

# Resilience of Buildings at the Wildland-Urban Interface (WUI)

Dr. Yiannis Kontoulis,  
Hellenic Institute for the Fire Protection of Structures (ELIPYKA)

Athens  
21/10/2021



ELIPYKA



**CFPA EUROPE**<sup>®</sup>  
Fire Safety | Security | Natural Hazards

# How can we save lives and properties from fire in the Wild land-Urban Interface?

- Copy practices we know best



Images: Wikimedia Commons CC-BY-SA

# Wild Land Urban Interface

- From: Birgitte Messerschmidt (NFPA National Fire Protection Association)
- Presentation to Fire Safe Europe

High rise building	Wild Land Urban Interface	
Evacuation routes	Allow access	Fire in Greece, Mati
Compartmentation	Assess areas by fire risk	
Requirements for construction products	Requirements for construction products	A1 or A2 fire class

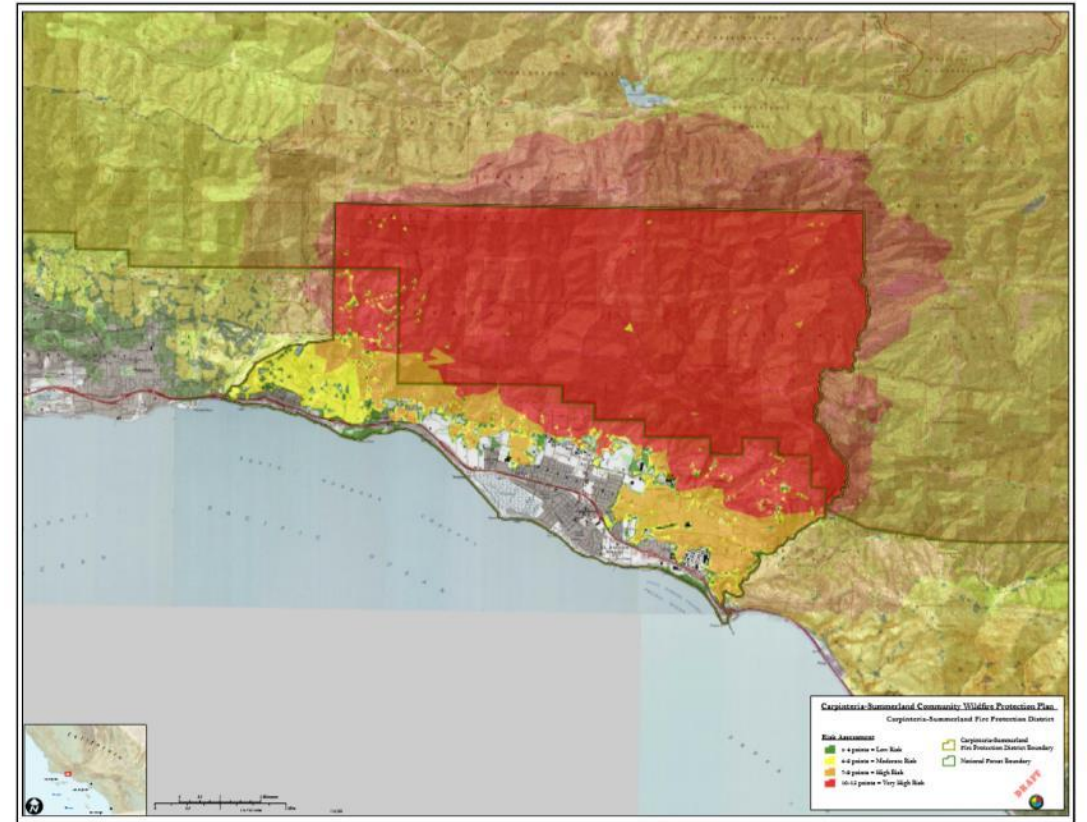
However, the question is:

- How do you define where is the Wild Land - Urban Interface ?



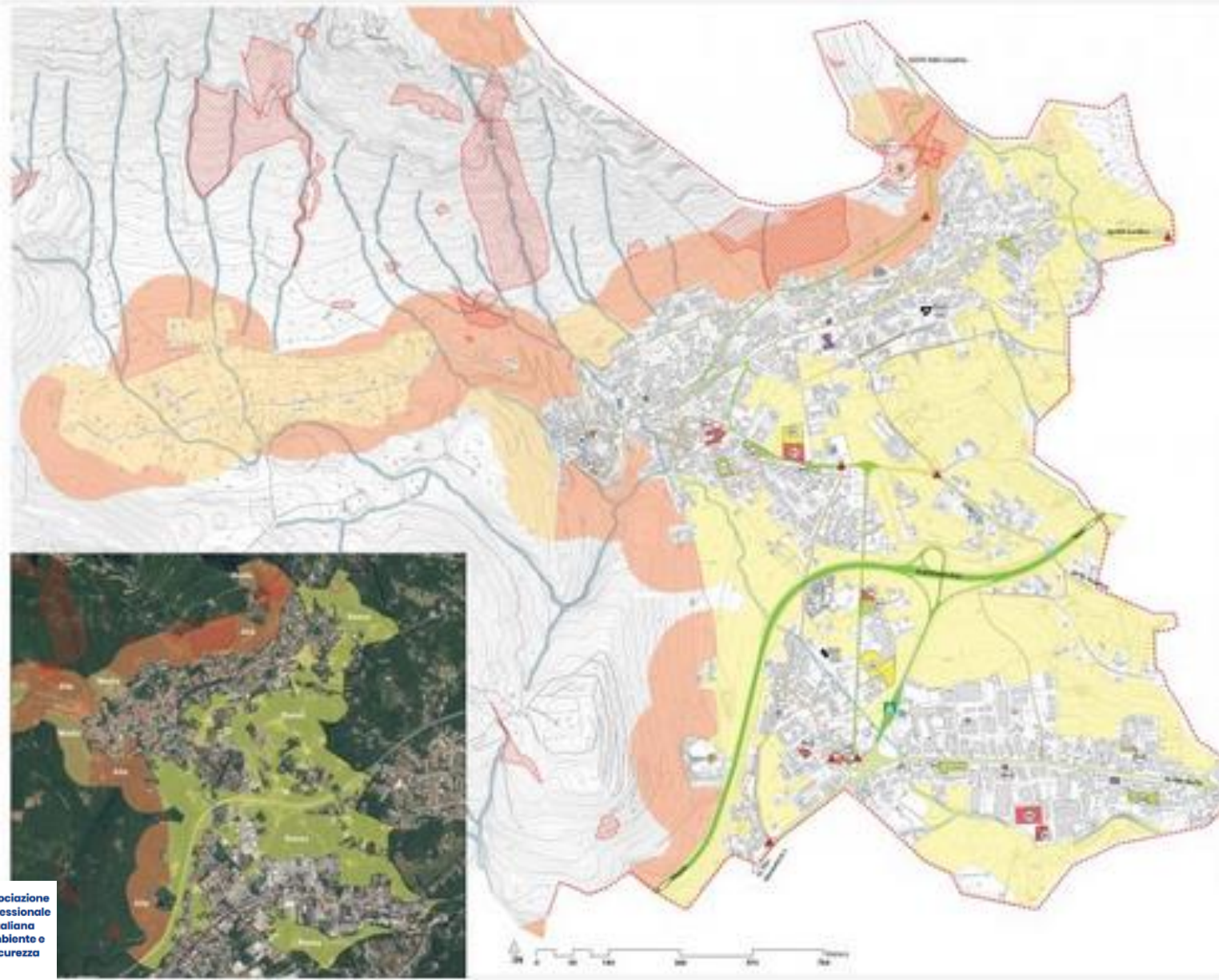
# Fire risk assessment

- From Dr. Konstantinos-Victor Belivanis, Jensen Hughes, USA
- 1<sup>st</sup> Conference of Fire Protection Athens Feb. 2020
- Historical data
- Action plan
- **Fire risk assessment**
- **Compartmentation**
- => fire risk maps



# Forest-Urban interface

## Mercogliano (Avellino)

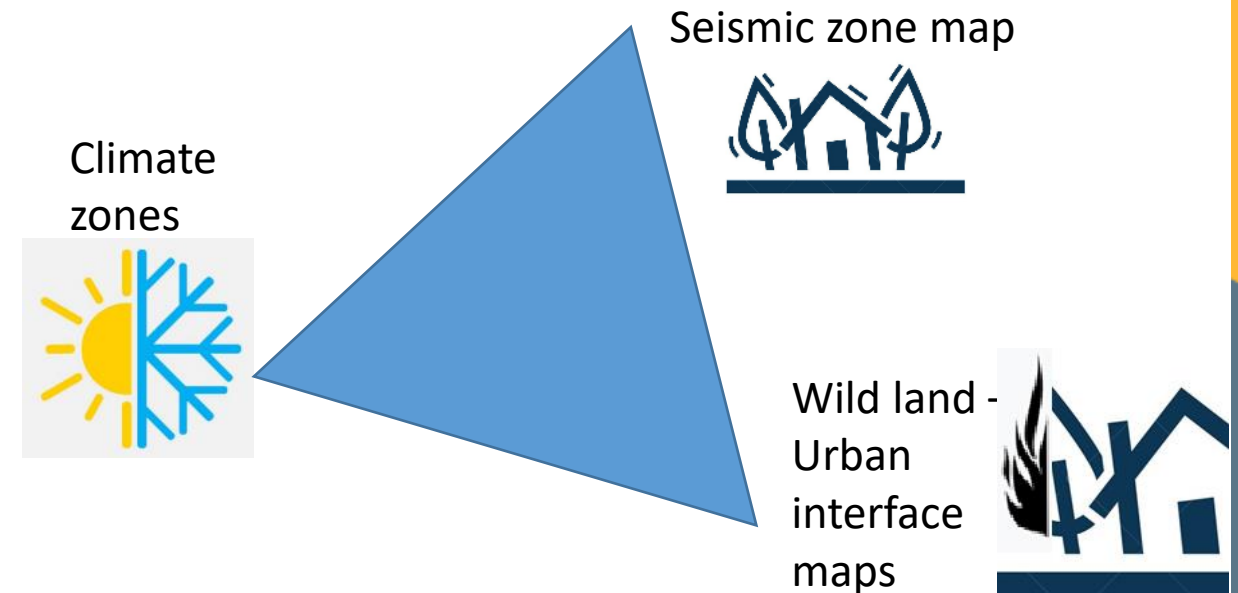


From the presentation of Guido Zaccarelli

# The Resilience Triangle: earthquakes / energy consumption / fire

- Map of seismic activity risk (Χάρτης Σεισμικής Επικινδυνότητας) for the Greek Anti-seismic Regulation (Αντισεισμικός Κανονισμός) – **Structural resilience**

- Climate zones for the Energy Efficiency Regulation (ΚΕΝΑΚ) **Energy resilience**



Needed:

- Fire Risk Map of Wildland - Urban Interface (WUI) for the Fire Protection Regulation (Χάρτης Επικινδυνότητας Πυρκαγιάς για τον Κανονισμό Πυροπροστασίας) and fire resilient roofs/ walls (A1/A2 products) specification – **Fire resilience**

# Hellenic Institute for the Fire Protection of Structures

With respect to human life

ELIPYKA