

Common template for risk assessment and management operational tools and best practices identification (Action B1)

Title: Operational Tools and Best Practices for Risk Assessment and Management

The identification of tools and best practices on risk assessment and management helps providing an idea of the state of the art in the field. By completing this form, the best practice will be included in the knowledge repository platforms and available for the practitioner community to use. We encourage the user to complete as many fields as possible from the template in order to provide the most relevant information needed to apply the best practice to other practitioners.

Instructions:

- Blue boxes are mandatory fields
- More than one item can be selected in multiple choice boxes

Document classification

Title	Adaptation Workbook
Description [1 sentence]	The Adaptation Workbook is a structured process to adapt forests to climate change taking account of different preconditions and management objectives.
Country, location	USA, Midwest and Northeast Climate Hub Regions
Date	2016
Contact e-mail	cswanston@fs.fed.us
Institution	Northern Institute of Applied Climate Science
Net Risk Work Partner	FVA
Document type	Best practice
Language	<input type="checkbox"/> Catalan <input checked="" type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> German <input type="checkbox"/> Italian <input type="checkbox"/> Spanish <input type="checkbox"/> Other
Source/origin	<input type="checkbox"/> Partner's expertise <input type="checkbox"/> Expertise from the network <input checked="" type="checkbox"/> Other (internet)

Topic

Area	<input checked="" type="checkbox"/> Risk assessment	<input checked="" type="checkbox"/> Risk Planning	<input checked="" type="checkbox"/> Risk Management
Risk	<input type="checkbox"/> Wildfires	<input type="checkbox"/> Fire behaviour patterns and typologies <input type="checkbox"/> Fire ignition and spread models <input type="checkbox"/> Wildland urban interface	<input type="checkbox"/> Fuel management <input type="checkbox"/> Fire service needs <input type="checkbox"/> Prescribed burning <input type="checkbox"/> Other [Introduce which ones]
	<input type="checkbox"/> Storms	<input type="checkbox"/> First measures after storm <input type="checkbox"/> Work safety during salvage logging <input type="checkbox"/> Timber storage and cost containment <input type="checkbox"/> Forest protection and pest control	<input type="checkbox"/> Regeneration and afforestation <input type="checkbox"/> Preventive sylvicultural measures <input type="checkbox"/> Other [Introduce which ones]
	<input type="checkbox"/> Avalanches	<input type="checkbox"/> Technical protective measures <input type="checkbox"/> Maintenance of protection forests	<input type="checkbox"/> Other [Introduce which ones]
	<input type="checkbox"/> Floods	<input type="checkbox"/> Prevention through land use management <input type="checkbox"/> Technical protective measures	<input type="checkbox"/> Other [Introduce which ones]
	<input checked="" type="checkbox"/> Other	Focus on climate change, open for every risk type	[Introduce which ones]

Cross-sectoral topics	<input checked="" type="checkbox"/> Risk and vulnerability assessment and mitigation <input checked="" type="checkbox"/> Cost-effectiveness assessment <input type="checkbox"/> Civil protection, emergency and post-disaster management	<input checked="" type="checkbox"/> Risk planning, governance and policy framework <input checked="" type="checkbox"/> Community involvement and risk communication <input type="checkbox"/> Other: [Introduce which ones]
Level	<input type="checkbox"/> Local <input checked="" type="checkbox"/> Regional <input type="checkbox"/> National <input type="checkbox"/> Cross-border <input type="checkbox"/> EU <input type="checkbox"/> Global	
DRM cycle phase	<input checked="" type="checkbox"/> Prevention <input checked="" type="checkbox"/> Preparedness <input type="checkbox"/> Response <input type="checkbox"/> Recovery	
DRM domain	<input checked="" type="checkbox"/> Policy making <input type="checkbox"/> Early warning system	<input type="checkbox"/> Disaster response
Sendai priorities	<input checked="" type="checkbox"/> Priority 1: Understanding disaster risk <input checked="" type="checkbox"/> Priority 2: Strengthening disaster risk governance to manage disaster risk <input checked="" type="checkbox"/> Priority 3: Investing in disaster risk reduction for resilience <input checked="" type="checkbox"/> Priority 4: Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction	
Contribution to Sendai Targets	<input type="checkbox"/> Reduce global disaster mortality <input checked="" type="checkbox"/> Reduce the number of affected people <input checked="" type="checkbox"/> Reduce the direct disaster economic loss <input checked="" type="checkbox"/> Reduce disaster damage to critical infrastructure <input checked="" type="checkbox"/> Increase the number of national and local disaster risk reduction strategies <input type="checkbox"/> Enhance international cooperation to developing countries <input type="checkbox"/> Increase availability of and access to multi-hazard early warning systems and disaster risk information and assessment	

Description and analysis

Summary: quick presentation of the Good Practice [Objective: summarize in a few lines the key elements of the good practice]

The Adaptation Workbook is a structured process to consider the potential effects of climate change and design land management and conservation actions that can help prepare for changing conditions. The process is completely flexible to accommodate a wide variety of geographic locations, ownership types, ecosystems and land uses, management goals, and project sizes.

Place in national/regional policy [Mentioned in the law/regulation/guidelines? Mandatory? Recommended?]

The workbook is part of the Climate Change Response Framework launched by the U.S. Forest Service. The Framework is a collaborative, cross-boundary approach among scientists, managers, and landowners to incorporate climate change considerations into natural resource management. The focus lays on cooperation to bridge the gap between science and practice. The use is not part of a regulation and not mandatory.

[free text – 5 lines max]

Goals and achievements [Objectives, goals and the achievements of the Good Practice]

The workbook shall provide a flexible, logical process to consider climate change information and design customized management actions for forest managers that can help achieve their management objectives. It is aimed to provide a practical tool to implement the recommendations for climate change adaption into real-world management decisions.

[free text – 5 lines max]

Actors involved [Explain who is involved in the development: practitioners, stakeholders, educators, ...]

The workbook was developed by scientists from the Northern Institute of Applied Climate Science (NIACS) and related institutions.

[free text – 5 lines max]

Implementation stage [Is it operational? Since how long? Is it a pilot experiment?]

The workbook is available since 2012 with the first version of the workbook. In 2016, a 2nd edition was published and the workbook is additionally available as an online tool.

<i>[free text – 5 lines max]</i>
State of technical knowledge <i>[state of the art and technical background of the Best Practice]</i> The climate change data is mostly delivered by the National Climate Assessment (NCA).
<i>[free text – 5 lines max]</i>
Context <i>[regulatory, socio-economic, political]</i> The workbook is embedded in the Climate Change Response Framework. Under the increasing urge to react to climate change, the tool provides a practical approach to climate change adaption without neglecting owners' individual objectives and priorities. It further incorporates the local knowledge of the practitioners in the assessment of climate change impacts in the field.

Detailed Characteristics <i>[Objective: detail the implementation conditions of the Good Practice]</i>
Description of the implementation steps <i>[different stages in the implementation process, duration]</i> <i>The Workbook consists of 5 basic steps: (1) Define goals and objectives; (2) Assess climate impacts and vulnerabilities; (3) Evaluate objectives considering climate impact; (4) Identify adaptation approaches and tactics for implementation; (5) Monitor effectiveness of implemented action. This can be done with the aid of templates provided by the print version or online in a step-by-step process.</i>
<i>[free text – 5 lines max]</i>
Governance <i>[responsible authority and roles of the different actors involved]</i> The Northern Institute of Applied Climate Science (NIACS) is the driving force in the development, distribution and implementation of the tool.
<i>[free text – 5 lines max]</i>
Necessary means to implement the Good Practice in efficient conditions <i>[human resources, materials, financial...]</i> With the online workbook, the tool is available to everybody, there is still a need for supervision since the knowledge required to conduct the assessments is on a professional level. It further needs incentives to motivate practitioners to participate.
<i>[free text – 5 lines max]</i>
Challenges encountered during implementation and solutions incurred As part of the Climate Change Response Framework, the workbook is designed to continually incorporate new information and adapt to the current state of knowledge, which can change quite fast. The issue itself is complex; therefore, the way the workbook and its tools are presented has to be appealing. The new online version offers an easier way to conduct the analysis. Explanatory videos can be watched to become familiar with the tool and online trainings are available.
<i>[free text – 5 lines max]</i>
Priorities identified for successful implementation of the Good Practice The integration of the land owners' and managers' management objectives makes the tool appealing and trustworthy for the users. Climate change and associated risks become a factor in the management process, not the all-determining point of reference. The tool is further able to break down the available scientific knowledge and combine it with local knowledge to support professionals during decision-making processes.
<i>[free text – 5 lines max]</i>

Impact of the Good Practice <i>[Objective: evaluate the impact of the Good Practice]</i>
<i>[Added value on decision processes, on national policies or regulations, on relationship with stakeholders, etc.]</i>
The Adaptation Workbook offers a method to break down scientific knowledge on a local level in order to enable practitioners to integrate it into their management process and under their priorities. It makes risk assessment and adaption considering changing climate conditions applicable

on a local level.

[free text – 5 lines max]

Future developments [Objective: understand the follow-up perspectives]

[Continuation, future improvements,]

Feedback from the users and new knowledge will flow into the workbook. More examples from the field shall provide shall help to bring the target group in touch with risk management, climate change and the method itself.

[free text – 5 lines max]

External resources [Objective: provide further information]

Attached materials	[include format (document, photo, video...) and name of the file]
Web links	<p>Link to the tool (English): https://adaptationworkbook.org</p> <p>Description of the method with examples (English): https://www.fs.fed.us/nrs/pubs/jrn/2014/nrs_2014_janowiak_001.pdf</p> <p>Guide to the workbook: Climate Change Tools and Approaches for Land Managers (English): https://www.fs.fed.us/nrs/pubs/gtr/gtr_nrs87-2.pdf</p> <p>The workbook is part of the “Climate Change Response Framework” (English): http://forestadaptation.org/</p>
Contacts	Author of the guide: Christopher Swanston Email: cswanston@fs.fed.us

[Additional information - optional]

Lessons learnt [Objective: compare the results obtained to the objectives set at the start of the Good Practice]
Evaluation process, if exists (internal or external)
[free text – 5 lines max]
Assessment of results (quantitative and qualitative) and comparison with main goals
[free text – 5 lines max]
Negative aspects identified
[free text – 5 lines max]
Unexpected consequences (short / mid / long term) and corrective measures implemented
[free text – 5 lines max]

Durability and transferability [Objective: evaluate the integration of the Good Practice and its sustainability, give recommendations for transferability]

Is this information:	Replicable <input type="checkbox"/>	Measurable <input type="checkbox"/>	
Regulatory Framework			
<i>[free text – 5 lines max]</i>			
Stability of the human environment <i>[Stability of partnership, structures, population enabling successful implementation and positive impact in the long term]</i>			
<i>[free text – 5 lines max]</i>			
Financial requirements <i>[business model]</i>			
<i>[free text – 5 lines max]</i>			
Success factors <i>[political, technical, human, financial...]</i>			
<i>[free text – 5 lines max]</i>			
Risk factors <i>[legal, financial, safety...]</i>			
<i>[free text – 5 lines max]</i>			
Additional and non-formal experiences contributing to the implementation of Good Practice			
<i>[free text – 5 lines max]</i>			