



EUROPAN 18

‘Varadero - Cantera’ in the Municipality of Santa Pola (Province of Alicante).
Valencian Community, SPAIN.

EUROPAN España.

Paseo de la Castellana, 12. 28046 Madrid – ES

T + 34 91 435 22 00 (*214) / europan.esp@cscae.com / www.europan-esp.es / [@europan_esp](https://www.instagram.com/europan_esp)

Spanish, French, English. 10:00 a.m. to 2:00 p.m. from Monday to Friday.

Index

0 Program of requirements

1 Summary of Main Objectives

2 Specific Aspects of the Site

- 2.1. Site Representative
- 2.2. Stakeholders Involved
- 2.3. Professional Profiles

3 Presentation of the Site

- 3.1. Main Physical Characteristics
- 3.2. Key Issues
- 3.3. Program Requirements

4 Socio-Cultural Information

- 4.1. Information
- 4.2. Lifestyles
- 4.3. Goals for Social Interaction and Inclusivity



5 Environmental Data of the Site

- 5.1. Geology
- 5.2. Topography
- 5.3. Climate
- 5.4. Natural Risks
- 5.5. Natural Resources and Elements

6 Economic Dynamics and Challenges

7 Proposed Assignment Following the Jury's Decision

Program of requirements

EUROPAN 18 / RESOURCING

‘Varadero - Cantera’

Santa Pola

EUROPAN 18/ESPAÑA, “RESOURCING-LA CIUDAD RENACIDA”

The objective of EUROPAN is to bring to the fore Europe’s young architecture and urban design professionals, and to present and develop their ideas.

It is also about helping cities and developers who provided sites to find innovative architectural and urban solutions for the transformation of urban locations and help them to implement. The open competition is an anonymous and public call for ideas on a European scale.

The aim of EUROPAN Spain is to implement the projects chosen by EUROPAN 18 national jury. To facilitate contracting of the proposals by public administrations participating in EUROPAN Spain as the core of the Competition, the Ministry of Housing and Urban Agenda launches the Competition in Spain, establishing its Rules by a bidding document that complies with the procedure of Juried Design Competitions as provided in section 183 et seq of the LCSP. This ensures compliance with the conditions established in the EUROPAN Internal Procedures and in the aforementioned Law.

Therefore, in case of entering any of the Spanish sites, it is important to get familiar with the “Rules of the EUROPAN 18 Juried Design Competition”, published in the Official Public Tender Platform.

EUROPAN/ESPAÑA NATIONAL COMMITTEE

Presidency

Ministry of Housing and Urban Agenda (Ministerio de Vivienda y Agenda Urbana)

Members

Ministry of Housing and Urban Agenda (MIVAU) / Consejo Superior de Colegios de Arquitectos de España (CSCAE) General Direction of Housing of the Principality of Asturias / General Direction of Housing and Architecture, Regional Government of Balearic Islands / City of Barcelona / General Secretary of Housing, Architecture and Urban Renewal, Regional Government of Extremadura / City of Getafe / INCASÓL (Regional Government of Catalonia) / City of Madrid / General Direction of Ecological Innovation in Construction, Regional Government of Valencia / General Direction of Housing and Architecture, Regional Government of Basque Country.

City of Oviedo / City of Felanitx / City of Navalmoral de la Mata / City of Barcelona / **City of Santa Pola** / City of Vitoria-Gasteiz / ADIF.

NATIONAL SECRETARIAT EUROPAN España

Carmen Imbernón, General Secretary

Begoña Fernández-Shaw, Vice Secretary in charge of implementations follow-up.

PRIZES

EUROPAN/España intends to award 9 first prizes and 9 second prizes, in addition to the special mentions. The winner and runner-up teams receive a prize of €12,000 and €6,000 (including tax) respectively. In Spain, the EUROPAN awards are exempt from tax withholding in accordance with the Resolution of April 5, 2006, of the Department of Tax Management of the State Agency of Tax Administration, granting the exemption provided for in Article 7 (1) Royal Legislative Decree 3/2004, of 5 March.

LEGAL PROVISIONS

For nationals from EU and EES countries in possession of a diploma in accordance with EU Directive 2005/36/EC and wishing to practice on a provision of services basis (occasional), they must be legally established in a Member State for the purpose of pursuing the same profession in Spain. They must ask for an authorization to the competent authority, the Ministry of Housing and Urban Agenda (Ministerio de Vivienda y Agenda Urbana, Subdirección de Normativa y Estudios Técnicos. Secretaría General Técnica. Paseo de la Castellana, 67 – 28071 Madrid).

For nationals in possession of a diploma from other countries, please contact the Ministry of Education.

Communication and Publicity

The Launching of the competition and the Results of EUROPAN 17/Spain will be published in the State Contracting Platform (<https://contrataciondelestado.es>), the B.O.E (Official State Gazette) as well as in a national newspaper.

The results of EUROPAN /SPAIN will be published in a catalogue. All the EUROPAN 17 projects awarded and specially mentioned by the Jury will be displayed in a travelling exhibition.

The teams rewarded in EUROPAN Spain will be invited to present their work in forums and workshops, both at national and international level.

Jury – 1st evaluation

In the first jury meeting, the site representatives participate with voice and vote. They select 20% of the projects submitted.

Jury's decision

After two days analysis of the pre-selected projects by the site representatives and the members of the jury, the jury only takes the final decision. The prizes are awarded based on the quality of the projects and not on the basis of an equal distribution between sites. The jury is sovereign in its decision.

Post-Competition Procedure

Soon after the results announcement, winning teams in the Spanish sites will be invited to a meeting with the site Representatives: The Honorable City Council of Santa Pola to present their proposals. This presentation will be followed by round tables in which jury members are invited.

Provided procedure for the contract following the Juried Design Competition

EUROPAN Competition, in Spain, is in compliance with the EU directive for procurement Directive 2014/24/EU and with Spanish National Law. The Public Administrations that take part in the competition as members of the National Committee, or any other entity in which they may delegate (Local Entities, Autonomous Communities or, where appropriate, Public Law Entities) are recognised as contracting authorities, to proceed in each of the sites to award the service contract by means of a negotiated procedure, without prior publication, to the winner or one of the winners of the design contest. In case of ex-aequo winners, all the teams must be invited to participate in the negotiations.

Summary of Main Objectives

The aim is to generate, receive, and discuss comprehensive proposals for the “Varadero/Cantera” area to regenerate the space and foster activities related to leisure, nautical services, culture, sports, and public parks. These objectives leverage the area’s natural conditions while incorporating anthropised spaces.

In summary, the question posed to participants is:

Can renewal be achieved by forging an alliance between inhabited environments and natural elements?

Could this alliance restore the lost centrality of these spaces within a broader territorial strategy?



Specific Aspects of the Site

2.1. Site Representative

The promoter of the site is the Honorable City Council of Santa Pola (Province of Alicante, Valencian Community), which processed its file No. E_30301_2022.

By resolution of the Local Government Board in its session on July 11, 2024, a commitment was formalised to join the National Committee of EUROPAN 18/SPAIN.

In the same session, it was decided that the City Council of Santa Pola would be represented before the EUROPAN 18 National Committee by **Ms. Trinidad ORTIZ GÓMEZ, Councilor for Urban Planning, and Mr. José Pedro MARTÍNEZ GONZÁLEZ, Delegate Councilor of Finance**; who would act with the support of municipal officials: Ms. María José MOJICA MARHUENDA, Municipal Architect and Head of the Urban Planning Service, and Mr. Emilio M. JORDÁN CASES, Legal Urban Planning Advisor, who is both a Law graduate and a certified Urban Planner.

Mr. Emilio M. Jordán Cases, the City Council's Legal Urban Planning Advisor and certified Senior Architect, has been appointed as the contact representative with the EUROPAN/Spain Secretariat. He will liaise with participants throughout this eighteenth session and participate in the jury's first meeting and the Forum of Cities and Juries.

2.2. Stakeholders Involved

State Administration

COAST

General Directorate of the Coast and the Sea under the Department for Ecological Transition and Demographic Challenge (Provincial Coastal Service in Alicante).

Valencian Regional Administration

MINING

Department of Sustainable Economy, Productive Sectors, Commerce, and Labor (Territorial Service of Industry, Energy, and Mining in Alicante).

FOREST ADMINISTRATION

Department of Agriculture, Rural Development, Climate Emergency, and Ecological Transition.

URBAN AND ENVIRONMENTAL ADMINISTRATION

Regional Departments responsible for spatial planning, urban development, the environment, and landscape management.



Pursuant to Article 47 of the consolidated text of the Valencian Community’s Territorial Planning, Urban Development, and Landscape Law (LOTUP), approved by Decree-Law 1/2021, dated June 18, by the council:

“Strategic environmental and territorial evaluation of plans pursues the following objectives:

- a) To integrate environmental criteria and constraints, alongside functional and territorial considerations, throughout the entire plan preparation process, from the initial preparatory work to its approval.*
- b) To ensure effective public participation and the involvement of relevant institutions and organisations in the plan’s preparation, as well as transparency in planning decision-making.*
- c) To achieve a high level of environmental protection and promote sustainable development in its economic, social, and environmental dimensions.”*

Article 48 of the LOTUP specifies the individuals and institutions involved in the strategic environmental and territorial evaluation of plans, including: *“d) (...) affected public administrations: those public administrations with specific competences in the following areas: population, human health, biodiversity, geodiversity, fauna, flora, soil, water, air, climatic factors, landscape, material assets, cultural heritage, including historical heritage, education, social services, health, territorial planning, and urban planning”*, additionally, this includes the plan’s promoting body, the substantive authority responsible for its approval, the environmental authority tasked with issuing the environmental and strategic declaration, and the public, both interested and otherwise.

Thus, the drafting and approval process for the planning ensures the involvement and participation of all public administrations with sectoral interests in defining the area’s anticipated or planned state. This formalised procedure promotes consensus to commit the actions of various public administrations, reduces conflicts of interest, and ensures the realisation of the projected state as defined by the Plan.

2.3. Professional Profiles

2.3.1. Profile of the team representative

Licensed Architect.

2.3.2. Desired Competencies for the Team Based on Site Characteristics



Architecture
and Landscape
Design



Enviromental
Sciences



Topography



Civil
Engineering



Mining
Engineering



Forestry
Engineering

Presentation of the Site

Santa Pola is a tourist municipality on the southeastern coast of Spain, strategically located between two major hubs: Alicante, the provincial capital, and Elche, the second-largest city in population, situated close to the international airport. Santa Pola boasts an extensive coastline, with its beaches earning Blue Flags for their water quality. Historical records trace human occupation of the area back to prehistoric times, with significant Iberian and Roman archaeological sites.

The current urban center has medieval origins, developing north of the harbour around a fortress built to guard against 16th-century pirate attacks.

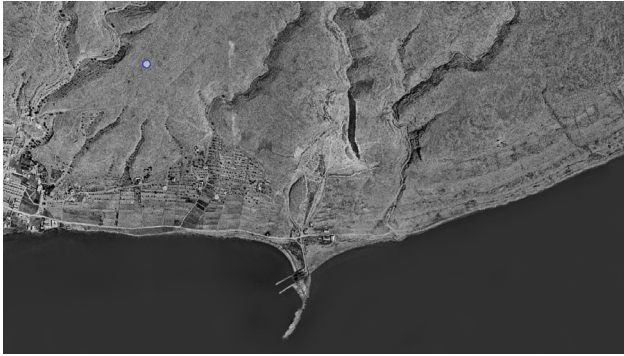
Subsequent urban expansion occurred outside the walls: first to the north and later, once the piracy threat subsided, to the south, reaching the harbour. In the 20th century, urban growth included expansions dedicated to second homes, forming linear developments along both sides of the urban core, to the east and west.

The proposed site is located in the eastern expansion, considered the municipality's prime area. This urban development runs parallel to the coast and is predominantly residential and tourist-oriented, featuring open-plan buildings.

The site includes soils of different classification and use:

- 1** The Quarry: Located on a hillside, it was designated for aggregate extraction but is now disused, leaving steep slopes and unevenness.
- 2** Adjacent Urban Blocks: Including residential areas intersected by uneven infrastructure.
- 3** The Varadero Beachfront: Named after shipyard activities in the last century. It retains remnants such as a slipway ramp and a gantry crane.





Historically, the project area dates back to 1923, originating with the quarry used for materials to construct the Torrevieja harbor's seawall. Torrevieja is a nearby town located at the southern end of the Bay of Santa Pola.

Notably, the quarry's pier and inclined railway connecting it to the harbor were key elements.

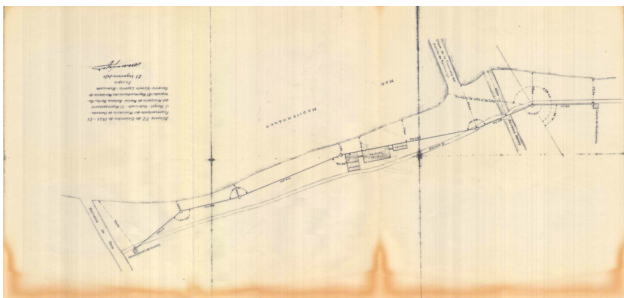
After the Torrevieja harbor's completion, the quarry pier, initially a temporary auxiliary structure, remained in place.

Post-Civil War (1946), the area sheltered two shipyards to service Santa Pola's significant fishing fleet, still the largest in Spain's Mediterranean region.

Additionally, the quarry resumed operation during the construction boom of the 1960s due to the high quality of its aggregates.



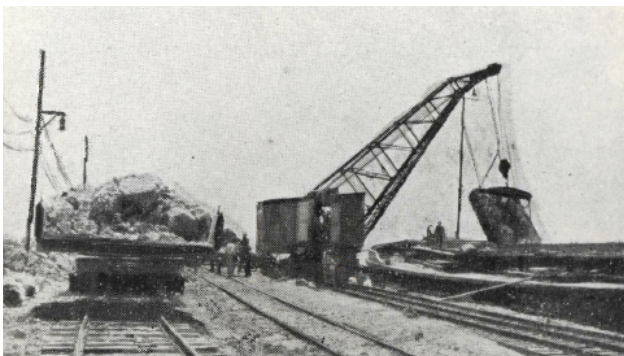
Thus, the project area includes:



1 The Quarry: Currently abandoned, leaving significant elevation changes and drops.

2 The unlevel land: Now occupied by urban blocks and infrastructure on various levels.

3 The Varadero Beachfront: Once home to two shipyards.



With the shipyards demolished and the quarry closed, a void has emerged in a centrally located area. Yet, a crisis signifies change, and change signals opportunity.

In the current EUROPAN edition, proposed sites are grouped into two families:

Family 1: Re-emerging from natural elements, further divided into: 1.1. Managing Water, 1.2. Revitalising Land, 1.3. Regenerating Landscapes; and **Family 2: Re-emerging from social dynamics and inclusion**, further divided into: 2.1. Inducing a Second Life, 2.2. Promoting Open Neighborhoods, and 2.3. Creating New Urban Relationships.

The proposed site, titled **"Varadero/Cantera"**, falls within Group **1.3: Re-emerging from natural elements by regenerating landscapes**.

3.1. Main Physical Characteristics

3.2. Key Issues (Resourcing)

Rising from Ashes: The void left by the obsolescence and loss of activity in strategic spaces has created a scar in the city that requires deliberation.

The project area comprises:

The Varadero: A former harbour zone that hosted shipyards.

The Quarry: A cliff overlooking the sea, situated between the protected hillside and the anthropised area awaiting regeneration, marked by severe elevation unevenness from past stone extraction. Various levels of urban uses and infrastructure intersect the space.

The Coastal Edge: Currently fragmented and resembling a wasteland facing the sea.

Regenerating this space is essential as it has become an urban void.

QUESTIONS FOR CONTESTANTS

Can necessity drive regeneration?

Does regeneration merely mean restoration: flattening the land or revegetating slopes?

Is this feasible given the extent of the transformation from the original natural state?

Is it enough to regenerate the exploited space and eliminate the former shipyard buildings to restore the area's centrality?

Or does restoring previous use, leveling the slopes, and leaving an empty space where the shipyard structures once stood suffice?



Could the urban void's opportunity be leveraged to introduce new activities?



Environmental studies suggest the Varadero is ideal for water sports. Behind the Varadero, the quarry—currently non-urbanisable land—is a magnificent vantage point, a “window to the sea.” However, planning limitations raise the question:

Should proposals adhere to existing planning regulations?

Or should planning adapt to proposals?

This is the primary question addressed here.

We firmly believe the territory and its complexity should guide planning, which should in turn adapt to territorial needs.

Therefore, to recover the area’s lost centrality:

Is territorial planning, administrative management, location, or usage the key to achieving this?

Can the empty space be reimagined and infused with new relational uses, embedding memory?

How can the living and leisure habits of new generations be integrated?



3.3.1. Project Area Needs. (Yellow boundary)

[View plan →](#)

1 Re-emergence of Natural Elements: To counter harmful development and restore vitality:

- Healing the land.
- Reviving the sea.

This involves recombining vital elements:

WATER AIR EARTH ENERGY

2 Rebirth of Shared Lifestyles:

For Users: Reclaiming formerly privatised spaces for collective use.

By Purpose: Aligning with the territorial vocation of the project space:

- Leisure and nautical service activities, with various management models (direct or public-private collaboration).
- Cultural, sports, and educational facilities.
- An urban public park.

3 Constructive Rebirth:

Identify artificial elements responsible for significant resource consumption, such as:

Port Infrastructure:

- The pier (former breakwater for the Torrevieja harbor).
- The shipyard slipway.
- The gantry crane trench.
- The VATASA shipyard yard and the open area between the slipways and Avenida de Santiago Bernabéu.

Quarry Excavation: Requiring an Integrated Restoration Plan (PRI) as an engineering project, with technical details, cartography, and budget. This should also align with urbanisation planning without replacing its functions.

Existing elements should be transformed using the “3Rs Strategy”: Reduce, Reuse, and Recycle.

3.3.2. Needs in the Reflection Area. (Red boundary)

[View plan →](#)

At this scale, the objective is to leverage the project's potential as an organising force within a broader contiguous area: the so-called reflection area. Here, the following must be addressed:

- 1** Resolve the tension between the transversal layout (perpendicular to the coastline) of the Project Area and the longitudinal orientation of the main road axes, ensuring the functional unity of the project space.
- 2** Reorganise motor vehicle traffic to benefit pedestrians, the primary users of open spaces and recreational areas, ...
- 3** ... ensure this reorganisation does not compromise the use of public service facilities for sports, cultural, and educational purposes, which also need to be established in the area.



3.3.3. Needs at the Territorial Scale. Area of influence. (White boundary)

[View plan →](#)

Contrasting with the industrial focus of Elche, the western vertex of the metropolitan triangle, and the primarily administrative and service-oriented role of Alicante as the provincial capital (northern vertex), Santa Pola, located at the southern vertex of the triangle, has a more specifically touristic orientation. This is supported by:

- 1** The appeal of its natural and scenic elements of high environmental value, such as the Salinas to the west, which occupy a significant part of the municipal area, and the Protected Mountain with its cliff-front to the east.
- 2** The maritime frontage: including its beaches, the picturesque allure of fishing activities, and more recently, its favorable conditions for sports, leisure, and nautical recreation.

The Varadero-Cantera site can and should become a key attraction within the metropolitan area. To achieve this, it must be equipped with distinctive features through landscape design and urban planning implementation, ensuring its singularity and appeal.

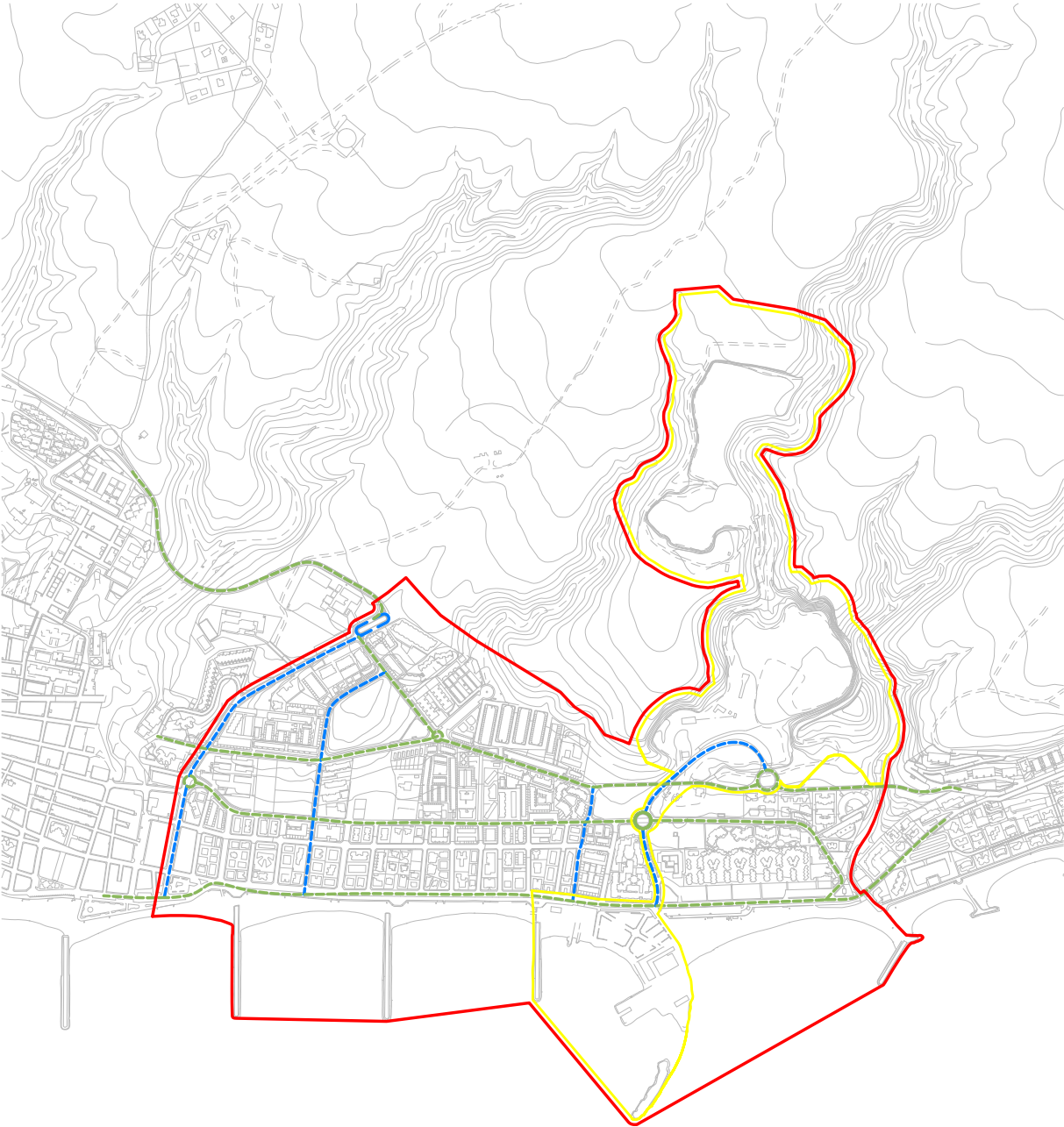
TERRITORIAL AREA PLAN



REFLECTION ZONES AND PROJECT PLAN



ROADS REFLECTION ZONE PLAN



- White line:** Territorial area boundary
- Red line:** Reflection area boundary
- Yellow line:** Project area boundary
- Green dashed line:** Road parallel to the coastline
- Blue dashed line:** Road perpendicular to the coastline

Socio-Cultural Information

4.1. Information

4.1.1. Overview of the area

Santa Pola is located to the north of the bay of the same name, an oval-shaped bay oriented towards the southeast, bordered to the north by the Santa Pola Cape massif and to the south by the Cape of Cervera. Traveling from north to south, the appearance of the coast is very variable.

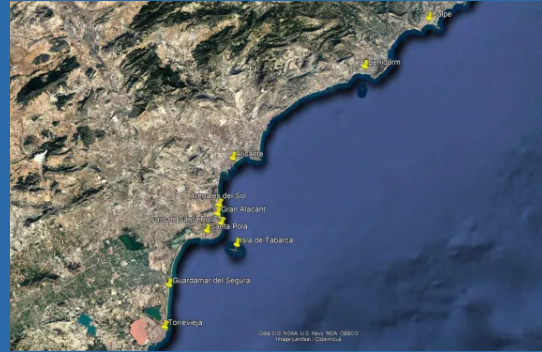
Initially, at the Santa Pola Cape massif, the coast is rugged. It should be noted that the highest point, at 142 meters above sea level, is located 600 meters from the coastline. Erosion processes have led to the formation of small coves, formed by deposits stored between the rocky outcrops. Between the cape and the island of Tabarca, located more than 2 miles southeast, the maximum depth is 10-11 meters.

To the north of the Santa Pola Cape massif, there is a low, sandy coast extending to the port of Alicante. On the southern slope, an area known as Santa Pola del Este, the construction of a series of breakwaters has led to the formation of sheltered beaches, the most important of which is Varadero Beach. Supported by the old Engineer's Breakwater, it is about 400 meters long.

Between the fishing port and the Engineer's Breakwater, lies Levante Beach, which underwent a regeneration project in 1984. The project involved the construction of four perpendicular breakwaters and artificial sand nourishment, creating the current four beach cells. This project has halted the westward transportation of sand, allowing the beaches to become independent, increasing the area of dry beach, and the construction of a promenade.

To the west of the fishing port, the coast is low, with several beaches: Gran Playa, Playa Lisa, Playa del Tamarit, Playa del Pinet, and Playa de la Mata.

The first two, well protected from the Levante storms, have the largest accumulation of fine sand in the area, and were subject to artificial sand nourishment with coarser sand. These two beaches are under significant urban pressure due to the tourist expansion of Santa Pola towards the west. Further south, the Tamarit and Pinet beaches share similar characteristics. Together with the previous beaches, they mark the boundary of the lowlands of the Bajo Vinalopó. These beaches are exposed to stronger coastal dynamics due to their lesser protection from the dominant easterly swells. They have larger sand sizes and dune formations, open to the Levante swells.



4.1.2. Description of the location

The site's context is structured from north to south as follows:

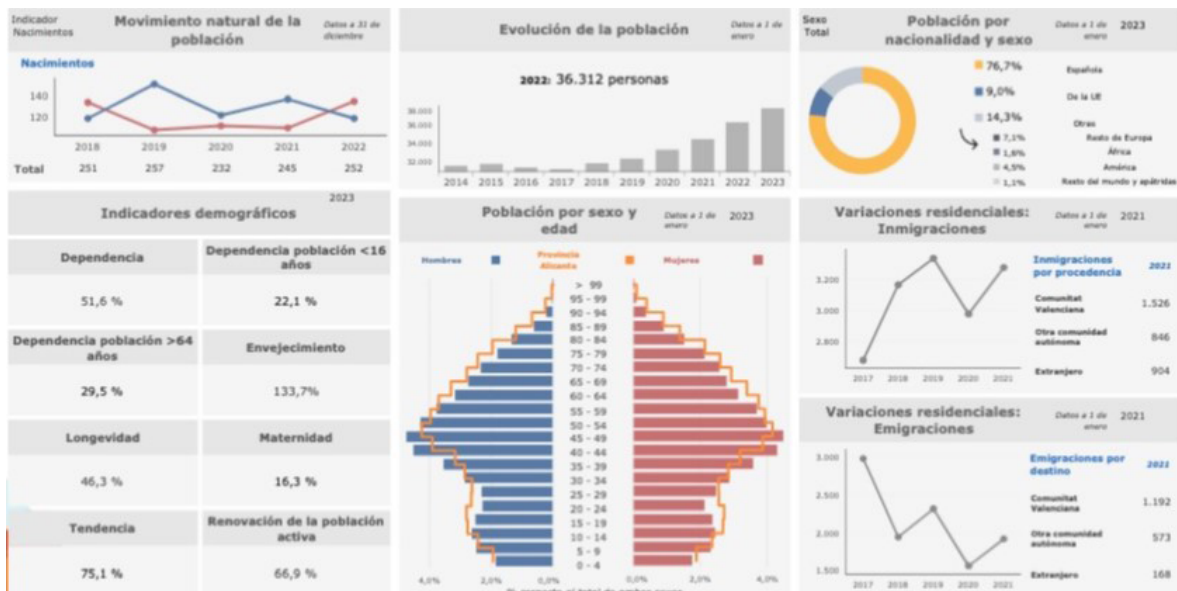
- 1 Non-developable land, municipal public mountain land.
- 2 A residential-touristic zone, primarily consisting of second homes.
- 3 To the south, the open land adjacent to the coastline and the Maritime-Terrestrial Zone, including the promenade, the former slipways/shipyards, the protective seawall, and the anchorage or mooring area.

The urban structure in the residential area mainly consists of grid blocks with principal roads running parallel to the coast. Buildings are predominantly residential, either open or grouped, depending on zoning regulations. The maximum allowable height varies by ordinance zone, set at 9 m, 11.9 m, or 14.8 m, according to the current 2009 Municipal General Plan. The relevant zones are: Ensanche del Mar, Paseo Santiago Bernabéu, Ensanche Levante, Ensanche Varadero RA (Grouped Residential), and Ensanche Varadero RG (Open Residential).

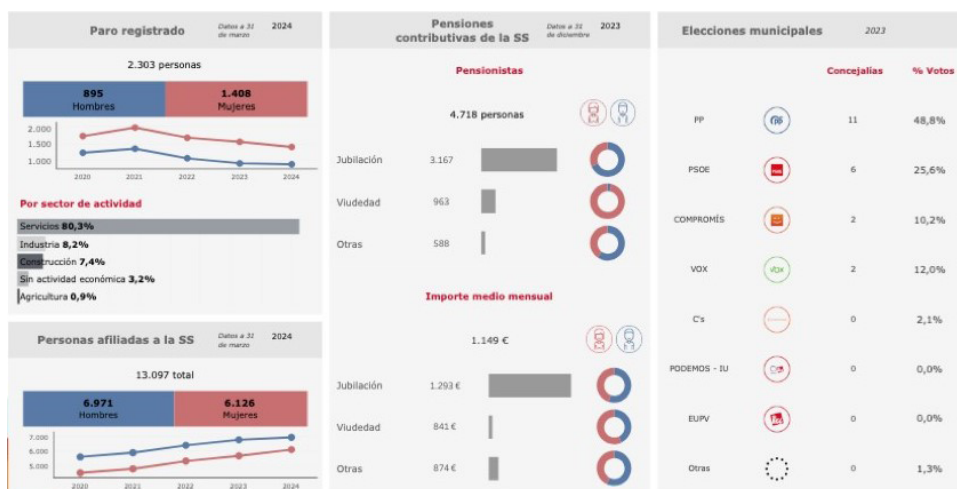
4.2. Population. Demography. Society and Lifestyles. Economy. Treasury

Source: "Información urbanística del Plan General Municipal de Ordenación Urbana de Santa Pola y de su Término Municipal, de 2009 -PG_2009-. Instituto Valenciano de Estadística_Ficha Municipal_ES_FM_03121"

4.2.1. Demographics



4.2.2. Society and Lifestyles



4.2.3. Economy and Treasury



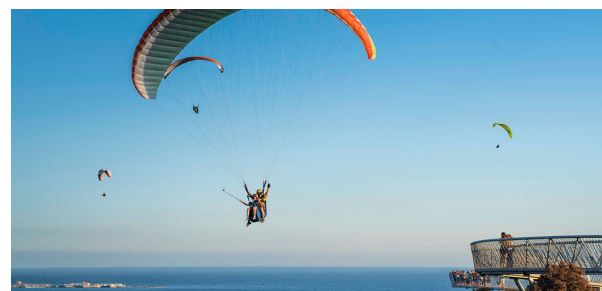
Santa Pola has historically been, and still is, a fishing village, though the service sector—particularly tourism—has become its primary economic driver. The floating population can quintuple during the summer season.

The area of the site, within the study scale (red line), is mostly characterised by touristic buildings used as second homes, with predominantly seasonal occupancy. However, the project area (yellow line) should primarily serve as an open space and facility for the entire population of Santa Pola (both residents and transients). At the territorial scale (white line), it should act as a tourism resource for the Metropolitan Area, specifically within the Alicante-Elche-Santa Pola triangle.

4.3. Goals for Social Interaction and Inclusivity

The aim is to establish in the project area a public space for interaction, leisure, and services—sporting, cultural, and educational—aligned with its specific territorial vocation. This space should serve local residents (registered inhabitants), transients, and seasonal or residential tourists. Additionally, it should act as a distinct and uniquely appealing tourist resource for the broader Metropolitan Area, particularly for external visitors within the Alicante-Elche-Santa Pola triangle.

The objective is to open the area to a wide range of urban planning proposals that enhance the quality of urban space while strategically positioning the locality competitively in the leisure and tourism service offerings.



Various cultural and sports events and activities held in the municipality.

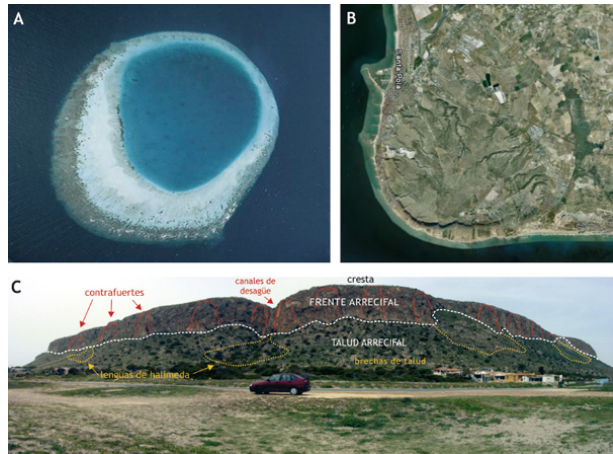
Environmental Data of the Site and its Context

5.1. Geology

Source: <http://www.senderosdealicante.com/geologicos/lugares/santapola.html>

The Project area lies between the Sierra de Santa Pola, the site of the former quarry, and the sea. The Sierra de Santa Pola is a small carbonate platform representing an ancient Messinian-age atoll approximately 5 km in diameter.

The atoll of the Sierra de Santa Pola formed approximately 6 million years ago in the so-called Bajo Segura Basin. This basin, which extends between Alicante and Murcia, originated in the Late Miocene and its sedimentary fill accurately records the evolution of the Mediterranean Sea in geologically recent times.



The reef formation occurred shortly before the Messinian Salinity Crisis, which culminated in the desiccation of the Mediterranean and the creation of vast saline plains.

After being buried by more recent sediments, the atoll was exhumed during the Quaternary period. The resulting relief replicates the original morphology of the reef and provides magnificent exposures.

In the area, despite the anthropisation of the space, two basic components of this ancient reef can still be distinguished:



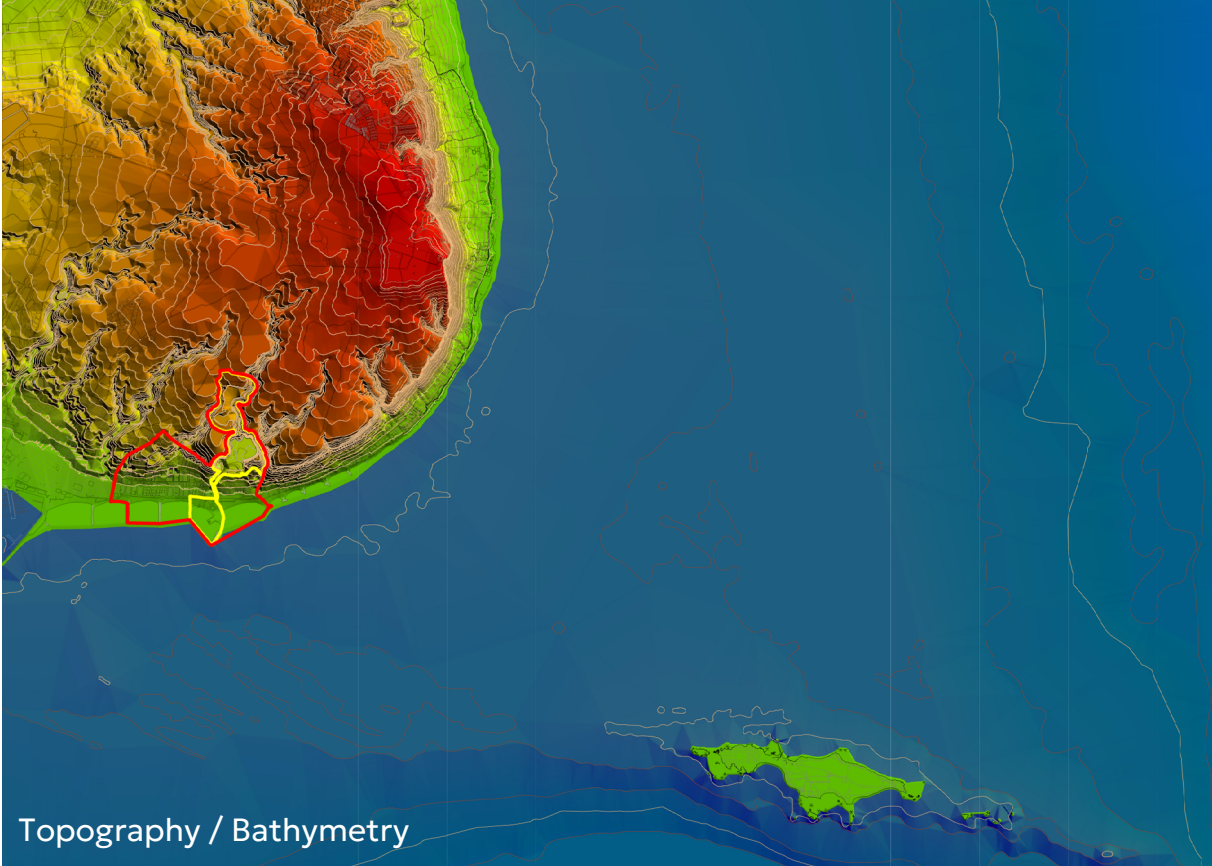
1. Reef Front. This corresponds to the current cliff. Its height reaches up to 50 meters near the lighthouse, although it is lower in this sector. It is mainly composed of colonies of the coral *Porites*, which exhibit different morphologies depending on depth.

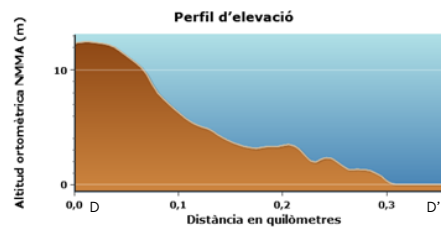
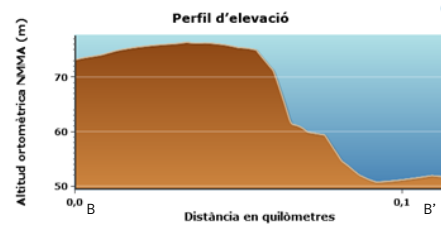
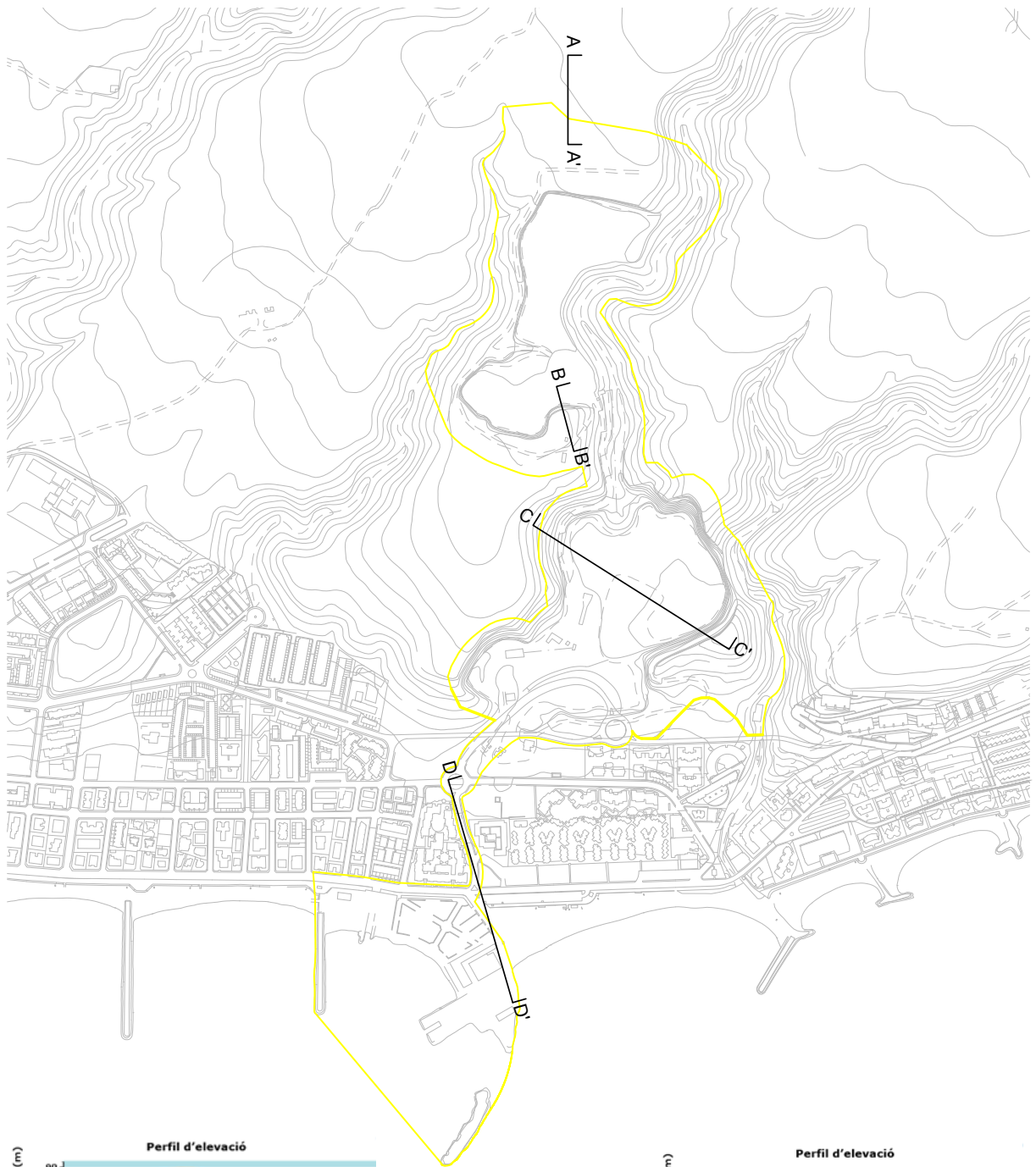


2. Submarine Reef Slope. During the Messinian period, fragments that broke off the reef accumulated here. It coincides with the current slope and, as a result, its deposits are partially covered by fragments that fell more recently under subaerial conditions.

5.2. Topography

The activity of the quarry over 100 years has drastically altered the natural profile of the terrain (reef front, reef slope, and coastline mentioned in the previous “geology” section), resulting in steep gradients:





5.3. Climate

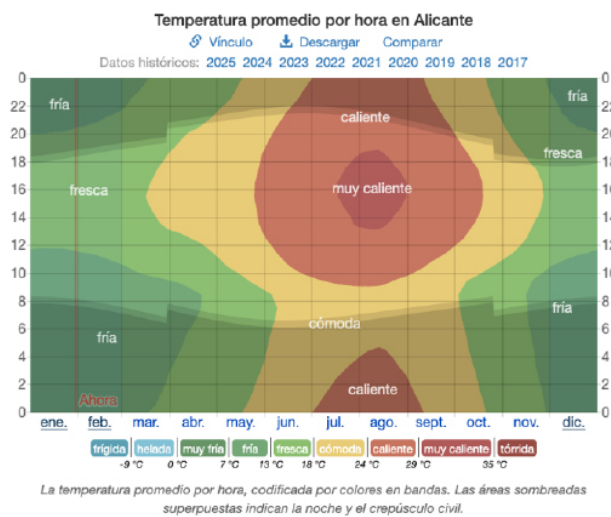
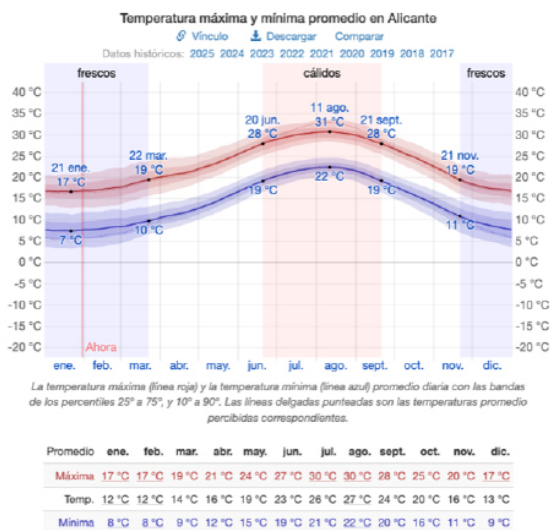
Source: <https://es.weatherspark.com/y/42586/Clima-promedio-en-Alicante-Espa%C3%B1a-durante-todo-el-a%C3%B1o#Sections-WaterTemperature>

5.3.1. Temperature

In Santa Pola, summers are warm, humid, and mostly clear, while winters are cool, windy, and partly cloudy. The area is dry year-round. Over the course of the year, temperatures typically range from 7°C to 31°C, rarely dropping below 3°C or exceeding 34°C.

The warm season lasts for 3 months, from June 20 to September 21, with an average daily high temperature above 28°C. The warmest month of the year in Alicante is August, with an average high of 30°C and a low of 22°C.

The cool season lasts for 4 months, from November 21 to March 22, with an average daily high temperature below 19°C. The coldest month of the year in Alicante is January, with an average low of 8°C and a high of 17°C.



5.3.2. Precipitation

The likelihood of a day with precipitation varies throughout the year. (A day with precipitation is defined as one with at least 1 millimeter of liquid or equivalent).

The wetter season lasts 8.6 months, from September 8 to May 27, with a probability of more than 9% that any given day will have precipitation. The month with the most days of precipitation is October, with an average of 4.7 days having at least 1 millimeter of rain.

The drier season lasts 3.4 months, from May 27 to September 8. The month with the fewest precipitation days is July, with an average of 0.8 days having at least 1 millimeter of rain.

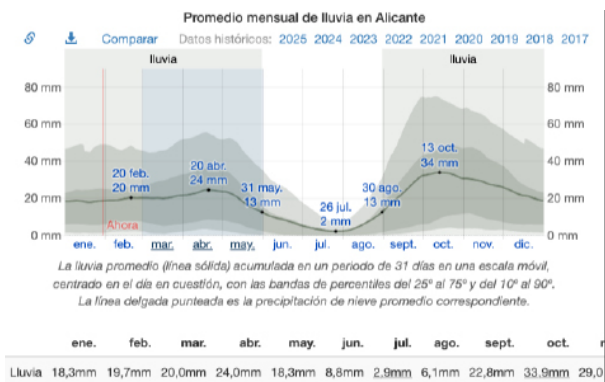
Among days with precipitation, distinctions are made between those with only rain, only snow, or a mix of both. The month with the most days of only rain is October, with an average of 4.7 days. Based on this categorisation, the most common type of precipitation throughout the year is only rain, with a maximum probability of 16% on October 7.

Rain

To demonstrate monthly variation rather than just totals, we show accumulated rainfall over a 31-day moving period centered around each day of the year. Santa Pola experiences slight variations in monthly rainfall by season.

The rainy season lasts 9 months, from August 30 to May 31, with a 31-day moving rainfall average of at least 13 millimeters. The rainiest month is October, with an average of 34 millimeters.

The dry season lasts 3 months, from May 31 to August 30. The driest month is July, with an average of 3 millimeters.



It is important to consider the recurrence of the phenomenon known as “DANA” (Isolated Depression at High Levels, also called “Gota Fría”) along the Spanish Mediterranean coast. a DANA occurs when the polar jet stream moving west to east develops undulations and curvatures that isolate part of this circulation, forming a pocket separate from the atmosphere’s main flow. This isolated pocket is colder than the surrounding air. When it reaches warmer surface and higher atmospheric temperatures in Spain, it creates a significant temperature contrast across atmospheric layers. This results in an unstable profile where air masses rise rapidly, saturate with water vapor, and lead to severe storms.

DANA’s can occur anywhere in Spain, but they are particularly dangerous when they originate over the Mediterranean. The heat and humidity in the lower layers meet the cold air above, triggering intense storms and downpours. Due to the region’s topography, these can cause flash floods, inundations, and collapses.

DANA events are most hazardous in late summer and autumn along the Mediterranean region. The accumulated heat and humidity in the lower layers meet the upper-level cold air, creating powerful storms and heavy rains.

Extreme weather events are increasing due to the impact of climate change. But is global warming also leading to more DANA’s and torrential rains in Spain? In a country like Spain, the Mediterranean Sea’s temperature plays a critical role in this process.

The Mediterranean provides the necessary ingredient for forming severe storms and intense rainfall. Its warmer waters at the end of summer act as a trigger for storms and torrential rains when a DANA occurs.

It should be noted that the Mediterranean Sea's temperature has increased by 0.8°C over the past 100 years along the Spanish coastline, with a rapid rise since 1980.

This results in a buildup of heat during spring (May-June) that extends through summer and into autumn (October and early November). According to climate change projections for the coming decades, the Mediterranean's temperature will continue to rise.

This makes it easier for storm clouds to form, concentrating rainfall in shorter periods, potentially releasing 100 to 200 liters per square meter in just one hour.

When facing heavy rainfall, such as during a DANA, it is essential to take measures to not only prevent flooding but also minimise damage.

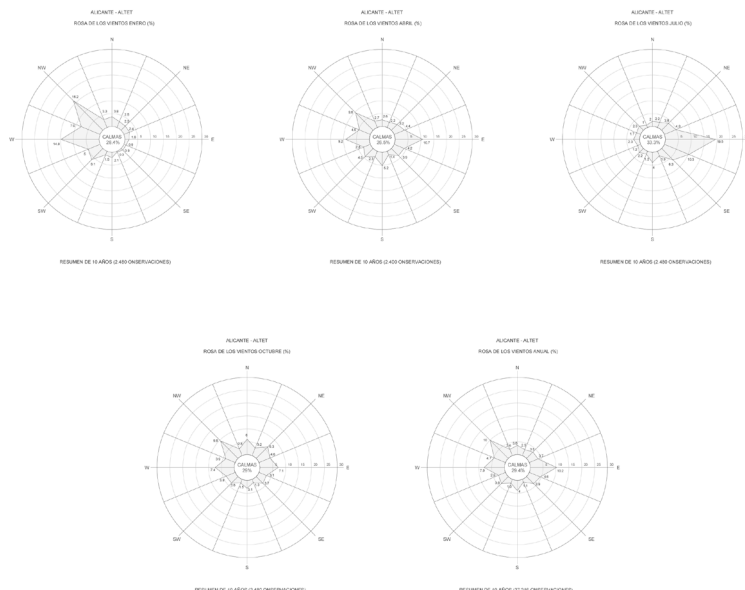
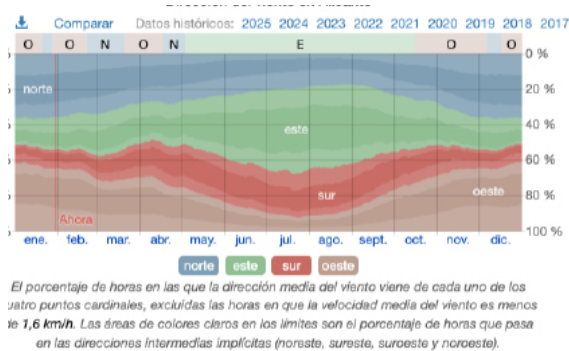
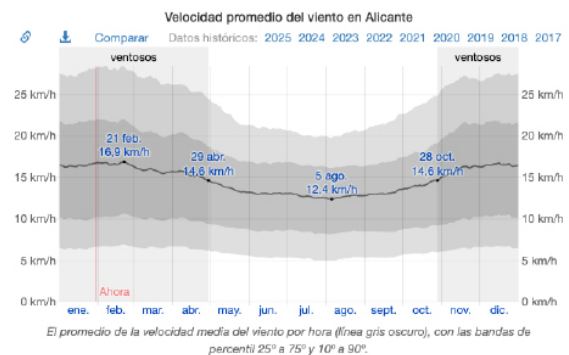
5.3.3. Wind

The winds in the Santa Pola area are moderate, with a significant percentage of calm conditions (nearly 30%) and a low frequency of strong winds (0.9% for winds exceeding 27 knots or 50 km/h).

The highest frequencies correspond to winds from the east, northwest, and west, in that order, highlighting the presence of a sea breeze.

Easterly winds are particularly frequent in summer. In contrast, winter is dominated by westerly and northwesterly winds. During the other seasons, transitions occur between these patterns.

From a maritime climate perspective, easterly winds are the most significant, as western and northwestern winds are land breezes for the project's location. Southerly and southwesterly winds (Lebeches) are less relevant.



The prevailing winds align with the dominant directions, making easterly winds (NE-SE sector) the most characteristic from a maritime perspective.

The highest recorded wind speed between 1963 and 1988 reached 146 km/h.

The average hourly wind vector (speed and direction) is analysed at 10 meters above ground level. Local topography and other factors heavily influence wind behavior, and instantaneous wind speeds and directions vary more than hourly averages.

The average hourly wind speed in Santa Pola shows slight seasonal variations throughout the year. The windiest part of the year lasts 6.0 months, from October 28 to April 29, with average wind speeds exceeding 14.6 km/h. The windiest month is February, with an average speed of 16.6 km/h.

The calmest part of the year lasts 6.0 months, from April 29 to October 28. The calmest month in Santa pola is August, with an average wind speed of 12.7 km/h.

The average hourly wind direction varies throughout the year.

North Winds: Most frequent for 1.1 weeks (January 20–28), 3.9 weeks (February 21–March 20), 2.3 weeks (April 17–May 3), and 1.4 weeks (December 6–16), peaking at 36% on December 12.

West Winds: Most frequent for 3.4 weeks (January 28–February 21), 4.0 weeks (March 20–April 17), 1.7 months (October 16–December 6), and 1.1 months (December 16–January 20), peaking at 36% on November 30.

East Winds: Most frequent for 5.4 months (May 3–October 16), peaking at 48% on July 24.

5.3.4. Cloudiness

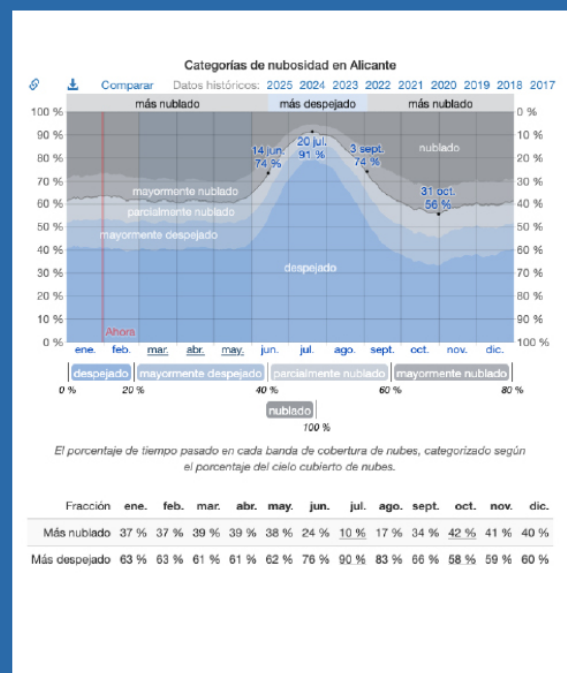
The average percentage of sky covered by clouds varies significantly throughout the year.

The clearest part of the year begins around June 14, lasts for 2.6 months, and ends around September 3.

The clearest month of the year is July, during which the sky is clear, mostly clear, or partly cloudy an average of 90% of the time.

The cloudiest part of the year begins around September 3, lasts for 9.4 months, and ends around June 14.

The cloudiest month of the year is October, during which the sky is cloudy or mostly cloudy 42% of the time on average.



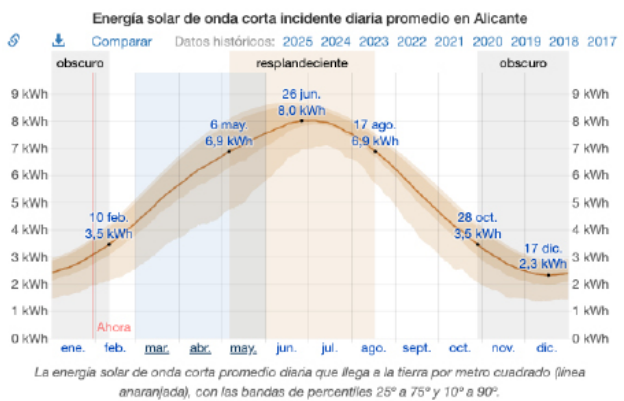
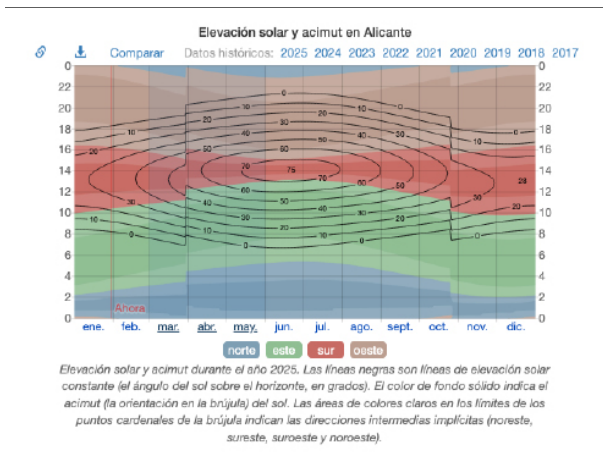
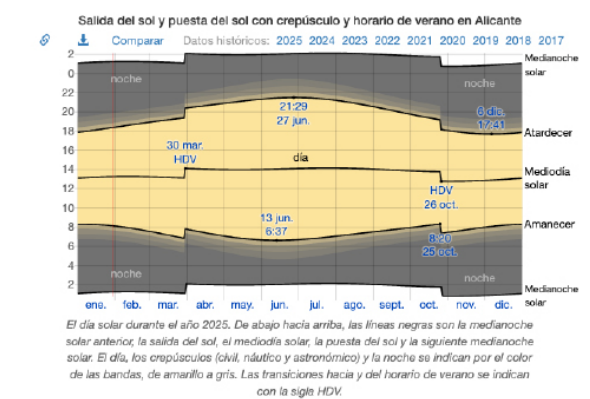
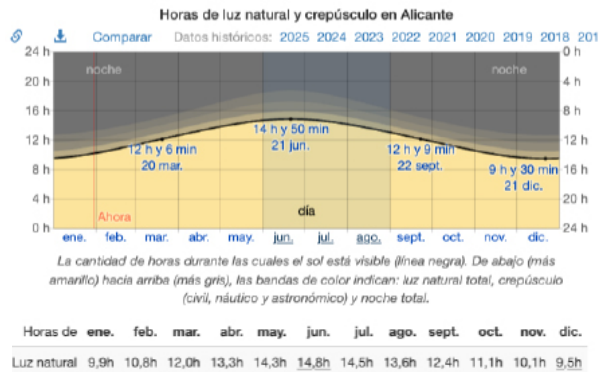
5.3.5. Sun

The length of the day in Santa Pola varies considerably throughout the year. The shortest day is December 21, with 9 hours and 30 minutes of daylight. The longest day is June 21, with 14 hours and 50 minutes of daylight.

The earliest sunrise is at 6:37 AM on June 13, and the latest sunrise is 1 hour and 43 minutes later at 8:20 AM on October 25. The earliest sunset is at 5:41 PM on December 6, and the latest sunset is 3 hours and 49 minutes later at 9:29 PM on June 27.

Daylight Saving Time (DST) was observed in 2024, starting in the spring on March 30, lasting 6.9 months, and ending in the fall on October 26.

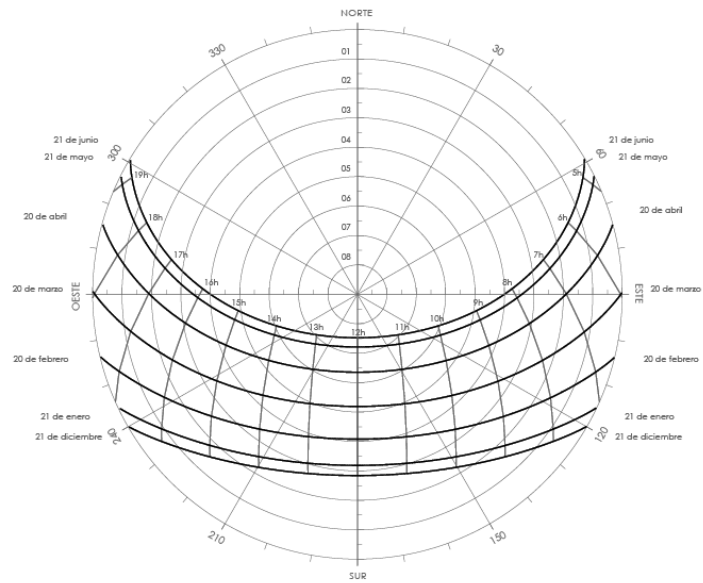
The image below is a compact representation of the sun's elevation (the angle of the sun above the horizon) and azimuth (compass orientation) for each hour of the day during the reported period. The horizontal axis represents the day of the year, and the vertical axis represents the time of day. On a given day and at a specific time, the background colour indicates the sun's azimuth at that moment. Black contour lines represent constant solar elevation.



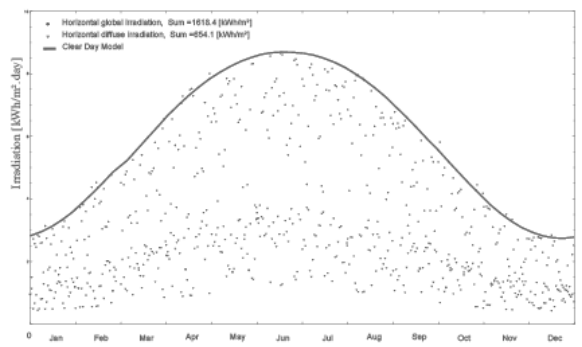
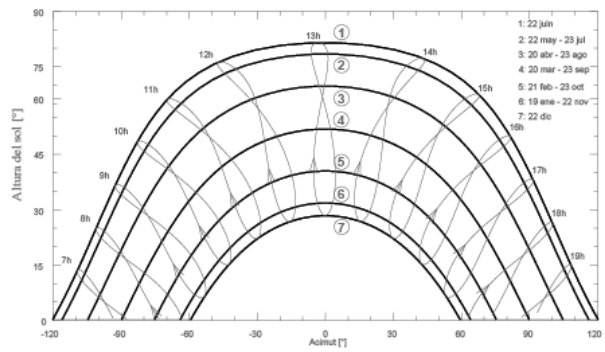
Solar Energy

The total daily incident shortwave solar energy reaching the Earth's surface is analysed over a broad area, accounting for seasonal variations in day length, solar elevation above the horizon, and absorption by clouds and other atmospheric elements. Shortwave radiation includes visible light and ultraviolet radiation.

The average daily incident shortwave solar energy experiences extreme seasonal variations throughout the year.



CARTA SOLAR (Lat: 38.2098; Long: -0.5146; (Solar) time zone: UT + 01
 © Universidad de Oregón SRML



The brightest period of the year lasts for 3.4 months, from May 6 to August 17, with an average daily incident shortwave energy of more than 6.9 kWh per square meter. The brightest month of the year in Alicante is June, with an average of 7.9 kWh.

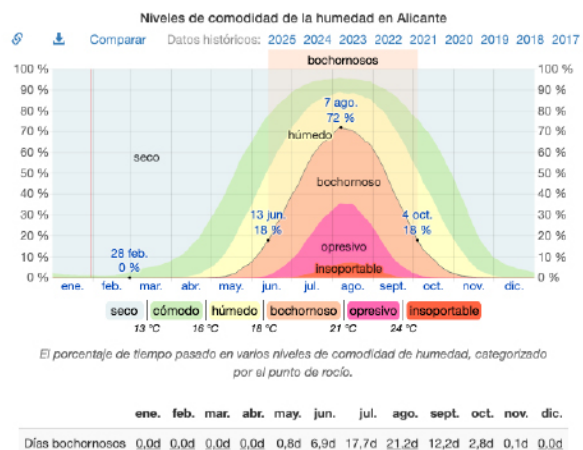
The darkest period of the year lasts for 3.4 months, from October 28 to February 10, with an average daily incident shortwave energy of less than 3.5 kWh per square meter. The darkest month of the year in Alicante is December, with an average of 2.4 kWh.

5.3.6. Humidity

Humidity comfort levels are typically based on the dew point, as this determines whether sweat will evaporate from the skin, cooling the body. Lower dew points feel drier, while higher dew points feel more humid.

Unlike temperature, which often fluctuates significantly between day and night, dew points change more slowly, meaning that even if temperatures drop at night, a humid day is usually followed by a humid night.

In Alicante, the perceived humidity varies extremely.



The most humid period of the year lasts for 3.7 months, from June 13 to October 4, during which the comfort level is muggy, oppressive, or unbearable at least 18% of the time. The month with the most muggy days in Alicante is August, with 21.2 muggy or worse days.

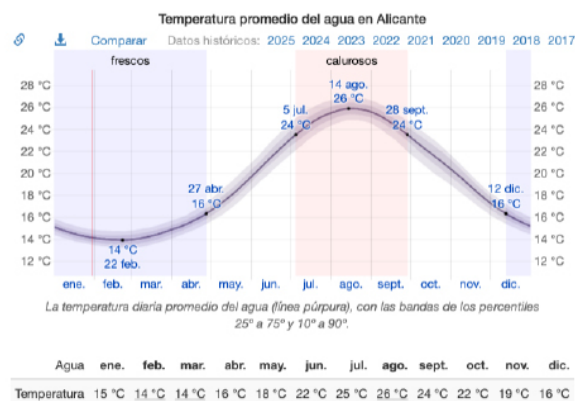
The least humid day of the year is February 28, when muggy conditions are essentially nonexistent.

5.3.7. Water Temperature

Santa Pola is located near a large body of water (the Western Mediterranean). The average surface water temperature is reported over a broad area.

The average water temperature experiences extreme seasonal variations throughout the year.

The time of year with warmer water lasts for 2.8 months, from July 5 to September 28, with an average temperature above 24°C. The month of the year with the warmest water is August, with an average water temperature of 26°C.



The time of year with cooler water lasts for 4.5 months, from December 12 to April 27, with an average temperature below 16°C. The month of the year with the coolest water is February, with an average water temperature of 14°C.

5.3.8. Optimal Climate Season*

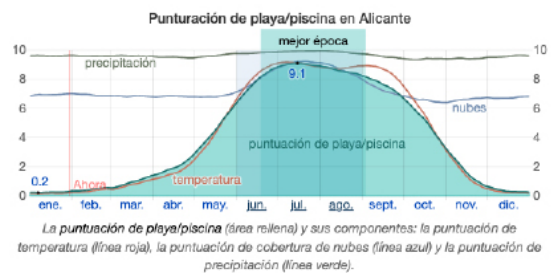
To describe how pleasant the weather in Santa Pola is throughout the year, two travel scores are calculated:

The tourism score favors clear, rainless days with perceived temperatures between 18°C and 27°C.

Based on this score, the best times of the year to visit Santa Pola for general outdoor tourist activities are from late April to early July and from late September to late October, peaking in the third week of June.

The beach/pool score favors clear, rainless days with perceived temperatures between 24°C and 32°C.

Based on this score, the best time of year to visit Santa Pola for hot-weather activities is from mid-June to early September, peaking in the second week of July.



*(Methodology: For each hour between 8:00 AM and 9:00 PM during the analysis period (1980 to 2016), independent scores for perceived temperature, cloud cover, and total precipitation are calculated. These scores are combined into a single composite hourly score, then aggregated daily, averaged over all years in the analysis period, and smoothed.

The cloud cover score is 10 when the sky is clear, decreasing linearly to 9 for mostly clear skies and to 1 for completely overcast conditions.

The precipitation score is 10 if there is no precipitation, decreasing linearly to 9 for trace amounts and to 0 for 1 millimeter or more.

The tourism score is 0 if perceived temperatures are below 10°C, rising linearly to 9 at 18°C, to 10 at 24°C, then decreasing linearly to 9 at 27°C, and to 1 at 32°C or higher.

The beach/pool score is 0 if perceived temperatures are below 18°C, rising linearly to 9 at 24°C, to 10 at 28°C, then decreasing linearly to 9 at 32°C, and to 1 at 38°C or higher).

5.4. Coastal Dynamics

Source: "Project for a Marina in Santa Pola (Alicante)" by "Ibérica de Estudios e Ingeniería SA - IBERINSA, for Sociedad Puerto Deportivo Varadero, S.A." Municipal Archive.

5.4.1. Maritime Climate

The main variables influencing coastal processes are wind and waves.

Key conclusions:

- 1 Prevailing winds are from the east, with lower frequencies from the NW and W directions.

- 2 Easterly winds dominate in summer, while the other two directions are more frequent in winter.
- 3 Dominant winds are also from the east.
- 4 The wave climate is moderate, due to the shelter provided by the Island of Tabarca and the coastal configuration.
- 5 The most significant wave component is from the east, but due to the importance of refraction and diffraction processes, waves reaching the coast are highly attenuated and arrive obliquely.

5.4.2. Coastal Line Variations

The stretch of coast between the fishing port and Cape Santa Pola has undergone transformations over time:

Levante Beach

Between 1947 and 1956, the beach experienced significant erosion, losing dry sand along its length. From 1956 to 1972, a marked tilting was observed, with sand accumulating against the Levante breakwater of the fishing port, highlighting that the annual average wave result is easterly, causing longitudinal sediment transport towards the West.

Photographs from 1980 show this phenomenon persisted, even with the possibility of sands overtopping the fishing port breakwater. In 1979, the port entrance was dredged.

In the 1980s, this situation worsened, and no dry beach existed between the “Plan Blasco” and González Vicens Avenue.

In 1984, the Directorate General of Ports and Coasts drafted a project for regenerating this beach, involving the construction of four perpendicular sea walls and the addition of marine-sourced sand. As a result, Levante Beach is now divided into four, each consisting of a sheltered beach, preventing sediment flow.

Varadero Beach

Located to the east of the “Muelle de los Ingenieros”, this beach originally had a roughly equal length on both sides of Punta del Esparto, with clear support from the two sections on its western side, as a consequence of the prevalence of easterly waves.

With urban development in Santa Pola del Este, sea walls were built at Punta del Esparto and further east, creating small sheltered beaches.

Finally, to counterbalance or mitigate tilting between “Punta del Esparto” and the “Muelle de los Ingenieros”, a sea wall was built extending from the existing structure to protect the easternmost area, nourished with borrowed sand. This effort was part of the aforementioned project promoted by the Directorate General of Ports and Coasts.

5.4.3. Coastal Processes

The coastal processes along the stretch of coast between the fishing port and Cape Santa Pola are summarised as follows:

- 1** The coastline layout and the predominance of easterly wave components generate coastal transport in an east-to-west direction.
- 2** The direction of the fetch wind, with the presence of the Balearic Islands and Tabarca Island, means the area is relatively sheltered from dominant waves.
- 3** Cape Santa Pola and Tabarca Island act as partial barriers to coastal transport. The availability of sand for westward transport is virtually nonexistent.
- 4** The origin of these beaches can be attributed to the erosion of nearby coasts and, to a lesser extent, to sediment inputs from the Vinalopó and Segura rivers. This latter contribution has been reduced to negligible levels since the construction of the fishing port, which acts as a barrier to sediment flow. River regulation has also contributed to the reduction of sediments.
- 5** Human intervention, particularly through the construction of sea walls perpendicular to the coast, has further decreased longitudinal transport. This is evidenced by the stability of regenerated beach units. The erosion of beaches located to the east of the Engineers' Sea wall has been halted by these structures. Beaches situated between this sea wall and the fishing port have become isolated from coastal transport processes, at least in the area closest to the shore.

5.5. Natural Hazards

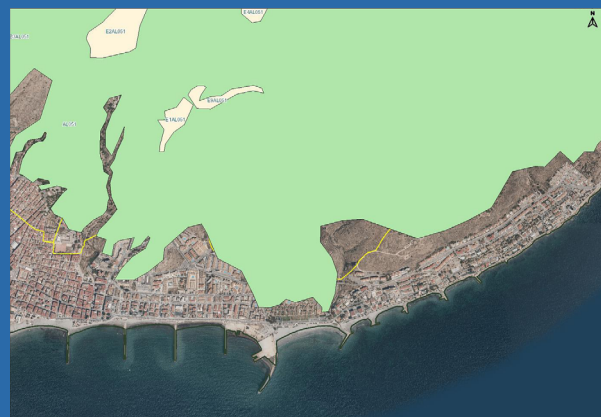
Outlined below are general natural hazard considerations based on thematic cartography from the Valencian Community, along with references to specific site conditions and risks.

5.5.1. Thematic Cartography of the Valencian Community

Forestry Source: <https://mediambient.gva.es/es/web/medio-natural/explotaciones-mineras-en-terreno-forestal>

Territorial Forestry Action Plan of the Valencian Community: Approved by Decree 58/2013 of the Valencian Government on May 3, partially repealed and replaced by Decree 91/2023 of June 22, approving the Regulation of Law 3/1993, dated December 9, on Forests of the Valencian Community.

Mining activity significantly impacts the economy of the Valencian Community, supplying strategic sectors such as construction, road infrastructure, and ceramics. However, the environmental and visual impact is considerable. Regulations establish mechanisms to ensure the restoration of mining areas and the enhancement of their natural heritage.



Decree 82/2005, dated April 22, on the environmental management of mining operations in forest areas of the Valencian Community, modified by Decree 91/2023, aims to balance mining sector development with natural conservation through environmental regulation of open-pit mining activities.

In the Valencian Community over 450 mining operations are located, since the regulation came into effect in 2005, 375 Comprehensive Restoration Plans (PRIs) have been processed.

A PRI is an engineering document in which mining operators propose spatial and temporal restoration plans. On Public Utility Forest lands, restoration must ensure the land's return to the values that warranted its classification as Public Utility Forests.

For example:

Explotaciones mineras en terreno forestal en fase de explotación



Explotación minera restaurada en terreno forestal



Livestock Paths

Law 3/2014 of July 11 on Livestock Paths of the Valencian Community, with the corresponding administrative instructions and catalog approvals, regulates their management.



Flood Risk

Decree 201/2015, dated October 29, approves the Territorial Action Plan for Flood Risk Prevention in the Valencian Community (PATRICOVA).

According to Article 8.1.g, flood hazard levels are classified into six hydrological-hydraulic and one geomorphological levels, serving as indicators of historical flood events and their likelihood of recurrence.



Coastal Green Infrastructure

Decree 58/2018, dated May 4, approves the Territorial Action Plan for Coastal Green Infrastructure in the Valencian Community, including the region's Beach Catalog.



5.5.2. Public Maritime-Terrestrial Domain

Key regulations include:

Law 22/1988, dated July 28, on Coasts (consolidated text as of December 11, 2015).

Law 2/2013, dated May 29, on Sustainable Coastal Protection and Use, amending Law 22/1988.

Royal Decree 876/2014, dated October 10, approving the General Regulations on Coasts.



5.5.3. Other Site-Specific Risks

Climatology

Risk from DANA (isolated high-altitude depressions) or “Cold Drop” events, as detailed in the climatology section, is significant due to the area’s unique orographic configuration.

Relief and Topography

The steep cliffs created by quarry operations near adjacent unaltered public land present risks of falls. Mitigation measures such as physical barriers, fencing, and appropriate signage are necessary.

5.6. Natural Resources and Elements

This section refers to previously discussed climatology and physical environment aspects.

Economic Dynamics and Challenges of the Site and Its Context

This section refers to programmatic content outlined earlier in the document.



Proposed Assignment Following the Jury's Decision:

1st. Service to Be Contracted: Special Plan Project

A **Special Plan Project initiated by the municipality**, a specific planning instrument outlined in Article 43 of the Law on Territorial Planning, Urban Development, and Landscape of the Valencian Community, approved by Decree-Law 1/2021 of the Valencian Government Council on June 18 (LOTUP), with the following terms:

“Article 43. Special Plans

1st Special plans complement other plans and may modify them if necessary. They may be formulated to establish territorial and urban planning for actions included in other planning instruments, regulate projects for works, services, or activities of general interest, and address rehabilitation, regeneration, or renewal actions in the urban environment referenced in this consolidated text and related national legislation. They may also apply to scenarios regulated by relevant sectoral legislation.

Special plans will also serve as the instrument for detailed territorial analysis and urban planning when aimed at minimising environmental impact.

2nd Their documentation will include the following:

a) Non-regulatory documents:

1st Graphic and written informative documentation.

2nd Descriptive and justificatory report and complementary studies.

3rd Strategic environmental and territorial study and landscape integration study or, where applicable, a landscape study, in accordance with the annexes I and II of this consolidated text, or regulatory provisions approved by the Valencian Government Council.

4th Economic feasibility and sustainability reports, if required by the general structural plan's preliminary studies.

b) Regulatory documents:

1st Ordinances.

2nd Catalog, if necessary.

3rd Planning maps.”



The co-drafting of the Special Plan Project, alongside the local team, including the aforementioned documentation and formal content, would constitute the first service to be contracted with the winning team of the European 18 international competition **through a negotiated procedure without public notice,** in accordance with Article 168 of the current Law 9/2017, of November 8, on Public Sector Contracts (LCSP):

“Article 168. Applicability of the negotiated procedure without public notice

Contracting authorities may award contracts using the negotiated procedure without prior publication of a contract notice only in the following cases: (...)

d) In service contracts, when the contract in question is the result of a project competition and, according to applicable rules, must be awarded to the winner. If there are multiple winners, all must be invited to participate in the negotiations. (...)”

The local co-authoring team for the Special Plan Project will include the municipal architect, the Legal-Technical Urban Planning Advisor, and any municipal technicians designated by the competent municipal authority. The municipal architect will assume the role of team leader for the co-authoring team, which will consist of the international team (the European 18 winner) and the local team.

The Santa Pola City Council is authorised, under Article 44.6 of LOTUP, to formulate and process the Special Plan. Therefore, the City Council is responsible for contracting the drafting service for the Special Plan Project. Within the City Council, the authority to contract this service, initially held by the Mayor under Second Additional Provision 1 of the LCSP, was delegated to the **Local Government Board** by a Presidential Mayoral Decree on June 20, 2023.

2nd. Service to Be Contracted: Urbanisation Project and Health and Safety Study

The Special Plan will likely include structural planning determinations established anew or modifying those currently set forth in the General Plan. For this reason, its final approval will fall under the authority of the Generalitat Valenciana’s administration and, within it, the department responsible for urban planning, territorial organisation, and landscape (Article 44.3.c of the LOTUP).

Once the Special Plan is definitively approved, the definition of the necessary public works to implement its determinations will require the approval of an Urbanisation Project (Article 182 of the LOTUP), with the material and formal content and the approval process established in Article 183 of the same legal text.

The Urbanisation Project will also include the content required for the Quarry Restoration Project, as specified in Royal Decree 975/2009, of June 12, on the management of waste from extractive industries and the protection and rehabilitation of spaces affected by mining activities, and Decree 82/2005, of April 22, by the Generalitat Council, on Environmental Regulation of Mining Operations in Forest Areas of the Valencian Community. These regulations establish a series of minimum content requirements that a Restoration Plan (PR) must include.

The Urbanisation Project will be co-drafted by a team composed of the international team (winner of European 18) and a local team formed by the municipal architect, the municipal civil engineer specialising in roads, canals, and ports, and other technicians designated by the competent municipal authority. The international team (winner of European 18) will be contracted through a negotiated procedure without public notice (Article 168.d LCSP). The municipal civil engineer specialising in roads will direct the co-drafting team for the Urbanisation Project or, in their absence, the municipal architect.

3rd. Service to Be Contracted: Supervision of Works for the Urbanisation Project and the Health and Safety Study

The international team (winner of European 18) will also integrate into the works supervision team for the Urbanisation Project by appointing one or more (up to three) of its members with professional qualifications for the task. For this purpose, the team will be contracted through a negotiated procedure without public notice (Article 168.d LCSP). The local co-supervision team for the Urbanisation works and the Health and Safety Study will consist of the municipal technicians designated for this purpose. In any case, the team will include: the municipal civil engineer specialising in roads, the municipal architect, the municipal senior industrial engineer, the municipal public works technical engineer, the municipal technical architect, and the municipal technical industrial engineer. Additional competent municipal technicians may also be designated by the relevant municipal authority.

The costs of the necessary geotechnical study and topographical survey required to prepare the documents and provide the contracted services will be borne by the Santa Pola City Council. All other work required for the contracted service will be the responsibility of the international team (the competition winner). The City Council will cover the salary expenses of the local team composed of municipal technicians.

Schedule

The contracting of the first service, “Special Plan Project,” will be immediate following the competition decision. **However, an additional preliminary contract could be arranged with the competition-winning team, as a minor contract, for the preparation of an initial draft of the subsequent Special Plan.** This would aim to cover the financial costs for the winning team, such as travel expenses and other minor expenses needed to start the project before receiving payment for the first phase of the negotiated contract without public notice.

The two successive services depend on: The second, “Drafting the Urbanisation Project and Health and Safety Study,” requires the approval and enactment of the Special Plan. The third, “Supervision of Works for the Urbanisation Project and the Health and Safety Study,” depends on the contracting of the works included in the project. The latter, in turn, will depend on the budget availability for the execution of the work, which cannot be anticipated at this time.