

# ATTEMPTING TO COMPARE THE VALENCIA FLOODS OF 2024 AND 1957

## OCTOBER 2024

- Regional population: **5,300,000**
- Urban population: **840,000**
- Large urban impermeable development
- **Ubiquitous automobile**
- Fatalities: **200**
- Duration of rainfall: **72 hours**
- Rain accumulation: **112 mm**
- Max rain, average: 4.2 / 1.5 mm/h
- Max wind: 26 knots (48 km/h, Beaufort 6/7)

## OCTOBER 1957

- Regional population: **2,300,000**
- Urban population: **506,000**
- Large agricultural permeable environment
- **Almost inexistent automobile**
- Fatalities: **100**

*Note: rain accumulation in some recent hurricanes - Harvey (2017): 1538 mm; Lane (2018): 1473 mm; Imelda (2019): 1096 mm; Florence (2018): 912 mm; Helene (2024): 782 mm*

OCTOBER 2024



*At Paiporta: 2 km SW of the 1960s runoff channel*





OCTOBER 1957

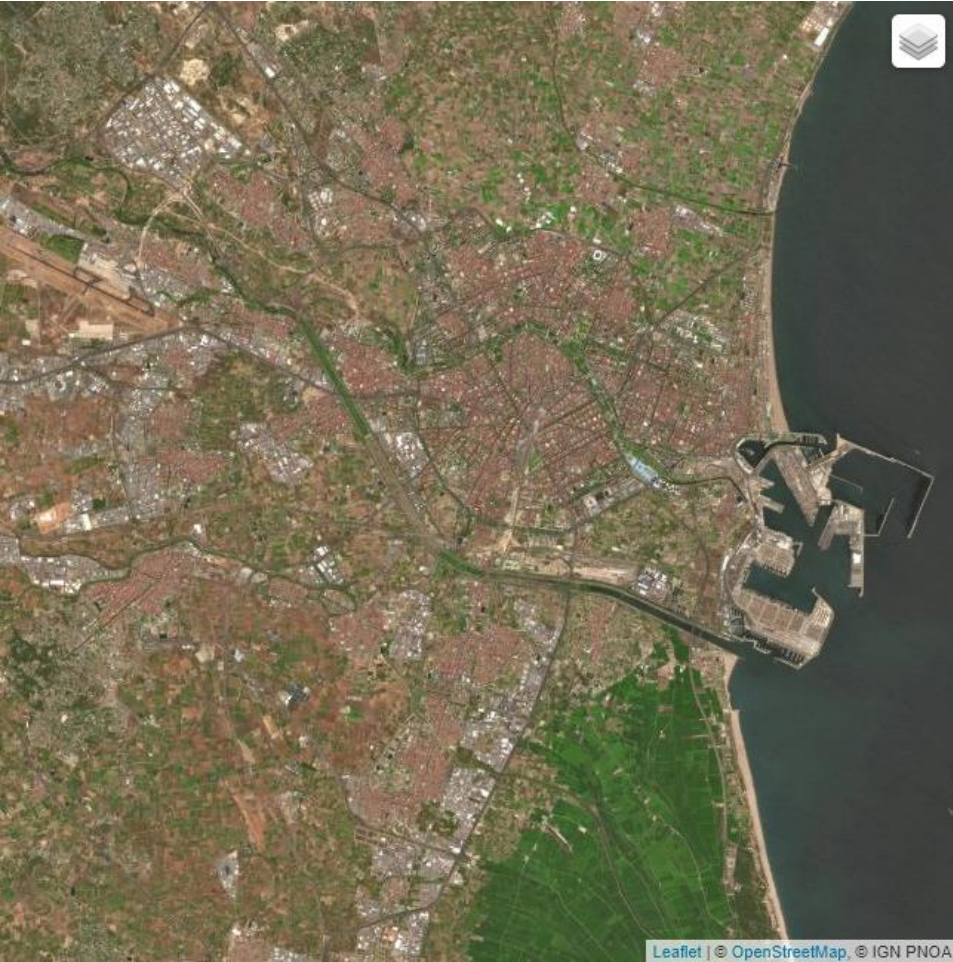
*Downtown Valencia, north of the 1960s runoff channel*



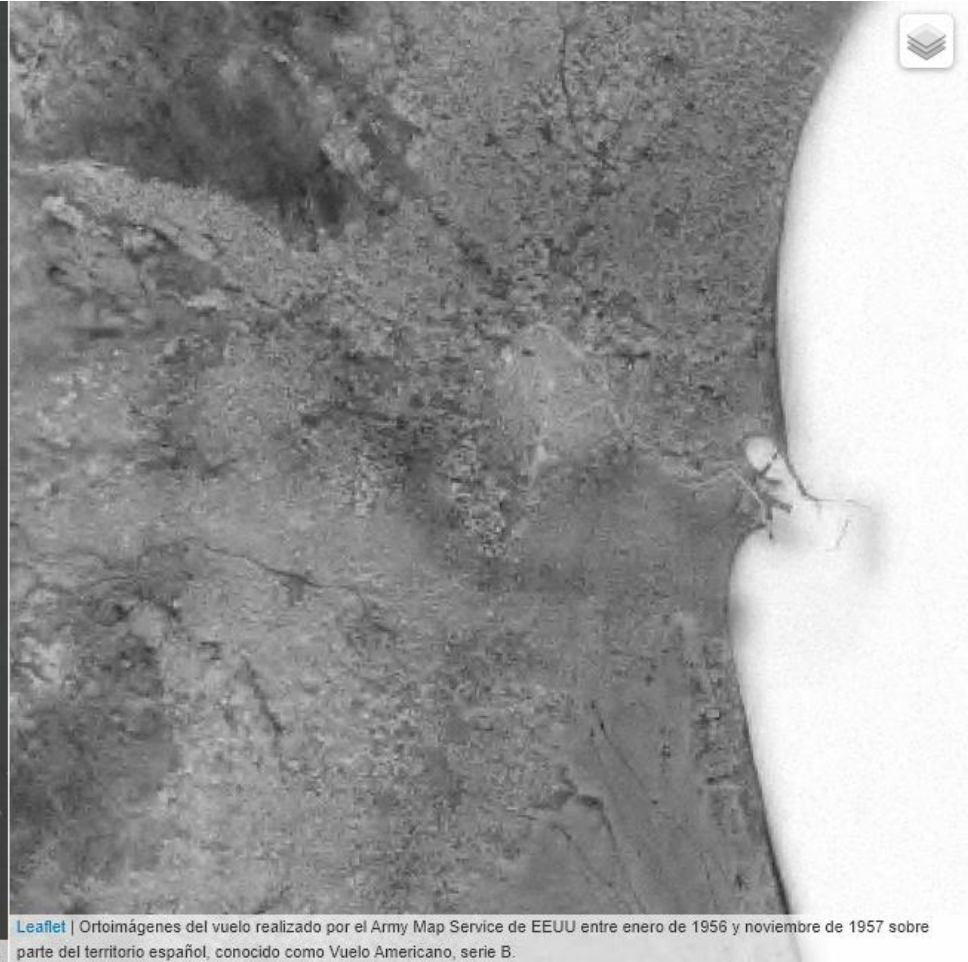


# SAME SCALE, SAME GEOGRAPHICAL REFERENTIAL

2023



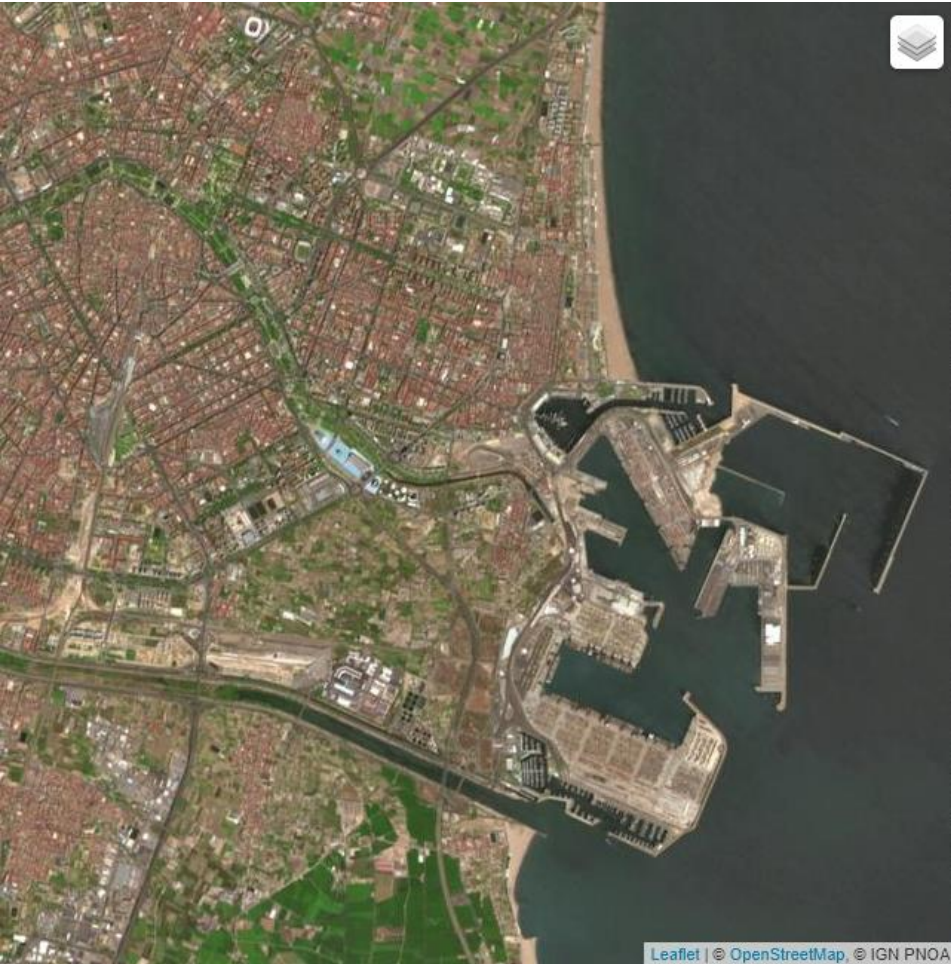
1956





## SAME SCALE, SAME GEOGRAPHICAL REFERENTIAL

2023



**The Río Turia river bed had been diverted to the south of the city**

1956

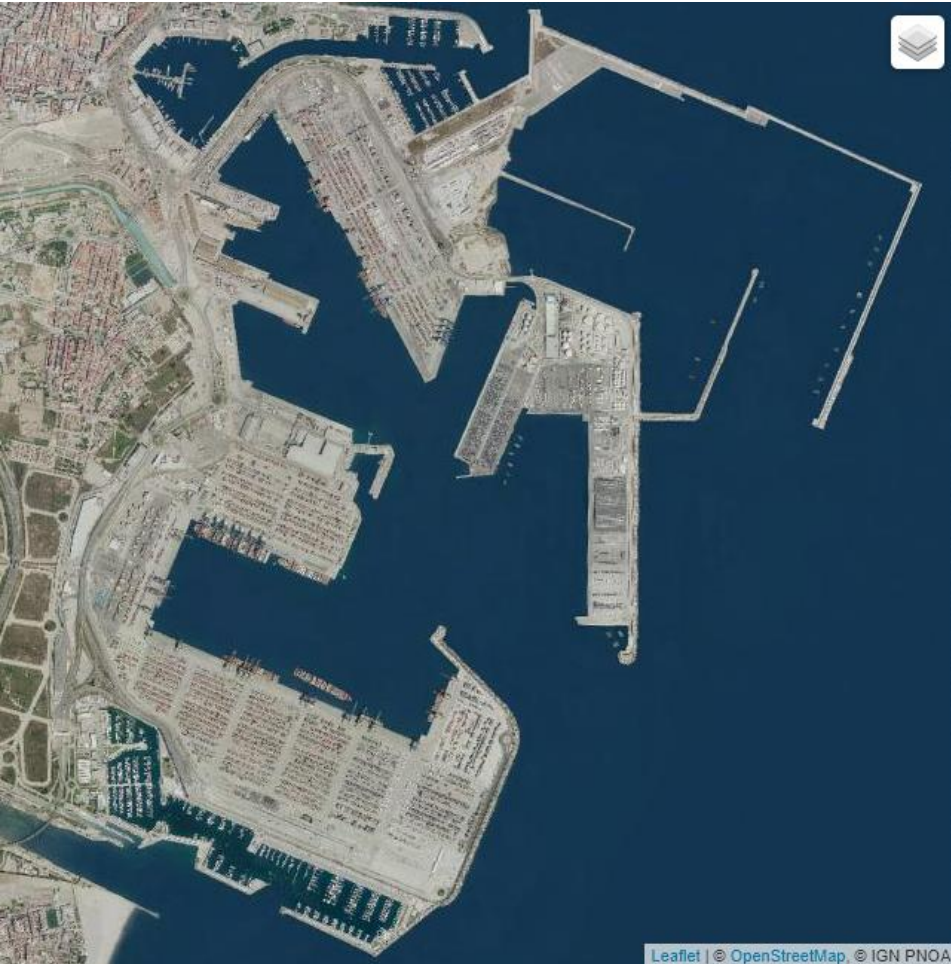


**The Río Turia river bed ran through the city**

## SAME SCALE, SAME GEOGRAPHICAL REFERENTIAL

2023

1956



**Exponential port expansion**



# SAME SCALE, SAME GEOGRAPHICAL REFERENTIAL

2023

1956

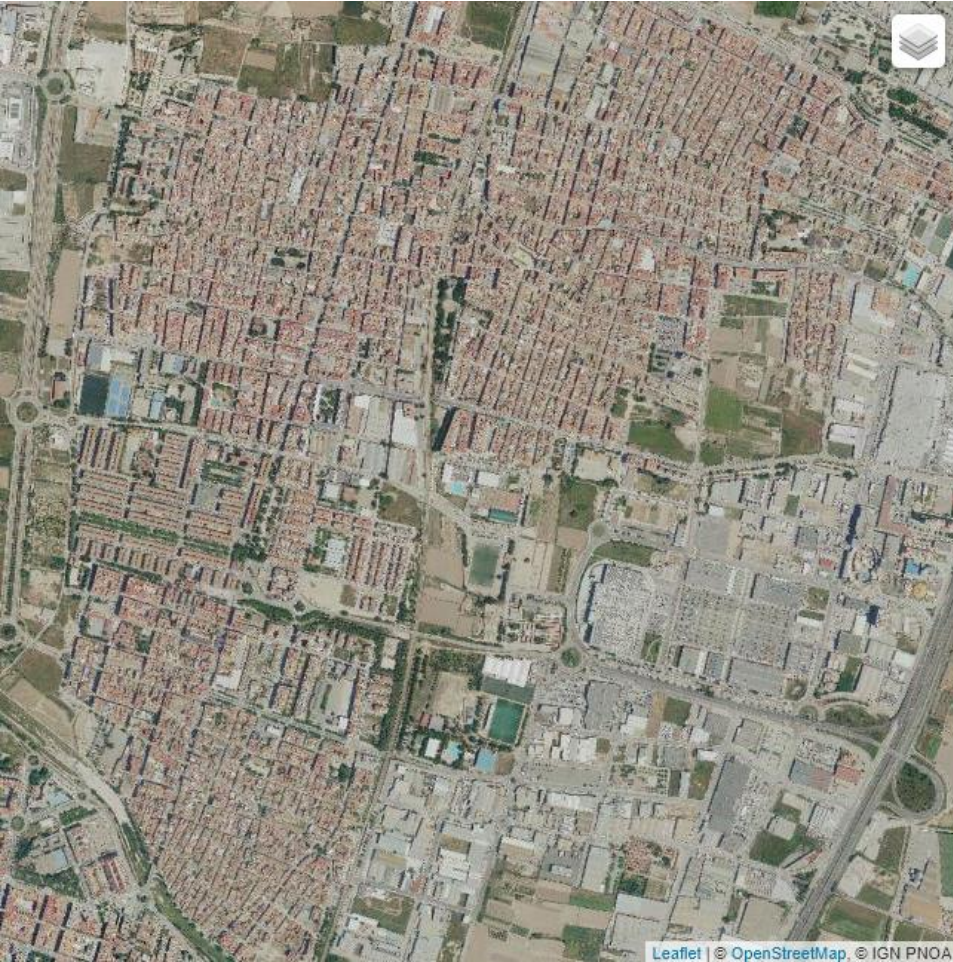


Urbanization and soil impermeabilization

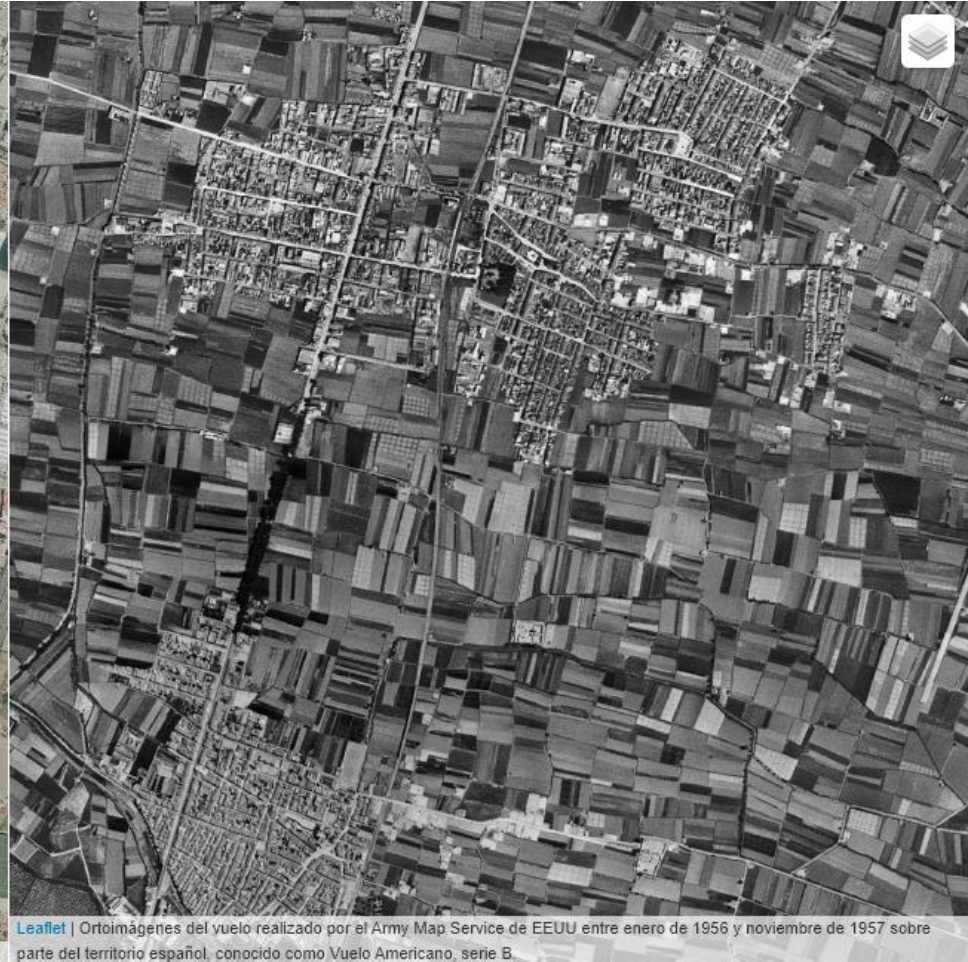


## SAME SCALE, SAME GEOGRAPHICAL REFERENTIAL

2023



1956



**Replacement of permeable agricultural land by hard construction**



TOPOGRAPHIC MAPS

2020



1939



**Old river bed (always dry, vegetal cover)**

**Lower end of old river bed (wet)**



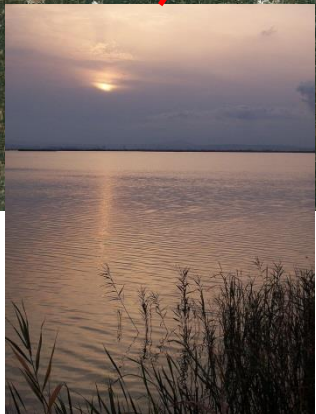
**1960s storm runoff channel (usually dry, vegetal cover)**

**Lower end of the storm runoff channel (sea water)**



25 October 2024

30 October 2024



Note the large sea level lagoon of  
the *Albufera* south of Valencia



25 October 2024

30 October 2024

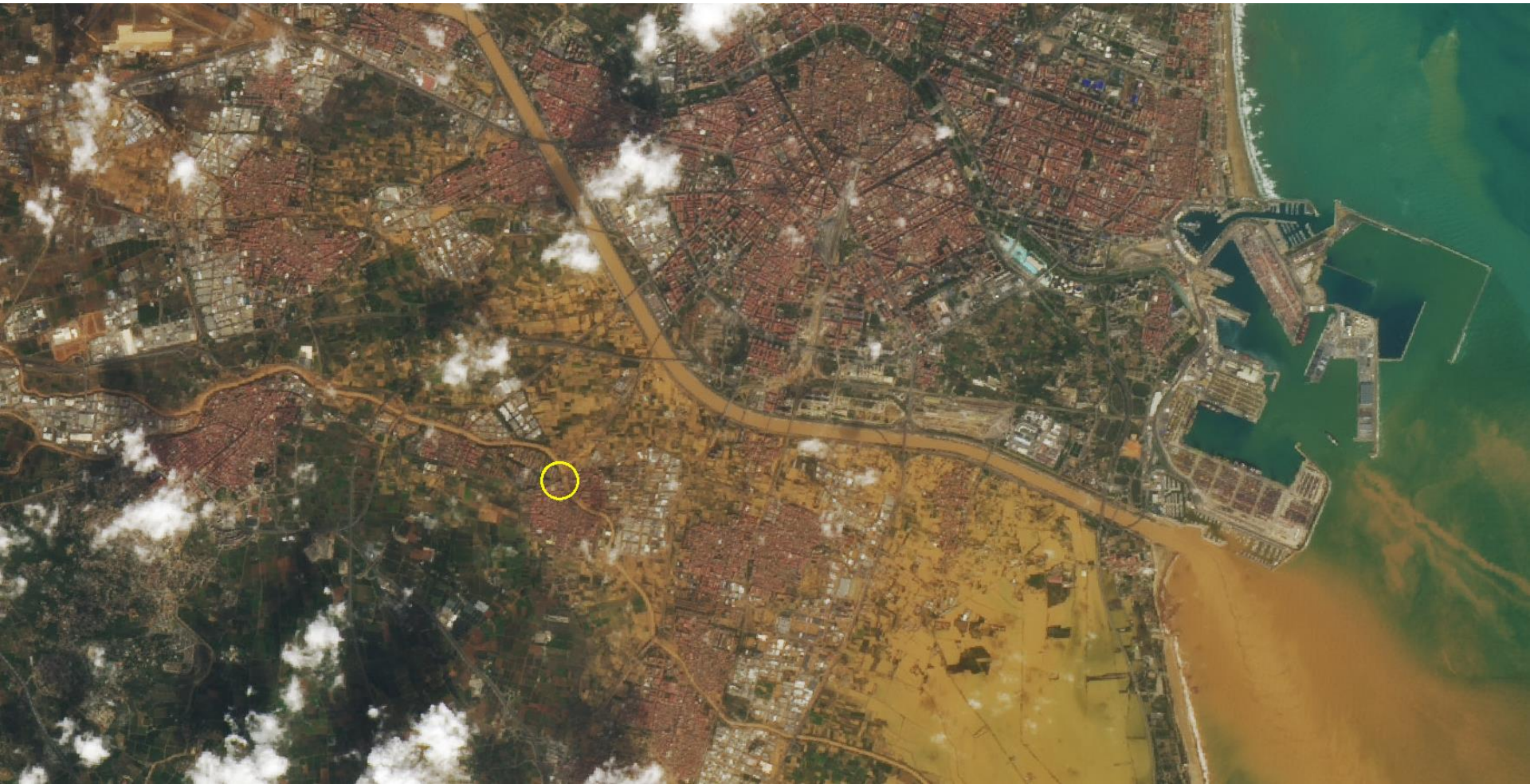


The *Albufera* lagoon



*The yellow circle shows the location  
of the pictures in slide 2*

The 1957 flood affected mostly the old  
historic town north of the 1960s runoff  
channel

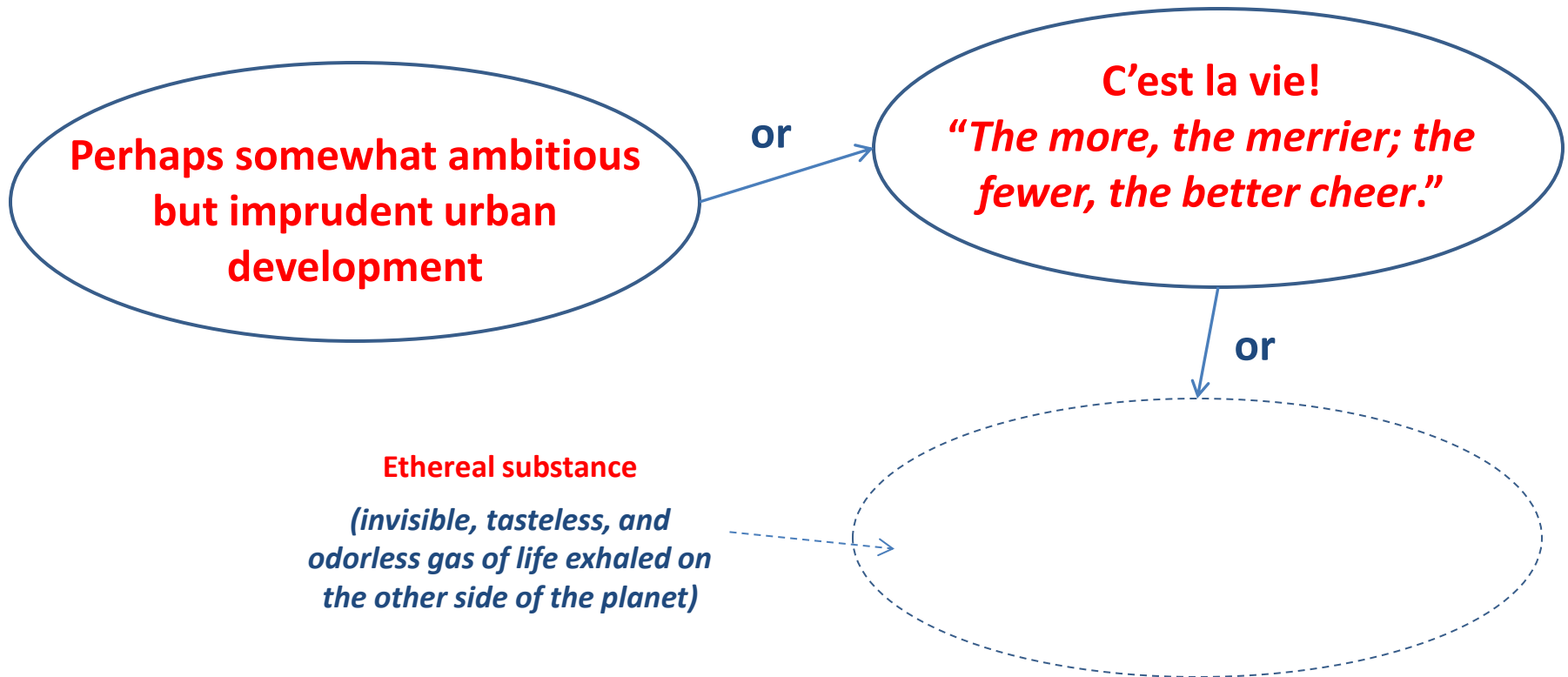


The 2024 flood affected mostly the  
urban developments south of the  
1960s runoff channel

The runoff channel was built after  
1957 to protect the historic town,  
which it seems to have accomplished



## DETERMINING PROBABLE CAUSES AND REMEDIES



If in need of answers, try locating the local national equivalent to an Environmental Protection Agency. Please report your finding to this site <sup>1</sup>

<sup>1</sup> It appears that the Ministries for the *"Protection of the Environment"*, per se, have disappeared from several European countries. In Spain the closest thing is now the *Ministry for the Ecological Transition and the Demographic Challenge*; in France the *Ministry of Ecological Transition, Energy, Climate, and Risk Prevention*. Among the *plethoric epithets*, the defining term seems to be *"transition"*, or change, which appears to be quite the **exact opposite** of protection and conservation.