

1. Record Nr.	UNINA9910254998503321
Autore	Amon Francine
Titolo	Development of an Environmental and Economic Assessment Tool (Enveco Tool) for Fire Events // by Francine Amon, Jonatan Gehandler, Selim Stahl, Mai Tomida, Brian Meacham
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2016
ISBN	1-4939-6559-X
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XII, 111 p. 36 illus.)
Collana	SpringerBriefs in Fire, , 2193-6595
Disciplina	628.92
Soggetti	Civil engineering Quality control Reliability Industrial safety Natural resources Environmental engineering Biotechnology Civil Engineering Quality Control, Reliability, Safety and Risk Natural Resource and Energy Economics Environmental Engineering/Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction and Background -- Scope -- Approach -- Integration and Implementation -- Sensitivity and Uncertainty Analyses -- Case Studies -- Conclusions -- Future Work.
Sommario/riassunto	This book investigates the feasibility of developing a tool that enables fire departments to estimate the value of their services to a community in terms of environmental and financial impact. This book provides a summary of this effort, which resulted in development of a prototype tool for fire department use. The impact of fire on a community is usually measured in terms of the number of fires, human casualties, and property damage. There are, however, more subtle impacts of fire that are not so easily estimated but contribute to the measure of overall

performance of the fire service in protecting a community. While environmental and economic impact assessment methodologies exist as separate systems, they generally require a high level of knowledge that is outside the scope of most fire departments. A relatively simple methodology for estimating the environmental and economic impact of fires helps communities understand the degree to which fire department activities can benefit a community's environmental and economic well-being. The scope and approach for this prototype tool is explained, including risk assessment, cost benefit analysis, life cycle assessment, integration and implementation, and sensitivity and uncertainty analysis. It includes multiple case studies and offers statistical support for future expansion of the tool. Fire service professionals will find this a useful new approach to presenting value in a community, as well as a method for examining their own financial and environmental plans.

---