### **Forest fires Future Challenges?**

### FIRELIFE **Forest Fire Prevention project**











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www.erdotuz.hu

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### Water – Fire The short term relation

We need water for forest fire supression

For large fire supression we don't have enough water and equipment







# Watermanagement – Firemanagement The long term relation



- Water has a great influence on the potential forest stand types and plant communities.
- Usually the drought resistant plant communities have higher fire risk.
- High intensity forest and wildland fires cause change in surface cover, water balance and in surface roughness.
- Without post fire management activity occour high risk of erosion and deflation, possibility of landslip and local floods.



# Wildlandfires and climate change

- Indirect effects in Europe
- Longer fire season (february october)
- Change in land management: decreasing grazed areas, increasing non managed areas with successions process
- Increasing fuel load,
- Increasing number of fires (99 % human cuased fires)
- Increase the fire intensity because of extrem fire environment (low fuel moisture, local dry winds, drought periods)
- Increase fire spread, increase flam lenght and flame hight
- Increasing burned area
- Inrease the number of large (>50 ha) forest fires









#### **SOLUTION**

Paradigm change and integrated fire management

Long term activities

Fire as land management tool

Silviculture and land management

Early warning

Fuel breaks

Short term activities

Multy agency cooperation

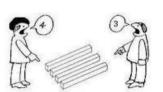
Common professional language and definitions

Communication and training





Forest fire is the only abiotic forest damage which we can prevent within a "short" time



#### FÎRELIFE Erdőtűz-megelőzési Projekt

#### **Risk of implementation**







# Prevention is invisible. Aeroplanes are sexy; silviculture is not."

(Lorenza Colletti, Corpo Forestale del Stato, Italy)



New Wildlandfire data gathering method (Twininng light project)

• Development of fuel models and communication concept

New Forest fire prevention decree

Obligatory Forest fire prevention plans (3 levels), joint data gathering system,
 Forest fire prevention maps, RX in forest

New forest act, FWI based fire ban system

Sociology research in endangered counties

• Common interagency traing and education

Infrastructural investments (fire breaks, water ponds, sylvicultur measures)

• FIRELIFE communication and training project

New regulation: RX in agricultural area

• Fuel breaks, watch towers, ICS





2015

















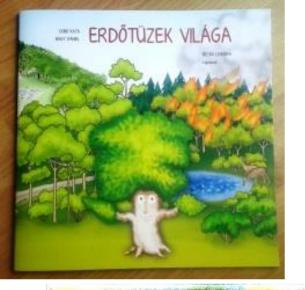


Target group and stakeholder involvment





**Connected distribution technics** 













## Fun in learning



Adventure Education













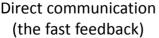


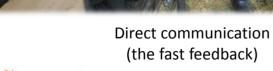
























Praxis oriented education



Group exercises
Field training



## Thanks for your attention!







