Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

NATIONAL LEVEL

1. General information

1.1 Member State	**GR**
1.2 Habitat code	**1150 - Coastal lagoons**

2. Maps

2.1 Year or period	2015
2.3 Distribution map	Yes
2.3 Distribution map Method used	Based mainly on extrapolation from a limited amount of data
2.4 Additional maps	Yes

BIOGEOGRAPHICAL LEVEL

3. Biogeographical and marine regions

3.1 Biogeographical or marine region where the habitat occurs	**Mediterranean (MED)**
3.2 Sources of information	• Christia, C., Tziortzis, I., Fyttis, G., Kashta, L., & Papastergiadou, E. (2011). A survey of the benthic aquatic flora in transitional water systems of Greece and Cyprus (Mediterranean Sea). Botanica marina, 54(2), 169-178. • Christia, C., Giordani, G., & Papastergiadou, E. (2014). Assessment of ecological quality of coastal lagoons with a combination of phytobenthic and water quality indices. Marine pollution bulletin, 86(1), 411-423. • Christophoridis, A., Stamatis, N., & Orfanidis, S. (2007). Sediment heavy metals of a Mediterranean coastal lagoon: Agiasma, Nestos Delta, Eastern Macedonia (Greece). Transitional Waters Bulletin, 1(4), 33-43. • HCMR, 2014. Monitoring of coastal and transitional waters in Greece under the article 8 of the Water Framework Directive (WFD 2000/60/EC), Simboura N & P Panagiotidis (eds). HCMR Annual Report 2013, 145pp (in Greek) • HCMR, 2013. Monitoring of coastal and transitional waters in Greece under the article 8 of the Water Framework Directive (WFD 2000/60/EC), Simboura N & P Panagiotidis (eds). HCMR Annual Report 2012, 123pp (in Greek) • HCMR Technical Reports (2007-2014). • HCMR unpubl data (2007-2014). • Christia, C., Tziortzis, I., Fyttis, G., Kashta, L. & Papastergiadou, E. (2011). A survey of the benthic aquatic flora in transitional water systems of Greece and Cyprus (Mediterranean Sea). Botanica marina 54(2): 169-178. • Markou, D. A., Sylaios, G. K., Tsihrintzis, V. A., Gikas, G. D., & Haralambidou, K. (2007). Water quality of Vistonis Lagoon, Northern Greece: seasonal variation and impact of bottom sediments. Desalination, 210(1), 83-97. • Orfanidis, S., Pinna, M., Sabetta, L., Stamatis, N. and Nakou, K. (2008), Variation of structural and functional metrics in macrophyte communities within two habitats of eastern Mediterranean coastal lagoons: natural versus human effects. Aquatic Conserv: Mar. Freshw. Ecosyst., 18: S45–S61. • Simboura, N. & S. Reizopoulou, 2008. An intercalibration of classification metrics of benthic macroinvertebrates in coastal and transitional ecosystems of the Eastern Mediterranean ecoregion (Greece). Marine Pollution Bulletin 56:116. • ΙΧΘΥ.Κ.Α., 2001. Μελέτη Οργάνωσης & Λειτουργίας Αλιευτικής Εκμετάλλευσης των Λιμνοθαλασσών. • Φυττής Γ., 2011. Παρακολούθηση της οικολογικής ποιότητας των λιμνοθαλασσών Κοτύχι & Πρόκοπος της Δ. Ελλάδας : ανάλυση των βιοκοινωνιών

των υδρόβιων μακρόφυτων και μακροασπόνδυλων στα πλαίσια εφαρμογής της οδηγίας 2000/60/ΕΕ για τα ύδατα. Master Thesis, Πανεπιστήμιο Πατρών, 272σελ.
• WWF Ελλάς, Ελληνική Ορνιθολογική Εταιρία & ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ Περιβάλλοντος και Πολιτισμού, 2009. Ελληνικοί Υγρότοποι Ραμσάρ: Αξιολόγηση Προστασίας και Διαχείρισης. Αθήνα. Φεβρουάριος 2009.
• Zogaris S, Kapsimalis V & S. Reizopoulou, 2003. Coastal lagoons in the Amvrakikos Gulf (Greece): Conservation evaluation and Typology development using an integrated river basin-coastal zone approach. International Conference on Southern European Coastal Lagoons: The Influence of River Basin-Coastal Zone interactions, 10-12 November, Ferrara, Italy.

4. Range

4.1 Surface area	4247,15	
4.2 Short-term trend Period	2007-2018	
4.3 Short-term trend Direction	Stable (0)	
4.4 Short-term trend Magnitude	a) Minimum	b) Maximum
4.5 Short-term trend Method used	Based mainly on extrapolation from a limited amount of data	
4.6 Long-term trend Period		
4.7 Long-term trend Direction		
4.8 Long-term trend Magnitude	a) MInimum	b) Maximum
4.9 Long-term trend Method used	Based mainly on extrapolation from a limited amount of data	
4.10 Favourable reference range	a) Area (km²)	
	b) Operator	Approximately equal to (≈)
	c) Unknown	Yes
	d) Method	Most major 1150 Habitat Types in Greece have been largely identified using available georeferenced satellite imagery (e.g. Google Earth) and included in the calculation of its range within the national borders. Although quality of these ecosystems is systematically deteriorating, their large-scale extent may be regarded as stable.
4.11 Change and reason for change in surface area of range	Improved knowledge/more accurate data Use of different method	
	The change is mainly due to:	Improved knowledge/more accurate data
4.12 Additional information		

5. Area covered by habitat

5.1 Year or period	2015-015-			
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value	385,54
5.3 Type of estimate	Minimum			
5.4 Surface area Method used	Based mainly on extrapolation from a limited amount of data			
5.5 Short-term trend Period	2007-2018			
5.6 Short-term trend Direction	Decreasing (-)			
5.7 Short-term trend Magnitude	a) Minimum	b) Maximum	c) Confidence interval	
5.8 Short-term trend Method used	Based mainly on extrapolation from a limited amount of data			

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5.9 Long-term trend Period			
5.10 Long-term trend Direction			
5.11 Long-term trend Magnitude	a) Minimum	b) Maximum	c) Confidence interval
5.12 Long-term trend Method used			
5.13 Favourable reference area	a) Area (km²)		
	b) Operator	More than (>)	
	c) Unknown	Yes	
	d) Method	Although highly dynamic and naturally variable in size and structure, coastal lagoons and their surrounding wetlands (largely inseparable and interdependent systems) are known to have been losing ground to a number of anthropogenic pressures such as damming, water flow modifications, agricultural activities, etc.	
5.14 Change and reason for change in surface area of range	Improved knowledge/more accurate data Use of different method		
	The change is mainly due to:	Improved knowledge/more accurate data	
5.15 Additional information	The surface area of the habitat (5.2) is reported as equal to the area of the habitat within the Natura 2000 network (pSCIs, SCIs and SACs) (11.1), because no recent data are available regarding its distribution outside the network.		

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km²)	Minimum 0	Maximum 0
	b) Area in not-good condition (km²)	Minimum 77,11	Maximum 77,11
	c) Area where condition is not known (km²)	Minimum 308,43	Maximum 308,43
6.2 Condition of habitat Method used	Complete survey or a statistically robust estimate		
6.3 Short-term trend of habitat area in good condition Period	20072018		
6.4 Short-term trend of habitat area in good condition Direction	Unknown (x)		
6.5 Short-term trend of habitat area in good condition Method used	Insufficient or no data available		
6.6 Typical species	Has the list of typical species changed in comparison to the previous reporting period?	No	
6.7 Typical species Method used	The list of typical species presented here follows the phytosociological criteria set by Dafis et al. (2001), updated by recent phytosociological studies. To assess the ecological status of the Habitat Type however, multi-specific approaches have been applied based on various biotic indices which take into account the composition and relative abundance of the invertebrate (infaunal) communities of benthic sediments (Simboura & Reizopoulou, 2008).		
6.8 Additional information	Assumption: 20% of habitat area is estimated to be in not-good condition.		

7. Main pressures and threats

7.1 Characterisation of pressures/threats

Pressure	Ranking

Mixed source marine water pollution (marine and coastal) (J02)	M
Physical alteration of water bodies (K05)	H
Marine fish and shellfish harvesting (professional, recreational) activities causing physical loss and disturbance of seafloor habitats (G03)	M
Marine aquaculture generating marine pollution (G16)	M
Sports, tourism and leisure activities (F07)	M
Creation or development of sports, tourism and leisure infrastructure (outside the urban or recreational areas) (F05)	M
Other human intrusions and disturbance not mentioned above (H08)	H
Change of habitat location, size, and / or quality due to climate change (N05)	H
Sea-level and wave exposure changes due to climate change (N04)	M

Threat	Ranking
Agricultural activities generating marine pollution (A28)	H
Physical alteration of water bodies (K05)	H
Marine fish and shellfish harvesting (professional, recreational) activities causing physical loss and disturbance of seafloor habitats (G03)	M
Marine aquaculture generating marine pollution (G16)	M
Sports, tourism and leisure activities (F07)	M
Creation or development of sports, tourism and leisure infrastructure (outside the urban or recreational areas) (F05)	M
Other human intrusions and disturbance not mentioned above (H08)	H
Change of habitat location, size, and / or quality due to climate change (N05)	H
Conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions) (F01)	M
Sea-level and wave exposure changes due to climate change (N04)	M

7.2 Sources of information	PRESSURES: Based exclusively or to a larger extent on real data from sites/occurrences or other data sources. THREATS: Expert opinion.
7.3 Additional information	

8. Conservation measures

8.1 Status of measures	a) Are measures needed?	Yes
	b) Indicate the status of measures	Measures identified, but none yet taken

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8.2 Main purpose of the measures taken

8.3 Location of the measures taken

8.4 Response to the measures

8.5 List of main conservation measures

Adopt climate change mitigation measures (CN01)

Reduce impact of multi-purpose hydrological changes (CJ02)

Reduce impact of mixed source pollution (CJ01)

Reduce/eliminate marine pollution from agricultural activities (CA13)

Reduce impact of outdoor sports, leisure and recreational activities (CF03)

Reduce impact of other specific human actions (CH03)

Manage conversion of land for construction and development of infrastructure (CF01)

Habitat restoration of areas impacted by residential, commercial, industrial and recreational infrastructure, operations and activities (CF02)

Reduce/eliminate marine pollution from marine aquaculture (CG08)

Management of professional/commercial fishing (including shellfish and seaweed harvesting) (CG01)

8.6 Additional information

9. Future prospects

9.1 Future prospects of parameters

a) Range	Good
b) Area	Poor
c) Structure and functions	Poor

9.2 Additional information

10. Conclusions

10.1. Range: Favourable (FV)

10.2. Area: Unfavourable - Inadequate (U1)

10.3. Specific structure and functions (incl. typical species): Unfavourable - Inadequate (U1)

10.4. Future prospects: Unfavourable - Bad (U2)

10.5 Overall assessment of Conservation Status: Unfavourable - Bad (U2)

10.6 Overall trend in Conservation Status: Deteriorating (-)

10.7 Change and reasons for change in conservation status and conservation status trend

a) Overall assessment of conservation status

No change

The change is mainly due to:

b) Overall trend in conservation status

No change

The change is mainly due to:

10.8 Additional information

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11. Natura 2000 (pSCIs, SCIs, SACs) coverage for Annex I habitat types

11.1 Surface area of the habitat type inside the pSCIs, SCIs and SACs network (in km² in biogeographical/ marine region)	a) Minimum b) Maximum c) Best single value 385,54
11.2 Type of estimate	Minimum
11.3 Surface area of the habitat type inside the network Method used	Complete survey or a statistically robust estimate
11.4 Short-term trend of habitat area in good condition within the network Direction	Unknown (x)
11.5 Short-term trend of habitat area in good condition within network Method used	Insufficient or no data available
11.6 Additional information	Habitat type for which either new Natura sites have been designated or former ones have been expanded to cover a bigger part of their surface area. The change in 11.1 (in comparison to the previous report) is due to the updated mapping datasets on terrestrial habitat types within the Natura 2000 network (pSCIs, SCIs and SACs), based on the most recent national project (results became available in 2018). As this project did not include the extended areas of the Natura 2000 sites, nor the newly proposed SCIs, the surface area reported is the minimum.

12. Complementary information

12.1 Justification of % thresholds for trends	
12.2 Other relevant information	Most of the collected data regarding habitat type 1150 status across Greece result from the HCMR Monitoring activities under the article 8 of the Water Framework Directive.