

GETTING TO KNOW THE CALDERA

Bradyseism,
gas emissions
and possible
volcanic
eruptions

AN ACTIVE VULCANO

The Phlegraean Fields are a vast active volcanic area with a structure known as a 'caldera', i.e. a low-lying area of almost circular shape that was formed by large explosive eruptions.

BRADYSEISM

Bradyseism, linked to the volcanic dynamics of the caldera, is a deformation of the ground that involves alternating phases of rapid uplift, associated with earthquakes, and phases of slow subsidence.

GAS EMISSIONS

The caldera area is also affected by emissions of volcanic gases from the ground (fumaroles). Some of these gases, in high concentrations, can be dangerous to human and animal health, particularly, carbon dioxide (CO₂).



Where can I find more about this?

In the mini-documentary "Volcanic eruptions and bradyseism. The civil protection response" produced by the Civil Protection Department, the Campania Region - Civil Protection and the INGV Vesuvius Observatory and on www.iononrischio.gov.it/it/preparati/vulcani/campi-flegrei



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CIVIL PROTECTION PLANNING: BRADYSEISM

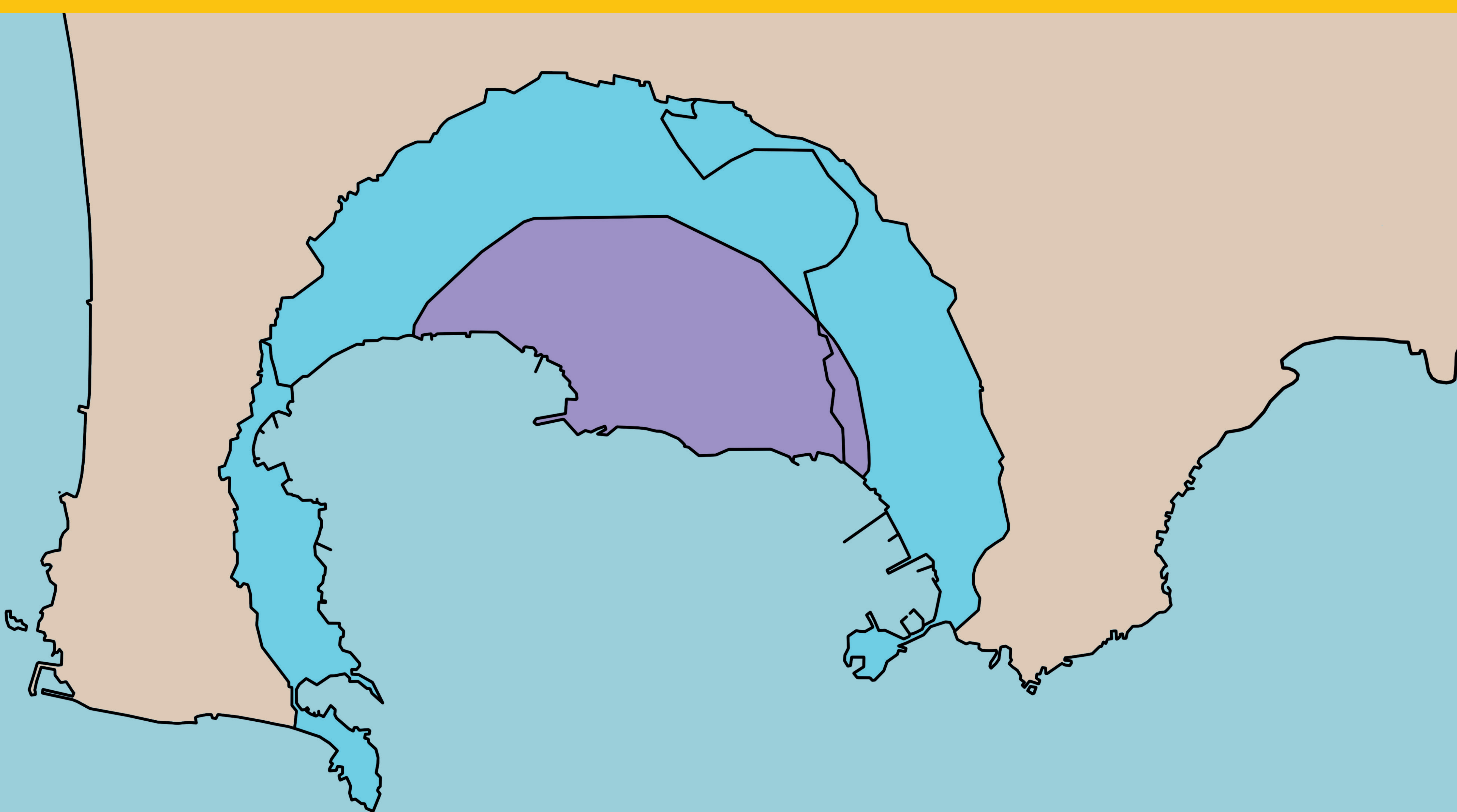
In response to the ongoing bradyseism crisis, a Rapid Emergency Planning has been prepared to identify the most affected areas: the intervention area and, particularly, the area impacted by bradyseism.

- **Intervention area:** Pozzuoli, Bacoli, Naples (Bagnoli district and part of Soccavo/Pianura and Posillipo), about 85,000 inhabitants.
- **Restricted intervention area:** part of Pozzuoli and Naples (Bagnoli district), more than 33,000 inhabitants.

The plan defines the strategy and operational procedures for responding to the effects of bradyseism and identifies three operational scenarios of increasing severity, considering the different impacts of bradyseism on buildings and infrastructure.



Do you live in the intervention area or restricted intervention area?
Check it out on the interactive map.



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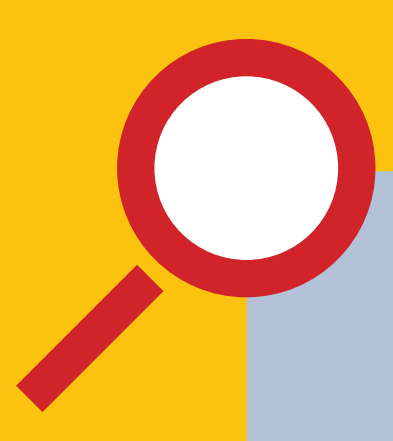
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CIVIL PROTECTION PLANNING: THE VULCANIC RISK

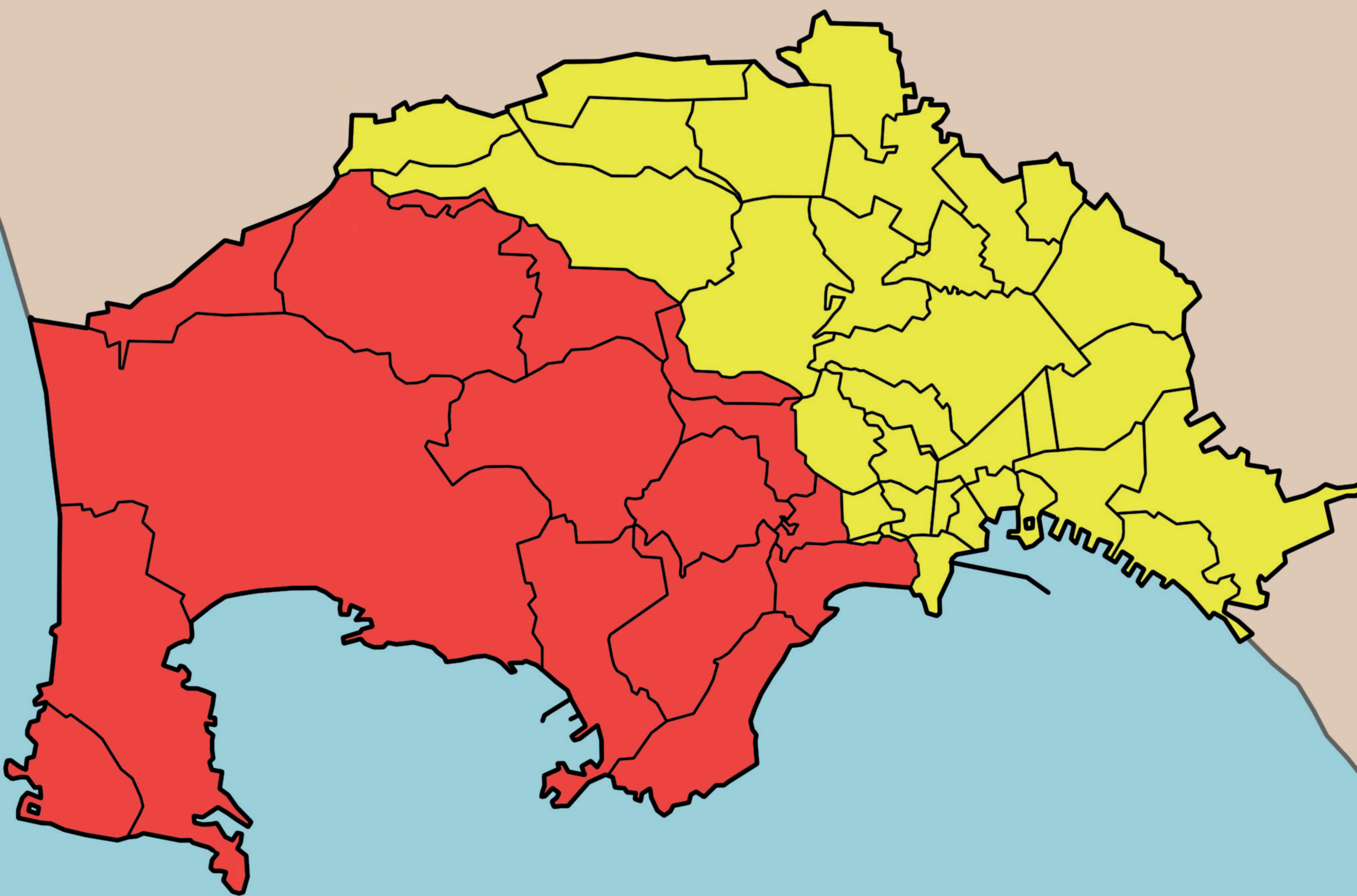
It is based on alert levels, the reference scenario of a possible eruption and identifies the zones at risk:

- **Red zone:** the most dangerous area (about 500,000 inhabitants).
- **Yellow zone:** the area outside the red zone, exposed to the danger of lapilli and volcanic ash fallout (over 800,000 inhabitants).

In the event of a possible volcanic eruption, the Civil Protection System has outlined several operational phases (warning, pre-alarm and alarm). During the alarm phase, resident living in the red zone must relocate to the Region or Autonomous Province twinned with their municipality. The start of evacuation operations will be announced by sending an **IT-alert message** to the mobile phones of individuals in Campania.



Do you live in a red or yellow zone?
Check it out in the interactive map.



Red zone: Municipalities of Bacoli, Monte di Procida, Pozzuoli, Quarto and part of the municipalities of Giugliano in Campania, Marano di Napoli and some districts of Naples: Bagnoli, Fuorigrotta, Pianura, Soccavo and part of the districts of Arenella, Chiaia, Chiaiano, Montecalvario, Posillipo, San Ferdinando and Vomero.

Yellow zone: The municipalities of Calvizzano, Casavatore, Marano di Napoli, Melito di Napoli, Mugnano di Napoli, Villaricca and 24 neighbourhoods in the municipality of Naples: Arenella, Avvocata, Barra, Chiaia, Chiaiano, Mercato, Miano, Montecalvario, Pendino, Piscinola, Poggioreale, Porto, San Carlo all'Arena, San Ferdinando, San Giovanni a Teduccio, San Giuseppe, San Lorenzo, San Pietro a Patierno, Scampia, Secondigliano, Stella, Vicaria, Vomero and the Industrial Area.