MAINTAIN OR RESTORE QUALITY AND NUTRIENT CYCLING

OBJECTIVE

Improve the forest resilience.

DESCRIPTION

Maintaining both soil quality and nutrient cycling in forest ecosystems is already a common tenet of sustainable forest management, and continued vigilance will help improve the capacity of the forest to persist under new conditions imposed by climate change. Re-evaluation of the timing and intensity of some practices will help ensure that site quality is not degraded as both ecosystem vulnerabilities and the duration of seasons change. One example of an adaptation tactic under this approach is to alter the timing of logging operations to prevent soil compaction, realizing that the time when soils will be frozen or protected by snowpack is decreasing. Another example of a tactic is to retain coarse woody debris in order to maintain moisture conditions, soil quality, and nutrient cycling.

EXPECTED RESULTS

The ecosystem quality is not reduced.

RESULT INDICATORS

Concentration of each nutrient

INVOLVED ACTORS

Local government, environmental agencies.

EXPECTED TIMELINE FOR ACTION

- Medium term (5-10 years)

BEST PRACTICES

- Rostherne Mere – Cheshire – UK
- Heilbronn – Germany
- Segovia – Spain
- Portugal
- Alentejo - Portugal

CRITICALITIES

Interaction among nutrients, climate and ecology.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Green
- Soft

SECTOR OF ACTION

- Agriculture / Forests / Land use
- Biodiversity / Conservation of ecosystems

CLIMATE IMPACTS

- Change or loss of biodiversity
- Extreme precipitation
- Extreme temperatures
- Other

IMPLEMENTATION SCALE

- Province
- Region / Country

SOURCE

https://www.nrs.fs.fed.us/