

# CLIMATE VULNERABILITY INDEX

**Climate change** is the fastest growing global threat to World Heritage (WH) properties, many of which – natural, cultural and mixed – are already being impacted. The severity of current climate impacts on individual WH properties varies, as do the rate at which they are occurring and the range of climate change drivers causing them. In most cases, the consequence of climate change is a decline in the values that collectively comprise the Outstanding Universal Value (OUV) for most WH properties.

The **Climate Vulnerability Index (CVI)**:

- Has been developed as a rapid assessment tool to assess climate impacts upon WH properties based on a risk assessment approach;
- Differs from other vulnerability assessments by assessing both the **OUV Vulnerability** and the **Community Vulnerability** and is applicable to all types of WH properties; and
- Considers impacts on key values of the OUV and on the economic, social and cultural characteristics of the community, and their adaptive capacities to cope with climate change.

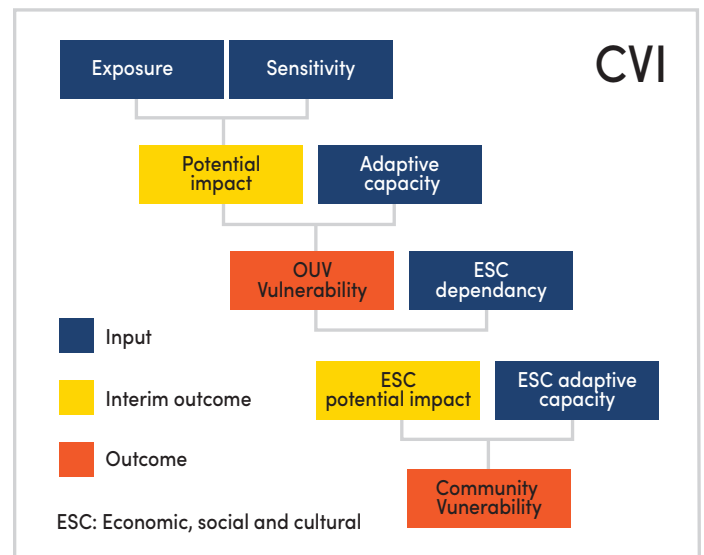
The **foundation for the CVI process** is the Statement of OUV for a property, from which key WH values are summarised. A preliminary assessment of the current condition and trend in condition of the key values is undertaken.



Flooding in Venice 2015

“...climate change has become one of the most significant and fastest growing threats to people and their heritage worldwide...”

Resolution 19th General Assembly of ICOMOS (2017)



The top three key climate change drivers most likely to impact the key values are identified for a defined and agreed time scale (e.g. by 2050). With this foundation established, the CVI process is initiated.

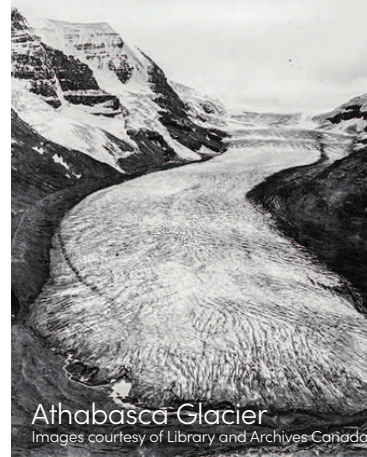
The ICOMOS Climate Change and Heritage Working Group (CCHWG) has included the development of the CVI in its current workplan, as has the IUCN Protected Areas Climate Change Specialist Group; the UNESCO World Heritage Centre is also supportive of the CVI.



CVI workshop, Orkney 2019  
Credit: Marion Ratier

1918

2011



Athabasca Glacier  
Images courtesy of Library and Archives Canada



The **CVI process** is conducted through a workshop of diverse participants using a customised worksheet to:

1. Conduct a high-level risk assessment (**exposure** and **sensitivity**) of OUV to the chosen three key climate change drivers within the agreed time frame, considering some important modifiers that may vary these assessments;
2. Identify the **potential impacts** of the three key climate change drivers on the key WH values;
3. Consider the **adaptive capacity** in relation to the three key climate drivers;
4. Determine the **OUV Vulnerability** to the three key climate drivers;
5. Assess the **economic, social and cultural (ESC) dependencies** on the WH property;
6. Derive the **ESC potential impact on the community** (local, domestic and international) associated with the WH property;
7. Evaluate the **ESC adaptive capacity**; and
8. Determine the **Community Vulnerability**.

OUV Vulnerability and Community Vulnerability are highly relevant for site managers, responsible management agencies, businesses that are dependent on the property, the local community and other stakeholders.

The CVI is (i) **a rapid assessment tool** consistently applicable to all types of WH properties (natural, cultural and mixed) that (ii) assesses both **OUV Vulnerability** (physical) and **Community Vulnerability** (economic, social and cultural) for individual WH properties. The CVI is (iii) a **systematic and comprehensive approach** that balances scientific robustness and credibility with a level of practicality, which enables it to be undertaken in a multi-day workshop of diverse stakeholders, and (iv) whose **transparent process** can be **repeated** to assess trends.

**CVI applications** have been highly successful at Shark Bay (a natural WH site in Western Australia) and the Heart of Neolithic Orkney (a cultural WH site in Scotland). The current testing phase will continue, with other WH properties (e.g., Ningaloo Coast, Wadden Sea, Willandra Lakes, Vega Archipelago, Gondwana Rainforests, Belize Barrier Reef and Sydney Opera House) part of a growing interest from across the globe in the CVI.

“Climate change is fast becoming one of the most significant risks for World Heritage sites worldwide.... direct and indirect impacts of climate change may present a threat to their OUV, integrity and authenticity”

UNESCO, UNEP and UCS (2016)

‘World Heritage and Tourism in a Changing Climate’

## For further information: [cvi-heritage.org](http://cvi-heritage.org)

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