

Assess the potential of other effective area-based conservation measures as a driver for landscape-level conservation and connectivity in the EU

Final (Submitted to EEA 31 January 2021)

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Client: European Environment Agency (EEA)

Request for services for specific contract 3417/B2020/EEA.58150

Implementing Framework Contract EEA/NSS/17/002/Lot 3

Acknowledgements

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The authors would like to thank all those who contributed positively to this report with their critical and constructive comments and observations, in particular Heather Bingham and John Tayleur (UNEP-WCMC); Kym Whiteoak (Trinomics), Jari Ilmonen and Lasse Kurvinen (Metsähallitus Parks & Wildlife Finland); Turo Hjerpe (Ministry of the Environment, Department of the Natural Environment); Juho Kotanen, Liisa Muuri and Pekka Sojakka (Regional ELY Centres, South Savo); Anna Bonde (Regional ELY Centres, South Ostrobothnia); Niina Karjalainen, Pekka Ränkä and Jukka Ylikörkkö (Regional ELY Centres, Lapland); Satu Maaria Karjalainen, Minna Kuoppala and Heikki Mykrä (Finnish Environment Institute, Freshwater Centre); the International Union for Conservation of Nature World Commission on Protected Areas.

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List of abbreviations

APSFR	area of potential significant flood risk
CAP	common agricultural policy
CBD	Convention on Biological Diversity
CDDA	Common Database on Designated Areas
CGBN	Coordination Group for Biodiversity and Nature
COP	Conference of the Parties (to the CBD)
DG	Directorate-General
DG ENV	Directorate-General for Environment
DG ENV.D.2	Biodiversity Unit of the European Commission's Directorate-General for Environment
DG ENV.D.3	Nature Protection Unit of the European Commission's Directorate-General for Environment
EEA	European Environment Agency
ELY Centres	Centres for Economic Development, Transport and the Environment
EQSD	Environmental Quality Standards Directive
EU	European Union
FD	Floods Directive
FRMP	flood risk management plan
GIS	geographic information system
GWD	Groundwater Directive
IBA	BirdLife Important Bird Area
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IUCN	International Union for Conservation of Nature
KBA	Key Biodiversity Area
LIFE	EU funding instrument for the environment and climate action
NADEG	EU Nature Directives Expert Group
NGO	Non-governmental organisation
NVZ	nitrate vulnerable zone
NWRM	natural water retention measures
OECM	Other effective area-based conservation measures
PFRA	preliminary flood risk assessments
PoM	programme of measures
RBD	river basin district
RBMP	river basin management plan
SCI	Site of Community Importance
SGH	State Game Husbandries
SPA	Special Protection Area
SPAMI	Specially Protected Area of Mediterranean Importance
UoM	unit of management
UWWTD	Urban Waste Water Treatment Directive
WCPA	IUCN World Commission on Protected Areas
WDPA	World Database on Protected Areas

Key messages

1. Other effective area-based conservation measures (OECMs) are a major new conservation approach, separate from IUCN and CBD-recognised protected areas, where effective conservation is mainly achieved as a by-product of other management objectives.
2. OECMs can support, amongst other objectives, EU targets for 30 % of land and water to be protected by 2030, the EU restoration plan and aspects of the Green New Deal.
3. Various existing EU directives have the potential to result in land and water management that fulfils the criteria of OECMs and could thus provide EU Member States with a means to efficiently identify potential OECMs.
4. The Water Framework Directive (WFD) and Floods Directive (FD) both fall into this category according to preliminary analysis in Spain and Finland. This is likely the case at the EU regional level, with OECMs having potential for recognition under the WFD and FD, associated with the *EU Biodiversity Strategy for 2030*, *European Green Deal*, Nature Directives, and Nitrates Directive. Additionally, national-level legislation thought to be listing protected areas may, in fact, be more accurately listing OECMs, as shown in Bulgaria.
5. However, the actual assessment of sites against the criteria of an OECM needs to be carried out on a case-by-case basis and it is very unlikely that all sites falling under any one directive will be found to meet the criteria..
6. EU Member States also differ in the degree to which biodiversity conservation considerations are embedded within the implementation of given directives, which will probably influence the likelihood of particular areas being recognised as OECMs.
7. Key determinants include state of knowledge about and condition of biodiversity in potential OECMs - some of this information may be determined from existing monitoring systems tracking implementation of directives.
8. A standardised three-part methodology to identify actual and candidate OECMs is being developed by IUCN, starting to initial screening, then seeking agreement of land- and water-owners and, if successful, more rigorous assessment against a standard list of criteria.
9. These findings are preliminary, further research is needed to assess links between OECMs and other directives, and on the opportunities in countries, particularly new Member States and accession countries.
10. Understanding of OECMs is generally still low in Europe and there is an urgent need to raise awareness about the opportunities and limitations of OECMs as conservation tools. This could be achieved through a roadmap of activities, both at EU institutional level, at EU-wide level (supported by the European Commission) and at national level as well, to catalyse work on OECMs.

Executive summary

OECMs: other effective area-based conservation measures (OECMs) are a new conservation approach, separate from protected areas, where conservation is achieved mainly as a by-product of other management. A definition was agreed at the 14th Conference of Parties of the Convention on Biological Diversity in 2018: ‘A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the *in-situ* conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values’.

Types of OECM: this covers three situations: (1) ‘ancillary conservation’, *in-situ* conservation as a by-product of management, where biodiversity conservation is not an objective; (2) ‘secondary conservation’ where biodiversity is only a secondary management objective; and (3) ‘primary conservation’: areas meeting the definition of a protected area, but where the governance authority does not wish the area reported as a protected area.

OECMs in the EU: OECMs could bring new or existing areas important for biodiversity into overall conservation planning. OECMs can support EU targets for 30 % of land and water to be protected by 2030, the EU restoration plan and aspects of the *Green New Deal*. However, identifying OECMs could be a huge task and there is a risk that OECMs become an easy alternative to protected areas. Various EU directives have the potential to create land and water management that fulfils the criteria of OECMs and could provide EU Member States with a shortcut to identification. The current project selected some likely directives and assessed their potential value as sources of OECMs.

Methodology: the study analysed whether the Water Framework Directive (WFD) and Floods Directive (FD) would be useful in identifying potential or actual OECMs, tested this in Finland and Spain with in-country consultants, and drew a road map for future EU investigation. An online workshop was held in Spain to discuss preliminary findings with a wider group of stakeholders, followed by a more general workshop for stakeholders throughout Europe; the discussions that followed contributed to the overall conclusions. The project also explored the potential for recognition of OECMs beyond the WFD and FD in Bulgaria.

The potential: analysis found that OECMs do have potential for recognition under the WFD and FD, associated with the *EU Biodiversity Strategy for 2030*, *European Green Deal*, Nature Directives and Nitrates Directive. Options include primary conservation of high-biodiversity sites outside protected areas, secondary conservation by maintaining good status, and ancillary conservation in areas managed for other reasons e.g. drinking or bathing water. Actions that may create conditions for OECM recognition include nitrate controls, supplementary measures of pollution control, and restoration. Challenges include poor ecological status of many waters, the number of existing protected areas, lack of good ecological data and complications of multiple ownership and governance. Matching directives with OECMs needs to be on a case-by-case basis and it is unlikely that any particular EU directive will invariably result in an OECM. EU Member States also differ in the degree to which biodiversity conservation considerations are embedded within the implementation of given directives, which will probably influence the likelihood of particular areas being recognised as OECMs.

Results from Spain: the WFD offered considerable potential to identify OECMs, whereas the FD was less useful. Three River Reserves, which fall under the WFD, met the criteria for ‘potential OECMs’. However, areas of potential significant flood risk (APFR) that fall under the FD are not closely aligned with OECM criteria. Recognising OECMs provides opportunities to increase international recognition

of important biodiversity, and of sites that contribute with ecological representativity and connectivity to the protected area network. Challenges include the general lack of knowledge about OECMs among Spanish decision makers and practitioners, uncertainty about the OECM recognition process, and concerns about the possible unintended socio-economic consequences of recognising OECMs.

Results from Finland: almost a tenth of Finland is freshwater and the WFD and FD are both important. Four water bodies were assessed: a large and smaller lake, a river system and a marine site. Those parts of the large lake outside a Natura 2000 site were considered a potential OECM. The smaller lake most likely doesn't have potential to become an OECM as it is unclear if there is currently sufficient biodiversity data to consider the site as an OECM. The marine site would benefit if biodiversity values were more effectively integrated into the river basin management plan (RBMP), and the potential role of the Marine Strategy Framework Directive is also noted. The river system (part of which falls under the FD) could be a potential OECM although it is not clear whether this would bring any particular advantages over current management (in addition, FD measures were not seen very relevant for conservation of biodiversity in the OECM context).

Beyond the WFD and FD: Bulgaria: State Game Husbandries (SGHs) cover 10.52 % of Bulgaria's land and would represent a notable addition to its protected area and OECM network. Their suitability was assessed and mapped. Questions remain on the extent to which the SGH network, and individual SGHs, comply with OECM criteria. The overlap or close proximity to built-up urban areas in conjunction with their extractive management objectives means that a detailed site-by-site analysis would be essential. Reviewing potential OECM sites that are already listed as protected areas brings a novel perspective and raises several questions. For example, re-listing as an OECM requires considerable additional work at a site-by-site scale, and raises questions about the value to governance authorities of doing this?

Identifying OECMs: these findings are preliminary, further research is needed to assess links between OECMs and other directives, and on the opportunities in countries, particularly new Member States and accession countries. A standardised three-part methodology to identify OECMs is being developed by IUCN, starting with initial screening, then seeking agreement of land- and water-owners and, if successful, more rigorous assessment against a standard list of criteria. Key determinants include state of knowledge about and condition of biodiversity in potential OECMs - some of this information may be determined from existing monitoring systems tracking implementation of directives. Understanding of OECMs is generally still low in Europe and there is an urgent need to raise awareness of the opportunities and limitations of OECMs as conservation tools.

Roadmap for the EU: there is an urgent need to raise awareness in the EU, including Member States and relevant European Commission officials. This can be addressed through meetings affiliated to the implementation of the *EU Biodiversity Strategy for 2030* and EU Nature Directives, organised by the Coordination Group for Biodiversity and Nature, chaired jointly by DG ENV.D.2 and D.3. EU-wide activities supported by the European Commission might include:

- A comprehensive analysis of the potential of other directives to support OECMs.
- Publication of a related resource on opportunities and limitations of recognising land and water managed under various EU directives as OECMs.
- Adapting and translating into national languages the methodologies and guidelines identifying, recognising and reporting OECMs.
- Further engagement with any systemic issues and questions relating to adoption of OECMs.

National-level activities should focus on: identifying, providing legal recognition for, monitoring, supporting, and reporting OECMs.

1 Introduction

1.1 General scope

The European Union (EU) is considering strategies towards identification and designation of a new area-based conservation designation: other effective area-based conservation measures (OECMs). In 2010, at the Convention on Biological Diversity's (CBD) 10th Conference of the Parties (COP) in Nagoya, Japan, a Global Biodiversity Framework was agreed including 20 targets with a 2020 deadline (CBD, 2010). Unexpectedly, Target 11 included reference to a new term and initiated debate about its implications: 'By 2020, at least 17 % of terrestrial and inland water areas and 10 % of coastal and marine areas ... are conserved through ... systems of protected areas **and other effective area-based conservation measures...**' (our emphasis).

The Secretariat of the CBD requested the International Union for Conservation of Nature (IUCN) to assist in defining an OECM. An IUCN World Commission on Protected Areas (WCPA) task force was established and produced draft guidance for the CBD, following extensive consultation. Parties to the CBD finally agreed a definition in November 2018 at the 14th COP in Sharm el Sheik, Egypt, which defined an OECM as: 'A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the *in-situ* conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values' (CBD, 2018).

This definition covers three main cases:

1. '**Ancillary conservation**': areas delivering *in-situ* conservation as a by-product of management, even though biodiversity conservation is not an objective (e.g. some military training grounds, protected marine war graves and freshwater protection zones).
2. '**Secondary conservation**': active conservation of an area where biodiversity outcomes are only a secondary management objective (e.g. some conservation corridors).
3. '**Primary conservation**': areas meeting the IUCN definition of a protected area, but where the governance authority (e.g. community, Indigenous peoples' group, religious group, private landowner) does not wish the area reported as a protected area.

The above categories are not precise and OECMs need to be judged on a case-by-case basis. OECMs should only be recognised in areas where there is significant biodiversity, and which meet the CBD criteria. An area set aside to ensure clean drinking water could be a form of ancillary conservation, or possibly secondary conservation if it included some conservation aims within its management strategy, or possibly neither if the water protection offered few biodiversity benefits.

It is important to note that, in order to comply with the OECM criteria, areas identified as 'potential OECMs' should demonstrate relevant ecological standards and not just an improvement in the ecological condition. For instance, the OECM's definition requires the '*in-situ* conservation of biodiversity' and the CBD defines '*in-situ* conservation' in its Article 2 as 'the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties'. Furthermore, the IUCN (2019) states that OECMs '...should deliver biodiversity outcomes of comparable importance to, and complementary with, those of protected areas'. COP Decision 14/8 (CBD, 2018) indicates that the recognition of OECMs: '...is expected to include the identification of the range of biodiversity attributes for which the site is considered important (e.g. communities of rare, threatened or endangered

species, representative natural ecosystems, range restricted species, key biodiversity areas, areas providing critical ecosystem functions and services, areas for ecological connectivity).’

Because they are based on existing management, OECMs are recognised rather than designated, i.e. they are existing management systems that already provide effective biodiversity conservation. However, some places identified as ‘potential OECMs’ which almost but not quite meet the definition might require some management changes to reach full OECM status.

IUCN has prepared technical guidelines that explain the definition of OECMs and help to explain how these may be applied in practical conservation strategies (IUCN-WCPA, 2019). The concept has been explored in more detail, for instance in the context of marine conservation (Laffoley et al., 2017), privately protected areas (Mitchell et al., 2018) and community conservation (Jonas et al., 2017). The IUCN WCPA OECM Specialist Group is currently developing and field-testing a site-level methodology for identifying OECMs (Marnewick et al., forthcoming). This site-level methodology consists of the three steps listed below which should be followed sequentially:

- Step one: comprises a screening tool to determine if a site is a ‘potential OECM’ (this is the tool that has been used in the case studies within the present project).
- Step two: if the site is a ‘potential OECM’, this step allows to record the consent by the legitimate governance authority for assessing the site as a ‘candidate OECM’. This step allows as well to capture details of the ‘candidate OECM’ and its assessee/s and assessor/s. The site cannot be assessed without consent from the legitimate governance authority.
- Step three: comprises a detailed assessment tool that enables to assess the ‘candidate OECM’ against the CBD criteria of an OECM (CBD, 2018) to determine whether it qualifies as an OECM.

OECMs are very likely to be included in any post-2020 CBD targets (Jonas et al., 2018) and are already reflected in the zero draft for this process (CBD, 2020). They will then start to be recorded by countries as part of their contributions to area-based conservation, and thus listed on the World Database on OECMs (WD-OECM). Canada announced the first OECM, a military training area that has high conservation value, and large areas are now being declared, for instance in Algeria (which has listed five OECMs in the WD-OECM, with extension per site ranging from 88 916.6 km² the smallest to 544 691.4 km² the largest) and Morocco.

The implications are still being worked out. OECMs could bring new or existing areas that are important for biodiversity conservation into overall conservation planning and thus help prevent them from being lost or degraded. They also enable diverse actors not usually associated with conservation to be more formally recognised for their contributions to biodiversity. There is a risk that OECMs become perceived as an easy option for governments as an alternative to protected areas (although in reality the process of recognising OECMs might entail more work for governments). They also change the debate about big new conservation targets, making the proposed 2030 target of 30% of the world in protected and conserved areas much more feasible (Dudley et al., 2018).

The EU is now investigating options for encouraging EU Member States to recognise OECMs (the role for recognising these sites lies in the countries and the different actors operating at subnational levels). One obvious way forward is to determine whether land and water designated under various directives might sometimes be the equivalent of ‘potential OECMs’, which would expedite the process for identifying such areas.

The EU and its 27 Member States are each party to the CBD. Environmental matters in the EU, including biodiversity policy, are a shared competence between the EU and Member States. Each can legislate and adopt legally binding acts and EU Member States exercise their own competence where

the EU does not. The EU's principle binding conservation acts are the Birds Directive and Habitats Directive (shortly 'Nature Directives'). They require EU Member States to ensure both the physical protection of individual specimens as well as the conservation of core breeding and resting sites for threatened species under the Natura 2000 network of protected areas (EU, 1992; EU, 2009).

The non-binding *EU Biodiversity Strategy to 2020* is the EU's strategy contributing to the CBD Strategic Plan and Aichi Targets (EU, 2011a). The EU has an established environmental policy framework including various other binding instruments that indirectly support conservation objectives under the Nature Directives and EU Biodiversity Strategy. The most relevant of these are policies addressing the most reported pressures and threats on EU protected habitats and species: agriculture, forestry and human induced changes in water regimes such as the common agricultural policy (CAP).

Since the European elections in May 2019, environment has risen significantly up the EU political agenda. The European Commission made the *European Green Deal* its top strategic priority with biodiversity one of its eight key initiatives (EC, 2020a). The European Commission published in May 2020 the *EU Biodiversity Strategy for 2030* which makes explicit reference to the role of OECMs in contributing to the Strategy's 2030 nature protection targets. Specifically, the Strategy announces that:

... the Commission, working with Member States and the European Environment Agency, will put forward in 2020 criteria and guidance for identifying and designating additional [protected] areas, including a definition of strict protection, as well as for appropriate management planning. In doing so, it will indicate how other effective area-based conservation measures and greening of cities could contribute to the targets (EC, 2020b).

OECMs are still relatively unknown in EU policy development and implementation and there is an urgent need to provide insight so that guidance can be offered to help EU Member States to assess which measures to prioritize and report on OECMs in their National Strategies and Action Plans under the CBD and in implementation of the *EU Biodiversity Strategy for 2030*. This scoping study was commissioned by the European Environment Agency (EEA) to review the application of recently established international OECM guidelines in the EU policy context, provide such insight and identify priorities for future work to implement and report OECMs in the EU.

1.2 Technical objectives

The scoping study aimed to achieve three main objectives:

1. Analysis of whether the selected EU Water Framework Directive (WFD) and Floods Directive (FD) may be useful in identifying potential or actual OECMs;
2. Testing these general conclusions by detailed case studies (which included building capacity with the in-country experts conducting the case studies and workshops with stakeholders if possible) and wider mapping of potential OECMs in two selected case study countries;
3. Using this information to draw some general conclusions and using these to develop a roadmap for future investigation by the EU.

1.3 Methodology

The following section describes the main steps taken in the analysis:

1. Analysis carried out on the two selected directives to identify categories of potential OECMs falling under both these at the regional scale.
2. Identification of two case study EU Member States and selection of in-country experts for each, to be involved in facilitating in-country processes – after analysis of a number of options Spain and Finland were selected. Given the short timescale, these were selected because both countries had started the process of discussion about OECMs and the learning process was therefore shortened.
3. Analysis of the WFD and FD to identify categories of potential OECMs falling under both these at the national scale in the selected EU Member States.
4. Remote capacity building was undertaken with local experts in the selected EU Member States case studies to discuss potential OECMs under the directives and ensure that everyone is working under the same general premises.
5. A list of areas falling within the directives that are potential OECMs was developed, working in close collaboration with the two identified in-country consultants.
6. These potential OECMs were mapped for Spain and Finland.
7. Some particular sites in Spain and Finland were identified for more in-depth analysis.
8. An online workshop was held in Spain to discuss the preliminary findings with a wider group of stakeholders and refine the results if necessary.
9. A more general online workshop was held for relevant stakeholders throughout Europe, to present the results and discuss any questions; these wider discussions contributed to the overall conclusions of the report and ensured that the analysis covered more than the two case study countries.
10. Overall conclusions were drawn from the study in terms of the practical implications of using the WFD and FD as tools for identifying spatially defined OECMs within the EU.
11. The project explored the potential for the recognition of OECMs beyond the WFD and FD in a third additional EU Member State (Bulgaria).
12. A succinct plan (roadmap) for next steps was developed, in terms of achieving comprehensive recognition, reporting and support of OECMs across EU Member States.

2 Overview of the Water Framework Directive and Floods Directive

Key messages

1) OECMs have potential for recognition under the WFD and FD, associated with the *EU Biodiversity Strategy, European Green Deal, Nature Directives, and Nitrates Directive*. Options include primary conservation of high-biodiversity sites outside protected areas, secondary conservation by actions to maintain good status, and ancillary conservation in areas managed for other reasons e.g. drinking or bathing water.

2) Key actions include nitrate controls, supplementary measures of pollution control, and restoration.

3) Challenges include poor status of many waters, the number of existing protected areas, lack of good ecological data and complications of multiple ownership and governance.

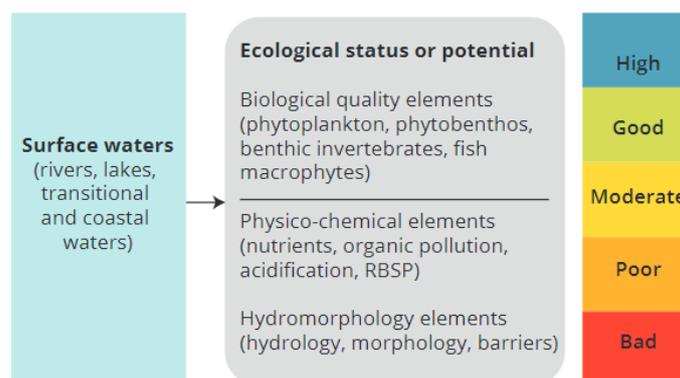
2.1 EU Water Framework Directive, river basin management & conservation

Growing frustration with multiple EU water acts led to the adoption of the EU WFD in 2000. This expanded the scope of water protection to all surface and groundwaters, aiming to achieve good chemical and ecological status of all water bodies by 2015. Standards allow only a slight departure from the biological community expected in conditions of minimal human impact. Objectives include to prevent deterioration of the status of all bodies of surface water or groundwater – the non-deterioration principle (EU, 2000). This means no water bodies in a river basin district should decline in ecological quality (see Box 2.1), providing an important legal baseline for protection and restoration. The WFD follows a six-yearly management cycle, with the second management cycle ending in 2021, and most EU Member States are preparing plans towards 2027.

Box 2.1 Assessing good ecological status

The WFD defines ecological status as quality of the surface water ecosystems. It shows the influence of pressures (pollution, habitat degradation and climate change) and is determined for rivers, lakes, transitional and coastal waters by biological quality plus physico-chemical and hydromorphological quality. Classification is defined by the worst status of the biological and other elements. Around 40 % of surface waters are in good ecological status or potential.

Figure 2.1 Assessment of ecological status of surface water bodies



Source: EEA, 2018.

Article 1(a) covers protection and enhancement of the status of aquatic ecosystems and protection of terrestrial ecosystems and dependent wetlands. Article 6(1) requires a register of *protected areas*⁽¹⁾ 'requiring special protection ...' (see Box 2.2). Objectives are set in river basin management plans (RBMP), which include its characteristics, human impacts, effect of existing legislation, remaining 'gap' in meeting objectives, and measures designed to fill these. Plans include an economic analysis of water use, and measures for adequate public participation.

2.2 EU Floods Directive

After a severe flooding event in 2002, the European Commission adopted the EU FD in 2007. This applies to all floods on EU territory and aims to reduce risks to humans, environment, economic activity and cultural heritage, on a 6-year cycle coordinated with the WFD. The first cycle included by 2015 preliminary flood risk assessments (PFRA), flood hazard and flood risk maps and flood risk management plans (FRMPs) for river basins and coastal zones. Although the FD does not set ecological objectives, it requires EU Member States (in Art 7(3)) to take account of environmental objectives in FRMPs, including under Art 4 of the WFD, and those under nature conservation. The EU encourages ecosystem-based flood management combined with environmental objectives through regional policy, the CAP, EU's funding instrument for the environment and climate action (LIFE) and EU budget climate-mainstreaming (e.g. EC 2011b, 2012, 2013a, 2013b; EEA 2017, 2019; WWF 2019). In 2014, EU guidance on 'Natural Water Retention Measures' was published (WFD CIS, 2014).

⁽¹⁾ Note that in this document we refer to two types of 'protected areas', one type recognised by EU Directives as places to maintain water quality and one recognised internationally, designated primarily for nature conservation. To reduce confusion, we refer to those under the WFD and FD as '*protected areas*' and those recognised by IUCN and the CBD (Dudley, 2008) as '*protected areas*' or '*nature protected areas*'. One element in this study is to explore the extent to which the two overlap.

Box 2.2 Register of protected areas under the EU WFD and FD

Article 6 of the WFD requires EU Member States to establish and update a register of the following kinds of *protected areas*:

1. areas designated for abstraction of drinking water (*Drinking Water Protected Areas*);
2. areas designated for protection of economically significant aquatic species;
3. designated recreational waters, including areas designated as Bathing Waters;
4. nutrient-sensitive areas, nitrate vulnerable zones (NVZ) under the Nitrates Directive or sensitive areas designated under Urban Waste Water Treatment Directive (UWWTD);
5. areas designated for protection of habitats or species where water status is an important factor in their protection, including relevant Natura 2000 sites (please note these are nature protected areas meeting the IUCN definition of a protected area).

The FD only stipulates in Article 6 that flood risk maps show the potential adverse consequences associated with flood scenarios on affected *protected areas* for drinking water, recreational waters and nature conservation (1, 3 and 5 WFD Annex IV).

Neither obliges EU Member States to designate new areas, and under the WFD they are only required to undertake monitoring to ensure ecological objectives are met for nature protected areas. All RBMPs must identify and map the Annex IV *protected areas*. Even though the Directives do not commit EU Member States to designate new conservation sites, they do commit them to **define and implement targeted measures to conserve certain areas**. Since OECMs are explicitly **outside** formal protected areas, we analyse whether WFD and FD-driven *protected areas* under types 1-4 contribute to effective *in-situ* conservation.

2.3 EU Biodiversity Strategy to 2020 and Action Plan for Nature, People & the Economy

The *EU Biodiversity Strategy to 2020* had six targets focused on conservation of habitats and species, maintenance and restoration of ecosystems, sustainable agriculture, forestry and fisheries, invasive alien species, and global biodiversity loss (EC, 2011a). Target 1 asks EU Member States to ‘...integrate species and habitats protection and management requirements into key land and water use policies, both within and beyond Natura 2000 areas’, here relating mainly to 14 Annex I freshwater habitats and many freshwater-dependent species. Target 2 says ‘Member States, with the assistance of the Commission, will develop a strategic framework to set priorities for ecosystem restoration at sub-national, national and EU level’ and that the European Commission should develop a *Green Infrastructure Strategy*, which was published in 2013 (EC, 2013b).

A review of the Strategy identified progress on both targets, but at an insufficient rate (EC, 2015). The 6th Report to the CBD identified challenges to halting declines of common species outside Natura 2000. It referred to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) assessment that restoration and construction of wetlands in response to the Nitrates Directive, Water Directives and Marine Strategy Directives are decreasing pollution and improving water quality (IPBES, 2018; EU, 2019). The value of legal frameworks over voluntary strategies was echoed in evaluation of the *EU Green Infrastructure Strategy* (EC, 2019a). Following the 2015-2016 *Fitness Check of EU Nature Directives*, the EC published an *EU Action Plan for Nature, People and the Economy* proposing integrated implementation of relevant EU policies. Actions outside Natura 2000 included a

framework for supporting EU-level green and blue infrastructure (EC, 2019b) and guidance on integrating ecosystem services into decision-making (EC, 2019c).

2.4 EU Green Deal and conclusion EU water policy fitness check

In 2018, the EEA published an assessment of European waters (EEA, 2018) which found only 40 % of surface waters in good ecological status. The main pressures are point source pollution (affecting 18 %), diffuse source pollution (affecting 38 %) and hydromorphological pressures (affecting 40 %). The study also found EU Member States making marked efforts to improve water quality or reduce pressures (e.g. support for organic farming) with both measurable short-term and expected long term improvement.

In December 2019 the European Commission did a ‘fitness check’ of EU water legislation (EC, 2019d) evaluating the WFD, FD, Environmental Quality Standards Directive (EQSD), and Groundwater Directive (GWD). Results were mixed. The WFD set up a framework for integrated water management for the EU’s 110 000 water bodies, slowing deterioration and reducing (mainly point source) pollution. But no substantial progress was made in overall status of water bodies. Less than half the EU’s water bodies are in good status, despite the 2015 deadline. While it is too early to conclude about the FD, it was found to have improved flood risk management.

Since European elections in May 2019, the environment has significantly risen up the political agenda. The European Commission made the *European Green Deal* its strategic priority with biodiversity one of eight key pillars (EC, 2020a). The Deal was launched in 2019, committing to a *2030 Biodiversity Strategy* (2020), measures to address drivers of biodiversity loss (2021) and a zero-pollution action plan for water, air and soil (2021). The *EU Biodiversity Strategy for 2030* adopted in May 2020 introduces new commitments relevant to OECMs under EU nature- and water policy (EC, 2020b):

- **Protected area targets** by 2030 to legally protect 30 % of EU land and sea area (up 4 % and 19 % respectively) and increase strictly protected areas to 10 % (up 7 % and over 9 %). In 2020, provide guidance on identifying and designating extra protected areas and corridors, appropriate management planning, and on how other effective area-based conservation measures and urban greening can contribute to targets.
- **An EU restoration plan** with binding targets to achieve favourable conservation status of at least 30 % of protected habitats and species. The plan commits to restoring at least 25 000 km of free-flowing rivers by 2030. The European Commission will help EU Member States to identify sites and mobilise funding (2021) and provide guidance on reviewing water abstraction and impoundment permits and restoring ecological flows in revised RBMPs (2023). Restoration targets are currently under development and are subject to an impact assessment to explore potential for legal backing (potentially as a directive or regulation).
- Stepping up **implementation and enforcement** of EU environmental legislation, focusing on completing the Natura 2000 network, effective site management, species-protection provisions, and on species and habitats showing declining trends. The European Commission will ensure that legislation like the WFD is better implemented. It will by 2023 assess effectiveness of a proposed cooperation-based biodiversity governance framework, and enhanced, legally binding or other, approaches to biodiversity governance.

Assessments point to a poor state of freshwaters. The IPBES regional assessment for Europe and Central Asia (IPBES, 2018) found wetland extent has declined by 50 % since 1970. *State of Nature* reporting by the EU (EEA, 2020) found only 21 % of freshwater habitats show favourable conservation status, and just 12 % of bogs, mires and fens. Only 28 % and 24 % of amphibian and fish species show favourable status, and in both over a third of assessments show deterioration since previous reporting.

These factors are likely – although not certain – to increase EU Member State interest in reporting of conservation outside protected areas.

2.5 OECM-relevant measures taken under the EU WFD and FD directives

This section reviews measures under the WFD and FD and compares them against established guidance on the identification of OECMs.

WFD Programmes of Measures

Under the WFD, competent authorities commit to establish programmes of measures (PoMs) for each river basin district (RBD) which include the actions with which EU Member States plan to achieve the WFD's environmental objectives (Article 4). The WFD PoMs bundle so-called basic and supplementary measures. Basic measures are the minimum requirements. They consist of:

- measures associated with the implementation of **other Community legislation for the protection of waters** (referred to in WFD Article 11(3) para a and Annex VI, e.g. measures to achieve compliance with the objectives of the Nitrates Directive and UWWTD) and
- other **WFD-specific basic measures** (WFD Articles 11(3) paras b to l) to achieve environmental objectives. These measures are largely administrative and regulatory instruments such as permit regimes, general binding rules, etc. They should enable the authorities to exert control over all activities that have a significant impact on water bodies and thus potentially hinder achieving environmental objectives.

Basic measures may not be enough and supplementary measures are then required (Article 11(4)). The WFD is not prescriptive and measures can be tailored to conditions in RBDs as long as good water status is achieved. Reporting has been complicated. To streamline this, a list of Key Types of Measures was adopted, with relevant sections discussed below.

WFD and FD measures potentially relevant to OECMs

Among basic measures, the following types could potentially represent OECMs:

- Measures to ensure the good status of bathing waters under the EU Bathing Water Directive 2006/7/EC, which requires two measures of faecal bacteria and since 2015 bathing water must be at least of 'sufficient' quality. Inland bathing waters usually hold significant biodiversity, maintained for regulating services such as water purification.
- Measures to meet the objectives of the EU Nitrates Directive 91/676/EEC in NVZ (some EU Member States apply measures on their territory).

While most measures relate to fertilizer application and agricultural management, some include abandonment or even extensification (e.g. riparian buffer strips). European Commission guidance linking Nature and Nitrates Directives (EC, 2019h) emphasize the potential for synergies. Restrictions for fertilizers near water courses under the Nitrates Directive could align with the Nature Directives in riparian zones. But agricultural conservation of riparian habitats is usually implemented through the EU CAP Pillar II with agri-environment and climate measures for recurring management or restoration investments (Measure 10). EU Member States can use Natura 2000 and WFD payments (Measure 12) and payments for areas with natural constraints (Measure 13), but these are more suspect, coming with few strings attached (Rouillard and Berglund, 2017).

Among Key Types of supplementary measures, the following could potentially be measures that result in OECMs:

- Reduce nutrient pollution beyond Nitrates Directive requirements (2). The latter does not set biodiversity requirements, so in practice this includes conservation buffer zones.
- Reduce pesticides pollution in agriculture (3), e.g. buffer zones in agricultural areas.
- Remediate contaminated sites (historical pollution including sediments, groundwater, soil) (4), if combined with nature restoration (usually this is not done in practice).
- Improve longitudinal continuity (e.g. fish passes, demolishing old dams) (5), probably only relevant if combined with other long-term management measures.
- Improve hydromorphological water body conditions beyond longitudinal continuity (6).
- Drinking water protection (13) (e.g. safeguard or buffer zones). The EU has requirements under the Drinking Water Directive. Most EU Member States designate groundwater source protection zones often owned by water companies who favour near-natural conditions.

Under the FD, the number and types of measures reported by EU Member States also differ greatly. The European Commission encourages EU Member States to implement natural flood management measures or green infrastructure over grey infrastructure such as ‘better environmental options for flood risk management’ (EC, 2011c) and promotes natural water retention in national Adaptation Plans and Green Infrastructure strategies. The recent FD report shows all 27 EU Member States assessed include nature-based solutions in some or all FRMPs. FD implementation is widely regarded as a chance for conservation and ecosystem restoration and there are examples in most EU Member States. Some receive targeted EU environmental funding, for example the Austrian ‘Iris’ LIFE integrated project.

2.6 Potential of the WFD and FD measures to comply with OECM criteria

The WFD provides a strong framework for OECMs, through primary conservation benefits of high-biodiversity sites outside protected areas (e.g. some Important Bird Areas, IBAs), secondary conservation through efforts to maintain good status, and ancillary conservation in areas conserved for other reasons e.g. drinking water protection. At the same time, using the WFD as a starting point for OECM recognition may be challenging for several reasons:

1. **Poor status of water bodies:** 60 % of surface waters are not in good ecological status or potential (EEA, 2018) and while WFD measures in them result in conservation benefits, it would be inappropriate to report them as OECMs.
2. **Focus on nature protected areas:** most EU Member States have already designated significant shares of water bodies as protected area, thus limiting the scope for OECMs.
3. **Insufficient ecological data to assess effectiveness in water bodies generally and non-nature protected areas in particular:** while it is now possible to establish the status of almost all water bodies, important gaps in ecological status monitoring remain.
4. **Delineation of measures:** measures are taken across the RBD while ecological impacts are only monitored in the water bodies. Water bodies in good ecological status may be classified as OECMs, but key measures that ensure their *in-situ* conservation may be taken elsewhere in the basin.
5. **Issues of governance:** multiple ownership and governance arrangements in many water bodies may make it difficult to reach agreement on whether they should be OECMs, given that recognition requires agreement by the relevant governance authority.

Nonetheless, 40 % of water bodies are in good ecological status, and if implemented, the WFD ensures they remain so in the long-term. The share of these water bodies not formally designated as nature protected areas would be the starting point of any search for WFD-driven OECMs. It would be interesting to identify water bodies in or surrounded by non-nature protected areas in the WFD register of *protected areas* and thus subject to (often stricter/prioritized) measures under the Directive. For groundwater protection zones, water managers have an intrinsic interest in ensuring a high quality of water purity, which can dovetail with conservation objectives. For example, In The Netherlands, 23 % of registered groundwater extraction zones are located outside nature protected areas (Van der Zee et al, 2016).

An alternative approach would be to identify important biodiversity areas, e.g. IBAs in the respective RBD, in case they are not or only partly designated as protected areas and then review how WFD measures protect/restore conservation values in these sites.

A less systematic but perhaps more targeted approach to identify examples of dramatic improvements in ecological status in implementation reports, e.g. through WFD-driven restoration measures with flood risk management- or climate change adaptation measures. There are plenty of examples in FD reports, but these are usually one-off investments with only short-term and local monitoring of conservation impacts. The FD does not ensure long-term conservation, however, if located in or on a water body designated under the WFD 'mother directive' deterioration in the ecological status of the restored water body is in principle illegal.

3 Spain

Key messages

- 1) Areas such as APSFRs that fall under the FD are not closely aligned with the OECM criteria.
- 2) Three River Reserves, which fall under the WFD, met the criteria for 'potential OECMs'.
- 3) Recognising OECMs in Spain provides a range of opportunities, such as increasing the international recognition of important biodiversity and sites that contribute ecological representativity and connectivity to the protected area network.
- 4) Challenges include the general lack of knowledge about OECMs among Spanish decision makers and practitioners, uncertainty about the OECM recognition process, and concerns about the possible unintended socio-economic consequences of recognising OECMs.

3.1 Overview of the WFD and FD in Spain

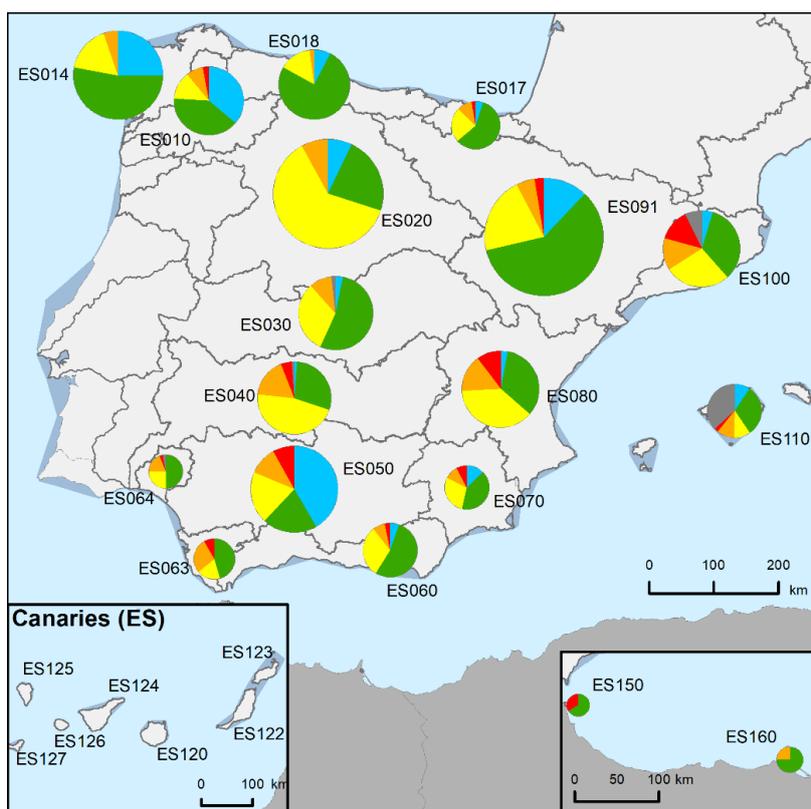
3.1.1 *Water Framework Directive*

Spain has designated 25 RBDs and each has a large number of competent authorities for its RBDs. These are generally restricted to the River Basin Authorities of RBDs (*Confederaciones Hidrográficas*), one per basin which cross Autonomous Regions or Water Boards on islands. The competent authorities also include Autonomous Regions with a role in economic analysis, enforcement of regulations, public participation, implementation of measures and coordination of implementation. Various Federal ministries also have key roles including the enforcement of regulations and coordination of implementation, including the Ministry of Agriculture, Food and Environment. Local authorities are indicated as also competent authorities for enforcement of regulations, economic analysis, preparation of PoMs, public participation, implementation of measures and coordination of implementation (EC, 2019e).

Ecological status of water bodies

The overall ecological status/potential has slightly improved, but the proportion of water bodies at less than good status is still between 30-70 % for natural rivers in most RBDs (EC, 2019e).

Figure 3.1 Ecological status or potential of surface water bodies in Spain



Notes: Green=High; Blue=Good; Orange=Moderate; Yellow=Poor; Red=Bad; Grey=Unknown.

Source: EC, 2019e.

Protected areas listed in Annex IV of the WFD have been designated in Spain (see Table 3.1). The status of water bodies associated with these areas has been comprehensively reported. The reported extent of the monitoring programme associated with *protected areas* is limited and inconsistent with the number of *protected areas*. Progress since the first cycle with the definition of additional objectives for *protected areas* associated with Natura 2000 sites has been limited.

Table 3.1 Number of *protected areas* of all types in each RBD of Spain

<i>Protected Area type</i>	<i>Number of Protected Areas associated with</i>				
	<i>Rivers</i>	<i>Lakes</i>	<i>Transitional</i>	<i>Coastal</i>	<i>Groundwater</i>
Abstraction of water intended for human consumption under Article 7	1239	8	4		7485
Recreational waters, including areas designated as bathing waters under Directive 76/160/EEC8	200	18	79	1543	
Protection of species where the maintenance or improvement of the status of water is an important factor in their protection, including relevant Natura 2000 sites designated under Directive 79/409/EEC (Birds Directive)	282	65	51	79	303
Protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection, including relevant Natura 2000 sites designated under Directive 92/43/EEC (Habitats Directive)	708	101	83	145	732
Nutrient-sensitive areas, including areas designated as vulnerable zones under Directive 91/676/EEC (Nitrates Directive)88 and areas designated as sensitive areas under Directive 91/271/EEC (Urban Wastewater Treatment Directive)89	310	44	53	111	102
Areas designated for the protection of economically significant aquatic species	700	4	92	175	0

Source: EC, 2019e.

Spain has designated 79 117 km² as NVZ. It also has 177 inland wetlands recognized as IBAs, which are not by definition protected under Spanish law. While some of these IBAs were fully designated as Special Protection Areas, others are not or only partly.

3.1.2 Floods Directive

Spain is divided into 25 units of management (UoMs), which correspond to the RBDs under the WFD. By February 2019, FRMPs had been approved and reported for 17 of Spain’s UoMs, the exceptions being the UoMs for Catalonia (ES100) and the Canary Islands (ES120 to ES127). Spain reported 1306 areas of potential significant flood risk (APSFR) spread over all 25 UoMs, ranging from four areas for the small city Melilla UoM on the Moroccan coast to 204 and 207 for the large Andalusian UoM and smaller but more floods-prone Atlantic Galician coast UoM (EC, 2019f).

The review of the first FRMPs (EC, 2019f) found only limited evidence of integration of environmental objectives. One of key recommendations from the review was the need for stronger emphasis on the introduction of nature-based solutions (including natural water retention measures, NWRM). However, in practice nature-based solutions appear to be more commonplace. The critical European

Court of Auditors in its last report on the FD (ECA, 2018) included Spain as one of key case study countries and reported how all projects visited included green infrastructure development. The report also mentioned that Spanish authorities listed the adoption of a decree on spatial planning as one of the FD’s key achievements. Strict limitations are imposed on most land uses in the main floodway, where there is a medium probability of flooding.

3.2 Assessment of selected case study sites

3.2.1 Methods and activities for the site assessments

Two levels of activities were conducted. First, we assessed four sites against the OECM criteria, as set out in the *Site-level methodology for identifying ‘other effective area-based conservation measures’* (Marnewick et al., forthcoming). While the intention was to review two sites each from the WFD and the FD, we quickly determined that the areas under the FD were unlikely to meet the criteria: data on biodiversity and its effective long-term conservation is unknown, as APSFRs are not designed for biodiversity purposes and it is not inventoried or monitored. In spite of the different river restoration projects and initiatives going on in Spain, they are temporary measures, they are not spatially defined or managed areas once restoration is over (there might be some limited monitoring of the success of restoration while the project is being implemented), as they are carried out in different parts of the Public Water Domain. For this reason, one APSFR under the FD and three River Reserves under the WFD were reviewed. Table 3.2 shows the sites’ main characteristics.

Table 3.2 Main characteristics of the assessed sites

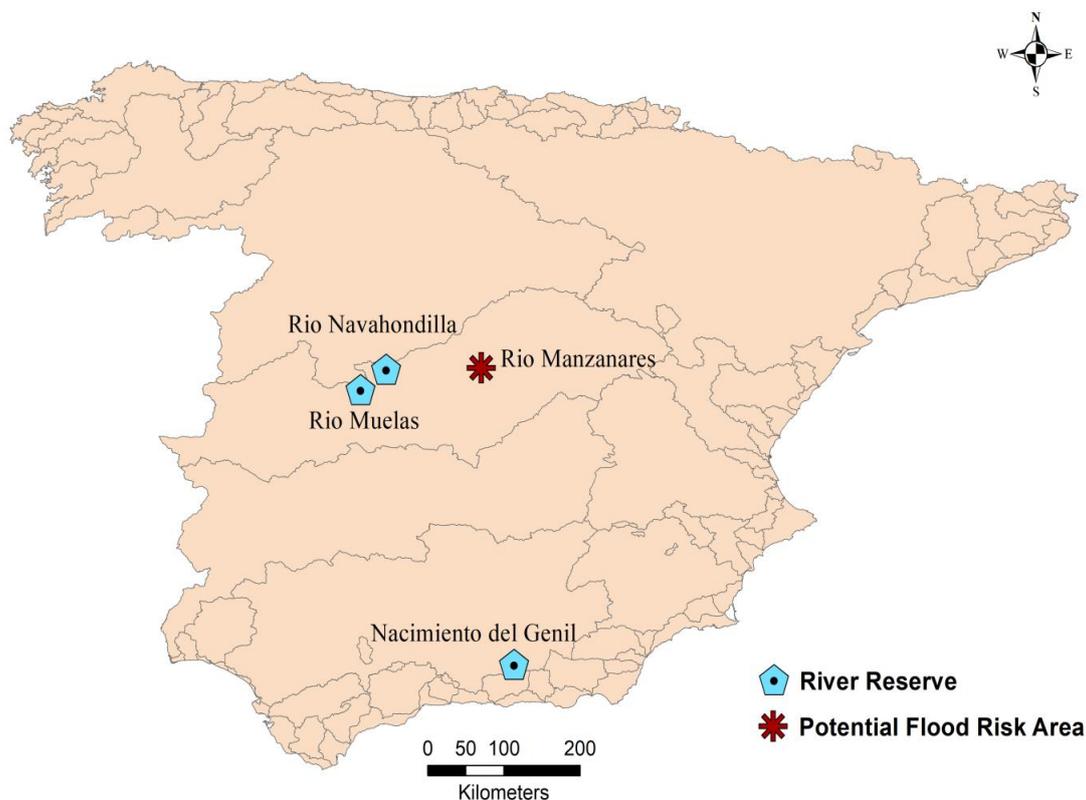
Site’s name	Category	Directive	Location	Length ⁽²⁾ (m)
<i>Río Manzanares</i>	APSFR	FD	Madrid (Madrid Region)	22 000
<i>Río Muelas</i>	River Reserve	WFD	Arenas de San Pedro (Castilla y Leon Region)	8 400
<i>Nacimiento del Genil</i>	River Reserve	WFD	Guejar Sierra (Andalucia Region)	56 120
<i>Río Navahondilla</i>	River Reserve	WFD	Navarrevisca (Castilla y Leon Region)	10 280

Source: MITECO, 2020a, prepared for this study.

The assessments were carried out through geographic information system (GIS) analysis, digital cartography, review of the literature (MITECO, 2020b), and phone interviews with relevant stakeholders including site’s managers and local councils’ representatives.

⁽²⁾ Approximate GIS-measured length of the sites.

Map 3.1 Location of the four identified potential OECMs in Spain on a country's river basin map



Source: prepared for this study.

3.2.2 Spain's protected area network

Because an OECM is necessarily outside of protected areas, this section provides a brief overview of Spain's existing protected areas network. The Spanish basic norm regulating PAs, Law 42/2007 on Natural Heritage and Biodiversity, recognises nationally designated protected areas, Natura 2000 sites and internationally designated areas as protected areas in the country. Internationally designated protected area categories include: World Heritage sites, Man and Biosphere UNESCO Biosphere Reserves, Ramsar sites, Specially Protected Areas of Mediterranean Importance (SPAMIs), OSPAR sites in the north-east Atlantic, UNESCO's Geoparks and Council of Europe's Biogenetic Reserves. This long list of protected area categories covers over 28 % of Spain's terrestrial area (EC and EEA, 2021; Rodríguez-Rodríguez et al., forthcoming; UNEP-WCMC, 2021). A recent study highlights that OECMs can upgrade conservation targets and bring greater recognition to areas that are important for biodiversity yet are not included in the protected area network, including: Public Utility Forests, River Reserves and Hunting Reserves (Rodríguez-Rodríguez et al., forthcoming).

3.2.3 Case studies

The following section provides the key outcomes of the four assessments. For a more in depth analysis, please see Annex 1.

Floods Directive

The *Río Manzanares* APSFR falls under the FD and is designed to manage flooding risk to the city of Madrid. It crosses the south-eastern part of the municipality of Madrid for approximately 22 km. It connects a number of protected areas, namely: *Monte de El Pardo* Special Protection Area (a forested Special Protection Area; SPA) and *Cuenca de Río Manzanares* Site of Community Importance (a river basin Site of Community Importance; SCI) to the north, with lowland rivers in the *Ejes de los Cursos Bajos de los Ríos Manzanares y Jarama* Regional Park, and a hilly, moorland area in *Vegas, Cuestas y Páramos del Sureste de Madrid* SCI, to the south, potentially creating an ecological corridor role across the highly humanised urban landscape.

The results of the assessment are set out in Table 3.3.

Table 3.3 Results of *Río Manzanares* Potential Flood Risk Area

Criteria	Result
Is the site geographically delineated, with agreed and demarcated boundaries?	Yes
Is the site outside of a protected area?	Yes
Is the site under a governance?	Partially
Is the site subject to a management regime?	Partially
Is the governance and management 'sustained'?	Partially
Is there a strong likelihood that the area contains important biodiversity values?	Partially
Is there a strong likelihood that site is delivering the effective in-situ conservation of biodiversity?	Partially

Source: prepared for this study.

While the site is geographically delineated and connects two protected areas, the governance authority - the River Tajo Basin Authority – is focused on preventing flood risk and damage. While a conservation objective is not required for an OECM, in this case the low focus on biodiversity outcomes raises significant questions about the conservation effectiveness of the area. Biodiversity monitoring would enable a clear assessment of the local values, including relating to bird species that are associated with the local protected areas (Ayuntamiento de Madrid, 2018). Similarly, further work would be required to ascertain whether the management intervention sufficiently addresses threats, such as the following: extreme flood events may cause severe damage to biological communities, especially in the long channelled area; several small dams hamper the flow of swimming organisms; public works; alien species (*Cairina moschata domestica*; *Alopochen aegyptiaca*; *Trachemys scripta*; *Procambarus clarkia*; *Myiopsitta monachus*); Uncivic behaviour (disturbance to fauna; littering); and sports fishing. The above findings were supported by the stakeholder interviews, who also stated the need for more information on legal and managerial implications of recognition.

Overall result: the site is unlikely to meet the OECM criteria. Effective conservation of important biodiversity (if it existed) cannot be ensured.

Water Framework Directive

Three sites were assessed under the WFD, namely:

1. ***Río Muelas River Reserve***, which is 8.39 km long and connects different protected areas in central-western Spain, namely *Sierra de Gredos* Nature Park, SCI and SPA to the north, and *Valle del Tietar* SCI and SPA, thus likely performing an ecological corridor role across the landscape. Approximately 7 km of the reserve are outside protected areas.
2. ***Río Navahondilla River Reserve***, which flows from south to north across more than 10 km in central-western Spain. It lies completely outside protected areas.

3. **Nacimiento del Genil River Reserve**, which includes 56.12 km of the upper stretch of the Genil River in south-eastern Spain. Its upper-most part (zones 1 and 2) is included within the *Sierra Nevada* National Park, *Sierra Nevada* Nature Park and *Sierra Nevada* SCI. Approximately 15 km of the reserve are outside protected areas.

Because the results of the three assessments were the same on each of the criteria, they can be set out in one Table 3.4, below.

Table 3.4 Collated results for the assessment of three sites under the Water Framework Directive

Criteria	Result
Is the site geographically delineated, with agreed and demarcated boundaries?	Yes
Is the site outside of a protected area?	Yes
Is the site under a governance?	Yes
Is the site subject to a management regime?	Yes
Is the governance and management 'sustained'?	Yes
Is there a strong likelihood that the area contains important biodiversity values?	Yes
Is there a strong likelihood that site is delivering the effective in-situ conservation of biodiversity?	Yes

Source: prepared for this study.

The three assessments demonstrate that River Reserves will generally be 'potential OECMs'. This is for the following reasons:

- The sites are all geographically delineated and are totally or partially outside protected areas.
- All three adjoin protected areas, and therefore support ecological connectivity, both terrestrial and freshwater.
- They all have governance authorities (Tajo River Basin Authority – sites 1 and 2, and the Guadalquivir River Basin Authority – site 3).
- The sites are managed according to management guidelines, which establish management zones and measures and which considers important biodiversity. Notably, these proposals are not compulsory, and guide management in the reserves.

The governance and management of the sites can be considered to be 'sustained' because 'River Reserve' is a legal category under the Spanish Law on Water and the authority, and the management guidelines are not time bound. Moreover, River Reserves are included in the Public Water Domain which is managed by River Basin Authorities (*Confederaciones Hidrográficas*). While proposed management measures for River Reserves are implemented according to budgetary availability, which may lead to discontinuous active management.

The sites contain species and habitats of conservation importance, including:

- **Río Muelas River Reserve:** *Salmo trutta*, *Emys orbicularis*, *Lutra lutra*, *Cinclus cinclus*, *Prunus lusitanica*, *Discoglossus galganoi*, *Triturus pygmaeus*, *Alcedo atthis*, *Myotis daubentonii*, *Microtus cabrerai* (animal species); and alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (91E0) (priority habitat).
- **Río Navahondilla River Reserve:** *Squalius carolitertii*; *Gobio lozanoi*; *Margaritifera margaritifera*; *Rana ibérica*; *Lacerta schreiberi*; *Mauremys leprosa*; *Cinclus cinclus*; *Lutra lutra*; *Neomys anomalus* and *Mustela putorius* (animal species).
- **Nacimiento del Genil River Reserve:** *Salmo trutta*. 67 invertebrate species, *Pleurodeles waltl*, *Hyla meridionalis*, *Pelodytes ibericus*, *Discoglossus jeaneae*, *Epidalea calamita*, *Alytes*

dickhilleni, *Mauremys leprosa*; and 6420 (Mediterranean tall humid grasslands of *Molinio-Holoschoenion*), 6430 (Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels), 91B0 (Thermophilous *Fraxinus angustifolia* woods) and 92A0 (*Salix alba* and *Populus alba* galleries) (Habitats of Community Interest).

There is also considered to be a strong likelihood that the sites are delivering effective and long-term *in-situ* conservation of biodiversity because they are under active management regimes, through the implementation of proposed management guidelines, and there is surveillance by rangers to check regulations are being adhered to. The sites each face a range of threats, including:

- **Río Muelas River Reserve:** unregulated water catchments; perpendicular obstacles to water flow and swimming organisms; small bridges and river crossings; occupation of riverbed and river banks by illegal hunting fences; localised grazing pressure; alien invasive species (*Arundo donax*, *Neovison vison*, *Procambarus clarkii*, *Trachemys scripta*); occupation of river banks by crops; diffuse pollution from animal farming; and reduced water quantity due to climate change.
- **Río Navahondilla River Reserve:** multiple water catchments, including a large 50 500 m³/month one; perpendicular obstacles to water flow and swimming organisms; walls channelling river banks at some points; grazing pressure; possible untreated wastewater spills from Navahondilla town; diffuse water pollution from animal farming; located pollution at bath point; alien invasive species (*Phytolacca Americana*; *Neovison vison*); and reduced water quantity from climate change.
- **Nacimiento del Genil River Reserve:** perpendicular obstacles to water flow and swimming organisms; water catchments for agriculture; forest fires; alien invasive species (*Robinia Pseudoacacia*); reduced water quantity from climate change. Threats require management actions but do not seriously compromise biodiversity conservation in the reserve.

Overall result: the sites meet the criteria of a 'potential OECM'. Local stakeholders' consent and input should be obtained to further ascertain whether the site does in fact meet the criteria of an OECM.

3.2.4 Stakeholder inputs

The following sets out points derived from engaging Spanish stakeholders who were either interviewed as part of the above analysis or joined a webinar on 19 November 2020:

- **Lack of awareness and knowledge:** very few Spanish stakeholders have yet engaged with OECMs. Only one stakeholder, from the Ministry of Environment, stated he knew of the topic. Consequently, there is a widespread lack of knowledge about the criteria and about how to identify, recognise, support or report OECMs.
- **Opportunity:** the OECM framework is seen by some stakeholders as providing an opportunity to increase the legal recognition and visibility of areas important for biodiversity outside protected areas. For example, specific privately managed sites were put forward as areas that are not always designated as protected areas and might benefit from recognition as OECMs.
- **Redundancy:** others wonder why another 'designation' is needed, for example, when the River Reserves are already recognised as such. In this regard, it will be important to make sure stakeholders understand that this process does not comprise adding a new designation but recognising the conservation measures that currently exist under different processes, albeit with some additional obligations relating to long-term security and monitoring.
- **Concern:** some stakeholders expressed concern that there may be unknown or unintended socio-economic consequences of recognising and reporting areas as OECMs.

- **EU Biodiversity Strategy:** OECMs are referenced in the *EU Biodiversity Strategy* but stakeholders were unaware of how it arises in the context and the ramifications for Spanish conservation.

All stakeholders suggested that the provision of more information and opportunities to discuss the issues relating to OECMs was a critical next step. The question of whether this has to be led by a governmental agency or whether there could be a more plural approach was considered but no decisions taken. Further, some stakeholders asked whether there should be an exercise to identify priority areas, outside of protected areas, to help the consideration of OECMs. Any work should be inclusive, ensuring engagement by government agencies as well as site managers.

Non-governmental organisations (NGOs) and others involved in the management of landscapes and coasts, including pastoralist and fishers. Broader public awareness and capacity-building activities regarding an array of existing legal categories with high likelihood to meet the OECM criteria would contribute to including OECMs in the political agenda and to the wider engagement of stakeholders in the country.

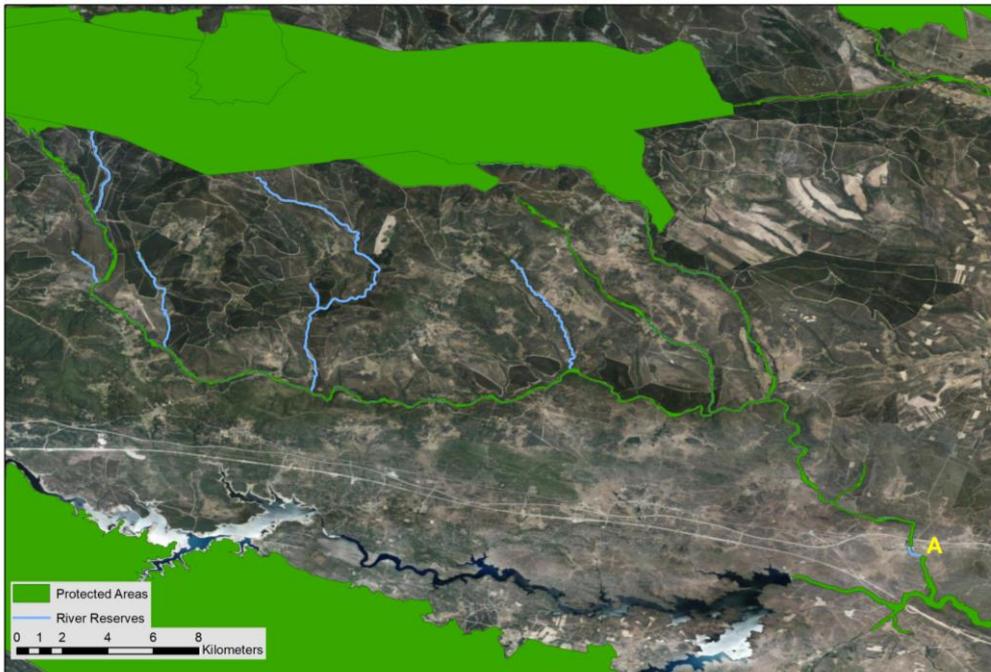
3.3 Spatial analysis on River Reserves (WFD)

A high-level spatial analysis focussing on the River Reserves was undertaken to assess the contribution of these potential OECMs to national conservation efforts. There are 103 River Reserves in total across Spain, with an average length of ~15 km but with some well over 100 km. Each River Reserve was buffered by five metres in accordance to the prescribed management of the Reserves. The footprint of the Reserves totals 33.3 km²; however, many (91 %) overlap with existing protected areas in Spain and as such the novel area of the River Reserves is only ~6 km². This area is evidently very small in relation to Spain's overarching protected area network, which is in excess of 140 000 km², but this does not imply these sites do not have value.

An encouraging aspect of River Reserves is that only 31 overlap with urban areas, equivalent to less than 10 % of the total area. Of these, only four overlap with the 'urban' core, suggesting that potentially many of these River Reserves are in natural or semi-natural environments.

Almost 150 of the River Reserves overlap with Key Biodiversity Areas (KBAs), representing around 70% of their total area. Whilst no connectivity analyses were undertaken in this analysis it is clear from many River Reserves, including the *Río Muelas* River Reserve mentioned above, that these sites play a critical role in freshwater connectivity (see Map 3.2). Whilst many River Reserves overlap protected areas they also go beyond the boundaries of protected areas, as shown at point A in Map 3.2 where the River Reserve connects two parts of the *Riberas del Río Tera y afluentes* SCI.

Map 3.2 The role River Reserves play in landscape connectivity



Source: UNEP-WCMC and IUCN, 2020, developed for this study.

The use of globally available datasets cannot prove or disprove whether a site complies with OECM criteria but it can give a quick overview for a network of sites how well they comply with broad principles and their potential value in the wider network. This analysis corresponds to findings above that these sites could potentially be OECMs, but further site-based analysis and discussion is required.

4 Finland

Key messages

- 1) Almost a tenth of Finland is freshwater and therefore the WFD and FD are both important.
- 2) Four water bodies were selected for assessment: a large and smaller lake, a river system and one marine site.
- 3) Assessment was carried out in a web-based workshop, involving representatives from The Ministry of Environment, Finnish Environment Institute, Regional ELY Centres and Metsähallitus Parks and Wildlife Finland.
- 4) Those parts of the large lake outside a Natura 2000 site were considered a potential OECM, supporting the Natura 2000 area. The smaller lake is a potential candidate OECM but there was discussion about whether there is currently sufficient biodiversity data to make a decision. The marine site would benefit if biodiversity values were more effectively integrated into the RBMP, and the potential role of the Marine Strategy Framework Directive is also noted here. The river system could be a potential OECM although it is not clear whether this would bring any particular advantages over current management.

4.1 Overview of the WFD and FD in Finland

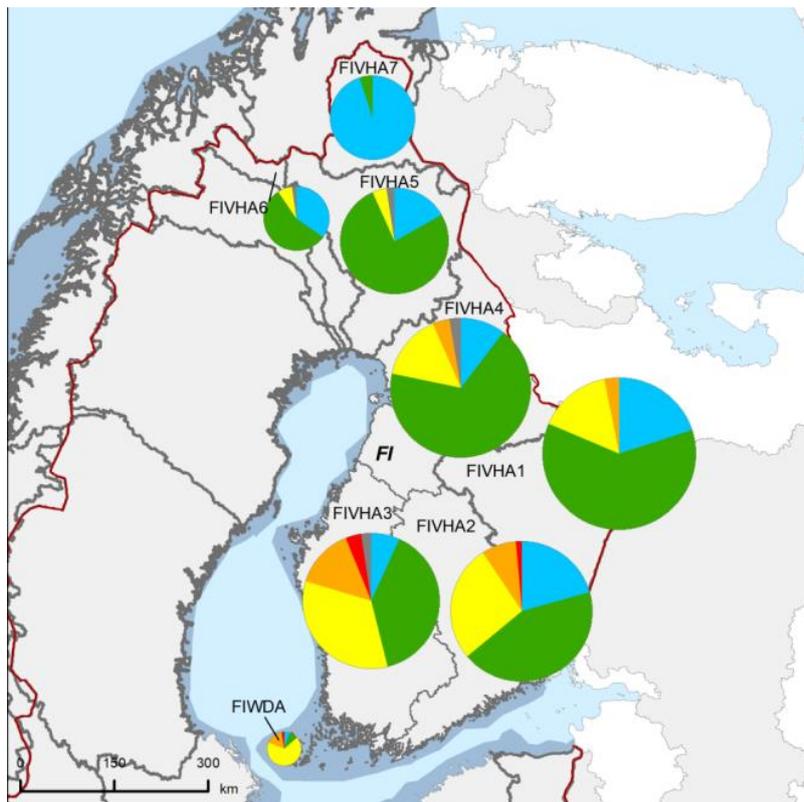
4.1.1 *Water Framework Directive*

Almost a tenth of Finland is water, with 187 888 lakes larger than 500m² and tens of thousands of kilometres of rivers and streams. There are seven RBD for planning and management under the WFD. Finland's various Centres for Economic Development, Transport and Environment (ELY Centres) cooperate on river basin planning and management within each RBD, together with the fisheries administration. ELY Centres run joint working groups, including representatives of national and local authorities, landowners, businesses and others responsible for the use, protection and state of water bodies (EC, 2019g).

Ecological status of water bodies

The overall ecological status/potential in Finland has not improved significantly since the first RBMPs, but there has been a significant improvement in the level of confidence of the classification. The most recent assessment, covering 6 875 lakes, rivers and coastal water bodies, shows that 87 % of the surface area of lakes and 68 % of river length are in good or high condition, with the best in northern and eastern Finland and the most degraded along the coast and in southern Finland (see Figure 4.1). Eutrophication is still the most significant problem. There have been no major changes in status since 2013. The status of the Gulf of Finland has improved, but status of most coastal waters is not good. The risks associated with groundwater have not increased (EC, 2019g).

Figure 4.1 Ecological status or potential of surface water bodies in Finland



Notes: Green=High; Blue=Good; Orange=Moderate; Yellow=Poor; Red=Bad; Grey=Unknown.

Source: EC, 2019g.

Protected areas associated with surface waters are identified and characterized and include those designated under Article 7 of the WFD (Drinking Water *Protected Areas*, Bathing Water, Birds, Habitats and economically significant species). None were identified in relation to the Nitrates Directive or the UWWTD, as a 'whole territory' approach is adopted for implementation of these Directives in Finland. For groundwaters, *protected areas related to Drinking Water and Habitats* have been identified (see Table 4.1).

Table 4.1 Number of *protected areas* of all types in each RBD of Finland

Protected zone type	Number of <i>Protected Areas</i> associated with			
	Rivers	Lakes	Coastal	Ground-water
Abstraction of water intended for human consumption under Article 7	19	43	2	2068
Recreational waters, including areas designated as bathing waters under Directive 76/160/EEC8	14	177	82	-
Protection of species where the maintenance or improvement of water status is an important factor in their protection, including relevant N2000 sites designated under Directive 79/409/EEC (Birds)	83	111	72	-
Protection of habitats or species where the maintenance or improvement of water status is an important factor, including relevant N2000 sites designated under Directive 92/43/EEC (Habitats)87	145	152	120	61
Areas designated for the protection of economically significant aquatic species	10	11		-

Source: EC, 2019g.

4.1.2 Floods Directive

Finland is divided into eight UoMs, corresponding to the eight RBDs under the WFD. It has FRMPs for six of these; in the other two (Åland and Vuoksi) the assessment did not find areas of potential significant flood risk (APSFs). Finland reported 21 APSFRs spread over the 16 FRMPs. The plans follow a similar approach, except that inland FRMPs cover watersheds that include one or several APSFRs, while in coastal areas the FRMPs cover the exact area of the APSFRs (EC, 2019i).

The review of the first FRMPs based on a sample of five (EC, 2019i) found that environment ‘is specified in the definition of objectives in all five FRMPs assessed. The objectives refer to avoiding long-lasting or widespread damage to the environment, for example by directing site selection of industries away from flood risk areas’. It states that ‘Natural water retention measures are included in all FRMPs assessed except the plan for the Hamina and Kotka Coastal area (FIVHA2). The measures include studying the potential of natural retention in the catchment area, promoting wetlands as well as flood meadows or forests in land use planning, and a measure targeted to actors in agriculture and forestry to promote natural water retention capacity.’

FRMPs were assessed against environmental objectives on a five-point scale, and the review concludes: ‘Although none of the five FRMPs assessed had measures that specifically involved nature conservation, all plans assessed include an analysis of the effects on biodiversity or Natura 2000 in their assessment of measures.’

4.2 Assessment of selected case study sites

4.2.1 Methods and activities for the site assessments

Four water bodies delineated for river basin management planning under the WFD and FD were selected for the assessment. This assessment was done in a single Skype meeting as a table-top exercise by national and regional experts. Assessors were representatives of following organisations: Ministry of Environment, Finnish Environment Institute, Regional ELY Centres and Metsähallitus Parks and Wildlife Finland. Table 4.2 shows the sites' main characteristics.

Table 4.2 Main characteristics of the assessed sites

Site's name	Water body type	Directive	Location (region/ ELY Centre)	Area (ha)/ Length (m)
<i>Puruvesi</i>	Large low-humic lake	WFD	South Savo (south-eastern Finland)	41 635 ha
<i>Kangasjärvi</i>	Shallow humus-rich lake	WFD	South Savo (south-eastern Finland)	1 969 ha
<i>Utgrynnän-Molpehällorna</i>	Quark outer archipelago (marine)	WFD/ Marine Strategy Framework	South Ostrobothnia (west coast)	110 301 ha
<i>Ivalojoiki</i>	Large subarctic river	WFD/ FD	Lapland (northern Finland)	115 500 m (388 400 ha catchment)

Information on these sites was collected before and after the meeting. Water bodies were selected using the following criteria to (partly) match the OECM criteria:

- Present ecological status is high or good: the ecological status is an indication of effective conservation outcome from the point of view of the aquatic ecosystem.
- Status assessment is based on extensive biological data: there is enough data to assess biodiversity value and monitoring data to assess against OECM and conservation criteria.
- One large lake, one smaller lake, and one marine site: the initial idea was to look at lakes only, since water bodies in river and coastal environments are more artificially delineated and more often in less than good ecological status. However, there may be future potential in marine areas to develop the OECM concept as the ecological status (hopefully) improves and more biological data becomes available (and existing data is better used).
- One large river system, a small part of which is also a FD site:
 - One FD example was chosen to discuss implications generally. *Ivalo* River is a water body that is in high/good ecological status and not fully included in the Natura 2000 network. Flood impacts are of concern only in the *Ivalo* town area. Measures against flood impacts involve embankments, etc. that may also help maintain water quality/ecological status locally.
 - An entire large river complex was selected. Also, as in the Spanish case study (see Chapter 3), it may be feasible to look at only parts of larger river systems.

4.2.2 Case studies

The following section provides the key outcomes of the four assessments. For a more in depth analysis, please see Annex 1.

The sites were assessed against the OECM criteria, as set out in the *Site-level methodology for identifying 'other effective area-based conservation measures'* (Marnewick et al., forthcoming).

1. Sites geographically delineated, with agreed and demarcated boundaries?

Yes, the chosen water bodies are delineated for WFD RBMP and registered with GIS boundaries. However, they are not demarcated in the sense that statutory protected areas are.

2. Relation with protected area?

Three out of four water bodies are partly overlapping with Natura 2000 site(s). Typically, designated aquatic habitat types and species extend outside of Natura 2000 boundaries. Expert agreement was that in water environments OECM status in the water area surrounding protected areas could have a buffering effect, if conservation/water management measures are supported and implemented. This pertains also to measures in the whole watershed area of the entire water body. Measures include those in forestry and agriculture as well as fishery management.

3. Governance authority?

In Finland, provisions on water resources management are laid down in Act on the Organisation of River Basin Management and the Marine Strategy (1299/2004), Government Decree on Water Resources Management (1040/2006) and Government Decree on Water Resources Management Regions (1303/2004). ELY Centres (part of regional government) are the statutory management authorities responsible for implementation of WFD. Many different authorities and research institutes participate in water resources management. See comments on landowners below.

4. Is the site subject to a management regime which contributes to the in-situ conservation of biodiversity?

Generally, yes. The ELY Centres are the authorities that are also responsible for biodiversity conservation measures inside and outside of Natura 2000 sites. See also general comments below.

5. Is the governance and management 'sustained'?

Yes. The third round of RBMPs are now completed. All four sites areas are under monitoring and will most likely maintain their ecological status in the future.

6. Is there a strong likelihood that the area contains important biodiversity values?

The biodiversity values of *Puruvesi* are especially well known and registered. As a large part of the water body is designated as a Natura 2000 site, the remaining water area is also likely to have the same kind of values. *Kangasjärvi* has no special biodiversity values but is a more or less representative natural lake ecosystem.

For other sites, the biodiversity values have not been so well documented in the RBMP context. For example, the marine underwater inventories (VELMUProgramme) have produced data on habitats and species which may not have been fully used. Good biodiversity data is available for part of the large *Ivalojoiki* River area. All of the upper streams that are part of the

river system have not been included in the RBMPs. The water ecosystems of all the pilot sites are pretty well intact.

7. Is there a strong likelihood that the sustained governance and management of the site is expected to deliver the effective in-situ conservation of biodiversity through legal or other effective means?

Generally, yes. The WFD objectives together with those of the Nature Directives are a strong obligation, even if conservation measures are (partly) voluntary and/or often dependent on resource availability. This is the case especially in southern Finland. Few measures are needed in the outer archipelago or in northern Finland.

8. Is there a strong likelihood that the sustained governance and management of the site is expected to deliver the long-term in-situ conservation of biodiversity through legal or other effective means?

Generally, yes. See above.

9. Existing threats?

Threats to surface water ecological status are listed in water body site-specific datasets. Mostly, impacts on water-dependent biodiversity are the same. Possible impacts are caused by forestry, agriculture and holiday homes in the South *Savo* area and eutrophication, fish farming and wind energy production in the west coast. The *Ivalojoiki* River area is mostly quite wild and known problems are only local.

10. Stakeholders' views?

This assessment was conducted only by managers and other government experts, local stakeholders were not involved. See general comments below.

11. Site proposals

The four selected sites considered are potential OECM candidates, if the criteria are taken 'literally'. See comments below on each site.

Puruvesi:

- It was agreed that this large lake is definitely a potential OECM candidate. Although a large part is already a Natura 2000 site, the entire surrounding area could be an OECM and support the Natura 2000 site. Measures should be planned inclusively, as they are in the RBMP context.
- The high biodiversity values of the lake are well known and monitored.
- The lake is involved in the Freshabit LIFE Integrated Programme project and management/restoration measures are thus presently well-resourced and implemented.

Kangasvesi:

- This site most likely does not have potential to become an OECM as significant biodiversity values have not been identified or documented.

Utgrynnan-Molpehällorna:

- This site has potential to become a candidate OECM although known biodiversity values could perhaps be better integrated into RBMP.
- Harmful impacts of activities in the marine environment are also addressed in larger scale in measures planned in the context of the Marine Strategy Framework Directive.

Ivalojoeki:

- It was agreed that the entire large river system could be a potential OECM candidate. However, there was discussion on the 'added value' of the OECM status when additional conservation measures are not seen as critical. FD measures were not seen very relevant for conservation of biodiversity in the OECM context.

Further general comments

- **Natura 2000 sites vs. OECM sites:** when initially designating Natura 2000 network sites in 1998, Finland extended the existing national protected area network (which at the time included mostly terrestrial nature reserves and large wilderness reserves) especially in inland and coastal waters. However, as much of these Natura 2000 water areas do not have the same statutory status as nature reserves, conservation measures are not as compulsory and use restrictions are less strict. Water legislation and land use and building legislation as well as fishing legislation has an important role in directing the measures that are needed to implement conservation objectives.

Also, RBMPs have an important role in implementing conservation objectives of Natura 2000 sites. A number of 450 Natura 2000 sites have been identified as having habitats and/or species that are depended on surface and/or ground waters. These special sites are linked to water bodies in RBMPs. There are national guidelines for planners on how to take these into account.

Although Natura 2000 sites are considered as protected areas, within many water bodies the area and biodiversity values outside of the designations may be very similar. Measures needed to maintain/enhance conservation status and the ecological status of the water body are mostly coherent. Thus, it might make sense that these could be considered potential OECMs.

In connection to the *Puruvesi* case, the OECM area is easily separated from the water body/Natura 2000 site with GIS tools. The same is possible for a number of large lakes with a similar situation.

- **Floods Directive sites:** Finland just has 22 sites delineated under the FD. Almost half are rivers in the low-lying western part of the country with floods effects concerning agricultural landscapes. Similar measures and impacts as mentioned for the *Ivalo* River may be relevant also for biodiversity values of these rivers, especially as climate warming may bring more rains and nutrient flows into the rivers.

In the opinion of the assessors, the measures that are planned in connection to the directives do not have significant relevance in connection to OECM objectives and criteria.

- **Spatial land use planning of terrestrial and marine areas:** in Finland there is a three-level land use planning system, with strategic regional land use plans at the top. These plans have had and will potentially have a growing role in enhancing the green and blue infrastructure. At the moment, the Land Use and Building Act is being updated. Previously the focus has been very much terrestrial. Hopefully in the future, large scale planning will consider possibilities also within the water environment.
- **Habitats Directive App. IV species:** there was discussion on whether water bodies that are living environments of certain key species of EU interest (some also nationally red listed)

should be considered as potential OECMs, regardless of the criteria the study followed as a starting point. An example could be the freshwater pearl mussel (*Margaritifera margaritifera*). However, this point needs further consideration.

4.2.3 Stakeholder inputs

River basin management planning procedures have been designed to promote transparency, participation and dialogue. Planning processes are led by the ELY Centres, and organised through joint working groups whose members also include invited representatives of the main national and local authorities, organisations, landowners and business interests responsible for the use, protection and state of water bodies.

In Finland, water ownership is rather complex in many water areas. Both within large lake systems and on (especially) the (western) coast, state-owned and privately-owned waters often form a mosaic. In the context of OECM assessments, it is not possible to engage all landowners, but it would be possible to work with bodies of joint owners of water areas and fishing rights, and with fisheries regions.

Fisheries regions are public corporations whose purpose is to develop fishery in their region and to promote the collaboration of their members for the organisation of the sustainable management of fish resources. Their duty is to plan for sustainable management, enforce the approved plan and monitor its impact. In the south *Savo* ELY Centre region, there is a pilot project presently going on to enhance compatibility of fishery plans and RBMPs.

The northernmost part of Finland is part of the *Saami* homeland region and there is a statutory obligation for participatory planning of lands and waters (*Ivalojoiki* River is located within the *Saami* homeland). Even if potential OECM status does not necessarily bring any new management obligations or restrictions to use of waters, the *Saami* Parliament should be involved.

4.3 Spatial analysis on high/good ecological status water bodies (WFD)

A high-level spatial analysis focussing on water bodies (lakes and rivers) that present high or good ecological status was undertaken to explore an approach that could be a starting point for further identification of potential OECM.

Instead of focussing on a few water bodies hand-picked by in country focal points a broad nation-wide screening took place using all the water bodies listed under the WFD. Using the ecological appraisal data linked to each water body enabled us to filter out those water bodies considered to be in high/good ecological condition. Those water bodies in high/good ecological condition were then further filtered based upon whether they overlapped with urban areas. Those that did not were then lastly clipped to KBAs. The rationale of this approach is to try and identify the best quality water bodies, in the most natural state which are in the most significant areas for biodiversity. As stated throughout this report, this by no means equates to a ensuring these water bodies are OECMs, it merely attempts to utilise publicly available data to form a repeatable, scalable and effective screening tool as first step to identify potential OECM sites at the national scale.

The results suggest that of the more than 4 000 lakes in Finland many (80 %) have high/good ecological status, with a final subset of 801 lakes that could represent a good place to start in terms of further

OECM appraisal. In addition, Finland has almost 2 000 rivers of which 66 % have high/good ecological status, and there were 191 rivers that, using the same methodology, were equally considered of high interest for further appraisal. What is notable about the Finnish data is that high proportions of their freshwater bodies are in good or high ecological condition, resulting in many sites being potential sites of interest.

The efficacy of this approach entirely depends on the quality of the data one uses. What may work well in one country does not necessarily translate to efficacy in another. For this reason, creating a uniform regional or even global approach using datasets with broad geographical scope has inherent limitations. Furthermore, one must consider conflicting messages from the data one uses. One can assume that water bodies in urban areas are less likely to be OECMs but WFD data for Finland states that many of these waterbodies are in fact in high or good ecological condition, testing this assumption. Favouring the use of nationally available and validated data may therefore provide a more appropriate mechanism with which to filter potential OECM sites, even if this creates a diversity of approaches and methodologies regionally. Nonetheless, screening is still a useful activity to undertake for OECMs and at the very least provides the catalyst for asking rather pointed questions on how to identify OECMs within the country in question. Methodologies for screening are on-going and will no doubt be refined in time however the results shown here highlight that by doing so can create a useful starting point for in-country dialogue. For Finland, some nationally-relevant tweaks may be required to the methodology to create a list of sites that can more feasibly be more thoroughly assessed against OECM criteria.

5 Beyond the Water Framework Directive and the Floods Directive – Bulgaria

Key messages

- 1) SGHs cover a significant (10.52 %) proportion of Bulgaria's land. As such, they would represent a notable addition to Bulgaria's protected area and OECM network.
- 2) Questions remain on the extent to which SGH as a network and also individually comply with the OECM criteria. In particular the overlap or close proximity to built-up urban areas in conjunction with their inherent extractive management objectives means that a detailed site-by-site analysis would be essential.
- 3) Reviewing potential OECM sites that are already listed as protected areas brings a novel perspective and raises several worthy questions. For example, re-listing as an OECM requires considerable additional work at a site-by-site scale, and raises questions about what is the value to governance authorities of doing this?

As demonstrated in Spain and Finland, there are potentially many existing sites that are quietly resulting in the effective *in-situ* conservation of nature despite not being formally recognised as contributing to a nation's conservation network. Recognising that the OECM definition is very recent and prior to this some EU Member States would likely have wanted to either recognise or protect these sites in some form, it is also possible that some OECM sites have been mis-reported as protected areas to the WDPA. In this case study we look at one potential example of this in Bulgaria.

There are currently 28 SGH in Bulgaria. These sites are designated under the Bulgarian Hunting and Game Protection Act (2018) primarily for the sustainable management of game, timber and other natural resources (Game Protection Act 2017). There are seven key responsibilities of SGH, including the preservation and enlargement of the game species diversity and reproduction, dissemination and protection of the game. The sites are managed by the Ministry of Agriculture, Food and Forestry, through the Executive Forest Agency. Each SGH has a management plan which focusses on game and forest management but which also touches upon broader environmental management such as fire protection measures, existing biodiversity and other environmental factors. Some of the more common management practices include the prescription of hunting periods per species, the extermination of stray predators and the prohibition of poison. Environmental considerations in the management are reinforced in the SGH sites that overlap the Natura 2000 network or other forms of protected area. Whilst some quantitative analysis is created on an annual basis for a site's wood use plan, like the other potential OECM sites in this report, there is seemingly little information on biodiversity outcomes for the sites.

A high-level desk-based analysis was undertaken to assess the contribution SGH may play in biodiversity conservation efforts nationally and to what extent using globally available datasets can help elucidate whether these sites comply with OECM criteria.

The SGH are large sites, averaging 416 km² but with some sites reaching close to 1 500 km². In total, SGH cover 11 662 km², though a large proportion of this is covered by protected areas so the area covered by only SGH is approximately 6 500 km² (see Table 5.1).

Table 5.1 The role of SGH and protected areas in Bulgaria

	Number	Area (km ²)	Area (%)
Protected areas and SGH	1 427	45 503	41.04
Protected areas	1 399	38 596	35.14
SGH	28	11 662	10.52
SGH outside protected areas	26	6 547	5.91

Notes: Areas do not include sites with a status of ‘Proposed’, ‘Not Reported’ or sites with a designation of UNESCO Man and Biosphere Reserve.

Source: UNEP-WCMC and IUCN, 2020, developed for this study.

Whilst their large individual and collective spatial footprint speaks to the potential role they could play in national biodiversity conservation it is well understood that it is encouraged for protected areas and OECMs to be in areas of high biodiversity importance. Despite their large area SGH only had 45 km² of overlapping area with KBA. In other words, SGH contribute less than 0.5 % of the combined protected areas and SGH-KBA overlap (see Table 5.2).

Table 5.2 The contribution of SGH to the coverage of KBAs in Bulgaria

	Area (km ²)	Area (%)
KBA area	25 355	100
Protected areas and SGH - KBA overlap	25 105	99.01
SGH novel area - KBA overlap	45.83	0.18

Source: UNEP-WCMC and IUCN, 2020, developed for this study.

It may be unsurprising that SGH overlap little with KBAs, the SGH are large human-modified landscapes primarily aimed at the exploitation of specific taxa. Whilst OECM criteria clearly state the need to support a wide spectrum of biodiversity and not only a single species or taxon it is possible that, through secondary or ancillary means, the SGH do provide effective, *in-situ* conservation. OECMs also require the effective *in-situ* conservation of biodiversity and yet half of the SGH overlap to some extent with urban areas. For those sites that do, on average 28 % of the site overlapped with urban areas and for three sites this even included overlapping with the ‘urban core’ (see Figure 5.1). The OECM guidance does note that urban or municipal parks could be OECMs if they are large enough, sufficiently natural and managed effectively to conserve biodiversity, but this is predicated on the parks being in a mainly natural state and will be the exception rather than the rule. Importantly, the question is not whether an SGH is or is not an OECM, but is instead whether an SGH contains one or more OECM. Conversely, though not likely in this case, an OECM might be larger than the local legal designation (in this case the SGH).

Map 5.1 The intersection of SGH with urban areas in Bulgaria



Source: UNEP-WCMC and IUCN, 2020, developed for this study.

By indicating that several of these sites are in highly human-modified landscapes questions whether some of these sites fully comply with OECM criteria. Furthermore, it shows that treating a 'classification' or 'recognition' of OECMs and assessing them together based on legislative criteria or indeed via globally available datasets are both unsatisfactory mechanisms with which to determine whether the sites comply with OECM criteria. As stated above for Spain and Finland, candidate OECM sites must be assessed on a site-by-site basis.

This analysis neither discounts these sites as being candidate OECMs or suggests they may be – more research is required most notably at the site level's governance, management and the outcomes of that management. For potential OECM sites already listed as protected areas it is interesting to consider how the governance authority would benefit from such a task. To consider reclassifying SGH, or parts of them, as OECMs would initiate a national discourse on the management of SGH and whether if some elements were changed it could result in more effective conservation outcomes. This would be the value to governance authorities, but also civil society and Bulgaria's natural environment.

'Converting' sites (or parts of them) already listed as protected areas to OECMs is a controversial issue that possibly needs to be resolved at a global level within CBD strategy, but discussions within the EU could be useful in this process - most legally designated protected areas have specific legislative conservation requirements that could be weakened by a 'conversion' to an OECM. General advice at the moment would be not to convert protected areas to OECMs.

6 Roadmap

Key messages

1) There is a pressing need to raise awareness of the opportunities and limitations of OECMs as conservation tools in the EU, starting with EU Member State and European Commission officials working on biodiversity. This can be addressed through a series of dedicated meetings affiliated to the implementation of the *EU Biodiversity Strategy* and EU Nature Directives, organised under the auspices of the Coordination Group for Biodiversity and Nature, chaired jointly by DG ENV.D.2 and D.3, with participation by the European Commission's DG for Agriculture and Rural Development and DG for Maritime Affairs and Fisheries, and involves EU Member States, NGOs, and the EEA.

2) EU-wide activities, that can be supported by the European Commission, include: a comprehensive analysis of other directives, publication of a related resource on opportunities and limitations of recognising land and water managed under various EU directives as OECMs, adapt and translate into national languages the methodologies and guidelines identifying, recognising and reporting OECMs, and engage with any systemic issues.

3) National-level activities should focus on: identifying, providing legal recognition for, monitoring, supporting, and reporting OECMs.

6.1 Regional expert meeting

To investigate further the options for OECMs in Europe, an invited workshop was organised and run remotely. This began with presentations about OECMs, the EU policy context and case studies from Finland and Spain. The meeting then moved to a facilitated discussion looking at opportunities, challenges and next steps. Around 40 people took part, from a dozen countries, and the conversation brought up a number of additional points of discussion, which are summarised briefly below:

- There is potential confusion between some of the less strictly protected Natura 2000 sites, which are listed as protected areas, and OECMs; the extent to which this is an issue will depend to some extent on policies towards Natura 2000 in individual countries.
- OECMs should not only focus on preventing actions likely to damage biodiversity but also on promoting beneficial management approaches, particularly some traditional uses and community conservation, that help maintain or support biodiversity.
- Integrating traditional land protection systems – commons, alpine management, forests, etc. – into OECMs will be important in places where these are not already recognised as protected areas. But it is still unclear as to the relationship between these different systems, and recognition of OECMs in traditionally managed areas will often require detailed negotiation with stakeholders and rights-holders.
- The appropriateness of recognising particular fisheries measures in Europe as OECMs or potential OECMs is something that will require particular attention (and is likely to be controversial).

- Any development of OECMs needs to be linked closely with existing and planned policies on restoration, including the *2030 EU Nature Restoration Plan*.
- Key elements in development of OECMs include agreeing an ecological standard that all OECMs should meet and finding ways of measuring the effectiveness of a particular site in attaining that standard. In many areas managed by communities, this will either involve bringing in outside expertise to assist with monitoring or going through a capacity building programme to help local stakeholders carry out their own monitoring. Local monitoring helps to build community awareness, and can provide a feasible, long-term monitoring system.
- Both protected areas and OECMs are predicated on effectiveness. But the OECM definition is also closely linked to effectiveness, which is not true to quite the same extent for protected areas: an ineffective protected area is still a protected area. It is still unclear what happens if an OECM is degraded after being declared – for instance if an OECM under the WFD loses its favourable status. Does it also lose its OECM classification at that stage and if so, what are the implications for the presumption of permanence within the OECM definition?
- The name ‘other’ effective area-based conservation measures implies a secondary role for sites outside protected areas, whereas research by IPBES and others suggests that most biodiversity in Europe lives outside protected areas. The name should therefore be modified as soon as possible, possibly just to ‘effective area-based conservation’, with distinctions made between different approaches.
- There is a general presumption against ‘converting’ protected areas to OECMs although this issue is likely to be raised as OECMs develop.

6.2 Suggested activities

This section sets out a series of non-exhaustive activities intended to catalyse work at various levels, towards identifying, legally recognising, supporting and reporting OECMs as part of the *EU Biodiversity Strategy*. This should also be read in the context of the on-going development of the post-2020 Global Biodiversity Framework, whose current Target 2 states the following: ‘By 2030, protect and conserve through well connected and effective system of protected areas and **other effective area-based conservation measures** at least 30 per cent of the planet with the focus on areas particularly important for biodiversity’ (CBD, 2020, emphasis added).

The section first sets out the activities by scale, first EU institutional and EU-wide activities, then national-level activities.

6.2.1 EU institutional activities

EU institutions: OECMs are still largely an unknown and poorly understood conservation designation in EU policy circles. Until OECMs were specifically referred to in the *EU Biodiversity Strategy for 2030* adopted in May⁽³⁾, they were not regarded in EU policy. The EU’s executive institutions, the European Commission and the EEA, were not involved in the IUCN WCPA Task Force on OECMs. Therefore

⁽³⁾ The EU Strategy for 2030 includes a specific action for the European Commission, EU Member States and the EEA to (by 2020) adopt ‘Criteria and guidance for identifying and designating additional protected areas and ecological corridors, on appropriate management planning, and on how other effective area-based conservation measures and urban greening can contribute to the EU 2030 nature protection targets’

awareness-raising is priority. The only exposure to OECMs has been by a selected number of EU delegates within the UN CBD process. Nevertheless, OECMs are referenced in the *EU Biodiversity Strategy for 2030*, which calls on the EEA to “indicate how other effective area-based conservation measures and greening of cities could contribute to the targets” (EC, 2020b). Although it is too early to ascertain to which extent, this suggests that OECMs can complement protected areas towards the 2030 targets at the national, EU and international levels.

The Biodiversity Unit of the European Commission’s Directorate-General for Environment (DG ENV.D.2) is responsible for EU-CBD coordination as well as the EU’s strategic framework. However, the Nature Protection Unit (DG ENV.D.3) is coordinating early work on OECM guidance⁽⁴⁾. Regular meetings on implementation of the *EU Biodiversity Strategy* and EU Nature Directives take place between the European Commission, EU Member States, NGOs, and the EEA through the Coordination Group for Biodiversity and Nature (CGBN).⁽⁵⁾ This meeting is chaired jointly by DG ENV.D.2 and D.3, and has a standing participation by the European Commission’s DG for Agriculture and Rural Development and DG for Maritime Affairs and Fisheries. This scoping study therefore proposes the following actions:

- January 2021: set up internal workshop with key experts in DG ENV.D.2 and D.3 and EEA to discuss opportunities and threats in OECM application in EU policy context.
- February/March 2021: provide a presentation in the ad hoc NADEG meeting which is foreseen to discuss criteria and guidance on OECMs.
- April/May 2021: provide a presentation to the CGBN meeting reflecting on discussions in NADEG meeting.
- Summer/Fall 2021: provide targeted technical support to European Commission and EU Member States if required in operationalizing criteria and guidance (see below).
- Early-2022: based on agreed criteria between the European Commission and EU Member States, organise:
 - A public EU event, for example in cooperation with the European Parliament and/or Committee of the Regions, to raise broader awareness and discuss avenues for practical application with range of stakeholders; and
 - Regional/national workshops with key practitioners to discuss experiences so far and provide input for EU-level assessment of further support required by EC and EEA.

6.2.2 EU-wide activities that could be supported by the European Commission

The current analysis has shown that there is important potential within the EU for using some existing directives to identify potential OECMs. The following identifies some potential next steps in further developing this process.

⁽⁴⁾ On 16/10, the Commission shared with EU Member States and stakeholders in the EU Nature Directives Expert Group (NADEG, a standing technical working group of the CGBN) a draft technical note on the criteria and guidance for identifying and designating additional protected areas, a definition of strict protection, as well as for appropriate management planning. The note also indicates how OECMs could contribute to the targets [In very brief terms]. The NADEG meeting had a preliminary discussion on the note in its meeting of 22/10. The European Commission expects feedback by mid-December and an ad hoc meeting is planned for January or February 2021. A final agreement on criteria and guidance are expected by the end of 2021.

⁽⁵⁾ Register of EC expert groups page of the CGBN:

<https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=2210&NewSearch=1&NewSearch=1>

Comprehensive analysis of other Directives: extend the present analysis of the WFD and FD to the full spectrum of relevant directives, including directives such as Birds, Habitats, Integrated Pollution Prevention and Control, Landfill, and Marine. This would generate an ‘EU Directive-OECM’ matrix setting out the kinds of areas under each directive that may qualify as an OECM with select examples from diverse countries (see suggested format in Table 6.1 below).

Table 6.1 Concept for the EU directives-OECM matrix

Name of directive	Options for OECMs	National level examples

Source: prepared for this study.

EU directives-OECM publication: the above findings can be developed into a publication that sets out for users the opportunities and limitations of recognising land and water managed under various EU directives as OECMs, thus significantly speeding up the process of identification and potential designation within Europe.

Develop OECM guidance: adapt and translate into national languages the IUCN guidelines for *Recognising and Reporting OECMs* (IUCN-WCPA, 2019), the IUCN *Site-level Methodology for Identifying OECMs* (Marnewick et al., forthcoming) and UNEP-WCMC’s guidance on reporting OECMs to the World Database on Other Effective Area-based Conservation Measures, WD-OECM (UNEP-WCMC, 2019), possibly in summary form. This advice should cover all relevant aspects of OECMs, including how to identify, legally recognise, support and report them, as well as provide advice on monitoring compliance, a framework and minimum requirements. This could be combined with the institutional activities set out above.

Investigation of select issues: as the above and national-level work (below) proceeds, a number of conceptual and practical issues will arise. For example, there may be sites that meet the criteria when assessed, but for a variety of reasons the conditions within the site may fall below the standards over time. Guidance should be developed to address these issues as they arise; this will have policy implications beyond the EU.

6.2.3 National-level activities

Identify OECMs: drawing on the work above, support country-led processes to test the guidance and identify OECMs and sites that have the potential to be recognised as OECMs with minor management changes. We advise that these processes should be carried out in a diversity of states, including newer EU Members States and transition states, and be managed collaboratively between state and non-state actors. These activities could be targeted to directives (as per this report) or could engage with sectors or stakeholder groups. On the latter, there is significant potential to work with community groups and private landowners. IUCN advises that sites that meet the definition of a privately protected area should be recognised and reported as such. But areas that are privately owned, which do not meet the definition of a protected area, can be reported as OECMs if they meet the criteria.

Legal recognition of areas that meet the OECM criteria: review the legal arrangements for the areas that are being identified as meeting the OECM criteria to assess whether they have sufficient and/or appropriate legal recognition. Where they are not well enough recognised in law, set out recommendations for their improvement. This does not necessarily mean ‘legal recognition as OECMs’, but instead refers to the legal status of the areas and related institutions, including referring to tenure, governance or management rights.

Monitor OECMs: provide clear guidance on how OECMs managed under a variety of directives may be monitored over time, covering key indicators, thresholds and responsibility for monitoring and reporting changes in status.

Support OECMs: a similar exercise should be undertaken to assess whether areas are sufficiently and appropriately supported – through financial, capacity-development and other means – to address internal challenges and external pressures and threats.

Report OECMs: support EU Member States to develop modalities for reporting in coordinated ways to assess progress on CBD and *EU Biodiversity Strategy for 2030* commitments, ideally through existing EEA reporting framework (the Common Database on Designated Areas, CDDA) and to the WD-OECM.

7 Conclusions

OECMs, as a new area-based conservation designation, can contribute to achieving new biodiversity targets, both at the global level (they are very likely to be included in any post-2020 CBD targets) and at the regional level (OECMs are specifically recognized in the EU Biodiversity Strategy for 2030 as a way to achieve EU target for 30 % of land and water to be in protected by 2030).

After a preliminary analysis, this study found that there is potential in certain EU directives to set aside land and water that meet the criteria of potential OECMs as agreed by Signatory States of the CBD. More specifically, the analysis of the EU's WFD and FD revealed that OECMs have potential for recognition under these two directives, although in the case of the FD this is not true for all EU Member States.

The WFD provides a strong framework for OECMs, through primary conservation benefits of high-biodiversity sites outside protected areas, secondary conservation through efforts to maintain good ecological status, and ancillary conservation in areas managed for other purposes. However, using the WFD as a starting point for OECM recognition may be challenging for several reasons (poor ecological status of 60 % of surface waters, the number of existing protected areas, lack of good ecological data and issues of multiple ownership and governance).

On the other hand, the FD does not ensure long-term conservation but, if located in or on a water body designated under the WFD, deterioration in the ecological status of the restored water body would theoretically be illegal, which could create the conditions for recognition of an OECM. While there are plenty of positive conservation measures taken in APSFR, since the FD does not legally require taking these measures nor monitor their conservation outcomes, the effectiveness of the measures cannot be verified nor governed. This does not mean that no EU Member States have set such requirements for nature-based flood risk reduction measures. While this study did not find evidence of areas under the FD being potential OECMs in Spain (see below) it would be worth to evaluate systematically the presence and potential of OECMs in APSFRs and identify EU Member States with more progressive approaches that could be scaled-up in other EU Member States.

The case studies conducted in the two selected EU Member States showed the following results:

- Spain: the studied three River Reserve sites, which fall under the WFD, met the criteria for potential OECMs, whilst the APSFR studied (under the FD) was not closely aligned with the OECM criteria. It is evident that recognising OECMs in this country offers a variety of opportunities, but these come with important challenges, notably lack of knowledge about OECMs among decision makers and practitioners, uncertainty about the OECM recognition process, and concerns about the possible unintended socio-economic consequences of recognising OECMs.
- Finland: for this study the selection approach was different in the sense that study sites were selected so that they were water bodies with good ecological status and with, if possible, extensive biological data available to assess this status. Three of them seem to be potential OECMs, whilst one most likely does not have potential to become an OECM as significant biodiversity values have not been identified or documented. All four sites fall under the WFD, with one site falling as well under the Marine Strategy Framework, and another site partially falling under the FD. Some interesting questions/comments arose as a result of this study, such as the potential role of the Marine Strategy Framework Directive in coastal sites or not being clear whether the OECM status would bring any particular advantages over current management in some cases. The conclusion in one of the sites was that not all biodiversity

values were well documented, with doubts raised about whether there was enough information to identify this site as a potential OECM.

The degree to which biodiversity conservation considerations is embedded within the implementation of the directives varies between EU Member States. As this possibly influences the likelihood of areas being potential OECMs, matching directives measures as potential OECMs needs to be done on a case-by-case basis and it is very unlikely that the application of any particular EU directive will invariably equate with an OECM. A standardised three-part methodology to identify actual and candidate OECMs is developing.

The OECM definition is very recent and it is possible that potential OECMs have been reported as protected areas up to now. A third country study was conducted in Bulgaria in the context of reviewing potential OECM sites that are already listed as protected areas. This study revealed that more detailed research (and probably a case-by-case study) is necessary, mainly at the governance, management and the outcomes of that management level, to determine to which extent the subject national protected area designation (in this case, SGHs) actually complies with the OECM criteria as a network and also individually. The issue of 'converting' protected areas to OECMs is controversial and probably needs to be resolved at a global level within CBD strategy, but discussions within the EU could be useful in this process. Although the two designations should give equivalent protection to biodiversity, this is not yet proven in practice and it is too early to claim this with any confidence. Most legally designated protected areas have specific legislative conservation requirements that could be weakened by a 'conversion' to an OECM. General advice at the moment would be not to convert protected areas to OECMs.

At the EU institutional level, it will be necessary to raise awareness, starting with EU Member State and European Commission officials working on biodiversity. To further develop the process of identifying potential OECMs under certain directives, potential next steps (which can be supported by the European Commission) include: a comprehensive analysis of other directives, publication of a related resource on opportunities and limitations of recognising land and water managed under various EU directives as OECMs, adapt and translate into national languages the methodologies and guidelines identifying, recognising and reporting OECMs, and engage with any systemic issues. National-level activities will be important, and they should ideally focus on identifying, providing legal recognition for, monitoring, supporting, and reporting OECMs.

This study's findings are preliminary and as such further research is needed to assess the links between OECMs and other directives, and on the opportunities and limitations of OECMs as conservation tools, especially at country-level, particularly new Member States and accession countries.

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Annex 1: case study report for Spain and case study report for Finland

See separate file