MAINTAIN OR RESTORE HYDROLOGY

OBJECTIVE

Preserve suitable hydrologic conditions.

DESCRIPTION

Some forest types, such as lowland hardwoods and lowland conifers, are very susceptible to drought and may become more vulnerable as a result of climate change. Conversely, other forest types are susceptible to flooding and ponding, which may occur more often as a result of more frequent severe weather events. In order to maintain appropriate hydrologic regimes within systems, existing infrastructure that diverts water or otherwise alters hydrology can be reevaluated to compensate for changes in water levels or flows. Examples of adaptation tactics under this approach include minimizing road networks, adjusting culvert size requirements for changes in peak flow, and planning for seasonal limitations on heavy equipment.

EXPECTED RESULTS

Guaranteed forest productivity.

RESULT INDICATORS

Water flow [m^3/sec or L/sec]

INVOLVED ACTORS

Local government.

EXPECTED TIMELINE FOR ACTION

- Short term (1-4 years)

BEST PRACTICES

- San Joaquin River – California – USA
- Paìs Vasco – Spain
- Charlotte & Lee Counties – Florida

CRITICALITIES

Modifications to maintain hydrology at one site may have negative impacts on hydrology at another site.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Green

SECTOR OF ACTION

- Biodiversity / Conservation of ecosystems

CLIMATE IMPACTS

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

IMPLEMENTATION SCALE

- Province
- Region / Country
- Other

SOURCE

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