

Workbook for Risk Assessment and Adaptation Planning

Part 2: Assessment

This document is the second part of the Workbook for the Adapt Northern Heritage tool *Risk Assessment and Adaptation Planning: Guidance on Managing the Impacts of Climate Change on Northern Historic Places*.

This Workbook should be used in conjunction with this Guidance.

This part of the Workbook should be used to perform an assessment of a historic place, as part of the risk management process described in the Guidance. To commence this process, please start with part 1 of this Workbook in order to select an Assessment Level and Assessment Type and identify the historic places to be assessed.

If you have chosen the Assessment Type **Singular Historic Place**, please complete this document.

If you have chosen the Assessment Type **Group of Historic Places**, please complete this document for each historic place in the group, for which an assessment is required.

If you have chosen the Assessment Type **Place Categories**, please complete this document for each place category, for which an assessment is required.

For assessments at **Standard Level** only tables marked in green should be completed.

For assessments at **Advanced Level** tables marked in green and blue should be completed.

For assessments at **Advanced Plus Level** tables in green and blue should be completed and tables in purple can be completed as required.

Grey table cells indicate information carried over from previous tables in the risk management process. Yellow cells indicated information transferred from scale tables in the Guidance.

In this document, additional rows in tables can be created as required. For Adaptation Planning, tables can be duplicated as required. Rows and tables not used can be deleted. This cover page and the last page of this document can be deleted after completion of the assessment.

This template was developed by the project Adapt Northern Heritage
with funding from the Interreg Programme for the Northern Periphery and Arctic.

Historic Places and Cultural Significance

Historic place overview

Name of historic place to be analysed		Place ID if applicable
Description of historic place and its wider surroundings		
Brief description of historic place		
Brief description of place's immediate surroundings		
Brief description of places' wider environs		

Place elements

Place elements (Advanced Level)		
Identify place elements e.g. walls, roof, bridge, woodland, building	Principal material / matter e.g. live organic matter, peat, stone, timber	Description / comments if required

Cultural significance

Conservation policies				
ID	Document title	Author(s)	Version	Date
1				
2				
3				

Cultural heritage designations			
Designation	Title	Reference	Comments
Rating of key cultural significance values			
Key value	Rating	Comments / reasons	

Implications of cultural heritage designations (Advanced Level)		
Designation	Title	Conferred management implications
Cultural significance ratings of place elements (Advanced Level)		
Place elements	Rating	Reasoning for rating

Climate, hazards and impacts

Site observations, hazards and climate drivers (optional)

Observed damages and deterioration			
Damage and deterioration observed at historic place	Impact type	Environmental hazard associated with observations	Climate drivers
	<input checked="" type="checkbox"/> damage <input type="checkbox"/> deterioration		
	<input checked="" type="checkbox"/> damage <input type="checkbox"/> deterioration		
	<input checked="" type="checkbox"/> damage <input type="checkbox"/> deterioration		

Climate drivers and environmental hazards					
Climate drivers	Climate trends		Environmental hazards		
<i>Description of variables</i>	<i>Observed trends</i>	<i>Projected trends</i>	<i>Description of hazards</i>	<i>Increase in relevance observed</i>	<i>projected</i>
				<input type="checkbox"/> increase <input type="checkbox"/> decrease <input type="checkbox"/> no change	<input type="checkbox"/> increase <input type="checkbox"/> decrease <input type="checkbox"/> no change
				<input type="checkbox"/> increase <input type="checkbox"/> decrease <input type="checkbox"/> no change	<input type="checkbox"/> increase <input type="checkbox"/> decrease <input type="checkbox"/> no change

Impacts on historic place		
Environmental hazard	Impacts on historic place	
<i>Description of hazard</i>	<i>Description of observed or potential impacts</i>	<i>Impact type</i>
		<input type="checkbox"/> damage <input type="checkbox"/> deterioration
		<input type="checkbox"/> damage <input type="checkbox"/> deterioration
		<input type="checkbox"/> damage <input type="checkbox"/> deterioration
		<input type="checkbox"/> damage <input type="checkbox"/> deterioration

Impacts on historic place with affected place elements (Advanced Level)		
Environmental hazards	Impacts on historic place	Place elements affected

Impacts on historic place with affected locations (Advanced Level)					
Environmental hazards	Impacts on historic place	Place elements affected	Exposure duration of impact	Impact intensity	Impact likelihood
			<input type="checkbox"/> decreasing <input type="checkbox"/> increasing <input type="checkbox"/> no change Comments:	<input type="checkbox"/> decreasing <input type="checkbox"/> increasing <input type="checkbox"/> no change Comments:	<input type="checkbox"/> decreasing <input type="checkbox"/> increasing <input type="checkbox"/> no change Comments:
			<input type="checkbox"/> decreasing <input type="checkbox"/> increasing <input type="checkbox"/> no change Comments:	<input type="checkbox"/> decreasing <input type="checkbox"/> increasing <input type="checkbox"/> no change Comments:	<input type="checkbox"/> decreasing <input type="checkbox"/> increasing <input type="checkbox"/> no change Comments:

Hazard register

Hazard Register								(Advanced Level)			
Climate drivers	Climate trends		Environmental hazards			Impact on historic place					
Description of variables	Observed trends	Projected trends	Description of observed or potential hazard	Change in relevance		Description of observed or potential impacts	Impact types	Affected location	Length of exposure to impact	Intensity of impact	Likelihood of impact to occur
				<input checked="" type="checkbox"/> increase <input type="checkbox"/> decrease <input type="checkbox"/> no change	<input checked="" type="checkbox"/> increase <input type="checkbox"/> decrease <input type="checkbox"/> no change		<input checked="" type="checkbox"/> damage <input type="checkbox"/> deterioration		<input type="checkbox"/> decreasing <input type="checkbox"/> increasing <input checked="" type="checkbox"/> no change	<input type="checkbox"/> decreasing <input checked="" type="checkbox"/> increasing <input type="checkbox"/> no change	<input type="checkbox"/> decreasing <input checked="" type="checkbox"/> increasing <input type="checkbox"/> no change
				<input checked="" type="checkbox"/> increase <input type="checkbox"/> decrease <input type="checkbox"/> no change	<input checked="" type="checkbox"/> increase <input type="checkbox"/> decrease <input type="checkbox"/> no change		<input checked="" type="checkbox"/> damage <input type="checkbox"/> deterioration		<input checked="" type="checkbox"/> decreasing <input type="checkbox"/> increasing <input type="checkbox"/> no change	<input type="checkbox"/> decreasing <input checked="" type="checkbox"/> increasing <input type="checkbox"/> no change	<input type="checkbox"/> decreasing <input checked="" type="checkbox"/> increasing <input type="checkbox"/> no change

Risk register

Risk register for multiple time horizons												
Impact	Time horizon #1: Today						Time horizon #2: <div></div>					
Impact ID and description	Likelihood rating	Severity rating	Inherent risk rating	Inherent risk rating definition	Acceptability of risk	Recommendations for action	Likelihood rating	Severity rating	Inherent risk rating	Inherent risk rating definition	Acceptability of risk	Recommendations for action

Risk register for multiple time horizons (Advanced Level)																		
Impact	Place elements			Time horizon #1: Today					Time horizon #2: <div></div>					Time horizon #3: <div></div>				
Impact ID and description	Place element affected	Significance rating	Vulnerability rating	Intensity rating	Likelihood rating	Severity rating	Inherent risk rating	Heritage risk rating	Intensity rating	Likelihood rating	Severity rating	Inherent risk rating	Heritage risk rating	Intensity rating	Likelihood rating	Severity rating	Inherent risk rating	Heritage risk rating

Summary of risk register

Summary of Risk Register (incl. Advanced Level)		<input type="checkbox"/> Standard level: Risks ratings are 0-16 (inherent risk) <input type="checkbox"/> Advanced level: Risk ratings are 0-64 (heritage risk)		
List of unacceptable risks state risks consider as unacceptable at the respective time horizons ranked by decreasing risk rating				
Impact				
ID	Description	Risk rating	Time horizon 1	Time horizon 2
		Today		
Highest-ranked acceptable risks (state multiple if of the same rating at time horizon #1)				
Impact				
ID	Description	Risk rating	Time horizon 1	Time horizon 2
		Today		
Summary of increasing risks				
Summary of decreasing risks				
Effect of occurrence of impacts on key cultural heritage values				
Key values	Current rating	Revised rating	Comments	
Conclusions				

Adaptation Planning

Identifying adaptation measures

For each considered impact, the following table must be completed.

When following *Standard Level* assessment, please refer to the inherent risk rating. For *Advanced Level* assessment, please use the heritage risk rating.

Impact to be investigated	
Impact description	
Associated hazard	
Risk rating	
Impact ID	
Longlist of adaptation measures	
PROTECT	
P1	
P2	
STRENGTHEN	
S1	
S2	
RELOCATE	
R1	
R2	
RESPOND TO DAMAGE	
D1	
D2	
MANAGING LOSS	
L1	
L2	
MANAGE UNCERTAINTY	
I1	
I2	

Appraising adaptation measures

Adaptation measure appraisal			
Impact / Measure ID			
Adaptation measure (short title)			
Details of measure (brief description)			
Adaptation type			
Location where measure would be installed (If working at Advanced Level, use <i>place elements</i> .)			
If adaptation type is Protect, Strengthen, Relocate or Respond to Damage, use below table:			
Adaptation measures appraisal: Adjustment of severity rating (Standard Level only)			
Effect of measure on risk <i>The risk would be...</i>			
Associated effect on severity rating <i>Severity rating would ...</i>			
If the answer to the first query is left unchanged or increased, stop the appraisal of the measure concerned.			
Adaptation measure appraisal: Adjustment of ratings (Advanced Level)			
Change to	Scale of change using refined responses of Error! Reference source not found.	Adjusting intensity / vulnerability rating using data from Error! Reference source not found.	Adjusting heritage risk rating
exposure duration of place to impact			
magnitude of impact on place			
vulnerability of the place to impact			

If adaptation type is Managing Loss, use below table:

Managing Loss appraisal

How would the measure support communities?	
Which specific communities would be supported?	
Are the answers to the two questions above considered sufficiently relevant to explore measure further?	<input type="checkbox"/> Yes, explore this adaptation measure further <input type="checkbox"/> No, file this idea of an adaption measure and proceed to next measure on long-list

If the answer to the last question was no, stop the appraisal of the measure concerned.

If adaptation type is Manage Uncertainty, use below table:

Manage Uncertainty appraisal

How would the considered measure reduce uncertainty?	
How would the considered measure support other relevant measures?	
Are the answers to the two questions above considered sufficiently relevant to explore measure further?	<input type="checkbox"/> Yes, explore this adaptation measure further <input type="checkbox"/> No, file this idea of an adaption measure and proceed to next measure on long-list

If the answer to the last question was no, stop the appraisal of the measure concerned.

Regardless of adaptation type, continue with the table below:

Potential effects on cultural significance

Descriptive rating of effect on cultural significance of the place	<input type="checkbox"/> unacceptably adverse <input type="checkbox"/> acceptably adverse subject to mitigation <input type="checkbox"/> acceptably adverse without mitigation <input type="checkbox"/> neutral <input type="checkbox"/> beneficial
If the response above was "subject to mitigation", name examples for how this might be achieved.	

If the answer to the first query was unacceptably adverse or was acceptably adverse subject to mitigation, with no suitable example identified in the second query, top the appraisal of the measure concerned.

Regardless of adaptation type, continue with the table below, if assessing at Advanced Level:

Potential economic, environmental and social effects (Advanced Level)

Descriptive rating of economic effects	<input type="checkbox"/> unacceptably adverse <input type="checkbox"/> acceptably adverse subject to mitigation <input type="checkbox"/> acceptably adverse without mitigation <input type="checkbox"/> neutral <input type="checkbox"/> beneficial
Descriptive rating of environmental effects	<input type="checkbox"/> unacceptably adverse <input type="checkbox"/> acceptably adverse subject to mitigation <input type="checkbox"/> acceptably adverse without mitigation <input type="checkbox"/> neutral <input type="checkbox"/> beneficial
Descriptive rating of social effects	<input type="checkbox"/> unacceptably adverse <input type="checkbox"/> acceptably adverse subject to mitigation <input type="checkbox"/> acceptably adverse without mitigation <input type="checkbox"/> neutral <input type="checkbox"/> beneficial
If any of the responses above was “subject to mitigation”, name examples for how this might be achieved.	
<p><i>If the answer to the first query was unacceptably adverse or was acceptably adverse subject to mitigation, with no suitable example identified in the second query, stop the appraisal of the measure concerned.</i></p>	

If an adaptation measure has not been rejected through the process above, please enter its details in the *Adaptation Measures Register* overleaf. Thereafter, assess the next adaptation measures from the longlist.

Once all longlisted adaptation measures have been appraised and accepted measures recorded in the *Adaptation Measures Register*, proceed to section Adaptation Strategy.

Adaptation Measures Register

Adaptation Measures Register						(Advanced Level)			
Impact investigated					Impact ID				
Impact / Measure ID	Adaptation measure (short title)	Adaptation type	Location where measure would be installed	Potential effect on cultural significance including mitigation example	Include in summary	Potential economic effects including mitigation example	Potential environmental effects including mitigation example	Potential social effects including mitigation example	
					<input type="checkbox"/> include				
					<input type="checkbox"/> include				
Impact investigated					Impact ID				
Impact / Measure ID	Adaptation measure (short title)	Adaptation type	Location where measure would be installed	Potential effect on cultural significance including mitigation example	Include in summary	Potential economic effects including mitigation example	Potential environmental effects including mitigation example	Potential social effects including mitigation example	
					<input type="checkbox"/> include				
					<input type="checkbox"/> include				

Summarising the adaptation measures

Summary of Adaptation Measures Register				
Impact / Measure ID	Adaptation measure (short title)	Adaptation type	Location where measure would be installed	Potential effect on cultural significance including mitigation example
Impact investigated				Impact ID
Impact investigated				Impact ID

Summaries for Groups of Historic Places and Place Categories

If you have chosen to assess a group of historic places, please include the following table.

Geographic information (group of historic places)			
ID	Name of place	Place's address	Place's extent
1			
2			
3			
Summary of assessment of group of historic places			

If you have chosen to assess place categories, please include the following table.

Geographic information (place categories)		
ID	Name of category	Description of category
1		
2		
3		
Summary of assessment of place categories		

Advanced Plus: Adaptation Planning

Appraising feasibility and viability

Feasibility and viability assessment of adaptation measure		
Feasibility		
Complexity <i>describe the complexity involved in the design, implementation and operation of the measure</i>	<input type="checkbox"/> extremely complex <input type="checkbox"/> highly complex <input type="checkbox"/> moderate complexity <input type="checkbox"/> simple <input type="checkbox"/> very simple	
Expertise / knowledge <i>describe the availability and level of expertise and knowledge required to design and implement the measures</i>	<input type="checkbox"/> readily available <input type="checkbox"/> readily available but specialist <input type="checkbox"/> not available but can be developed short term <input type="checkbox"/> not available but might be developed mid-term <input type="checkbox"/> not available and unlikely to be developed longer term	
Responsible organisation <i>identify the principal organisation responsible for the measure</i>		
Viability		
Investment cost <i>describe cost estimate for design, implementation and start-up of the measure</i>	<input type="checkbox"/> very high cost <input type="checkbox"/> high cost <input type="checkbox"/> moderate cost <input type="checkbox"/> low cost <input type="checkbox"/> very low cost	
Operation cost <i>describe cost estimate for future operation and longer-term maintenance of the measure</i>	<input type="checkbox"/> very high cost <input type="checkbox"/> high cost <input type="checkbox"/> moderate cost <input type="checkbox"/> low cost <input type="checkbox"/> very low cost	
Timeframe <i>describe suitable period or point in time to implement the measure</i>		<i>for example, in 30 years or in 2070 or when the first river flood reaches the building</i>

Barriers and limits, prerequisites, maladaptation and dependencies

Barriers and limits		
Restrictions <i>Identify restrictions which might prevent the measure's design and implementation</i>	Mitigation activities <i>Identify activities to overcome the restriction</i>	Barrier or limit?
		<input type="checkbox"/> barrier <input type="checkbox"/> limit
		<input type="checkbox"/> barrier <input type="checkbox"/> limit
Prerequisites, maladaptation and dependencies		
Prerequisites <i>Identify any activities or conditions required to design and implement measure</i>		
Maladaptation <i>Identify how, in future, the measure might hinder the implementation of other measures</i>		
Dependencies <i>List any measure(s) which could be beneficially combined with the measure investigated</i>		
Assessment of pathways		
Pathways roadmap		
<i>Insert here a single image / photograph of the produced pathways roadmap</i>		
Describe each of the created pathways		
Name the preferred pathway, stating the reasons for this preference		
State the actions, resources and responsibilities needed to commence the implementation of the preferred pathway		
Define timescale for the next review of the adaptation pathways, including reason		

This is the end of the second part of the Workbook. Tables not used in the assessment above should now be deleted. This page and the front page of this document can be deleted also.

If you have chosen to assess a **singular historic place**, please proceed to part 3.

If you have chosen to assess a **group of historic places**, please complete another copy of this part 2 for the next required place. Once all places, for which an assessment is required, have been completed, please proceed to part 3.

If you have chosen to assess **place categories**, please complete another copy of this part 2 for the next required category. Once all categories, for which an assessment is required, have been completed, please proceed to part 3.