

Urban Planning and Landscape Management

Recovery and adaptation

- Vegetation restoration should take the opportunity to improve ecosystems resilience to new fires by establishing fire-adapted species (e.g. resprouts)
- Consideration should also be given to changing the previous land use of the burned area (e.g. conversion of forest to pasture or agricultural land)
- The planning process for the construction of new housing or re-building within high fire
 risk areas could be conditioned to risk mitigation measures, involving all public agencies in
 charge of spatial planning and risk management as well as local communities and
 homeowners

• Ecology and Landscape Management

- Forests need to be managed to reduce fuel consumption and energy availability in order to avoid that extinguishing capacities are exceeded
- Enforcement of clearing obligations; enforcement of higher fines and penalties was deemed critical
- Agro-silvo pastoral activities are therefore crucial to manage wildland and rural fuels,
 maintaining the population in remote areas, avoiding depopulation and loss of income
- Specific agreements between agro-silvo-pastoral farms and community/national/regional; Provide funding to the performance of adequate prevention activities by the farms while maintaining agro-silvo-pastoral productions
- Integrate ecosystems services and nature-based solutions into fire risk reduction as well as other values we have in the landscape
- Supporting grazing and browsing treatments as effective means of reducing the frequency of fuel load treatments is recommended
- Where are treatments (including land use change) needed? How feasible is it to handle big regions when land is fragmented and how to organise that (landscape design, economies of scale)? How much treatment is necessary (intensity/frequency)? How much do we want to treat combining risk reduction with other values in our landscape?
- Multidimensional, co-creative and transformative paradigm: the system of values of each landscape must be explored and defined through a planning that considers risks and climate change and adaptation, accepting burned areas as a basic aspect of landscape dynamics and discussing the societal boundaries of suppression-centred methods (optionally including what values are to be prioritized for protection in case of a wildfire and how to deal with temporary or permanent loss of value)

Urban planning

 It is crucial to integrate fire risk into urban planning, as well as to support area protection through fuel management and prevention activities



Fire-resilient landscapes

- The management of forest vegetation is imperative for improving the capabilities of firefighting. Particular attention is needed following large-scale disasters (e.g., snow or windstorms, dying out of the vegetation caused by pest and insect attacks) to control sudden increase of heavy fuel load that maintains fires and contributes to rekindling
- Distinct normal fires and extreme events → resilience depends on disturbance
- o Pairing with private investors for creating more fire resilient landscape is possible
- Policies that combine farmland protection (i.e., initiatives aimed at reversing farmland abandonment and preserving it) with fire-smart practices create more resilient landscapes
- Changing human behaviour/self-organizations
- Reducing biomass and changing how it is distributed at the landscape level (homogeneous vs. heterogeneous landscapes); promoting the forest-linked bio-economy and the recognition and payment of environmental services by society

Recommendations have been largely distilled from the following reports:

- European Commission, Joint Research Centre, Almeida, M., Ribeiro, L., Alves, D. et al. (2023) Analysis of 2021 critical wildfire events in the Mediterranean region. Publications Office of the European Union. https://data.europa.eu/doi/10.2760/562495
- Castellnou, M., Nebot, E., Estivill, L., Miralles, M. et al. (2022). FIRE-RES Transfer of Lessons Learned on Extreme wildfire Events to key stakeholders. Deliverable D1.1 FIRE-RES project. 119 pages. DOI: 10.5281/zenodo.10260790
- Pronto et al., 2023, Research for REGI Committee Forest Fires of Summer 2022, European Parliament,
 Policy Department for Structural and Cohesion Policies, Brussels.
 https://www.europarl.europa.eu/RegData/etudes/STUD/2023/747280/IPOL_STU(2023)747280_EN.pdf