

2014-19 Coordination Plan

The Dyfi Biosphere will be recognised and respected internationally, nationally and locally for the diversity of its natural beauty, heritage and wildlife, and for its people's efforts to make a positive contribution to a more sustainable world. It will be a self confident, healthy, caring and bilingual community, supported by a strong locally-based economy.



The Dyfi estuary Credit: Patrick Laverty

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A. Introduction

The purpose of the plan

This coordination plan describes the purpose and functioning of Biosffer Dyfi Biosphere.

It indicates why this area and community deserve this accolade from UNESCO, sets out our vision for a more resilient and integrated local environment, economy and community, and shows how we intend to work towards this, together.

Mainly, it is a guide for the Dyfi Biosphere Partnership and others active in the Dyfi Biosphere network. It will help those involved in only one aspect of the work to see the whole picture.

By describing the background or strategic context to our work, the plan can steer community and business effort towards delivering the agreed objectives of the Dyfi Biosphere. By identifying gaps and imbalances in our activities, the plan helps us prioritise where to put our effort and provides a basis for efforts to obtain more resources.

The action plan for the next 12-18 months builds on previous achievements. It focusses mostly on collaborative actions to be carried out in the name of the Dyfi Biosphere itself, so as to demonstrate the value the status adds to the area, but of course much of the additional work carried out by partner organisations and others in their own right is relevant as well.

The structure of this document

Following an explanation of Biosphere Reserves and **the Mission we have from UNESCO**, the document highlights some of **the people and places** that make Biosffer Dyfi Biosphere special.

“Coordination and communication” explains how we are all responsible for the Dyfi Biosphere, to the extent that we want to be.

The Vision we have for the area is the main focus of the plan. It is broken down into nine more specific **Objectives**, followed by **the activities** planned to deliver these. **Ways to monitor progress** towards the Objectives form the next section.

A discussion of **the gaps in our plans** leads into a section of **proposals for further work** to address those gaps, to be fed into the review of the Action Plan, expected in the January-March period of 2015.

Unfamiliar terms and acronyms may be looked up in the **Glossary** and a set of **Appendices** contain more detail about specific aspects.

What is a “Biosphere Reserve”?

Biosphere Reserves are places recognized by UNESCO. They are nominated by communities within a shared landscape, to demonstrate how to achieve sustainable livelihoods, vibrant culture and robust economies based on a healthy environment.

UNESCO identifies three interconnected functions for Biosphere Reserves:

1. **Conservation:** protecting cultural diversity and biodiversity, including genetic variation, species, ecosystems and landscapes and securing services provided by such diversity
2. **Development:** fostering economic and human development that is environmentally and socially sustainable and culturally appropriate
3. **Logistic support and creating a culture of sustainability:** facilitating demonstration projects, education, training, research, monitoring and communications

See Appendix 1 for notes about how this applies in the Dyfi Biosphere.

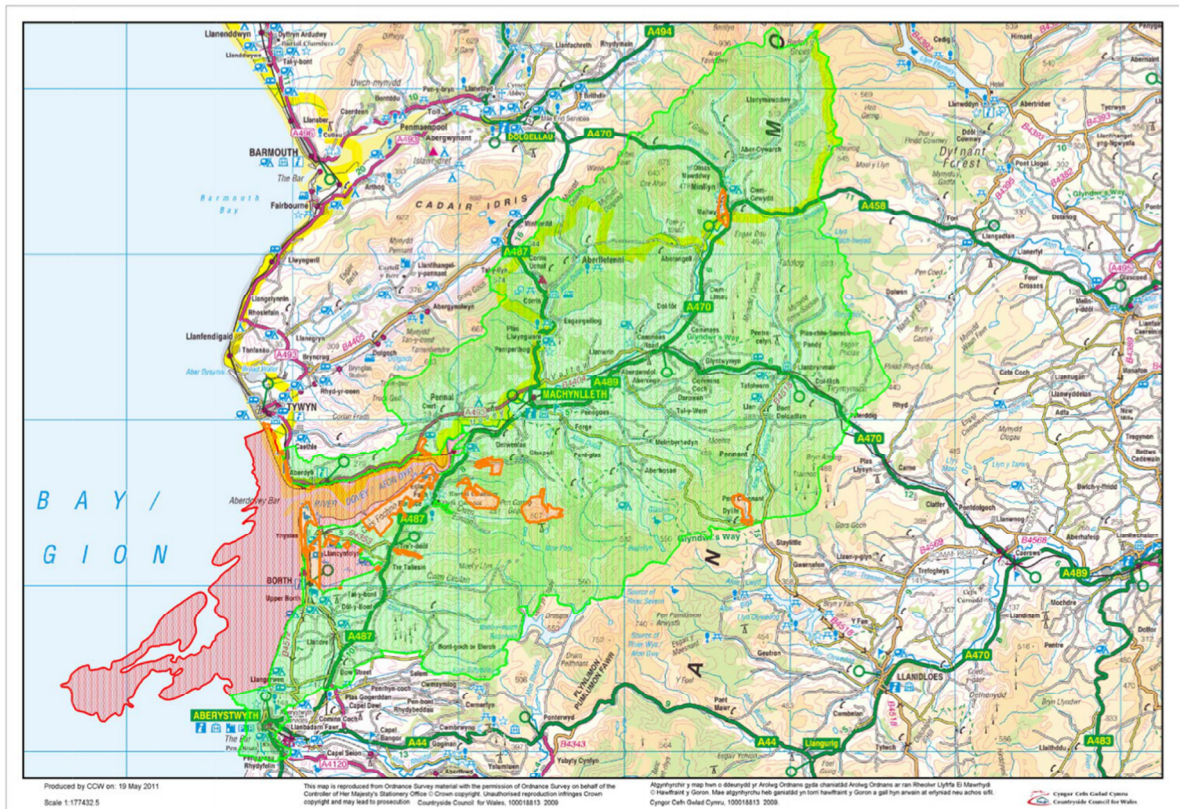
As places that seek to reconcile conservation of biological and cultural diversity and economic and social development through partnerships between people and nature, they are ideal for **the Mission of all Biosphere Reserves: to test and demonstrate innovative approaches to sustainable development from local to international scales.**

All Biosphere Reserves are split into three zones:

1. **Core Area** – legally constituted areas devoted to long term protection. These are statutory nature conservation sites with international designations;
2. **Buffer Zone** – land and sea surrounding or contiguous to the core areas, where only activities compatible with the conservation objectives can take place. These have UK conservation designations;
3. **Transition Area** – areas of more intensive urban/rural land use, as well as the open sea, where sustainable resource management practices are promoted and developed. This is the rest of the Dyfi Biosphere area, where the status is purely voluntary.

How did the Dyfi valley and Aberystwyth come to be a Biosphere Reserve?

Biosffer Dyfi Biosphere has this international status by virtue of being listed in the World Network of Biosphere Reserves in 2009. This replaced the former (smaller) Dyfi Biosphere, originally listed in 1978, following a three-year period of public discussion. Now, the area consists of the whole water catchment area of Afon Dyfi, plus Aberystwyth, as shown by green shading in the map below.



The area shaded red on the map is the Core Area, and the Buffer Zone is shaded orange. The Dyfi Biosphere as a whole:

- Measures 840 square kilometres, of which 762 are land and 78 are sea;
- As counted in 2011, is home to 26,100 people, of whom 41% can speak Welsh and 12,800 (including students) live in Aberystwyth;
- Includes parts of Gwynedd, Ceredigion and Powys County Council areas as well as part of Snowdonia National Park;
- Has 15 Town and Community Councils.

B. What makes the area special?

Connecting Snowdonia and the Cambrian Mountains, the landscape of the Dyfi Biosphere is beautiful and impressive, yet welcoming. It contains habitats of international importance that provide homes to rare species. At its heart, Machynlleth is the ancient capital of Wales, where Owain Glyndŵr brought Wales together and well over half the people speak Welsh. The vibrancy of local Welsh-language heritage and culture can be seen in the repeated successes of choirs and theatre groups at regional and national levels.

This Fair Trade valley is known for its expertise in sustainable development and its institutions include the National Library of Wales, Aberystwyth University, the Museum Of Modern Art Wales and the Centre for Alternative Technology.

Key aspects of the area are described in the Nomination Form we sent to UNESCO in 2008. www.biosfferdyfi.org.uk/?page_id=296 Here we draw attention to just a few jewels in the crown.

1) Natural environment

Many of the diverse habitats of the area, together with their most significant species, are characteristic of much of rural Wales, while some are rare enough to be of international significance. Examples include:

- Cors Fochno is a rare lowland raised bog, containing a seven metre deep record of the past in its peat;
- Ospreys bred in 2011 for the first time in the Dyfi Valley for over 400 years, at Cors Dyfi;
- Lowland wet grassland at RSPB Ynys-hir holds Wales' largest breeding population of redshank and lapwing - two species that have seen breeding numbers decline by over 70% in the last 15 years. The Dyfi estuary is the only regular site in Wales and England for wintering Greenland white-fronted geese;
- The whole landscape is of cultural importance, including the Upland Ceredigion 'Landscape of outstanding historic interest'.

2) Built and historic environment

Our buildings, sites and structures reflect a long history of winning a livelihood from the land, of social and economic change and of our aspirations. Examples include:

- Medieval buildings such as Royal House and the Parliament House in Machynlleth;
- Remains of lead mine workings and buildings - revealing a surprisingly industrial past to very rural communities such as Dylife;
- Hyddgen - considered to be the location of Owain Glyndŵr's first victory.

3) People and culture

- The Welsh language and contemporary culture, including very active Young Farmers Clubs;
- A strong community interest in environmental issues and sustainable living.

If you would like others to appreciate what you know and love about this place and its heritage, join our 'Faces of the Dyfi Biosphere' programme (see Appendix 2).

C. Coordination and communication

The Dyfi Biosphere's status is voluntary, so its aims are achieved by people and organisations working in co-operation.

Between 2009 and 2011, financial resources available to the Dyfi Biosphere were very limited, so the ability to influence and stimulate activity was limited as well. Good progress on the objectives was made, but in a piece-meal fashion, according to where individuals and organisations were willing to work voluntarily or secure money themselves.

Between 2011 and 2014, an “animation budget”, contributed by several of the partners, has helped to stimulate action. A part-time Projects Facilitator supports Thematic Groups, manages or assists relevant activities, and leads on communications and interpretation. This person is employed by ecodyfi, as the Partnership itself is not in a position to hold funds. Ecodyfi’s Manager also spends some time on Dyfi Biosphere work. Recent Biosphere projects have included Giants in the Forest and Gwres (“Renewable heating made more affordable”).

There is still a lack of balance in our activities, when assessed against our objectives. This plan identifies those gaps and how to fill them.

Coordination of activity is achieved through the following means:

- The **Annual Meeting** is open to all with an interest in the Dyfi Biosphere - to receive reports, to discuss what’s happening and to have their say.
- The **Dyfi Biosphere Partnership** oversees all activities, reporting to UNESCO through Natural Resources Wales and the Welsh Government. The Welsh Government, local government (in Gwynedd, Powys and Ceredigion), Natural Resources Wales, Snowdonia National Park and others are represented on the Partnership. The majority of Partnership members, however, represent the local community – businesses, voluntary groups and people who’ve come together to realise the Dyfi Biosphere’s vision. Its constitution and membership selection mechanism is in Appendix 3. The Secretariat is provided by the public sector partners in turn.
- The **Officer Support Group** works for the Partnership between meetings, making sure its decisions are being carried out.
- The Partnership sets up **working groups** occasionally, which may include people other than Partnership members. They may be temporary (for example to organise an Annual Meeting) or longer term (for example the Communications Group). Another example is Destination Dyfi Biosphere, which brings together the Tourism Association and public sector organisations to look at all aspects of tourism.
- Much of the Dyfi Biosphere’s work is done by groups of people who make different aspects of the vision happen. In some cases, this is done through formal self-regulating **thematic groups or networks**, such as the following:
 - ✓ Dyfi Biosphere Education Group (consisting mostly of outdoor educators);
 - ✓ Dyfi Biosphere Tourism Association (for tourism providers)
 - ✓ Dyfi Biosphere Research Thematic Group
 - ✓ Mid Wales Africa Network
 - ✓ Living Landscape Dyfi (a network of land artists and others) – LlanD

At the time of writing, such networking is more informal in the following sectors:

- Sustainable land management;
- Welsh language culture;
- Marine & estuary.

The Communications Plan describes other ways in which participation is encouraged, including newsletters, the website, facebook and twitter, the Dyfi Biosphere Charter (see Appendix 4), the Supporters scheme for individuals (see Appendix 5) and the 'Faces of the Biosphere' programme (see Appendix 2).

D. What we aim to achieve

Our vision statement is:

"The Dyfi Biosphere will be recognised and respected internationally, nationally and locally for the diversity of its natural beauty, heritage and wildlife, and for its people's efforts to make a positive contribution to a more sustainable world. It will be a self confident, healthy, caring and bilingual community, supported by a strong locally-based economy."

The Objectives that define how we work towards the vision were developed during 2006-2008, when all concerned were deciding whether to renew the UNESCO status, and what the benefits might be. They are not in order of priority. To help our reporting to UNESCO, **the overall Biosphere Reserve function** (see page 4) that is most relevant to each Objective **is added in brackets**:

1. To keep and improve the area as a great place to live, work and bring up children - and to create more opportunities for them to stay here (development);
2. To place a greater value on our natural environment and on Welsh language culture (**conservation**);
3. To increase activity in nature conservation through voluntary means (**conservation**);
4. To encourage discussion, agreement and co-ordination between people and organisations with different values and priorities (**logistic support**);
5. To develop a more self-reliant local economy; less dependent on fossil fuel, with growth driven by local knowledge and resources (**development**);
6. To develop a more sustainable area; with residents and visitors choosing locally-produced goods more often and reducing our impact on the world (**logistic support**);
7. To use the Biosphere 'brand' to promote the quality of local agricultural & other products and tourism experiences (**development**);
8. To ensure education and training in sustainable development, as well as research in the natural and social sciences, in support of the Biosphere vision (**logistic support**);
9. To take advantage of help and advice from UNESCO and other Biosphere Reserves across the world (**logistic support**).

Activities carried out in the name of the Dyfi Biosphere are reported in the Partnership's Annual Report and discussed at the Annual Meeting. The latest Report is downloadable from <http://www.biosfferdyfi.org.uk/?p=708>

E. Action Plan for 2014/15

These tables list actions with a close connection to the Dyfi Biosphere initiative. We appreciate that many other businesses, voluntary organisations, schools and individuals carry out relevant activities as well, and invite them to offer information for the next action plan. There is one Table of activities for each Objective, but many of the activities are relevant to more than one Objective. Activities have been placed under the most relevant activity.

Objective 1 - To keep and improve the area as a great place to live, work and bring up children - and to create more opportunities for them to stay here (development function)

While some activities help deliver this Objective, none have it as their primary focus.

Objective 2 - To place a greater value on our natural environment and on Welsh language culture (conservation function)

Refer-ence	Activity	Desired outputs (with outcomes)	Thematic Group (TG), Lead body (LB) & others	Status, timing & resources	Also relates to Objectives:
2a	Faces of the Biosphere - individuals recognised for willingness to share enthusiasm for the area	Two awareness sessions; twelve people signed up; list of stories & features that convey a sense of place (Visitors appreciate the area better)	DB Tourism Association; ecodyfi (LB)	Underway; by summer 2014; TPMW	7
2b	360 Observatory at Cors Dyfi / Dyfi Osprey Project	New building; interpretation about the area (More visitors, increased understanding & inspiration)	Montgomeryshire Wildlife Trust	By Easter 2014; Heritage Lottery Fund, Communities and Nature through ERDF	-

Objective 3 - To increase activity in nature conservation through voluntary means (conservation function)

Reference	Activity	Desired outputs (with outcomes)	Thematic Group (TG), Lead body (LB) & others	Status; timing & resources	Also relates to Objectives:
3a	Catchment-wide action for sustainable land & water management	Habitat improvements implemented e.g. shelterbelts, streams fenced out; clusters of farmers working with the Biosphere (Better habitat connectivity; more sustainable water and carbon management; farmers being paid directly for such ecosystem services)	Montgomeryshire Wildlife Trust; Ecodyfi; Farmers	Proposals made to Welsh Government Nature Fund; 2014/15	1, 4, 5, 7
3b	Management of Lowland Wet Grassland for breeding waders	Management measures implemented; report on numbers of breeding redshank and lapwing (Increasing populations)	RSPB Ynys-hir	Planning; 2014/15; funded	-
3c	Wintering Greenland white-fronted geese (England and Wales' only wintering population)	Report on numbers and locations; additional report on species requirements, if funded (Increasing populations)	RSPB Ynys-hir with Dyfi Wildfowlers, Wildfowl and Wetlands Trust and Welsh Government	On-going – fundraising for additional work; 2014/15	8
3d	Restoration of Estuarine mire	Area of bog with birch and rhododendron removed; mires on the south side of the Dyfi improved, if funded (Benefits for many species)	RSPB Ynys-hir – with Montgomeryshire Wildlife Trust for larger project	On-going – fundraising for additional work; 2014/15	-
3e	Saltmarsh at Domenlas	Area of saltmarsh re-created (Benefits for many species)	RSPB Ynys-hir with Natural Resources Wales	On-going	-

Objective 4 - To encourage discussion, agreement and co-ordination between people and organisations with different values and priorities (logistic support function)

Objective 5 - To develop a more self-reliant local economy; less dependent on fossil fuel, with growth driven by local knowledge and resources (development function)

Objective 6 - To develop a more sustainable area; with residents and visitors choosing locally-produced goods more often and reducing our impact on the world (logistic support function)

While some activities help deliver these Objectives, none have them as their primary focus

Objective 7 - To use the Biosphere 'brand' to promote the quality of local agricultural & other products and tourism experiences (development function)

Reference	Activity	Desired outputs (with outcomes)	Thematic Group (TG), Lead body (LB) & others	Status, timing & resources	Also relates to Objectives:
7a	Deliver the activities in the Dyfi Biosphere Tourism Plan – see Appendix 6	Various – see Plan	Destination Dyfi working group with Dyfi Biosphere Tourism Association, coordinated by ecodyfi	Various – to 2017	1, 5
7b	Darganfod Dyfi / Explore Dyfi	Development of 19 promoted routes, including capital improvements to existing Public Rights of Way, visitor interpretation and promotion	Natural Resources Wales in conjunction with Local Authorities	March 2014; Communities and Nature through ERDF	2, 5

Objective 8 - To ensure education and training in sustainable development, as well as research in the natural and social sciences, in support of the Biosphere vision (logistic support function)

Reference	Activity	Desired outputs (with outcomes)	Thematic Group (TG), Lead body (LB) & others	Status, timing & resources	Also relates to Objectives:
8a	Pilot study: integrated management of natural resources	Pilot Natural Resources Plan (Improved understanding of how to manage on an area basis)	Natural Resources Wales	Underway; August 2014; funded	2, 3, 4
8b	Research into degree of economic self-reliance	Undergraduate dissertation (Improved understanding of local economic options; pointers to action in sectors other than tourism)	Aberystwyth University business school – undergraduate level initially	Underway; 2014	5
8c	Involve people in recording environmental data using mobiles	Report on demonstrations of software infrastructure to use crowd sourced data for policy (Increased voluntary activity in environmental management)	COBWEB consortium (Welsh Government, ecodyfi, Aberystwyth University and Environment Systems)	4 year project started November 2012; EC FP7 funded	2, 3
8d	Research travel patterns of holiday home park users	MSc dissertation (Increased understanding, leading to proposals for more sustainable travel options)	MSc student at Aberystwyth University (“Access to Masters”)	October 2013-14; industry partner ecodyfi	6
8e	Research eco-art practice in Biosphere	PhD dissertation (Increased understanding of practice and impact)	DGES, Aberystwyth University, with LlanD (DB arts network)	3 years started October 2013	-
8f	Action research: use art to deepen people’s relationship to water – Talybont/Borth one of four study areas in UK	Events; artistic creations; report (Increased awareness of ecosystem services such as flood management, water supply & electricity)	“Hydrocitizenship” consortium including Aberystwyth University, ecodyfi & Shelagh Hourahane	3 year project starts March 2014; Arts & Humanities Research Council	2, 4

8g	Participative characterisation of Machynlleth	Voluntary activity; report to assess and articulate character and heritage (May lead to Supplementary Planning Guidance)	Powys County Council with Cadw and local groups	Under discussion; 2014; Limited resources required	-
8h	Conference on impacts of climate change in Africa and Welsh connections	Conference (Increased understanding of challenges and what we might do about them in partnership)	Mid Wales Africa Network, Wales Centre for International Affairs, Wales Africa Community Links, CAT	In development & fundraising; To be held 4th April 2014	4, 9
8i	Fish project in schools	10 High School sessions (Increased understanding of river/estuarine/sea habitats & human use and impact)	Dyfi Biosphere Education Group, Montgomeryshire Wildlife Trust (LB)	Fundraising; 2014	2, 4

Objective 9 - To take advantage of help and advice from UNESCO and other Biosphere Reserves across the world (logistic support function)

Reference	Activity	Desired outputs (with outcomes)	Thematic Group (TG), Lead body (LB) & others	Status, timing & resources	Also relates to Objectives:
4b	Formalise link with Urdaibai BR, Basque country in Spain	Memorandum of agreement (Exchange of good practice, especially cultural; proposals for collaboration)	DB Partnership	On-going	-

F. Monitoring and reporting

This plan is structured around working towards the Dyfi Biosphere's vision, as reflected in the Objectives. On the next page, consideration is given to the additional requirement of reporting to UNESCO on the mission and functions of all Biosphere Reserves, as described on page 4.

Monitoring **the activities** is the responsibility of the lead body or project manager concerned. They will be asked to provide information for inclusion in Annual Reports. This information will be one measure of progress towards the relevant Objective.

In addition, progress towards **the Objectives** will be monitored by using a number of indicators, as set out in the following table. Availability of suitable data sets is limited because some data which could be useful is not analysed at the level of the Dyfi Biosphere, typically being at local authority level. Two reports commissioned by the former Countryside Council for Wales (Appendices 7 and 8) went some way towards addressing this difficulty, but did not resolve it.

They suggested surveys be commissioned to collect data for some indicators, where suitable data sets do not exist, but recognised that this requires funding. A survey of a sample of households could establish a baseline for values, attitudes and behaviour relating to Objectives 2 and 6, and a business survey could create a baseline for indicators relating to Objectives 5 and 7, but these have not been included in the table below because no funds are available to carry them out.

Dyfi Biosphere Objective	Indicator(s)	Source
1. To keep and improve the area as a great place to live, work and bring up children - and to create more opportunities for them to stay here	The 8 domains that make up the Welsh Index of Multiple Deprivation	Infobasecymru
	% people of working age claiming benefits	Neighbourhood Statistics
	No. affordable homes per year, by tenancy type	Rural Housing Enablers, with LAs and RSLs
2. To place a greater value on our natural environment and on Welsh language culture	No. of visits to nature reserves	Partners
	No. & area of designated sites in favourable condition	Natural Resources Wales
	% able to speak, read or write Welsh	Neighbourhood Statistics
3. To increase activity in nature conservation through voluntary means	No. person/hours on conservation tasks	Partners
4. To encourage discussion, agreement and co-ordination between people and organisations with different values and priorities	No. of activities with this aim	Dyfi Biosphere Partnership
5. To develop a more self-reliant local economy; less dependent on fossil fuel, with growth driven by local knowledge and resources	Use of electricity & gas per dwelling	Neighbourhood Statistics

6. To develop a more sustainable area; with residents and visitors choosing locally-produced goods more often and reducing our impact on the world	% travelling to work on public transport	Infobasecymru
	Flood risk	Infobasecymru
	No. people with formal connections to DB & ecodyfi	Dyfi Biosphere Partnership & ecodyfi
7. To use the Biosphere 'brand' to promote the quality of local agricultural & other products and tourism experiences	No. signatories of Dyfi Biosphere Charter	Dyfi Biosphere Partnership
	No. DBTA members	DBTA
8. To ensure education and training in sustainable development, as well as research in the natural and social sciences, in support of the Biosphere vision	No. & financial value related research programmes	Research Thematic Group
	Contact hours by members of DBEG	DBEG
9. To take advantage of help and advice from UNESCO and other Biosphere Reserves across the world	No. of substantive contacts (face to face and otherwise)	Dyfi Biosphere Partnership

UNESCO's reporting form will change before our Periodic Review in 2019; it is based on the now-ended Madrid Action Plan. Nevertheless, the current version (January 2013, Appendix 9) does provide a good indication of what will be expected.

The Periodic Review Form asks how we have fulfilled the three **Biosphere Reserve functions**. In this Plan, the activities help deliver the Objectives and in turn each Objective is linked to the most relevant function, as shown in section D (page 8).

The current form also asks for information about relevant programmes of activity not carried out in the name of the Dyfi Biosphere. For example, it asks how we assess the effectiveness of "the main conservation programmes that have been conducted in the biosphere reserve". In our case, these are not just the ones in the action plan, but also those overseen by Natural Resources Wales, Welsh Government and charitable and private sector interests. Partners will be asked to provide this information.

Also, the form asks about **indicators of ecosystem services** that are being used to evaluate the three functions and whether **the zonation system** is appropriate to serve the functions. Further work is required on these points, as noted in section G.

While this plan will be monitored as described on the previous page, further information about conservation of the natural environment is in LANDMAP (which assesses the diversity of landscapes within Wales), and at <http://naturalresourceswales.gov.uk/our-work/policy-advice-guidance/designated-sites/?lang=en#.Up7vsOL6TPs> (which leads to information about designated conservation sites' features, management plans and condition reports.)

Information about the historic environment is held by the several Archaeological Trusts, the Royal Commission on the Ancient and Historical Monuments of Wales, and by Cadw.

Appendix 10 lists the most significant management plans that will need to be taken into account in preparing for the Periodic Review.

G. Gaps in activity and opportunities for action

The Communications Plan describes ways for people in the wider community to suggest what else we should be doing. More strategically, gaps in activity by those involved in the Dyfi Biosphere can be identified in four ways – called (a) to (d) below. These approaches reveal some weaknesses, numbered 1 to 9 below.

- a) Appendix 11 is an analysis of the Strengths, Weaknesses, Opportunities and Threats facing the Dyfi Biosphere initiative. Key opportunities are identified as follows:
- Gap 1: Partners to identify how collaborative working through the Dyfi Biosphere can deliver their own agendas;
 - Gap 2: Increased participation by farmers; and
 - Gap 3: Increased participation by Aberystwyth businesses and residents.
- b) Appendix 12 analyses how closely our objectives align with those of our partners and with wider strategies, particularly the Single Integrated Plans and Welsh Government strategies. It concludes that there is good alignment generally. However, the wording of the Dyfi Biosphere objectives does not capture explicitly two strategic issues that a Biosphere Reserve in mid Wales would be expected to be concerned with, namely:
- Gap 4: Securing a sustainable and resilient environment (especially in relation to climate change);
 - Gap 5: Understanding and protecting all aspects of our cultural heritage, including the built environment.
- c) Thirdly, the table below looks at whether the activities in the 2014/15 Action Plan are balanced appropriately between the nine Objectives. By appropriately, we mean that all are being worked on to some extent, but that some need more attention than others – because they are more aligned with Wales and County-wide strategies.

Where an Objectives scores highly in the second column, this shows it helps deliver several wider strategies. This ought to be reflected in a relatively high number of activities for this Objective in the action plan.

The third column shows how many of the activities actually relate to each of the Objectives.

Dyfi Biosphere objective	Alignments with wider strategies, from Appendix 12	Number of relevant activities in the Action Plan
1. To keep and improve the area as a great place to live, work and bring up children - and to create more opportunities for them to stay here	5	2

2. To place a greater value on our natural environment and on Welsh language culture	10	8
3. To increase activity in nature conservation through voluntary means	5	3
4. To encourage discussion, agreement and co-ordination between people and organisations with different values and priorities	2	5
5. To develop a more self-reliant local economy; less dependent on fossil fuel, with growth driven by local knowledge and resources	9	4
6. To develop a more sustainable area; with residents and visitors choosing locally-produced goods more often and reducing our impact on the world	7	1
7. To use the Biosphere 'brand' to promote the quality of local agricultural & other products and tourism experiences	1	4
8. To ensure education and training in sustainable development, as well as research in the natural and social sciences, in support of the Biosphere vision	1	12
9. To take advantage of help and advice from UNESCO and other Biosphere Reserves across the world	0	2

This table indicates that Objectives 8 and 4 are well catered for. However three Objectives are under-represented and identify three more gaps:

Gap 6: The most neglected is Objective 6 “To develop a more sustainable area...”

Gap 7: Objective 1 – “To keep and improve the area as a great place...”

Gap 8: Objective 5 – “To develop a more self-reliant local economy...”

d) We need to anticipate the Periodic Review to UNESCO, due in 2019. As described in section F, the reporting form asks about two aspects where we need to do further work:

Gap 9: Establish a set of indicators of ecosystem services, to evaluate the three functions; and

Gap 10: Ensure the zonation system (particularly the Buffer Zone) is appropriate to serve the functions.

e) Lastly, are there any barriers to implementing the Objectives? Looking at them this way reveals a weakness:

Gap 11: Objective 7 – no system is in place for endorsement of non-tourism goods and services. The Charter recognises the existence of a relationship between the business and the Dyfi Biosphere, but does not permit use of the logo on packaging etc.

H. What else we are planning to do

The Partnership will oversee the delivery of the 2014/15 Action Plan and respond to the weaknesses identified above, in preparation for reporting to UNESCO. This creates an agenda for development work that it will keep under review, along the following lines. The weaknesses or gaps being addressed are noted in brackets after each point:

- a) From time to time, the Dyfi Biosphere is asked to endorse or support project proposals. The Partnership will continue to write letters of support (to accompany grant applications) that relate to any of our Objectives, but if time or other resources are requested, the Partnership will favour activities that help to fill the gaps identified above (All Gaps)
- b) Carry out further work on monitoring and reporting, including reviewing the indicators, creating baseline data for them, fundraising for survey work related to additional indicators (for Objectives 2, 5, 6 and 7), and preparing for the periodic review of 2018/19 (Gaps 9 & 10)
- c) Encourage all partners to continue their shared responsibility for the initiative; using the Dyfi Biosphere brand and coordination & communication mechanisms to deliver relevant objectives of their own; and sharing responsibility for delivering the Coordination Plan and monitoring its effectiveness (Gap 1)
- d) Increase awareness, understanding, support & participation in the wider community, paying particular attention to Aberystwyth and the agricultural community (Gap 2 & 3)
- e) Greater resilience, of the environment and community in a changing climate (Gap 1 & 4)
- f) Greater appreciation of (and activity in support of) the diverse services that derive from healthy habitats - an assessment of such 'ecosystem services' would be very helpful for reporting to UNESCO as well as increasing the community's understanding of the issues (Gaps 4, 7, 9 & 10)
- g) Attention to the historic and built environment (Gap 5)
- h) Encouragement for behaviour change in a pro-sustainability direction, coupled with the development of more sustainable options for people to choose from (Gap 6)
- i) Greater resilience, of a more diverse local economy (Gaps 7 & 8)
- j) Create a system to enable and regulate endorsement of goods and services, using the Dyfi Biosphere brand identity (Gap 11)

I. **Glossary**

BR – Biosphere Reserve

Cadw - the Welsh Government's historic environment service working for an accessible and well-protected historic environment for Wales

CAT – Centre for Alternative Technology

COBWEB – Citizen Observatory Web <http://cobwebproject.eu/>

DB – Dyfi Biosphere

DBEG – Dyfi Biosphere Education Group

DGES – Department of Geography & Earth Sciences at Aberystwyth University

EC FP7 – Research funding from the European Commission

ERDF – European Regional Development Fund

Infobasecymru - www.infobasecymru.net/IAS/ “Access to a wide range of data locally and nationally on Wales”

LA – local authority

Neighbourhood Statistics - www.neighbourhood.statistics.gov.uk From the Office for National Statistics

RSL – Registered Social Landlord (generally, Housing Associations)

TPMW – Tourism Partnership Mid Wales

UNESCO – United Nations Educational, Scientific and Cultural Organisation