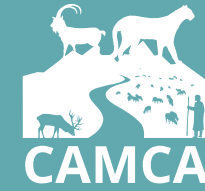


# Central Asian Mammals and Climate Adaptation



Enhancing the conservation of flagship migratory mammal species of  
Central Asia through climate-informed management and decision making

New addition

Experience Exchange between Central Asia and Western Balkan on climate  
change informed wildlife conservation and ecosystem-based adaptation

Supported by:



based on a decision of  
the German Bundestag

# Project data – CABAMCA

<b>Countries</b>	Albania, Bosnia and Herzegovina, Kosovo (under UNSCR1244/99), Montenegro, North Macedonia and Serbia.
<b>Pilot sites</b>	Tara and Drina National Parks (bordering between Bosnia and Herzegovina and Serbia), Shar Mountain National Parks (Albania, Kosovo under UNSCR 1244/99 and North Macedonia) and Bjeshket e Namuna/Prokletje (Albania, Kosovo under UNSCR 1244/99 and Montenegro)
<b>Implementing organisation</b>	UN Environment Programme (UNEP)
<b>Political partners</b>	Ministries of Environment of each economy and National Park Authorities
<b>BMVU grant:</b>	500,000 EUR

**OBJECTIVE:** to transpose the experience from Central Asia, in integrating climate considerations in biodiversity conservations, to the three selected transboundary protected areas in the Western Balkans.



Work Package 1: Strengthened biodiversity conservation in the Western Balkans through increased climate resilience.

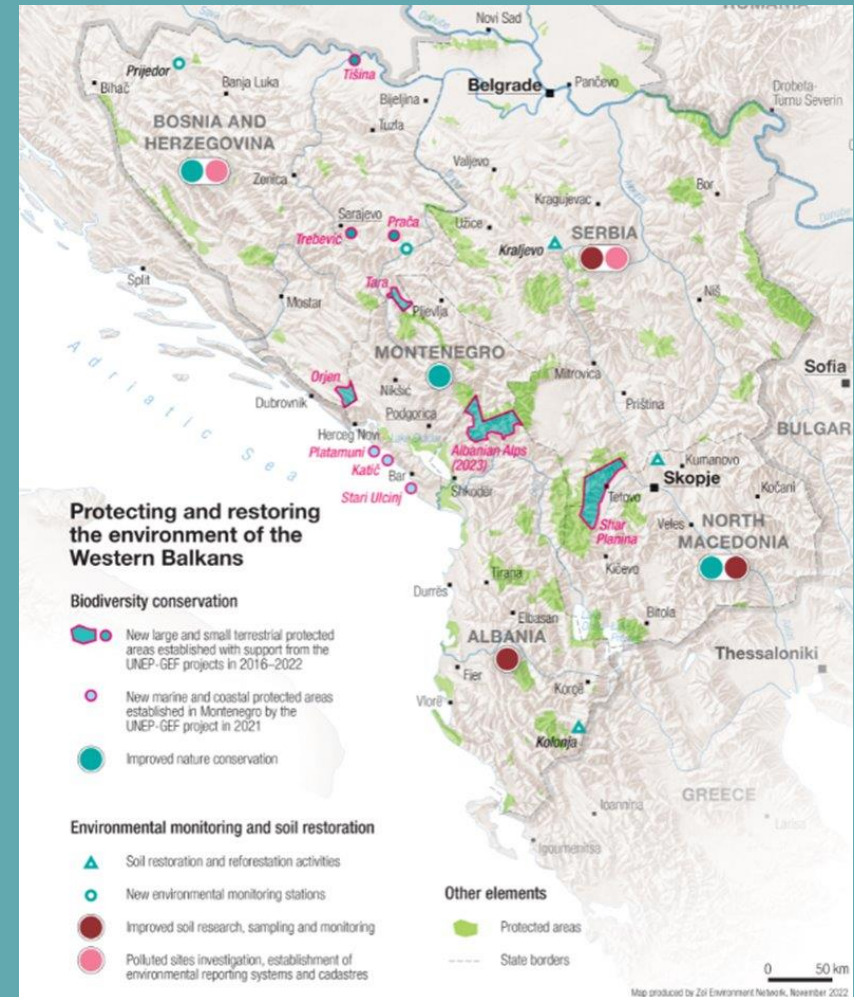
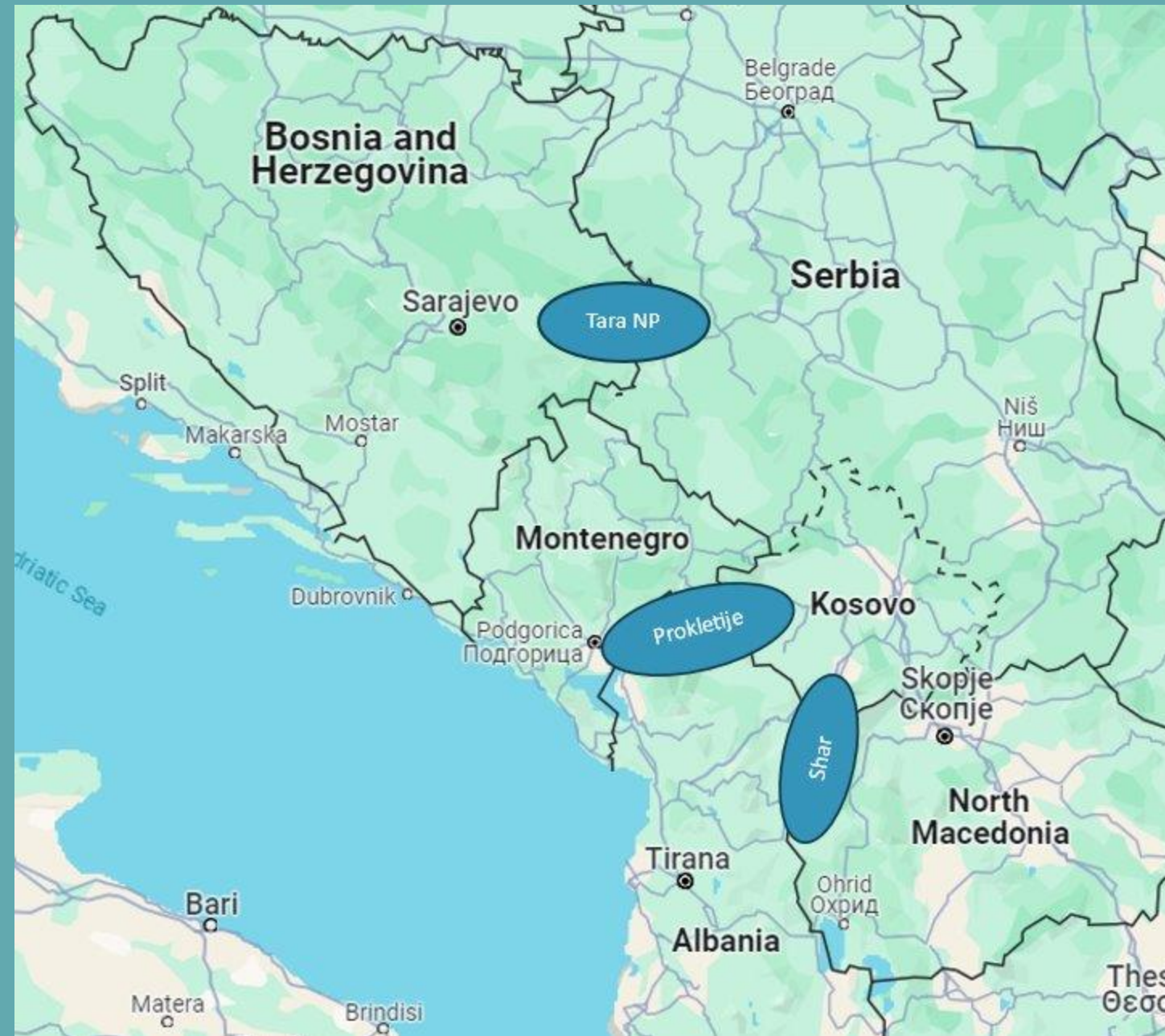
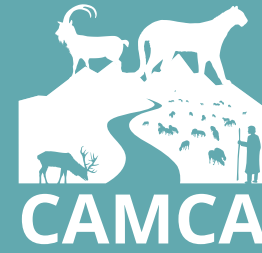
Work Package 2: Bridging knowledge systems on climate-smart wildlife conservation and ecosystem-based adaptation between Western Balkans and Central Asia.

Rapid assessment of the 6 Western Balkan economies regarding the transposition of the Acquis Chapter 27 as well as the implementation of the GAWB

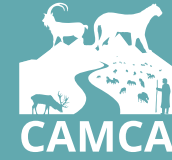
Output 1.2: Detailed analysis of climate projection scenarios and indicators and recommended EbA measures to be integrated into the management transboundary protected areas

Capacity building and training of key stakeholders (protected areas managers) of the Western Balkans based on CAMCA results in Central Asia.

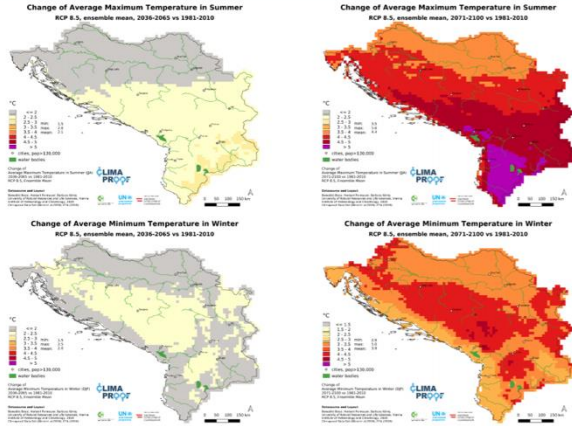




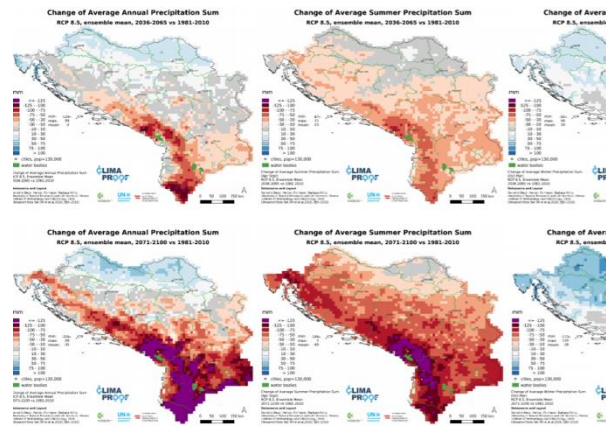
# How/What?



## Change of Average Temperature (Tmax JJA, Tmin DJF)



## Change of Precipitation



- Parameters to be analyzed:
- Extreme heat stress (desert days);
  - Drought frequency and severity (SPEI);
  - Change in snow cover (duration of snow cover, snow water equivalent);
  - Modelling of soil moisture content for meadows; Forest fire danger (FFMC);
  - Extreme precipitation (max 1 day and max 3 days)

### Extreme Rainfall events (local or regional)



- Flooding of road surface
- Erosion of road embankments
- Weakening of the road embankments and road foundation due to standing water
- Landslides and mudflows
- Loss of road structure integrity
- Overloading of drainage systems
- Damage to energy supply and communication
- Traffic hindrance and safety (aquaplaning)

### Seasonal or annual rainfall (sum)



- Structural integrity of roads, bridges and tunnels (soil moisture levels)
- Damage of the road base due to standing water
- Risk of floods, landslides and slope failures (if change in precipitation pattern)

### Max Temperature/ Heatdays



- Pavement integrity (Rutting, cracking and blow-ups of asphalt; migration of liquid bitumen)
- Thermal expansion in bridge expansion joints and pavements

### Drought



- Increased risk of wildfires threatening transport infrastructure
- Threats from areas deforested by wildfires (decreased soil integrity)
- Increased generation of smog

### Thaw/Frost-Thaw Cycle



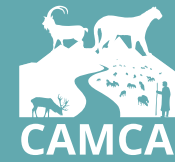
- Cracking due to weakening of the road base
- Increased demand for reconstruction
- Increases risk of stone chipping

### Extreme wind speed (storm surge, worst gales and wind gusts)



- Threat to stability of bridges
- Damage to signs, lightings etc
- Trees, windmill, noise barriers and trucks falling on the road
- Reduced vehicle control





# Questions for the National Parks:

**I**nput data we need: zonation maps, management plans, observed issues, ongoing projects dealing with adaptation to climate change, socio-economic data etc