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| Table S1. Sources of spatial information for coastal habitat distribution and methodological approach. | | | |
|  | **Habitat ID** | **Habitat** | **Source and methodological approach** |
| Transitional Waters | hab1 | Estuarine saltmarshes | Areal cover mapped based on field observations from 2012 (GPS measurements collected on foot). The data is a part of the Mondego estuary monitoring program, in practice since 1986 (Neto et al., 2013). The most abundant species in the low saltmarshes of the Mondego estuary are Scirpus maritimus and Spartina maritima (Couto et al., 2014). |
| hab2 | Aquaculture tanks | Spatial information obtained from previous studies (Teixeira et al., 2018). Aquaculture tanks, Water ponds and Saltworks, together, constitute the Salgado of the Figueira da Foz system, a traditional solar salt extraction area, whose saltworks are intermixed, nowadays, with extensive (Water ponds) and semi-extensive (Aquaculture tanks) aquaculture farms. |
| hab3 | Water ponds |
| hab4 | Saltworks |
| hab5 | Estuarine littoral granule and very coarse to coarse sands | Spatial information obtained from previous studies (Cunha and Dinis 2002; inedit 1/10,000 cartography of the subsedimentary enviroments of the Mondego estuary and adjacent sedimentary systems). The Mondego estuary is a tidal and fluvial dominated system, controlled by periodic phenomena at different time and space scales. The fluvial sediment transport is expressed by a grain-size decrease towards the mouth (gravel to fine sand), but an inverse variation results from the tidal flood currents. Fine sediments, like mud and muddy very fine sand, accumulate on areas of reduced hydrodynamics of the channel margins and in the tidal flats. |
| hab6 | Estuarine littoral sandy mud and very fine to medium sands |
| hab7 | Estuarine littoral mud |
| hab8 | Estuarine seagrass bed | Areal cover of meadows mapped based on field observations (GPS measurements collected on foot) (Neto et al., 2013) sampled in September 2016. The data is a part of the Mondego estuary monitoring program, in practice since 1986 (Neto et al., 2013). Seagrasses in the Mondego estuary are occupied by the species Zostera noltii. Its cover is highly variable because it responds to hydromorphology, light intensity, toxic substances and changes in nutrient concentrations (Benedetti-Cecchi et al., 2001; Soltan et al., 2001; Panayotidis et al., 2004; Melville and Pulkownik, 2006; Yuksek et al., 2006; Arévalo et al., 2007; Scanlan et al., 2007; Krause-Jensen et al., 2008). |
| hab9 | Estuarine sublittoral granule and very coarse to coarse sands | Spatial information obtained from previous studies (e.g., Cunha and Dinis, 2002). The Mondego estuary is a tidal and fluvial dominated system, controlled by periodic phenomena at different time and space scales. The fluvial sediment transport is expressed by a grain-size decrease towards the mouth (gravel to fine sand), but an inverse variation results from the tidal flood currents. Fine sediments, like mud and muddy very fine sand, accumulate on areas of reduced hydrodynamics of the channel margins and in the tidal flats. |
| hab10 | Estuarine sublittoral sandy mud and very fine to medium sands |
| hab11 | Estuarine sublittoral mud |
| hab12 | Estuarine pelagic waters of the South Mondego Branch and Pranto River | Obtained from the Mondego estuary limits downloaded from the National System of Environmental Information , specifically the file named «Transitional surface water bodies of mainland Portugal».For the purpose of this study, the habitat categories were characterized based on the water column characteristics during winter, when the fluvial discharge is high (Cunha and Dinis, 2002; Kenov et al., 2012). As such, this study assumes that the estuarine water column from the South arm, the Armazéns channel and the Pranto River is completely mixed and shows reduced salinity due to freshwater inflow and tidal dynamics (Cunha and Dinis, 2002); whereas the estuarine water column from the North arm is stratified (Cunha and Dinis, 2002) with short residence time (1 day in winter) (Kenov et al., 2012). |
| hab13 | Estuarine pelagic waters of the North Branch of the Mondego River and upstream system |
| Coastal Waters | hab14 | Sandy beaches | Spatial information obtained from Carta de Ocupação do Solo 2007 (IGP., 2010), corresponding to class 3.3.1.02 - Coastal beaches and dunes, which is equivalent to class 3.3.1 Beaches, dunes, sands from CORINE Land Cover Maps . Includes pre-dune vegetation. |
| hab15 | Coastal rocky middle and supralitoral areas | Seabed habitat based on the Ecosystem types of Europe raster dataset (version 2.1.)), converted to vector data format. This dataset combines the Copernicus land service portfolio with the non-spatial EUNIS habitat classification for a better biological characterization of ecosystems across Europe. |
| hab16 | Coastal supralittoral sedimentary areas |
| hab17 | Infra and circalittoral rocky areas |
| hab18 | Infralittoral or circalittoral sedimentary areas | Seabed habitats based on the EMODnet broad-scale seabed habitat map for Europe (AKA EUSeaMap 2016). The ‘AllcombD” field was used for the identification of EUSeamap 2016 habitat types. |
| hab18\_1 | Infralittoral fine sand or infralittoral muddy sand areas |
| hab18\_2 | Circalittoral fine sand or muddy sand areas |
| hab19 | Marine pelagic (0-200) waters | Pelagic habitats are based on the EMODnet bathymetric data. In the study area, only shallow pelagic habitats (0 to 200m) are present. |

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| Table S2. Systematic review of scientific literature focused on the Atlantic coastal region adjacent to the Mondego River | | | | | | | | | | | | | | | | | | | | | | | |
| References | Biophysical structures | | | | | | | | | | | | | | | Habitats | | | | | | Other | Ecosystem Services |
| Bivalves | Fish | Zooplankton | Phytoplankton | Bacterioplankton | Macroinvertebrates | Birds | Macroalgae | Microalgae | Microfauna | Microbiological | Benthic Foraminiferal | Meiofauna | Macrophytes /Seagrasses | Macrophytes /Saltmarshes | Aquaculture | Saltworks | Coastal Surface Waters | Rocky Shore | Sandy shore | Surface Water |
| Bessa et al., 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |  |
| Campos and Soares 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Fernandez-Fernandez et al., 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |  |
| Marques et al., 2018 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |
| Mesquita et al., 2018 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Neves et al., 2018 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |  |
| Primo et al., 2018 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |
| Rodrigues et al., 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |  |
| Teixeira et al., 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |  |  |  | x |  | x |
| Vieira et al., 2018 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bessa et al., 2017 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |
| Cruz et al., 2017 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gaspar et al., 2017a |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |
| Gaspar et al., 2017b |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |
| Gonçalves et al., 2017 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Veríssimo et al., 2017 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vinagre et al., 2017 | x |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |
| Bento et al., 2016 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |
| Castro et al., 2016 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |
| Cruzeiro et al., 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |  |
| D'Ambrosio et al., 2016 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |
| Dessandier et al., 2016 |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |
| Filimionova et al., 2016 |  |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |
| Gonçalves et al., 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ojeda et al., 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Rada et al., 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Soares et al., 2016 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| van der Linden et al., 2016 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vinagre et al., 2016 | x |  |  |  |  | x |  | x |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |
| Alves et al., 2015 |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |
| Araújo et al., 2015 |  |  |  |  |  | x |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baptista et al., 2015 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Botelho et al., 2015 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brito et al., 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |  |
| Gonçalves et al., 2015 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Primo et al., 2105 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rodrigues and Pardal 2015 |  |  |  | x |  |  |  | x |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Rodrigues et al., 2015 |  |  |  | x |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rossi et al., 2015 | x |  |  |  |  | x |  |  | x |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Verdelhos et al., 2015 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Verdelhos et al., 2015 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vinagre et al., 2015 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Zell et al., 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Alves et al., 2014 |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |
| Bessa et al., 2014 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |
| Bordalo et al., 2014 |  |  |  |  |  | x |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Carrola et al., 2014 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Couto et al., 2014 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |
| Friis et al., 2014 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Guerra et al., 2014 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kristensen et al., 2014 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Leite et al., 2014 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marques et al., 2014 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martins et al., 2014b |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mota and Pinto 2014 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |
| Niquil et al., 2014 |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Pinto et al., 2014a |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |
| Pinto et al., 2014b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |
| Rocha et al., 2014 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Teixeira et al., 2014 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Veiga et al., 2014 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Verdelhos et al., 2014 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alves et al., 2013 |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |
| Baptista et al., 2013a |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baptista et al., 2013b |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Calves et al., 2013 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Castro and Santos 2013 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ceia et al., 2013 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Costa et al., 2013a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Costa et al., 2013b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |
| Couto et al., 2013a |  |  |  |  |  |  |  |  | x |  |  |  |  |  | x |  |  |  |  |  |  |  |  |
| Couto et al., 2013b |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  | x |  |
| Friis et al., 2013 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Guinand et al., 2013 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lança et al., 2013 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mantas et al., 2013 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Marques et al., 2013 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martinho et al., 2013 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Modesto et al., 2013 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Neto et al., 2013 |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Nolasco et al., 2013 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nyitrai et al., 2013 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Otero et al., 2013 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Pinto et al., 2013 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |
| Primo et al., 2013 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Reis-Santos et al., 2013 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Veríssimo et al., 2013a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Veríssimo et al., 2013b |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brito et al., 2012 |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duarte et al., 2012 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |
| Falcão et al., 2012 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Franco et al., 2012 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gamito et al., 2012 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gaspar et al., 2012 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gonçalves et al., 2012b |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gonçalves et al., 2012c |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gonçalves et al., 2012a |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grilo et al., 2012 |  |  |  |  |  | x |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Kenov et al., 2012 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Lillebo et al., 2012 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Neto et al., 2012 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nyitrai et al., 2012 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Patrício et al., 2012 |  |  |  |  |  |  |  | x |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |
| Primo et al., 2012c |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Primo et al., 2012a |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Primo et al., 2012b |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ramos et al., 2012 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Van der Linden et al., 2012 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Veríssimo et al., 2012 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Viegas et al., 2012 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baeta et al., 2011 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bordalo et al., 2011a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bordalo et al., 2011b |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borja et al., 2011 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dolbeth et al., 2011 |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Friis et al., 2011 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Grilo et al., 2011 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lillebo et al., 2011 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marques et al., 2011 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nunes et al., 2011 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Primo et al., 2011 |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tavares et al., 2011 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baptista et al., 2010 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bessa et al., 2010 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cardoso et al., 2010 |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Chaves et al., 2010 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Couto et al., 2010 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Crespo et al., 2010 | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dolbeth et al., 2010 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gonçalves et al., 2010a |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gonçalves et al., 2010b |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martinho et al., 2010 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Neto et al., 2010 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pinto et al., 2010 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |
| Sousa et al., 2010 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |
| Vasconcelos et al., 2010 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adão et al., 2009 |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |
| Alves et al., 2009 |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |
| Anastacio et al., 2009 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baeta et al., 2009a |  |  |  |  |  |  |  | x |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Baeta et al., 2009b |  | x | x |  |  | x |  | x |  |  |  |  | x | x |  |  |  |  |  |  |  |  |  |
| Castro et al., 2009 |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |  |  |  |  |  |  |  |  |
| Costa et al., 2009 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |
| Crisman et al., 2009 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |
| Duarte et al., 2009a |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Duarte et al., 2009b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Duarte et al. 2009c |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Garel et al., 2009 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Grilo et al., 2009 |  |  |  |  |  | x |  | x |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Marques et al., 2009 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martinho et al., 2009 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martynova et al., 2009 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Patrício et al., 2009 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pedro and Ramos 2009 |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pinto et al., 2009 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |
| Primo et al., 2009 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ribeiro et al., 2009 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Teixeira et al., 2009 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vasconcelos et al., 2009 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vinagre et al., 2009 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cardoso et al., 2008a |  |  |  |  |  | x |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Cardoso et al., 2008b |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cardoso et al., 2008c |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chainho et al., 2008 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dolbeth et al., 2008a |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dolbeth et al., 2008b |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Leston et al., 2008 |  |  |  |  |  |  |  | x |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Marques et al., 2008 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martinho et al., 2008a |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martinho et al., 2008b |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Neto et al., 2008 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Reis-Santos et al., 2008 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Salas et al., 2008 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sliva-Santos et al., 2008 |  |  |  |  |  | x | x | x |  |  |  |  |  | x | x |  |  |  |  |  |  |  |  |
| Sousa et al., 2008 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |
| Teixeira et al., 2008a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Teixeira et al., 2008b |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Almeida et al., 2007 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Cabral et al., 2007 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cardoso et al., 2007a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cardoso et al., 2007b |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Castro et al., 2007a |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Castro et al., 2007b |  |  |  |  |  |  |  |  |  |  |  |  |  | x | x |  |  |  |  |  |  |  |  |
| Chaínho et al., 2007a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chaínho et al., 2007b |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dolbeth et al., 2007a |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dolbeth et al., 2007b |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ferreira et al., 2007 |  |  |  |  |  | x |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Leitão et al., 2007 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lillebo et al 2007a |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Lillebo et al., 2007b |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |
| Marques et al., 2007a |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marques et al., 2007b |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martinho et al., 2007a |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martinho et al., 2007b |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martins et al., 2007 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Morgado et al., 2007 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Patrício et al., 2007 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Saraiva et al., 2007 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Teixeira et al., 2007 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vasconcelos et al., 2007 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Viegas et al., 2007 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wise et al., 2007 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Baeta et al., 2006 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chainho et al., 2006 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Coelho et al., 2006 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ferreira et al., 2006 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Francisco et al., 2006 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Leitão et al., 2006 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lopes et al., 2006 |  |  |  |  |  |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marques et al., 2006 |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Patrício et al., 2006a | x |  | x | x |  | x |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Patrício et al., 2006b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Remerie et al., 2006 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Salas et al., 2006a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Salas et al., 2006b |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Salas et al., 2006c |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Silva-Santos et al., 2006 |  |  |  |  |  | x | x | x |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Baeta et al., 2005 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cardoso et al., 2005 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dolbeth et al., 2005 |  |  |  |  |  | x |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Lillebo et al., 2005 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Lopes et al., 2005 |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martins et al . 2005 |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Pereira et al., 2005 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Santos et al., 2005 |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Verdelhos et al., 2005 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cardoso et al., 2004a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cardoso et al., 2004b |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |
| Coelho et al., 2004 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Ferreira et al., 2004 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Freire et al., 2004 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  | x |  |
| Jensen et al., 2004 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lillebo et al., 2004 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Pardal et al., 2004 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pereira and Mesquita 2004 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rydin et al., 2004 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Salas et al., 2004 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anastacio et al., 2003 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aprahamian et al., 2003 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bacelar-Nicolau et al., 2003 |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cabral et al., 2003 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Costa et al., 2003 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cruz et al . 2003 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dolbeth et al., 2003 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gonçalves et al., 2003a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gonçalves et al., 2003b |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lillebo et al., 2003 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |
| Maranhão and Marques 2003 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marques et al., 2003a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marques et al., 2003b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Pastorinho et al., 2003a |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pastorinho et al., 2003b |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pereira and Mesquita 2003 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vieira et al . 2003a |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vieira et al., 2003b |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Azeiteiro 2002 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cardoso et al., 2002 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Domingos et al., 2002 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Fonseca et al., 2002 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jorgensen et al., 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Martins and Marques 2002 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martins et al., 2002 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Neves et al., 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  | x |  |  |  |  |  |  |
| Correia et al., 2001 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Do Carmo and Marques 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Duarte et al., 2001 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Maranhão et al., 2001 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Martins et al., 2001 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vale and Sampayo 2001 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Friis et al., 2000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Lopes et al., 2000 |  |  |  |  |  |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pardal et al., 2000 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Schories et al., 2000 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Azeiteiro et al., 1999 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cabral et al., 1999 |  |  |  |  |  |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Friis et al., 1999 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Granja 1999 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Lillebo et al., 1999a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lillebo et al., 1999b |  |  |  |  |  | x |  |  |  | x |  |  | x |  | x |  |  |  |  |  |  |  |  |
| Martins et al., 1999 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Almeida et al 1998 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Almeida et al 1997 | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Flindt et al 1997 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |
| Martins et al 1997 |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Múrias et al. 1997 |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cabral et al. 1996 |  |  |  |  |  |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Múrias et al., 1996 |  |  |  |  |  |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ribeiro et al., 1996 |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gonçalves et al., 1995a |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gonçalves et al., 1995b |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marques et al., 1994 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marques et al., 1993 |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baetahall et al., 1989 |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table S3. Current and potential provisioning ecosystem services per habitat, in the Atlantic coastal region adjacent to the Mondego River , based on literature review. | | | | | | | | | | | | |
|  |  |  |  |  |  | **Evidence for Current** | | | | **Evidence for Potential** | | |
|  | **Habitats** | **CICES Code** | **Class type** | **Service** | **Goods and Benefits** | **Scientific, explicitly analysing the ES concept** | **Scientific** | **Grey Literature** | **Other (obervation/expert knowledge/ongoing projects/Media** | **Scientific, explicitly analysing the ES concept** | **Scientific** | **Scientific / grey literature / other** |
| Transittional waters | Estuarine saltmarshes | 1.2.1.1 | Macrophytes | Population of saltmarsh species used to in breeding programmes | Wild plant replantation for habitat reconstruction |  |  |  | ReSEt project. (Ongoing) |  | Zhao et al., 2016; Heuner et al., 2016; Carus et al., 2017 | Couto et al., 2014 |
| Aquaculture tanks | 1.1.2.1 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Source of food fibre, protein and minerals for human and animal consumption |  |  |  |  |  | Abirami and Kowsalya 2011; Abudabos et al., 2013; Ahmed et al., 2017; Makkar et al., 2016; Pereira et al., 2018; Pereira et al., 2003 | Gaspar et al., 2017a |
| 1.1.2.2 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Production of thickening or emulsifying agents (e.g. agar and carrageenan), Cosmeceuticals, Algotherapy, Thalassotherapy; Pharmaceuticals |  |  |  |  |  | Ahmed et al., 2017; Khalil et al., 2018; Pereira 2018; Vieira et al., 2017; Soares et al., 2016 | Gaspar et al., 2017a |
| 1.1.2.3 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Seaweed for bioenergy production |  |  |  |  |  | Balina et al., 2017; Bruhn et al., 2011; Romagnoli et al., 2010 | Gaspar et al., 2017a |
| 1.1.4.1 | Fish, bivalve | Harvestable stock of reared fishes (*Sparus aurata*, *Dicentrachus labrax*) and bivalves | Fish (Sparus aurata, Dicentrachus labrax) and Seafood (e.g. mussels) for human food consumption | Pinto et al., 2014a; Teixeira et al., 2018 |  |  |  |  | Gadelha et al., 2019; Matias et al., 2013 | Teixeira et al., 2018 |
| 1.1.4.3 | Fish, Macroalgae, Microalgae | Biogas from aquaculture waste; Animal food (e.g. Artemia sp.) from aquaculture waste | Energy production; Fodder production |  |  |  |  |  | Balina et al., 2017; Bikker et al., 2016; Lanari and Franci 1998; Luo et al., 2017; Nnali and Oke 2013; van der Wal et al., 2013; Hughes et al., 2012 | Teixeira et al., 2018 |
| Water ponds | 1.1.6.1 | Fish | Harvestable surplus of estuarine commercial fish population and/or fish stocking | Fish for human food consumption |  |  | Da Rocha 2017 |  | Costa et al., 2013b | Hunt et al., 2017; Rocha et al., 2012 | Da Rocha 2017; Teixeira et al., 2018 |
| Saltworks | 1.1.5.1 | Macrophytes | Harvestable surplus of macrophytes (e.g. Salicornia and other halophytes) in saltpond habitats | Source of food fibre, protein and minerals for human and animal consumption |  |  | Marques et al., 2017 |  | Costa et al., 2013b | Laconsole et al., 2019 | Neves et al., 2002; Castro and Freitas 2011 |
| 1.2.1.2 | Macrophytes | Population of plant algae or fungi species used to in breeding programmes | Wild plant replantation for commercial sale |  |  |  |  | Costa et al., 2013b | Laconsole et al., 2019 | Neves et al., 2002; Castro and Freitas 2011 |
| 1.2.1.3 | Macrophytes | Harvestable share of population of plant species used to extract genes | Development of pharmaceuticals |  |  |  |  | Costa et al., 2013b | Patel 2016 | Neves et al., 2002; Castro and Freitas 2011 |
| 1.1.2.2 | Macroalgae | Harvestable surplus of microalgae and halobacteria | Extraction of carotenoids and glycerol |  |  |  |  | Costa et al., 2013b | Abbes et al., 2013 | Couto et al., 2013a |
| 4.3.1.1 | Salt | Salt production | Dietary value | Pinto et al., 2010; Pinto et al., 2014a | Teixeira et al., 2018 |  |  | Costa et al., 2013b | Rocha et al., 2012 | Neves et al., 2002; Teixeira et al., 2018 |
| Estuarine littoral granule and very coarse to coarse sands |  |  |  |  |  |  |  |  |  |  |  |
| Estuarine littoral sandy mud and very fine to medium sands | 1.1.5.1 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Source of food fibre, protein and minerals for human and animal consumption |  |  |  |  |  | Li et al., 2018; Abirami and Kowsalya 2011; Abudabos et al., 2013; Ahmed et al., 2017; Makkar et al., 2016; | Gaspar et al., 2017a; Patrício et al., 2009 |
| 1.1.5.2 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Production of thickening or emulsifying agents (e.g. agar and carrageenan), Cosmeceuticals, Algotherapy, Thalassotherapy; Pharmaceuticals |  |  |  |  |  | Khalil et al., 2018; Pereira 2018; Rocha et al., 2019; | Gaspar et al., 2017a; Patrício et al., 2009 |
| 1.1.6.1 | Bivalve | Harvestable surplus of estuarine commercial bivalve population | Seafood for human food consumption | Pinto et al., 2014a | Crespo et al., 2010 |  |  |  |  | Mesquita et al., 2018 |
| 1.1.6.2 | Wild species (shrimps, crabs, seaworms, bivalves) | Harvestable surplus of animals | Fish baits |  |  |  |  |  | Carvalho et al., 2013 | Verdelhos et al., 2015; Veríssimo et al., 2017 |
| 1.2.1.1 | Macroalgae | Seeds or spores that we can harvest | Wild plant seed for commercial sale |  |  |  |  |  | Gupta et al., 2018 | Gaspar et al., 2017a; Patrício et al., 2009 |
| 1.2.2.1 | Bivalve | Spat for shellfish farms | Reduced costs of production |  |  |  |  |  | Brenner and Buck 2010; Walter and Liebezeit 2003; Teixeira et al., 2018 | Mesquita et al., 2018 |
| 1.2.2.2 | Bivalve | Population of animals used in breeding programmes | Animals with novel characteristics that increase yields or reduce costs by resisting diseases or pests |  |  |  |  |  | Rasmussen and Morrissey 2007 | Mesquita et al., 2018 |
| Estuarine littoral mud | 1.1.5.1 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Source of food fibre, protein and minerals for human and animal consumption |  | Pereira et al., 2003 |  |  |  | Abirami and Kowsalya 2011; Abudabos et al., 2013; Ahmed et al., 2017; Makkar et al., 2016; Pereira et al., 2018; | Gaspar et al., 2017a; Patrício et al., 2009 |
| 1.1.5.2 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Production of thickening or emulsifying agents (e.g. agar and carrageenan), Cosmeceuticals, Algotherapy, Thalassotherapy; Pharmaceuticals |  |  |  |  |  | Khalil et al., 2018; Pereira 2018; Rocha et al., 2019; | Gaspar et al., 2017a; Patrício et al., 2009 |
| 1.1.6.1 | Bivalve | Harvestable surplus of estuarine commercial bivalve population | Seafood for human food consumption | Pinto et al., 2014a | Crespo et al., 2010 |  |  |  |  | Mesquita et al., 2018 |
| 1.1.6.2 | Wild species (shrimps, crabs, seaworms, bivalves) | Harvestable surplus of animals | Fish baits |  |  |  |  |  | Carvalho et al., 2013 | Verdelhos et al., 2015; Veríssimo et al., 2017 |
| 1.2.1.1 | Macroalgae | Seeds or spores that we can harvest | Wild plant seed for commercial sale |  |  |  |  |  | Gupta et al., 2018 | Gaspar et al., 2017a; Patrício et al., 2009; Soares et al., 2016 |
| 1.2.2.1 | bivalve | Spat for shellfish farms | Reduced costs of production |  |  |  |  |  | Brenner and Buck 2010; Walter and Liebezeit 2003; | Mesquita et al., 2018 |
| 1.2.2.2 | Bivalve | Population of animals used in breeding programmes | Wild bivalves' breeding for commercial sale |  |  |  |  |  | Rasmussen and Morrissey 2007 | Mesquita et al., 2018 |
| Estuarine seagrass bed | 1.2.1.1 | Macrophytes (Zoostera noltii) | Population of zostera noltii used to in breeding programmes | Wild plant replantation for habitat reconstruction |  | Martins et al., 2005 |  |  |  | Heuner et al., 2016 | Neto et al., 2013 |
| Estuarine sublittoral granule and very coarse to coarse sands | 4.3.2.2 | Sand and gravel | Occurrence of exploitable sand and gravel | Source of sand and gravel for materials |  |  |  |  |  | Velegrakis et al., 2006 | Cunha et al., 2006 |
| Estuarine sublittoral sandy mud and very fine to medium sands | 1.1.6.1 | Bivalve | Harvestable surplus of estuarine commercial bivalve population | Seafood for human food consumption |  | Crespo et al., 2010 |  |  |  |  | Mesquita et al., 2018 |
| 1.2.2.1 | Bivalve | Spat for shellfish farms | Reduced costs of production |  |  |  |  |  | Brenner and Buck 2010; Walter and Liebezeit 2003; | Mesquita et al., 2018 |
| 1.2.2.2 | Bivalve | Population of animals used in breeding programmes | Wild bivalves' breeding for commercial sale |  |  |  |  |  | Rasmussen and Morrissey 2007 | Mesquita et al., 2018 |
| Estuarine sublittoral mud | 1.1.6.1 | Bivalve | Harvestable surplus of estuarine commercial bivalve population | Seafood for human food consumption | Pinto et al., 2014a | Crespo et al., 2010 |  |  |  |  | Mesquita et al., 2018 |
| 1.2.2.1 | Bivalve | Spat for shellfish farms | Reduced costs of production |  |  |  |  |  | Brenner and Buck 2010; Walter and Liebezeit 2003; | Mesquita et al., 2018 |
| 1.2.2.2 | Bivalve | Population of animals used in breeding programmes | Wild bivalves' breeding for commercial sale |  |  |  |  |  | Rasmussen and Morrissey 2007 | Mesquita et al., 2018 |
| Estuarine pelagic waters of the South Mondego Branch and Pranto River | 1.1.6.1 | Fish | Harvestable surplus of estuarine commercial fish population | Fish for human food consumption |  | Domingos, 2002 |  | Portaria 164/99 |  | Piet et al., 2017 | Vieira et al., 2018; Primo et al., 2018 |
| 1.1.6.2 | Zooplankton | Zooplankton – jellyfish used for various purposes | Aquaria and other non-nutritional puposes |  |  |  |  |  | Purcell et al., 2013; | D'Ambrosio 2017 |
| 1.2.2.1 | Fish | Spat for fish farms | Reduced costs of production |  | Teixeira et al., 2018 |  |  |  |  | Vieira et al., 2018; Primo et al., 2018 |
| 1.2.2.2 | Fish | Population of animals used in breeding programmes | Wild fish species' breeding for commercial sale |  |  |  |  |  | Rasmussen and Morrissey 2007 | Vieira et al., 2018; Primo et al., 2018 |
| 4.2.1.2 | Estuarine Surface Water | Temperature and volume of water that can be used for cooling | Reduced energy costs |  |  |  | EDP 2017 |  | Hoffmeyer et al., 2005 | Teixeira et al., 2018 |
| 4.2.1.4 | Estuarine Surface Water | Tidal velocity | Tidal power |  |  |  |  |  | Angeloudis et al., 2018 | Teixeira et al., 2018 |
| Estuarine pelagic waters of the North Branch of the Mondego River and upstream system | 1.1.6.1 | Fish | Harvestable surplus of estuarine commercial fish population | Fish for human food consumption |  | Domingos, 2002 |  | Portaria 164/99 |  | Piet et al., 2017 | Vieira et al., 2018; Primo et al., 2018 |
| 1.1.6.2 | Zooplankton | Zooplankton – jellyfish used for various purposes | Aquaria and other non-nutritional purposes |  |  |  |  |  | Burgess et al., 2018 | D'Ambrosio 2017 |
| 1.2.2.1 | Fish | Spat for fish farms | Reduced costs of production |  | Teixeira et al., 2018 |  |  |  |  | Vieira et al., 2018; Primo et al., 2018 |
| 1.2.2.2 | Fish | Population of animals used in breeding programmes | Wild fish species' breeding for commercial sale |  |  |  |  |  | Rasmussen and Morrissey 2007 | Vieira et al., 2018; Primo et al., 2018 |
| 4.2.1.2 | Estuarine Surface Water | Temperature and volume of water that can be used for cooling | Reduced energy costs |  |  |  | EDP 2017 |  | Hoffmeyer et al., 2005 | Teixeira et al., 2018 |
| 4.2.1.4 | Estuarine Surface Water | Tidal velocity | Tidal power |  |  |  |  |  | Angeloudis et al., 2018 | Teixeira et al., 2018 |
| Coastal Waters | Sandy beaches | 4.3.2.1 | Beaches | Sunlight | Vitamin D |  |  | Fernandes, 2015 |  |  | Sreelatha et al., 2018 | Fernandes, 2015; Vinagre etal. 2017; Vinagre et al., 2016 |
| 4.3.2.2 | Sand and gravel | Occurrence of exploitable sand and gravel | Source of sand and gravel for materials |  |  |  | Diário de Notícias Lusa, 2019 |  | Velegrakis et al., 2006 | Fernandes, 2015; Vinagre etal. 2017; Vinagre et al., 2016 |
| Coastal rocky middle and supralitoral areas | 1.1.5.1 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Source of food fibre, protein and minerals for human and animal consumption |  |  |  |  |  | Abirami and Kowsalya 2011; Abudabos et al., 2013; Ahmed et al., 2017; Makkar et al., 2016; Pereira et al., 2018; | Gaspar et al., 2017b; Soares et al., 2016 |
| 1.1.5.2 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Production of thickening or emulsifying agents (e.g. agar and carrageenan), Cosmeceuticals, Algotherapy, Thalassotherapy; Pharmaceuticals |  | Soares et al., 2016 |  |  |  | Khalil et al., 2018; Pereira 2018; Rocha et al., 2019; | Gaspar et al., 2017b; Soares et al., 2016 |
| 1.1.5.3 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Seaweed for bioenergy production |  |  |  |  |  | Balina et al., 2017; Bruhn et al., 2011; Romagnoli et al., 2010 | Gaspar et al., 2017b; Soares et al., 2016 |
| 1.1.6.1 | Bivalve; Crabs | Harvestable surplus of commercial bivalve population | Seafood for human food consumption |  | Rius and Cabral 2004; Costa et al., 2003 |  |  |  |  | Costa et al.,2003; Vinagre et al., 2016;Vinagre et al., 2017 |
| 1.1.6.2 | Bivalve | Harvestable surplus of animals | Fish baits |  |  |  |  |  | Carvalho et al., 2013; Plicanti et al., 2016; | Vinagre et al., 2016;Vinagre et al., 2017 |
| 1.2.2.1 | Bivalve | Spat for shellfish farms | Reduced costs of production |  |  |  |  |  | Brenner and Buck 2010; Walter and Liebezeit 2003; Rius and Cabral 2004; | Vinagre et al., 2016;Vinagre et al., 2017 |
| 1.2.2.2 | Bivalve | Population of animals used in breeding programmes | Wild bivalves', and/or sea urchins, breeding for commercial sale |  |  |  |  |  | Rasmussen and Morrissey 2007; Rocha et al., 2019; Suckling et al., 2018 | Vinagre et al., 2016;Vinagre et al., 2017 |
| 1.2.2.3 | Echinoderme (Sea Urchin) | Harvestable share of population of a given species used to extract genes | Sea urchins used for the creation of biomimetic products |  |  |  |  |  | Lebesgue et al., 2016; Viana and Santos 2018 | in situ observations observation |
| Coastal supralittoral sedimentary areas | none |  |  |  |  |  |  |  |  |  |  |
| Infra and circalittoral rocky areas | 1.1.5.1 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Source of food fibre, protein and minerals for human and animal consumption |  |  |  |  |  | Abirami and Kowsalya 2011; Abudabos et al., 2013; Ahmed et al., 2017; Makkar et al., 2016; Pereira et al., 2018; | Gaspar et al., 2017b; Soares et al., 2016 |
| 1.1.5.2 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Production of thickening or emulsifying agents (e.g. agar and carrageenan), Cosmeceuticals, Algotherapy, Thalassotherapy; Pharmaceuticals |  |  |  |  |  | Khalil et al., 2018; Pereira 2018; Rocha et al., 2019; | Gaspar et al., 2017b; Soares et al., 2016 |
| 1.1.5.3 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Seaweed for bioenergy production |  |  |  |  |  | Balina et al., 2017; Bruhn et al., 2011; Romagnoli et al., 2010 | Gaspar et al., 2017b; Soares et al., 2016 |
| Infralittoral or circalittoral sedimentary areas | none |  |  |  |  |  |  |  |  |  |  |
| Infralittoral fine sand or infralittoral muddy sand areas | none |  |  |  |  |  |  |  |  |  |  |
| Circalittoral fine sand or muddy sand areas | none |  |  |  |  |  |  |  |  |  |  |
| Marine pelagic (0-200) waters | 1.1.2.1 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Source of food fibre, protein and minerals for human and animal consumption |  |  |  |  |  | Abirami and Kowsalya 2011; Abudabos et al., 2013; Ahmed et al., 2017; Makkar et al., 2016; Pereira et al., 2018; | Gaspar et al., 2017b; Soares et al., 2016 |
| 1.1.2.2 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Production of thickening or emulsifying agents (e.g. agar and carrageenan), Cosmeceuticals, Algotherapy, Thalassotherapy; Pharmaceuticals |  |  |  |  |  | Ahmed et al., 2017; Khalil et al., 2018; Pereira 2018; Vieira et al., 2017; | Gaspar et al., 2017b; Soares et al., 2016 |
| 1.1.2.3 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Seaweed for bioenergy production |  |  |  |  |  | Balina et al., 2017; Bruhn et al., 2011; Fernand et al., 2017; Romagnoli et al., 2010 | Gaspar et al., 2017b; Soares et al., 2016 |
| 1.1.4.1 | Fish, bivalve | Harvestable stock of reared fishes and molluscs | Fish and Seafood (e.g. mussels) for human food consumption |  |  |  |  |  | Ramalho and Dinis 2011; Dumbauld et al., 2009 | Baptista et al., 2013a; Vinagre et al., 2016; Vinagre et al., 2017 |
| 1.1.4.3 | Fish | Biogas from aquaculture waste; Animal food (e.g. Artemia sp.) from aquaculture waste | Energy production; Fodder production |  |  |  |  |  | Balina et al., 2017; Bikker et al., 2016; Lanari and Franci 1998; Luo et al., 2016; Nnali and Oke 2013; Van der wal et al., 2013; Hughes et al., 2012 | Baptista et al., 2013a; Cabral et al., 2003 |
| 1.1.5.1 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Source of food fibre, protein and minerals for human and animal consumption |  |  |  |  |  | Abirami and Kowsalya 2011; Abudabos et al., 2013; Ahmed et al., 2017; Makkar et al., 2016; Pereira et al., 2018; | Gaspar et al., 2017b; Soares et al., 2016 |
| 1.1.5.2 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Production of thickening or emulsifying agents (e.g. agar and carrageenan), Cosmeceuticals, Algotherapy, Thalassotherapy; Pharmaceuticals |  |  |  |  |  | Khalil et al., 2018; Pereira 2018; Rocha et al., 2019; | Gaspar et al., 2017b; Soares et al., 2016 |
| 1.1.5.3 | Macroalgae | Harvestable surplus of seaweed biomass in situ | Seaweed for bioenergy production |  |  |  |  |  | Balina et al., 2017; Bruhn et al., 2011; Fernand et al., 2017; Romagnoli et al., 2010 | Gaspar et al., 2017b; Soares et al., 2016 |
| 1.1.6.1 | Fish | Harvestable surplus of commercial fish population | Fish for human food consumption |  | Nunes 2005; Cabral et al., 2003 |  |  |  | Piet et al., 2017 | Baptista et al., 2013a; Cabral et al., 2003 |
| 1.1.6.2 | Zooplankton | Zooplankton – jellyfish used for various purposes | Aquaria and other non-nutritional purposes |  |  |  |  |  | Burgess et al., 2018 | D'Ambrosio 2017 |
| 1.2.2.1 | Fish | Spat for fish farms | Reduced costs of production |  | Cabral et al., 2003 |  |  |  |  | Baptista et al., 2013a; Cabral et al., 2003 |
| 1.2.2.2 | Fish | Population of animals used in breeding programmes | Wild fish species' breeding for commercial sale |  |  |  |  |  | Pacheco et al., 2018; Rasmussen and Morrissey 2007; | Baptista et al., 2013a; Cabral et al., 2003 |
| 4.2.1.4 | Coastal surface waters | Wave intensity | Wave Power |  |  |  |  |  | Castro-Santos et al., 2015 | Mota and Pinto 2014 |
| 4.3.2.3 | Wind | Wind power | Renewable energy source |  |  |  |  |  | Lopes 2016 | Campos and Soares 2018 |

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| Table S4. Current and potential regulation ecosystem services per habitat, in Atlantic coastal region adjacent to the Mondego River , based on literature review. | | | | | | | | | | | | |
|  |  |  |  |  |  | **Evidence for Current** | | | | **Evidence for Potential** | | | |
|  | Habitats | CICES Code | Class type | Service | Goods and Benefits | **Scientific, explicitly analysing the ES concept** | **Scientific** | **Grey Literature** | **Other (obervation/expert knowledge/ongoing projects/Media** | **Scientific, explicitly analysing the ES concept** | **Scientific** | **Scientific / grey literature / other** | |
| Transitional Waters | Estuarine saltmarshes | 2.2.1.1 | Macrophytes and Microphytobenthos | Wave attenuation and Sediment biostabilisation | Improved water quality and clarity |  |  |  |  | Almeida et al., 2016 | Macintyre et al., 1996; Shepard et al., 2011; Castro and Freitas 2011; | Araújo et al., 2015; Couto et al., 2014 | |
| 2.2.1.3 | Macrophytes | The capacity of saltmarsh macrophytes to retain water and release it slowly | Mitigation of damage as a result of reduced in magnitude and frequency of flood/storm events |  |  |  |  |  | McCartney et al., 2013; | Couto et al., 2014 | |
| 2.2.2.3 | Macrophytes | Important nursery habitat | Sustainable populations of useful or iconic species that contribute to a service in another ecosystem. | Pinto et al., 2014a | Martinho et al., 2007a; Vasconcelos et al., 2007; Dolbeth et al., 2008a |  |  | Whitfield et al., 2017 |  | Couto et al., 2014 | |
| 2.2.3.1 | Macrophytes | Providing a habitat for native pest control agents | Reduction in pest damage to comercially important indigenous species |  |  |  |  |  | Secord 2003; | Couto et al., 2014; Chainho et al., 2015 | |
| 2.2.5.2 | Macrophytes | Nutrient and contaminant absorption | Improved water quality and reduction of human health risks | Pinto et al., 2014a; Pinto et al., 2013 | Castro et al., 2007b; Castro et al., 2009; |  |  | Pinto et al., 2014a; Wieski et al., 2010 |  | Couto et al., 2014 | |
| 2.2.6.1 | Macrophytes | Carbon sequestration | Climate regulation resulting in avoided damage costs |  | Couto et al., 2013a; Sousa et al., 2010 |  |  | Schaefer et al., 2014 | Beaumont et al., 2014 | Couto et al., 2014 | |
| Aquaculture tanks | 2.2.5.2 | Macroalgae, Bivalve | Nutrient and contaminant absorption | Improved water quality and reduction of human health risks |  |  |  |  | Pinto et al., 2014a; Gray et al., 2019;Clements and Comeau 2019 | Leston et al., 2014; Abreu et al., 2011; Elizondo-González et al., 2018; Hadley et al., 2016; Nielsen et al., 2016; Walton et al., 2015; | Gaspar et al., 2017a; Patrício et al., 2009 | |
| 2.2.6.1 | Macroalgae | Carbon sequestration | Climate regulation resulting in avoided damage costs |  | Baeta et al., 2009a |  |  |  | Sengupta et al., 2017; Walton et al., 2015 | Gaspar et al., 2017a; Patrício et al., 2009 | |
| Water ponds | 2.2.2.2 | Macrophytes (Water column as dispersal agent) | Natural restoration of saltmarsh beds | Contribution to saltmarsh restoration |  |  |  |  |  | Huiskies et al., 1995 | Couto et al., 2014; Da Rocha 2017; Teixeira et al., 2018 | |
| 2.2.2.3 | Water column | Important nursery habitat | Sustainable populations of useful or iconic species that contribute to a service in another ecosystem. | Pinto et al., 2014a | Teixeira et al., 2018 |  |  |  |  | Martinho et al., 2007a; Teixeira et al., 2018; Vasconcelos et al., 2007 | |
| 2.2.3.1 | Water column | Providing a habitat for native pest control agents | Reduction in pest damage to comercially important indigenous species |  |  |  |  |  | Secord 2003; | Chainho et al., 2015; Martinho et al., 2007a; Teixeira et al., 2018; Vasconcelos et al., 2007 | |
| 2.2.5.2 | Biological components at Water/Sediment interface (autotrophic (benthic algae) and heterotrophic (bacterial community) biofilms) | Transformation processes of Organic matter and nutrients | Improved water quality and reduction of human health risks |  |  |  |  |  | Sauvage et al., 2018 | Lillebo et al., 1999b | |
| Saltworks | 2.2.1.1 | Macrophytes | Wave attenuation and shoreline stabilization | Improved water quality and clarity |  |  |  |  |  | Shepard et al., 2011; | Neves et al., 2002; Castro and Freitas 2011 | |
| 2.2.2.3 | Macrophytes | Habitat for birds | Sustainable populations of useful or iconic species, such as Flamingos, that contribute to a service in another ecosystem. |  | Múrias et al., 2005 |  | Neves et al., 2002 | Costa et al., 2013b | Herbert et al., 2018; Rocha et al., 2012 | Neves et al., 2002; Pedro and Ramos 2009 | |
| 2.2.5.2 | Macrophytes, planktonic communities, halophilic bacteria, benthic communities | Nutrient and contaminant absorption; Water temperature increase; saltwork floor sealing. | Improved water quality and reduction of human health risks. Increased evaporation and increased salt production |  | Castro et al., 2007a; Castro et al., 2009; Vieira and Bio 2011 |  |  | Pinto et al., 2014a; Costa et al., 2013b | Rocha et al., 2012 | Couto et al., 2014; Neves et al., 2002 | |
| 2.2.6.1 | Macrophytes | Carbon sequestration | Climate regulation resulting in avoided damage costs |  | Couto et al., 2013a; Sousa et al., 2010 |  | Neves et al., 2002 |  | Beaumont et al., 2014 | Neves et al., 2002 | |
| Estuarine littoral granule and very coarse to coarse sands | none |  |  |  |  |  |  |  |  |  |  | |
| Estuarine littoral sandy mud and very fine to medium sands | 2.1.2.1 | Deposit-feeding macrofaunal consumers (Amphipods, bivalves, polychates, gastropods) | Removal of material such as rotting algal mats, which is in the littoral zone but could potentially wash up on shore and produce olfactory and visual impacts | Reduction in nuisance effect of smells from animal lots |  | Rossi et al., 2015 |  |  |  |  | Martins et al., 2014a; Rossi et al., 2015 | |
| 2.2.5.2 | Macroalgae; Microphytobenthos; Microbial communities; Bivalve | Nutrient and contaminant absorption; Source and sink of inorganic nutrients by Microphytobenthos communities regulating the resilience of tidal flats to eutrophication; Microbial communities as biodegradation agents | Higher resilience to eutrophication, improved water quality and reduction of human health risks | Pinto et al., 2014a; Pinto et al., 2013 | CC/PP: Baeta et al., 2009a; Baeta et al., 2011 |  |  | Pinto et al., 2014a; Gray et al., 2019 | Harrabi et al., 2019; Henriques et al., 2017; Larson and Sundback 2008; Nielsen et al., 2016 | Araújo et al., 2015; Botelho et al., 2019; Gaspar et al., 2017a; Lillebo et al., 1999b | |
| 2.2.1.1 | Macroinvertebrates | Sediment biostabilisation | Improved water quality and clarity |  | Kristensen et al., 2013 |  |  |  |  | Veríssimo et al., 2017 | |
| 2.2.6.1 | Macroalgae | Carbon sequestration | Climate regulation resulting in avoided damage costs |  | Baeta et al., 2009a |  |  |  | Sengupta et al., 2017 | Gaspar et al., 2017a; Patrício et al., 2009 | |
| Estuarine littoral mud | 2.1.2.1 | Deposit-feeding macrofaunal consumers (Amphipods, bivalves, polychates, gastropods) | Removal of material such as rotting algal mats, which is in the littoral zone but could potentially wash up on shore and produce olfactory and visual impacts | Reduction in nuisance effect of smells from animal lots |  | Rossi et al., 2015 |  |  |  |  | Martins et al., 2014a; Rossi et al., 2015 | |
| 2.2.5.2 | Macroalgae; Microphytobenthos; Microbial communities; Bivalve | Nutrient and contaminant absorption; Source and sink of inorganic nutrients by Microphytobenthos communities regulating the resilience of tidal flats to eutrophication; Microbial communities as biodegradation agents | Higher resilience to eutrophication, improved water quality and reduction of human health risks | Pinto et al., 2014a; Pinto et al., 2013 | Baeta et al., 2009a; Baeta et al., 2011 |  |  | Pinto et al., 2014a; Gray et al., 2019 | Harrabi et al., 2019; Henriques et al., 2017; Larson and Sundback 2008; Nielsen et al., 2016 | Araújo et al., 2015; Botelho et al., 2019; Gaspar et al., 2017a; Lillebo et al., 1999b | |
| 2.2.1.1 | Macroinvertebrates | Sediment biostabilisation | Improved water quality and clarity |  | Kristensen et al., 2013 |  |  |  |  | Veríssimo et al., 2017 | |
| 2.2.6.1 | Macroalgae | Carbon sequestration | Climate regulation resulting in avoided damage costs |  | Baeta et al., 2009a |  |  |  | Sengupta et al., 2017 | Gaspar et al., 2017a; Patrício et al., 2009 | |
| Estuarine seagrass bed | 2.2.1.1 | Macrophytes (Zostera noltii) and Microphytobhentos | Sediment biostabilisation | Improved water quality and clarity |  |  |  |  |  | Macintyre et al., 1996; Potouroglou et al., 2017; van Katwijk et al., 2010; Widdows et al., 2008 | Neto et al., 2013; Rossi et al., 2015 | |
| 2.2.1.3 | Macrophytes (Zostera noltii) | The capacity of seagrass macrophytes to retain water and release it slowly | Mitigation of damage as a result of reduced in magnitude and frequency of flood/storm events |  |  |  |  |  | Fonseca and Calahan 1992; Widdows et al., 2008 | Neto et al., 2013 | |
| 2.2.2.3 | Macrophytes (Zostera noltii) | Important nursery habitat | Sustainable populations of useful or iconic species that contribute to a service in another ecosystem. | Pinto et al., 2014b | Castro et al., 2016; Dolbeth et al., 2008a; França et al., 2009 |  |  | Whitfield et al., 2017 | Polte and Asmus 2006 | Neto et al., 2013 | |
| 2.2.3.1 | Macrophytes (Zostera noltii) | Providing a habitat for native pest control agents | Reduction in pest damage to comercially important indigenous species |  |  |  |  |  | Secord 2003 | Chainho et al., 2015; Neto et al., 2013 | |
| 2.2.5.2 | Macrophytes (Zostera noltii) | Nutrient and contaminant absorption | Improved water quality and reduction of human health risks | Pinto et al., 2014a; Pinto et al., 2013 | Castro et al., 2007b; Castro et al., 2009; |  |  | Pinto et al., 2014a; Wieski et al., 2010 | La Nafie et al., 2014 | Neto et al., 2013 | |
| 2.2.6.1 | Macrophytes (Zostera noltii) | Carbon sequestration | Climate regulation resulting in avoided damage costs |  | Couto et al., 2013b; Sousa et al., 2010 |  |  | Schaefer et al., 2014 | Beaumont et al., 2014 | Neto et al., 2013 | |
| Estuarine sublittoral granule and very coarse to coarse sands | none |  |  |  |  |  |  |  |  |  |  | |
| Estuarine sublittoral sandy mud and very fine to medium sands | 2.1.2.1 | Deposit-feeding macrofaunal consumers (Amphipods, bivalves, polychates, gastropods) | Removal of material such as rotting algal mats, which is in the littoral zone but could potentially wash up on shore and produce olfactory and visual impacts | Reduction in nuisance effect of smells from animal lots |  | Rossi et al., 2015 |  |  |  |  | Martins et al., 2014a; Rossi et al., 2015 | |
| 2.2.5.2 | Macroalgae; Microphytobenthos; Microbial communities; Bivalve | Nutrient and contaminant absorption; Source and sink of inorganic nutrients by Microphytobenthos communities regulating the resilience of tidal flats to eutrophication; Microbial communities as biodegradation agents | Higher resilience to eutrophication, improved water quality and reduction of human health risks | Pinto et al., 2014a; Pinto et al., 2013 | Baeta et al., 2009a; Baeta et al., 2011 |  |  | Pinto et al., 2014a; Gray et al., 2019 | Harrabi et al., 2019; Henriques et al., 2017; Larson and Sundback 2008; Nielsen et al., 2016 | Araújo et al., 2015; Botelho et al., 2019; Gaspar et al., 2017a; Lillebo et al., 1999b | |
| 2.2.1.1 | Macroinvertebrates | Sediment biostabilisation | Improved water quality and clarity |  | Kristensen et al., 2013 |  |  |  |  | Veríssimo et al., 2017 | |
| Estuarine sublittoral mud | 2.1.2.1 | Deposit-feeding macrofaunal consumers (Amphipods, bivalves, polychates, gastropods) | Removal of material such as rotting algal mats, which is in the littoral zone but could potentially wash up on shore and produce olfactory and visual impacts | Reduction in nuisance effect of smells from animal lots |  | Rossi et al., 2015 |  |  |  |  | Martins et al., 2014a; Rossi et al., 2015 | |
| 2.2.5.2 | Macroalgae; Microphytobenthos; Microbial communities; Bivalve | Nutrient and contaminant absorption; Source and sink of inorganic nutrients by Microphytobenthos communities regulating the resilience of tidal flats to eutrophication; Microbial communities as biodegradation agents | Higher resilience to eutrophication, improved water quality and reduction of human health risks | Pinto et al., 2013 | Baeta et al., 2009a; Baeta et al., 2011 |  |  | Pinto et al., 2014a; Gray et al., 2019 | Harrabi et al., 2019; Henriques et al., 2017; Larson and Sundback 2008; Nielsen et al., 2016 | Araújo et al., 2015; Botelho et al., 2019; Gaspar et al., 2017a; Lillebo et al., 1999b | |
| 2.2.1.1 | Macroinvertebrates | Sediment biostabilisation | Improved water quality and clarity |  | Kristensen et al., 2013 |  |  |  |  | Veríssimo et al., 2017 | |
| Estuarine pelagic waters of the South Mondego Branch and Pranto River | 2.2.2.1 | Macroalgae (Water column as dispersal agent of gametes) | Natural fertilization of Macroalgae | Macroalgae for human use and/or consumption |  |  |  |  |  | Cui et al., 2018 | Gaspar et al., 2017a; Patrício et al., 2009 | |
| 2.2.2.2 | Macrophytes (Water column as dispersal agent) | Natural restoration of aquatic macrophyte-based habitats | Contribution to saltmarsh restoration |  |  |  |  |  | Huiskies et al., 1995 | Couto et al., 2014 | |
| 2.2.2.3 | Water column | Important nursery habitat | Sustainable populations of useful or iconic species that contribute to a service in another ecosystem. | Pinto et al., 2014b | Martinho et al., 2007a |  |  |  |  | Martinho et al., 2007a; Teixeira et al., 2018; Vasconcelos et al., 2007 | |
| 2.2.5.2 | Biological components at Water/Sediment interface (autotrophic (benthic algae) and heterotrophic (bacterial community) biofilms) | Transformation processes of organic matter and nutrients | Improved water quality and reduction of human health risks |  |  |  |  | Pinto et al., 2014a | Sauvage et al., 2018 | Lillebo et al., 1999b | |
| Estuarine pelagic waters of the North Branch of the Mondego River and upstream system | 2.2.2.1 | Macroalgae (Water column as dispersal agent of gametes) | Natural fertilization of Macroalgae | Macroalgae for human use and/or consumption |  |  |  |  |  | Cui et al., 2018 | Gaspar et al., 2017a; Patrício et al., 2009 | |
| 2.2.2.2 | Macrophytes (Water column as dispersal agent) | Natural restoration of aquatic macrophyte-based habitats | Contribution to saltmarsh restoration |  |  |  |  |  | Huiskies et al., 1995 | Couto et al., 2014 | |
|  | 2.2.2.3 | Water column | Important nursery habitat | Sustainable populations of useful or iconic species that contribute to a service in another ecosystem. | Pinto et al., 2014b | Martinho et al., 2007a |  |  |  |  | Martinho et al., 2007a; Teixeira et al., 2018; Vasconcelos et al., 2007 | |
|  | 2.2.5.2 | Biological components at Water/Sediment interface (autotrophic (benthic algae) and heterotrophic (bacterial community) biofilms) | Transformation processes of organic matter and nutrients | Improved water quality and reduction of human health risks |  |  |  |  | Pinto et al., 2014a | Sauvage et al., 2018 | Lillebo et al., 1999b | |
| Coastal Waters | Sandy beaches | 2.1.2.1 | Deposit-feeding macrofaunal consumers (Amphipods, bivalves, polychates, gastropods) | Removal of material such as rotting algal mats, which is in the littoral zone but could potentially wash up on shore and produce olfactory and visual impacts | Reduction in nuisance effect of smells from animal lots |  | Bessa et al., 2014 |  |  |  |  | Bessa et al., 2014 | |
| 2.2.2.3 | Sandy shore | Foraging habitat for birds | Sustainable populations of bird species that people enjoy |  | Pereira et al., 2018 |  |  |  |  | Bessa et al., 2014; Bessa et al., 2017 | |
| 5.2.1.2 | Sandy shore | Flood and erosion protection | Reduction in damage costs |  | Do Carmo et al., 2010; Reis et al., 2008; |  |  |  | Do Carmo et al., 2018; Stronkhorst et al., 2018 | Bessa et al., 2014; Bessa et al., 2017 | |
| Coastal rocky middle and supralitoral areas | 2.1.2.1 | Deposit-feeding macrofaunal consumers (Amphipods, bivalves, polychates, gastropods) | Removal of material such as rotting algal mats, which is in the littoral zone but could potentially wash up on shore and produce olfactory and visual impacts | Reduction in nuisance effect of smells from animal lots |  |  |  |  |  | Vinagre et al., 2015 | Bessa et al., 2014; Vinagre et al., 2017 | |
| 2.2.6.1 | Macroalgae | Carbon sequestration | Climate regulation resulting in avoided damage costs |  |  |  |  | Geraldi et al., 2014 | Sengupta et al., 2017 | Gaspar et al., 2017b; Soares et al., 2016 | |
| 2.2.5.2 | Bivalve | Nutrient absorption | Improved water quality and reduction of human health risks |  |  |  |  | Pinto et al., 2014a; Gray et al., 2019 | Nielsen et al., 2016 | Vinagre et al., 2016;Vinagre et al., 2017 | |
| Coastal supralittoral sedimentary areas | 5.2.1.2 | Sandy shore | Flood and erosion protection | Reduction in damage costs |  | Do Carmo et al., 2010; Reis et al., 2008 |  |  |  |  | Bessa et al., 2014; Bessa et al., 2017 | |
| Infra and circalittoral rocky areas | 2.2.6.1 | Macroalgae | Carbon sequestration | Climate regulation resulting in avoided damage costs |  |  |  |  | Geraldi et al., 2014 | Sengupta et al., 2017 | Gaspar et al., 2017b; Soares et al., 2016 | |
| 2.2.5.2 | Bivalve | Nutrient absorption | Improved water quality and reduction of human health risks |  |  |  |  | Gray et al., 2019; Clements and Comeau 2019 | Nielsen et al., 2016 | Vinagre et al., 2016;Vinagre et al., 2017 | |
| Infralittoral or circalittoral sedimentary areas | none |  |  |  |  |  |  |  |  |  |  | |
| Infralittoral fine sand or infralittoral muddy sand areas | none |  |  |  |  |  |  |  |  |  |  | |
| Circalittoral fine sand or muddy sand areas | none |  |  |  |  |  |  |  |  |  |  | |
| Marine pelagic (0-200) waters | 2.2.2.1 | Macroalgae (Water column as dispersal agent of gametes) | Natural fertilization of Macroalgae | Macroalgae for human use and/or consumption |  |  |  |  |  | Cui et al., 2018 | Gaspar et al., 2017b; Soares et al., 2016 | |
| 2.2.2.3 | Water column | Important nursery habitat | Sustainable populations of useful or iconic species that contribute to a service in another ecosystem. |  | Cabral et al., 2003 |  |  |  |  | Baptista et al., 2013a; Cabral et al., 2003 | |

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| Table S5. Current and potential cultural ecosystem services per habitat, in the Atlantic coastal region adjacent to the Mondego River , based on literature review. | | | | | | | | | | | | | | |
|  |  |  |  |  |  | **Evidence for Current** | | | | **Evidence for Potential** | | |  |
|  | Habitat | Code | Class type | Service | Goods and Benefits | **Scientific, explicitly analysing the ES concept** | **Scientific** | **Grey Literature** | **Other (obervation/expert knowledge/ongoing projects/Media** | | **Scientific, explicitly analysing the ES concept** | **Scientific** | **Scientific / grey literature / other** | |
| Transitional Waters | Estuarine saltmarshes | 3.1.1.2 | Macrophytes; Birds; Macroinvertebrates | Species of interest to birdwatchers | de-stressing or mental health; eco-tourism |  | Lopes et al., 2002 | Cruz et al., 2014; Ribeiro et al., 2001 |  | | Pinto et al., 2014b |  | Pedro and Ramos 2009 | |
|  |  | 3.1.2.1 | Wader species | Site of special scientific interest: RAMSAR site and Important Bird and Biodiversity Area (IBA) | Knowledge about the environment and nature |  | Costa et al., 2013c | BirdLife International, 2019. |  | |  |  |  | |
|  |  | 3.1.2.2 | Macrophytes; Birds; Macroinvertebrates | Site used for *insitu* teaching and conservation activities | Skills or knowledge about environmental management |  | Lopes et al., 2002; Costa et al., 2013b | Cruz et al., 2014; |  | |  |  |  | |
|  |  | 3.1.2.4 | Macrophytes; Birds; Macroinvertebrates | Area of Outstanding Natural Beauty; panorama site | Artistic inspiration |  | Lopes et al., 2002 | Cruz et al., 2014; Ribeiro et al., 2001 |  | | Pinto et al., 2014b |  |  | |
|  |  | 3.2.1.1 | Flamingos | Presence of iconic species: Flamingos | Social cohesion, cultural icon | Pinto et al 2013 | Múrias et al., 2002 |  |  | |  |  | Múrias et al., 2002 | |
|  |  | 3.2.1.3 | Macrophytes; Birds; Macroinvertebrates | Archive records or collections | Nature films |  |  |  | Mondego documentary, 2011 | |  |  |  | |
|  |  | 3.2.2.1 | Macrophytes; Birds; Macroinvertebrates | Areas designated as wilderness | Mental/Moral well-being | Pinto et al., 2013 |  |  | Ramsar, 1999 | |  | Lefeuvre et al., 2003 | Botelho et al., 2019; Couto et al., 2014; Lopes et al., 2002 | |
|  |  | 3.2.2.2 | Macrophytes; Birds; Macroinvertebrates | Near Threatened wader species; Saltmarsh biodiversity | Moral well-being | Pinto et al 2013 | Lopes et al., 2005; Couto et al., 2014; | Cruz et al., 2014 |  | |  |  |  | |
|  | Aquaculture tanks | 3.1.1.1 | Fish | Recreational fishery | Recreation; Tourism | Pinto et al., 2016 |  |  | Fernandes, 2015; Pescódromo de Lavos Facebook Page | |  |  | Teixeira et al., 2018 | |
|  |  | 3.1.2.1 | Fish, Macroalgae and Bivalves | Site of special scientific interest for two main reasons: 1. to evaluate its relationship with the natural surroundings; 2. to support aquaculture studies for the developmet of more sustainable solutions | Knowledge about the environment and nature |  | Teixeira et al., 2018; Baptista et al., 2013b |  |  | |  | Nunes et al., 2011 | Teixeira et al., 2018 | |
|  |  | 3.1.2.2 | Fish, Macroalgae and Bivalves | Site used for *insitu* teaching and conservation activities | Skills or knowledge about technological and environmental management |  |  |  | in situ observations | |  |  | Teixeira et al., 2018 | |
|  | Water ponds | 3.1.1.1 | Fish | Recreational fishery | Recreation; Tourism | Pinto et al., 2016 |  |  | Fernandes, 2015 | |  |  | Da Rocha, 2017; Teixeira et al., 2018 | |
|  |  | 3.1.1.2 | Water ponds' Biodiversity | Species of interest to birdwatchers | de-stressing or mental health; eco-tourism |  | Lopes et al., 2002 | Cruz et al., 2014; Ribeiro et al., 2001 |  | |  |  |  | |
|  |  | 3.1.2.1 | Wader species | Site of special scientific interest: RAMSAR site and Important Bird and Biodiversity Area (IBA) | Knowledge about the environment and nature |  | Costa et al., 2013c | BirdLife International, 2019 |  | |  |  |  | |
|  |  | 3.1.2.2 | Fish | Site used for *insitu* teaching and conservation activities | Skills or knowledge about environmental management |  | Costa et al., 2013b |  |  | |  |  | Da Rocha 2017; Teixeira et al., 2018 | |
|  |  | 3.1.2.3 | Fish | Recreational fishery | Tourism, Local Identity | Pinto et al., 2016 |  |  | Fernandes, 2015 | |  |  | Da Rocha 2017; Teixeira et al., 2018 | |
|  | Saltworks | 3.1.1.1 | Saltworks' biodiversity | Ecological qualities of saltworks that make it attractive to hiker | Recreation; nature-based recreation |  | Múrias et al., 2002 | Cruz et al., 2014; Ribeiro et al., 2001 |  | | Pinto et al., 2014b; Crisman et al., 2009 | Gauci et al., 2017 |  | |
|  |  | 3.1.1.2 | Saltworks' biodiversity | Species of interest to birdwatchers | de-stressing or mental health; eco-tourism |  | Múrias et al., 2002 | Cruz et al., 2014; Ribeiro et al., 2001 |  | | Pinto et al., 2014a; Crisman et al., 2009 |  |  | |
|  |  | 3.1.2.1 | Birds | Site of special scientific interest: RAMSAR site and Important Bird and Biodiversity Area (IBA) | Knowledge about the environment and nature |  | Múrias et al., 2002 | BirdLife International, 2019 |  | | Pinto et al., 2014a; Crisman et al., 2009 | Millán et al., 2011 | Múrias et al., 2002 | |
|  |  | 3.1.2.2 | Birds | Site used for voluntary conservation activities | Skills or knowledge about environmental management |  |  |  | in situ observations | | Pinto et al., 2014a; Crisman et al., 2009 | Lopes et al., 2005 | Múrias et al., 2002 | |
|  |  | 3.1.2.3 | Saltworks | Recreational use and emotional attachment of saltwork areas | Tourism, local identify |  |  | Neves et al., 2002; Ribeiro et al., 2001 |  | | Pinto et al., 2014a; Crisman et al., 2009 |  |  | |
|  |  | 3.1.2.4 | Saltworks | Area of Outstanding Natural Beauty; panorama site | Artistic inspiration |  |  | Neves et al., 2002; Ribeiro et al., 2001 |  | | Pinto et al., 2014a; Crisman et al., 2009 |  |  | |
|  |  | 3.2.1.1 | Flamingos | Presence of iconic species: Flamingos | Social cohesion, cultural icon | Pinto et al., 2010 | Múrias et al., 2002 |  |  | | Pinto et al., 2014a; Crisman et al., 2009 |  | Múrias et al., 2002 | |
|  |  | 3.2.1.3 | Saltworks | Archive records or collections | Nature films |  |  |  | [Mondego documentar](https://www.youtube.com/watch?v=ztT9UXinq3E)y, 2011 | | Pinto et al., 2014a; Crisman et al., 2009 |  |  | |
|  |  | 3.2.2.1 | Wader species | Areas designated as wilderness | Mental/Moral well-being | Pinto et al., 2010 | Lopes et al., 2002; Castro and Freitas 2011; |  |  | | Pinto et al., 2014a; Crisman et al., 2009 | Lefeuvre et al., 2003 |  | |
|  |  | 3.2.2.2 | Saltworks | Endangered habitat for bird species | Moral well-being |  | Lopes et al., 2005 | Cruz et al., 2014 |  | | Pinto et al., 2014a; Crisman et al., 2009 |  |  | |
|  |  | 6.1.1.1 | Saltworks | Recreational use of saltwork areas | Ecotourism |  |  | Neves et al., 2002; Ribeiro et al., 2001 |  | | Pinto et al., 2014a; Crisman et al., 2009 | Crisman et al., 2009; Korovessis and Lekkas 2009; Rodrigues et al., 2011; Walmsley et al., 1999; |  | |
|  |  | 6.1.2.1 | Saltworks | Recreational use and emotional attachment of saltwork areas | Recreation |  |  | Neves et al., 2002; Ribeiro et al., 2001 |  | | Pinto et al., 2014a; Crisman et al., 2009 | Crisman et al., 2009; Korovessis and Lekkas 2009; Rodrigues et al., 2011; Walmsley et al., 1999; |  | |
|  |  | 6.2.1.1 | Saltworks | Emotional attachment of saltwork areas | Identity |  |  | Neves et al., 2002; Ribeiro et al., 2001 |  | | Pinto et al., 2014a; Crisman et al., 2009 |  |  | |
|  |  | 6.2.2.1 | Saltworks | Emotional attachment of saltwork areas | Cultural meaning |  |  | Neves et al., 2002; Ribeiro et al., 2001 |  | | Pinto et al., 2014a; Crisman et al., 2009 |  |  | |
|  | Estuarine littoral granule and very coarse to coarse sands | 3.1.1.1 | Macroinvertebrates | Recreational mollusc harvest | Recreation; nature-based recreation |  | Crespo et al., 2010 |  |  | |  |  | Verdelhos et al., 2015 | |
|  |  | 3.1.2.1 | Macroinvertebrates | Site of special scientific interest | Knowledge about the environment and nature |  | Verdelhos et al., 2015 |  |  | |  | Kristensen et al., 2013 | Verdelhos et al., 2015 | |
|  |  | 3.1.2.2 | Macroinvertebrates | Site used for *insitu* teaching and conservation activities | Skills or knowledge about environmental management |  | Costa et al., 2013b |  |  | |  |  | Verdelhos et al., 2015 | |
|  |  | 3.1.2.3 | Macroinvertebrates | Traditional mollusc harvest | Tourism, local identity |  | Crespo et al., 2010 |  |  | |  |  | Verdelhos et al., 2015 | |
|  | Estuarine littoral sandy mud and very fine to medium sands | 3.1.1.1 | Macroinvertebrates | Recreational mollusc harvest | Recreation; nature-based recreation |  | Crespo et al., 2010 |  |  | |  |  | Verdelhos et al., 2015 | |
|  |  | 3.1.2.1 | Macroinvertebrates | Site of special scientific interest | Knowledge about the environment and nature |  | Verdelhos et al., 2015 |  |  | |  |  | Verdelhos et al., 2015 | |
|  |  | 3.1.2.2 | Macroinvertebrates | Site used for *insitu* teaching and conservation activities | Skills or knowledge about environmental management |  | Costa 2013b |  |  | |  |  | Verdelhos et al., 2015 | |
|  |  | 3.1.2.3 | Macroinvertebrates | Traditional mollusc harvest | Tourism, local identity |  | Crespo et al., 2010 |  |  | |  |  | Verdelhos et al., 2015 | |
|  | Estuarine littoral mud | 3.1.1.1 | Macroinvertebrates | Recreational mollusc harvest | Recreation; nature-based recreation |  | Crespo et al., 2010 |  |  | |  |  | Verdelhos et al., 2015 | |
|  |  | 3.1.2.1 | Macroinvertebrates | Site of special scientific interest: RAMSAR site and Important Bird and Biodiversity Area (IBA) | Knowledge about the environment and nature |  | Verdelhos et al., 2015; Costa et al., 2013b | BirdLife International, 2019 |  | |  |  | Verdelhos et al., 2015 | |
|  |  | 3.1.2.2 | Macroinvertebrates | Site used for *insitu* teaching and conservation activities | Skills or knowledge about environmental management |  | Costa et al., 2013b |  |  | |  |  | Verdelhos et al., 2015 | |
|  | Estuarine seagrass bed | 3.1.2.1 | Zostera noltii | Site of special scientific interest | Knowledge about the environment and nature |  | Cardoso et al ., 2004b; Lillebø et al., 1999b; Rodrigues et al., 2015 |  |  | |  |  |  | |
|  |  | 3.1.1.2 | Seagrasses' biodiversity | Species of interest to birdwatchers | de-stressing or mental health; eco-tourism |  | Lopes et al., 2002; Cardoso et al ., 2004b; | Cruz et al., 2014 |  | |  |  |  | |
|  |  | 3.1.2.2 | Zostera noltii | Site used for *insitu* teaching and conservation activities | Skills or knowledge about environmental management |  | Costa et al., 2013b |  |  | |  |  |  | |
|  |  | 3.2.1.3 | Macrophytes; Birds; Macroinvertebrates | Archive records or collections | Nature films |  |  |  | [Mondego documentary](https://www.youtube.com/watch?v=ztT9UXinq3E),2011 | |  | Freitas, 2014 |  | |
|  |  | 3.1.2.4 | Zostera noltii | Area of Outstanding Natural Beauty; panorama site | Artistic inspiration |  | Lopes et al., 2002; Cardoso et al ., 2004b | Cruz et al., 2014 |  | |  |  |  | |
|  |  | 3.2.1.1 | Flamingos | Presence of iconic species: Flamingos | Social cohesion, cultural icon | Pinto et al 2010 | Múrias et al., 2002 |  |  | |  |  | Múrias et al., 2002 | |
|  |  | 3.2.2.1 | Zostera noltii | Areas designated as wilderness | Mental/Moral well-being | Pinto et al., 2010 | Lopes et al., 2002; Castro and Freitas 2011; |  |  | |  |  |  | |
|  |  | 3.2.2.2 | Zostera noltii | Endangered species or habitat | Moral well-being |  | Neto et al., 2013; Leston et al., 2008 |  |  | |  |  |  | |
|  | Estuarine sublittoral granule and very coarse to coarse sands | 3.1.2.1 | Macroinvertebrates | Site of special scientific interest | Knowledge about the environment and nature |  | Verdelhos et al., 2015 |  |  | |  |  | Verdelhos et al., 2015 | |
|  |  | 3.1.2.2 | Macroinvertebrates | Site used for *insitu* teaching and conservation activities | Skills or knowledge about environmental management |  | Costa et al., 2013c |  |  | |  |  | Verdelhos et al., 2015 | |
|  | Estuarine sublittoral sandy mud and very fine to medium sands | 3.1.2.1 | Macroinvertebrates | Site of special scientific interest | Knowledge about the environment and nature |  | Verdelhos et al., 2015 |  |  | |  |  | Verdelhos et al., 2015 | |
|  |  | 3.1.2.2 | Macroinvertebrates | Site used for *insitu* teaching and conservation activities | Skills or knowledge about environmental management |  | Costa et al., 2013c |  |  | |  |  | Verdelhos et al., 2015 | |
|  | Estuarine sublittoral mud | 3.1.2.1 | Macroinvertebrates | Site of special scientific interest | Knowledge about the environment and nature |  | Verdelhos et al., 2015 |  |  | |  |  | Verdelhos et al., 2015 | |
|  |  | 3.1.2.2 | Macroinvertebrates | Site used for *insitu* teaching and conservation activities | Skills or knowledge about environmental management |  | Costa et al., 2013c |  |  | |  |  | Verdelhos et al., 2015 | |
|  | Estuarine pelagic waters of the South Mondego Branch and Pranto River | 3.1.1.1 | Fish | Recreational fishery | Recreation; nature-based recreation |  |  |  | Fernandes, 2015 | |  |  | Vieira et al., 2018; Primo et al., 2018 | |
|  |  | 3.1.2.1 | Fish, zooplankton, phytolankton | Site of special scientific interest | Knowledge about the environment and nature |  | D'Ambrosio et al., 2016; Filimonova et al., 2016; Primo et al., 2018; Vieira et al., 2018 |  |  | |  |  | D'Ambrosio et al., 2016; Filimonova et al., 2016; Primo et al., 2018; Vieira et al., 2018 | |
|  |  | 3.1.2.2 | Fish, zooplankton, phytolankton | Site used for *insitu* teaching and conservation activities | Skills or knowledge about environmental management |  | Costa et al., 2013c |  |  | |  |  | D'Ambrosio et al., 2016; Filimonova et al., 2016; Primo et al., 2018; Vieira et al., 2018 | |
|  |  | 3.1.2.3 | Fish | Recreational fishery | Tourism, local identity |  |  |  | Fernandes, 2015 | |  |  | Vieira et al., 2018; Primo et al., 2018 | |
|  |  | 3.2.1.3 | Macrophytes; Birds; Macroinvertebrates | Archive records or collections | Books |  |  |  | Estorias do Mondego,2019 | |  | Freitas, 2014 |  | |
|  | Estuarine pelagic waters of the North Branch of the Mondego River and upstream system | 3.1.1.1 | Fish | Recreational fishery | Recreation; nature-based recreation |  |  |  | Fernandes, 2015 | |  |  | Vieira et al., 2018; Primo et al., 2018 | |
|  |  | 3.1.2.1 | Fish, zooplankton, phytolankton | Site of special scientific interest | Knowledge about the environment and nature |  | D'Ambrosio et al., 2016; Filimonova et al., 2016; Primo et al., 2018; Vieira et al., 2018 |  |  | |  |  | D'Ambrosio et al., 2016; Filimonova et al., 2016; Primo et al., 2018; Vieira et al., 2018 | |
|  |  | 3.1.2.2 | Fish, zooplankton, phytolankton | Site used for voluntary conservation activities | Skills or knowledge about environmental management |  | Costa et al., 2013c |  |  | |  |  | D'Ambrosio et al., 2016; Filimonova et al., 2016; Primo et al., 2018; Vieira et al., 2018 | |
|  |  | 3.1.2.3 | Fish | Recreational fishery | Tourism, local identity |  |  |  | Fernandes, 2015 | |  |  | Vieira et al., 2018; Primo et al., 2018 | |
|  |  | 3.2.1.3 | Fish | Archive records or collections | Books |  |  |  | Estorias do Mondego, 2019 | |  | Freitas, 2014 |  | |
| Coastal Waters | Sandy beaches | 3.1.2.1 | Sand shore Biological and Geomorphological elements | Site of special scientific interest | Knowledge about the environment and nature |  | Bessa et al., 2014; Bessa et al., 2017; Cunha et al., 2006 |  |  | |  |  | Bessa et al., 2014; Bessa et al., 2017; Cunha et al., 2006 | |
|  |  | 3.1.2.2 | Sand shore Biological and Geomorphological elements | Site used for insitu teaching and voluntary conservation activities | Skills or knowledge about environmental management |  | Bessa et al., 2014; Bessa et al., 2017; Cunha et al., 2006 |  |  | |  | Cravidão and Santos 2013 | Bessa et al., 2014; Bessa et al., 2017; Cunha et al., 2006 | |
|  |  | 6.1.1.1 | Beaches | Qualities of beaches that make them attractive to bathers and coastal tourists | Recreation, fitness; de-stressing or mental health; nature-based recreation |  |  |  | in situ observations | |  |  | Fernandes, 2015; Vinagre et al., 2017; Vinagre et al., 2016 | |
|  |  | 6.1.1.1 | *Monumento Natural do Cabo Mondego* | Qualities that make it attractive to hikers | Recreation, fitness; de-stressing or mental health; nature-based recreation |  |  |  | in situ observations | |  |  | Rocha et al., 2012; Trincão et al., 2018 | |
|  |  | 6.1.2.1 | *Monumento Natural do Cabo Mondego* | Site used for insitu teaching outreaching activities | Recreation |  |  |  | in situ observations | |  |  | Rocha et al., 2012; Trincão et al., 2018 | |
|  |  | 6.2.2.1 | *Monumento Natural do Cabo Mondego* | Distinctive geological formation or geomorphological feature. | Cultural meaning |  | Rocha et al., 2012; Trincão et al., 2018 |  |  | |  |  | Rocha et al., 2012; Trincão et al., 2018 | |
|  | Coastal rocky middle and supralitoral areas | 3.1.1.1 | Macroalgae; Macroinvertebrates; Echinodermes | Ecological qualities of rocky platforms that make it attractive to hiker | de-stressing or mental health; nature-based recreation |  | Vinagre et al., 2017; Cunha et al., 2006; Rodrigues et al., 2015 |  | in situ observations | |  | Depellegrin et al., 2012; Drius et al., 2019 | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.1.1.2 | Macroalgae; Macroinvertebrates; Echinodermes | Mix of species that can be enjoyed by wildlife watchers | de-stressing or mental health; eco-tourism |  | Vinagre et al., 2017; Cunha et al., 2006; Rodrigues et al., 2015 |  | in situ observations | |  | Depellegrin et al., 2012 | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.1.2.1 | Macroalgae; Macroinvertebrates; Echinodermes | Site of special scientific interest | Knowledge about the environment and nature |  | Vinagre et al., 2017; Cunha et al., 2006; Rodrigues et al., 2015 |  |  | |  |  | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.1.2.2 | Macroalgae; Macroinvertebrates; Echinodermes | Site used for insitu teaching and voluntary conservation activities | Skills or knowledge about environmental management |  |  |  | in situ observations | |  | Cravidão and Santos 2013 | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.1.2.3 | Macroinvertebrates | Harvestable Fish Bait (Sabellaria sp.) | Tourism, local identity |  |  |  |  | |  | Plicanti et al., 2016 | Vinagre et al., 2016 | |
|  |  | 3.1.2.4 | Macroalgae; Macroinvertebrates; Echinodermes | Area of Outstanding Natural Beauty; panorama site | Artistic inspiration |  |  |  | Guia de Bolso Às Voltas com o MARE,2019. | |  |  | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.2.1.3 | Macroalgae; Macroinvertebrates; Echinodermes | Archive records or collections | Nature films |  |  |  | Cabo Mondego Beach - Portugal,2018 | |  |  | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.2.2.1 | Macroalgae; Macroinvertebrates; Echinodermes | Areas designated as wilderness | Mental/Moral well-being |  |  |  | Guia de Bolso Às Voltas com o MARE,2019. | |  |  | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.2.2.2 | Macroalgae; macroinvertebrates | Endangered species or habitat | Moral well-being |  | Vinagre et al., 2016 |  |  | |  |  | Vinagre et al., 2016; Vinagre et al., 2017 | |
|  |  | 6.1.1.1 | Rocky Shores | Qualities of that make it attractive to hikers | Recreation, fitness; de-stressing or mental health; nature-based recreation |  |  |  | in situ observations | |  |  | Cunha et al., 2006; Trincão et al., 2018 | |
|  | Coastal supralittoral sedimentary areas | 3.1.2.1 | Talitrus sp. | Site of special scientific interest | Knowledge about the environment and nature |  | Bessa et al., 2014 |  |  | |  | Bessa et al., 2017 |  | |
|  |  | 3.1.2.2 | Talitrus sp. | Site used for insitu teaching | Skills or knowledge about environmental management |  | Bessa et al., 2014 |  |  | |  | Cravidão and Santos 2013 |  | |
|  |  | 6.1.1.1 | Sand | Qualities that make it attractive to hikers | Recreation, fitness; de-stressing or mental health; nature-based recreation |  | Cunha et al., 2006 |  |  | |  | Drius et al., 2019; Semeoshenkova and Newton 2015 |  | |
|  | Infra and circalittoral rocky areas | 3.1.1.2 | Macroalgae; Macroinvertebrates; Echinodermes | Mix of species that can be enjoyed by wildlife watchers | Recreation, fitness; de-stressing or mental health; eco-tourism |  | Vinagre et al., 2016; Vinagre et al., 2017 |  |  | |  |  | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.1.2.1 | Macroalgae; Macroinvertebrates; Echinodermes | Site of special scientific interest | Knowledge about the environment and nature |  | Vinagre et al., 2016; Vinagre et al., 2017 |  |  | |  |  | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.1.2.2 | Macroalgae; Macroinvertebrates; Echinodermes | Site used for insitu teaching | Skills or knowledge about environmental management |  |  |  | in situ observations | |  | Cravidão and Santos 2013 | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.2.1.3 | Macroalgae; Macroinvertebrates; Echinodermes | Archive records or collections | Nature films |  |  |  | Cabo Mondego Beach - Portugal, 2018 | |  |  | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.2.2.1 | Macroalgae; Macroinvertebrates; Echinodermes | Areas designated as wilderness | Mental/Moral well-being |  |  |  | Guia de Bolso Às Voltas com o MARE,2019. | |  |  | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 3.2.2.2 | Macroalgae; Macroinvertebrates; Echinodermes | Endangered species or habitat | Moral well-being |  | Vinagre et al., 2016 |  |  | |  |  | Gaspar et al., 2017b; Vinagre et al., 2017 | |
|  |  | 6.1.1.1 | Rocky shores | Qualities of rocky shores that make them attractive to bathers and coastal tourists | Recreation, fitness; de-stressing or mental health; nature-based recreation |  |  |  | Fernades, 2015 | |  |  | Cunha et al., 2006; Trincão et al., 2018 | |
|  | Infralittoral or circalittoral sedimentary areas | 3.1.2.1 | Macroalgae; Macroinvertebrates; Echinodermes | Site of special scientific interest | Knowledge about the environment and nature |  | Martins et al., 2013a; Martins et al., 2014b; Sampaio et al., 2016; Martins et al.,2013b |  |  | |  | Salominidi et al., 2012; Tempera et al., 2016 | Martins et al., 2013a; Martins et al., 2014b; Sampaio et al., 2016; Martins et al.,2013b | |
|  |  | 3.1.2.2 | Macroalgae; Macroinvertebrates; Echinodermes | Site used for insitu teaching | Skills or knowledge about environmental management |  |  |  | in situ observations | |  | Salominidi et al., 2012; Tempera et al., 2016 | Martins et al., 2013a;Martins et al., 2014b,; Sampaio et al., 2016; Martins et al., 2013b | |
|  |  | 6.1.2.1 | Sediments | Site of special scientific interest | Knowledge about the environment and nature |  | Fernández-Fernández et al., 2018 |  |  | |  | Salominidi et al., 2012; Tempera et al., 2016 |  | |
|  | Infralittoral fine sand or infralittoral muddy sand areas | 3.1.2.1 | Macroalgae; Macroinvertebrates; Echinodermes | Site of special scientific interest | Knowledge about the environment and nature |  | Martins et al.,2013a; Martins et al., 2014b; Sampaio et al., 2016; Martins et al., 2013b |  |  | |  | Salominidi et al., 2012; Tempera et al., 2016 | Martins et al.,2013a; Martins et al., 2014b; Sampaio et al., 2016; Martins et al., 2013b | |
|  |  | 3.1.2.2 | Macroalgae; Macroinvertebrates; Echinodermes | Site used for insitu teaching | Skills or knowledge about environmental management |  |  |  | in situ observations | |  | Salominidi et al., 2012; Tempera et al., 2016 | Martins et al., 2013a; Martins et al.,2014b; Sampaio et al., 2016; Martins et al.,2013b | |
|  |  | 6.1.2.1 | Sediments | Site of special scientific interest | Knowledge about the environment and nature |  | Fernández-Fernández et al., 2018 |  |  | |  | Salominidi et al., 2012; Tempera et al., 2016 |  | |
|  | Circalittoral fine sand or muddy sand areas | 3.1.2.1 | Macroalgae; Macroinvertebrates; Echinodermes | Site of special scientific interest | Knowledge about the environment and nature |  | Martins et al 2013a; Martins et al 2014b; Sampaio et al., 2016; Martins et al., 2013b |  |  | |  | Salominidi et al., 2012; Tempera et al., 2016 | Martins et al.,2013a; Martins et al., 2014b; Sampaio et al., 2016; Martins et al 2013b | |
|  |  | 3.1.2.2 | Macroalgae; Macroinvertebrates; Echinodermes | Site used for insitu teaching | Skills or knowledge about environmental management |  |  |  | in situ observations | |  | Salominidi et al., 2012; Tempera et al., 2016 | Martins et al.,2013a;Martins et al., 2014b; Sampaio et al., 2016; Martins et al., 2013b | |
|  |  | 6.1.2.1 | Sediments | Site of special scientific interest | Knowledge about the environment and nature |  | Fernández-Fernández et al., 2018 |  |  | |  | Salominidi et al., 2012; Tempera et al., 2016 |  | |
|  | Marine pelagic (0-200) waters | 3.1.1.1 | Water | Opportunities for swimming | Recreation, fitness; de-stressing or mental health; nature-based recreation |  | Carmo, 2013; Mendonça et al., 2012 |  |  | |  | Drius et al., 2019 |  | |
|  |  | 3.1.2.1 | Fish | Site of special scientific interest | Knowledge about the environment and nature |  | Cabral et al., 2003; Mesquita et al., 2017 | De Oliveira, 2015 |  | |  | Braga et al., 2017 | Baptista et al., 2013a; Cabral et al., 2003 | |
|  |  | 3.1.2.2 | Fish | Site used for insitu teaching | Skills or knowledge about environmental management |  |  | De Oliveira, 2015 |  | |  |  | Baptista et al., 2013a; Cabral et al., 2003 | |
|  |  | 3.1.2.3 | Fish | Recreational fishery | Tourism, local identity |  |  |  | Fernandes, 2015 | |  |  | Baptista et al., 2013a; Cabral et al., 2003 | |

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| Table S6. Pairwise comparison matrix for the criteria. | | | | | |
| Criteria | Abundance | Evidence | Strength of Evidence | Weight |  |
| Abundance | 1 | 2 | 3 | 0.539613 | CR = 0.01 |
| Evidence | 0.5 | 1 | 2 | 0.296962 |
| Strength of Evidence | 0.333333 | 0.5 | 1 | 0.163425 |
| CR - Consistency Ratio |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table S7. Pairwise comparison matrix for the subcriteria. | | | | | | | | | |
| Criteria ABUNDANCE | | | | | | | | | |
| Subcriteria | High | Moderately High | Moderate | Moderately Low | Low | No ES |  | Weight |  |
| 5 -High | 1 | 2 | 3 | 4 | 5 | 7 |  | 0.387 | CR = 0.023 |
| 4 - Moderately high | 0.50 | 1 | 2 | 3 | 4 | 6 |  | 0.252 |
| 3 - Moderate | 0.333 | 0.500 | 1 | 2 | 3 | 5 |  | 0.162 |
| 2 - Moderately Low | 0.250 | 0.333 | 0.500 | 1 | 2 | 3 |  | 0.098 |
| 1 - Low | 0.200 | 0.250 | 0.333 | 0.500 | 1 | 3 |  | 0.068 |
| 0 -No ES | 0.143 | 0.167 | 0.200 | 0.333 | 0.333 | 1 |  | 0.036 |
| Criteria EVIDENCE | | | | | | | | | |
| Subcriteria | 5 -Robust | 4 - Moderately Robust | 3 - Moderate | 2 - Moderately Fragile | 1 - Fragile | 0 -No Evidence |  | Weight |  |
| 5 -Robust | 1 | 2 | 3 | 4 | 5 | 7 |  | 0.383 | CR = 0.026 |
| 4 - Moderately Robust | 0.500 | 1 | 2 | 3 | 4 | 6 |  | 0.251 |
| 3 - Moderate | 0.333 | 0.500 | 1 | 2 | 3 | 5 |  | 0.161 |
| 2 - Moderately Fragile | 0.250 | 0.333 | 0.500 | 1 | 2 | 4 |  | 0.103 |
| 1 - Fragile | 0.200 | 0.250 | 0.333 | 0.500 | 1 | 3 |  | 0.067 |
| 0 -No Evidence | 0.143 | 0.167 | 0.200 | 0.250 | 0.333 | 1 |  | 0.034 |
| Criteria STRENGTH OF EVIDENCE | | | | | | | | | |
| Subcriteria | Strong | Moderately Strong | Moderate | Moderately Weak | Weak | Very Weak | No Evidence | Weight |  |
| Strong | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 0.354 | CR = 0.03 |
| Moderately Strong | 0.500 | 1 | 2 | 3 | 4 | 5 | 7 | 0.240 |
| Moderate | 0.333 | 0.500 | 1 | 2 | 3 | 4 | 6 | 0.159 |
| Moderately Weak | 0.250 | 0.333 | 0.500 | 1 | 2 | 3 | 5 | 0.105 |
| Weak | 0.200 | 0.250 | 0.333 | 0.500 | 1 | 2 | 4 | 0.069 |
| Very Weak | 0.167 | 0.200 | 0.250 | 0.333 | 0.500 | 1 | 3 | 0.047 |
| No Evidence | 0.125 | 0.143 | 0.167 | 0.200 | 0.250 | 0.333 | 1 | 0.025 |
| CR - Consistency ratio | | | | | | | | | |

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| Table S8.  Abundance of ecosystem services per habitat, ecosystem service category and type of evidence. | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | Habitat ID | Number of ES | | | | | | | | | | | | % of ES | | | | | | | | | | | |
|  |  | Provisioning | | | Regulation | | | Cultural | | | Total | | | Provisioning | | | Regulation | | | Cultural | | | Total | | |
|  |  | C | P | T | C | P | T | C | P | T | C | P | T | C | P | T | C | P | T | C | P | T | C | P | T |
| Transitional Waters | hab1 | 1 | 0 | 1 | 3 | 3 | 6 | 8 | 0 | 8 | 12 | 3 | 15 | 2.38 | 0.00 | 2.38 | 10.71 | 10.71 | 21.43 | 53.33 | 0.00 | 53.33 | 14.29 | 3.57 | 17.86 |
| hab2 | 1 | 4 | 5 | 1 | 1 | 2 | 3 | 0 | 3 | 5 | 5 | 10 | 2.38 | 9.52 | 11.90 | 3.57 | 3.57 | 7.14 | 20.00 | 0.00 | 20.00 | 5.95 | 5.95 | 11.90 |
| hab3 | 1 | 0 | 1 | 1 | 3 | 4 | 5 | 0 | 5 | 7 | 3 | 10 | 2.38 | 0.00 | 2.38 | 3.57 | 10.71 | 14.29 | 33.33 | 0.00 | 33.33 | 8.33 | 3.57 | 11.90 |
| hab4 | 2 | 3 | 5 | 3 | 1 | 4 | 14 | 0 | 14 | 19 | 4 | 23 | 4.76 | 7.14 | 11.90 | 10.71 | 3.57 | 14.29 | 93.33 | 0.00 | 93.33 | 22.62 | 4.76 | 27.38 |
| hab5 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 4 | 0 | 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.67 | 0.00 | 26.67 | 4.76 | 0.00 | 4.76 |
| hab6 | 1 | 6 | 7 | 3 | 1 | 4 | 4 | 0 | 4 | 8 | 7 | 15 | 2.38 | 14.29 | 16.67 | 10.71 | 3.57 | 14.29 | 26.67 | 0.00 | 26.67 | 9.52 | 8.33 | 17.86 |
| hab7 | 2 | 5 | 7 | 3 | 1 | 4 | 3 | 0 | 3 | 8 | 6 | 14 | 4.76 | 11.90 | 16.67 | 10.71 | 3.57 | 14.29 | 20.00 | 0.00 | 20.00 | 9.52 | 7.14 | 16.67 |
| hab8 | 1 | 0 | 1 | 3 | 3 | 6 | 8 | 0 | 8 | 12 | 3 | 15 | 2.38 | 0.00 | 2.38 | 10.71 | 10.71 | 21.43 | 53.33 | 0.00 | 53.33 | 14.29 | 3.57 | 17.86 |
| hab9 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 2 | 3 | 0 | 3 | 2.38 | 0.00 | 2.38 | 0.00 | 0.00 | 0.00 | 13.33 | 0.00 | 13.33 | 3.57 | 0.00 | 3.57 |
| hab10 | 1 | 2 | 3 | 2 | 1 | 3 | 2 | 0 | 2 | 5 | 3 | 8 | 2.38 | 4.76 | 7.14 | 7.14 | 3.57 | 10.71 | 13.33 | 0.00 | 13.33 | 5.95 | 3.57 | 9.52 |
| hab11 | 1 | 2 | 3 | 2 | 1 | 3 | 2 | 0 | 2 | 5 | 3 | 8 | 2.38 | 4.76 | 7.14 | 7.14 | 3.57 | 10.71 | 13.33 | 0.00 | 13.33 | 5.95 | 3.57 | 9.52 |
| hab12 | 3 | 3 | 6 | 1 | 3 | 4 | 5 | 0 | 5 | 9 | 6 | 15 | 7.14 | 7.14 | 14.29 | 3.57 | 10.71 | 14.29 | 33.33 | 0.00 | 33.33 | 10.71 | 7.14 | 17.86 |
| hab13 | 3 | 3 | 6 | 1 | 3 | 4 | 5 | 0 | 5 | 9 | 6 | 15 | 7.14 | 7.14 | 14.29 | 3.57 | 10.71 | 14.29 | 33.33 | 0.00 | 33.33 | 10.71 | 7.14 | 17.86 |
| Coastal Waters | hab14 | 1 | 0 | 1 | 2 | 1 | 3 | 6 | 0 | 6 | 9 | 1 | 10 | 2.38 | 0.00 | 2.38 | 7.14 | 3.57 | 10.71 | 40.00 | 0.00 | 40.00 | 10.71 | 1.19 | 11.90 |
| hab15 | 2 | 6 | 8 | 0 | 3 | 3 | 7 | 3 | 10 | 9 | 12 | 21 | 4.76 | 14.29 | 19.05 | 0.00 | 10.71 | 10.71 | 46.67 | 20.00 | 66.67 | 10.71 | 14.29 | 25.00 |
| hab16 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 0 | 3 | 4 | 0 | 4 | 0.00 | 0.00 | 0.00 | 3.57 | 0.00 | 3.57 | 20.00 | 0.00 | 20.00 | 4.76 | 0.00 | 4.76 |
| hab17 | 0 | 3 | 3 | 0 | 2 | 2 | 6 | 1 | 7 | 6 | 6 | 12 | 0.00 | 7.14 | 7.14 | 0.00 | 7.14 | 7.14 | 40.00 | 6.67 | 46.67 | 7.14 | 7.14 | 14.29 |
| hab18 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 3 | 0 | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 0.00 | 20.00 | 3.57 | 0.00 | 3.57 |
| hab18\_1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 3 | 0 | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 0.00 | 20.00 | 3.57 | 0.00 | 3.57 |
| hab18\_2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 3 | 0 | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 0.00 | 20.00 | 3.57 | 0.00 | 3.57 |
| hab19 | 2 | 12 | 14 | 1 | 1 | 2 | 4 | 0 | 4 | 7 | 13 | 20 | 4.76 | 28.57 | 33.33 | 3.57 | 3.57 | 7.14 | 26.67 | 0.00 | 26.67 | 8.33 | 15.48 | 23.81 |
| C - Current; P Potential; T – Total;  hab1 - Estuarine saltmarshes; hab 2 - Aquaculture tanks; hab3 - Water ponds; hab4 – Saltworks; hab5 - Estuarine littoral granule and very coarse to coarse sands; hab6 - Estuarine littoral sandy mud and very fine to medium sands; hab7 - Estuarine littoral mud; hab8 - Estuarine seagrass bed; hab9 - Estuarine sublittoral granule and very coarse to coarse sands; hab10 - Estuarine sublittoral sandy mud and very fine to medium sands; hab11 - Estuarine sublittoral mud; hab12 - Estuarine pelagic waters of the South Mondego Branch and Pranto River; hab13 - Estuarine pelagic waters of the North Branch of the Mondego River and upstream system; hab14 - Sandy beaches; hab15 - Coastal rocky middle and supralitoral areas; hab16 - Coastal supralittoral sedimentary areas; hab17 - Infra and circalittoral rocky areas; hab18 - Infralittoral or circalittoral sedimentary areas; hab18\_1 - Infralittoral fine sand or infralittoral muddy sand areas; hab18\_2 - Circalittoral fine sand or muddy sand areas; hab19 - Marine pelagic (0-200) waters. | | | | | | | | | | | | | | | | | | | | | | | | | |

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| Table S9. Analytic Hierarchy Process rank priorities per habitat. | | | | | | | | | | | | | | | | | |
|  | | AHP Priorities | | | | | | | | | | | | AHP Ranks | | | |
|  | Habitat ID | ahpA\_P | ahpA\_R | ahpA\_C | ahpA\_T | ahpEv\_P | ahpEv\_R | ahpEv\_C | ahpEv\_T | ahpS\_P | ahpS\_R | ahpS\_C | ahpS\_T | Ranking\_P | Ranking\_R | Ranking\_C | Ranking\_T |
| Transitional Waters | hab1 | 0.05 | 0.21 | 0.21 | 0.14 | 0.11 | 0.05 | 0.11 | 0.07 | 0.03 | 0.01 | 0.06 | 0.06 | 0.19 | 0.27 | 0.38 | 0.27 |
| hab2 | 0.14 | 0.09 | 0.14 | 0.14 | 0.03 | 0.05 | 0.11 | 0.05 | 0.01 | 0.06 | 0.06 | 0.01 | 0.18 | 0.19 | 0.31 | 0.20 |
| hab3 | 0.05 | 0.14 | 0.21 | 0.14 | 0.11 | 0.03 | 0.11 | 0.07 | 0.04 | 0.01 | 0.06 | 0.06 | 0.21 | 0.18 | 0.38 | 0.27 |
| hab4 | 0.14 | 0.14 | 0.21 | 0.21 | 0.03 | 0.07 | 0.11 | 0.07 | 0.02 | 0.06 | 0.04 | 0.04 | 0.18 | 0.27 | 0.36 | 0.32 |
| hab5 | 0.02 | 0.02 | 0.21 | 0.05 | 0.01 | 0.11 | 0.11 | 0.11 | 0.00 | 0.00 | 0.06 | 0.06 | 0.03 | 0.14 | 0.38 | 0.22 |
| hab6 | 0.14 | 0.14 | 0.21 | 0.14 | 0.03 | 0.07 | 0.01 | 0.07 | 0.01 | 0.06 | 0.06 | 0.06 | 0.18 | 0.27 | 0.28 | 0.27 |
| hab7 | 0.14 | 0.14 | 0.14 | 0.14 | 0.03 | 0.07 | 0.11 | 0.05 | 0.01 | 0.06 | 0.06 | 0.06 | 0.18 | 0.27 | 0.31 | 0.24 |
| hab8 | 0.05 | 0.21 | 0.21 | 0.14 | 0.11 | 0.05 | 0.11 | 0.07 | 0.06 | 0.01 | 0.06 | 0.06 | 0.22 | 0.27 | 0.38 | 0.27 |
| hab9 | 0.05 | 0.02 | 0.14 | 0.05 | 0.11 | 0.11 | 0.11 | 0.11 | 0.01 | 0.00 | 0.06 | 0.06 | 0.18 | 0.14 | 0.31 | 0.22 |
| hab10 | 0.09 | 0.14 | 0.14 | 0.09 | 0.03 | 0.07 | 0.11 | 0.07 | 0.01 | 0.06 | 0.06 | 0.06 | 0.13 | 0.27 | 0.31 | 0.22 |
| hab11 | 0.09 | 0.14 | 0.14 | 0.09 | 0.03 | 0.07 | 0.11 | 0.07 | 0.01 | 0.06 | 0.06 | 0.06 | 0.13 | 0.27 | 0.31 | 0.22 |
| hab12 | 0.14 | 0.14 | 0.21 | 0.14 | 0.05 | 0.03 | 0.11 | 0.07 | 0.01 | 0.01 | 0.03 | 0.01 | 0.20 | 0.18 | 0.35 | 0.22 |
| hab13 | 0.14 | 0.14 | 0.21 | 0.14 | 0.05 | 0.03 | 0.11 | 0.03 | 0.01 | 0.01 | 0.03 | 0.01 | 0.20 | 0.18 | 0.35 | 0.18 |
| Coastal Waters | hab14 | 0.05 | 0.14 | 0.21 | 0.14 | 0.11 | 0.07 | 0.11 | 0.07 | 0.04 | 0.06 | 0.06 | 0.06 | 0.21 | 0.27 | 0.38 | 0.27 |
| hab15 | 0.14 | 0.14 | 0.21 | 0.21 | 0.03 | 0.02 | 0.07 | 0.03 | 0.01 | 0.02 | 0.03 | 0.01 | 0.18 | 0.17 | 0.31 | 0.25 |
| hab16 | 0.02 | 0.05 | 0.14 | 0.05 | 0.01 | 0.11 | 0.11 | 0.11 | 0.00 | 0.06 | 0.06 | 0.06 | 0.03 | 0.22 | 0.31 | 0.22 |
| hab17 | 0.09 | 0.09 | 0.21 | 0.14 | 0.02 | 0.02 | 0.07 | 0.05 | 0.01 | 0.02 | 0.03 | 0.03 | 0.12 | 0.12 | 0.31 | 0.21 |
| hab18 | 0.02 | 0.02 | 0.14 | 0.05 | 0.01 | 0.11 | 0.11 | 0.11 | 0.00 | 0.00 | 0.06 | 0.06 | 0.03 | 0.14 | 0.31 | 0.22 |
| hab18\_1 | 0.02 | 0.02 | 0.14 | 0.05 | 0.01 | 0.11 | 0.11 | 0.11 | 0.00 | 0.00 | 0.06 | 0.06 | 0.03 | 0.14 | 0.31 | 0.22 |
| hab18\_2 | 0.02 | 0.02 | 0.14 | 0.05 | 0.01 | 0.11 | 0.11 | 0.11 | 0.00 | 0.00 | 0.06 | 0.06 | 0.03 | 0.14 | 0.31 | 0.22 |
| hab19 | 0.21 | 0.09 | 0.21 | 0.21 | 0.03 | 0.05 | 0.11 | 0.03 | 0.01 | 0.06 | 0.06 | 0.01 | 0.25 | 0.19 | 0.38 | 0.25 |
| AHP- Analytic Hierarchy Process; A - abundance; Ev - Evidence; S - Strength of Evidence; P - Provisioning; R - Regulation; C - Cultural; T - Total | | | | | | | | | | | | | | | | | |
| hab1 - Estuarine saltmarshes; hab 2 - Aquaculture tanks; hab3 - Water ponds; hab4 – Saltworks; hab5 - Estuarine littoral granule and very coarse to coarse sands; hab6 - Estuarine littoral sandy mud and very fine to medium sands; hab7 - Estuarine littoral mud; hab8 - Estuarine seagrass bed; hab9 - Estuarine sublittoral granule and very coarse to coarse sands; hab10 - Estuarine sublittoral sandy mud and very fine to medium sands; hab11 - Estuarine sublittoral mud; hab12 - Estuarine pelagic waters of the South Mondego Branch and Pranto River; hab13 - Estuarine pelagic waters of the North Branch of the Mondego River and upstream system; hab14 - Sandy beaches; hab15 - Coastal rocky middle and supralitoral areas; hab16 - Coastal supralittoral sedimentary areas; hab17 - Infra and circalittoral rocky areas; hab18 - Infralittoral or circalittoral sedimentary areas; hab18\_1 - Infralittoral fine sand or infralittoral muddy sand areas; hab18\_2 - Circalittoral fine sand or muddy sand areas; hab19 - Marine pelagic (0-200) waters. | | | | | | | | | | | | | | | | | |

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