

Earthquake impacts on Cultural Heritage

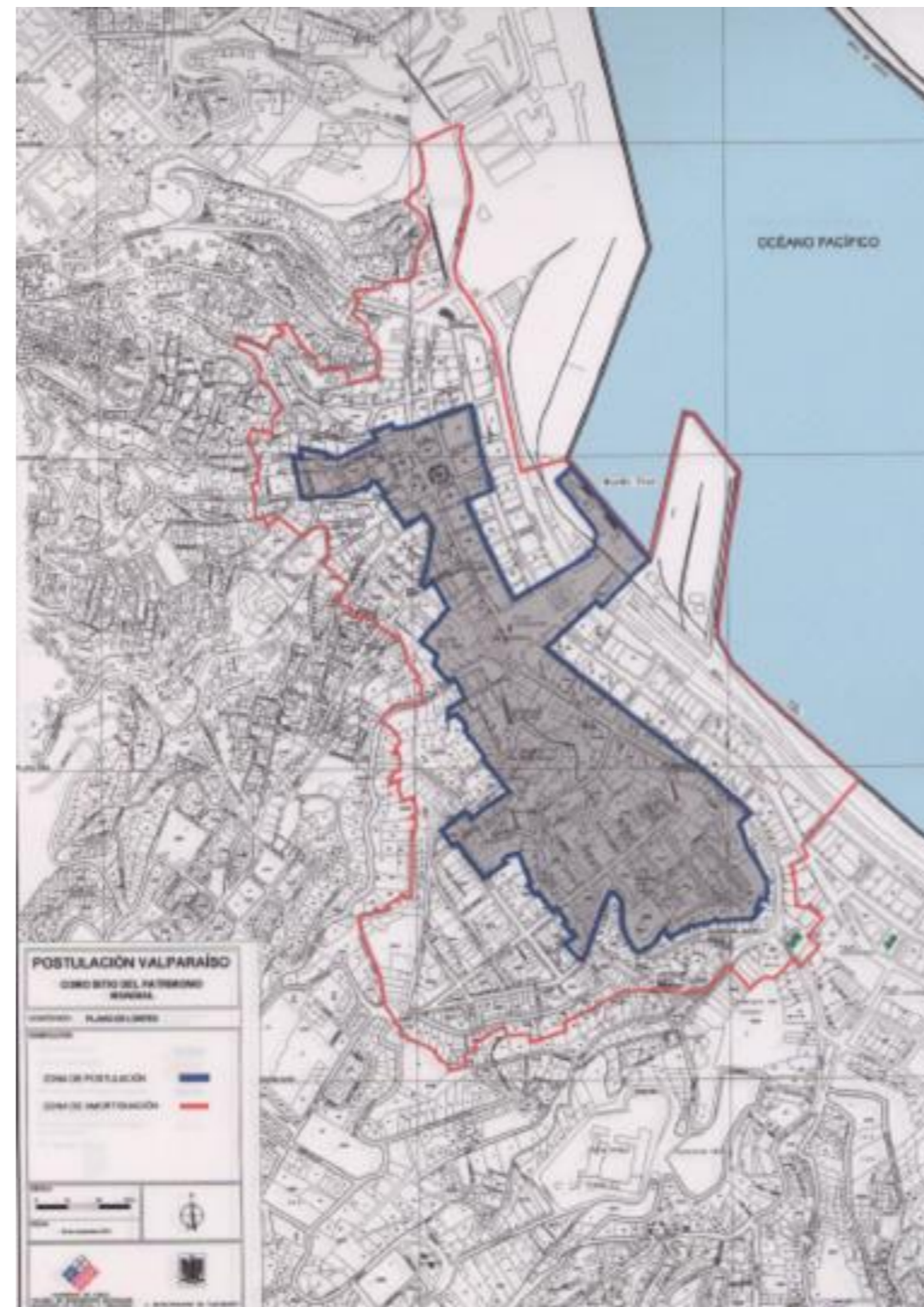
in the Historic Quarter of the Seaport City of Valparaíso, Chile



Chile



Seismic situation



Historic Quarter of the Seaport City of Valparaíso



Monumental architecture in the core zone of Valparaíso



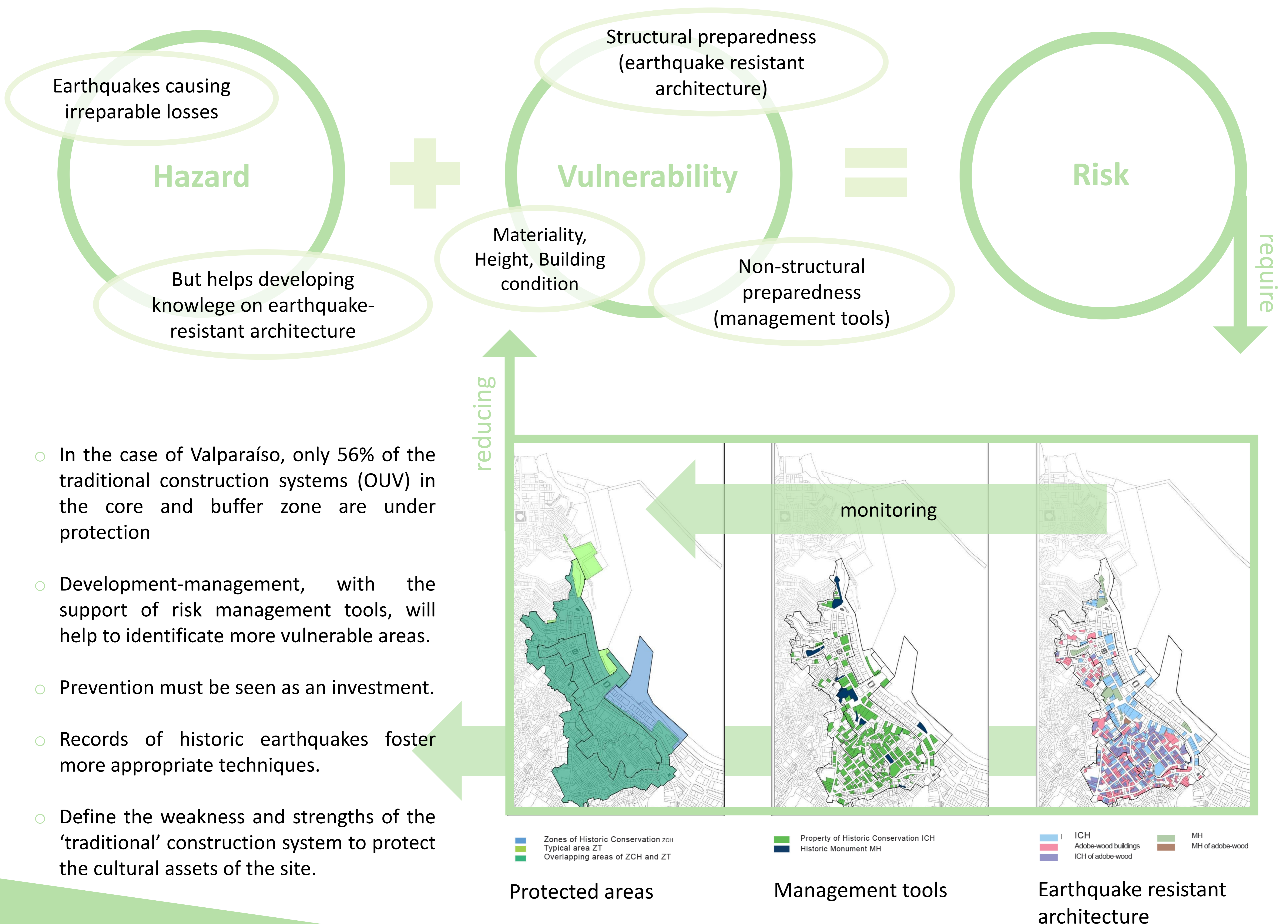
Hill „Concepcion“, Valparaíso



Traditional adobe construction

Cultural heritage throughout time has been endangered by many factors. Disasters appear to be an increasing threat in protected areas designated as World Heritage Sites jeopardizing their Outstanding Universal Value. Although disasters can in most cases be prevented, there are some which cannot be predicted as of yet. Natural hazards like earthquakes can be neither forecasted nor measured in advance. For this reason, risk anticipation constitutes a key strategy for the mitigation of earthquake impact.

Located in an earthquake prone area, the case study permits the analysis of the available management tools linked directly to tangible seismic heritage protection. Revealing the gaps of the Chilean institutional framework will lead to raised effectiveness of the currently applied methods. Strengthening pre- and post-disaster initiatives will enable decision-makers to develop measures to mitigate the aforementioned impact on heritage sites.



- In the case of Valparaíso, only 56% of the traditional construction systems (OUV) in the core and buffer zone are under protection
- Development-management, with the support of risk management tools, will help to identificate more vulnerable areas.
- Prevention must be seen as an investment.
- Records of historic earthquakes foster more appropriate techniques.
- Define the weakness and strengths of the 'traditional' construction system to protect the cultural assets of the site.