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0.1 Member State	**GR**
0.2.1 Species code	**5093**
0.2.2 Species name	**Barbus macedonicus**
0.2.3 Alternative species scientific name	N/A
0.2.4 Common name	Makedoniki Briana

1. National Level

1.1 Maps

1.1.1 Distribution Map	Yes
1.1.1a Sensitive species	No
1.1.2 Method used - map	Estimate based on partial data with some extrapolation and/or modelling (2)
1.1.3 Year or period	2007-2012
1.1.4 Additional map	Yes
1.1.5 Range map	Yes

2. Biogeographical Or Marine Level

2.1 Biogeographical Region

Mediterranean (MED)

2.2 Published sources

Στεφανίδης, Α. (1934). Συμβολή εις την μελέτην των ιχθύων των γλυκών υδάτων της Ελλάδος. Πρακτικά της Ακαδημίας Αθηνών. Συνεδρία της 10ης Ιουνίου 1943, σελ. 200-210.

Οικονομίδης, Π.Σ. (1973). Κατάλογος των ιχθύων της Ελλάδος. "Ελληνική Ωκεανολογία και Λιμνολογία", Πρακτικά του Ινστιτούτου Ωκεαν. και Αλιευτ. Ερευνών, 11, σελ. 421-598.

Imaca, C. (1981). La collection de Barbus d'Europe du Museum national d' Histoire naturelle (Cyprinidae, Pisces). Bull. Mus. natn. Hist. nat., Paris, 4e ser., 3, section A, no1: 277-307.

Bianco, P.G. (1998). Diversity of Barbinae fishes in southern Europe with description of a new genus and a new species (Cyprinidae). Ital. J. Zool., Suppl. 65: 125-136.

Tsigenopoulos, C.S., Karakousis, Y. & Berrebi, P. (1999). The North Mediterranean Barbus lineage: phylogenetic hypotheses and taxonomic implications based on allozyme data. J. Fish Biol., 54: 267-286.

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Bobori, DC., Economidis, PS. & Maurakis, EG. (2001). Freshwater Fish Habitat Science and Management in Greece. Aquatic Ecosystem Health & Management, 4 (4) : 381-391.

Machordom, A. & Doadrio, I. (2001). Evidence of a Cenozoic Betic-Kabilian connection based on freshwater fish phylogeography (Luciobarbus, Cyprinidae). Molecular Phylogenetics and Evolution, 18 (2): 252-263.

Maurakis, E.G., Pritchard, M.K. & Economidis, P.S. (2001). Historical relationships of mainland river drainages in Greece. BIOS (Macedonia, Greece), 6: 109-124.

Berrebi, P. & Tsigenopoulos, C.S. (2003). Phylogenetic organization of the genus Barbus sensu stricto: A review based on data obtained using molecular markers. In: The Freshwater Fishes of Europe, Vol. 5/II: Cyprinidae 2, Part II: Barbus, (Banarescu, P. & Bogutskaya, N. eds.). Wiebelsheim: Aula-Verlag GmbH.

Bobori, D.C. & Economidis, P.S. (2003). Fish biodiversity in the main Greek rivers and lakes. In review.

Economidis, P.S. (2003). Barbus macedonicus Karaman, 1928. In: The Freshwater Fishes of Europe, Vol. 5/II: Cyprinidae 2, Part II: Barbus, (Banarescu, P. & Bogutskaya, N. eds.). Wiebelsheim: Aula-Verlag GmbH, pp. 271-276.

Kottelat, M. and J. Freyhof, 2007. Handbook of European freshwater fishes. Publications Kottelat, Cornol, Switzerland. 646 p.

Οδηγία Πλαίσιο περί Υδάτων 2000/60/ΕΕ - Ανάπτυξη δικτύων και παρακολούθη ση ποιότητας των επιφανειακών, εσωτερικών, μεταβατικών και των παράκτιων υ δάτων της χώρας – Αξιολόγηση/Ταξινόμηση της οικολογικής τους κατάστασης. Π ρόγραμμα της Κεντρικής Υπηρεσία Υδάτων του ΥΠ.Ε.ΧΩ.Δ.Ε.. Ανάδοχος Κοινοπρα ξία ΕΛΚΕΘΕ - ΕΚΒΥ. ΥΠΕΧΩΔΕ 2008-2010.

ΕΤΜΕ ΙΛΑΡΙΩΝΑ – Μελέτη της ιχθυοπανίδας και προτάσεις για τη διατήρησή της , στην περιοχή κατασκευής του υδροηλεκτρικού έργου Ιλαρίωνα (Φορέας χρημα τοδότησης: Δ.Ε.Η. Α.Ε., Γενική Δ/νση Παραγωγής, Δ/νση Ανάπτυξης Υδροηλεκτρι κών Έργων, Διάρκεια: 2006 –2009 (24 μήνες).

2.3 Range

2.3.1 Surface area - Range (km²)	4450	
2.3.2 Method - Range surface area	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	Basic assumption: Favourable Reference Range = Surface Area Range (current range)
2.3.10 Reason for change	Improved knowledge/more accurate dataUse of different method	

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2.4 Population

2.4.1 Population size (individuals or agreed exception)	Unit	N/A		
	min		max	
2.4.2 Population size (other than individuals)	Unit	number of map 5x5 km grid cells (grids5x5)		
	min	178	max	178
2.4.3 Additional information	Definition of locality			
	Conversion method			
	Problems	Most data are described as semi-quantitative or qualitative. Few quantitative data. Too much variability between existing samples, especially between different river basins, making it difficult to extrapolate a number or a class for reporting population unit.		
2.4.4 Year or period	2006-2012			
2.4.5 Method – population size	Estimate based on partial data with some extrapolation and/or modelling (2)			
2.4.6 Short-term trend period	2001-2012			
2.4.7 Short term trend direction	stable (0)			
2.4.8 Short-term trend magnitude	min		max	confidence interval
2.4.9 Short-term trend method	Estimate based on partial data with some extrapolation and/or modelling (2)			
2.4.10 Long-term trend period				
2.4.11 Long term trend direction	N/A			
2.4.12 Long-term trend magnitude	min		max	confidence interval
2.4.13 Long-term trend method	N/A			
2.4.14 Favourable reference population	number			
	operator	approximately equal to (≈)		
	unknown	No		
	method	Basic assumption: Favourable Reference Population = value extracted from Additional Range Map		
2.4.15 Reason for change	Improved knowledge/more accurate data Use of different method			

2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km²)	4450
2.5.2 Year or period	2006-2012
2.5.3 Method used - habitat	Estimate based on partial data with some extrapolation and/or modelling (2)
2.5.4 a) Quality of habitat	Moderate
2.5.4 b) Quality of habitat - method	Based on partial data with some extrapolation and expert judgment.
2.5.5 Short term trend period	2001-2012
2.5.6 Short term trend direction	unknown (x)
2.5.7 Long-term trend period	
2.5.8 Long term trend direction	N/A
2.5.9 Area of suitable habitat (km²)	0
2.5.10 Reason for change	Improved knowledge/more accurate data Use of different method

2.6 Main Pressures

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Pressure	ranking	pollution qualifier(s)
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	low importance (L)	N/A
small hydropower projects, weirs (J02.05.05)	low importance (L)	N/A
large scale water deviation (J02.03.01)	medium importance (M)	N/A
Urbanised areas, human habitation (E01)	low importance (L)	N/A
intensive mixed animal grazing (A04.01.05)	low importance (L)	N/A
sand and gravel quarries (C01.01.01)	low importance (L)	N/A
Discharges (E03)	low importance (L)	N/A
surface water abstractions for agriculture (J02.06.01)	low importance (L)	N/A
invasive non-native species (I01)	low importance (L)	N/A
Fishing and harvesting aquatic resources (F02)	low importance (L)	N/A

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

2.7 Main Threats

Threat	ranking	pollution qualifier(s)
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	low importance (L)	N/A
small hydropower projects, weirs (J02.05.05)	low importance (L)	N/A
large scale water deviation (J02.03.01)	medium importance (M)	N/A
Urbanised areas, human habitation (E01)	low importance (L)	N/A
intensive mixed animal grazing (A04.01.05)	low importance (L)	N/A
sand and gravel quarries (C01.01.01)	low importance (L)	N/A
Discharges (E03)	low importance (L)	N/A
surface water abstractions for agriculture (J02.06.01)	low importance (L)	N/A
invasive non-native species (I01)	low importance (L)	N/A
Fishing and harvesting aquatic resources (F02)	low importance (L)	N/A
reduction or loss of specific habitat features (J03.01)	medium importance (M)	N/A
reduction in migration/ migration barriers (J03.02.01)	medium importance (M)	N/A
reduction in genetic exchange (J03.02.03)	medium importance (M)	N/A

2.7.1 Method used – threats	expert opinion (1)

2.8 Complementary Information

2.8.1 Justification of % thresholds for trends	The % threshold could not be used for the assessment since: a) a different method for assessing range was employed, compared to the 2nd Reporting
2.8.2 Other relevant Information	1. A rheophilic species found in Thessalian Pinios, Aliakmon, Loudias and Axios river basins. It inhabits deeper river sections and certain reservoirs (e.g. Polyphytos dam lake). Migrates during spawning and may therefore be impacted by any barriers to fish movment (dams, wiers, etc). 2. Basic Assumptions: i) "Surface Area Range" (field 2.3.1) = value extracted from "Range Map" (field 1.1.5). ii) "Favourable Reference Range" (field 2.3.9a) = a) "Surface Area Range" (field 2.3.1) OR b) value extracted from "Additional Reference Range Map" (provided). Depends on whether the Favourable range is equal

	or larger than actual species range. iii) "Population Size" (field 2.4.2) = value extracted from "Distribution Map" (field 1.1.1) or "Additional Distribution Map" (field 1.1.4) (when provided). iv) "Favourable Reference Population" (field 2.4.14) = a) "Population Size" (field 2.4.2) OR b) value extracted from "Additional Reference Range Map" (provided). Depends on whether the Favourable population is equal or larger than actual species population. v) Habitat "Area Estimation" (field 2.5.1) = "Distribution Map" (field 1.1.1) or "Additional Distribution Map" (field 1.1.4) (when provided).
2.8.3 Trans-boundary assessment	

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

2.9.1 Range	assessment	Favourable (FV)
	qualifiers	N/A
2.9.2. Population	assessment	Favourable (FV)
	qualifiers	N/A
2.9.3. Habitat	assessment	Inadequate (U1)
	qualifiers	unknown (x)
2.9.4. Future prospects	assessment	Inadequate (U1)
	qualifiers	unknown (x)
2.9.5 Overall assessment of Conservation Status	Inadequate (U1)	
2.9.5 Overall trend in Conservation Status	unknown (x)	

3. Natura 2000 coverage and conservation measures - Annex II species

3.1 Population

3.1.1 Population Size	Unit	N/A	
	min		max
3.1.2 Method used	N/A		
3.1.3 Trend of population size within	N/A		

3.2 Conversation Measures