



Short name	Fire protection
CICES class name	Fire protection
CICES Section	Regulation & Maintenance (Biotic)
CICES Class code	2.2.1.5

Brief Description

- Protecting people and/or their property from fire
- The reduction in the frequency, intensity, or speed of spreading of fires by virtue of the presence of plants and animals that mitigates or prevents potential damage to human property or human health

Sample Indicators









Indicator values from			
Experiment or direct measurement		Survey	
Expert assessment		Statistical- or census data	
Model or GIS		Literature values	
Stakeholder participation		Not provided	

Table 1: Field Scale



Indicator	Unit	Indicator values from
<p>^[1] Property loss due to fires, calculated as a combination of:</p> <ul style="list-style-type: none"> ● Site quality: population within 3 mile radius [0 - 1] ● Site opportunity: value of property at risk [0 - 1] ● Complementary inputs: is the site within or adjacent to a major urban area [0 - 1] ● Reliability: Risk of future service loss through urban development within 3 mile radius [0 - 1] 	Index [0 - 1]	 , 

Table 3: Regional Scale


Indicator	Unit	Indicator values from
<p>^[2] Fire risk index. The index is based on the vegetations vulnerability to wildfires, climatic conditions, and topography.</p>	Index [-]	

Table 4: National Scale




Indicator	Unit	Indicator values from
^[3] (Historical analysis) Protection against fires from lightning strikes: occurrence of big trees near houses that were able to attract lightning and thereby protect the houses	[not provided]	 , 

Table 5: Multinational Scale

Indicator	Unit	Indicator values from
^[2] Fire risk index. The index is based on the vegetations vulnerability to wildfires, climatic conditions, and topography.	Index [-]	

References

No.	Citation
1	Wainger LA, King DM, Mack RN, Price EW, Maslin T (2010) Can the concept of ecosystem services be practically applied to improve natural resource management decisions? Ecological Economics 69(5): 978-987. DOI: 10.1016/j.ecolecon.2009.12.011
2	Mouchet MA, Paracchini ML, Schulp CJE, Sturck J, Verkerk PJ, Verburg PH, Lavorel S (2017) Bundles of ecosystem (dis)services and multifunctionality across European landscapes. Ecological Indicators 73: 23-28. DOI: 10.1016/j.ecolind.2016.00.026
3	Dittrich A, von Wehrden H, Abson DJ, Bartkowski B, Cord AF, Fust P, Hoyer C, Kambach S, Meyer MA, Radzevičiūtė R, Nieto-Romero M, Seppelt R, Beckmann M (2017) Mapping and analysing historical indicators of ecosystem services in Germany. Ecological Indicators 75: 101-110. DOI: 10.1016/j.ecolind.2016.12.010