From ICONA document, Madrid, Sept. 1994

TRANSLATION FROM ORIGINAL SPANISH TEXT (6 Dec 1994, Dave Fawcett)

[Square brackets indicate translator's notes. The direct translations of Spanish common names may not always equal the common name used in English. I have left the translation in quotation marks (") where I felt that this may be the case. Spanish common names etc. that I could not translate have been left in italics. ~ Indicates text is present in the original but has not yet been translated.]

[Site ref: SP035]

# MARJAL DE PEGO-OLIVA

"Pego-Oliva Marsh"

### 1. PHYSICAL ENVIRONMENT

## 1.1. Geographical location and boundaries

The Marjal de Pego-Oliva, with an approx. area of 1,290 ha, is found in the extreme south of the Golfo [gulf] de Valencia, bounded to the north by the Sierra [mountain range] de Mustalla and the Río [river] Bullent, bounded to the east by the alluvial delta of the Pego plain, bounded to the south by the Sierra de Segaria and the Río Molinell, and bounded to the west by the Mediterranean Sea.

In terms of administration, the western half belongs to the province of Alicante (municipal area: Pego), and the eastern half to the province of Valencia (municipal area: Oliva).

### 1.2. Climate

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## 1.3. Hydrological and hydrographical characteristics

The Marjal [marsh] de Pego-Oliva is bounded by a mountainous border of an intensely fractured limestone-dolomite nature which explians the development of exokarstic [via underground drainage dissolved through limestone] springs and absorption. Its hydrological functioning is associated with regional subterrainean water flow systems whose supplies depend on annual precipitation, which are of the order of 900m in this area. The permanent water level is subject to seasonal variations but normally reaches very near the surface. The marsh extends over the central area of the catchment basin, topographically depressed in relation to nearby features and with a very low seawards gradient. Two main rivers, essentially fed karstically [via underground drainage dissolved through limestone], pass through the marsh. The Río Revolta used to flow through the marsh from north to south, fed by more than 30 springs from the Sierra [mountain range] de Mustalla. It used to maintain a constant flow, but went underground when drainage of [i.e. to dry-up] the marsh was attempted. Currently the Río Racons-Molinell persists with a constant regime, through its connection with the aquifers, and flows across the marsh through its southern flank, passing afterwards through the sandbar to the sea. The Río Vedat-Bullens remains from the original Río Revolta, and crosses the marsh through the north and empties, like the Racons-Molinell, into the sea through the sand-bar, though most of its water drains directly into the marsh. The water coming from the springs is generally fresh, given the short time it remains in the aquifer and the practical abscence of salts in the basin, but the seasonality and variability allows notable chemical changes in the wetland; above all through the influence of sea water. The highest indices of salinity are found in the immediate vicinity of the sandbar, and in the springs of the final stretch of the Río Racons.

The area depends hydrogeologically on three main undergound water reserves: Alineación ["line-up"/"assemblage"] Benicadell-Almirant-Mustalla; Unidad ["unit"] Alfaro-Migdia-Segaria and Plana de Gandía-Denia. The first two of these are aligned parallel to the Sierra de Mustella and Sierra de Segaria, and the third - perpendicular to the others - is of detrital [eroded] nature. The marsh is supplied with waters which rise to the surface from all three.

# 1.4. Geomorphology

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# 1.5. Flora/ vegetation communities

The variety of vegetation communities present in the marsh is possible thanks to a zonation of different water qualities and to the temporal and spatial water depth variations. Different biotopes are found in the area, such as

dunes, "malladas" [?artificial network of channels?], rivers, the marshy area, the cultivated areas, and the mountain chains.

[See second page of section 1.3. in original for community species lists, indicated by ~~~~ under the headings given below]

The aquatic communities are rich, owing to the prescence of talophytes and bryophtes like:

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The most characteristic communities are:

1. Floating aquatic vegetation

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2. Submerged aquatic vegetation

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3. Helophytic [?=emergent reedswamp?] vegetation

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### Sandbar:

Dune strands are preserved [? i.e "remain" or "are held together.."] with natural vegetation comprising the communities

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### Mountains:

Natural vegetation: scrubland (*Erico-Lavanduletum dentatae*), "coscojar" oakwood (*Querco-Pistecietum lentisci*), many low "pinadas" [areas with low pine trees] of *Pinus halepensis* and some relict "carrascal" oakwoods (*Rubio Quercetum rotundifoliae*).

### 1.6. Fauna. Vertebrate communities.

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# 2. LAND REGIME

### 2.1. Current land use

In the wetland:

- some very unintensive agricultural activity (fruit horticulture) on the west, south and east borders
- the area is considered a hunting reserve. More than 700 rifles belong to the Pego Hunting Society.
- sport fishing is carried out on the rivers and channels, mainly for "llisa" [? ] and eels.
- livestock herding is an important activity above all in spring and summer amounting to some 100 head of cattle and 1000 sheep.

In the catchment basin of the marsh:

the main economic activity is citrus cultivation, followed by non-irrigated cultivation, livestock, and the existence of a settlement of 400 chalets in the Sierra de Segaria should also be mentioned.

### 2.2. Ownership

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## 2.3. Form of Protection

The protection of the marsh as a National Park is pending the approval of the Law for Regulation of natural areas of the Valencian Community ["regional authority"]. The Plan for Regulation of Natural Resources for the marsh is

nearly finalized, which covers all of its subterrainean basin.

### 3. CRITERIA FOR INTERNATIONAL IMPORTANCE

### 3.1. Waterbird criteria

The marsh fulfills the A1 numerical criteria for resident waterbirds for the little bittern (*Ixobrychus minutus*), the purple heron (*Ardea purpurea*) and the black-winged stilt (*Himantopus himantopus*), all of these being breeders. Likewise, the A2 criteria are fulfilled for the "white-faced *fumarel*" (*Chydonias hybrida*) and "cerceta pardilla" (*Marmaronetta angustirostris*) which breed at the site, and the cattle egret *Bubuculus ibis* which winters there.

# 3.2. Botanical criteria

The marsh has features of international importance, according to the "botanical criteria for the evaluation of Spanish lakes and wetlands" drawn up by Santos Cirujano and others, for ICONA.

### Other criteria:

The marsh has one of the best populations of "samaruc" (Valencia hispanica).

### 4. MANAGEMENT PLAN

The marsh has no Management Plan, but the Plan for Regulation of Natural Resources is practically ready.