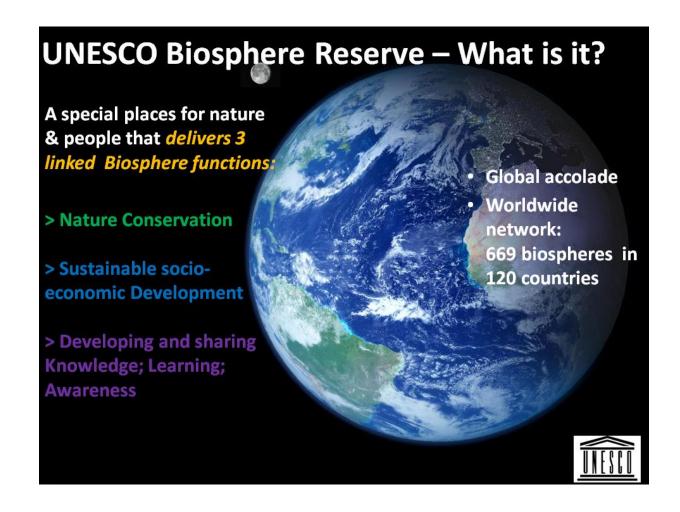
A UNESCO Biosphere Reserve is a "site of excellence to explore and demonstrate approaches to conservation and sustainable development on a regional scale". Biosphere Reserves are regions showcasing models for sustainable development; the designation is the world's only globally-recognised accolade for demonstrating excellence in sustainable development.

Biosphere reserves test approaches that aim to reconcile biodiversity conservation with sustainable economic and community development and promotion of cultural values. Being a member of this global network provides unique opportunities for exchanges of experience, collaborative research and other partnerships.

A Biosphere is *not* a reserve; not a "protected area"; as such, it might be useful to look at Biospheres as a prestigious accolade rather than a designation. It may, thus, come as no surprise that in countries around the world without strong legislative protection for the environment, biodiversity and landscapes, Biosphere Reserves have increasingly become a popular alternative.

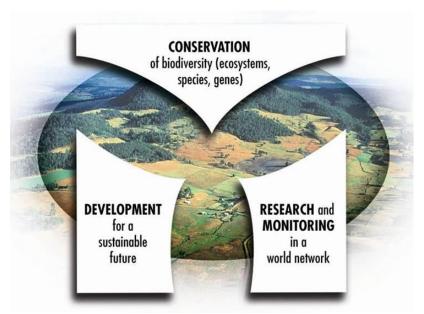
KEY INGREDIENTS which make areas suitable to become a Biosphere Reserve:

- An area with a strong identity
- An area globally recognised for:
 - Exceptional environment and biodiversity
 - Significant cultural heritage
 - Commitment of a wide range of stakeholders working together towards a sustainable future
- o An area demonstrating excellence in sustainable development, for nature and for people & local communities
- An area demonstrating good examples of using and preserving its resources
- o It is **neither restrictive nor exclusive** as to what happens in the Biosphere apart from management within the legally designated core area(s)



2.2 What does a Biosphere Reserve focus on?

Sustainable Development, the core focus for a Biosphere Reserve, is achieved by different sectors working together to deliver the three core Biosphere functions. Each Biosphere Reserve should fulfil these **three functions**, which should be interlinked and mutually reinforcing:



- **Conservation** Preserving genetic variation, species, ecosystems and landscapes through nature conservation.
- Development Fostering sustainable economic and human development through Sustainable Socio-economic Development. This also includes developing people's understanding of the issues/benefits/needs.
- Logistics/ Research & Monitoring Developing and sharing Knowledge, Learning & Awareness raising, by supporting research, monitoring, education and information exchange related to local, national and global issues of conservation and development. Research and monitoring are generally viewed as underpinning the other two functions.

Image: Copyright UNESCO

Biosphere reserves, in addition, each have three interrelated zones that aim to fulfil three complementary and mutually reinforcing functions:

Biosphere - Zoning



Core areas – devoted to nature conservation and legally protected



Buffer zones – only activities compatible with conservation objectives of core areas - must have defined boundaries



Transition areas – sustainable development here – where most people live and work – includes the cities and the market towns

Images, copyright: Top, National Trust; middle, WTBCN.

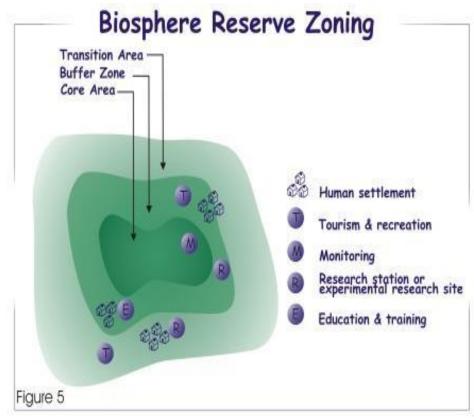


Image: Copyright UNESCO

- The core area(s): UNESCO requires "a legally constituted core area or areas devoted to long term protection, according to the conservation objectives of the biosphere reserve, and of sufficient size to meet these objectives".
 The core area(s) comprise protected sites that contribute to the conservation of nature, landscapes, ecosystems, species and genetic variation.
- The buffer zone(s): UNESCO requires "a buffer zone or zones clearly identified and surrounding or contiguous to the core area or areas, where only activities compatible with the conservation objectives can take place...".

The buffer zone has clearly-defined boundaries around or adjoining the core area(s), supporting the multiple functions of a biosphere reserve while helping to ensure the protection and natural evolution of the core area(s). It is used for activities compatible with sound ecological practices that can reinforce scientific research, monitoring, training and education.

The transition area: UNESCO requires "an outer transition area where sustainable resource management practices are promoted and developed".
 The transition area is the part of the reserve where the greatest activity is allowed, promoting and developing economic development that is socio-culturally and ecologically sustainable. The transition area tends to be where most of the people live.

3 Requirements to achieve Biosphere reserve status

3.1 The process: How to achieve Biosphere reserve designation status

Biosphere Reserves are selected via an international application process, using strict qualifying criteria.

The UK MAB Committee is able to advise at an early stage in the development of an application if it is likely to get their support, and what steps are required to develop an application that is likely to be successful. When the application process is well underway, the Committee can give the area formal Biosphere candidate status. The application is then further developed by the partner organisations and local community involved, with support from the Committee. When complete, it has to be endorsed by a wide range of stakeholders in the area.

The UK MAB Committee must then approve the application before it can be passed to the UK Government for scrutiny and endorsement.

The UK Government then forwards the nomination to UNESCO (with an annual deadline of 30 September). It is reviewed by the Secretariat of the MAB Programme and then evaluated by the international Advisory Committee on Biosphere Reserves. The recommendations of this Committee are then considered by the International Coordinating Council of the MAB Programme, which makes the final decision regarding designation.

Scoping

- •Define initial area around core area(s).
- •Develop partnership, building on existing structures; identify stakeholders; and start getting local community support & input.
- •Initial consultation with the UK MAB Committee will inform about the area's suitability and ideas for zonation.

Development

- Develop sustainable development policies/plan(s) for area.
- Develop other critical elements including: a good management strategy/plan; a good organisational structure that is representative and can deliver the management plan for the biosphere reserve; and compile crucial evidence includes good zonation of the areas for the biosphere reserve.
- Public consultations & stakeholder engagement
- Throughout this development phase, UK MAB will give support on how the project takes shape.

Nomination Form

- Fill in nomination form ; and supply all supplementary documentation needed.
- Ultimately, the application document will need the endorsement of the relevant stakeholders in the area, the UK MAB Committee, the approval of the Minister for Defra or the Minister for environment in the devolved administration, before being sent by Defra to the UK Permanent Delegation to UNESCO in Paris.

Approval process

- UNESCO then invokes its own review and approvals procedures and makes the final decision. This includes review by a special UNESCO advisory committee of experts and then by the International Co-ordinating Council for the MAB Programme (MAB ICC).
- The approvals process in UNESCO is undertaken only once a year.

Timeline: Nomination and Periodic Review Process

30 September By 30 November of each year of each year February of each year Technical review of Deadline for forms received by the Meeting of the Member States to Secretariat and Advisory Committee submit nomination sending of letters for at UNESCO and periodic review missing information to Headquarters forms the Member States By 30 May By 30 March MAB ICC meeting of each year of each year Final decision on Member States may The Secretariat sends periodic review address the the Advisory reports and biosphere recommendation and Committee reserves by the MAB send additional International corecommendations to information to the ordinating Council. the Member States Secretariat.

The approvals process in UNESCO is undertaken only once a year, so deadlines for submissions are important!

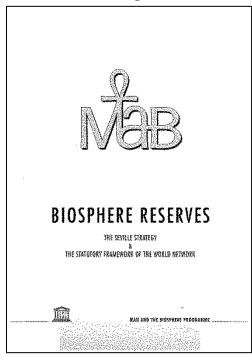
Timeline, for Nomination (as well as for the 10-yearly Periodic Review Process).

From: http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/designation-process/timeline-nomination-and-periodic-review-process/

Note that there is an extensive review process before final submission as part of the application process. The UNESCO international Advisory Committee reviews the application, after which they might ask questions of the applicant which the applicant needs to answer, before a final decision is made.

3.2 Key criteria for designation

The criteria for designation are defined in the Statutory Framework of the World Network of Biosphere Reserves (Seville document), 1995 under Article 4



The document is available from http://unesdoc.unesco.org/images/0010/001038/103849Eb.pdf

The Statutory Framework sets out key criteria for an area to be qualified for designation as a biosphere reserve; **the following areas need to be addressed in detail:**

- > Fulfilment of the three functions of Biosphere Reserves;
- > The three types of zones: core area(s); buffer zone(s); and transition area;
- > Stakeholder involvement;
- > Management policy or plan.

CRITERIA for an area to be qualified for designation as a biosphere reserve. From: Statutory Framework of the World Network of Biosphere Reserves (1995, Article 4). Each line corresponds to a key question in PART I of the Nomination form:

To qualify for designation as a Biosphere Reserve, an area should:

On: Biodiversity

- > Encompass a mosaic of ecological systemsincluding a "gradation of human interventions" (levels of human influence)
- ➤ Be of significance for biological diversity conservation

On: Sustainable development

> Provide an opportunity to explore & demonstrate approaches to sustainable development on a regional scale

On: Zoning

- > Be of an appropriate size to serve the three functions of biosphere reserves (see Article 3)
- > Include these functions, through appropriate zoning

On: Governance, Logistic support & Mechanisms for implementation

- Provide for organisational arrangements for involvement & participation of range of stakeholders ('inter alia public authorities, local communities and private interests') in the design & carrying out the functions of a BR
- > Provide for mechanisms to manage human use & activities in buffer zone(s)
- Provide for management policy or plan for area as BR
- > Provide for a designated authority/mechanism to implement policy or plan
- Provide for programmes for research, monitoring, education & training

3.3 The nomination form

A **nomination form**, downloadable from the UNESCO website, will take one through a tick list of the criteria. The application form is technical, requires a lot of information and requires evidence of the community and other partners working together to obtain the designation. There will need to be a lot of documented public participation in the planning of the biosphere reserve.

The key questions to be answered in **PART I** of the form are directly linked to each of the points highlighted in the above table.

In addition to this, for **PART II** of the form, more detailed information is needed regarding (see also image below):

- Land use; biophysical characteristics; biodiversity; human population information; and ecosystem services;
- A range of more detailed questions regarding plans for conservation; development; and logistic functions of the Biosphere;
- A range of more detailed questions regarding plans for governance, Biosphere reserve management and coordination.

	PART I: SUMMARY	Summary headings of information to be compiled for nomination form , in Part I and Part II.
1. 2. 3. 4. 5.	Proposed Name of the Biosphere Reserve Name of the Country Fulfillment of the Three Functions of Biosphere Reserves Criteria for Designation as a Biosphere Reserve Endorsements	From: http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/biosphere_reserve_nomin ation_form_2013_en.pdf
	PART II: DESCRIPTION	
6.	Location	
7.	Area	
8.	Biogeographical Region	
9.	Land Use	
10.	Human Population of the Proposed Biosphere Reserve 10	
11.	Biophysical Characteristics	
12.	Ecosystem Services	
13.	Main Objectives for the Biosphere Reserve's Designation	
14.	ConservationFunction	
15.	Development Function	
16.	Logistic Support Function	
17.	Governance, Biosphere Reserve Management and Coordinati	
18.	Special Designation	
19.	Supporting Documents	
20.	Addresses	

In addition to the nomination form, the following **supporting documents** are also requested:

Supporting document to accompany Nomination Form	Notes – as per description in UNESCO nomination form
1) Location and zonation map with coordinates	Provide the biosphere reserve's standard geographical coordinates (all projected under WGS 84). Provide a map on a topographic layer of the precise location and delimitation of the three zones of the biosphere reserve (Map(s) shall be provided in both paper and electronic copies). Shapefiles (also in WGS 84 projection system) used to produce the map must also be attached to the electronic copy of the form. If applicable, also provide a link to access this map on the internet (e.g. Google map, website).
(2) Vegetation map or land cover map	A vegetation map or land cover map showing the principal habitats and land cover types of the proposed biosphere reserve should be provided, if available.
(3) List of legal documents (if possible with English, French or Spanish	List the principal legal documents authorizing the establishment and
synthesis of its contents and a translation of its most relevant provisions)	governing use and management of the proposed biosphere reserve and any
	administrative area(s) they contain. Provide a copy of these documents.
(4) List of land use and management/cooperation plans	List existing land use and management/cooperation plans (with dates and
	reference numbers) for the administrative area(s) included within the
	proposed biosphere reserve. Provide a copy of these documents. It is
	recommended to produce English, French or Spanish synthesis of its contents
	and a translation of its most relevant provisions.
(5) Species list (to be annexed)	Provide a list of important species occurring within the proposed biosphere
	reserve, including common names, wherever possible.
(6) List of main bibliographic references (to be annexed)	Provide a list of the main publications and articles of relevance to the
	proposed biosphere reserve over the past 5-10 years.
(7) Original Endorsement letters according to paragraph 5	
(8) Further supporting documents	

Find out more – about UNESCO Biosphere CRITERIA and NOMINATION PROCESS (see also Appendix 1):

- > Designation process: http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/designation-process/
- Nomination form: http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/biosphere_reserve_nomination_form_2013_en.pdf
- > Links to range of relevant documents: https://www.unesco.org.uk/apply-to-become-a-biosphere-reserve/
- > Seville Strategy, 1995 criteria for designation are in Article 4: http://unesdoc.unesco.org/images/0010/001038/103849Eb.pdf

USEFUL EXAMPLES OF NOMINATION FORMS FILLED IN RELATIVELY RECENTLY:

- > Brighton and Lewes Downs BR, 2013, http://thelivingcoast.org.uk/admin/resources/bhld-br-unesco-nomination-form-parts-i-ii-final-september-2013.pdf
- ➤ Isle of Man BR, 2013, https://www.biosphere.im/biosphere-isle-of-man/unesco-nomination-papers/
- ➤ Wester Ross BR, 2015, https://static1.squarespace.com/static/588f52dc3e00be6360b1c824/t/588f7a00e3df28739f088975/1485857853999/Wester+Ross+Biosphere+Applic ation+09%3A15.pdf
- Moen BR, Denmark, 2016, https://vordingborg.dk/media/3454541/del1.pdf

4 Why a Fens Biosphere?

4.1 Potential benefits

A wide range of benefits of having a Biosphere reserve in place have been stated. The UK MAB Committee states the key benefits of Biospheres as such:

"Biosphere reserves provide a framework for projects that improve people's lives and protect the environment in a sustainable way. Communities, local stakeholders and government officials gain an increased awareness of environmental and development issues. Biosphere reserves may attract funding to demonstrate approaches to conservation and sustainable development that can provide lessons to be applied elsewhere."

UK MAB Committee, FAQ page, http://www.unesco-mab.org.uk/biosphere-faqs.html

The idea that Biospheres provide a useful framework for partnership-led projects is also a key message that has come out of discussions with UK Biospheres (see section 7). A number of common benefits are given in the below table:

BENEFITS – Commonly cited benefits Biosphere reserves can (help) deliver:

- Provides **neutral platform** for drivers and innovative projects & programmes
- Confers **international recognition:** globally respected accolade; quality assurance this heightens profile & helps attract grants and investment for innovative growth
- Delivers a **sustainable management** system, 'fit for 21st century' through greater co-ordination of conservation and development working with nature not against it
- Provides benefits for nature by bringing disparate partners and partnership together to encourage landscape-scale connectivity initiatives
- Drives rural development and a sustainable local /regional economy 8:1 return on Local Authority Investment (North Devon and Dyfi Biospheres)
- Strengthens economy by making an area more attractive place to visit live and work visitor destination promotion
- Attracts dynamism into the local economy marketing opportunities for sustainably produced products or sustainably managed environments

- Increases pride in place and social cohesion
- A focus on "place" and place making
- Improves quality of life through healthier environment
- Supports health and wellbeing agendas: Providing e.g. more & better green spaces for recreation/exercise/quiet contemplation
- Promotes better research and understanding & drives up standards for education, research, training
- international networks through which to share experience and develop partnerships; good spring board for e.g. INTERREG funding opportunities
- Helps to levers in support and project funding

4.2 Why would the Fens make a great Biosphere?

"This region has exceptional natural, cultural and economic assets.

Biosphere status will enable us to grow towards a sustainable future together"

Wildlife Trust BCN, Kate Carver, summarising FBWG comments

There is a clear consensus, amongst the FBWG and other partners involved, that the Fens has excellent natural, cultural and economic assets ranging from unique lowland and wetland landscapes and wildlife, ancient sites, cities and buildings, vibrant urban and rural communities, first-class universities, cuttingedge science and digital industries, and innovative businesses – in particular in the agri-tech and agri-business as well as medical and pharmaceutical arenas.

Why would the Fens make a great Biosphere?

This region has exceptional natural, cultural and economic assets combined with a confident new governance structure able to value vision, seize opportunity, and create legacy.



Biosphere status enables us to draw it all together, unifying around a big idea that benefits everyone. It will enable us to grow towards a sustainable future *together*.

Key assets of the Fens as summarised by WTBCN. Images: Copyright WTBCN.

KEY REASONS why FBWG partners feel that the Fens is suitable as a Biosphere reserve (and why now):

- > Why Fens deemed suitable Unique combination of assets:
- Expansive areas of lowland wetland with unique and internationally significant habitats and species.
- Expanding core wetland vision projects; multiple partnership-led initiatives for landscape-scale conservation.
- > Landscape full of significant archaeological, cultural and drainage engineering heritage.
- ➤ Close relationship in Fens between character of landscape, biodiversity value and intensive human intervention/land use, past and present resulting in strong focus on water connecting all aspects of landscape, and related cultural assets, with strong emphasis on rural agricultural character.
- Few biospheres seem to combine its strong natural and cultural assets so well: in the Fens nature and heritage are truly interwoven. In addition, the big urban populations close to very rural areas are relatively unusual, providing great opportunities to link people with their environment 'hinterland'.
- > Why now seems to be a good time Unique opportunity presented:
- Economic (and technological, environmental and academic) powerhouses in Cambridge and, to a certain extent, Peterborough could drive true sustainability vision for the area.
- High population growth in cities and rural areas, combined with ongoing, major new housing developments and multiple major infrastructure plans mean that sustainable development is more important now than it has ever been
- > Cutting edge R&D Industry in and around Cambridge, in particular close links between academic research institutions and agri-tech industry and agri businesses, and is still growing.
- Combined Authority, Local Nature Partnership, Fens for the Future partnership, and hundreds of organisations, businesses and community groups behind a single, big idea that delivers quality of life and the best possible environmental outcomes within the framework of sustainable growth agenda.

The partners involved in developing the idea of a Biosphere for the Fens feel that many of the above benefits could indeed be achieved for the Fens, with the Biosphere seen as the missing 'glue' to make things happen. There is a strong appetite amongst partners to make more of the opportunities the UNESCO

Biosphere Reserve designation could bring and help this rural area, overlooked when it comes to socio-economic development. The following benefits have been proposed so far, for which partners feel realistic, tangible and inspiring projects and programmes could be developed under the BR umbrella:

KEY BENEFITS the FBWG partners currently feel that a Biosphere could bring to the Fens:

- > International Recognition: UNESCO Biosphere is an internationally-recognised accolade for sustainable development and land management.
- More coordinated promotion of Nature Conservation done on reserves to support unique and significant biodiversity
- Increase the amount of land that is under sustainable land management practices and under conservation management, with a coordinated focus on increasing landscape-scale conservation work.
- More coordinated and targeted promotion of work done to encourage sustainably managed environments in wider landscape.
- > Driving **Sustainability** and **Innovative growth** BR could show **Leadership in sustainability** create strong links to Green Infrastructure; Technology, Research and Education; Health & Wellbeing agenda; Quality of environment
- > Driving Rural Development & Sustainable Local Economy Sustainably produced products
- > Create Marketing opportunities: Products; Promoting leisure activities, tourism, local food
- > Visitor Destination Promotion Distinctive destination Branding
- > Potential for developing Nature-friendly accreditation within BR, to complement existing LEAF etc. accreditation schemes
- Pride in place & Social cohesion
- **Celebration of the unique Fenland culture** & biodiversity of the Fens and associated towns & cities.

WTBCN and the Fens Biosphere Working Group are supported in their ideas by many others, as evidenced by ongoing discussions with closely related partnerships and initiatives including the Natural Cambridgeshire Local Nature Partnership, the Fens for the Future Partnership and Visit Cambridge & Beyond Destination Management Organisation.

Similar appetite is also evidenced in the media (see e.g. this article in the Ely Standard, dated 30 January 2018 – following the WTBCN's press release regarding the HLF funding being secured - http://www.elystandard.co.uk/news/wildlife-campaigners-set-sights-on-unique-status-for-fenland-1-5374687), and initial support from the relatively newly formed Cambridgeshire and Peterborough Combined Authority – see e.g. https://www.cambridgenews.co.uk/news/local-news/cambridgeshire-peterborough-new-developments-2030-14730118:

Appetite and support shown by the Combined Authority, as evidenced in this recent article. From: Cambridge News, 30 May 2018, https://www.cambridgenews.co.uk/news/local-news/cambridgeshire-peterborough-new-developments-2030-14730118



The 14 new developments that will completely reshape Cambridgeshire by 2030

New train stations, thousands of extra homes and a massive M11 upgrade - You've just got 12 years to wait...

12. Fenlands UNESCO World Biosphere Site



Discussions are underway to make The Fenland a UNESCO World Biosphere Site.

The council hopes the area will have that status by 2030, with residents enjoying easy access to a variety of parks and open spaces across the region.

Find out more – about BENEFITS to having a UNESCO Biosphere reserve:

- Report 'Wider Value of UNESCO to the UK 2014–2015', published 2016, https://www.unesco.org.uk/publication/wider-value-of-unesco-to-the-uk-2014-2015/
- Report: Wider value of Biosphere Reserves to the UK, https://www.unesco.org.uk/wp-content/uploads/2017/02/UNESCO-Biospheres-in-the-UK.pdf
- ➤ Biosphere reserve in practice: examples from the word of sustainable development, http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/biosphere-reserves-in-practice/

5 Is there an alternative to a Biosphere? - Comparative analysis of alternatives to Biosphere Reserve status

"Provide justification why a UNESCO Biosphere Reserve designation might be most appropriate for the Fens"

As part of the consultancy work, alternative designations were looked at, to;

- Understand alternative designation options: which options are there; what are they for; and what are their criteria?
- Understand each designation's potential relevance to the situation in the Fens;
- > Provide a comparison between each designation and the Biosphere Reserve status, to understand potential pros and cons;
- > Provide justification how and why a UNESCO Biosphere Reserve designation might be most appropriate for the Fens;
- > Demonstrate that alternatives have been considered, and provide reasons for discounting those going forward.

Appendix 2 provides full details of the research data collated. Below provides a summary of the key findings:

COMPARATIVE ANALYSIS OF ALTERNATIVE DESIGNATIONS – CONCLUSIONS AND RECOMMENDATIONS (See also Appendix 2)

Key conclusions: why Biosphere 'is best for Fens':

- 1. A Biosphere Reserve seems to be the best designation solution for partners' wishes for sustainable development within the Fens basin, having advantages over all of the alternative designations. Biospheres are the world's only globally recognised designation for demonstrating excellence in sustainable development.
- 2. IUCN's Green List of Protected and Conserved Areas have similarities to Biosphere Reserves but key focus would be on designated areas; BR also includes transition zone as key to sustainable development management activities.
- 3. For other key UNESCO designations, Global Geopark and World Heritage Sites, the Fens could offer some elements, but unlikely to fit key criteria fully.
- 4. Criteria for Areas of Outstanding Natural Beauty and National Parks partly match with Fens' offer. But statutory designation means a long timescale to designate and may not go down well with many stakeholders, nor is designating new NPs and AONBs *en vogue* in current political and economic climate (with new AONB designation currently shelved by Natural England).
- 5. Key conservation sites within the Fens basin (NNRs, Natura 2000 sites, Ramsar sites, SSSIs, as well as LNRs, CWSs and Country Parks- see Appendix 2 for explanation of acronyms) could form part of the network of core and buffer zones. In themselves not big enough as BR.
- 6. Likewise, historic environment designations such as Conservation Areas and Scheduled Ancient Monuments (the latter often also important for biodiversity) and other relatively small-site designations including Registered Parks & Gardens and Registered Battlefields could also could form part of the network of buffer zones.

Further recommendations-linking in with other initiatives and opportunities:

- 1. Potential for Government to start similar programmes as recent NIAs, with announcement in 25 Year Environment Plan of intention to roll out a 'Nature Recovery Network'. This could have similar focus in Fens as BR. Potential here for (match-) funding BR designation development?
- 2. Likewise, investment from Cambridgeshire and Peterborough Combined Authority, and interest created amongst key partnerships such as the Fens for the future Partnership and Natural Cambridgeshire LNP, could mean further match funding and (political/ stakeholder) support could potentially be found through those routes.
- 3. In addition, working closely with key partners' visions for landscape-scale conservation, in which sustainable rural development also play key roles, is going to be paramount: in particular the Wildlife Trust's Living Landscapes work and the RSPB's Futurescapes (Note: the latter currently being reviewed and renamed for the Fens).

6 What is happening out there? Information gained about what other BRs are doing

"All Biospheres in the UK are quite different in terms of geography, density of population, types of land use, as well as their governance and funding models, and focus for activities"

As part of the consultancy work an overview was created of the other Biospheres in the UK, as well as selected other Biospheres elsewhere. This was done to;

- > Pull together relevant information on UK BRs and BRs elsewhere that have relevance to project delivery;
- > Compare each BR's situation against the specifics of the Cambridgeshire Fens, focusing on any similarities and differences;
- > Obtain understanding of experience of past, existing and candidate UK Biosphere Reserves;
- > Obtain better understanding of pros and cons of UNESCO Biosphere Reserve designation;
- Getting pointers as to types of activities and scope of their work, to help in devising a questionnaire;
- > Provide recommendations as to which BRs (and why) would be best to approach for a phone interview.



At the start of 2018 there were six Biosphere reserves in the UK. The Isle of Wight is putting in their nomination form in June 2018. There are also ideas around, potentially, creating a Biosphere reserve around the Wash and Lincolnshire Fens, as flagged up in this image.

Appendix 3 provides full details of the research data collated. Below provides a summary of the key findings:

OVERVIEW OF BIOSPHERES in the UK & Selection for phone interviews – CONCLUSIONS AND RECOMMENDATIONS (See also Appendix 3):

Key conclusions & Recommendations:

- There are currently six Biosphere Reserves in the UK, 2 in Scotland, one in Wales, the Isle of Man, and two in England. In addition, there are aspiring BRs, with the Isle of Wight being most advanced in this.
- All BRs are quite different in terms of geography, density of population, types of land use, as well as their governance and funding models, and focus for activities see details in Appendix 3 for more information.
- It would be beneficial for the following current, aspiring and past BRs are to be approached for a telephone interview:
 - O North Devon BR Mature BR; Wide Portfolio; Similar ambitions: Similar ambitions to those voiced to date by partners in the Fens: North Devon BR focuses on sustainable tourism development, also trying to assure a return on investment. In addition, a wide range of biodiversity and water/land management work is carried out, including catchment work and work with farmers, similar to the focus of the Fens' partners. Would be good to find out what approaches have worked well and how they envisage keeping the BR relevant and economically viable.
 - The Living Coast (formally known as Brighton and Lewes Downs BR) Sustainable Tourism focus; Large urban community: They have gone through the whole designation process fairly recently (designated 2014) and have tried to make things financially viable going forward, through attracting external funds to match local authority investment. Also aim to create strong links with businesses in sustainable tourism based around nature and heritage assets and land managements sectors. The designation, similar to the Fens, consists of multiple core areas and patchy buffer and transition zones around these similar to the fens' situation. Similar also is the situation of the proximity and inclusion of several major urban areas and wider countryside as part of the BR.
 - Wester Ross BR Community-led bottom-up approach: Contacting Wester Ross BR would be a good idea: their BR is very much based around community input and would be useful to learn from their approach to stakeholder engagement and socio-economic benefits generation.
 Wester Ross also has complex land management challenges.

- o **Isle of Wight (***candidate BR***)** Close to submission of nomination form: Is getting close to finalising paperwork to UNESCO for designation. Would be useful to understand the issues they have come up against and getting a realistic perspective on what needs doing to get to designation (and beyond). They have also struggled with issues around zoning so it may be useful experience we can benefit from.
- O North Norfolk Coast (past BR) Withdrawn in 2014; AONB link?: As this BR was active for quite some time, but have pulled out recently (2014) it would be good to understand the reasons for pulling out of this: was e.g. the AONB designation considered more useful for long-term goals? BR covered extensive nature conservation areas and tourism is a key driver for the North Norfolk Coast similar to Fens' situation. Also, so far has been the only other BR in the East of England; would be good to understand challenges and opportunities they saw in this part of the UK.

7 Obtaining more details: Interviews with selected BRs

7.1 Development of a questionnaire to guide interviews

As part of the consultancy work, a number of UK Biospheres were approached for an interview. In advance of these interviews, and based on the information gathered prior to these interviews (see section 6) and discussions held at FBWG meetings as to the key things we would like to learn, a **questionnaire** was created to guide the interviews. The questionnaire can be found in **Appendix 4**.

The questionnaire focuses on questions in three different areas:

Types of questions (for details of questions, see Appendix 4)	Why such questions?
Questions around: Development of the Application and Governance models	The partners involved in developing a case around a BR for the Fens are keen to understand the realities of developing a UNESCO BR designation application and the governance and resourcing implications.
Questions around: Sustainable development, socio- economic investment and long-term viability	The partners involved in developing a case around a BR for the Fens are keen to understand opportunities for strengthening the local economy and in general the socio-economics of the area.

Questions around: Opportunities and Risks stemming from	The partners involved in developing a case around a BR for the Fens are keen to understand
designation	risks and challenges of the designations, as well as socio-economic opportunities this may bring
	once designation is in place

7.2 Interviews held with current, past and candidate BRs

As part of the consultancy work, phone interviews were held with three existing, one candidate and one past UK Biosphere, to benefit from their experiences, to compare against the specifics of the Cambridgeshire Fens situation and to inform the Route map development. The WTBCN contract with Cambridgeshire ACRE specified a minimum of four interviews to be held. With the inclusion of one past Biosphere reserve (thereby obtaining relatively limited information directly useful), and the opportunity presented by the planned FBWG site visit to The Living Coast BR on 18 April, it was decided that a total of five interviewees would be appropriate in this case.

Assessing potential benefits, implications, challenges, opportunities and risks of Biosphere Reserve Status In order to achieve a free-flow conversation, Cambridgeshire ACRE took a practical approach to the interviews, using the questionnaire as a 'guide' to pick-and-chose questions from that seem most relevant to the particular BR we were talking to. Where practical and relevant, phone conversations were recorded and transcribed. Transcribed texts have been passed by the interviewees for their approval. Key notes of conversations can be found in **Appendix 5**; full interview transcripts are held on file.

Interviews were held with the following people:

Who interviewed	When	Type of interview	Type of record – See also Appendix 5
Rich Howorth Biosphere Programme Manager, The Living Coast	18 April 2018	Site visit & Interview (with	Notes compiled by Kate Carver from
Biosphere		other FBWG representatives)	various FBWG representatives on site visit
Estelle Hook, Manager of the Norfolk Coast Partnership	24 April 2018	Telephone interview	Notes of conversations compiled
Natasha Hutchison, Project Officer, Wester Ross Biosphere	17 May 2018	Telephone interview	Transcription of audio recording
Andy Bell, UNESCO World Biosphere Reserve Co-ordinator,	18 May 2018	Telephone interview	Transcription of audio recording
North Devon Biosphere			
Joel Bateman, AONB Communications and Projects Officer, Isle	7 June 2018	Telephone interview	Transcription of audio recording
of Wight AONB (who is leading on writing nomination form)			

Key areas explored with interviewees, were:

INTERVIEWS – KEY AREAS EXPLORED with interviewees (see also Appendices 4 and 5):

- ➤ Understand lessons learned in: Application processes; Governance models
- Understand Implementation processes and sustainable development focus
- > Understand potential challenges and risks/ implications associated with UNESCO Biosphere designation status
- ➤ Get better understanding of potential socio-economic benefits and opportunities a UNESCO Biosphere Reserve designation could bring for e.g. visitor economy; partnership working; and levering in funding [e.g., cost-benefit analysis where such data is available; strengthening local economy through e.g. the potential for marketing branded sustainably produced products or other visitor economy impulse]
- > Financial viability of sustaining BRs; Funding Model now and going forward

The interviews were summarised and interpreted against the Fenland situation. The results of these can be found in Appendix 5.

7.3 Key learning points from interviews with other BRs - Appraisal of key benefits, opportunities, challenges and risks.

"The Biosphere is really here to act as an umbrella. Organisations oversee and promote sustainable development, promote communications between organisations that are maybe doing similar things, to act responsibly and help each other and work together better for the benefit of our area and our landscape"

Natasha Hutchison, Project Officer, Wester Ross Biosphere; interview 17 May 2018

Reflecting on the interviews and information gained from these conversations, a great number of useful points were raised addressing the areas covered (see also section 7.2 and Appendix 5), with different people often touching on subjects in a similar way. The below table provides a summary of the key learning

points coming from these discussions held, ordered in *Benefits – Opportunities – Challenges – Risks* where seen as directly relevant for developing a UNESCO Biosphere application for the Fens area:

KEY LEARNING POINTS – FROM INTERVIEWS WITH BIOSPHERES IN UK:

KEY BENEFITS

Summary of information gained, useful for Fens Biosphere development

- ➤ Biospheres are very helpful in bringing partners from diverse sectors together, working towards common goals.
- ➤ The best functioning Biospheres have focused on creating a strong partnership, brought together around key aims. This creates synergies and supports partners and partnerships in their work.
- ➤ Governance models: various models being employed, from embedded within AONB (Isle of Wight) to separate social enterprise set up (Wester Ross), although all focus on developing a wide partnership around the Biosphere as key part of their governance model.
- ➤ Best functioning seem to be those who work through thematic Working Groups (The Living Coast; North Devon; Isle of Wight; Wester Ross), in order to create synergies and support aligned partnerships and initiatives.
- ➤ Key is also to make sure that various Working Groups set up are well-organised and aligned with the BR, with central reporting and monitoring & evaluation systems in place (North Devon).
- ➤ BRs seem a particularly useful vehicle for promote and raise awareness of sustainability issues ("Changing hearts and minds", The Living Coast) and for encouraging (sustainable) tourism developments around destination marketing; branding; product marketing (North Devon; The Living Coast; Wester Ross; Isle of Wight).
- BRs can also bring people together around management of the water and land

KEY OPPORTUNITIES

Summary of information gained, useful for Fens Biosphere development

- ➤ UN's Sustainable Development Goals useful as reference for BRs more and more BRs referring to this and aligning their ambitions with UN goals.
- ➤ Effective implementation of management strategy and plans can only happen through embedding in LA's Local development planning (e.g. North Devon and The Living Coast). BR then directly influencing through democratic process, despite being non-statutory.
- Business investment seems a possibility, but unlikely sufficient to fund all core costs (examples The Living Coast funding from Southern Water; and North Devon Biodiversity Offsetting Pilot, developing potential income streams).

(e.g. North Devon), although implementation of ambitions in these areas often left to other partnership structures (e.g. catchment partnerships; catchment sensitive farming initiatives).

- Biospheres containing a landscape designation such as an AONB or National Park (The Living Coast; North Devon; Isle of Wight) see the Biosphere very much as providing additional value and reaching out to people and communities around the designated areas.
- ➤ BRs can lever in funding e.g. at least 8:1 return on LA investment (North Devon) coming back through BR delivery and economic development e.g. tourism opportunities created.
- ➤ BRs see benefits of being a member of an international network: information exchange; funding opportunities through e.g. UK MAB supporting international project opportunities.

KEY CHALLENGES

Summary of information gained, useful for Fens Biosphere development

- > Don't underestimate the nomination process: a lot of information needs gathering. Writing the form is onerous, but the process before being able to fill in all sections in form will take more time.
- ➤ Key is to have (at least one F/T) central coordinator in place for both development phase, bringing together all strands of information needed for nomination from all partners involved, and leading on essential work regarding stakeholder and community engagement.
- In developing nomination it is paramount that all partners help develop this and bring their advice, information, expertise to the table throughout the period.
- Management plan development: do not reinvent the wheel; instead refer to/use existing strategies, policies and plans; identify and address gaps linked to

KEY RISKS

Summary of information gained, useful for Fens Biosphere development

- Risks of designation seen as extra layer of 'red tape' seems to be relatively low in practice, as long as all relevant stakeholders have been engaged sufficiently and appropriately.
- ➤ All Biospheres in UK are largely dependent on funding from Local Authorities, Government Agencies and/or AONBs
- Governance models: BRs are often closely aligned with (or even embedded within) lead AONB or LA (although outside of England some - Galloway and Southern Ayrshire and Dyfi

focus of sustainable development for area chosen.

- Linking up with existing partnership initiatives is critical, especially in early stages of its existence, to make sure one can provide mutual additional value and to keep Biosphere relevant for others.
- ➤ Broad portfolio seems to be aspired to; only most mature BR (North Devon) seems to have achieved truly broad portfolio: getting there takes a lot of time (and financial resources!).
- ➤ With broad portfolio it seems critical to get partners and partnerships to align and promote as such new projects and programmes under the overall BR umbrella.
- ➤ Post-designation, minimum budget needed to allow for good functioning central management team, to keep partnership momentum and to instigate new projects, whilst levering in further funding is around £50-£100K/year.
- ➤ Ensuring that core BR management receives a part of project funding brought in remains a big challenge for all BRs: projects with different partners often leading on these regularly create new project officer posts, but rarely provide for additional funds to support core management functions. Even very mature BRs (North Devon) only get maximum of 25% core cost covered through project development and income generation.
- ➤ Implementing management strategy/plan: one needs a strong partnership implementation drive to get plans implemented; regular reviewing and keeping strategy and plans relevant are all essential ingredients.
- ➤ Getting LAs on board is paramount. In this getting the BR's sustainability ambitions embedded in LA's local development planning work is key. However, lots of resources from partners (time; advice; expertise) are to be offered to LAs (e.g. planning departments) for this to happen in practice (e.g. Living Coast; North Devon).

- are not).
- ➤ Very few BRs are working fully independent. Yet, all BRs express the need to make one distinct from lead organisation. Easier for e.g. Wester Ross BR as entirely bottom-up approach to governance (but may possibly not be as effective in decision-making as a result).
- Understanding and practical implementation of 'sustainable development': key to make clear to everyone involved, and in external communications, what the BR means with this, and how this translates into a practical implementation plan risks otherwise not having clear focus and 'mission'.
- Ongoing resourcing of core functions remains key concern for all BRs.
- ➤ All BRs are vulnerable to further funding cuts linked to ongoing austerity measures. Some (e.g. Wester Ross; The Living Coast) seem very vulnerable to withdrawal of funding support due to vagaries of changing political climate (The Living Coast) or (short) time limitations to funding support pledged.
- Alternative funding models hard to come by: largely linked to bringing in external funding, in particular EU funding options (e.g. INTERREG). Post EU-Exit unclear what could replace these current useful funding options.

8 Route Map towards a UNESCO Biosphere Reserve

As part of the consultancy work, following the phone interviews all information gained to date fed into the development of a Routemap for the next phase towards a Biosphere nomination.

Whereas section 3 set out *what* is required to achieve the Biosphere Reserve designation, this section provides recommendations *how* best to satisfy and deliver those requirements, focusing on key challenges such as partnership development, governance structure, zonation requirements, etc. This is followed, in section 9, by a summary setting out the logical next steps, including a timescale, likely costs and potential funding routes to support a submission of an application to UNESCO were the FBWH to decide to go down this route.

8.1 Key areas for development phase: key challenges ahead

This section sets out which are the key areas of work that need developing during the circa 2 years needed when working towards Biosphere nomination. This assumes that all costs for the development towards nomination are to be found (see section 9 for more about this). It sets out the key challenges to be looked at in detail and for which workable solutions need to be found by the partners involved, in order to have a successful nomination process and a successful start to the implementation of a Biosphere post-designation.

What needs doing? Build consensus and partnerships Create Route map Secure £150-£200k development funding to support UNESCO application Once development money secured up to a 2 year process UNESCO Biosphere status from 2022 Global recognition of Fens

Diagram setting out key stages (see also image in section 3.1). The recommendations in section 8 focus on those decisions to be made in the '2 year process' referred to in this diagram.

The below flow-chart sets out the key areas that have been identified that need to be looked at in great detail, as part of the next phase, working towards Biosphere nomination. These challenges and recommended solutions for each of them are based on discussions held with other BRs (section 7 and Appendix 5) and numerous discussions at FBWG meetings and workshops. Section 8.2 will go through each of these 'challenges' in more detail.

It is envisaged that all areas will need to be worked at simultaneously, but the order as presented in this diagram is important as this is the likely order in which things need to be addressed and decided on. Giving just three examples here to illustrate these underlying principles;

- Objectives for the Biosphere, linked to its three core functions, can only be developed fully once the partners have formed a consensus around what we mean when we talk about 'sustainable development' and what areas/themes will be the focus of our attention (and what may be left to others to deal with).
- Stakeholder and community identification, as well as an engagement and communications plan, can only be developed properly once we have reached a consensus on the area's outer boundaries and associated zonation within.
- The development of a portfolio for the implementation phase post-designation status, can only be fully developed once it is clear how exactly the Biosphere partnership and partners are going to work together with existing partnerships and initiatives such as the Local Nature Partnership, the Fens for the Future Partnership, as well as those responsible politically for the area, the relevant Local Authorities and newly formed Cambridgeshire and Peterborough Combined Authority.

Key areas for 2 year development

- Partnership development
- Governance Model: legal structure and organisational structure (e.g. hierarchical or participatory; centralised and/or through Working Groups?)

- Vision development & Sustainable Development Definition / Focus: Where do we want impact in next 5/10/20/50 years & what does this look like?
- Provide key BR Objectives linked to 3 core BR Functions (Conservation -Development – Logistic Support/Research)

- Area identification: rural and urban
- Mapping & Zonation

- Stakeholder Identification & Engagement
- Communications Plan

- Management Plan(s)
- Cooperation/Alignment with other partnerships; initiatives; statutory bodies

- Portfolio Development
- Sustainable Funding Model With core costs covered at implementation

8.2 Main challenges ahead: what needs working out during circa 2 year 'development phase'

CHALLENGE #1: PARTNERSHIP DEVELOPMENT

Why this is a challenge	A strong partnership has already been formed around the Fens Biosphere Working Group. It will be important to retain this momentum and to continue developing this partnership, ensuring that all relevant sectors are included. A challenge will be to keep the partnership open to include new members, keep its work relevant to all involved, and continue having timely, sufficient and appropriate input from all partners involved in the ongoing developments towards a Biosphere for the Fens.
Recommendations for	Further develop partnership membership & keep momentum:
Development Phase	Keep momentum as instigated over last few years; build on strong willingness shown by many partners from different sectors to date, and keep key partners interested and engaged.
	 Unlike many other BRs (with Local Authority or AONB leading on development and delivery), the FBWG is currently led largely by NGOs. For the immediate future, continue FBWG as a medium through which the partnership is developed further. This seems to be best model to take forward, as good interest and willingness has already been shown. Currently many of the partners are those with links in conservation. The partnership needs expanding to include all relevant stakeholders: ensure the partnership is cross-sector led, and actively seek new partners. Ensure there is a strong community identity: make the partnership model participatory where realistically possible.
	Ensure ongoing partnership input:
	 As the process towards designation takes several years, the key partners in the Working Group need to be very committed and be able to work together. If the core group of partners is not functioning well, it will be important that the group finds ways for individuals to overcome differences and think of the long-term benefits of biosphere designation. As the FBWG is largely NGO-led, this may make it more difficult to support the sustainability of the partnership in future: there may be a challenge in terms of organisations potentially competing for same funding sources, and partners' competition with other priorities they may have. As such, one needs to find a way to ensure that all partners involved

continue to be willing to put in their resources (staffing time; expertise & knowledge; advice, information and data), to see
through whole of development phase (and beyond).

- In developing towards Biosphere nomination it is paramount that all partners help develop this and bring their advice, information, expertise to the table throughout the period.
- Fens Biosphere Working Group to continue meeting on a regular basis; and have targeted workshop-style meetings to work out details throughout development phase.

CHALLENGE #2: GOVERNANCE MODEL & IDENTIFICATION OF LEAD

Why this is a challenge	The Partnership has been meeting relatively informally, which has worked to date. Going forward, more clarity on partnership model and governance is needed, working towards a clear management structure post-designation.
Recommendations for	Devise suitable governance structure & organisational arrangements, including partnership agreement:
Development Phase	 In other UK Biospheres various governance models are being employed, from embedded within AONB (Isle of Wight) to separate social enterprise set up (Wester Ross), although all focus on developing a wide partnership around the Biosphere as key part of their governance model. Key to consider in the above is that the governance can change, and this is ok with UNESCO: focus initially on correct governance for development phase, which could potentially be relatively informal and creating more formal structures later down the line. At the stage of nomination one only needs to state what structure you will have, not necessarily what you have at the time of application (although it would obviously be beneficial to have the desired structure by the time the nomination is coming together).
	 Make decision, early on, whether to have a formal structure, or a more informal structure. In addition, consider whether to develop a legal structure, or make use of existing organisations to cover legal aspects. It is recommended to move towards a certain level of formality, with at least an agreed partnership agreement in place. With a partnership agreement in place, partners' common goals, expectations and individual responsibilities are clearly set out from the start.

- With a partnership agreement in place, a lead partner could take on certain key responsibilities, dealing with things such as all legal aspects of employment, insurance and data protection issues. Compared to e.g. Local Authorities or AONBs employing people to lead on Biosphere development, a smaller charity or similar organisation is likely to have lower overhead costs, keeping overall development phase cost down.
- It is recommended that making the partnership more formal, by setting up a legally constituted organisation, is not considered until later on during the development phase, and potentially instigated following designation.
- A more formal legal structure, becoming property constituted by setting up a Company Limited by Guarantee (e.g. Wester Ross formed after designation) or a Charitable Incorporated Organisation (see e.g. https://www.gov.uk/guidance/charity-types-how-to-choose-a-structure#types-of-charity-structure for more information) could help in formalising the partnership and moving the partnership forward more quickly.
- ➤ It may also help when e.g. applying for funding, as this often requires a constituted lead partner or legalised partnership structure to be eligible for funding. Thus, to some extent the decision as to the kind of governance might be dictated by the funder sought; most funders would not fund an unconstituted partnership.
- FBWG could consider coming under a different partnership's 'umbrella': for instance, Natural Cambridgeshire, the local LNP has invited FBWG to come under theirs. However, as it is itself not constituted, this may not necessarily be the best route (but it will be important to establish and keep good working relationships with the LNP throughout see also challenge #10). In addition, the LNP is largely conservation-led, which would go contra UK MAB recommendations as 'lead partner'.

Set up distinct Working Groups:

- It is recommended setting up Working Groups during the development phase, linked to sustainability themes and distinct work streams (see also challenges #3, #4 and #11); the partnership might function best by setting up thematic Working Groups through which sustainable development actions are implemented (e.g. The Living Coast; North Devon; Isle of Wight; Wester Ross); this creates synergies and supports aligned partnerships and initiatives.
- North Devon BR is a good example of a well-organised BR, with various Working Groups closely aligned with the BR and with central reporting and monitoring & evaluation systems in place (although in North Devon the BR's core management sits within LA).
- Ensure that local input is incorporated in the partnership management structure; this could be particularly important for specific Working Groups. Interlinking partners/partnerships with communities is going to be essential and should be

- central to the governance structure chosen.
- > It is also recommended that the BR's governance is not to be influenced by politics, allowing for open discussions amongst partners from different sectors.

Appoint Lead Partner:

- Identify lead partner early on, to take scoping work further and lead on development phase towards UNESCO nomination, coordinating all partnership-led work streams, and have centralised reporting structure and M&E framework oversight.
- > The lead partner needs to be an organisation that can receive funds and can take on any legal responsibilities (e.g. employment rights; insurance cover; data protection).
- > The lead partner needs to be relatively neutral to lead on circa two-year development programme. It is important that the development-phase work is seen not to be conservation-led, as this may make partnership development and stakeholder input more difficult.
- > Identified lead needs to have skills in working with a wide range of organisations across multiple sectors, to pull together different strands of information needed for nomination.
- ldentify lead partner whose strength lies in facilitation and mediation, to ensure that all partners and stakeholders (see challenge #7) have an equal chance to participate in the development process. As such, lead partner to be chosen from more neutral array of organisations which could ensure constructive communications with and input from e.g. local community groups, landowners, local authorities and interest groups.
- Most of the work required will be outside the core areas where stakeholders other than those working in conservation will have the most influence/ownership. Identified lead thus needs to be confident and skilled in public communications and engagement with local communities: community input will be an essential ingredient for successful Biosphere development and implementation.

Choose central development coordinator carefully:

- ➤ Key is to have (at least one F/T) central coordinator in place for the development phase, bringing together all strands of information needed for nomination from all partners involved, and leading on essential work regarding stakeholder and community engagement.
- Also essential will be making sure that the key person at the heart of the 2-year development stage has got the right kind of motivation; drive; knowledge; communication skills, people skills and management skills; such complicated work could stand or fall with getting the right person in position.

NB - Useful further reading:

Gaia S1/2008, Special Issue: Protected Areas and Biodiversity Conservation [on ideal governance models for Biosphere reserves], https://www.pik-potsdam.de/news/public-events/archiv/alter-net/former-ss/2008/07-09.2008/lotze-campen/literature/lotze-campen-et-al-gaia-s1-2008.pdf

CHALLENGE #3: SUSTAINABLE DEVELOPMENT – DEFINITION & FOCUS

	paramount to define and work out the areas within the broad spectrum of 'sustainable development' that the hip wishes to focus on (and why), and which areas may be left to others to deal with (and why).
Development Phase It D B A 20 ph D b t t t t t al	a central vision for Sustainable Development for the Biosphere: is recommended to use as a starting point for defining the fens' focus for sustainable development the UN's Sustainable evelopment Goals (2030 Agenda for Sustainable Development). This is useful as a reference for BRs, with more and more Rs referring to this and aligning their ambitions with these UN goals. lign Biosphere aims with Lima Action Plan 2016-2025 and the MAB Strategy 2015-2025. Both the Lima Action Plan 2016-025 and the MAB Strategy 2015-2025 also closely link to the UN's Sustainable Development Goals: The Lima Action Plan laces strong emphasis on thriving societies in harmony with the biosphere for the achievement of the Sustainable evelopment Goals and implementation of the 2030 Agenda for Sustainable Development, both within biospheres and eyond, through the global dissemination of the models of sustainability developed in biosphere reserves. is recommended organising a series of workshops for the partners involved in developing the Fens Biosphere, early in the development phase – key will be to set out a clear vision for the Biosphere and the purpose of partnership. Through his process, the FBWG can develop a clear narrative that we can then 'sell' to stakeholders and local communities (see laso challenges #7 and #8). evelop means of communicating what the difficult concept of 'sustainable development' means to "lay" udiences/potential supporters (i.e. not sector specialists already involved in e.g. FBWG) (see also challenge #8).

- Through workshops or similar ways of getting partners' input in development, define the key, central themes around which all partnership work can be developed. Define what impact the partnership wants to create in the themes and areas of work it aims to focus on: what is the change one wants to see, and what does this look like? And how are we going to measure the impact achieved?
- ➤ Initial themes considered to date are around water and carbon emissions/sequestration as core to a number of land, water and community/urban development issues and challenges such as soil fertility; farming challenges in light of climate change; urban growth & green infrastructure development needs.
- > Key is to think broadly, inclusive of environment, health and wellbeing, people and community to get wide buy-in. But, at same time, selective, where we see key themes converging around the partnership and its defined core aims and purpose.

Involve relevant research institutions, partnerships and businesses, in developing vision and themes:

- Involve and work closely with relevant organisations and institutions, especially those based in Cambridge dealing with sustainability issues, such as Anglia Ruskin University's Global Sustainability Institute, the Cambridge Forum for Sustainability and the Environment, and Cambridge Ahead. Think also about organisations that do similar things such as Water Resources East; CAMEO; Fens for the Future; Cambridge Conservation Forum (see also challenge #10).
- > Get the above organisations involved in developing our overarching vision and key sustainable development themes.

CHALLENGE #4: DEFINE KEY BIOSPHERE OBJECTIVES

Why this is a challenge Directly following from development of a vision and central themes at challenge #3, the partnership will need to define clear aims and objectives for its work across the three pillars of a Biosphere (Conservation – Development – Logistics/Research). These will guide any action plans and will define any tangible outputs and improvements that the partnership hopes to implement (see also challenge #11). This will be important to have a clear focus for what the Biosphere will do, both internally to prevent mission creep, and in external communications and relationships with stakeholders, to ensure credibility and to be able to bring stakeholders on board practically. Define key Objectives for Biosphere: Recommendations for **Development Phase** > From a clearly defined vision and developed themes (see challenge #3), well-defined Biosphere objectives need to be developed – these will provide the overarching framework for defining and developing aims and actions for the first 5-10year period post-designation, providing a coherent plan for tangible improvements/outputs (see also challenges #4 and #11). > Building on the decisions made regarding Biosphere's central themes and partnership purpose, it is advised to have workshops to work out the BR objectives for each of the three core BR functions (Conservation – Development – Research, Education & Monitoring). This will be particularly important to get influential audiences (e.g. politicians) interested and on board (see also challenge #7). Align with & influence sustainable development direction taken by the Combined Authority and Local Authorities: > Aim to work closely with the Combined Authority, in particular to link in with their focus on spatial planning and growth agenda. The focus for sustainable development for the Biosphere is going to important; it will need to link in with and complement the C.A.'s masterplan, certainly if the partnership wishes to get funding from them down the line (see also challenge #12) – the partnership needs to ensure that the sustainable development focus underpins as much as possible their, largely economic-driven, agenda and influence their direction as a result, ensuring sustainability and net environmental gain. As part of the Combined Authority's recently published 3 year plan, following the recent publication of its Non-Statutory

Spatial Plan (http://cambridgeshirepeterborough-ca.gov.uk/news/tag/non-statutory+spatial+plan) it is now focusing on

developing a Rural Strategy (to be published late 2018); the C.A. has started developing a series of Market Town

Masterplans.

- There is a lot of large-scale development (e.g. housing estates; roads) planned in the fens for the next few years. It will be important that the FBWG partnership is seen as not wanting to stop development, but as a group wanting to work with developers and politicians to help them develop the most sustainable option for development going ahead.
- Much of the development projects in the pipeline in Cambridgeshire are outside the fen part of the county as well as within the fens. The development of Cambridgeshire is driven outwards from the city of Cambridge, towards Oxford as well as in all other directions; many decisions are about providing transport solutions to and from Cambridge as well as providing housing for people who work in Cambridge. The fens are just one quadrant of the development envelope around Cambridge and there is a risk that 'trashing' parts of the fens could be seen as one way of providing wider 'sustainable' transport solutions for Cambridge and its hinterland (e.g. proposed M11 extension).
- ➤ It will be essential that the FBWG partnership or its partnership successor links in with the C.A. and other major developments, offers its expertise in these fields, and influences the direction of developments planned, meanwhile aligning its own sustainability aims and objectives with the CA's where deemed feasible and appropriate.

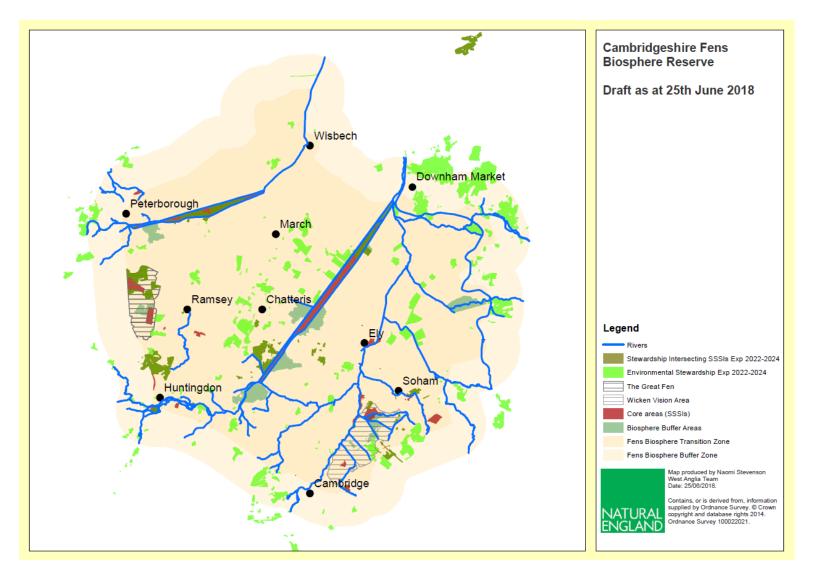
CHALLENGE #5: IDENTIFY AREA

Why this is a challenge	Defining the external boundaries within the Fens has been discussed extensively at various FBWG meetings and workshops. The extent of the transition zone is still being debated, although some sort of (initial) consensus has been achieved. It will be important to define the outer boundaries more precisely, as this will impact on decisions regarding stakeholder and community involvement, as well management and cooperation with other partnerships and Local Authorities.
Recommendations for	Define external boundaries:
Development Phase	 Defining an area with a clear identity is going to very important – link in with central themes (see challenge #3) and will help communications with stakeholders and communities (challenge #8). When discussing potential boundaries with stakeholders and community groups, it is recommended that the outer boundary is not represented by a hard line. This should help in having open discussions with those communities and stakeholders working around the edge of the area currently identified. Restrict main map (as needed for nomination) to data required by the 3-fold MAB zonation scheme. Devise supplementary maps to show landscape development and land use: Devise supplementary maps to highlight land aspired to become buffer zone in future (e.g. future land to be incorporated into Wicken Fen Vision; Great Fen Vision; Great Ouse wetland/habitat replacements schemes along Ouse Washes) – to be considered for re-zonation when the first 10-year periodic review is carried out. It is recommended devising a series of supplementary maps, to show key historic environment, landscape and similar data, to understand historic landscape development, land use and landscape value – e.g. 5 metre contour lines (showing Fen Isles and Fen edge clearly; distinction between silt and peat fen; key man-made features in landscape such as cultural heritage and historic environment assets (e.g. Scheduled Ancient Monuments and significant linear features such as Car Dyke); waterways and ditch network. Other mapping data that could be considered for supplementary maps: socio-economics; e.g. multiple deprivation data of communities. Use supplementary maps in the discussions towards nomination, to further clarify points made in the nomination document, and to use as part of stakeholder and community engagement.
	Consider inclusion of Local Authorities' boundaries carefully:

- Where feasible, do not include small parts of Local Authorities within outer Biosphere boundary, but ideally entire LAs, or at least big chunks. This should help relationships with and endorsement of those LAs (se also challenge #7), also simplifying the political buy-in needed. It's hard to get financial support from LAs at all (because of austerity budget cuts and their focus resourcing statutory services) and even harder when only a small part of their administrative boundary is within the Biosphere. In addition, enabling cooperation across political boundaries is a potential issue (unless we do not expect any funding from them anyway see challenge #12), so keeping the overall geographical area as small as possible, with as few as possible LAs included, would make sense in this respect.
- The nomination form needs to be signed off by legal representatives of *all* areas included in the Biosphere. This is an essential requirement for UNESCO. We *will* need some form of political sign off whether at District, county level, or CA; hence it will be important to have discussions with political leaders early on.

Decide on urban and/or rural focus:

- Partly following from decisions around the focus on sustainable development (challenges #3 and #4), a decision needs to be made whether the Biosphere is going to focus largely on rural areas or will also include substantial urban settlements in and around the Fens: why are certain areas to be included and how are they going to be involved?
- Consider bringing larger urban settlements into the Biosphere boundary, in particular those (Cambridge; Peterborough and Wisbech) that have a sustainability focus Cambridge: centre for sustainability/academic research & development; Peterborough: 'Green city' ambitions & strategic interests in e.g. green infrastructure; green economy; and Wisbech: proposed Garden Town development. How these cities are to be involved needs to be worked out in much greater detail. In certain cases (e.g., Dublin Bay Biosphere, Ireland), only parts of an urban area are included.
- ➤ Continue discussions with potential Biosphere around The Wash key contact is Matthew Cragoe, Pro Vice Chancellor at Lincoln University. Also important to engage with the Lincolnshire WT and their BR ideas which are somewhat separate from Cragoe's.
- > Currently best model seems to be to have two separate BRs; yet continuing the communications with them is important to have mutual benefits included in development where feasible.



Draft map of the Fens Biosphere, with initial suggestions for outer boundary and internal zonation; FBWG, June 2018. Copyright: Natural England. Note: this map is still being improved.

CHALLENGE #6: MAPPING AND ZONATION

Why this is a challenge	Linked to challenge #5, getting the internal divisions (into core – buffer –transition zone) of the proposed Biosphere is going to be paramount. Especially defining what will constitute the 'buffer(s)', to fit UNESCO criteria is going to be rather challenging: the situation in the Fens is unusual (especially without having the option of a landscape designation such as a NP or AONB to be used as 'buffer', as is often done for Biospheres elsewhere); as such the FBWG will have to look at alternative options to fit key UNESCO criteria. It will be paramount to get the mapping correct, as this is a crucial criterion for approval by UNESCO of the nomination application.
Recommendations for	Organise mapping skills & map development logistics:
Development Phase	 It is recommended to create a subset of partners to work out main and supplementary mapping needs – development of maps through targeted meetings/workshops. Continue using mapping skills and data sets available through Natural England's mapping services. Solve the 'Buffer zone(s) challenge': For a proposed Fen Biosphere Reserve, the core areas are quite straightforward: these would be the ecological assets with existing protections/designations (NNRs, SSSIs, Natura 2000 sites, Ramsar sites etc. e.g. Holme Fen NNR; Woodwalton Fen NNR. Ouse washes; Nene Washes). Some of these could potentially be considered as buffer zones. The most challenging zonation criterion for nomination purposes will be to get the buffer zones right. Buffer zones must have clearly-defined boundaries, with activities compatible with the conservation objectives of the core areas. The partnership will need to demonstrate how to secure the conservation value of core areas located within the buffer(s). Key principles to overcome/align with are: buffer can only be put forward around a core (so no buffer in transition without core within); core can only be put forward if there is also a buffer around it (so no core within transition zone); buffer normally also to be contiguous around a core.
	 The Partners need to be innovative to meet these challenging UNESCO requirements, by actively engaging with UNESCO to develop conceptual thinking around what could constitute the buffer zones. The partnership should continue to flag up the importance of the network of fenland waterways and link the development of a more extensive and supportive buffer zones to this where possible, creating a 'wetscape or Wet Net'. Many of the

managed drains, ditches and waterways are already good for aquatic biota and many potentially good with some management/restoration.

- > A number of potential alternatives for buffer zones need to be looked into, including:
 - Any land held in ownership by conservation organisation such as RSPB; NT, WT; WWT etc. can be buffer.
 - Natura 2000 sites could be made into buffer (sometimes done to make drawing lines on map easier).
 - Clusters of National Nature Reserves/Local wildlife Sites that are next to a core area these can then become buffers.
 - Private, non-designated nature reserves may count as buffer (e.g. Kingfisher Bridge).
 - Land in stewardship (e.g. Isle of Man BR has used land within agri-environment schemes as buffer). But the key challenge in this will be that there needs to be temporal security, with at least 5 years left on agreement as guideline look at stewardship schemes with minimum of 5 years on agreements land (but note that mid-tier only has 5-year agreements and as there is an annual application window it is unlikely to get all the land managers to align their agreements). It might be difficult to find stewardship agreements with a minimum of 5 years; and with Brexit it isn't clear how many more application windows there will actually be (but see draft map, above which shows current situation for longer-term arrangements in place and which looks promising).
 - RSPB Nature Friendly Farming zones (RSPB) and RSPB Turtle Dove Friendly Zone.
 - Also look at potential to include farmer clusters created (e.g. around Ouse Valley/ Somersham way), through NE's Catchment Sensitive Farming work (https://www.gov.uk/guidance/catchment-sensitive-farming-reduce-agricultural-water-pollution).
 - In addition, through the Facilitation Fund (https://www.gov.uk/government/publications/guide-to-countryside-stewardship-facilitation-fund) the partnership could possibly encourage to get landowners to join up to a single set of goals.
 - Ditches under conservation management: extensive network of ditches IDBs and private landowners. WFD ditches can be included as seeking good management. Likewise IDB drains: are under conservation management through IDBs' BAPs.
 - Look at ecological stepping stones (e.g. Project 'New Life on the Old West') as potential for buffer
 - Potentially useable? Nitrate-Vulnerable Zone (https://www.gov.uk/guidance/nutrient-management-nitrate-vulnerable-zones) this would potentially cover almost all of area.
 - The idea for a Great Ouse Valley and Washes AONB has previously been formally submitted to NE; it may be worth adding this too as a description/mapped area.
- > It will be essential to have good discussions with those landowners whose land we would like to include as buffer; to make

sure they are on board (and get their consent) and long-term sustainability is secure.

Obtain input from UK MAB Committee and UNESCO MAB Secretariat:

- > Ensure timely input from MAB UK Committee and UNESCO MAB Secretariat.
- The idea of 'Wet Net' and use of stewardship schemes etc. as core to buffer zones will needs to be 'sold' to UNESCO as somewhat outside normal buffer zone definition. The partnership needs to get an opinion, early on, on the utility of the fenland wetscape (waterbodies) as means to define buffer zones.
- ➤ Create an explanatory (A4 summary) sheet to go with initial zonation options. This, to explain what we propose to include in core buffer transition and why; and showing how each of components of buffer are to last in future; then getting draft map to UK MAB Committee and UNESCO MAB Secretariat as soon as possible to get feedback and to see whether this would be passable against UNESCO Biosphere criteria?

CHALLENGE #7: STAKEHOLDER IDENTIFICATION & STAKEHOLDER/COMMUNITY ENGAGEMENT

Why this is a challenge	Discussions around who we need to engage in the process have formed part of the FBWG meetings; in addition, the 11 June workshop around consensus building and stakeholder identification & engagement have provided the partners with useful tools to take this on in more detail.
	Following from an understanding of the focus of the Fens Biosphere in terms of sustainable development (challenges #3 and #4) and the definition and extent of the area (challenges #5 and #6), it will be important to get a clear understanding of the stakeholders involved and the extent and type of involvement we wish from each group of stakeholder identified. This, in turn, will help define our communications (challenge #8), and feed into the portfolio development (challenge #11) and development of a viable funding model (challenge #12).
Recommendations for	Map out & prioritise stakeholders:
Development Phase	 Following from a clear understanding of the Biosphere boundaries (challenges #5 and #6), it will be important to map out existing partners and stakeholders: who are they? - Create understanding of who is 'partner' and who is 'stakeholder' (see stakeholder workshop 11 June for tools). From this, prioritise stakeholders and partners, according to what we want from them and what they could bring to the

- partnership's work Use toolkit as employed at 11 June 2018 workshop.
- ➤ Define techniques to be used to engage stakeholders consider that there are different stakeholders at different stages of Biosphere development and implementation.
- Decide what level of relationship & communication the BR needs with each stakeholder (and why) and what are our objectives for each partner/stakeholder? From this, identify what the route is to get each group of stakeholder on board (see also challenge #8) for this, it is recommended using toolkits/charts as proposed at 11 June FBWG workshop.

Instigate reviewing process for stakeholder mapping:

- > Revisit stakeholder mapping & prioritisation exercises at defined milestones in the development process.
- Partners/stakeholders can be fluid over time: over time, stakeholders can become partners ('keep informed', versus 'get actively involved'); also, over time, more and more partners are likely to move from 'minimum effort', via 'keep informed' or 'keep satisfied' to 'manage closely'.
- ➤ It is, therefore, recommended creating time-sensitive overviews of stakeholder maps: create one for start of 2-year development period; and prepare different ones for where one wants each of the stakeholder types to be at different points in time: shortly before nomination; 2 years into implementation (initial establishment phase); 5 years into it (maturing BR); 20 years into delivery (mature BR) and adapt stakeholder prioritisation along the way through this reviewing process.

Get politicians and decision-makers on side:

- > CA: need to make strong economic case making it clear that the Biosphere 'lends itself to Fens' rural economy'.
- Political buy-in is imperative. Key to getting politicians' interest and support is creating and being able to present a clear long-term vision (see also challenge #3). In this, the FBWG partnership needs to take a view on how to reconcile our much monger vision with a political system that has relatively short-term timeframes, usually linked to politicians' period of office.
- The nomination form needs to be signed off by legal representatives of all areas included in the Biosphere. This is an essential requirement for UNESCO. The partnership *will* need some form of political sign off whether at District, County level, or Combined Authority; ideally at all levels especially LAs to be important in this.
- Those responsible for a zone (core/buffer/transition) must sign off the form; as well as national Government (DEFRA) and the Chair of UK MAB Committee. All of these people have to be involved from early stage.
- > Once the BR boundaries have been firmed up (challenges #5 and 6), the partnership needs to get all relevant Local Authorities on board as soon as possible start constructive dialogues which will need to be sustained throughout

- development phase. Communications need to be instigated with politicians at all levels: C.A. / County/City/District Councils and Parish Councils.
- > One needs to make it clear to politicians what the Biosphere can do practically/ real outputs (see also challenge #4 and #10) to help them deliver their own ambitions.
- ➤ Key also will be to get to the Members at the relevant Local Authorities: they need to know more about the BR development work; they are also the ones who can get us linked up with or can present things on behalf of the partnership to the right LA Committees. LAs tend to work in silos (i.e. functional departments don't necessarily talk to one another and Biospheres tend to cut across several functions) so LAs often have difficulties assigning specific officers to Biosphere matters
- ➤ Linking up with Chief Planning Officers the partnership needs to make a pitch to them: it will be important getting them interested early on and establish regular dialogue. Through this route, one can create a practical route to try and influence local planning policy in future and improving LAs' delivery on sustainability.
- At Local Authorities constructive discussions also need to be held with portfolio holders and officers dealing with economic development, to try and influence their delivery on sustainable development.
- ➤ To reach out to influential people, make best use of established networks within FBWG partnership e.g. to reach influential figures such as Lord Lieutenant through contacts within Church of England: through this route, aim to bring powerful/influential figures on board, to do part of the 'Biosphere selling' on our behalf.
- Consider getting relevant MPs involved, e.g. by giving them PR opportunities linked to their own agendas.

Bring on board other types of stakeholders:

- > Bring on board relevant Chambers of Commerce; trade associations.
- ➤ Have discussions with city councils/market towns in the area ensure that the partnership understands how they would feel about being part of a Biosphere, and what activities they would support.
- > Bring on board all relevant partners working in tourism development, e.g. local Destination Management Organisations and major visitor attractions.
- > Bring on board major producers in e.g. food and drink potential sponsors. Start discussions of potential for BR to be linked in with their branding of goods and products.
- ➤ Bring on board utility companies such as Anglia Water, especially those closely linked to central themes developed, perhaps those working in renewable energy sector (see challenge #3). They could become potential sponsors (see e.g. Brighton and Hove BR).
- > Start constructive discussions with developers about e.g. green and blue infrastructure (depending on focus for BR see

- challenge #3). Although the designation is not statutory thinks Biosphere status cannot cause developers to act differently, although they may take note if 'free' advice could be offered how to make developments more sustainable (as a result, houses may be sold for more money, for instance).
- > Bring on board major farms in the area; also county farms. Also organisations representing landowners in the area, e.g., East of England Agricultural Society and Agricultural industries Confederation.
- > Bring on board local educational authorities get schools and colleges involved. Make more of wealth of knowledge and expertise in Cambridge universities.
- ➤ Keep relevant media contacts 'warm'; likewise potential funders.

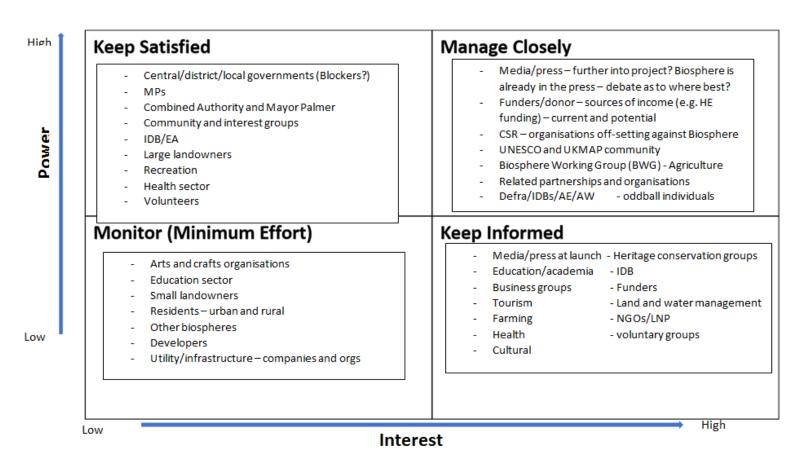
Develop methods and tools to get people interested:

- Even though Local Authorities and politicians are going to be important, the partnership needs to ensure that the BR remains politically resilient, being able to survive changes in political climate locally, regionally and nationally. The partnership may need to create messages that appeal to broad spectrum audience/politicians (see also challenge #8). Offer to provide a presentation at other people's meetings = 'infiltration method': tagging Biosphere onto an existing meeting, using opportunity to highlight core BR benefits for specific stakeholder group.
- > Produce a series of indicative maps to be produced, to help engagement with stakeholders and local communities (see also challenge #6).

Engage local communities:

- It will be important to work out how best to do engagement at a local level. Communities tend to engage well if brought on-board early on and given at least some decision-making powers (see also challenges #2 and #8).
- In the Fens we are dealing with very different communities in different parts of Biosphere, especially if urban areas such as Cambridge are also going to be part of the area (see challenge #5). There is huge variation and diversity in different communities. It is recommended using e.g. ONS and deprivation data to understand situation at a local level.
- Then target communications appropriately: work out how best to work with different communities; different messages and communication tools and actions are likely to be appropriate in different communities (see also challenge #8).

Activity – Mapping your stakeholders



Results of initial stakeholder mapping exercise, done at 11 June 2018 workshop for FBWG.

CHALLENGE #8: COMMUNICATIONS PLAN

group identified? What do we want to achieve with each audience type? What communication methods will work best for each group, and when to employ these best; how are we going to know if the communications work? How are we going to review communications plan? In creating a communications plan, it will be important to look at data on demographics. In this, find links with relevant agendas – e.g. health: devise health outcomes which target inequalities/deprivation (see also challenges #7 and #10). Providing for a sense of place, making clear that the 'area is special' is going to be important as part of the key messages to be conveyed in the communications plan. Develop appropriate communication tools:	Why this is a challenge	Following (challenge #7) a thorough understanding of our audiences (in terms of partners – stakeholders – local communities & community groups), it will be important to understand how best to reach out to and communicate with each audience type. Some groundwork was done at the 11 June 2018 workshop, but a lot more work is needed. For the Biosphere messages, and its related PR and marketing to be effective and thus to ensure the long-term sustainability of the Biosphere itself, it will be very important to have a through communications plan developed, and regularly reviewed.
 Include visuals - promotional film(s) may be particularly useful if done professionally. Make use, where possible, of existing footage from partners to create new, engaging short films. Clear online presence (website; social media) is needed and needs to be effective – and needs promoting. Create brand identity: The name of the Biosphere is going to be important – from marketing and ownership points of view. Recommended to 		 Create Communications Plan early on (through FBWG workshop?) and refresh on regular basis. Following stakeholder mapping exercise (see challenge #7), establish key messages and communication tools for each stakeholder/partner group. Key to work out are: Who are we trying to communicate with? What key messages are we trying to communicate to each group identified? What do we want to achieve with each audience type? What communication methods will work best for each group, and when to employ these best; how are we going to know if the communications work? How are we going to review communications plan? In creating a communications plan, it will be important to look at data on demographics. In this, find links with relevant agendas – e.g. health: devise health outcomes which target inequalities/deprivation (see also challenges #7 and #10). Providing for a sense of place, making clear that the 'area is special' is going to be important as part of the key messages to be conveyed in the communications plan. Develop appropriate communication tools: Where realistically feasible (considering resources etc.) include as wide a range of communication tools as possible during the development phase of the BR, including visuals. Include visuals - promotional film(s) may be particularly useful if done professionally. Make use, where possible, of existing footage from partners to create new, engaging short films. Clear online presence (website; social media) is needed and needs to be effective – and needs promoting. Create brand identity:

- have brainstorming session around this as a starting point; consider bringing in external branding help for this.
- > Brand guideline development (e.g. Brighton) very useful. Branding and communications toolkit is available from UNESCO. Galloway also produced communications toolkit.
- > Create brand identity early on link to 'sense of place'/ 'local pride' create e.g. logos that convey messages on an emotive level.
- > Consider bringing in external creative branding organisation (e.g. Cambridge Curiosity and Imagination) to help partnership devise branding.

Communications Planning

Stakeholder/Partner	Communication	Key Interests and	Current Status	Desired Support	Messages to convey	Communication
Name	Approach	issues				methods
Identify the	Identify the	Add each	Add your	What support do	What are the key	Which methods of
Stakeholder/Partner	strategy that is	stakeholder's	assessment of	you want from	messages I want to	communication are
	best suited to	level of influence	where they	them?	communicate?	best suited?
	each stakeholder.	and area of	stand in			
	The options are	interest in your	respect to			
	"Manage closely,"	task or project	interests in			
	"Keep satisfied,"		your project:			
	"Keep informed,"		"Advocate,"			
	or "Monitor."		"Supporter,"			
			"Neutral,"			
			"Critic," or			
			"Blocker."			
	1	I	I	I	1	I

Communications Planning Template, as used at 11 June workshop for FBWG.

CHALLENGE #9: MANAGEMENT POLICY OR PLAN

Why this is a challenge

The East Anglian Fens have been under increasingly intensive management since the 17th century; as such it is important to get the balance right for holistic fenland management: protection of the water environment (a significant factor is e.g. that fenland water supplies Essex), soil, farming and biodiversity using appropriate conservation and sustainable development principals. Formal co-operation within the diverse Fen Biosphere partnership will ensure that negative impacts of historic and mid-20th century management strategies could be reversed for a more sustainable future.

A key requirement of UNESCO nomination is the development of a management policy or plan for the entire area designated as a Biosphere (challenges #4 and #5). This will have to be related to and in proportion to the focus of the Biosphere (challenges #3 and #4).

For the Fens Biosphere Working Group it will be important to tease out, early on, what relevant strategies, policies and management plans are already in place for the area and where there may be gaps that need to be addressed through additional work.

Recommendations for Development Phase

Map out existing policies/plans:

- > Once the area is known and zonation has been decided on (challenges #5 and #6), and the key focus for the Biosphere have been worked out in some detail (challenges #3 and #4), map out all relevant policies, strategies and action plan in existence or being developed/reviewed.
- > Then, look at whether existing strategies and plans are sufficient to cover the Sustainability development focus for the BR, or whether there are certain gaps in provision.
- From this, make an informed decision whether to use existing strategies and plans as key documents to decide on the detail needed for the BR Management Policy or Plan to accompany the BR nomination form to UNESCO.

Decide on type of policy/plan to accompany nomination:

- Make a decision, early on, whether to focus on creating a more 'higher level' strategic Policy or a more detailed Action Plan. E.g. North Devon clearly has gone for a strategy as the main BR document, but detailed action plans are then developed (and regularly reviewed and updated) by each of the Working Groups sitting within the BR. This could perhaps be a model for the Fens.
- ➤ Have more detailed discussions with existing BRs around this subject e.g. Galloway and Southern Ayrshire Biosphere

- have currently gone through a 'strategic thinking' process, aiming to develop a rigorous approach as to what partners can bring to the Biosphere management plan.
- Ensure that the lead partner (see challenge #2) has the appropriate skills in-house to bring together the various strands of evidence to devise and/or collate the necessary management plan for nomination purposes.

Explore options for embedding policies with decision-making organisations:

- Through ongoing dialogues with the relevant people, (see challenge #7), ensure that management plan where feasible and where covering same agendas is closely lined up with existing LA policies and key strategies developed nationally and regionally (e.g. by Combined Authority), so that BR implementation could, potentially, be partially achieved through organisations with decision-making powers.
- Where possible, get LAs interested in getting e.g. the Biosphere Management Policy/Plan accepted as a Supplementary Planning Document.
- North Devon has, it seems, also influenced their LAs more subtly, by providing regular advice in terms of language to be used etc. in economic development strategies etc.; Brighton has helped LA define City's Green Infrastructure Strategy. Similar opportunities need to be considered for the relevant LAs in the Fenland area.

CHALLENGE #10: COOPERATION/ ALIGNMENT WITH OTHER PARTNERSHIPS/ INITIATIVES/ STATUTORY BODIES

Why this is a challenge

The Fens Biosphere Working Group has already established links with some of the key other partnerships and initiatives that will be important once a Biosphere has been instigated: these include the Fens for the Future Partnership, Natural Cambridgeshire (the Local Nature Partnership for Cambridgeshire and Peterborough), as well as strong links with major landscape-scale projects in the area promoted by conservation organisations Wildlife Trust BCN, RSPB and National Trust (e.g. Great Fen and Wicken Fen Visions).

Once the focus of the Biosphere has been defined (challenges #3 and #4), a stakeholder mapping exercise has been done in more detail (challenge #7) and a better understanding of existing management strategies and plans is in place (challenge #9), it will be important to map out what other partnership initiatives are in existence and what related work around 'sustainable development' is coordinated by e.g. statutory bodies, Local Authorities and related partnerships.

	Through this, a better understanding can be achieved what additional value the Biosphere could bring to existing partnership work (especially if the FBWG is seeking funding from them) – this to ensure close cooperation and to avoid duplication, whilst showcasing that the Biosphere can provide additional value and fills in one or more gaps in 'sustainable development' focus. The outcomes of these discussions, in return, need to feed into the portfolio development (challenge #11) as well as the communications plan (challenge #8).
Recommendations for	Explore mutually beneficial working relationships:
Development Phase	 Through a coordinated workshop amongst partners, understand and map relevant partnerships and what they could bring to a BR: what does each partnership/initiative do with regards to sustainable development (as defined per Challenges #3 and 4); what activities do they do that align with, or could complement the BR's ambitions? Continue and strengthen links with Fens for the Future partnership, with lots of great expertise and ideas available – e.g. some BR discussions could be tagged onto the Fens for the Future partnership's meetings. Link in closely with both the Wildlife Trust's Living Landscape initiatives and the RSPB's Futurescape initiative (the latter currently being renamed and being reviewed for the Fens – note: with potentially very similar boundaries proposed as for BR). Both organisations are keen to work much closer with other organisations and across other sectors. Continue discussions with Local Authorities (see also challenges #7 and #9), to ensure mutual benefits are explored and, ultimately, the BR ambitions regarding sustainable development (see challenges #3 and #4) are embedded in Local Plan revisions.
	Continue and strengthen relationships with both LNP and CA, exploring multiple mutual benefits – e.g. cooperation to raise the profile of the area (note: also work with DMOs on this).
	The LNP, for instance, could help bringing on more relevant partners from other sectors onto FBWG. Important to also have LNP input in buffer zone development (challenge #6), as many sites within buffer will be within some of its partners' remit. In addition, the LNP has developed and is about to launch some very useful toolkits, e.g. 'Developing with Nature Toolkit'.
	It is recommended that the Biosphere working Group remains flexible, open to opportunities that may present themselves. Along the way and which may come from unexpected arenas and initiatives.

CHALLENGE #11: PORTFOLIO DEVELOPMENT FOR IMPLEMENTATION PHASE

Why this is a challenge	With a clearly defined visions for 'sustainable development (challenge #3) and clear objectives set for the Biosphere's remit (challenge #4), combined with a detailed understanding of how best to link up with related partnerships' work (challenge #10), any actions with tangible outputs and improvements can be developed. This will set the scene for the development of a realistic and tangible work plan for the implementation phase post-designation, which will be important to ensure that the partnership can start delivering its vision through visible outputs on the ground.
Recommendations for Development Phase	 Bring partnership work under the 'BR banner': The key challenge in this will be to ensure that actions and work packages proposed are to be delivered under the banner of the Biosphere reserve, rather than individual partners' or related partnerships' work (see also challenges 2 and 10). To achieve this, it is recommended to set up appropriate working Groups (see also challenge #2) linked to the key themes the BR focuses on (see also challenge #3). Besides direct delivery through BR partners' work, effective implementation of the management policy/ plans (see challenge #9) can normally only happen through embedding in LA's Local development planning (e.g. North Devon and The Living Coast). BR then directly influencing through democratic process, despite itself being non-statutory. It will be important that, following ongoing exploration with relevant LAs (and C.A.) (See also challenge #7), that the Biosphere portfolio is closely linked in with their strategies and delivery plans.
	 Link in with latest developments/opportunities post-BREXIT: Following their announcement in the January 2018 25 Year Environment Plan, DEFRA and NE have been working on working out how the announced Nature Recovery Network might work in practice and where these areas are to be developed across the UK. This could, potentially, be a unique opportunity to link in with latest Government plans to use NRNs as key implementation for landscape-scale connectivity programmes, implementing 25 Year Environment Plan. Map CW Embedding in Las Local Plans. Think also about a post-Brexit world the Fens Biosphere reserve will face: the new management of land and payment for ecosystem services (concept of public payment for 'public goods') – A Biosphere designation may be the vehicle by which Biospheres could deliver public goods and coordinate payment for ecosystem services/payment for public goods. In addition, in a post-Brexit world, a Biosphere could potentially offer a new platform for a range of post-BREXIT opportunities, including new marketing opportunities and opportunity for sustainability accreditation. In this, look at

current accreditation schemes (e.g. LEAF) and consider developing BR-specific nature-friendly accreditation scheme, and/or accreditation scheme for marketing sustainable produce and products within BR.

CHALLENGE #12: SUSTAINABLE FUNDING MODEL

Why this is a challenge

The need to have a well-defined funding model for the period post-designation has been flagged up at various FBWG meetings. Unlike the vast majority of Biospheres, in the UK and elsewhere, it is unlikely that, in the Fens, a lot of money will come forward from Local Authorities, Government departments or statutory agencies.

As such, the Fens Biodiversity Working Group faces an unprecedented challenge whereby it needs to have a solid funding model right from the start when UNESCO approves the nomination, to ensure core cost coverage for *at least* a further five years.

If there is no clear understanding where the money could come from, and this has not at least partially been secured by the time of nomination, there is a real risk that the Biosphere will not be able to deliver on its ambitions, through sheer lack of basic resources covering core management costs. This would risk undoing all the hard work getting to the nomination, losing any momentum created amongst the partners, losing interest with stakeholders, risk disappointing public expectations, and losing out on opportunities to grow the Biosphere. In addition, individual partners would potentially face reputational risk, having put in considerable resources developing the Biosphere and which would have been exposed in the media and communications on a regular basis up to that point.

Recommendations for Development Phase

Develop a funding model:

- > Creating a viable BR funding model is essential to get right, in particular as it is unlikely that in the Fens Local Authorities or statutory agencies will fund ongoing management costs.
- > Key will be that, in the Fens, the partnership is unlikely being able to rely on a single funding source. Instead, one will need to develop a broad portfolio of funding income.
- ➤ In this, the partnership needs to be agile as to the funding model: the partners need to be organised in a way (see also challenge #2) so that we can focus and act constantly on opportunities presented possibility of setting a separate working Group that focuses on bringing in a diverse funding portfolio?
- > Regardless of where the funding for a BR is coming from, it will be important to obtain long-term funding agreements from

e.g. LAs, business sponsors and others willing to fund Biosphere – e.g. Dublin Bay BR funded by several partners (including Councils), benefiting from 5-year funding agreements. Very short funding agreements (1 or 2 years; e.g. Wester Ross) simply do not give enough security for core management to keep momentum and to make things happen.

Explore bringing in funds through partner-led projects and programmes:

- ➤ Key will be that, as part of the portfolio development (see challenge #11), work is commissioned through Working Groups with partners and partnerships within defined Working Groups under the overarching BR umbrella (see also challenge #2). Wherever feasible, aim to have some of the core BR management costs also covered in projects' external funding bids (see e.g. North Devon).
- As charities/NGOs and the conservation section always continually need to raise funds, the partnership needs to make sure it doesn't compete with individual projects and organisations. The partnership may need to be very innovative and continually look for new ideas to fund BR work programmes and projects.

Explore funding options from Local Authorities and Combined Authority:

- The FBWG is unlikely being able to rely on LAs' funding for core management costs. C.A. however worth exploring for funding options, but a much closer relationship needs establishing first (see also challenges #7 and #10).
- ➤ BRs can lever in funding e.g. at least 8:1 return on LA investment (North Devon) coming back through BR delivery and economic development e.g. tourism opportunities created. Thus, in ongoing discussions with LAs and CA the economic 'power' of Biospheres will have to be at the heart of discussions when asking for their support, resources or investment.

Explore opportunities for sponsorship from businesses:

- Link in with newly established businesses who may want to attach their brand to the Biosphere for their products e.g. August 2018, first UK sake brewery to open in UK, in Fordham, Cambridgeshire opportunity to link to e.g. Cranes in Fens (as done in past by others such as Elwood Brewery who have sponsored WWT Welney Wetland Centre). Other visitor- and customer focused businesses could be targeted in a similar manner.
- Link in with Corporate Social Responsibility (CSR) programmes, linking in with their sustainability goals. Target companies that have CSR principals aligned with those of the BR (see challenges #3, #4 and #11), making it clear to them how they can become involved with the BR (sponsorship or otherwise) helping them to deliver their own CSR targets in the process.
- In Cambridgeshire there are many international companies, in IT, food and multi-national farming businesses (e.g. food producer Shropshire's) as well as housing developers: it may be possible getting some of them interested in linking with the international 'brand' the Biosphere has (see also challenge #8).

Look closely at other BR's developments, e.g. North Devon's research into Biodiversity offsetting schemes and how these could bring in funding to support the Biosphere: are there similar opportunities in the Fens that could be explored?

9 Summary and key recommendations

Section 8 set out detailed recommendations what to do during the circa 2-year development phase working towards a UNESCO Biosphere Reserve nomination. It is hoped that the focus on the '12 key challenges' gives the Fens Biosphere Working Group clarity around the key challenges ahead to satisfy UNESCO requirements, and what opportunities and options there are in the Fens situation.

Some of the **key points highlighted**:

- Getting the nomination and associated paperwork together is a lot of work. Stakeholder buy-in and ongoing input (staff time; information; resources) from a wide number of partners across various sectors is going to be essential for success.
- A clearly identified, relatively neutral partner should be appointed early on as lead for the next phase of development, employing at least one full-time officer dedicated to this for up to 2 years.
- Getting the zonation sorted is going to be a key challenge early in the process, especially making sure that the partners satisfy the relatively strict UNESCO criteria for buffer zones, with potential alternative options for buffer zone identification to be explored.
- Equally important will be to discuss and decide on critical items such as the development of a clear, overarching vision for the area, decisions on the central focus, or themes, for 'sustainable development', and decisions on what a Biosphere Management Policy or Plan and its associated implementation portfolio 'package' should look like.
- Establishing constructive dialogues and getting stakeholder engagement and input, especially from Local Authorities, politicians and relevant businesses, as well as appropriate input from local communities are going to be essential ingredients for successful BR development.
- Key challenges are likely also to be around other, more practical elements such as developing a suitable governance model.
- A major challenge will be working out how to work towards a viable, sustainable funding model which will ensure that the Biosphere, once designated by UNESCO, can find its own momentum (and funding sources) in the following 5-10 years. It is recommended that the partnership works out a clear route towards getting core management costs of up to £100,000 a year covered for at least 5 years.

• A flexible and innovative approach taken by the partners involved is likely to be crucial in finding ways around challenges along the way. A lot of groundwork has been done and there is clearly a lot of appetite across various sectors to create a Biosphere in the Fens.

The following table provides a **summary of the key recommendations**, as further detailed in section 8.2:

Type of work	Challenge	Key Actions recommended (for details see Section 8.2)	
	Partnership development	Further develop partnership membership & keep momentum	
	·	Ensure ongoing partnership input	
6		Devise suitable governance structure & organisational arrangements, including	
Governance	2 (partnership agreement	
	Governance model development	Set up distinct Working Groups	
		Appoint Lead Partner Change and the standard and the standard fill	
		Choose central development coordinator carefully	
	Developing Vision & Sustainable Development focus	Develop a central vision for Sustainable Development for the Biosphere	
		Develop central themes for the Biosphere's focus	
Sustainable		 Involve relevant research institutions, partnerships and businesses, in developing vision and themes 	
Development	4. Developing key BR Objectives	Define key Objectives for Biosphere	
		Align with & influence sustainable development direction taken by the Combined	
		Authority and Local Authorities	
		Define external boundaries	
	5. Area identification	Develop supplementary maps to show landscape development and land use	
Area		Consider inclusion of Local Authorities' boundaries carefully	
		Decide on urban and/or rural focus	
	6. Zonation and mapping	Organise mapping skills & map development logistics	
		Solve the 'Buffer zone challenge'	
		Obtain input from UK MAB Committee and UNESCO MAB Secretariat	

Stakeholders	7. Stakeholder identification & engagement	 Map out & prioritise stakeholders Instigate reviewing process for stakeholder mapping Get politicians and decision-makers on side Bring on board other types of stakeholders Develop methods and tools to get people interested Engage local communities
	8. Communications Plan development	 Create a Communications Plan Develop appropriate communication tools Create brand identity
Management	BR Management Policy/Plan development	 Map out existing policies/plans Decide on type of policy/plan to accompany nomination Explore options for embedding policies with decision-making organisations
	Alignment & Cooperation with other partnerships etc.	Explore mutually beneficial working relationships
	11. Portfolio Development for implementation	 Bring partnership work under the 'BR banner' Link in with latest developments/opportunities post-BREXIT
Portfolio & Funding Model	12. Sustainable Funding model for implementation	 Develop a funding model Explore bringing in funds through partner-led projects and programmes Explore funding options from Local Authorities and Combined Authority Explore opportunities for sponsorship from businesses

The below table sets out when during the timeline for further Biosphere nomination (see also timeline in section 10.4), the various key challenges need to be addressed most. This outline critical path analysis will need to be further refined if the FBWG partners decide to continue down the route of Biosphere nomination:

	2018/19	2019/20	2020/21	2021/22
KEY CHALLENGES for Biosphere development towards UNESCO nomination				
1. Partnership development				
2. Governance model development				
3. Developing Vision & Sustainable Development focus				
4. Developing key BR Objectives				
5. Area identification				
6. Zonation and mapping				
7. Stakeholder identification & engagement				
8. Communications Plan development				
9. BR Management Policy/Plan development				
10. Alignment & Cooperation with other partnerships etc.				
11. Portfolio Development for implementation				
12. Sustainable Funding model for implementation				

Should be given HIGH PRIORITY in these years
Could be given LOWER PRIORITY in these years

10 Next steps for Fens Biosphere Working Group

This section sets out key steps the FBWG may need to take to get started on the development phase towards nomination. This sets out:

- Advice on resources necessary to make a future UNESCO Biosphere Reserve nomination;
- Advice on funding options that could be targeted to ensure submission of UNESCO nomination;
- Timeline towards making a BR nomination.

10.1 Resources needed to make a future UNESCO Biosphere Reserve nomination application

- Based on discussions with other BRs, it seems likely that the whole process leading to the preparation and submission of a nomination form will cost in the order of £150-£225K.
- In addition to the actual preparation of the nomination form and related documents, other key costs will be related to: stakeholder engagement (workshops; partner events; presentations; displays; venues and catering costs, etc.); communications and marketing (branding; website; leaflets; banners; etc.), as well as travel and similar expenses (for e.g. meetings with other UK BRs and elsewhere, and meetings with UNESCO representatives).
- Appointing a lead partner with relatively low overhead costs could reduce the staffing costs, the main cost to be considered. As such, a budget at the lower end of the above range seems possible, for a 2-year intense development phase (based on 1 F/T project officer as main cost).
- In the above calculations it is, nevertheless, assumed (as per section 8) that a lot of resources (staff time; information and data; in-kind contributions) will be supplied by all partners involved throughout development, thereby significantly reducing need for costly research and external consultancy input.

10.2 Where could the funding for the development phase come from?

Option 1: Go back to the Heritage Lottery Fund for further funding, under their Resilient Heritage Fund programme (grants up to £250K).

• Although the HLF sponsoring core management funding for the next phase of development of a BR would be a first for them, this was – as far as we know - also the case for the <£10K Resilient Heritage Fund project that enabled this consultancy work. In addition, the HLF has recently (June 2018) put out information about their renewed funding strategy and released figures as to their investment in different funding programmes. From this, it is

clear that: 1. The HLF sees the Resilient Heritage Fund as one of the key funds they want to keep investing in, as this provides 'good value for money';

2. Resilient Heritage Fund project application have a well-above success rate for approval; and 3. The HLF has set aside a good amount of funding allocated to Resilient Heritage Fund applications, in their 2018-19 financial budget overview.

Option 2: Talk to potential sponsors (to cover part of costs?)

- Go back to Combined Authority: there was an earlier pledge (February 2018) to fund the creation of a Business Case for Fens Biosphere development (which was subsequently retracted). But now, with firmer evidence in place (this report) and new opportunities available to link in with, and provide invaluable input into, their latest plans for e.g. a Rural Strategy development (see challenge #7), it would certainly be worth exploring funding options with them again.
- Talk to utility companies and major businesses (e.g. some Fens-based international farm producers), for potential sponsorship. This has worked for other BRs (e.g. The Living Coast).

Option 3: Look at alternative funding options:

The below table gives some other suggestions where the funding (or part thereof) for the circa 2-year development of UNESCO nomination processes could potentially come from:

Funding programme	Website	Details
Heritage Lottery Fund – Resilient Heritage Fund	https://www.hlf.org.uk/looki ng-funding/our-grant- programmes/resilient- heritage	 Grants of £3,000-£250,000 are available to organisations in the UK who want to build their capacity or achieve strategic change to improve the management of heritage. Grants can fund activities to help you acquire new skills or knowledge, or new models of governance, leadership and business to put your organisation in a better position for the future.
Power to Change (Community Business Bright Ideas Fund and Community Business Fund	http://www.powertochange. org.uk/funding/grants/	 Grant awards between £50K and £300K to community businesses in England (total £10 million) Now closed, but likely to reopen for further funding round early 2019? For community businesses that need funding for a business development project that will make them more sustainable. They have two main grant programmes. The £1.85 million Community Business Bright Ideas Fund is aimed at community groups who have a community business idea but need help turning it into reality. The £10 million Community Business Fund is aimed existing community businesses that need

Funding programme	Website	Details
		funding for a business development project to make their organisation more sustainable.Could fund both capital and revenue costs.
Esmée Fairbairn Foundation	https://www.esmeefairbairn .org.uk/what-we-fund	 Large funder. The Foundation makes grants in four areas: Arts, Children and Young People, Environment and Social Change – as well as through its Food funding strand. Across all its funding it aims to unlock and enable potential, back the unorthodox and unfashionable, build collective networks and catalyse system change. The environment area seeks to address environmental degradation and biodiversity loss, and challenge environmental inequality in people's lives. They fund organisations that see people and communities as an asset to support the sector's sustainability and take positive and practical action to address environmental challenges. Priorities are: Connecting people with nature; Large-scale conservation of natural environments on land and at sea; countering the effects of damaging human activities; lesser known plants, animals and organisms. Available Funding - Grants support organisations' core or project costs, including staff salaries and overheads. Does not fund building or equipment costs, or individuals. 2015 grants ranged from £5k to £1.5m (median average £100,000), with support lasting 1 - 5 years (45% 3 years). Two stage application process. Open to CICs as well registered charities. Applications may be made at any time. All Not-for-Profit groups
The Prince's Countryside Fund	http://www.princescountrysi defund.org.uk/grant-giving- programme/grant- programme	 Up to £50,000 They have grants available for innovative projects that will provide a lasting legacy to individuals and communities in rural areas
Rothschild Foundation Grants	https://rothschildfoundation .org.uk/	 Supports arts and heritage, the environment, education and social welfare by awarding grants, fostering dialogue and debate
People's Postcode Lottery's Dream Fund	http://www.postcodedreamt rust.org.uk/dream-fund	 Yearly fund; opens in July, deadline August; following full application, winners announced January following year). The Dream Fund offers a total award fund of £3,000,000 for charitable organisations to deliver their 'dream' project in one or more areas in Great Britain. Charities can apply for between £500,000 and £1,000,000 to deliver a project 24 months in length. The Dream Fund accepts applications that meet one of their five funding priorities; this includes

Funding programme	Website	Details	
		'Protecting Britain's biodiversity'.	
Cambridgeshire Innovate & Cultivate Fund	http://www.cambscf.org.uk/ icf.html	 Up to £50K For projects from organisations to help strengthen communities in Cambridgeshire and reduce pressure on County Council services. 	
Amey Community Fund (managed through Cambridgeshire Community Foundation)	https://www.cambscf.org.uk /amey-community-fund.html	 £10,000 to £40,000 The Landfill Communities Fund aims to offset some of the negative impacts of living near a landfill site by allowing operators to a pay a proportion of their landfill tax liability to not-for profit organisations. These could be bodies delivering benefits to the general public, biodiversity or the environment within a 10-mile radius of a landfill site. Be in Cambridgeshire (the Fund does not cover Peterborough); within 10 miles of any licensed landfill site 	
Postcode Local Trust	http://www.postcodelocaltr ust.org.uk/	 Projects that aim to make a difference to local communities Registered charities, voluntary organisations, community interest companies and social enterprises Requests from £500 - £20,000 (registered charities for over £2k) Projects of a maximum of 12 months 	
Plunkett Foundation	https://www.plunkett.co.uk/	Supports communities to take control of their challenges and overcome them together.	
Wolfson Foundation	http://www.wolfson.org.uk/	The Wolfson Foundation is an independent charity that awards grants to support and promote excellence in the fields of science, health, education and the arts & humanities.	
Garfield Weston Foundation	http://www.garfieldweston. org	 One of the UK's largest funders. The Foundation has no specific priorities for funding. It aims to support a wide range of charitable activity in the UK. Need to demonstrate local need/ support (often through funds already raised) and should be for new projects rather than 'core' work - could need to demonstrate sustainability. Particularly keen on capital funding. Has an environment strand through which it supports a range of environment projects ranging from 	
		organisations that raise public awareness of, and to undertake finding solutions to specific issues (e.g. sustainable fishing sources and community-based solutions such as gardens) in addition to charities that actively deliver conservation projects.	
		 There is no limit to the size of grant available and every application is considered on its own merit. The Foundation only provides one-off grant donations rather than multi-year funding. Applicants must show what other sources of funding have been sought or secured for the project. 	

Funding programme	Website	Details
		 Applications may be made at any time. Relevance – All partners
National Capacity Building Programme	Further information - Rebecca Rayner Historic England, 1 Waterhouse Square, 138 - 142 Holborn London EC1N, 2ST Telephone: 01904 601947. Email: rebecca.rayner@HistoricEngl and.org.uk	 The National Capacity Building Programme is provided by Historic England (HE) and is aimed at national and local voluntary (and other organisations) based in England to support projects that promote the conservation, understanding and enjoyment of the historic environment. Grants are predominantly awarded to voluntary organisations providing national coverage - however regional projects demonstrating good practice with the potential for wider application will be considered. Support is focused on building and maintaining voluntary sector capacity on the sustainable management and development of the historic environment. Projects and activities must meet at least one or more of the following objectives: i) Projects which build up the capacity and commitment of local communities to champion the conservation and enhancement of their own local historic environments. ii) Projects which promote best-practice standards for the conservation, documentation, interpretation and sustainable management of the resources of England's historic environment. Support to bodies discharging under specific functions relating to statutory controls. All partners involved in working with disadvantaged groups
Landfill Communities Fund	https://www.entrust.org.uk/ landfill-community-fund/	To find options for landfill tax funding in area
Reaching Communities Fund	https://www.biglotteryfund. org.uk/funding/programmes /reaching-communities- england	 For projects that: bring people together and build strong relationships in and across communities improve the places and spaces that matter to communities enable more people to fulfil their potential by working to address issues at the earliest possible stage.
Support Cambridgeshire	http://www.idoxopen4com munity.co.uk/supportcambs	Searchable funding options
Funding Central	https://www.fundingcentral. org.uk/default.aspx	Funding Central lists thousands of funding opportunities for voluntary and community organisations and social enterprises registered in England
Directory of Social Change	https://www.dsc.org.uk/fun ding-websites/	Listings of funding websites

Funding programme	Website	Details
Grantfinder	https://www.idoxgrantfinder	Listings of funding websites
	.co.uk/	
KnowHowNonProfit	https://knowhownonprofit.o	Information about wide range of grant sources
	rg/funding/grants/grants	
Environmental Funders	https://www.greenfunders.o	The Environmental Funders Network (EFN) is an informal network of trusts, foundations and individuals
Network	rg/about/	making grants on environmental and conservation issues.
Countryside Jobs - grants	https://www.countryside-	Listings of funding websites
overview	jobs.com/Information/Grant	
	s.htm	

10.3 What to do until start of development phase?

Key for the FBWG will be, based on the information provided in this report, to decide what to do next. There are three likely options:

- **OPTION 1: Go ahead** and find funding to develop the BR towards nomination.
- **OPTION 2: Do not go ahead**, as risks of developing the proposal to nomination and/or risks of implementation phase are considered too big. In this scenario, it would be helpful for the FBWG to consider alternative plans to move things forward for the Fenland area; e.g. one route may be to push to have an area 'designated' as part of the new Nature Recovery Network. The developing guide principles for the partnerships to be delivering the Nature Recovery Networks are very similar to the way currently the FBWG sees itself structured. Or perhaps continue the work (possibly with, or even under, the LNP) by pulling all existing conservation and sustainable use plans and strategies under an umbrella strategy to deliver a strong Vision for Cambridgeshire/the wider fenland.
- **OPTION 3: Do go ahead, but not just yet**: first develop partnership further; develop further key stakeholder relations; explore potential funding options and sponsorship options; potentially even await different political or financial climate once all taken to the next step, or changed more favourably, proceed towards development phase, as per option 1.

A key decision moment on the best way forward could be the next FBWG meeting planned for 17 September 2018.

- Using the information in this report as a basis, key at this meeting would be to explore, with as many stakeholders as possible, people's ideas on the next steps, regarding: funding options; engagement with stakeholders; developments in 5/10/20/50 years' time & potential role for BR in these, as well as links with partners' ambitions.
- Invite to this meeting other partners and representatives from related partnerships such as the LNP and Combined Authority, as well as selected business representatives to these discussions.
- For this meeting also consider discussing the overarching vision and sustainable development meaning and focus for the partnership's work going forward. For this, consider developing workshop-style meeting, perhaps coordinated in cooperation with an organisation such as Cambridge Forum for Sustainability or ARU's Global Sustainability Institute the group wishes to have closer working connections with anyway.

Other recommendations going forward:

- **Keep strong links and ongoing discussions with UK MAB representatives**, and make initial contacts with the UNESCO MAB Secretariat. Key will be to find out, as soon as possible, whether the Fens Biosphere WG's ideas around the alternatives for zonation, using in particular land in stewardship and the 'wet web' principles using ditches and drains, as proxies for buffer zone creation. The partnership will need to know whether this is acceptable by UNESCO as an alternative route to zonation, before proceeding towards nomination.
- Keep partnership momentum: continue meeting up regularly and discussing key items, keeping BR relevant to all partners involved.
- Hold series of targeted workshops, or similar interactive participatory events, around subjects identified in various subsections of section 8, either within WFBG, or tagged onto related partnerships/initiatives such as Fens for the Future and LNP. The focus of interactive meetings/workshops should be around key challenges, e.g. governance model; sustainability focus; and carried out very much in line with the consensus building workshop held in June 2018.
- Devise Action Plan for the Biosphere Working Group for the next 12 months: to include detailed timeline for actions towards submitting funding bid.
- **Consider identifying a lead partner** early on to lead on the 2-year process. Note that the lead partner for the funding bid (e.g. back to HLF) does not necessarily have to be the same as the lead partner for the 2-year development phase (although in practice that may be handy).

- Offer presentations/workshop facilitation at e.g. C.A. /LAs (for members?); LNP; other potentially influential groups. Key challenge may be around long timescales for nomination process: need to get key people and organisations on board early on to prevent risking losing political interest later on.
- Make use of other opportunities to promote and discuss BR ideas, to obtain further stakeholder input/support. Roger Mitchell already organising presentation and panel discussion/workshop around Fens theme, to be held at autumn CCF symposium and workshop (on 12 and 20 Nov. 2018).
- Make decisions around the use of (and future updates of) this report Who will own this; who will hold copyright? How is the partnership going to promote this? Put this on a website or not? An agreement needs to be achieved so that there is clarity how this document, and the information in it, can be used going forward. Likewise, consider how future updates of this Route Map report are to be handled: the current Route Map report is intended as a working document and may well evolve further over time, including refining the challenges and their expression.
- Consider creating a short, public-facing version of this document, to get further stakeholder and community buy-in going forward.

10.4 Outline timeline towards nomination

If a decision is made to go ahead towards Biosphere nomination, key dates would be (see also section 3.1):

Current HLF project work	Ends Jul 2018
Decision by FBWG to go ahead	Sep 2018
Develop application – e.g. to HLF's Resilient Heritage Fund	Submitting Jan 2018
Go ahead funder (HLF has 8 week turn-around)	Mar 2019
Start development phase	Apr 2019
Finish development phase	Mar 2021
Member State submission of nomination application to UNECO	Sep 2021
Technical Review, Assessment and initial Decision by UNESCO	Nov 2021 – Mar 2022
Revision of application following UNESCO queries (if necessary)	May 2022
Approval of Biosphere reserve nomination	Jun or Jul 2022

APPENDICES

Appendix 1: Further information – key online information sources on BRs

Appendix 2: Comparative analysis of alternatives to Biosphere Reserve status

Appendix 3: Overview of relevant BRs in UK and elsewhere

Appendix 4: Interview questionnaire

Appendix 5: Summaries of key learning points from interviews held with other Biosphere reserves

Appendix 1: Further information – key online information sources on BRs

GENERAL INFO ON BIOSPHERE RESERVES						
http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/	Main website for UNESCO Man and the Biosphere programme.					
http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/designation-process/	BR Designation process; including forms to be filled in downloadable from here.					
http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/biosphere-reserves-in-practice/	Worldwide exampled BRs – focus on different types of different sustainability highlighted.					
http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/	UNESCO: Up-to-date overview of current BRs in Europe and North America, listed per country.					
http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/united-kingdom-of-great-britain-and-northern-ireland/	UNESCO: Overview of UK BRs, with contact details UK MAB (note: contact details are out-of-date).					
http://www.unesco-mab.org.uk/	Main website UK Man and Biosphere Committee.					
http://www.unesco-mab.org.uk/news	Latest news from all UK BRs					
http://www.unesco-mab.org.uk/contact-us.html	Contact details UK MAB Committee					
http://www.unesco-mab.org.uk/periodic-review.html	Periodic Review of UK Biospheres.					
https://onlinelibrary.wiley.com/doi/pdf/10.1111/brv.12044	Periodic Review 2009 – following this, e.g. North Norfolk BR withdrew. [Hambrey Consulting, 2009. 10 Year Periodic Review of UK Biosphere Reserves. Overview and summary report. Report to DEFRA. Hambrey Consulting, Strathpeffer]					
https://www.unesco.org.uk/unesco-in-the-uk/	Searchable map of all UNESCO sites in UK					
https://www.unesco.org.uk/	UK National Commission for UNESCO.					
https://www.unesco.org.uk/designation/biosphere-reserves/	Biosphere Reserves info on UNESCO in the UK website – includes video.					
http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/world-network-wnbr/	World Network of Biosphere Reserves (WNBR)					
http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/images/MAB_leaflet	Latest UNESCO 2-page leaflet on Biosphere network globally.					

2016 2017 en.pdf	
https://en.wikipedia.org/wiki/Man and the Biosphere Programme	General information on BRs.
https://en.wikipedia.org/wiki/Category:Biosphere reserves of England	Some information and hyperlinks to UK BRs.
https://en.wikipedia.org/wiki/World Network of Biosphere Reserves in Europe and North America	Overview of Biosphere Reserves in Europe and North America, with hyperlinks for present and past UK Biosphere Reserves information online.
http://www.biodiversitya-z.org/content/man-and-the-biosphere-reserves-mab	Some generally information on BRs globally (somewhat out-of-date).
PUBLICATIONS and Impact evidence	
http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/Lima Action Plan en fin al.pdf	Lima Action Plan 2016-2025
http://www.gsabiosphere.org.uk/wp-content/uploads/2017/09/MAB_Strategy_2015- 2025_final_text.pdf	MAB Strategy 2015-2025
https://sustainabledevelopment.un.org/post2015/transformingourworld and http://ec.europa.eu/environment/sustainable-development/SDGs/index_en.htm	2030 Agenda for Sustainability Goals – Lima Action Plan 2016 – 2025 focuses on implementation of these goals.
https://www.unesco.org.uk/search/?tag=biosphere-reserves	Range of Publications on BRs downloadable.
https://www.unesco.org.uk/publication/wider-value-of-unesco-to-the-uk-2014-	Report 'Wider Value of UNESCO to the UK 2014–2015': Research in
<u>2015/</u>	this report on four Biosphere Reserves in the UK that were surveyed
	by UNESCO showed that these generated an estimated £1.9 million
	from April 2014 to March 2015 through their association with
	UNESCO. Background to this report: The Government queried value of
	continuing UNESCO in UK; report is the response to this.
http://unesdoc.unesco.org/images/0010/001038/103849Eb.pdf	Seville Strategy – includes criteria for designation (Article 4), policies and monitoring recommendations.
https://www.unesco.org.uk/all-publications/?type=designation-toolkits	List of recent publications on BRs
https://www.unesco.org.uk/wp-content/uploads/2017/02/UNESCO-Biospheres-in-the-	Report: Wider value of Biosphere Reserves to the UK.
UK.pdf and https://www.unesco.org.uk/news/the-value-of-uk-biosphere-reserves/	
http://www.northdevonbiosphere.org.uk/uploads/1/5/4/4/15448192/north_devon_biosph	Periodic Review North Devon BR, 2015
ere periodic review 2015.pdf	
http://www.gsabiosphere.org.uk/wp-content/uploads/2017/09/UNESCO-in- Scotland Brochure Low-Resolution-Version.pdf	Report: wider value of UNESCO to the UK - Scotland

http://www.unesco-	2007 report, Scotland, Social, economic and environmental benefits of
mab.org.uk/uploads/4/5/4/8/45481041/scottish national heritage biosphere rese	World Heritage Sites, Biosphere Reserves, and GeoParks
rves report no248.pdf	The manufacture of the second
and https://www.unesco.org.uk/publication/unesco-in-scotland/	
http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/Lima Action Plan en fin	Lima Action Plan for UNESCO's Man and the Biosphere (MAB) Programme
al.pdf	and its World Network of Biosphere Reserves (2016-2025).
https://www.unesco.org.uk/publication/unesco-mab-brand-story-toolkit-a-guide-to-	Toolkit to help with audience development etc. for BRs.
engaging-people-and-telling-our-powerful-story/	roomite to help with addictive development etc. for bilo
http://www.unesco-mab.org.uk/uploads/4/5/4/8/45481041/2002 pr paper.pdf	Periodic review – process; article by Martin Price, 2002
http://www.unesco-	Report: Review of UK Biospheres, 1999
mab.org.uk/uploads/4/5/4/8/45481041/review of uk biosphere reserves 1999.p	
<u>df</u>	
http://biospherejournal.org/	International Journal for Biosphere Reserves (launched 2017).
http://biospherejournal.org/database/	Overview of reports created by BRs, worldwide.
INTERACTIVE MAPPING DATA	
http://www.biospheresmart.org/ and http://www.unesco.org/new/en/natural-	Biosphere Smart initiative: Interactive Mapping Tool for Biosphere
sciences/environment/ecological-sciences/biosphere-reserves/biospheresmart-initiative/	Reserves ('The Biosphere Smart Initiative is based on the idea to
	maximise the use of new information technologies to build a covenant
	for a sustainable future and a transition to green societies based on
	knowledge. Citizens become both beneficiaries and key actors of the
	information and participation tools of the project').
http://www.biospheresmart.org/#	Interactive map of best practice examples of BRs worldwide.
http://www.biospheresmart.org/#	Interactive map of BRs worldwide.
http://oasiis.insights.us/implement	Discussion on: How could the UNESCO Biosphere Reserve (BR)
	designation help citizens contribute to inclusive and sustainable
	economic growth in their community? And how can businesses and
	social enterprises benefit and play a role?
https://www.unesco.org.uk/news/oasiis-platform-launched-to-evidence-the-economic-	Launch of Oasiis platform – aim of platform is to evidence the
impact-and-potential-of-unesco-biosphere-reserves/	economic impact and potential of UNESCO's Biosphere Reserves.
impact and potential of anesco biosphere reserves	economic impact and potential of ONESCO'S biosphere Reserves.

Appendix 2: Comparative analysis of alternatives to Biosphere Reserve status

Designation	About designation	Relevance to Fens	Comparison with Biosphere Reserve
1. World	Designation, following the 1972 World Heritage Convention,	- Well-known and respected	- WHS unlikely to cover large tracts of landscape with varied cultural
Heritage Site	identifies and safeguards sites of "outstanding universal	international designation:	and natural heritage. Buffer zones and transition areas in Fens more
(WHS)	value", our world's most significant natural and cultural	191 countries adhere to the	appropriate through BR.
[UNESCO]	heritage. Sites are designated for their globally important	World Heritage Convention.	
	cultural or natural heritage and which require appropriate		- Key criterion of "outstanding universal value" potentially applicable
	management and protection measures. Natural properties may	- The Convention links	to some sites within the Fens, but very unlikely to be applicable to
	be terrestrial or marine areas.	together the concept of	large area of Fenland landscape – would need a more unifying,
		nature conservation and the	unique element.
	http://whc.unesco.org/ and http://whc.unesco.org/en/criteria/	preservation of cultural	
		sites. Fens contains both	- WHS focus on appropriate management to safeguard natural and
		(inter-) nationally significant	cultural heritage - BR focuses more on the <i>management</i> of biological
		nature and cultural heritage	and cultural diversity as part of sustainable development.
		sites.	
			- WHS often driven by tourism. For BR also important consideration,
			but equally aims to promote other sustainable development.
2. Green List of	The aim of the 'IUCN Green List Programme' is to improve the	- Global benchmark for	- Green List: Focus is primarily on the management of protected
Protected and	contribution that equitably governed and effectively managed	landscape areas that are	areas. BR can also include undesignated/unprotected buffer zones
Conserved	protected areas make to sustainable development through the	fairly governed and	and transition zones.
Areas	conservation of nature and provision of associated social,	effectively managed.	
[IUCN]	economic, cultural, and spiritual values. The focus is on	, -	- Green List: Focus is on improving conservation outcomes in
	improving conservation outcomes, encouraging good		protected areas. BR can also provide for a focus on wider
	governance, sound design & planning, and effective		sustainable development.
	management.		·
			- 'Green List programme' still quite new (following trials, only agreed
	https://www.iucn.org/theme/protected-areas/our-work/iucn-		by IUCN in 2016). BR already has global 'accolade'.
	green-list and https://www.iucn.org/theme/protected-		
	areas/our-work/iucn-green-list/1-global-standard		
3. Global	UNESCO Global Geoparks are single, unified geographical areas	Fens has a young, yet unique	- UNESCO Global Geopark must demonstrate geological heritage of
Geopark	where sites and landscapes of international geological	geological and	international significance, with the purpose of the designation being
[UNESCO]	significance are managed with a holistic concept of protection,	geomorphological history.	to explore, develop and celebrate the links between that geological

Designation	About designation	Relevance to Fens	Comparison with Biosphere Reserve
	education and sustainable development. In these areas the geological heritage is safeguarded and sustainably managed, with strong local involvement; this involves a bottom-up approach of combining conservation with sustainable development involving local communities. There are 119 Global Geoparks spread across 33 countries (in UK 6 incl. e.g. North Pennines and English Riviera on S Devon Coast).		heritage and all other aspects of the area's natural, cultural and intangible heritages. Some links could be made with Fens, but natural and cultural heritage of Fens not always obviously linked to its geological history ('there is more to the Fens than just its geology'). BR: can incorporate geological significance as part of 'heritage' promoted and managed.
	http://www.unesco.org/new/en/natural-sciences/environment/earth-sciences/unesco-global-geoparks/		
4. Area of Outstanding Natural Beauty (AONB)	An AONB is a landscape whose distinctive character and natural beauty are so outstanding that it is in the national interest to safeguard them. The primary purpose of the AONB designation (under the CROW Act 2000) is to conserve and enhance an area's natural beauty. By statute this includes wildlife, physiographic features and cultural heritage as well as the more conventional concepts of landscape and scenery. Account is taken of the need to safeguard agriculture, forestry and other rural industries and the economic and social needs of local communities. AONBs have equivalent status to National Parks as far as conservation is concerned. There are currently 40 AONBs. http://www.landscapesforlife.org.uk/ and https://www.gov.uk/guidance/areas-of-outstanding-natural-	Although the Fens could, arguably, tick against some of the criteria for 'natural beauty' such as 'good landscape quality' (which can include man-made landscapes), 'relative tranquillity' and 'cultural heritage', much less clear is whether it can classify for 'scenic quality and 'relative wildness'.	 AONBs are statutorily designated areas. BR non-statutory which should make acceptance with different stakeholders easier. AONB: fixed boundary. BR: flexible outer boundary BR: additional zoning and the definition of types of activities in each zone; and provisions for research, monitoring, education, and training. Unlikely that NE will designate new AONBs in the future; process would also take many years.
5. National Park (NP)	beauty-aonbs-designation-and-management NPs are areas which have been designated for special protection because of their beautiful countryside, wildlife and cultural heritage. The purpose of NPs, designated under the National Parks and Access to the Countryside Act (2016), is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well being of those living within them. There are currently 10 NPs.	In England and Wales, designation as a national park may include substantial settlements and human land uses which are often integral parts of the landscape, and land within a national park remains largely in private	 NP: Focus is on relatively undeveloped and scenic landscape. Fens unlikely to tick all criteria. NPs are statutorily designated areas. BR non-statutory which should make acceptance with different stakeholders easier. NP: fixed boundary. BR: flexible outer boundary BR: additional zoning and the definition of types of activities in each

Designation	About designation	Relevance to Fens	Comparison with Biosphere Reserve
	http://www.nationalparks.gov.uk/ and https://web.archive.org/web/20060303232651/http://www.de fra.gov.uk/wildlife- countryside/issues/landscap/natparks/index.htm	ownership. This seems to fit well with the Fens' situation.	zone; and provisions for research, monitoring, education, and training.
6. City Park	The working definition of a City Park is 'a large urban area that is managed and semi-protected through both formal and informal means, to enhance the natural capital of its living landscape and provide a better quality of life'. It is meant to be the urban equivalent of a National Park. The National Park City Foundation is currently leading a piece of work to agree an international definition and typology for a National Park City). London is on course to be declared the world's first National Park City in 2019. Aim is to make the city greener, healthier, wilder and more enjoyable. http://www.nationalparkcity.london/	There are relatively large conurbations in the Fens: Cambridge and Peterborough.	- Although Cambridge and/or Peterborough are seen as important for a BR for the Fens, the remainder of Fens area is very rural instead, and sits uncomfortably with the urban focus of the City Park designation.
7. National Nature Reserve (NNR)	NNRs contain examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats or to provide special opportunities for scientific study of the habitats communities and species represented within them. In addition they may be managed to provide public recreation that is compatible with their natural heritage interests. https://www.gov.uk/government/collections/national-nature-reserves-in-england	The Fens contains several important NNRs which could be core sites as part of a BR.	- NNRs: Focus is on core reserves; BR links such cores sites with wider landscape through buffer and transition zones.
8. Natura 2000 site	European-wide network of protected areas established by the European Union, made up of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated respectively under the Habitats Directive and Birds Directive. http://ec.europa.eu/environment/nature/natura2000/index_en.htm	The Fens contains several important Natura 2000 sites which could be core sites as part of a BR.	- Natura 2000 sites: Focus on core reserves; BR links such core sites with wider landscape through buffer and transition zones.

Designation	About designation	Relevance to Fens	Comparison with Biosphere Reserve		
9. Ramsar site	Ramsar sites are wetlands of international importance designated under the Ramsar Convention. Under the "three pillars" of the Convention, the Contracting Parties commit to: work towards the wise use of all their wetlands; designate suitable wetlands for the list of Wetlands of International Importance (the "Ramsar List") and ensure their effective management; and cooperate internationally on transboundary wetlands, shared wetland systems and shared species.	The Fens contain important Ramsar sites which could be core sites as part of a BR.			
10. Site of Special Scientific Interest (SSSI)	https://www.ramsar.org/ Since 1949 SSSI designation provides statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features. These sites are also used to underpin other national and international nature conservation designations. Most SSSIs are privately-owned or managed. https://data.gov.uk/dataset/sites-of-special-scientific-interest-england3	The Fens contains several important SSSIs which could be core/buffer sites as part of a BR.	- SSSIs: Focus on core reserves; BR links such core and buffer sites with wider landscape through buffer and transition zones.		
11. Heritage Coast	Heritage Coasts are stretches of England's coastline defined by Natural England as worthy of conservation for their natural beauty. They are recognised for their natural beauty, wildlife, marine flora and fauna and their heritage features. Amongst the purposes of definition is support for these qualities and enabling enjoyment of them by the public. There is no statutory designation process. http://webarchive.nationalarchives.gov.uk/20140605094042/http://www.naturalengland.org.uk/ourwork/conservation/designations/heritagecoasts/default.aspx and https://www.gov.uk/government/publications/heritage-coasts-protecting-undeveloped-coast/heritage-coasts-definition-purpose-and-natural-englands-role	Coastline not so relevant for Fens - N/A, unless perhaps if focus is on The Wash.	- Heritage Coasts tend not to stretch very far beyond the actual coastline area.		
12. Marine Protection	MPAs are a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective	N/A, unless perhaps if focus is on The Wash (which is	- Marine zone not so relevant for Fens.		

Designation	About designation	Relevance to Fens	Comparison with Biosphere Reserve
Areas (MPAs); Marine Conservation Zone (MCZs)	means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. In the East of England regulated through IFCA (Inshore Fisheries and Conservation Authority). http://jncc.defra.gov.uk/page-4524 and http://jncc.defra.gov.uk/page-4524 and http://www.eastern-ifca.gov.uk/marine-protected-areas-eifcas-district/	protected as a SAC and SPA).	
13. Conservation Area (CA)	Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Conservation areas can be found across a wide a range of urban and rural UK locations. https://www.historicengland.org.uk/advice/planning/conservation-areas/ and https://historicengland.org.uk/advice/hpg/has/conservation-areas/	The Fens contains a great number of conservation areas across its towns and villages.	- CAs generally focus on smaller, built-up areas. Could include some local green spaces where relevant to the reasons for designating CA, but key focus is on an area's architectural and historic interest. BR's focus on core conservation sites would be more appropriate and can cover much larger areas.
14. Scheduled Ancient Monument (SAM)	Scheduling, under the Ancient Monuments and Archaeological Areas Act of 1979, is applied to archaeological sites of national importance, and is applied if considered the best means of protection. https://historicengland.org.uk/listing/what-is-designation/scheduled-monuments/	There are numerous SAMs, some arguably of international importance across the Fens basin.	SAMs are, on the whole, rather small. As part of a wider BR landscape, these could be important as buffer sites as SAMs are often also important for wildlife.
[15. Nature Improvement Area (NIA)]	NIAs formed part of the UK Government's response to the 2010 Lawton report "Making Space for Nature". They were then brought into law via the Natural Environment White Paper (2011). Funding through the NIA programme ended in March 2015, but the 12 funded projects have been able to carry on using their own resources. NIAs aimed to 'enhance and reconnect nature on a significant scale' in England, to improve ecological connectivity and improve biodiversity. In 2015 the NIAs covered 47,000 acres of England in total, as well as a total	NIAs helped improve habitats with a focus on landscape-scale habitat connectivity. This is close to the aims of the Fens for the Future Partnership (which - unsuccessfully - applied to be one of the original NIAs) and Natural Cambridgeshire,	- If similar schemes are to be devised in the future, perhaps following the publication of the 25 Year Environment Plan (Jan 2018 – which talks about rolling out a 'Nature Recovery Network'), a follow-up to NIAs could fit well with the Fens' partners' and related partnerships' ambitions. This could potentially deliver similar ambitions as a BR could bring for habitats, species as well as important social and economic benefits.

Designation	About designation	Relevance to Fens	Comparison with Biosphere Reserve
	of 335 miles of new footpaths for public access.	the Local Nature Partnership	
		for Cambridgeshire and	
	https://www.gov.uk/government/publications/nature-	Peterborough.	
	improvement-areas-improved-ecological-networks and		
	http://webarchive.nationalarchives.gov.uk/20140711180923/h		
	ttp://www.naturalengland.org.uk/ourwork/conservation/biodi		
	versity/funding/nia/default.aspx		

Appendix 3: Overview of relevant BRs in UK and elsewhere

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
POTENTIAL ONES FOR INTERV	IEWS – in oi	rder of (recon	nmended) potential for informing Fens Biosphere de	esignation.	
1. North Devon BR	England	Current	Size : 526,088 ha. (Including 292,800 ha. marine).	Key focus on biodiversity; land and water	YES
About: http://www.northdevonbios phere.org.uk/		Approved 1976	Population: 155,000 (2002 figure) Unique Features:	management and encouraging inward investment through	- North Devon BR was the first in the UK to be extended to meet UNESCO's new criteria for
http://www.unesco.org/new/en/natural-		Extended 2002	Located on the estuary of the Taw and Torridge Rivers. Primarily temperate broadleaf forests or woodlands including coastal/marina component	sustainable tourism development all seem to align with the Fens' key	biosphere reserves set out in the Seville Strategy – hence also key focus on sustainable development
sciences/environment/ecolo gical-sciences/biosphere-			(coastal due systems and marshland).	focus areas.	which would be key for Fens as well.
reserves/europe-north- america/united-kingdom-of- great-britain-and-northern-			Reaching to the heights of Dartmoor and Exmoor and extending to the marine environment 12 miles beyond Lundy, this Biosphere has	They have pioneered projects and programmes, similar to the ambitions of	- Periodic Review carried out only recently, in 2015. Biosphere review & related documents:
ireland/braunton-burrows- north-devon/			established very effective partnerships which pioneer a range of projects for a sustainable future in north Devon.	the partners involved in the Fens for the Future partnership across the	http://www.northdevonbiosphere.o rg.uk/managementfunding- review.html - Would be useful to
http://www.unesco- mab.org.uk/north-devon-			Braunton Burrows is internationally recognised as	fenland basin: they have pioneered large landscape-	hear 'lessons learned' as a result.
biosphere-reserve.html https://en.wikipedia.org/wik			one of the finest dune systems in the northern hemisphere. It is an amazingly rich habitat with over 470 species of flowering plants,	scale land-use change and biodiversity enhancement, nature improvement areas,	2002: BR extended: would be good to learn how easy they find the extension process was.
i/North Devon%27s Biosph ere Reserve			several Red Data species and a unique research history. The catchment area of the reserve	biodiversity offsetting, ecosystem-based local	- Recent cutbacks has, it seems,
<u>Crc_neserve</u>			includes the enigmatic Culm Grasslands; a kind of Rhos Pasture which is only found in the north	development plans, carbon reduction strategies and	provided difficulties for future (financial) viability of managing and

Biosphere Reserve	Country	Current/	BR's key focus and USPs	Similarities/ Differences	Approach for interview?
& Key hyperlinks and		Candidat		with Fens	& Key points for discussions
documents		e/ Past			
Karada arres antar		BR	Device	tananations to months	forth and accelerate Aba DD it would
Key documents:			Devon area.	innovations in marine	further developing the BR- it would
Strategy 2014 – 2024:			North Davan Diagrapage Basemus includes Lundy	conservation and fisheries	be good to understand what the
http://www.northdevonbios			North Devon Biosphere Reserve includes Lundy	management.	issues are and what their response is
phere.org.uk/uploads/1/5/4/			Island, England's first Marine Protected Area. As		going to be. Also interesting to find
4/15448192/the_biosphere_			well as seals and variety of other marine species,	The Biosphere and its	out if they have an Exit plan.
reserve strategy 2014 to 2			Lundy's seas are also home to species of plants	partners have been	
024 final version.pdf			and insects that are found no where else.	developing alternative land	- BR has key focus on economic
				use and land management	development, and is quantifying
Annual reports:				scenarios to optimise	what the BR status brings in
http://www.northdevonbios			Key Focus:	ecosystem services to	economically (Check report for
phere.org.uk/annual-			Key areas of BR focus to date:	benefit the communities of	details) – Return on Local Authority
<u>reports.html</u>			- Sustainable Development	north Devon. This fed into	investment: how quantified?
			- Sustainable Energy: support development of	the LA's Local Development	
Reports on biosphere review			low-carbon economy	Plan The outputs from this	- Focus on sustainable tourism
and funding challenges:			- Climate Change Mitigation	work also influenced the	development, and biodiversity and
http://www.northdevonbios			- Biodiversity: Nature Improvement Area Project	targeting and delivery of	water management improvements
phere.org.uk/management			- Biodiversity: Restoration	agri-environment schemes.	is similar to key focus of Fens: find
funding-review.html			- Catchment Partnership – Water Management.		out how effective BR designation is
			- Wildlife-sensitive farming practices	The UNESCO Biosphere has	in these areas.
Periodic review (2015):			- Providing for a sense of place.	helped to initiate change -	
http://www.northdevonbios			- Providing for a sense of internationalism.	working closely with the	- Devon has signs when entering BR
phere.org.uk/management				farming community. As in	saying something like "This is a
funding-review.html			BR is active in the manufacturing, agriculture and	Biospheres around the	UNESCO Biosphere Reserve" – this
			fishing industries.	world, the focus is on	helps giving it an international
Governance:				sustainable development,	'cloud'/ selling point. Find out what
North Devon Biosphere			The biosphere reserve is active in working with	in this case productive and	this means for local pride/sense of
Reserve Partnership is the			farmers, for instance the Catchment Sensitive	efficient farming which is in	place and for visitor
body responsible for			Farming Project helps farmers understand how	harmony with the	impressions/investment.
coordinating, on behalf of			their land use has effects further downstream.	environment and in tune	

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
the constituent local				with market demand and	- Likewise they seem to want to
authorities and stakeholders,			he North Devon's Biosphere Reserve participates	local community	'provide for a sense of
the management of the			in the Devon Marine Conservation Zone County	aspirations.	internationalism' - Interesting and
Biosphere Reserve.			Group for the Finding Sanctuary partnership that		relevant given world status of
Partnership members:			looks to establish Marine Conservation Zones in	Links to Plymouth and	Cambridge and new tech/digital
http://www.northdevonbios			the seas around south-west England as part of a	Exeter Universities.	industries.
phere.org.uk/partners.html			wider network of Marine Protected Areas		
			(MPAs).		- Lots of spin-offs and projects seem
Original BR, created in 1976					to have come out of BR work – find
('Braunton Burrows')			2012: North Devon's Biosphere Reserve was		out how exactly BR has enabled
extended in 2002 to North			chosen by Defra, the UK Government's		other work. Getting some examples
Devon BR – see			Department for		would be good.
https://web.archive.org/web			Environment, Food and Rural Affairs, as one of		
/20051024163320/http://w			only 12 pilot areas for 3-year Nature		- Funded largely by Local Authorities
ww.ukmab.org/BRReport/Br			Improvement Area (NIA) projects in England.		- find out sustainability of this as a
aunton.htm					m odel and what they are doing to
			2012-2014: North Devon's BR was chosen to be		diversify or make funding model
Part of North Devon AONB,			one of the handful of pilot areas in England to		more sustainable in other ways.
https://www.northdevon-			test approaches to Biodiversity Offsetting.		Countering potential vulnerability –
aonb.org.uk/			Evaluation of the Biodiversity offsetting pilot can		how?
			be found at		
			http://randd.defra.gov.uk/Default.aspx?Menu=M		- The local authorities have
			enu&Module=More&Location=None&ProjectID=		embraced the Biosphere designation
			18229&FromSearch=Y&Publisher=1&SearchText=		- the Local Development Plan
			WC1051&SortString=ProjectCode&SortOrder=Asc		adopts the principles of the
			&Paging=10#Description		Biosphere and the ecosystem
					approach to planning: how did they
			2012-2015: TRIP (Taw River Improvement		go about influencing local policy
			Project) was carried out – catchment partnership		makers? And are there any de facto

Biosphere Reserve	Country	Current/	BR's key focus and USPs	Similarities/ Differences	Approach for interview?
& Key hyperlinks and documents		Candidat e/ Past BR		with Fens	& Key points for discussions
			work towards the WFD directive – see		implications for planning/
			http://www.northdevonbiosphere.org.uk/taw-		developers? We know the
			river-improvement-project.html		designation isn't meant to but does it in reality?
			Latest developments:		- On ecosystem services : Be
			- Previously largely funded by Las, North Devon		interesting to know how they make
			BR) has been under threat and most of the team		concept of ESS accessible to non-
			made redundant – they have been considering withdrawal.		specialist audiences.
					On farmers' involvement: would be
			- At front-end of some severe cutbacks in BR core		good to find out how they work with
			budget as a result of local authorities' austerity		the farmer community.
			measures. Cutbacks have led to the reduction of		-
			1.4 FTE in the permanent team to leave 1.6 FTE in		Key contacts:
			place. The implementation of some of the		http://www.northdevonbiosphere.o
			projects has now led to the recruitment of 2.2		rg.uk/biosphere-team.html and
			FTE largely as project management rolls, and		http://www.northdevonbiosphere.o
			more expected as other projects come on line.		rg.uk/contact.html
			- The recent governance changes switch the		Andy Bell
			emphasis from the BR team from being a mixed		
			strategic body and implementation body to one		
			of more coordination and intelligence and		
			commissioning work through partners and		
			partnerships.		
			- The main strategic work at the moment is		
			associated with the Defra Pioneers. The		

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
			landscape pioneer and the Marine pioneer we chosen to be applied in the BR due to the leading work already done in north Devon. These projects are designed to test the natural capital approach, improve decision making, use new tools and approaches, develop innovative finance, and improve integration between authorities. The Pioneers are developing their plans now and have gone through exercises of ecosystem assessments and natural capital assessments to identify areas for investment.		
2. The Living Coast	England	Current	Size: 38,921 ha.	Similar to situation in Fens with one/two key	YES
About: https://www.thelivingcoast. org.uk/		Approved 2014	Population: 371,500 (of which 350,000 in urban areas)	conurbations (in our case Cambridge and Peterborough), with access	- They have gone through the whole process fairly recently – would be useful to find out what key issues
(formerly) Brighton, Hove			Unique Features: Chalk cliffs and city	to academia knowledge, and as gateway to the	one would need to consider and get understanding of realities of
and Lewes Downs Biosphere Reserve.			Covers 389 square kilometres of land and sea in Sussex between the River Adur and the River Ouse, bringing together the three environments	Fens. Sustainable tourism as key	application process (costs; time; resources; etc.) as well as partnership formation, stakeholder
Recently rebranded as the "Living Coast", with subheading, 'Brighton & Lewes			of countryside, coast, and city and towns under one united approach.	focus.	engagement and development of the management strategy needed to go with the application.
Downs UNESCO World Biosphere Region". See also			Situated on the chalk hills and coast of the South Downs within and around the city of Brighton & Hove and neighbouring towns of Lewes, Newhaven and Shoreham, this Biosphere brings		- Info from Richard Price: BR reserve used to attract inward investment and external funding – can learn

Biosphere Reserve	Country	Current/	BR's key focus and USPs	Similarities/ Differences	Approach for interview?
& Key hyperlinks and		Candidat		with Fens	& Key points for discussions
documents		e/ Past			
		BR			
http://www.brighton-			together rural, marine and urban environments		from them how this might work
hove.gov.uk/content/press-			to take care of this special place for both nature		best. E.g. we could learn about the
release/%E2%80%98-living-			and people: the local population of around		funding of the officer post: how has
coast%E2%80%99-comes-			370,000 people and 12 million annual visitors.		this been achieved and how is this
<u>alive</u>					made sustainable? Also, how have
					they gone about getting money from
https://www.brighton-			Key Focus:		INTERREG – also what other funds
hove.gov.uk/content/press-			- Sustainable Tourism.		have they targeted, or are planning
release/brighton-and-lewes-			- Green Infrastructure		to target?
downs-biosphere-here			- Water quality improvements		
			- International and national recognition of		- Funding model: Note that five
http://www.unesco.org/new			Brighton & Hove as a 'sustainable city' with		themes for BR are not very business
/en/natural-			consequential benefits to tourism and economic		orientated, yet amongst their
sciences/environment/ecolo			development		aspirations as benefits to gain from
gical-sciences/biosphere-					BR they mention Improved
reserves/europe-north-					opportunities to draw in external
america/united-kingdom-of-			Latest developments:		funding - where is their funding
great-britain-and-northern-			- BR has submitted a detailed funding application		coming from then?
ireland/brighton-lewes-			on 'BioCultural Heritage Tourism' to the EU		
downs/			Interreg Channel programme, working in		- Could provide real experiences of
			partnership with North Devon BR (lead) and 2		what Biosphere Status means to
http://www.unesco-			French Biospheres.		individuals/business - would be
mab.org.uk/brightonlewes-					useful in communicating the
downs-biosphere.html			- A Biosphere Management Strategy 2014-19		Biosphere concept to
			(BMS) serves as the foundation for the BS's focus		stakeholders/businesses in the Fens.
			and activities, with a Programme Delivery Plan to		
Key documents:			organise project implementation.		- Also, could likely provide
Biosphere Management					information about: 1. Attitude of
Strategy 2014-19:			- Five themes have been identified from the BMS		developers towards Biosphere

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
http://thelivingcoast.org.uk/admin/resources/biosphere-management-strategy-2014-19-1.pdf Biosphere Research and Monitoring Strategy, 2017-19: https://www.thelivingcoast.org.uk/admin/resources/biosphere-research-monitoring-strategy-2017-19-approved-1.pdf			as priorities to add value to local activity by realising new opportunities, plugging gaps in focus, bringing different organisations together to work in partnership, and engaging people in the local environment: 1. Environmental awareness – of local people, especially children and young people 2. Tourism and Recreation – by visitors and residents, to further economic and social development 3. 'Green Infrastructure' – enhanced networks of greenspace from town to downs, which provide multiple benefits ('ecosystem services') from		designation – any perceptions of it impeding development? And 2. Conversely, whether and to what extent Biosphere designation address addresses/influences green infrastructure development and flood risk management – could these in future be discussed with Brighton's planning department? Would also be useful to talk to a developer who had actually submitted a planning application to Brighton.
Overview of BR – PP presentation: http://thelivingcoast.org.uk/ admin/resources/tlc-2017- overview-2.pdf 4-page leaflet: http://thelivingcoast.org.uk/ admin/resources/tlc-leaflet- web.pdf BR application: http://thelivingcoast.org.uk/ admin/resources/bhld-br-			access to nature to water management 4. Water – improving local water quality, quantity, and public awareness of our groundwater chalk aquifer, as well as the coastal/marine environment 5. Research & Monitoring – working with universities and others to improve our applied understanding of the local environment They hope to get the following benefits from BR designation for the area (as set out in report to Brighton & Hove City Council, March 2012): • A more integrated approach to protecting and enhancing the environment across industry and businesses, public agencies,		 - Aim is to use BR as a celebration or accolade of Brighton & Hove and its hinterland for sustainable development. Branding and Identity are key to this – would be good to find out how this has worked in practice, and how things have been targeted and received by local people and stakeholders. - Urban focus: urban areas comparison is important to us in the Fens.
unesco-nomination-form-			community and voluntary sector, and		- Tourism focus : is interesting and

Biosphere Reserve	Country	Current/	BR's key focus and USPs	Similarities/ Differences	Approach for interview?
& Key hyperlinks and		Candidat		with Fens	& Key points for discussions
documents		e/ Past			
		BR			
parts-i-ii-final-september-			research and education areas		useful – would be good to find out if
<u>2013.pdf</u>			 Greater national and international recognition 		tourists come to area because of BR
			and opportunities to promote the area, widening		status; does it have any influence on
BR application – appendices:			the attraction of Brighton and Hove as a		tourist choices/patterns of visiting?
http://thelivingcoast.org.uk/			destination.		
admin/resources/appendices			Opportunities for economic development		- Aim is also to provide an
-13-7-bhld-br-application.pdf			focusing on green industries, in		overarching framework and a robust
			particular green tourism		management plan to help deliver
Other documents:			Greater community involvement and pride in		the council's sustainability
https://www.thelivingcoast.			the local environment		objectives – would be good to know
org.uk/about/resources/doc			More opportunities to promote local		what can realistically be achieved
<u>uments</u>			sustainable food production and consumption		and whether they think that the
			both from the land and the sea.		governance set-up for this BR is
Brighton and Hove has all its			 Improved opportunities to draw in external 		essential for this purpose.
documents online – very			funding.		
useful to read the					Koy contacts:
application to see					Key contacts:
commitments – this will help					Note: 18 April: Trip to Brighton
with the timeline we need to					Biosphere Reserve – minibus, to be
develop. (A planning session					shown around biosphere reserve by
for this might be good once					project officer Rich Howorth =
we are up to that stage?)					Biosphere Programme Manager –
					The Living Coast, Brighton & Lewes
					Downs Biosphere Partnership.
Governance:					
A Biosphere Partnership of					https://www.thelivingcoast.org.uk/c
over forty local organisations					ontact
exists to deliver the					
objectives, led by Brighton &					

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
Hove City Council and spanning other local authorities and public bodies, as well as representatives from the voluntary, private and educational sectors. Officer post: half paid for by AONB. Rest brought in through additional funding — to support ongoing costs post-designation.					
3. Isle of Wight BR	England	Candidate	Size: For the Biosphere the whole island is being put	Although different to the Fens, as the whole island	YES
About:		Expected	forward for BR designation, plus surrounding	has clear boundaries,	- Are currently going through the
https://www.wightaonb.org.		2018?	waters around the island.	similarities are likely to be	whole application process – would
uk/about-us/what-we-			Whole island: land surface: 384 km2; AONB	in the areas of: multiple,	be perfect to hear what the
do/projects/iow-candidate- biosphere/			covers 189 km2.	dispersed core sites.	difficulties are and what to consider as part of the process.
<u>biospilere/</u>			Population:	Difference also in that BR	as part of the process.
https://www.wightaonb.org.			The 2011 Census shows the total Isle of Wight	comes out of AONB	- Would be good to understand
<u>uk/</u>			population as 138,300, of this population	designation.	reasons why, beyond AONB status,
			approximately 8% (11,064) reside within the		they are also going for BR: what
Key documents:			AONB.		would this bring as well?
Leaflet:			Unique Features:		
https://www.peppercreative			From their website: "The Isle of Wight is a pocket		Key contacts:

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
.net/wightaonb.org.uk/uploa ds/final unesco biosphere I eaflet.pdf AONB Management Plan, 2014 – 2019 (note: does not mention BR yet): https://www.peppercreative.net/wightaonb.org.uk/uploa ds/iw aonb management% 20plan %20public%20versio n 2014 2019.pdf AONB leaflet: https://www.peppercreative.net/wightaonb.org.uk/uploa			version of southern England. The Island has everything you could possibly need: from blustery downs filled with water to secretive salt marshes teaming with life; from Victorian beachside resorts to wild surf strewn beaches. It is a magnificent place to live, work and play, with splendid wildlife. Proof of the Island's rich ecosystems, stretching back 65 million years, can be found along the coast through fossils and dinosaur footprints." "The Island has healthy ecosystems, with rare species; such as, the red squirrels in the woodlands, Glanville fritillaries on the cliffs and plants that occur nowhere else in the British Isles."		https://www.wightaonb.org.uk/cont act/ https://www.wightaonb.org.uk/abo ut-us/meet-the-team/ Person who is writing the application is Joel Bateman, AONB Communications and Projects Officer
Governance: Development of the BR made possible through the AONB's Sustainable Development Fund, a grant scheme supporting projects which bring community, environmental and economic benefits to Wight AONB. The Fund provides an			Key Focus: Tourism development. Latest developments: From their website: "Working with partner organisations across the Island, IW AONB are working towards achieving UNESCO Biosphere Reserve status for the Isle of Wight. This would highlight globally the Isle of Wight is one of the best places to explore people's interaction with		

Biosphere Reserve	Country	Current/	BR's key focus and USPs	Similarities/ Differences	Approach for interview?
& Key hyperlinks and		Candidat		with Fens	& Key points for discussions
documents		e/ Past BR			
opportunity to test new			nature".		
sustainable techniques,					
which enhance and conserve					
the characteristics of the					
Area – see					
https://www.wightaonb.org.					
uk/about-us/what-we-					
do/projects/					
4. North Norfolk Coast		Past	Size:	Likely similarities (TBC):	YES
4. North North Coust		1 430	Unknown	Extensive nature areas;	123
About:		Approved	- CHARLOWII	tourism focus.	Following BR review in late 1990s
https://en.wikipedia.org/wik		1976	Population:	tourism rocus.	and again in 2009, several UK BRs
i/North Norfolk Coast bios		1370	Unknown		withdrew; this, it seems, was in
phere reserve		Withdraw	- CHARLOWII		many cases a direct reaction to the
<u> </u>		n 2014	Unique Features:		BR definitions having been changed
http://www.unesco.org/mab		2011	Taken from		in the 1990s, from a focus largely on
db/br/brdir/directory/biores.			http://www.unesco.org/mabdb/br/brdir/director		nature conservation to a much
asp?code=UKM+09&mode=a			y/biores.asp?code=UKM+09&mode=all: "Situated		broader definition on sustainable
			north of Norwich at the Norfolk coast, this		development for nature and people.
_			biosphere reserve includes a wide range of		- Considering the North Norfolk's
			habitats, from intertidal sands and muds, through		AONB focus on people and visitor
Key documents:			shingle ridges, to saltwater and freshwater		economy, this would not make much
-			marshes. The saltmarshes are of great value for		sense in their case, on the face of it.
			breeding and wintering wildfowl and includes a		,
Governance:			large breeding colony of common seals. Other		- One wonders if they are now
On 2014 withdrawal:			habitats comprise mires, river valleys,		regretting their decision and
From 2009 BR review report			heathlands, chalk and cliff-top grasslands,		whether there is any move to
(https://onlinelibrary.wiley.c			woodlands and farmland.		reconsider? Would be good to

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om/doi/pdf/10.1111/brv.120					approach those involved in the
44 - see also p 15-16): "The			Many tourists frequent the area, notably for		Norfolk withdrawal from BSR status;
existing Biosphere Reserve in			beach activities and birdwatching. There arises		be really interesting to ask them,
North Norfolk no longer			some pressure on specific sites due to these		given the current resurgence of in
meets the revised UNESCO			activities.		interest in BSRs, and given the loss of
criteria. Although of					future EU funding, they are
exceptional ecological			Other activities within the biosphere reserve are		regretting losing their BSR status.
quality it fails to encompass			the cultivation of mainly cereals and sugar beet,		
sufficient gradation of			grazing and harvesting mussels, cockles, shrimps,		- It would be interesting to find out
human intervention or			crabs, and bait as well as some commercial		why they withdrew – did this have
opportunity for sustainable			shore-netting		to do with overlap of AONB
development."					ambitions; governance issues;
			Educational visits of school children and students		financial viability; expectation of
Proposals made in the			take place and there are a number of interpretive		new designation rules bringing with
periodic review for			and field centres in the area. Research covers a		it additional complications or
extending this reserve to			full range of biological sciences (and especially		restrictions; or otherwise?
meet the Seville criteria have			ornithology), and also relates to the		- The 2009 review report
been considered – unclear			geomorphology of coastal processes."		(discussions following this report
why not followed through.					eventually led, in 2014, to BR
					redrawal) makes it clear that the BR
			Key Focus:		needs to be larger: the whole of the
			- Ecology of marshes and dune systems		AONB or even more than that. – this
			- Research on coastal processes etc.		would the provide for a "ready made
					and largely suitable organisational
					and management structure, and an
			Latest developments:		established sense of identity" and a
			From http://www.unesco-mab.org.uk/periodic-		larger area would also include more
			review.html : "Following the 2009 periodic		people, to make sure the sustainable
			review, the UK withdrew Taynish Biosphere		development and educational

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			Reserve from the World Network of Biosphere Reserves in 2010. The UK withdrew three further biosphere reserves after more in depth consultation with stakeholders: Moor House and Upper Teesdale (2012), Loch Druidibeg (2013), and North Norfolk (2014). Over the same period, new biosphere reserves (Brighton and Lewes Downs Biosphere Reserve and Biosphere Vannin (Isle of Man) candidate Biosphere Reserve) have emerged and are in preparation."		aspects of a BR can be addressed better as well. - As part of BR focus there is the mention of agricultural production (like the fens) – would be interesting to find out if they had hoped to derive BR benefits (perceived or actual) for agri-businesses; and if this may have been a factor in withdrawal? Key contacts: Estelle Hook, Norfolk Acting Manager, Norfolk Coast Partnership. Originally this was Natural England (see http://www.unesco.org/mabdb/br/brdir/directory/biores.asp?code=UKM+09&mode=all)
5. Wester Ross BR	Scotland	Current	Size: 529,904 ha. (5,200 square kilometres)	Differences: very remote; highlands and very sparsely	YES (As an alternative to/ in addition to 4?)
About:		Approved	Population: 8,000	populated area.	A manifed in Parish and a state of 2000
https://www.westerrossbios phere.com/		1976 (formerly	Unique Features: Mixed mountain and highland	Difference: quite different	- A periodic Review carried out 2016 - Would be good to understand
phere.com/		known as	systems.	groups of stakeholder:	'lessons learned' and what is going
http://www.unesco-		Beinn	, -	farmers also important, but	to change as a result.

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mab.org.uk/wester-		Eighe BR)	The Wester Ross Biosphere extends from the	crofters and fishermen not	
<u>ross.html</u>			northern tip of Knoydart northwards to	likely to be as important in	- Bottom up engagement process:
		Extended	Achiltibuie and the Summer Isles and east to	the Fens.	would be good to learn how to make
http://www.unesco.org/new		(to	Garve, including in the settlements of Kyle of		a BR truly based on community
<u>/en/natural-</u>		include	Lochalsh, Lochcarron, Gairloch and Ullapool.	Similarities: potential for	input.
sciences/environment/ecolo		much		local businesses to benefit	
gical-sciences/biosphere-		larger	This mountainous region is one of the UK's most	from tourism linked to	- [KC/CW: At Moen]: Seemed very
reserves/europe-north-		part of	scenic and least-populated areas, with about	special qualities of the	switched on and passionate about
america/united-kingdom-of-		Wester	8,000 people living in its 5,200 square kilometres.	natural environment.	the Biosphere concept. Also they are
great-britain-and-northern-		Ross) and			active members of NORD MAB, and
<u>ireland/wester-ross/</u>		renamed	Beinn Eighe/Loch Maree Islands (NNR/SSSI/SAC)		it would be useful to ask some of the
		2016	is home to the largest remnant of ancient		UK BSRs what benefits they perceive
On: original Beinn Eighe BR,			Caledonian forest in Wester Ross, with trees as		as being part of (supported by?) the
http://www.unesco.org/mab			old as 400 years. Rare lichens, liverworts and		UK MAB.
db/br/brdir/directory/biores.			mosses flourish, from the mild, damp woodlands		
asp?mode=all&code=UKM+0			up to the highest peaks. Pine marten, Scottish		- Some sense of a unique cultural
1			crossbill and northern emerald dragonfly make		landscape which is not so prevalent
			their home in these ancient pinewoods, whilst		in some of the other BRs?
Key documents:			otters and black-throated divers can be seen		
Application to UNESCO			where the slopes meet the waters of Loch Maree.		- Active use of social media , is this
(2015),					important in establishing/
https://static1.squarespace.c			Crofting settlements reflect a historically		maintaining a sense of Biosphere
om/static/588f52dc3e00be6			important land use of the West Highlands which		community?
360b1c824/t/588f7a00e3df2			still remains relevant in local communities today.		
8739f088975/148585785399			The low-intensity nature of crofting helps to		Key contacts:
9/Wester+Ross+Biosphere+A			retain and enhance locally and nationally		Project Officer = Natasha Hutchison,
pplication+09%3A15.pdf			important habitats.		https://www.westerrossbiosphere.c
					om/the-board-1
On file also: report on initial			Some 70,000 people visit Wester Ross each year		

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& Key hyperlinks and	•	Candidat	·	with Fens	& Key points for discussions
documents		e/ Past			
		BR			
6 month engagement			and as such, the local economy and population		Social media:
process, before they			are heavily reliant on the quality and		Twitter:
embarked on full BR			sustainability of the natural environment. In		https://twitter.com/WesterRossBios
application (sent by Natasha			terms of the adventure tourism market, which is		Facebook:
to CW) – useful approach to			growing more rapidly than tourism in general,		https://www.facebook.com/Wester
learn from for achieving			Wester Ross is one of the finest areas in the UK		RossBiosphere/
community engagement and			for such activities. There has been strong growth		Instagram:
buy-in.			in the sector, with businesses across the area		https://www.instagram.com/westerr
			offering a range of opportunities to view and		ossbiosphere/
Info from Richard Price: In			learn about both marine and land-based		
the new, extended Scottish			ecosystems and wildlife.		
Biosphere reserve National					
Trust for Scotland's land			Key Focus:		
counts as buffer zone.			Sustainable Energy		
Governance:			Latest developments: 2020 is to be the Year of		
The Biosphere family is be			Coasts and Water in Scotland, and WRB is		
made up of members be			working with other groups to enhance the West		
they private individuals or			Coast as Scotland's prime marine tourism		
local organisations. Their			destination as well as reduce the pressure on		
common aim to promote the			landward infrastructure (NC500). WRB have also		
development of a			joined a Marine Litter Working Group to tackle		
sustainable economy and			the increasing issue of marine litter.		
society in Wester Ross -					
https://www.westerrossbios			KC/CW: from meeting reprs at Moen it is known		
phere.com/the-board-1			that they also have aspirations for Biosphere		
shows the collective of			visual arts projects relating to art installations in		
members suggests a truly			route that can be seen from off shore.		
bottom-up approach to this.					

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
			BR reached the second round of the HLF Great Places Scheme, managing to bring in 2 major project partners. Although not successful, the material is useful in producing its 5 year strategic plan.		
6. Isle of Man BR	UK, Crown	Current	Size: 572 km2 - 457,000 ha.	Difference: as with Isle of Wight, focus is on clearly	NO (Although some useful areas for exploration with them in future?)
About:	Depende	Approved	Population: 84,500	defined boundaries, unlike	, , ,
https://www.biosphere.im/	ncy	2016	Unique Features: Whole island (country).	situation in the Fens.	- Interesting process on getting pledges from partners – 'Isle of Man
http://www.unesco.org/new			Offique reacures: whole Island (country).	Similarities: although very	pledge' (see links in previous
/en/natural-			The Isle of Man is the first entire country in the	different in nature, rural	column) – its aim is to be
sciences/environment/ecolo			world to have been awarded BR status.	economy also forms the	'deliberately broad and inclusive' -
gical-sciences/biosphere-				backbone to the economy.	would be useful to find out how
reserves/europe-north-			On this self-governing island in the Irish Sea,		effective this is, rather than e.g.
america/united-kingdom-of-			traditional industries - such as fishing and farming		North Devon approach which
great-britain-and-northern-			- and a rich cultural heritage and vintage		focuses on specific areas of land and
<u>ireland/isle-of-man/</u>			transport network co-exist with tourism, leisure activities and a thriving business and		water management and visitor economy development for instance
http://www.unesco-			manufacturing sector.		and builds projects around these.
mab.org.uk/isle-of-man-			mandracturing sector.		and bands projects around these.
biosphere-region.html			The Island boasts spectacular beaches and cliffs		- There seems to be no incentive to
			and beautiful glens and forests, and is an		bring in additional funding , with core
			important haven for nature and marine and bird		activities/communications covered
Key documents:			life.		by the island Government it seems –
Biosphere UNESCO					would be interesting to find out
nomination papers, and			The area has a rich natural beauty and cultural		whether this would suffice to get
maps:			heritage, a strong farming and maritime tradition		'things moving' as this now seems to

Biosphere Reserve	Country	Current/	BR's key focus and USPs	Similarities/ Differences	Approach for interview?
& Key hyperlinks and documents		Candidat e/ Past BR		with Fens	& Key points for discussions
https://www.biosphere.im/b			and a distinctive sense of identity amongst its		be heavily dependent o other
iosphere-isle-of-			diverse population. The Manx language is		organisations' initiatives and
man/unesco-nomination-			enjoying a renaissance. The economy has now		goodwill.
papers/			become remarkably diverse.		
			·		 One wonders what the 'Island
summary brochure:			The terrestrial core areas include areas of		Pledge' actually translates into for
https://www.biosphere.im/c			statutory conservation designation, and the		businesses? Or whether it's largely
msAdmin/uploads/Appendix			marine core areas comprise six Marine Protected		window dressing??
-5-Communication-			Areas. The terrestrial buffer zone outside of		
Materials.pdf			statutorily protected land is made up of all land		
			outside of the core and urban areas. The marine		Key contacts:
video:			buffer zone comprises the 0-3 nautical mile zone		https://www.biosphere.im/contact-
https://vimeo.com/9772047			round the Island outside the Marine core areas		us/
8			(below mean high water mark), as agreed with		
_			the Manx Fish Producer's Organisation. Urban		
			land, comprising the largest towns and villages		
Governance:			and their development boundaries, makes up the		
The whole area is under the			terrestrial transition area. The marine transition		
administration of the Isle of			area covers the seas between 3 and 12 nautical		
Man Government and the			miles (5.6 and 22.2km respectively) from the		
people that live here.			shoreline.		
			Key Focus:		
			- Strengthening the economy by amplifying its		
			international reputation, creating business and		
			employment opportunities.		
			- Fostering pride in the unique way of life.		
			- Maintain and improve the island's exceptional		

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
		BR	landscapes and environment. See also https://www.biosphere.im/biosphere-isle-of-man/about/ Latest developments: Isle of Man pledge: see https://www.biosphere.im/biosphere-isle-of-man/biosphere-isle-of-man-pledge/ and https://www.unesco.org.uk/news/biosphere-isle-of-man-launches-pledge/ Isle of Man pledge: aim is to get people to get behind: PLEDGES TO HELP: • protect our natural resources • develop our economy in a sustainable way • support and promote our cultural heritage • make our environmental impact positive wherever possible • engage with the local community • promote our outstanding living landscape and seascape through active involvement with UNESCO Biosphere Isle of Man List of business and organisations signed up to the pledge: https://www.biosphere.im/who-		
7. Biosffer Dyfi	Wales	Current	involved?page=1 Size: 1,589 ha.		NO (Although some useful areas for

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
					exploration with them in future?)
About:		Approved	Population: 13,000		
http://www.dyfibiosphere.w		1977			- Lack of core funding, with input
ales/			Unique Features: Temperate broadleaf forests or		into Biosphere activities voluntarily
		Extended	woodlands including marshlands.		(and peculiarly way of governance):
and		and			is this effective enough and
http://www.unesco.org/new		renamed	"Aberystwyth and the Dyfi river valley is a special		sustainable in the long run? Would
/en/natural-		2009	place for its people, its bilingual culture and its		this not lead to potential difficulties
sciences/environment/ecolo			environment. Its inspiring landscapes run from		with different directions taken by
gical-sciences/biosphere-			high peat moorland, to sand dunes and beaches		different organisations?
reserves/europe-north-			and a wide estuary, taking in the wildlife of		
america/united-kingdom-of-			woodlands, farmland, saltmarsh and a large		- Dyfi Biosphere: Aims to provide
great-britain-and-northern-			lowland peat bog. The Biosphere's passionate		and quantify return on Local
<u>ireland/biosffer-dyfi/</u>			community cares strongly about its magnificent		Authority Investment – would be
			surroundings and its rich cultural heritage."		good to find out how they are doing
http://www.unesco-					this.
mab.org.uk/biosffer-dyfi-			Key Focus:		
biosphere.html			- Sustainable Energy (note: area also includes		- Focus on cultural heritage – good
l., .			Centre for Alternative Technology).		parallel for Fens – something to
Key documents:			- Education and research – works though the		follow up with them?
Maps and management			Education Group		
plans:			- Food and visitor economy – works through the		- Also, use of LEADER funding to
http://www.dyfibiosphere.w			Tourism Group		"help businesses explore how to use
ales/maps-and-					the Dyfi Biosphere brand." – It
management-plans					would be good to find out more
			Latest developments:		about that.
2014-2019 Coordination			The two-year development project co-funded by		
Plan:			LEADER and the local authorities has focussed on		Key contacts:
http://docs.wixstatic.com/ug			two priorities: 1. The first is to engage more		http://www.dyfibiosphere.wales/co

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
d/f2889b_fa7c722a9e7b4e7 4b7a5b45e03d7b048.pdf			children and young people; and 2; the second is to help businesses explore how to use the Dyfi Biosphere brand.		ntact-the-biosphere
Governance: - Periodic Review carried out in 2009 – see report details. The Dyfi Biosphere's status is			Contractors are being sought to carry out specific pieces of work. One contract will re-engage education providers, strengthening practical links with schools and (probably) farmers. The development of the new curriculum in Wales		
voluntary and there is no regular funding for core activities, so its aims are			presents excellent opportunities, as it will include a focus on community connection and on developing global citizens.		
achieved by people and organisations working in cooperation.			The second will develop the food and drink cluster of visitor-oriented businesses, improving and promoting local provenance and links to		
Because the Dyfi Biosphere has no staff of its own, the			landscape.		
public sector partners take it in turns to support the					
Partnership and its meetings. Sometimes they contract					
local development trust ecodyfi to do this for them.					
At the moment, ecodyfi also provides the main contact					
point for the Biosphere. This is an example of how					
members of the Partnership					

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
sometimes act on behalf of the whole initiative.					
Galloway and South Ayrshire BR About:	Scotland	Current. Approved 2012	Size: 5268 km2 Population: 95,000		NO (Although some useful areas for exploration with them in future?) - Seem to have been successful in
http://www.gsabiosphere.or g.uk/ http://www.unesco.org/new		(formerly Cairnsmo re of Fleet and Silver	Unique Features: Temperate broadleaf forests or woodlands /coastal areas. The Biosphere covers 5,200 square kilometres		bringing in a range of funding sources – would be useful to find out how they have gone about doing so, and what their long-term financing
/en/natural- sciences/environment/ecolo gical-sciences/biosphere-		Flowe Merrick Kells)	and was granted its status in recognition of its special qualities, from sweeping upland areas and blanket bog formations - one of the least		plans are. - Co-ordinator and business
reserves/europe-north- america/united-kingdom-of- great-britain-and-northern- ireland/galloway-and-		,	interrupted and undisturbed mire systems in Europe - to lush forests and agricultural land. Its rural communities occupy the radiating river valleys. The Biosphere is home to 95,000 people		development roles: would be good to get some role profiles out of them. Actually a library of BSR role profiles would be a good resource for us in the Fens.
southern-ayrshire- biosphere/ http://www.unesco-			who work together to improve life whilst caring for the natural environment. Key Focus:		- Dark Skies focus: Interesting, as we have Core areas with Dark Skies
mab.org.uk/gallowaysouth-ayrshire-biosphere.html			100% Renewable Energy Source Community Project Climate Ready partnership Social Enterprise partnership		status too (Great Fen) - Good to get a report of outcomes of the Sep 2017 conference.
Key documents: Strategic Plan (until 2022): http://www.gsabiosphere.or			Landscape partnership scheme (approved 2015).		Key contacts: http://www.gsabiosphere.org.uk/co ntact-us/

& Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
g.uk/wp- content/uploads/2017/07/Bi osphere-Strategic-Plan-2016- 2022-FINAL-September- 2016.pdf Management plan and a range of other resources: http://www.gsabiosphere.or g.uk/what-we-do/resources/ Various leaflets: http://www.gsabiosphere.or g.uk/allgsamedia/media- page/ Governance:			Latest developments: - Current situation: 5- year core funding supplemented by annual commitments from SNH and FCS. Provides 0.6 FTE for co-ordinator and business development roles, plus some administration support. - Accreditation scheme for businesses moved to pilot stage with three businesses. - Socio-economic base-line study by University of Glasgow launched in September 2017. - Successful application to the HLF Great Place Scheme. Allows employment two project officers for two years to work with communities in three distinctive landscape areas. - Ayrshire Learning Partnership with Ayrshire College launched in September. The aim is to create live briefs for students that have a focus on the Biosphere. - In partnership with Forest Enterprise hosted an international Dark Skies Conference in September 2017.		

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Moën BR About: http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/denmark/moen/ https://www.visitmoensklint.com/ln-int/moensklint/moen-first-danish-unesco-biosphere-reserve Key documents: Moën's BRs application: https://vordingborg.dk/media/3454541/del1.pdf	Denmark	Current Approved 2017	Size: 45,118 ha Population: Whole island. Unique Features: First Danish BR	Much smaller than the Cambridgeshire fens, at 450 km2, whilst county of Cambridgeshire is 3,389 km2. Different issues, challenges and complexities. Still a useful reference point, especially in area of whole community working together to embrace Biosphere concept, embrace idea of sustainable development, and to achieve Biosphere Reserve Status. – see PP CW and KC given at WG meeting on 12 Dec 2017.	NO Martin Price suggested to CW to contact Moen Biosphere reserve in Denmark as they have just recently gained designation and ask about the process. CW and KC also know a lot about them. Key contacts: Annette, whom CW and KC met — useful contact (ask CW for contact details) — she worked for 2 years on the development towards the BR application/designation. KC and CW visited this BR from 16 — 18 October 2017 — see also http://www.unesco.org/new/en/me dia-services/multimedia/photos/mab-2017/denmark/
Kristianstads Vattenrike About:	Sweden (S)	Current Approved	Size: 104,375 ha. (1,080 km2) Population: 75,000	Wetlands.	NO - One interesting thing about the

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
http://www.vattenriket.kristianstad.se/eng/index.php		2005	Unique Features: Temperate and subpolar broadleaf forests or woodlands; wetlands. Key Focus: - Eco museum; education - Economic gains - Increasing nature recreational activities - Reducing conflict - Improving participation Flagged up by Francine Hughes.		Swedish BSRs is that they are using the BSR concept and status to achieve the UNESCO 2030 sustainability programme; also several of them are quite long established (there have several) and the whole concept has really taken off and become established in both popular and government minds - So, they are probably where UK BSRs would want to be in the future. So, how, at the beginning, did they achieve all that? A strategic plan right from the start or an organic ripening towards where they are now?
Marais Audomarois	France (NW)	Current	Size: 22,539 ha.	Area with wetland and low, drained land.	NO
About: https://www.mab- france.org/fr/biosphere/rese rve-de-biosphere-du-marais- audomarois/ http://www.unesco.org/new /en/natural- sciences/environment/ecolo gical-sciences/biosphere-		Approved 2013	Population: 68,900 Unique Features: Includes the city of art and history, Saint Omer, and its wetland, a renowned Ramsar site. Key Focus: Lowland wetland and farming.		- But lowland wetland farming link might be useful Are also a partner in the new INTERREG project that Brighton BR and North Devon BR are involved in.

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
reserves/europe-north- america/france/marais- audomarois/ Key documents: Governance:		BR			
Entlebuch Biosphere Reserve About: https://www.myswitzerland. com/en-gb/unesco- biosphere-entlebuch.html http://www.unesco.org/mab db/br/brdir/directory/biores. asp?mode=all&code=SWI+0 2	Switzerla nd	Current Approved 2001		Info from Richard Price: BR used as a marketing tool to market goods produced within the Biosphere and thus drive local business.	- But the use of BSR status as a marketing tool for Biosphere products might be a useful example (if we can get more details) of actual tangible benefits conferred by BSRs
Mount Arrowsmith Biosphere reserve About: http://www.mabr.ca/ http://www.unesco.org/new/en/natural-	Canada	Current Approved 2000		Info from Richard Price: BR used to share knowledge.	NO

Biosphere Reserve & Key hyperlinks and documents	Country	Current/ Candidat e/ Past BR	BR's key focus and USPs	Similarities/ Differences with Fens	Approach for interview? & Key points for discussions
sciences/environment/ecolo gical-sciences/biosphere- reserves/europe-north- america/canada/mount- arrowsmith/ and research institute: http://mabrri.viu.ca/					
Dana Biosphere Reserve About: http://whc.unesco.org/en/te http://whc.unesco.org/en/te http://whc.unesco.org/en/te http://whc.unesco.org/en/te	Jordan	Current Approved 2007		Info from Richard Price: BR used to promote green/eco-tourism.	NO

Appendix 4: Interview questionnaire

QUESTIONS ON: DEVELOPMENT OF APPLICATION AND GOVERNANCE MODELS

- The partners involved in developing a case around a BR for the Fens are keen to understand the realities of developing a UNESCO BR designation application and the governance and resourcing implications.
- 1. What were the **drivers** behind the development of the BR designation?
 - 1.1. Why are you doing it? /why did you do it?
 - 1.2. What are the current key strategies, policies or drivers behind ongoing BR development?
- 2. What **other designations** has the BR considered?
 - 2.1. Why were those discounted in favour of a UNESCO BR designation?
- 3. How did the BR partners obtain the **funding** needed to pursue designation?
 - 3.1. How much did this cost/ how much funding was needed to get to the stage of a full UNESCO application?
 - 3.2. How long did it take?
 - 3.3. Any advice they can give on other resources necessary to make a UNESCO Biosphere Reserve application?
- 4. How did you go about creating a **Management Plan** to accompany the BR application?
 - 4.1. What sort of Plan did you settle on? (E.g. formal/informal; Very structured/less structured. Stakeholder consulted/or didactic from lead organization?)
 - 4.2. How much buy-in was there from relevant partners in developing this Plan?
 - 4.3. How did you go about ensuring that the Plan was complimentary to management and similar plans already in existence?
 - 4.4. Who is the designated authority responsible for implementing the plan, and how effective are they in doing so?
 - 4.5. How effective has the plan been in practice? Was this plan seen as a 'hurdle to get over to apply for the UNESCO designation', or has it actually been operationally useful? Or does it maybe sit on a shelf and not be used?
 - 4.6. Which factors impede or help the implementation of the plan?
 - 4.7. Is the plan being updated along the way to fit changing BR focus? How do you keep the plan "live" e.g. what kind of review schedules do you put in place?
- 5. What is the BR's **Governance** model and what are its organisational arrangements?
 - 5.1. Have other models been considered?
 - 5.2. If so, which were these; and why have they pursued the chosen model?
 - 5.3. Has the governance model changed over the lifetime of the BSR? If so, why?

- 6. Any advice you could give on **stakeholder involvement** and management of relevant stakeholders and local communities?
 - 6.1 How did you keep the initial buy-in and excitement going?
 - 6.2 How do you try to win 'hearts and minds'?
- 7. Would you be able to give advice on **best practice** for identifying and developing:
 - 7.1. Area size?
 - 7.2. **Zoning issues** that needed resolving?
 - 7.3. **Mapping** data needed to develop the BR application and Management Plan?
 - 7.4. Biological and cultural significance and conservation approaches?
- 8. Are there any (other) lessons learned in the application and designation processes you would like to share ('Top Tips')?

QUESTIONS ON: SUSTAINABLE DEVELOPMENT, SOCIO-ECONOMIC INVESTMENT AND LONG-TERM VIABILITY

- The partners involved in developing a case around a BR for the Fens are keen to understand opportunities for strengthening the local economy and in general the socio-economics of the area.
- 9. What are the **key types of activity (e.g. agriculture, water management, housing, research etc.)** your BR focuses on **to achieve 'Sustainable Socio-Economic Development'**?
 - 9.1. How successful have you been in each area (and how do you measure this)?
 - 9.2. What paths have you taken towards achieving sustainable development? Have you, for instance, set out key 'sustainable development principles'?
 - 9.3. Is the BR actively linking the implementation of the Sustainable Development Goals as set out in the UN's 2030 Agenda for Sustainability Goals; and how?
- 10. Which (types of) organisations (or individuals) are, or have been, the most active & instrumental in pursuing the BR's ambitions?
 - 10.1. Which (types of) organisations have you struggled to engage and retain, and why? What could you have done better?
 - 10.2. How successful have you been in encouraging private sector initiatives to establish and maintain environmentally and socially sustainable activities?
- 11. What are the **ongoing cost implications** of designation status and ongoing BR management, coordination and promotion?
 - 11.1. What is the annual budget to cover core team costs?
 - 11.2. What other costs are there to consider?
 - 11.3. And who pays for all of this?

- 12. How does the BR ensure long-term financial sustainability?
 - 12.1. Have you developed a Business Plan? If so, how?
 - 12.2. Are you drawing in further, internal or external, funding?
 - 12.3. What is the funding model?
- 13. Is **economic return** for BR management investment realistic?
 - 13.1. Have they undertaken a cost-benefit analysis?
 - 13.2. If so, could you tell us some more about how you analysed or monitor this?
- 14. What mechanisms have you put in place to monitor and measure success for the BR?
- 15. Are there any (other) lessons learned in the BR implementation processes you would like to share ('Top Tips')?

QUESTIONS ON: OPPORTUNITIES AND RISKS STEMMING FROM DESIGNATION

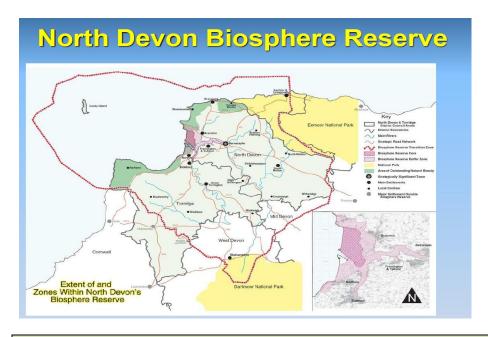
- The partners involved in developing a case around a BR for the Fens are keen to understand risks and challenges of the designations, as well as socio-economic opportunities this may bring once designation is in place.
- 16. Could you articulate what the *main* benefit(s) is/are of having the BR in place?
- 17. What key socio-economic and environmental benefits and opportunities has the BR designation brought you?
 - 17.1. Have you explored marketing branded, sustainably produced products?
 - 17.2. Have you been able to give the **visitor economy** an impulse in any other way?
 - 17.3. Has the Biosphere designation helped instigate the development of **new conservation approaches**?
 - 17.4. Has the Biosphere designation identified and implemented approaches around securing ecosystem services from the biosphere reserve? If so, how?
 - 17.5. Has the Biosphere designation helped developing and implementing environmental policies in the local planning system?
 - 17.6. Has the Biosphere designation helped kick-start any **other partnership initiatives?**
 - 17.7. Have you been able to lever in additional funding for any of the BR's activities?
- 18. What key benefits and opportunities has the BR designation brought you in the areas learning and research/knowledge sharing?
 - 18.1. What links have you been able to create with educational providers and research institutions?
 - 18.2. Has the Biosphere designation helped instigate new research agendas?

- 19. Are there any expected or unforeseen risks and challenges of having a BR designation status?
 - 19.1. Do you believe there are any drawbacks to having a Fens Biosphere Reserve, either real or perceived ones?

[E.g. perception that BR status might be just another layer of unnecessary bureaucracy granted by a body that has nothing to do with UK law, or that BRs might impede impact upon planning decisions and impede development? Or that initial enthusiasm might fizzle out and the designation becomes irrelevant, or, worst case scenario, an embarrassment?]

Appendix 5: Summaries of key learning points from interviews held with other Biosphere reserves

North Devon BR – key learning points



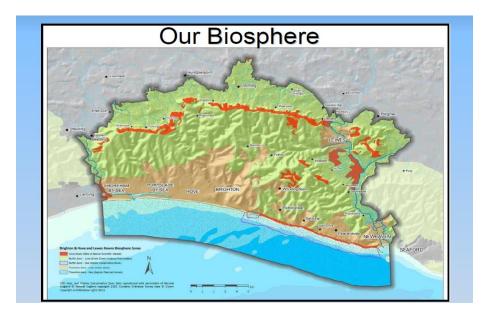
NORTH DEVON BR – KEY LEARNING POINTS (from interview and related research):

On 'Sustainable Development': "For us it is really about working with people and stakeholders, to moving forward having less impact on the natural capital of the area; and getting them to think differently, but also to look at the social impact and the economic impact"

- ➤ £100,000/year for core management
- ➤ Governance well-structured/ Core management Team & 7 thematic Working Groups
- > Well developed partnership (15 years since re-shaped BR was approved)

- > Central 10-year Strategy & each Working Group has 3-5 year Action Plan. All with one, unified reporting and monitoring system
- > Developed effective partnerships around BR as key designation commissioning work through partners and partnerships
- ➤ Periodic Review 2015 helped define ways to increase income streams
- ➤ Wide Portfolio helps levering in funding to bring in officers
- > 25% of core management costs covered by earned income from BR-projects
- > Return on investment 25 to 1; yet still potentially vulnerable to further LA budget cuts
- Tourism marketing collaboration; now also Biocultural Heritage Tourism (INTERREG project); next working towards a Biosphere accreditation system for local produce from local businesses (fish, woodland produce & farm produce) supported & branded as made/sourced in the Biosphere Reserve
- Range of work done through NIA; Catchment Sensitive Farming
- ➤ Biosphere is pilot area for testing approaches to biodiversity offsetting. Biodiversity Offsetting Pilot: ecosystem assessment & natural capital assessment carried out. Now DEFRA Pioneer: North Devon chosen to host Landscape Pioneer, to inform the content of 25YEP 2018: research, working out costing models; and trails planned for 2019. Aim to influence and work with Las, businesses and developers in this
- Feeding into LA's Local Development Plan: adoption of the Biosphere and the ecosystem services approach to planning/BR priorities and net gain principles embedded advice; workshops; information; close links with policy makers and planning officers
- Work with developers: advice on EIAs and how to improve their business in the area for environment and community

Living Coast BR – key learning points



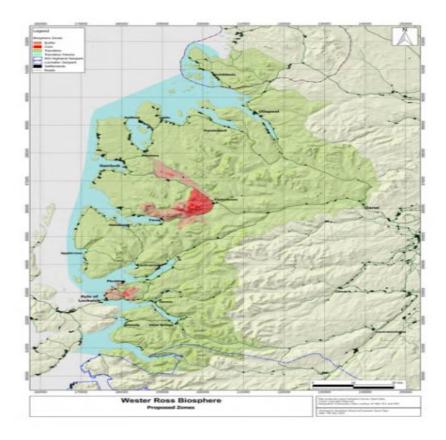
LIVING COAST BR – KEY LEARNING POINTS (from interview and related research):

"Key to our BR work is changing hearts and minds"

- 2-year period developing bid
- > Development costs circa £125,000
- > Ongoing costs: circa £50 K/ year
- > Vulnerable if further LA cuts: only .5FTE secure from City Council funding going forward (& reviewed annually) also, if Rich would leave, future of BR at risk?
- > Partnership (circa 3 years since approval) seems still not as well developed as probably needed no formal partnership framework

- > Overall vision somewhat undeveloped, despite detailed management plan submitted with nomination form (but unclear how much adhered to)
- ➤ Board and diverse Working Groups Range of commitment/alignment /association with BR for projects delivered added value of BR not (yet?) explicit in many cases?
- > Somewhat light on deliverables due to minimal central team and age of BR?
- > Focus largely on transition zone, not core and buffer for activities
- > Large urban community –focus of BR in terms of awareness raising; education; visiting countryside/ their 'hinterland'
- > Branding; marketing; communication Encouraging behavioural change = key, e.g. 2000 local people signed up as 'Friends of the Biosphere' for enews
- > Sustainable Tourism/ Visitor experience focus; tourism INTERREG project partner
- Nature conservation in terrestrial buffer zone largely left to well-resourced NP (but covers part of area)
- Monitoring framework and indicators devised, to demonstrate sustainable management; but "have not had the resources to actively track these to date"
- > Green Infrastructure policies being elaborated with by Brighton & Hove City Council included in updated Sustainability Plan
- Engagement with developers and utility companies: Southern Water (including £2K annual funding and extra sponsorship) and renewable energy/offshore windfarm (a partners and funding contributor)

Wester Ross BR – key learning points

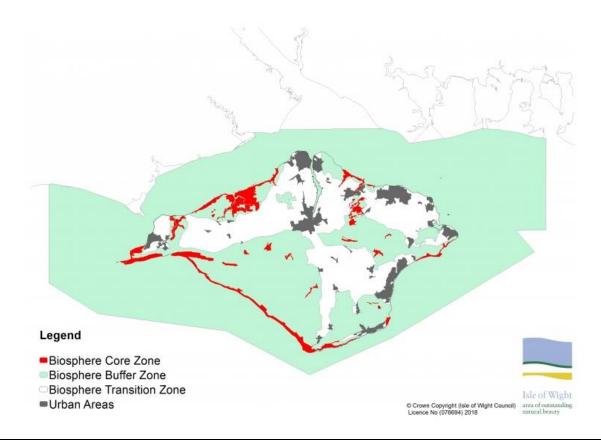


WESTER ROSS BR – KEY LEARNING POINTS (from interview and related research):

"[...] the Biosphere is really here [...] to act as an umbrella. Then organisations [...] oversee and promote sustainable development, promote communications between organisations that are maybe doing similar things, to act responsibly [...] and help each other and [...] work together better for the benefit of our area and our landscape. [...] What we believe is the key benefit is that there is a group, there is an organisation that is actually sitting here and is actively thinking about our future"

- > 2016 new BR approved
- ➤ Initial seed funding £30K over 2 years now ended
- Not sufficient to reach great momentum; now core funding at risk using £25-30K/year but need £50K/year to keep core running
- Governance: initial idea of membership fee option not (yet) seen as viable competing models & partnership development first; possibly business accreditation scheme in next 2 years
- > Community-led bottom-up approach; range of social media engagement
- > Social enterprise (Company Limited by Guarantee) set up for long-term financial viability anyone can be part of it
- > Strong community buy-in up to 50 members on Board
- Development Fund energy sector possibly to fund Project Officer for 2 years
- > Implementation of Management Plan largely left to agencies and organisations responsible for land
- Creating synergies and supporting partnerships key areas:
- cultural heritage; arts; sustainable tourism initiatives
- > Communications seen as key focus in 5 year Strategic Plan in development promoting sustainability
- > See benefits of being member of international network UK MAB support international project opportunities
- > SHAPE project ecotourism P/T project officer in core team

Isle of Wight candidate BR – key learning points



ISLE OF WIGHT *CANDIDATE* **BR – KEY LEARNING POINTS** (from interview and related research):

"Exploring people's interaction with nature; highlighting Isle of Wight as, globally, one of the best places to do so"

- > Close to submission of nomination form
- ➤ Governance structure for AONB used; also ongoing

- > costs to be absorbed by AONB for foreseeable future (expected 30-50K/year)
- > AONB covers half of island; BR gives whole-island approach good chance "taking AONB approach outside of AONB boundaries"
- > People and communities/settlements are almost all outside of AONB
- > AONB management plan and LDP as proxy for management plan both are being reviewed active input/ sustainability focus
- > Tourism key focus for practicalities and opportunities: plans for destination marketing; eco-branding; product marketing etc.
- Zoning tricky process

North Norfolk past BR – key learning points

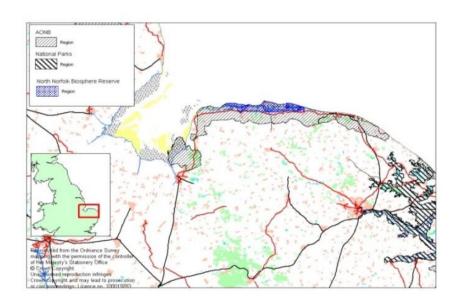


Image from: UK Biosphere Reserves: status, opportunities and potential, North Norfolk Coast. Report by Hambrey Consulting for DEFRA/UKMAB, April 2009.

NORTH NORFOLK PAST BR - KEY LEARNING POINTS (from interview and related research):

"Rather than us making a decision to de-designate the BR, we actually made a decision that we, the Norfolk Coast Partnership, should not take responsibility for managing it. Therefore the responsibility remained with Natural England. As they did not complete the work to ensure the BR complied with UNESCO requirements for BRs, UNESCO de-designated it, on advice from UK-MAB"

- UK MAB Periodic Review 2009
- De-designated 2014
- Old BR largely about environment (NNRs)

- > Old BR excluded built up areas; widening geography would mean that BR would potentially 'swamp' the AONB; community engagement also to be 'new' role
- > Generally seen as good idea; but, seen in contexts post-2008 financial decision-making, inclusion would have meant massive extra burden without statutory funding (unlike AONB)
- Existing Norfolk Coast Partnership considered as a suitable management vehicle for the Biosphere Reserve/ management plans AONB and BRs to be merged
- > 3 levels/zones was seen as complicated to arrange

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