

2013



MOLINO DE MAREAS - SIGLO XX

13/07/2011 18:51



ÁNGEL LEÓN

Después de su etapa de formación,
Francia y Toledo, El Tambuche...

2007 Abre las puertas Aponiente,
C/Puerto Escondido

-años terribles, abocados al cierre,
nadar contracorriente

2010 Primera Estrella Michelin, regalo
de Dios.

2014 Segunda Estrella Michelin

2017 Tercera Estrella Michelin.



RUMBO AL MOLINO DE MAREAS EL CAÑO



29/10/2012 11:21

MOLINO DE MAREAS - SIGLO XX



MOLINO DE MAREAS - SIGLO XXI











Aponiente, World's Sustainable Restaurant 2022

RECURSOS

Mar
Territorio
Biodiversidad
Viñedos
Salinas
Paisaje
Historia

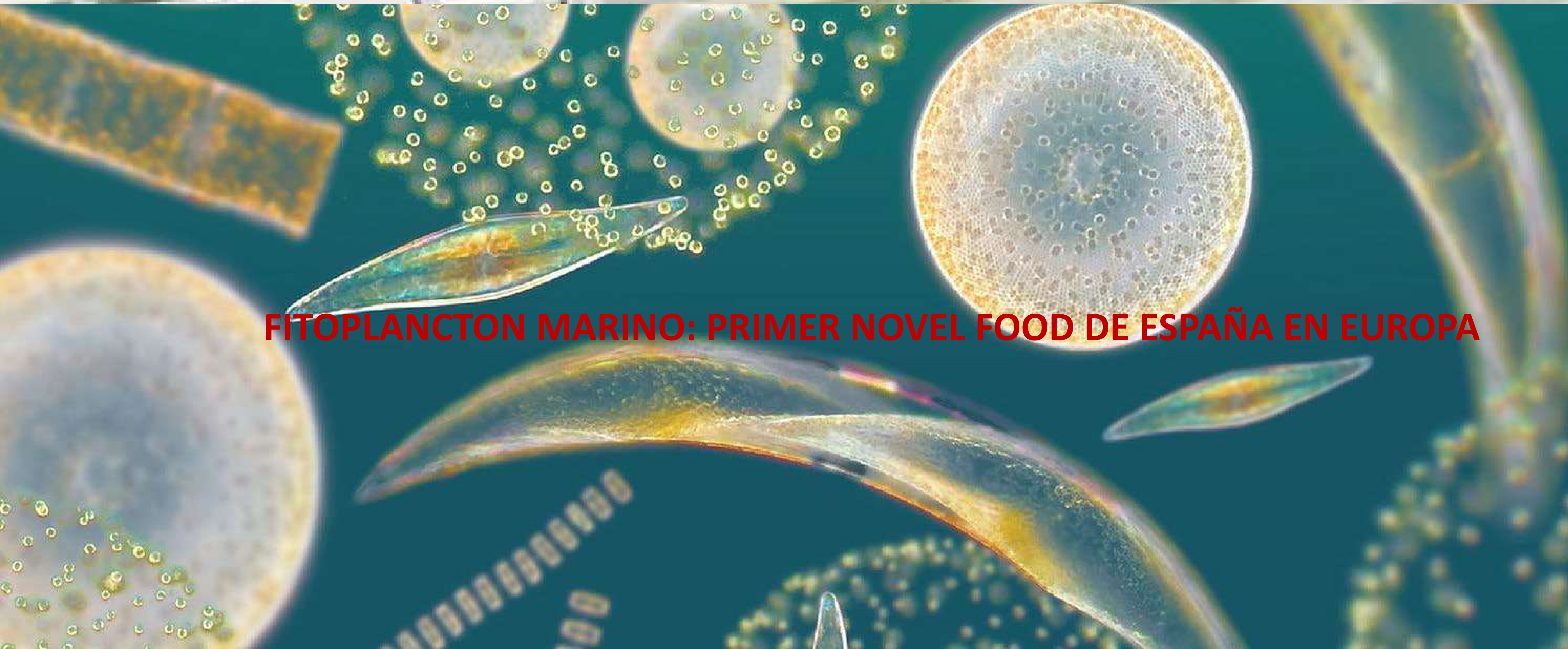
PRODUCTOS

Pescados
Algas
Marisco
Avifauna
Vino
Flor de Sal
Fotografía
Cultura

SERVICIOS

Ecoturismo
Observación
Experiencias
Despesques
Gastronomía
Productos alto valor
añadido
Servicios calidad
Arte, exposiciones





FITOPLANKTON MARINO: PRIMER NOVEL FOOD DE ESPAÑA EN EUROPA

CEREAL MARINO





SOJA MARINA



La gestion es clave para la conservación

...trabajamos por y para las personas...

porque sin marismeños no hay marismas vivas...

y sin marismas no tenemos biodiversidad...

ni sal, ni pescado ni productos que ofrecer...

un territorio vacío...

sin peces, sin pájaros, sin paisaje, sin vida...





Alianza Marismas del Guadalquivir – Doñana

A dream became true to save Nature and People

Dragados centenarios...

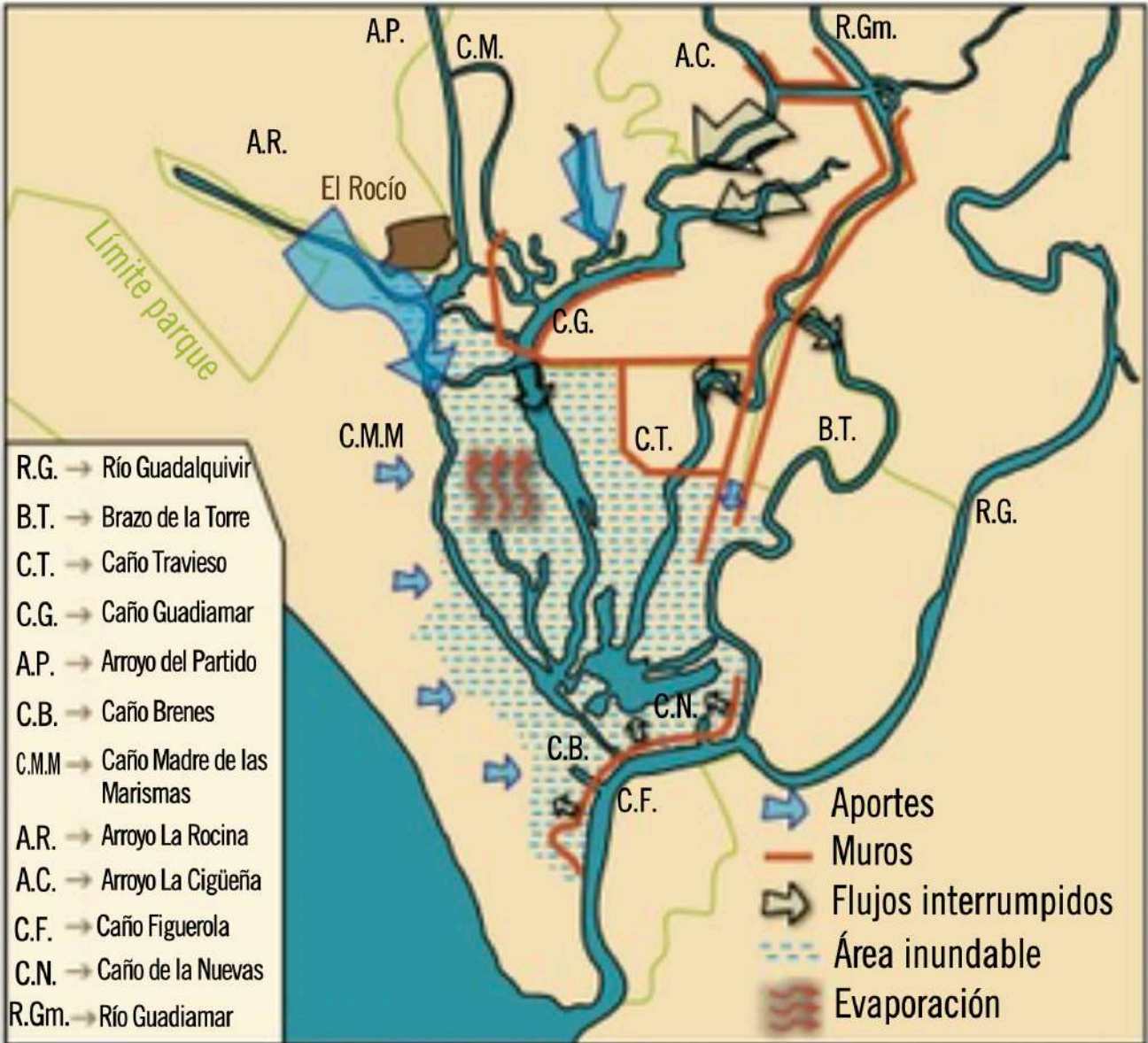
En 1680 la flota de Indias se traslada de Sevilla a Cádiz por la colmatación del Guadalquivir



Las cortas comienzan en 1795

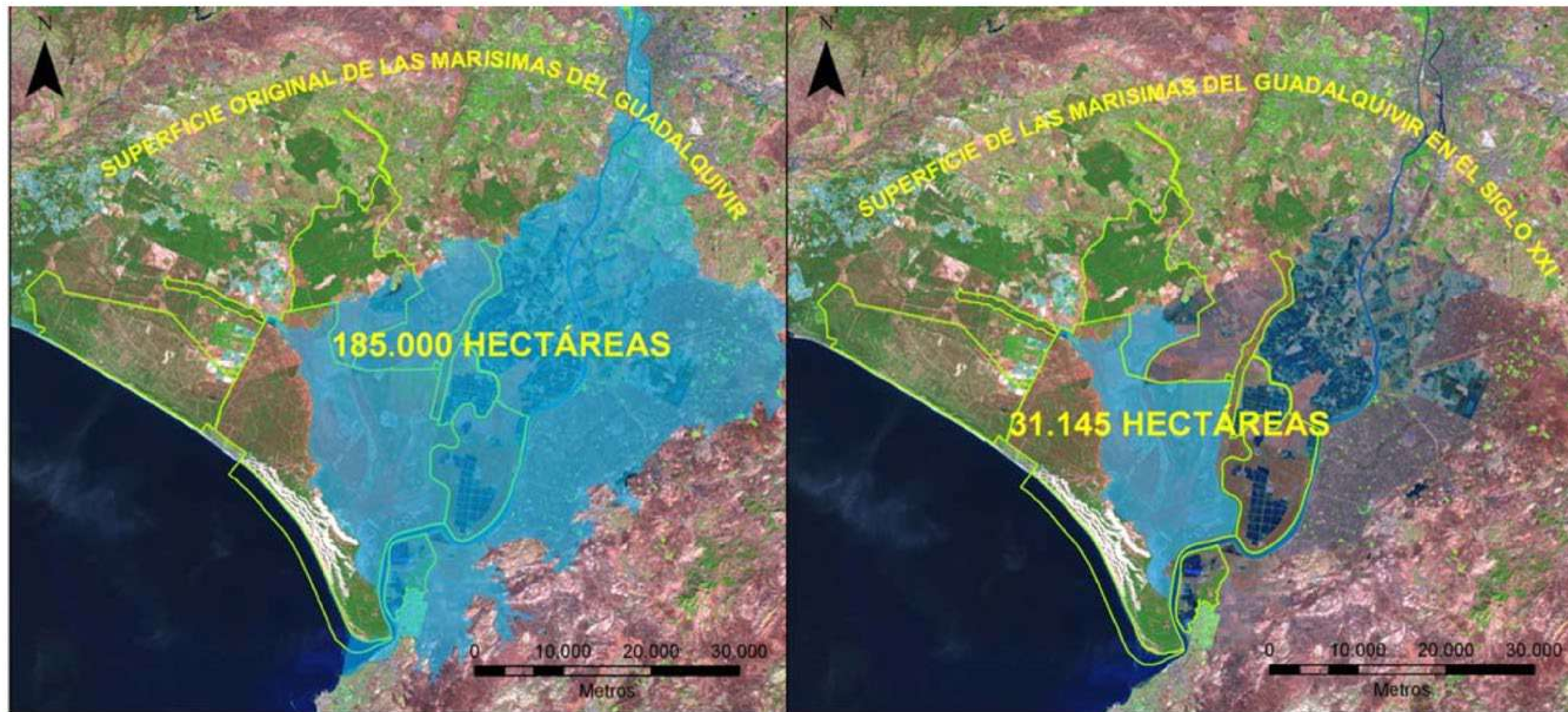
Sevilla y Sanlúcar “se acercan”...
de 129 km a 79 km

El Muro de la FAO - 1948



Alteración de la hidrografía natural de la marisma (Tomada de Nieto Gil et al., 2008)

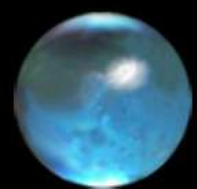
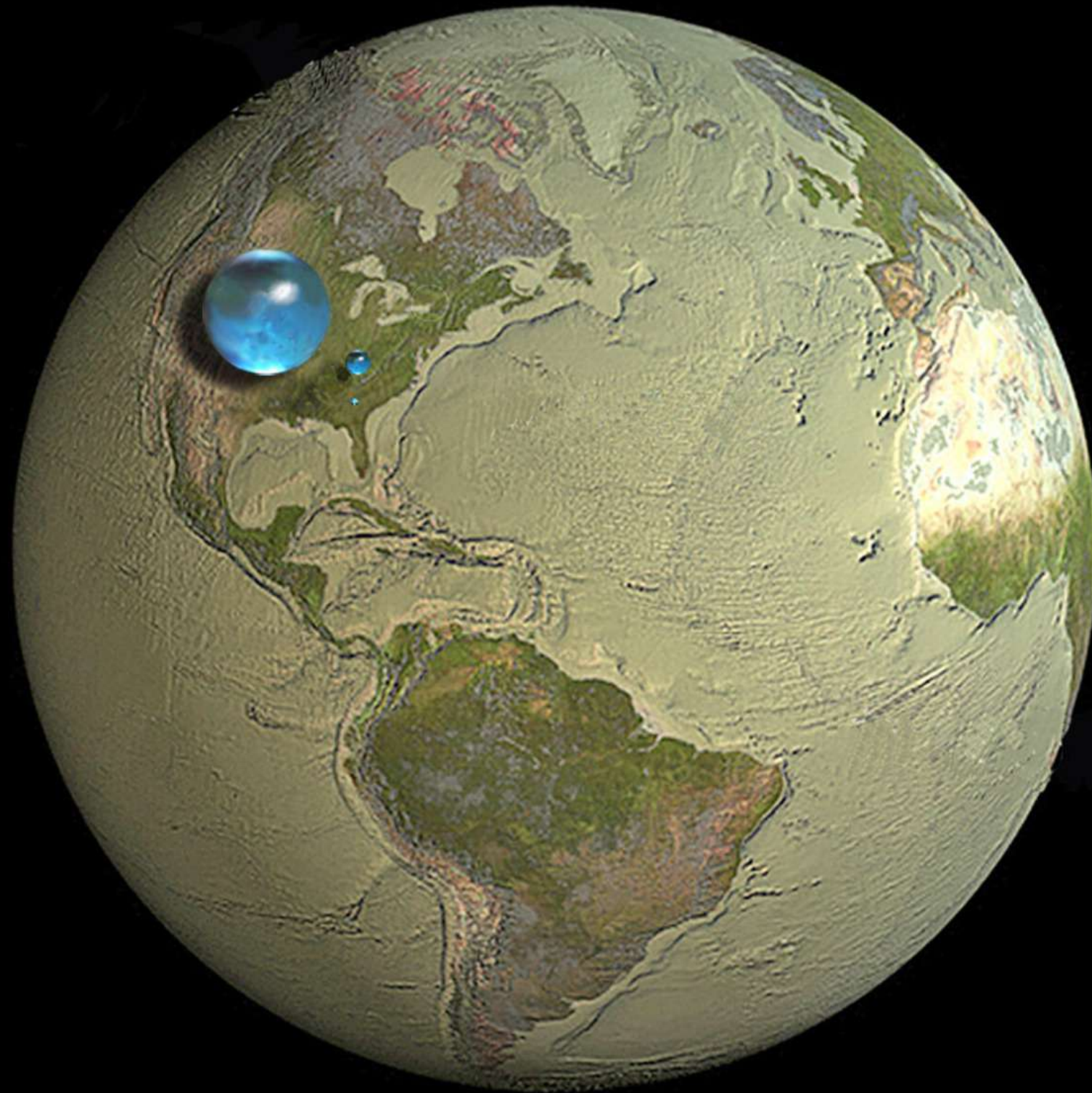
The original surface area of the Guadalquivir Marshes has been reduced by 80%.



Urdiales Alonso, C. 2010



The World's Water



All water on, in, and above the Earth



Liquid fresh water



Fresh-water lakes and rivers

Howard Perlman, USGS,
Jack Cook, Woods Hole Oceanographic Institution,
Adam Nieman
Data source: Igor Shiklomanov
<http://ga.water.usgs.gov/edu/earthhowmuch.html>

75% of the planet is covered by water, but:

- ✓ 97,5% is salt water
- ✓ 2,5% is fresh water
- ✓ 0,025% of freshwater is available



The change in the agricultural model has generated:

- ✓ Excessive irrigated area
- ✓ Overexploitation of aquifers
- ✓ Soil degradation
- ✓ Risk of population supply

The main problems are:

- ✓ Excessive use of pesticides
- ✓ Pesticide contamination
- ✓ Pesticide resistance
- ✓ Impact on human health



Agricultural industrialisation alters aquifers, valleys and fields



Jaén



Baena



Lebrija

Solids in the Guadalquivir cause millionaire losses

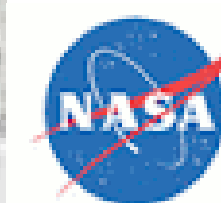
From $< 250 \text{ mg/L}$ in 2007 to $> 15,200 \text{ mg/L}$ between Puebla del Río and Lebrija.

Fuente: Grupo de Ingeniería Química de la Universidad de Alcalá





LANCE - NASA
12-11-2012



LANCE Web Mapping Service



- ✓ *Accipenser sturio* extinction
- ✓ Critically endangered species as eel (*Anguilla anguilla*), marbled duck (*Marmaronetta angustirostris*), fartet (*Aphanius baeticus*), etc.
- ✓ Million euros loosed in three provinces and
- ✓ Unemployment, population exodus, abandonment of the river ...



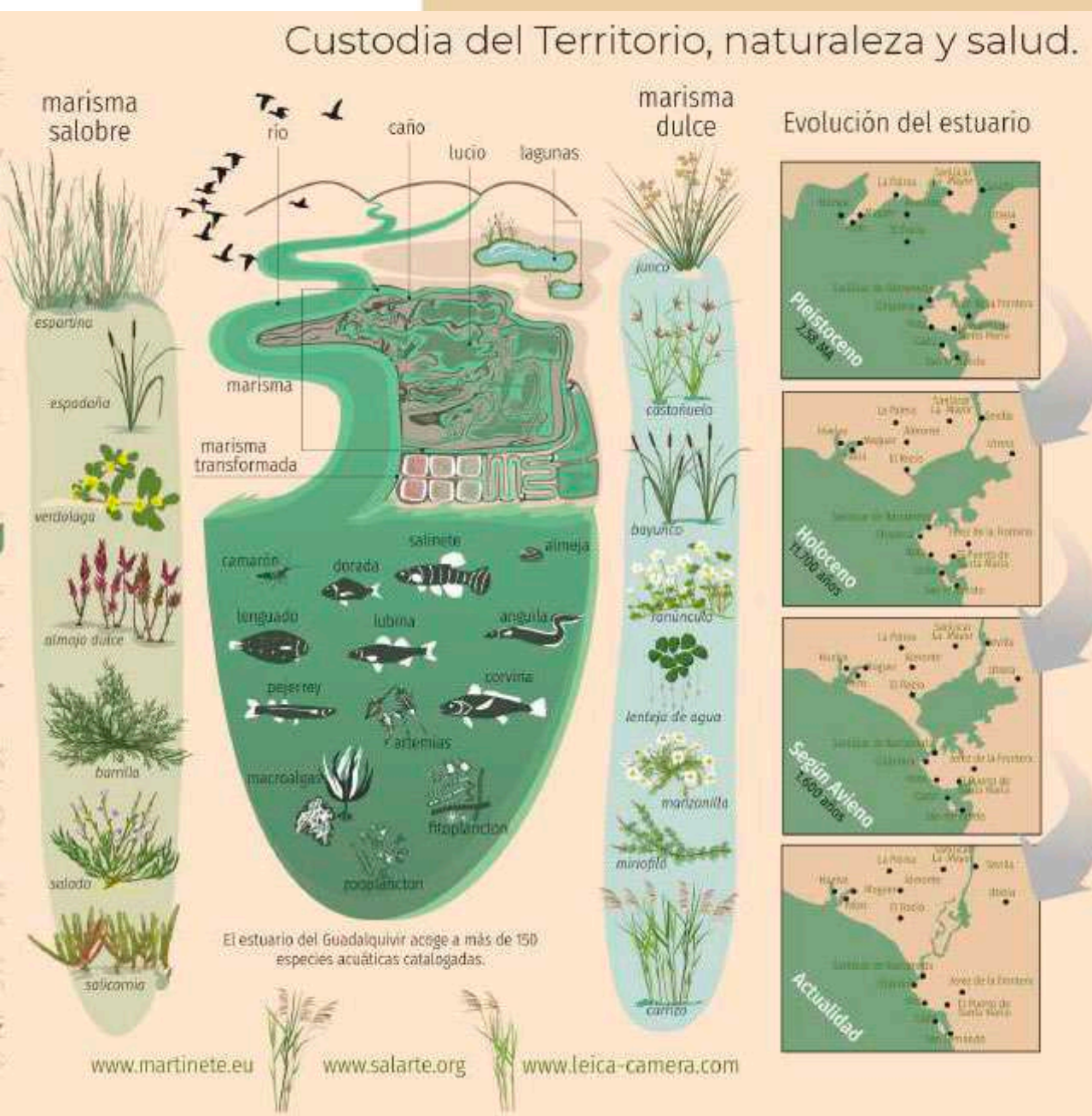
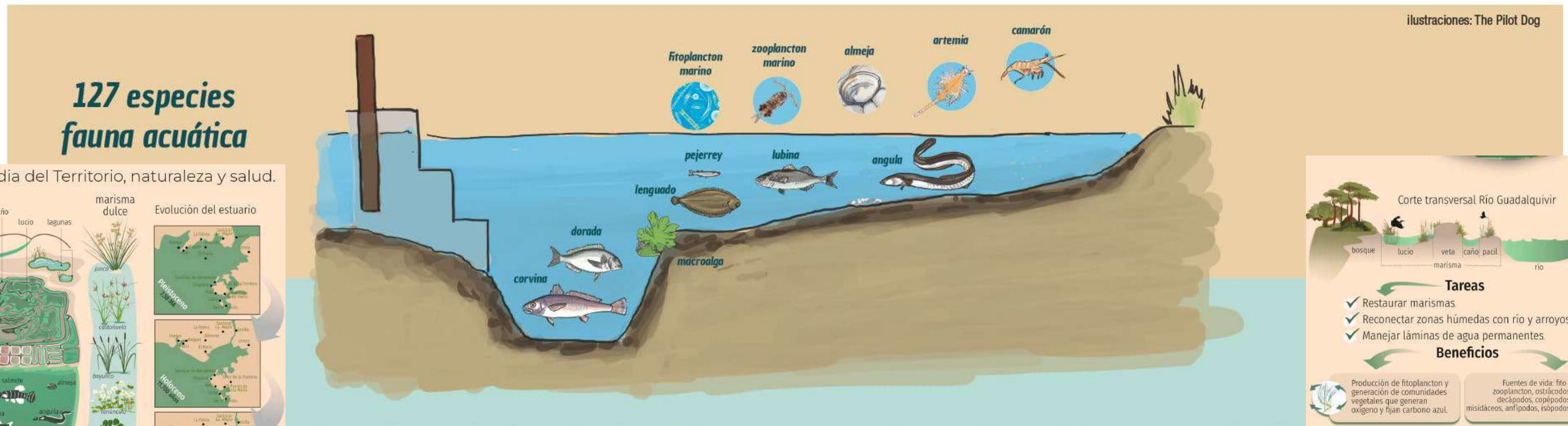
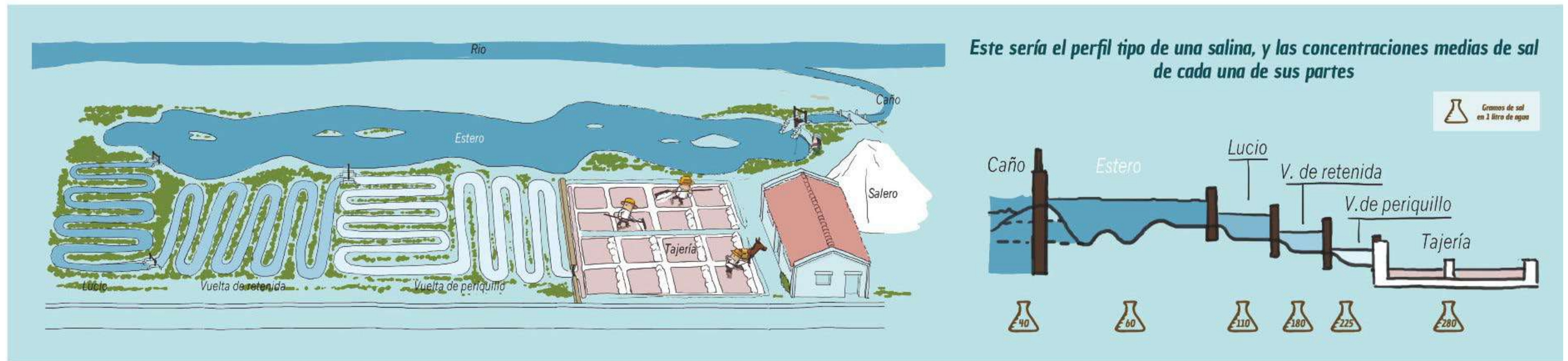


Current situation:

- ✓ Sea level rise
- ✓ Loss of fertile soil
- ✓ Increased need for food

La marisma viva es la respuesta





La marisma manejada es la solución



Alliances and agreements with fishermen, salt producers, fish farmers, livestock farmers, rice farmers, etc.

Ecological Reserve Esteros de Manego



How is the Marismas del Guadalquivir Alliance structured?

With a network of public and private collaborators from different sectors with a common objective

Promoters:



Collaborators:



Deloitte.

Management model:

Board:	Role:	Composition:	Frequency:
Alliance management and technical office	Direction and coordination of the execution of projects and activities of the alliance, supervision of budgets, follow-up reporting to committees, etc.	4 persons Promoter entities	Continuous
Planning and Follow-up Commission	Direction and guidance of the alliance, planning and monitoring of activities and budgets, promotion of the alliance in the development sectors.	7-10 persons Promoter + collaborator entities	Quarterly
Participation Council	Identification of needs and opportunities for the partnership, support in the planning and follow-up of actions, promotion of the partnership in the development sectors.	10-12 persons Director board + Promoter + collaborator entities + economical & social agents	Twice a year

What is the ambition of the Alianza Marismas del Guadalquivir - Doñana?

To demonstrate that marsh restoration and active land management benefits nature, the economy and society.

Areas of influence of the Alliance

3 provinces

23 towns

320.256 hectares

442.527 inhabitants

Áreas gestionadas y actividades desarrolladas

>13.900 managed hectares

Economic activities

- Aquaculture farming
- Salt production
- Fishing activities
- Rice farming
- National Parks & Nature Reserves
- Eco tourism and touristic experiences

membership ways and/or participation in the Alliance

- Marshes that are ascribed to be part of the network, but do not want an active management by the technical team; only to be part of the Alliance. E.g. rice farms, Marismas La Gamosa, National Park wetlands.
- Aquaculture farms, salt farms, hunting preserves, etc. that join the Alliance to form part of the network, but do not want active management by the technical team; they do want occasional advice, processing of aid, occasional projects. E.g. Veta La Palma, Salinas de Bonanza, Esteros de Manego, Cañada de Los Pájaros.
- Marshes that entrust the partial/general management of their farms (management of reserve areas for biodiversity, management of floodgates to flood/manage non-productive areas of environmental interest for waterfowl, etc.). San Carlos Farm, La Esparraguera-Pistresa Elbow, La Pardilla farm, Tierras Bajas.
- Marshes managed directly by the entities promoting the Alliance. Examples: La Esparraguera-Río Elbow, Paleocauce de Los Olivillos, Salina Santa Teresa-Bonanza, San Carlos Natural Reserve, etc.

Expected impact



Empleo

~79 empleos directos

~150 empleos indirectos



Formación

3 programas formativos

~45 plazas educativas



Economía y Naturaleza

>100K€ movilizados al año

~27 áreas protegidas de actuación

GUADALQUIVIR &DOÑANA MARSHES ALLIANCE. DESIRED BUDGET 2024-2027								Amount (€)
	Localidad	Provincia	Superficie (ha)	2024 (€)	2025 (€)	2026 (€)	2027 (€)	Subtotal (€)
Management				30.000	80.000	80.000	80.000	270.000
Machinery and outsourcing jobs				60.000	120.000	200.000	200.000	580.000
Technnical assistance, taxes				30.000	50.000	60.000	60.000	200.000
Salinas de Bonanza	Sanlúcar de Bda	Cádiz	670	3.000	10.000	25.000	25.000	63.000
Salina Santa Teresa	Sanlúcar Bda.	Cádiz	80	8.000	120.000	120.000	80.000	328.000
Granja acuícola San Carlos	Sanlúcar de Bda	Cádiz	70,4	20.000	20.000	20.000	20.000	80.000
Salina Montealgaida	Sanlúcar	Cádiz	507,62	3.000	10.000	15.000	15.000	43.000
Marisma La Gamosa	Sanlúcar	Cádiz	150	6.000	10.000	20.000	20.000	56.000
Codo Esparraguera – Pistresa	Trebujena	Cádiz	161,39	15.000	25.000	25.000	25.000	90.000
Codo de La Esparraguera – Río	Trebujena	Cádiz	220	25.000	100.000	50.000	50.000	225.000
Finca La Pardilla	Trebujena	Cádiz	6	6.000	10.000	10.000	10.000	36.000
Esteros de Manego	Trebujena	Cádiz	9	6.000	10.000	20.000	20.000	56.000
Los Olivillos	La Puebla del Río	Sevilla	60	10.000	60.000	100.000	50.000	220.000
La Isleta	Coria del Río	Sevilla	50	10.000	30.000	30.000	10.000	80.000
Veta La Palma	La Puebla del Río	Sevilla	7.500	10.000	25.000	25.000	25.000	85.000
Tierras Bajas	La Puebla del Río	Sevilla	1.134	25.000	40.000	40.000	40.000	145.000
Cañada de Los Pájaros	La Puebla del Río	Sevilla	7,6	10.000	25.000	25.000	25.000	85.000
Dehesa de Abajo	La Puebla del Río	Sevilla	617	5.000	10.000	10.000	10.000	35.000
Veta Hornitos	Hinojos	Huelva	1.900	15.000	30.000	120.000	70.000	235.000
Salinas de Poniente	Almonte	Huelva	470	6.000	20.000	60.000	120.000	206.000
Total			13.423,68	303.000	1.055.000	955.000	955.000	3.268.000



Tablazo de Tarfía
(before of management)





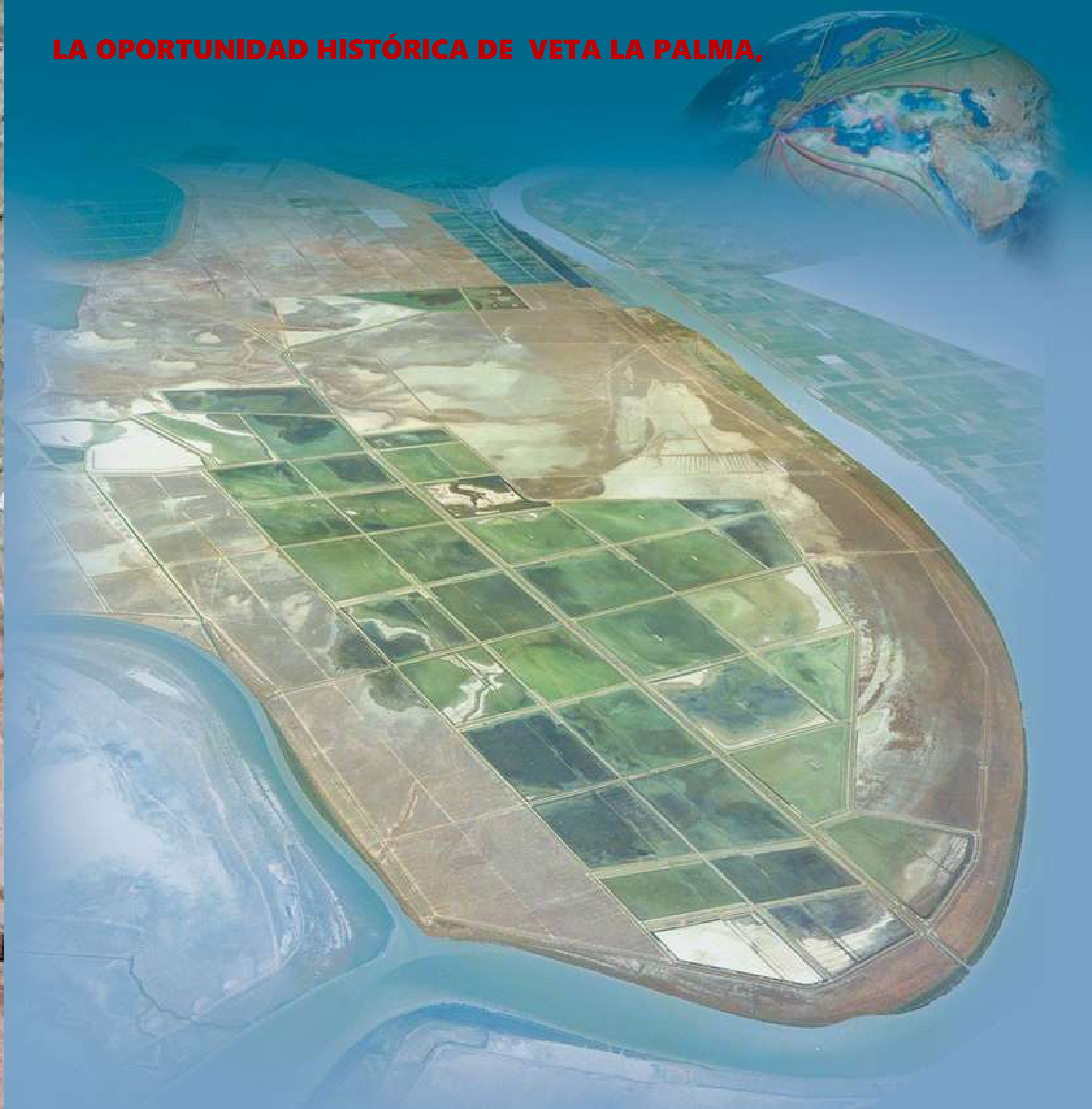
Brazo
de La Torre

Doñana

Finca
Veta
La Palma

Rio
Guadalquivir

LA OPORTUNIDAD HISTÓRICA DE VETA LA PALMA,



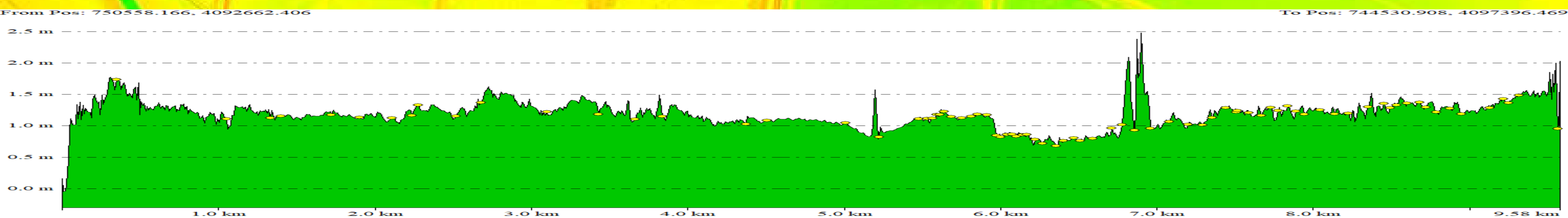
LA OPORTUNIDAD HISTÓRICA DE VETA LA PALMA + MARISMA DE TIERRAS BAJAS





salarte

Fondo para la Custodia
y Recuperación de la
Marisma Salinera



Tierras Bajas ANTES (abril 2023)



Tierras Bajas DESPUÉS (julio 2023)



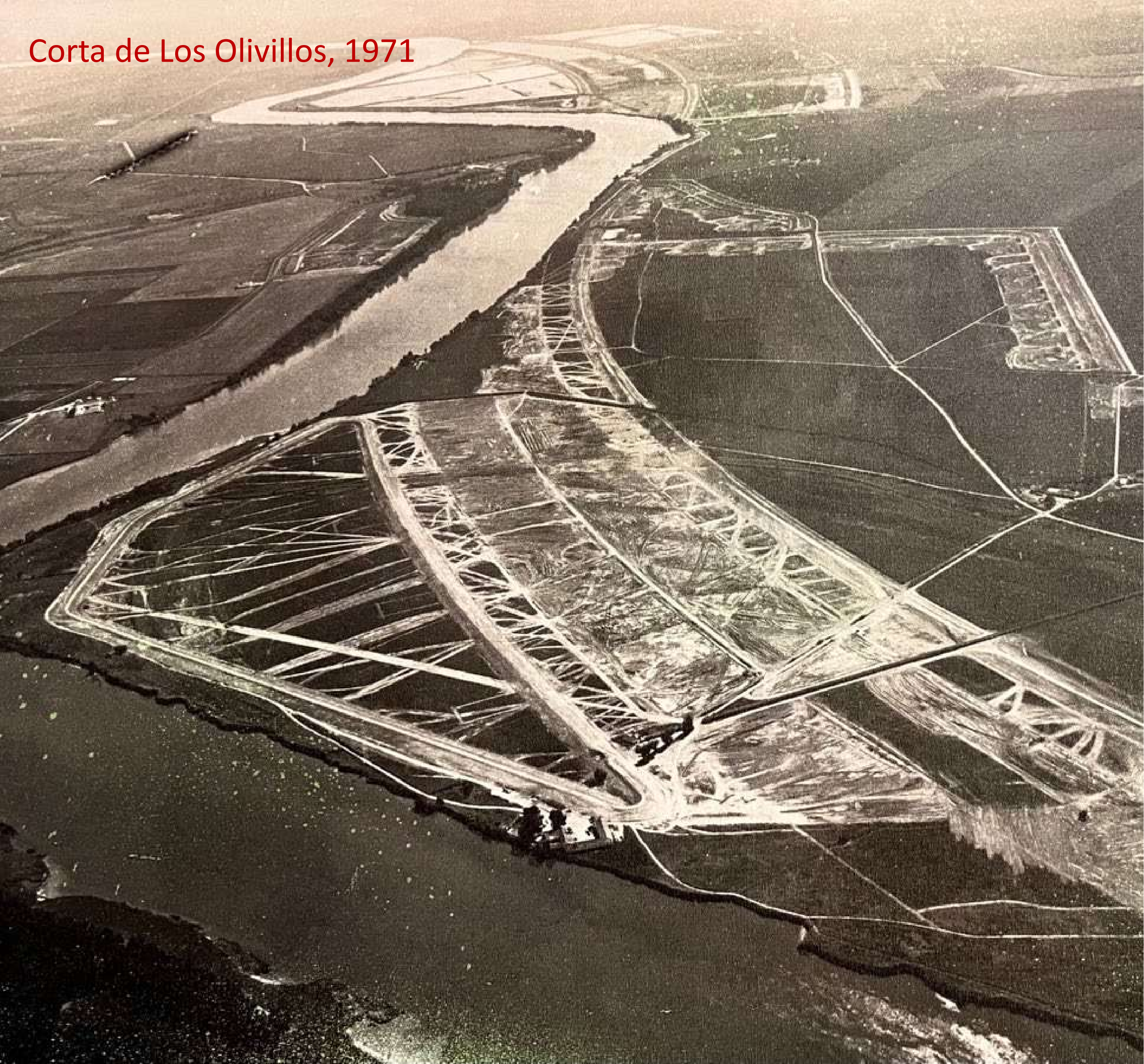
Tierras Bajas en agosto de 2023



Tierras Bajas en agosto de 2024



Corta de Los Olivillos, 1971



Corta Los Olivillos, junio 2024 (antes)



Corta Los Olivillos, agosto 2024 (después)





Estación de Anillamiento Los Olivillos



Francisco Aparicio, arrocero



SANTA TERESA, SAN CARLOS Y BONANZA, SANLÚCAR DE BARRAMEDA



GRANJA MARINA SAN CARLOS, SANLÚCAR DE BARRAMEDA

