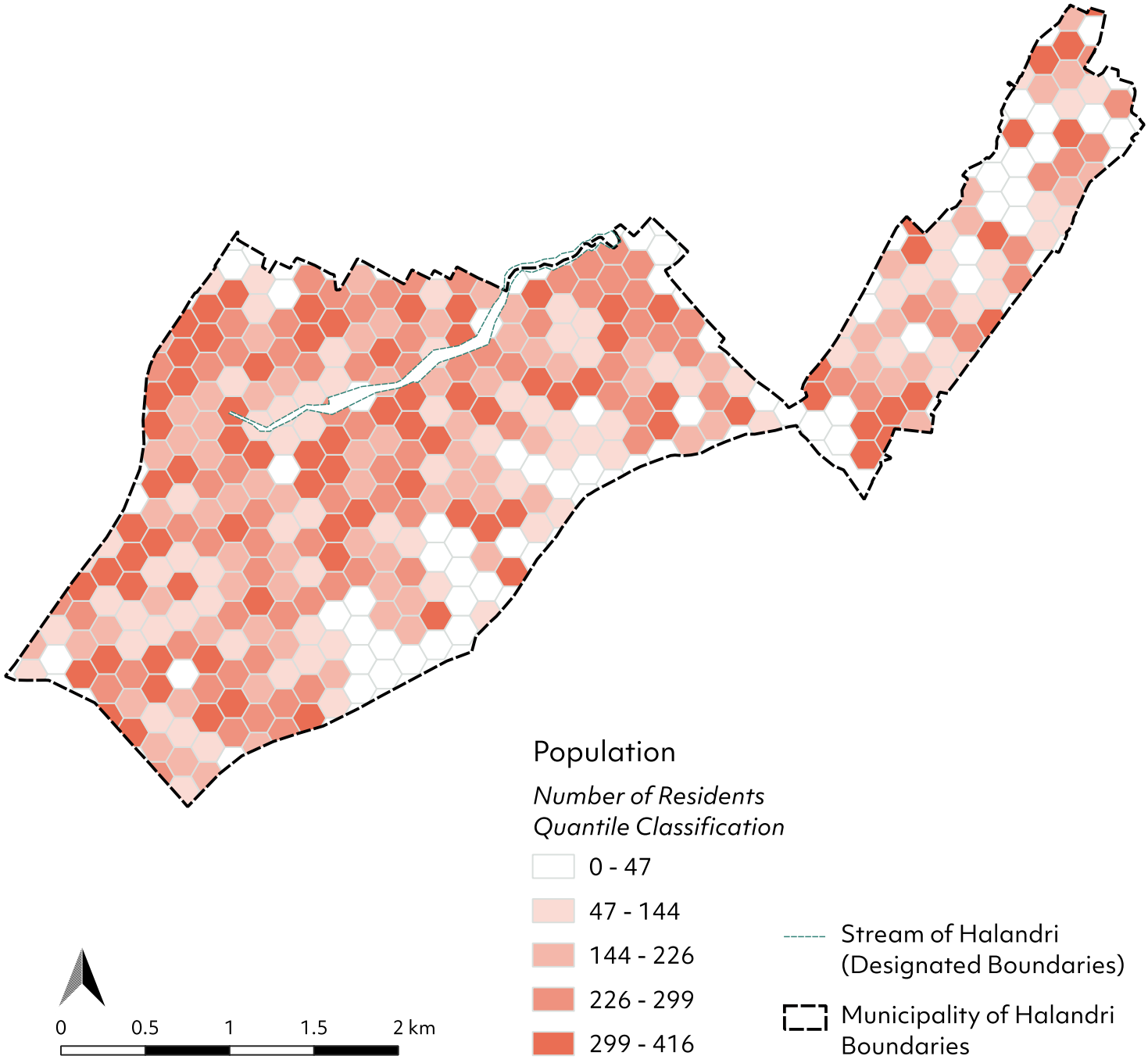
POPULATION DENSITY IN HALANDRI

Description	Population density refers to the number of residents within a defined spatial unit; in this case, the unit of analysis is the hexagonal cell.
Relevance to Urban Heat Vulnerability	High population density amplifies the impacts of extreme heat by increasing exposure. In densely populated areas, the combined effects of built-environment heat retention and social vulnerability further reduce adaptive capacity, thereby intensifying overall vulnerability to heat extremes.



Data Source: Hellenic Statistical Authority (ELSTAT) - Greek Census 2021

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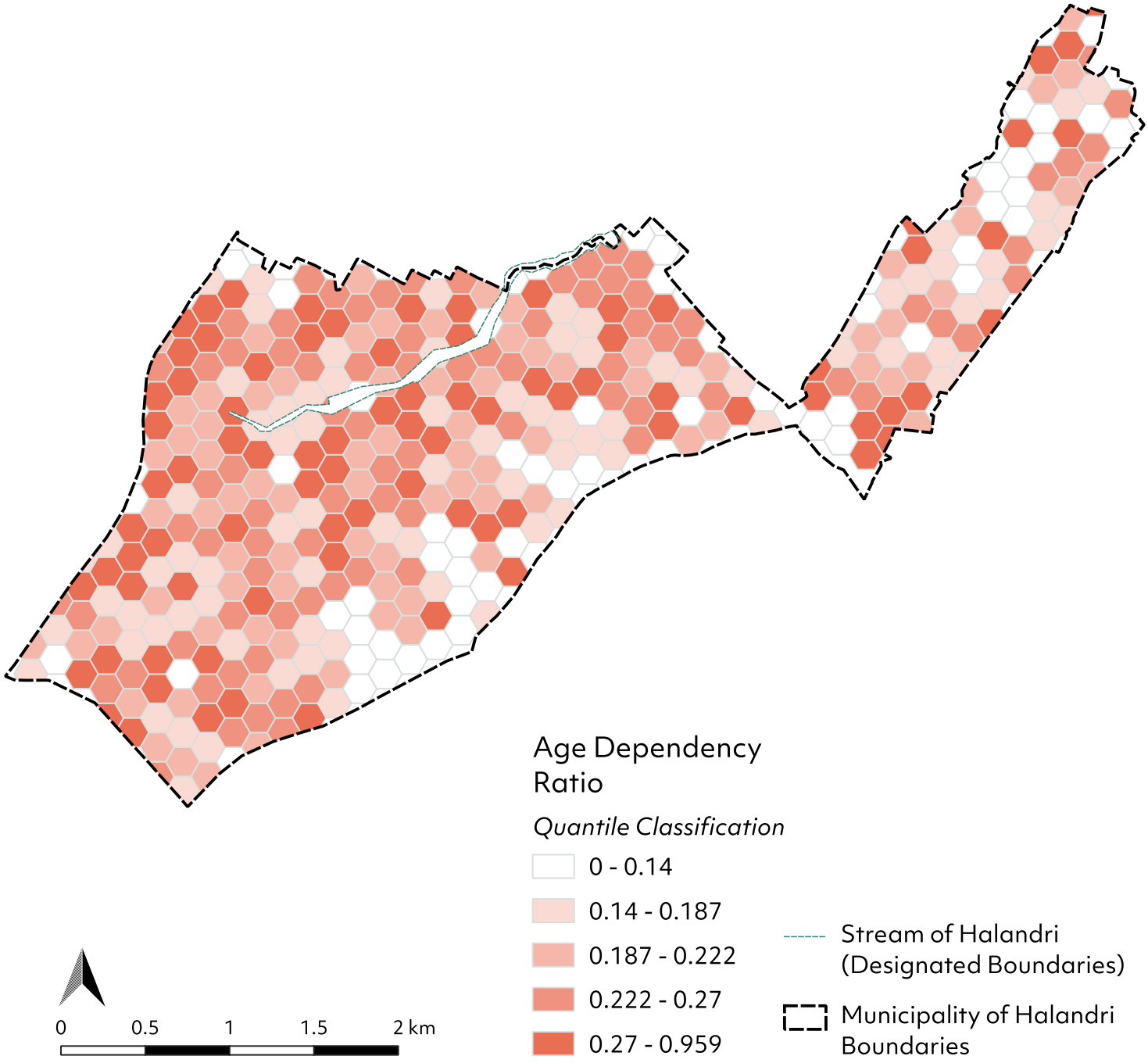
AGE DEPENDENCY RATIO
IN HALANDRI
(AGE GROUPS SENSITIVE TO HEAT)

Description	The age dependency ratio is the ratio of dependents (young people under 14 and older adults over 65) to the working-age population (15–64).
Relevance to Urban Heat Vulnerability	By reflecting the share of children and elderly relative to the working-age population, this demographic indicator captures the age groups that are more sensitive to heat stress, and also and also more reliant on others for care and protection.



Data Source: Hellenic Statistical Authority (ELSTAT) - Greek Census 2021

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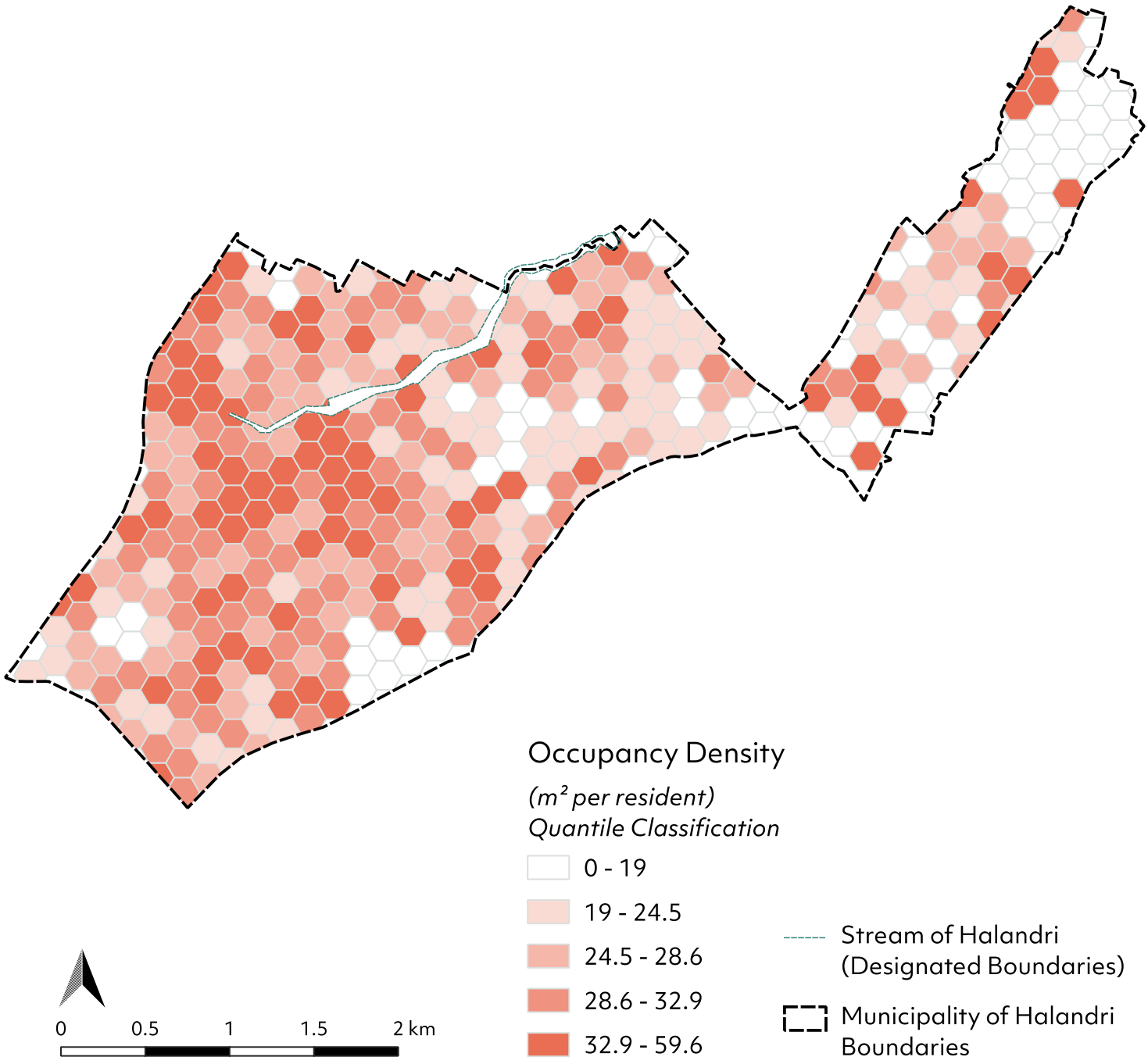
OCCUPANCY DENSITY IN HALANDRI

Description	Occupancy density refers to the amount of living space available per person in a dwelling.
Relevance to Urban Heat Vulnerability	High occupancy density serves as a proxy for low economic status and housing precarity, reflecting limited adaptive capacity to heat. It also reveals physical sensitivity to heat, as overcrowding leads to higher thermal stress.



Data Source: Hellenic Statistical Authority (ELSTAT) - Greek Census 2021

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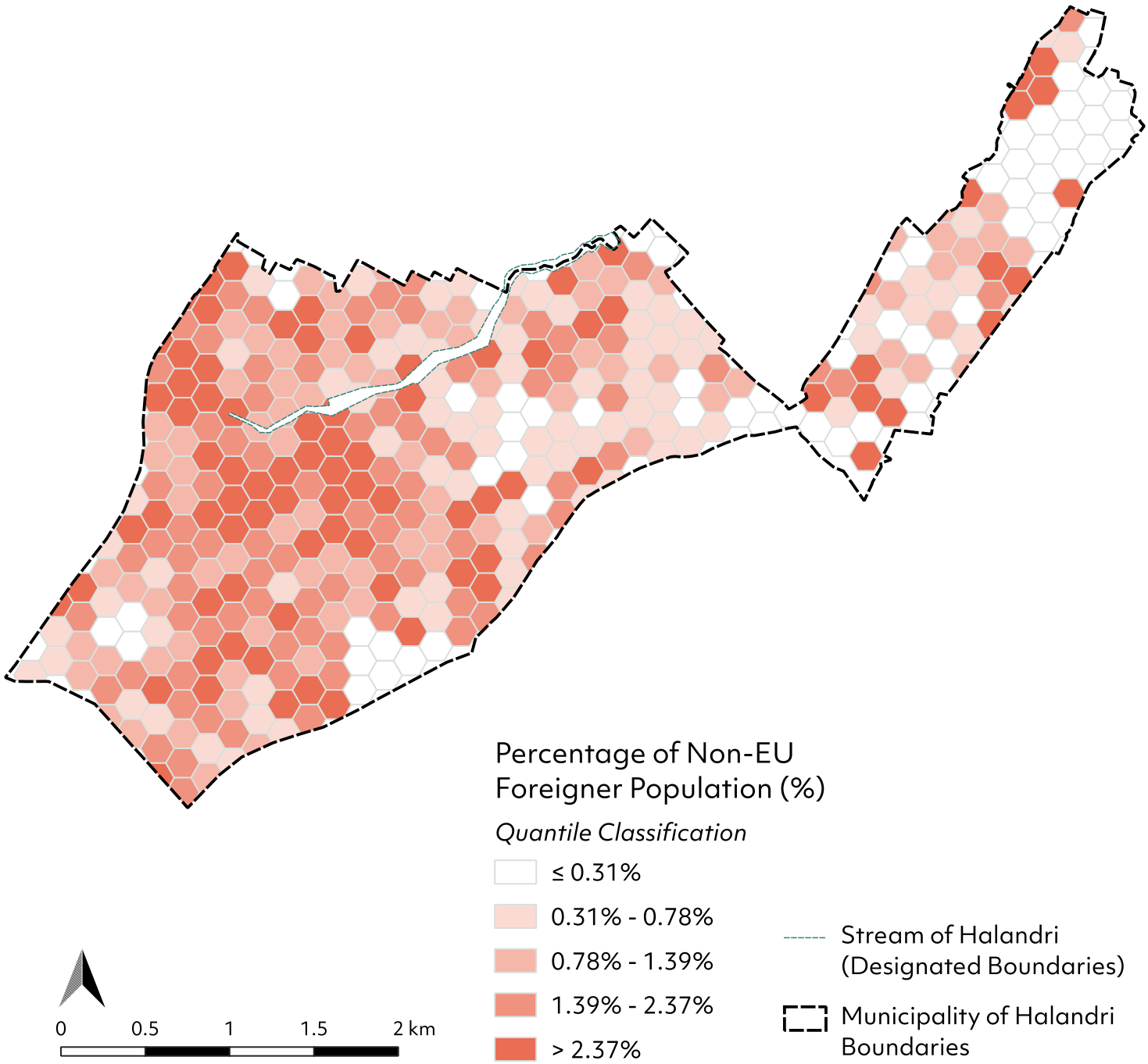
NON-EU FOREIGNER POPULATION (%) IN HALANDRI

Description	The share of residents who are citizens of countries outside the European Union.
Relevance to Urban Heat Vulnerability	Foreign nationals are likely to have less local knowledge and limited access to local information, due to language barriers. Higher values of non-EU foreigner residents in particular often indicate immigrant populations with lower average income, reflecting reduced adaptive capacity to heat.



Data Source: Hellenic Statistical Authority (ELSTAT) - Greek Census 2021

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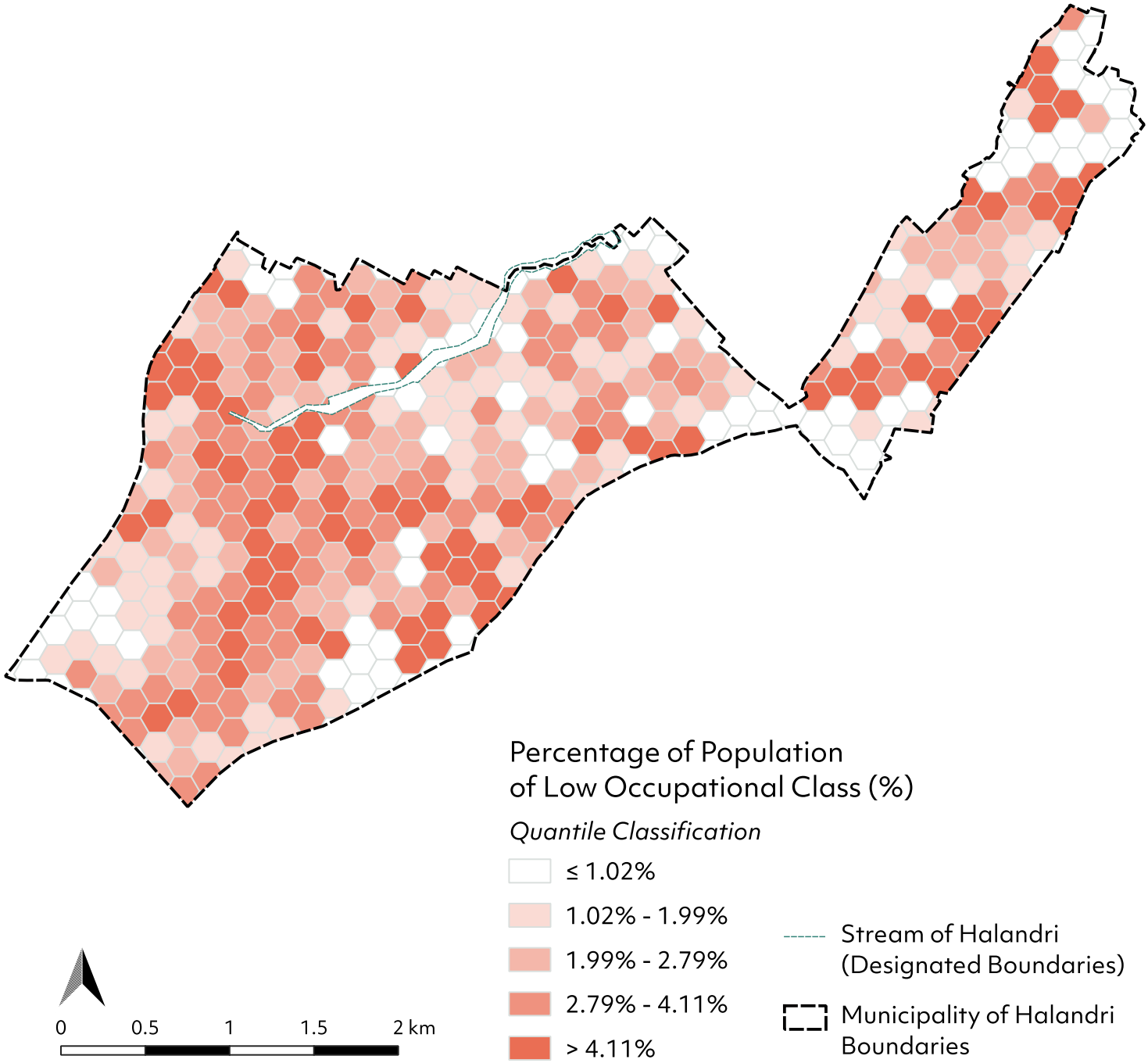
POPULATION OF LOW OCCUPATIONAL CLASS (%) IN HALANDRI

Description	Low occupational class refers to individuals employed in lower-skilled, lower-paid, and often more physically demanding jobs.
Relevance to Urban Heat Vulnerability	A high proportion of low occupational class population represents socioeconomic disadvantage, and therefore reduced adaptive capacity. It also indicates higher exposure and sensitivity, as such jobs often require outdoor or physically strenuous work, increasing vulnerability to extreme heat.



Data Source: Hellenic Statistical Authority (ELSTAT) - Greek Census 2021

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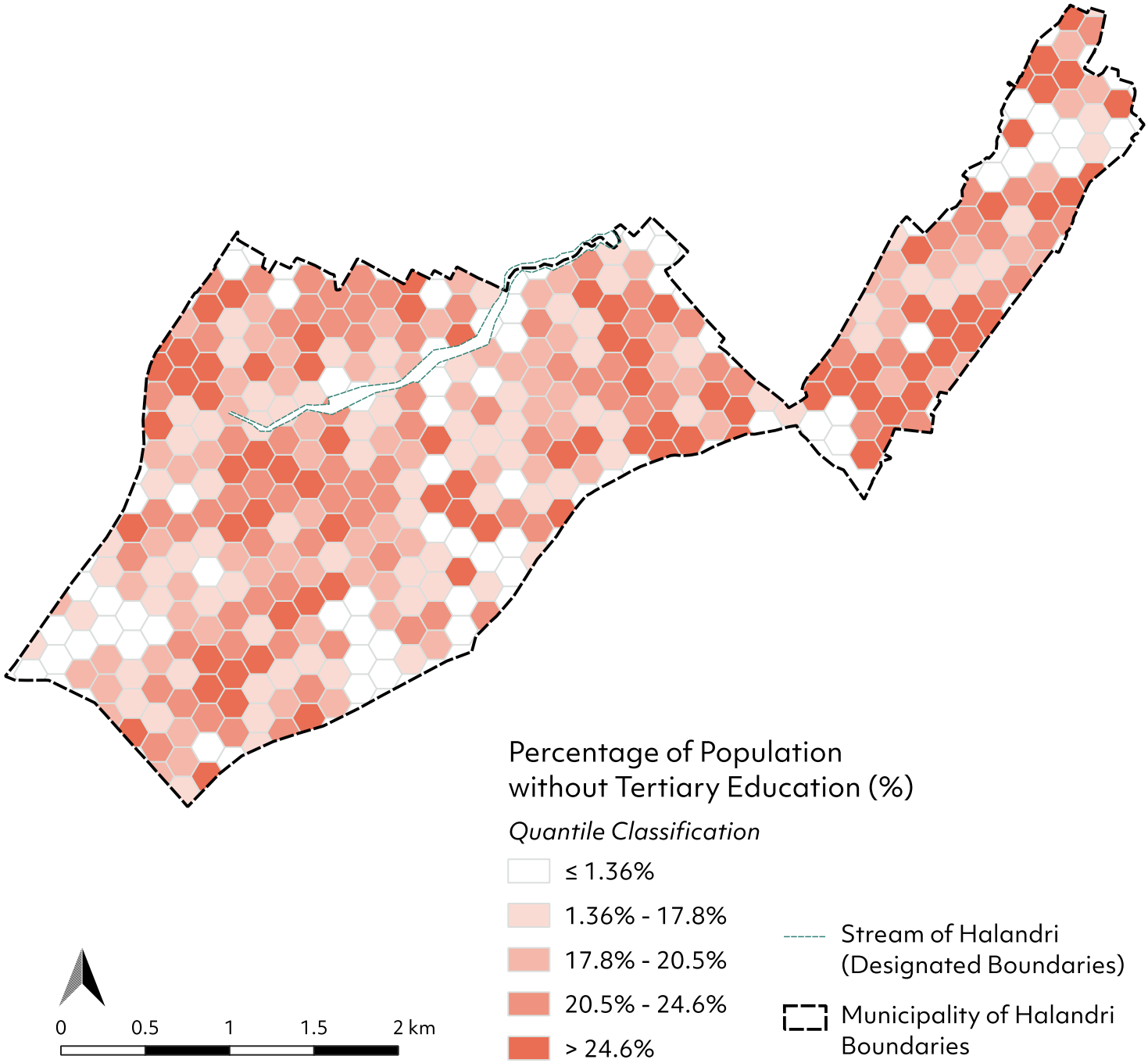
POPULATION WITHOUT TERTIARY EDUCATION (%) IN HALANDRI

Description	It refers to the share of residents whose highest education is up to secondary level (i.e. illiterate, incomplete secondary education, high school/ vocational school diploma).
Relevance to Urban Heat Vulnerability	Higher values reflect reduced adaptive capacity to heat, as lower education often limits access to, understanding of, and use of information about heat risks and protective measures, reinforcing socioeconomic disadvantage and sensitivity.



Data Source: Hellenic Statistical Authority (ELSTAT) - Greek Census 2021

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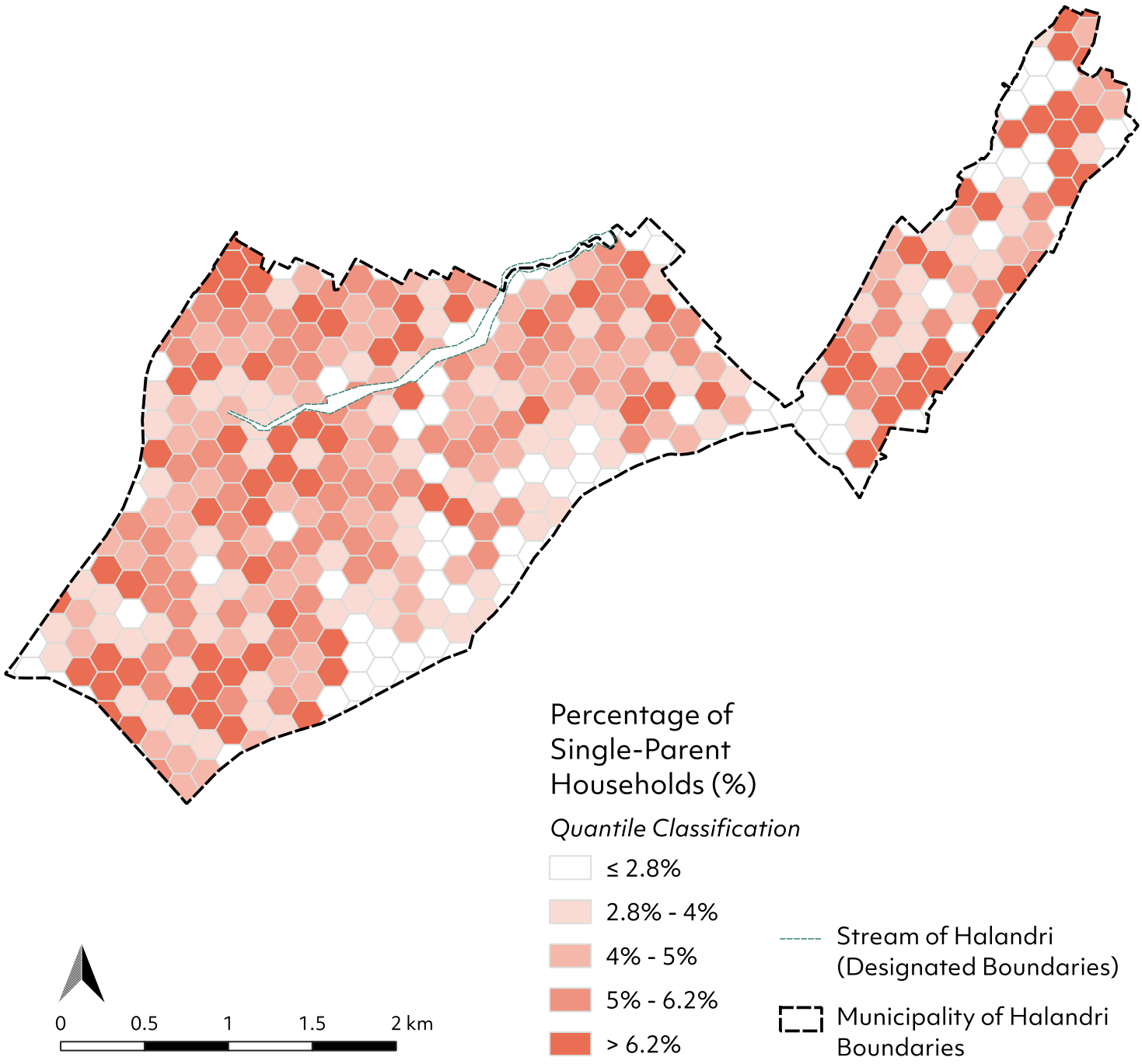
SINGLE-PARENT HOUSEHOLDS (%) IN HALANDRI

Description	Family units where one adult is the sole caregiver for children. Family units where one adult is the sole caregiver for children.
Relevance to Urban Heat Vulnerability	It often serves as a proxy for lower disposable income and higher caregiving burdens, reflecting reduced adaptive capacity to heat, as limited resources and responsibilities constrain access to cooling and safe refuge during extreme heat events.



Data Source: Hellenic Statistical Authority (ELSTAT) - Greek Census 2021

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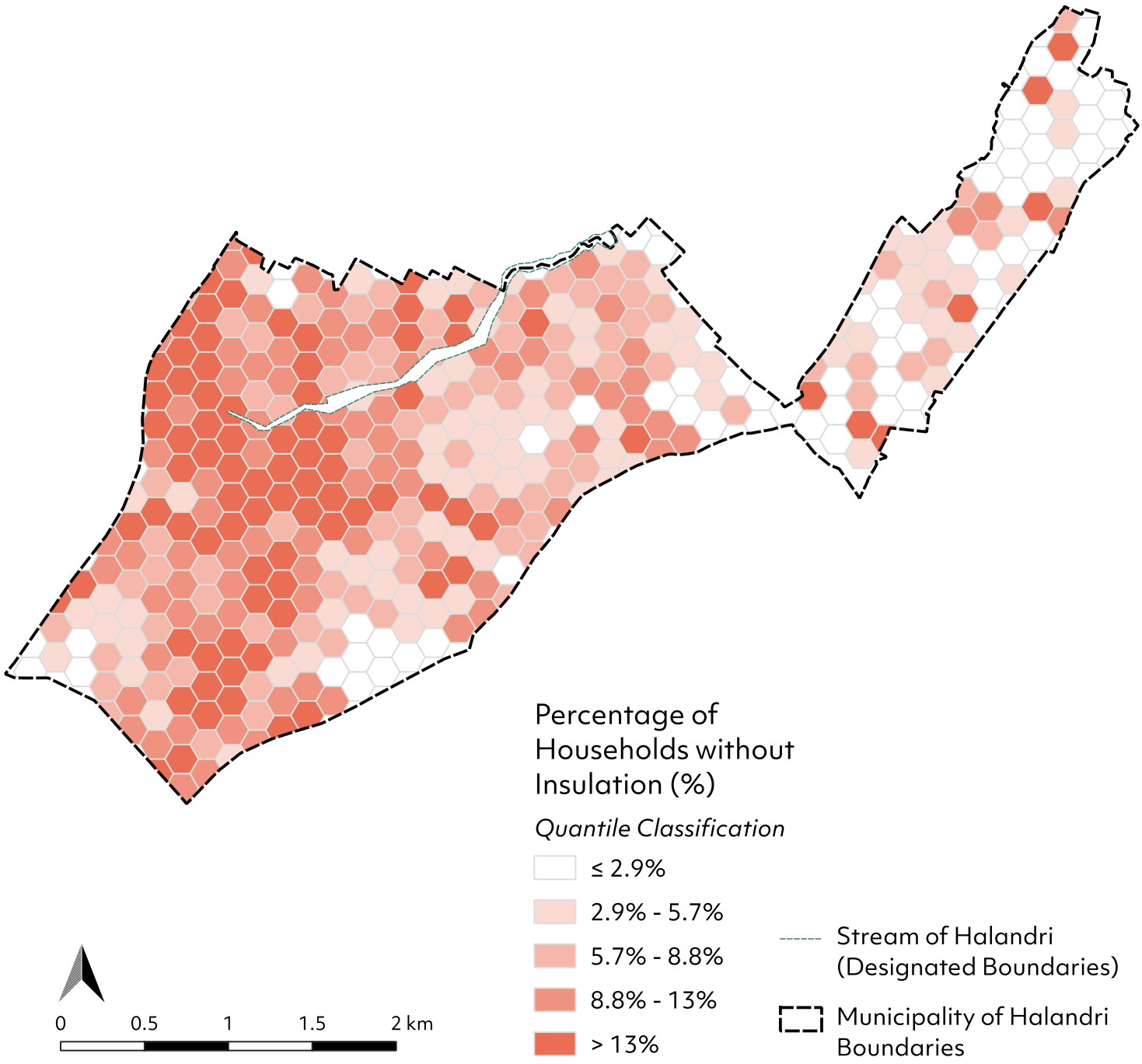
HOUSEHOLDS WITHOUT INSULATION (%) IN HALANDRI

Description	The share of households that reside in dwellings without thermal insulation.
Relevance to Urban Heat Vulnerability	Higher values indicate greater physical sensitivity to heat, as poorly insulated homes experience higher indoor temperatures and limited protection during extreme heat events. It is considered a socio-economic indicator, as it reflects households' financial capacity to implement protective measures against heat.



Data Source: Hellenic Statistical Authority (ELSTAT) - Greek Census 2021

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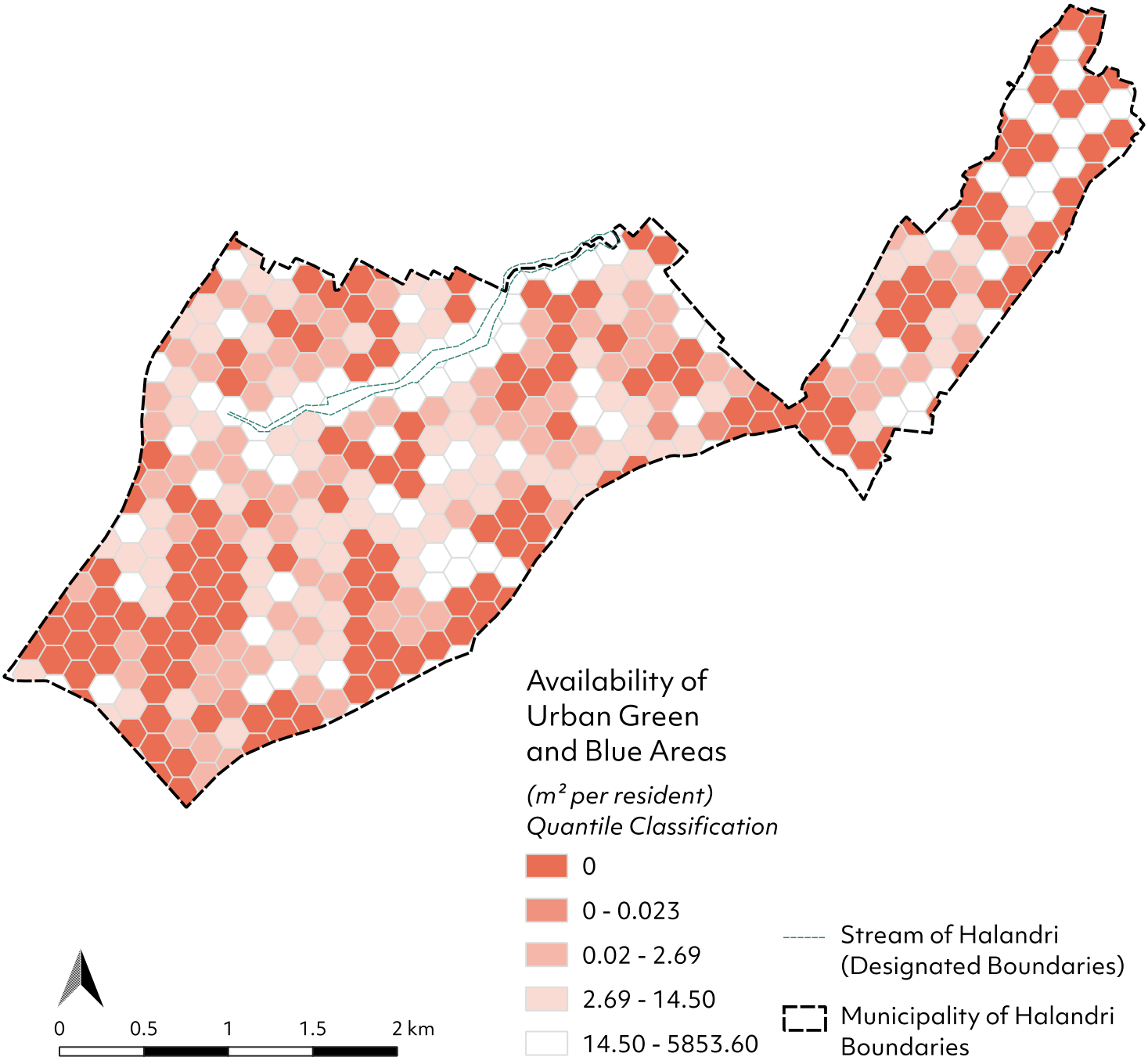
AVAILABILITY OF URBAN GREEN AND BLUE AREAS IN HALANDRI

Description	This metric represents the direct proximity of residents to public urban green and blue spaces; in the case of Halandri, to the Penteli–Halandri stream and to a series of green areas registered by the Municipality in its official geospatial portal.
Relevance to Urban Heat Vulnerability	Higher availability of accessible urban green and blue areas reduces exposure to heat. These areas remain cooler than built environments and can serve as important refuges during heatwaves. In addition, vegetation and water bodies improve the local microclimate by reducing surface and air temperatures, enhancing shade, and mitigating the urban heat island effect.



Data Source: Municipality of Halandri Geospatial Portal

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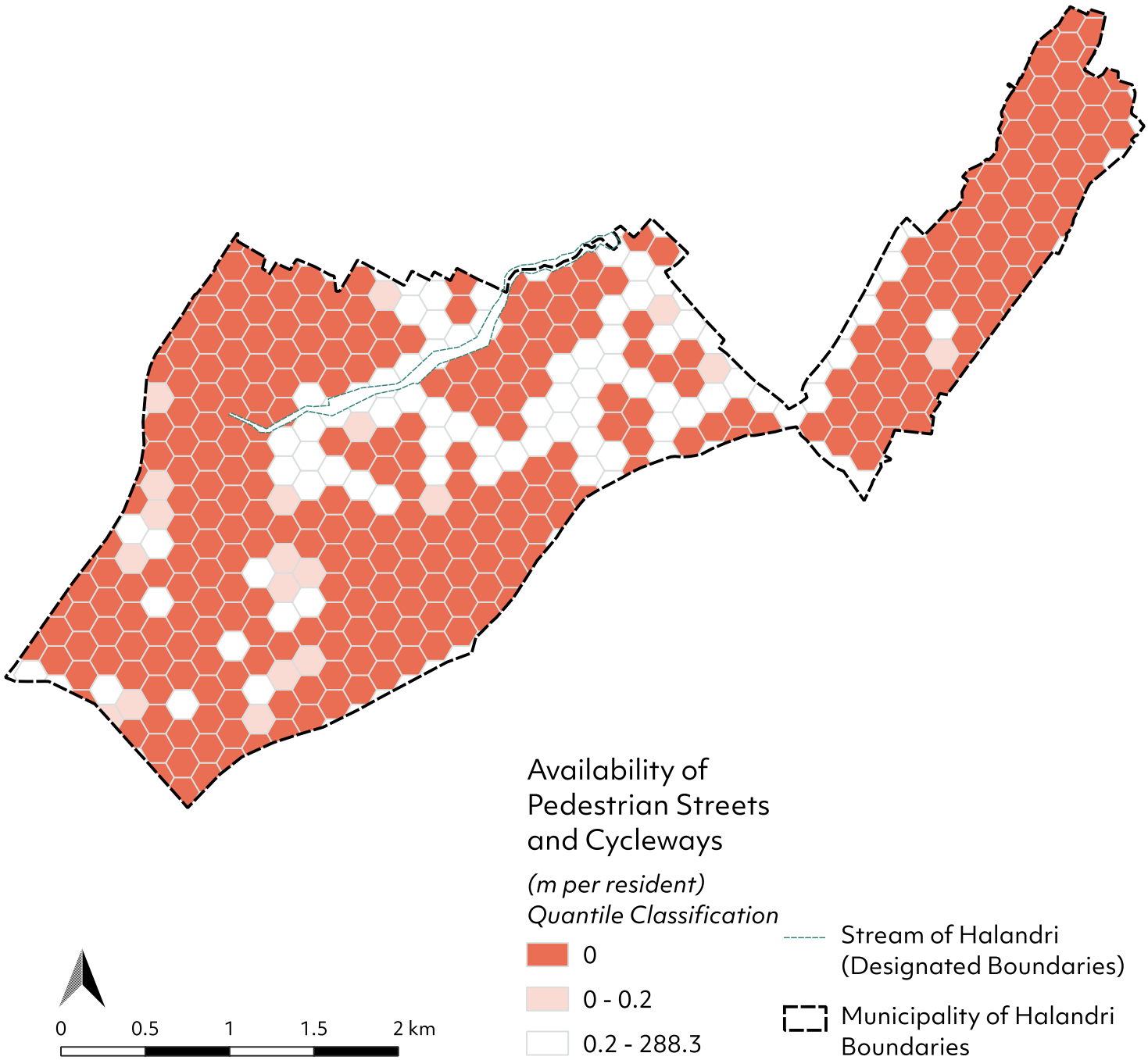
AVAILABILITY OF ACTIVE STREETS IN HALANDRI

Description	It refers to the direct proximity to the active mobility network; namely pedestrian streets, and cycleways.
Relevance to Urban Heat Vulnerability	Availability of active streets contributes to lower heat exposure, as a higher density of pedestrian streets and cycleways provides shaded, ventilated routes, reduces local car traffic, and allows residents to move through cooler areas during heat events.



Data Source: Municipality of Halandri Geospatial Portal

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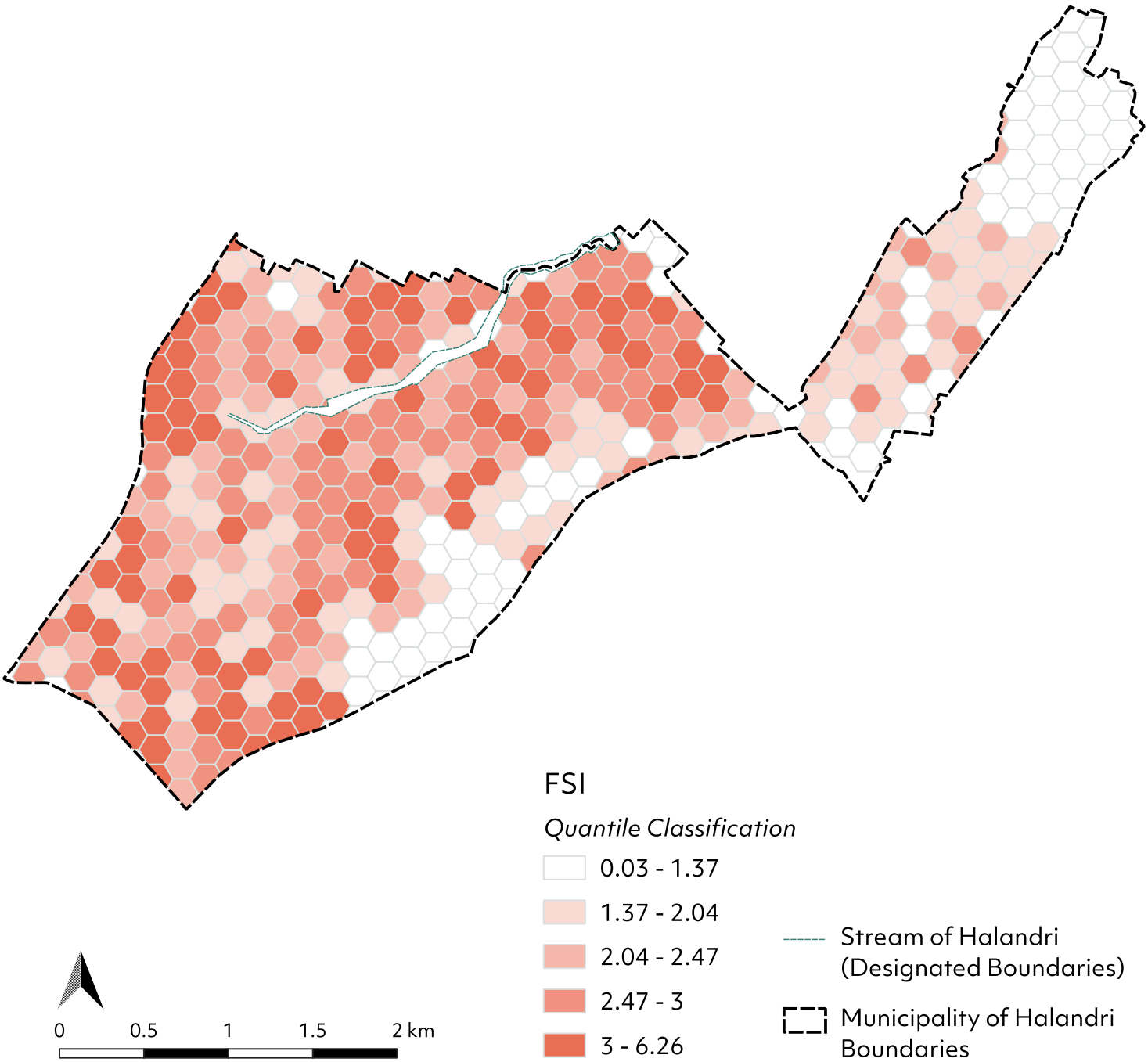
FLOOR SPACE INDEX (FSI) IN HALANDRI

Description	Floor Space Index (FSI) is a measure of urban density that quantifies the ratio between the total floor area of buildings and the area of the land they occupy.
Relevance to Urban Heat Vulnerability	Higher FSI values indicate denser built environments, which are often associated with reduced natural ventilation, higher heat retention, and greater overall exposure to urban heat.



Data Source: Copernicus

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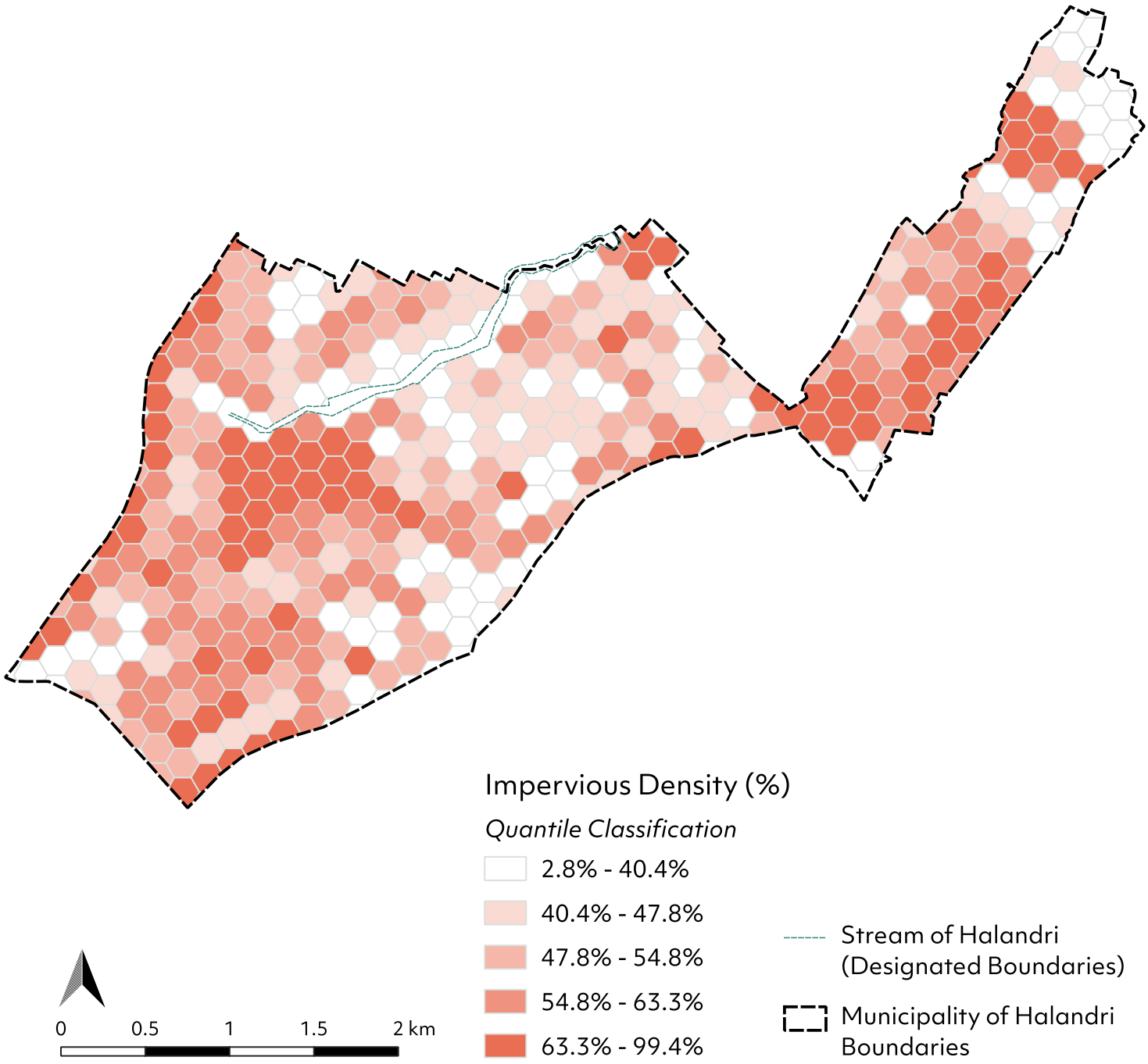
IMPERVIOUS DENSITY (IMD) IN HALANDRI

Description	Impervious density (%) refers to the proportion of land area covered by impervious surfaces, such as buildings, roads, and pavements.
Relevance to Urban Heat Vulnerability	Areas with high impervious density retain more heat and have reduced natural cooling from vegetation, resulting in elevated local temperatures, thereby indicating increased heat vulnerability for residents in these areas.



Data Source: Copernicus

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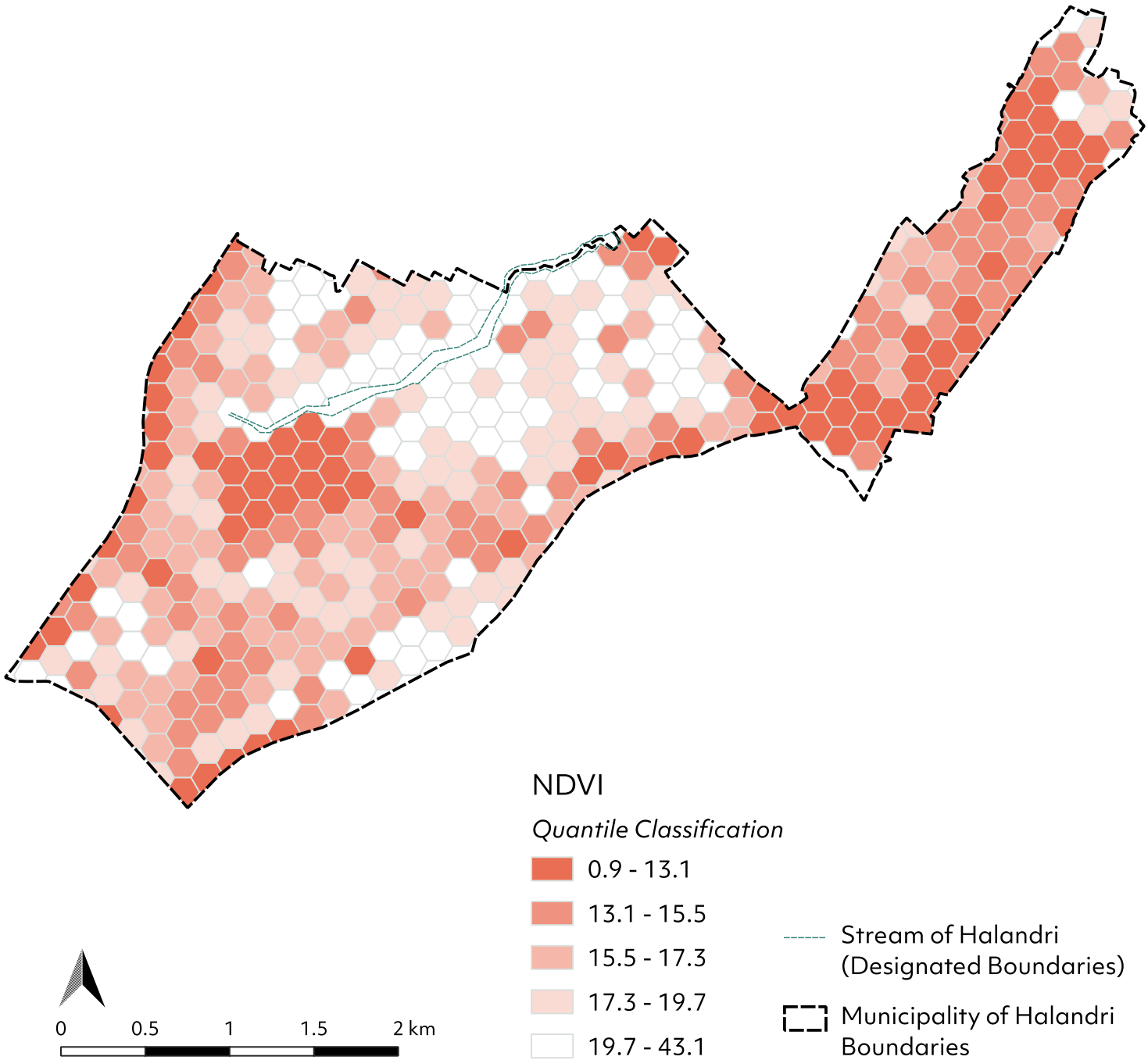
NORMALIZED DIFFERENCE VEGETATION INDEX (NDVI) IN HALANDRI

Description	NDVI is a broadly used satellite-derived metric for quantifying the health and density of vegetation.
Relevance to Urban Heat Vulnerability	NDVI is a commonly used metric for the assessment of urban heat vulnerability. Higher NDVI values indicate more abundant and healthier vegetation, which contributes to natural cooling, shading, and improved microclimatic conditions, thereby reducing heat exposure and vulnerability for nearby populations.



Data Source: Copernicus

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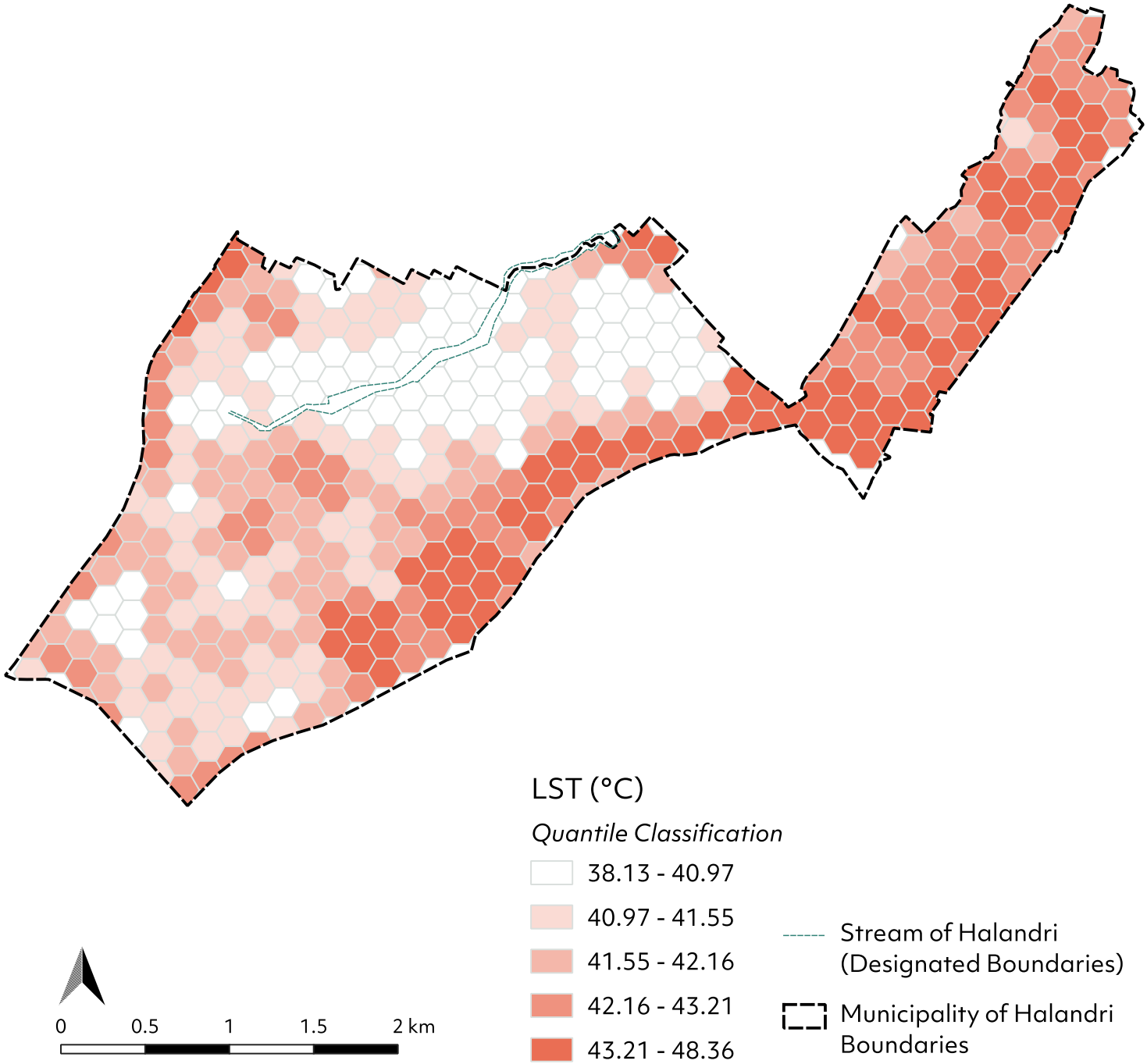
LAND SURFACE TEMPERATURE (LST) IN HALANDRI

Description	Land Surface Temperature (LST) derives from satellite thermal data and is an important variable within the Earth climate system, representing a specific time snapshot of surface temperature.
Relevance to Urban Heat Vulnerability	As a measure of the Earth's surface temperature (soil, vegetation, buildings, etc.), LST is a key indicator of heat vulnerability. It highlights urban heat islands and areas where people are more exposed to heatwaves.



Data Source: Copernicus

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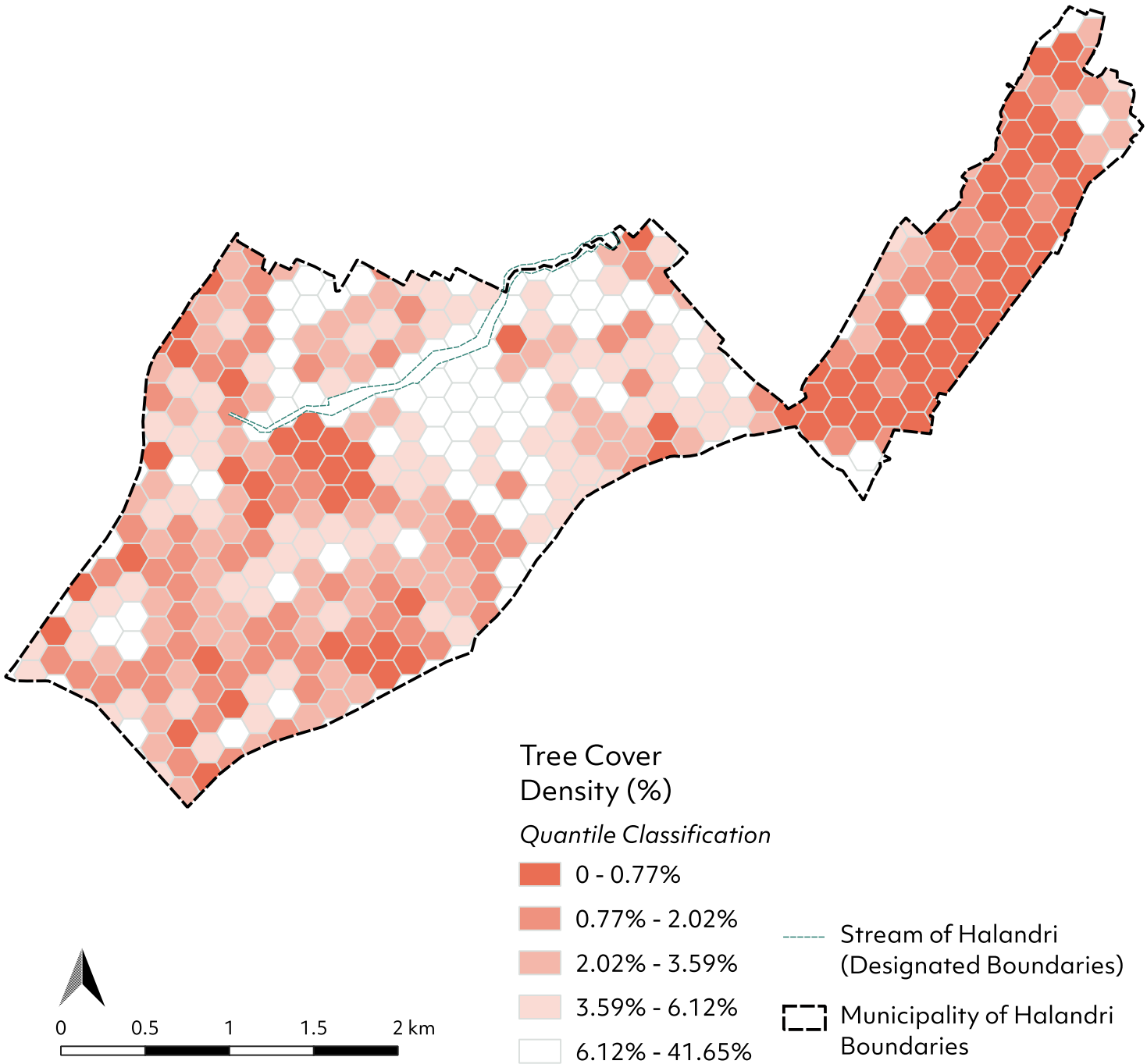
TREE COVER DENSITY (TCD) IN HALANDRI

Description	Tree Cover Density (TCD) refers to the proportion of an area covered by tree canopy, expressed as a percentage.
Relevance to Urban Heat Vulnerability	TCD is an important metric in the assessment of heat vulnerability, as higher tree cover reduces exposure to heat through shading. Urban areas with low TCD are more susceptible to urban heat island effects and related health risks.



Data Source: Copernicus

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