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

CODE: 3150

NAME: Natural eutrophic lakes with Magnopotamion or Hydrocharition — type vegetation

1. National Level

1.1 Maps

1.1.1 Distribution Map	Yes
1.1.2 Distribution Method	Estimate based on partial data with some extrapolation and/or modelling (2)
1.1.3 Year or period	2006-2012
1.1.4 Additional map	No
1.1.5 Range Map	Yes

2. Biogeographical Or Marine Level

2.1 Biogeographical Region

Mediterranean (MED)

2.2 Published

Dimopoulos P., Xystrakis F. and Tsiripidis I. 2014. Deliverable A1. Final Catalogue of Habitat Types – 1st edition. Ministry of Environment, Energy and Climate Change, OIKOM Ltd - E. Alexandropoulou - A. Glavas, Athens, pages 54.

Dimopoulos P., Fotiadis G., Tsiripidis I., Panitsa M. and Karadimou E. 2014. Deliverable A2. Report and Literature Database on Habitat Types of Greece – 1st edition. Ministry of Environment, Energy and Climate Change, OIKOM Ltd - E. Alexandropoulou - A. Glavas, Athens, pages 210.

Tsiripidis I., Xystrakis F., Kasampalis D., Mastrogianni A., Strid A. and Dimopoulos P., 2014. Deliverable A4. Potential Distribution Maps of Habitat Types – 1st edition. Ministry of Environment, Energy and Climate Change, OIKOM Ltd - E. Alexandropoulou - A. Glavas, Athens, Athens, pages 176.

Dimopoulos P., Tsiripidis I., Xystrakis F., Panitsa M., Fotiadis G., Kallimanis A.S. and Kazoglou I. 2014. Deliverable A6. Explanatory Implementation Manual for the Conservation Degree Assessment of Habitat Types – 1st edition. Ministry of Environment, Energy and Climate Change, OIKOM Ltd - E. Alexandropoulou - A. Glavas, Athens, pages 35. (with Annexes: I. Habitat types protocols, pages 600; II. Explanatory notes on the habitat types protocols selection, pages 4; III. Correspondence of Habitat types protocols with the clusters of vegetation relevés (excel file).

Dimopoulos P., Tsiripidis I., Xystrakis F., Kallimanis A.S and Panitsa M. 2014. Deliverable A7. Preliminary Analysis of the Field Data for the Habitat Types – 1st edition. Ministry of Environment, Energy and Climate Change, OIKOM Ltd - E. Alexandropoulou - A. Glavas, Athens, pages 16.

Βραχνάκης Μ., Φωτιάδης Γ. & Καζόγλου Ι. 2011. Τύποι Οικοτόπων Εθνικού Πάρκ ου Πρεσπών – Αναγνώριση-Καταγραφή 2011. Εταιρία Προστασίας Πρεσπών, σελ . 101.

Dimopoulos P., Sýkora K.V., Gilissen C., Wiecherink D. & Georgiadis T. 2005. Vegetation ecology of Kalodiki fen (NW Greece). Biologia/Bratislava 60 (1): 69-82.

Ζώτος Α. & Δημόπουλος Π. 2005. Οικολογική έρευνα της βλάστησης των καλαμι ώνων και των υγρών λιβαδιών στις λίμνες Λυσιμαχεία και Τριχωνίδα (Δ. Ελλάδα). Πρακτικά 10ου Πανελλήνιου Επιστημονικού Συνεδρίου της Ελληνικής Βοτανική ς Εταιρίας, Ιωάννινα, 5-8 Μαίου 2005, σελ. 10 (σε CD).

Georgiadis Th., Dimopoulos P. & Dimitrellos G. 1997. The flora and vegetation of the Acheron Delta (W Greece) aiming at nature conservation. Phyton 37: 31-60.

Θεοδωρόπουλος Κ. 2001. Ζώνες βλάστησης και τύποι οικοτόπων του νομού Θεσ σαλονίκης. Επιστ. Επετ. Τμημ. Δασολογίας & Φυσικού Περιβάλλοντος ΜΔ: 353-381.

Παπαστεργιάδου Σ.Ε. 1990. Φυτοκοινωνιολογική και Οικολογική μελέτη των υδρ

όβιων μακρόφυτων (υδρόφυτων), στη Βόρεια Ελλάδα. Διδακτορική Διατριβή. Επ ιστ. Επετ. Τμημ. Βιολογίας της Σχολής Θετικών Επιστημών, ΑΠΘ, Παράρτημα Αρ. 24, σελ. 266 + Παράρτημα σελ. 69.
Παπαστεργιάδου Ε., Θεοχαρόπουλος Μ., Δημητρέλλος Γ., Παπαστεργιάδης Ε., Δ ημητριάδης Η. & Γεωργιάδης Θ. 2003. Τεχνική έκθεση για το έργο: Οικολογική έρ ευνα της υδρόβιας μακροφυτικής βλάστησης των υγροτόπων Χειμαδίτιδα-Ζάζαρ η (LIFE00NAT/GR/7242). Πανεπιστήμιο Πατρών, Σχολή Θετικών Επιστημών, Τμήμ α Βιολογίας, Τομέας Βιολογίας Φυτών, σελ. 39 + Χάρτης.
Παπαστεργιάδου Ε., Λαζαρίδου Ε. & Μπαμπαλώνας Δ. 2002. Διαχείριση και απο κατάσταση της υδρόβιας βλάστησης στη λίμνη Χειμαδίτιδα, Β. Ελλάδα. Πρακτικά 9ου Πανελλήνιου Επιστημονικού Συνεδρίου της Ελληνικής Βοτανικής Εταιρίας, Αργοστόλι Κεφαλονιάς, 9-12 Μαΐου 2002: 254-259.
Πυρινή ΧΒ. Χ. 2011. Το οικοσύστημα των λιμνών Βεγορίτιδας και Πετρών: χλωρίδ α, βλάστηση και φυτογεωγραφία. Διδακτορική Διατριβή. ΑΠΘ, σελ. 332 + Παράρ τημα.
Sarika M. 2012. Flora and vegetation of some coastal ecosystems of Sterea Ellas and eastern continental Greece. Lazaroa 33: 65-99.
Σαρίκα-Χατζηνικολάου Μ. 1999. Χλωριδική και φυτοκοινωνιολογική έρευνα υδά τινων οικοσυστημάτων της Ηπείρου. Διδακτορική Διατριβή. Εθνικό και Καποδιστ ριακό Πανεπιστήμιο Αθηνών. Σελ. 495 + 1 Πίνακας.
Sarika-Hatzinikolaou M., Yannitsaros A. & Babalonas D. 2003. The macrophytic vegetation of seven aquatic ecosystems of Epirus (NW Greece). Phytocoenologia 33(1): 93-151.
Σαρίκα-Χατζηνικολάου Μ., Μπαμπαλώνας Δ. & Γιαννίτσαρος Α. 1998. Φυτοκοιν ωνιολογική μελέτη της ελοφυτικής βλάστησης υδάτινων οικοσυστημάτων της Η πείρου. Πρακτικά 7ου Πανελλήνιου Επιστημονικού Συνεδρίου της Ελληνικής Βοτ ανικής Εταιρίας, Αλεξανδρούπολη, 1-4 Οκτωβρίου 1998: 134-141.
Φωτιάδης Γ., Καζόγλου Ι. & Μπούσμπουρας Δ. 2008. Τύποι βλάστησης της λίμνη ς Χειμαδίτιδας πριν από την τεχνητή άνοδο της στάθμης της. Πρακτικά 6ου Πανε λλήνιου Λιβαδοπονικού Συνεδρίου, Λεωνίδιο Αρκαδίας, 2-4 Οκτωβρίου 2008: 101-106.

2.3 Range of the habitat type in the biogeographical region or marine region

2.3.1 Surface area - Range (km²)	3529	
2.3.2 Range method used	Estimate based on partial data with some extrapolation and/or modelling (2)	
2.3.3 Short-term trend period	2001-2012	
2.3.4 Short-term trend direction	stable (0)	
2.3.5 Short-term trend magnitude	min	max
2.3.6 Long-term trend period		
2.3.7 Long-term trend direction	N/A	
2.3.8 Long-term trend magnitude	min	max
2.3.9 Favourable reference range	area (km²)	
	operator	approximately equal to (≈)
	unkown	No
	method	
2.3.10 Reason for change	Improved knowledge/more accurate data Use of different method	

2.4 Area covered by Habitat

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

2.4.1 Surface area (km²)	33,47	
2.4.2 Year or period	2000-2012	
2.4.3 Method used	Estimate based on partial data with some extrapolation and/or modelling (2)	
2.4.4 Short-term trend period	2001-2012	
2.4.5 Short-term trend direction	stable (0)	
2.4.6 Short-term trend magnitude	min	max
2.4.7 Short term trend method used	Estimate based on partial data with some extrapolation and/or modelling (2)	
2.4.8 Long-term trend period		
2.4.9 Long-term trend direction	N/A	
2.4.10 Long-term trend magnitude	min	max
2.4.11 Long term trend method used	N/A	
2.4.12 Favourable reference area	area (km)	
	operator	approximately equal to (≈)
	unknown	No
	method	
2.4.13 Reason for change	Improved knowledge/more accurate data Use of different method	

2.5 Main Pressures

Pressure	ranking	pollution qualifier(s)
modification of cultivation practices (A02)	low importance (L)	N/A
Fertilisation (A08)	low importance (L)	N/A
Agriculture activities not referred to above (A11)	low importance (L)	N/A
Urbanised areas, human habitation (E01)	low importance (L)	N/A
Discharges (E03)	low importance (L)	N/A
Structures, buildings in the landscape (E04)	low importance (L)	N/A
Outdoor sports and leisure activities, recreational activities (G01)	low importance (L)	N/A
Soil pollution and solid waste (excluding discharges) (H05)	low importance (L)	N/A
invasive non-native species (I01)	low importance (L)	N/A
human induced changes in hydraulic conditions (J02)	low importance (L)	N/A
Other ecosystem modifications (J03)	low importance (L)	N/A
Cultivation (A01)	low importance (L)	N/A

2.5.1 Method used – pressures: mainly based on expert judgement and other data (2)

2.6 Main Threats

Threat	ranking	pollution qualifier(s)
Cultivation (A01)	low importance (L)	N/A
modification of cultivation practices (A02)	low importance (L)	N/A
Fertilisation (A08)	low importance (L)	N/A
Agriculture activities not referred to above (A11)	low importance (L)	N/A
Urbanised areas, human habitation (E01)	low importance (L)	N/A
Discharges (E03)	low importance (L)	N/A
Structures, buildings in the landscape (E04)	low importance (L)	N/A

Outdoor sports and leisure activities, recreational activities (G01)	low importance (L)	N/A
Soil pollution and solid waste (excluding discharges) (H05)	low importance (L)	N/A
invasive non-native species (I01)	low importance (L)	N/A
human induced changes in hydraulic conditions (J02)	low importance (L)	N/A
Other ecosystem modifications (J03)	low importance (L)	N/A
abiotic (slow) natural processes (K01)	low importance (L)	N/A

2.6.1 Method used – threats	expert opinion (1)

2.7 Complementary Information

2.7.1 Species

Helosciadium nodiflorum (syn: Apium nodiflorum)
Callitriche stagnalis
Carex divisa
Ceratophyllum demersum
Ceratophyllum submersum
Eleocharis palustris;
Hydrocharis morsus-ranae
Juncus subulatus
Lemna gibba
Lemna minor
Myriophyllum spicatum
Myriophyllum verticillatum
Najas marina
Nasturtium officinale
Nymphaea alba
Nymphoides peltata
Persicaria amphibia
Polypogon maritimus;
Potamogeton crispus
Potamogeton lucens
Potamogeton natans
Potamogeton nodosus
Stuckenia pectinata (syn: Potamogeton pectinatus)
Potamogeton perfoliatus
Ranunculus sphaerospermus
Salvinia natans
Samolus valerandii
Scirpoides holoschoenus
Spirodela polyrhiza
Trapa natans

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

Utricularia vulgaris

Vallisneria spiralis

Veronica anagalloides

2.7.2 Species method used	Typical species were determined on the basis of a vegetation database, comprised of about 22000 sampling plots. First, a list of possible typical species was determined per habitat type, selecting the ones presenting a high fidelity value to the habitat types according the algorithm of Tsiripidis et al. (2009) and the phi coefficient value (Chytrý et al. 2002). Then typical species per habitat type were selected from the above-mentioned lists by expert judgment and using as criteria species niche breadth, their ability to comprise indicators of habitat types' conservation status and their function as keystone species. The nomenclature of the typical species follows Dimopoulos et al. (2013). References Chytrý , M., Tichý , L., Holt, J. & Botta-Duká t, J. 2002. Determination of diagnostic species with statistical fidelity measures. Journal of Vegetation Science 13: 79–90. Dimopoulos, P., Raus, Th., Bergmeier, E., Constantinidis, Th., Iatrou, G., Kokkini, S., Strid, A. & Tzanoudakis, D. 2013: Vascular plants of Greece: an annotated checklist. – Berlin: Botanischer Garten und Botanisches Museum Berlin-Dahlem, Freie Universität Berlin; Athens: Hellenic Botanical Society. Englera 31: 1-367. Tsiripidis, I., Bergmeier, E., Fotiadis, G. & Dimopoulos, P. 2009. A new algorithm for the determination of differential taxa. Journal of Vegetation Science 20: 233-240.
2.7.3 Justification of % - thresholds for trends	
2.7.4 Structure and functions - methods used	Complete survey/Complete survey or a statistically robust estimate (3)
2.7.5 Other relevant information	

2.8 Conclusions (assessment of conservation status at end of reporting period)

2.8.1 Range	assessment	Favourable (FV)
	qualifiers	N/A
2.8.2 Area	assessment	Favourable (FV)
	qualifiers	N/A
2.8.3 Specific structures and functions (incl Species)	assessment	Favourable (FV)
	qualifiers	N/A
2.8.4 Future prospects	assessment	Favourable (FV)
	qualifiers	N/A
2.8.5 Overall assessment of Conservation Status	Favourable (FV)	
2.8.5 Overall trend in Conservation Status	N/A	

3. Natura 2000 coverage conservation measures - Annex I habitat types on biogeographical level

3.1 Area covered by habitat

3.1.1 Surface area (km²)	min	21,6	max	21,6

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

3.1.2 Method used	Complete survey/Complete survey or a statistically robust estimate (3)
3.1.3. Trend of surface area	stable (0)

3.2 Conversation Measures

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
Establish protected areas/sites (6.1)	Legal Administrative One-off	high importance (H)	Inside	Maintain Long term