



CY000LIM025 - GERMASOGEIA RESERVOIR

Description

The reservoir of Germasoyia LIM025 is located within the administrative area of the Akrounta community, within a distance of 0.78 km west from the centre of the Foinikaria community which is the nearest residential area.

It was constructed in 1968 within the bed of the river Germasoyeia (Amathos), in the confluence of three river tributaries, in a land which belongs to the Germasoyia Municipality as well as to the communities of Arkounta and Foinikaria. It has a capacity of 13,500,000 m³ and drains a catchment area of 156,70 km² to support the irrigation needs of an area of 1,924 hectares (1,2). According to the Water Development Department ranking, it belongs to the "Large Reservoirs" and in the list of the International Commission of Large Dams (1). More information - as for the criteria of ranking - are found in the "Archieve" of Wetland and on the website of WDD. It is fed by the catchment area and the presence of water is permanent. Downstream of the reservoir significant amounts of water are available for the enrichment of the underground pipe which feed the system of water supply of Limassol from pumping, for water supply of areas east of Limassol (3). For this reason is included into the Database of Protected Area of Dams of Drinking Water (4). Studies reported the importance of the linkage of the reservoir with the North Southevov in order to be used in its maximum, so much the dynamic of the reservoir itself, as well as the availability of the water sources of the river (2).

Within the Monitoring Scem of the Reservoir which falls within the provisions of the Directive 2000/60/ EK for Water (WDD), the average value of phosphorus in the reservoir is over the limit value (5) and its chemical status is evaluated as "lowered than good". The ecological condition / dynamic according to the phytoplankton, chlorophyll a and cyanobacteria is considered to be "good and above". For this reason, the total quality condition of the water of the reservoir is considered to be "medium" (5, 6). It has been recommended the increase in frequency of sampling for better observation.

The biological value is considered to be medium. The vegetation which is found in the wetland includes arborescence / shrubby species such as *Pistacia lentiscus*, *Nerium oleander*, *Ptilostemon chamaepeuce* subsp. *cyprius*, *Calicotome villosa*, *Tamarix* sp., reeds with *Arundo donax* and *Phragmites australis* and the species *Ecballium elaterium* *Verbascum sinuatum*. In the fauna ,a species of amphibian *Pelophylax bedriagae* was recorded in addition, a species of reptile *Stellagama stellio* *cypriaca* and the bird species *Anas crecca*, *Anas platyrhynchos*, *Aythya ferina*, *Actitis hypoleucos*, *Tringa ochropus*, *Ardea cinerea*, *Ardeola ralloides*, *Bubulcus ibis*, *Egretta garzetta*, *Columba palumbus*, *Alcedo atthis*, *Coracias garrulus*, *Falco peregrinus*, *Falco tinnunculus*, *Fulica atra*, *Carduelis chloris*, *Corvus corone*, *Corvus monedula*, *Hirundo rustica*, *Oenanthe cypriaca*, *Parus major*, *Phalacrocorax carbo*, *Tachybaptus ruficollis*. The bird fauna is more likely adaptive to the circumstances of food availability and/or whatever is offered by the river (2).

Within the reservoir leisure activities take place (rowing, leisure fishing, walks, motocross etc). In the catchment area there are arborescence cultivations fertilizers are also used. Continuous urbanization and Agricultural structures are also observed. The access to the area is relatively easy and there are paths and bridges.

The wetland falls within the Temporary Restricted Area Hunting (7) and within the Close Protection Zone of Dams of Drinking Water (4). Additionally it falls within the area of Nature Production Natura 2000 "Limassol Forest" as Location of Community Importance (8)

Reporting Period of Raw Data: 16/05/2014

Field Surveyors: Papatheodoulou A, Sergides L

(1) Christofides N., Kyrou K., Pisti E., Ioannou E., Augousti M., Hatziagiannis N. (2009). Dams of Cyprus. Water Development Department, Ministry of Agriculture Natural Resources and Environment

(2) Τμήμα Αναπτύξεως Υδάτων (2011). Εφαρμογή των Άρθρων 11, 13 και 15 της Οδηγίας Πλαίσιο Περί Υδάτων (2000/60/EK) στην Κύπρο. Παράρτημα II- Αναλυτικό Πρόγραμμα Μέτρων.

(3) Τμήμα Αναπτύξεως Υδάτων (2010). Εφαρμογή των Άρθρων 11, 13 και 15 της Οδηγίας Πλαίσιο Περί Υδάτων (2000/60/EK) στην Κύπρο. Σύμβαση Τ.Α.Υ. 97/2007. Προσχέδιο διαχείρισης λεκάνης απορροής ποταμού.

(4) Water Development Department Data (Accessed 07/2015)

(5) WL | Delft Hydraulics, ENVECO A.E., Δ. Αργυρόπουλος & Συνεργάτες (2004). Ανάλυση των επιπτώσεων. Έκθεση ανάλυσης επιπτώσεων για την εναρμόνιση σύμφωνα με την ενότητα 1.5 του Παραρτήματος II της Οδηγίας Πλαίσιο για τα Νερά.

(6) Τμήμα Αναπτύξεως Υδάτων (2009). Παροχή Συμβουλευτικών Υπηρεσιών για Αξιολόγηση των Αποτελεσμάτων των

Προγραμμάτων Παρακολούθησης για τα Επιφανειακά Ύδατα στα Πλαίσια του Άρθρου 8 της Οδηγίας 2000/60/ΕΚ. Σύμβαση ΤΑΥ 54/2009. Γ. Καραβοκύρης & Συνεργάτες Σύμβουλοι Μηχανικοί Α.Ε. Παναγιώτα Στυλιανή Καϊμάκη.

(7) Game and Fauna Service Data (Accessed 06/2015)

(8) BioCYPUS (2009). Electronic database. Department of Environment. Ministry of Agriculture Natural Resources and Environment.

Bibliographic Reference to Cyprus Wetlands:

Papathéodoulou A., Sergides L., Michael K., Emirzade T., Victora M., Anastasi A. 2015 - (continuous updating): Cyprus Wetlands - Cyprus Wetland Inventory. Published in <http://www.cypriuswetlands.org>, access [date].

General information

Basic information

Wetland location:	Inland
Wetland type:	Artificial
Natural / Artificial:	Reservoir
Area (Ha):	104.25171
Hydrological interaction with other wetland:	Yes - LIM081
Water salinity:	Fresh
Fresh water entry:	Catchment area (precipitation)
Surface water runoff:	Outflow controlled by spillway
Open water area (%):	> 95
Hydroperiod:	Permanent

Geographic information

Region:	AKROUNTA
Regional section:	LIMASSOL
Coordinates (WGS84):	33.090140 E - 34.753240 N

Biological significance

Biological significance:	Medium
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Ramsar wetland types

Ramsar type	Coverage (%)
6 -- Water storage areas; reservoirs/barrages/dams/impoundments (generally over 8 ha)	> 95

Protection statuses & other designations

Protection status

Protection status category	Protection status subcategory	Site name	Code	Coverage (%)	Legislation
Natura 2000 Area	Special Area of Conservation	DASOS LEMESOU	CY5000001	100	
Aquatic Protection	Close Protection Zone for Drinking Water Supply Re			100	
Aquatic Protection	Protection Zone for Drinking Water Drilling			100	Γερμασόγεια στις ζώνες της ομάδας γεωτρήσεων της κοιλάδας
Game Reserve Area	Temporary			100	
Planning Regime	Area of Landscape Protection		Z3	94	
Planning Regime	Other		Δα2	6	

Ecosystem Services, Activities & Impacts

Ecosystem Services

Type of Ecosystem service	Ecosystem service	Scale of Benefit	Importance
Cultural services	Recreation and tourism		
Provisioning services	Fresh water		
Regulatory services	Water regulation		
Supporting services	Provision of habitat		

Activities on wetland

Activities	Intensity
220 = Leisure fishing	Medium
502 = roads motorways	Low
507 = bridge viaduct	Low
530 = Improved access to site	High
600 = Sport and leisure structures	High
604 = circuit track	Low
621 = nautical sports	High
623 = motorised vehicles	Low
701 = water pollution	Low
703 = soil pollution	Low
709 = other forms or mixed forms of pollution	Low
853 = management of water levels	Low
948 = fire (natural)	Low
954 = invasion by a species	Low
965 = predation	Medium

Activities on drainage basin

Activities	Intensity
100 = Cultivation	Medium
107 = tree crops	Medium
120 = Fertilisation	Medium
162 = artificial planting	Low
230 = Hunting	Medium
401 = continuous urbanisation	Low
420 = Discharges	Medium
430 = Agricultural structures	Low
501 = paths tracks cycling tracks	Low
502 = roads, motorways	High
507 = bridge viaduct	Medium
530 = Improved access to site	High
600 = Sport and leisure structures	Low
850 = Modification of hydrographic functioning general	Low
890 = Other human induced changes in hydraulic conditions	Low

Impacts

Impact type	Intensity
AN- = Increase in noise	Medium
AS- = Loss of scenic value	Low
WG- = Drainage/Reduction of water level	Medium

Habitats & Vegetation

Habitat types

Habitat types	Coverage (%)
	5 - 25
CY17 Water-fringing beds of tall canes and medium tall grass beds	5 - 25

Vegetation types

Vegetation type	Coverage (%)
Alien Species	< 5
Emergent	5 - 25
Other	< 5
Shrubby / Arborescent	< 5
Wet meadow	< 5

Species

Flora

Species	Dominance	Reference
Acacia sp.	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Arundo donax	Dominant	A. Papatheodoulou, L. Sergides, 16/05/2014
Calicotome villosa	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Ceratonia siliqua	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Ecballium elaterium	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Eucalyptus sp.	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Juncus sp.	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Nerium oleander	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Olea europaea	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Phragmites australis	Dominant	A. Papatheodoulou, L. Sergides, 16/05/2014
Pistacia lentiscus	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Pistacia terebinthus	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Ptilostemon chamaepeuce subsp. cyprius	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Sarcopoterium spinosum	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Tamarix sp.	Present	A. Papatheodoulou, L. Sergides, 16/05/2014
Verbascum sinuatum	Present	A. Papatheodoulou, L. Sergides, 16/05/2014

Fauna

Mammals	Presence in wetland	References
Rousettus aegyptiacus (Geoffroy, 1810)		Benda et al. (2007)

Birds	Population	Nesting status	References
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Reptiles	Presence in wetland	References
Stellagama stellio cypriaca (Linnaeus, 1758)		A. Papatheodoulou, L. Sergides, 16/05/2014
Amphibians	Presence in wetland	References
Pelophylax bedriagae (Pallas 1771)		A. Papatheodoulou, L. Sergides, 16/05/2014
Invertebrates	Presence in wetland	References
-		A. Papatheodoulou, L. Sergides, 16/05/2014
Epallage fatime (Charpentier, 1840)		Odonata in resrevoirs
Selysiotthemis nigra (Vander Linden, 1825)		Odonata in resrevoirs

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BirdLife Cyprus monthly checklist, February 2011

BirdLife Cyprus monthly checklist, January 2010

BirdLife Cyprus monthly checklist, July & August 2005

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BirdLife Cyprus monthly checklist, May 2006

BirdLife Cyprus monthly checklist, May 2009

BirdLife Cyprus monthly checklist, May 2011

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BirdLife Cyprus monthly checklist, November 2011

BirdLife Cyprus monthly checklist, October 2008

BirdLife Cyprus monthly checklist, October 2009

BirdLife Cyprus monthly checklist, October 2010

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Representative Image & Map



LIM025

ΥΔΑΤΟΦΡΑΚΤΗΣ ΓΕΡΜΑΣΟΓΕΙΑΣ/ GERMASOGEIA RESERVOIR**Πρόγραμμα απογραφής των υγροτόπων της Κύπρου/ Inventory of the wetlands of Cyprus**

Δεδομένα Χάρτη: Google, DigitalGlobe

Map Data: Google, DigitalGlobe

 Όρια Υγροτόπου/ Wetland's Boundaries

TERRA CYPRIA
Το Κέντρο Ιατρικά Προσταγείας Τον Περιβάλλοντος
Της Στήλης Κοινωνικών Φορέσεων
Κέντρο Γενικής Κοινωνίας Υγείας


ΥΓΡΟΤΟΠΙΟ
Κύπρου