



Project no: FP6-022661

Project acronym: BioScore

Project title: Biodiversity Impact Assessment Using Species Sensitivity Scores

Instrument: Specific Targeted Research Project (STREP)

Thematic Priority: Sixth Framework Programme Priority 8.1.b.1: Sustainable Management of Europe's natural resources

Deliverable 2: List with the selected policy sectors and pressures.

In order to define the policy context of the BioScore project, project partners selected the policy instruments and legislation that have an impact (either positive or negative) on biodiversity. The European Community policies considered cover key policy areas such as agriculture, forestry, fisheries, agriculture, energy, nature conservation and urban development. The policies considered are the following:

- Winning the Battle Against Global Climate Change, COM (2005) 35 final
- Decision No. 1600/2002/EC, laying down the Sixth Community Environment Action Programme
- A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development
- Directive 92/43/EE, on the conservation of natural habitats and of wild fauna and flora
- Directive 79/409/EEC, on the conservation of wild birds
- Communication on a European Community Biodiversity Strategy
- Directive 91/676/EEC, concerning the protection of waters against pollution caused by nitrates from agricultural sources
- Directive 2000/60/EC, on establishing a framework for Community action in the field of water policy
- ESDP-European Spatial Development Perspective: Towards Balanced and Sustainable Development of the Territory of the EU
- Thematic Strategy on the urban environment, COM (2005) 718 final
- Thematic Strategy on the sustainable use of natural resources, COM (2005) 670 final
- Thematic Strategy on air pollution, COM (2005) 446 final
- Thematic Strategy for soil protection, COM (2002) 179 final
- Thematic Strategy on the sustainable use of pesticides, COM(2002) 349 final
- Halting the loss of biodiversity by 2010 and beyond: sustaining ecosystem services for human well-being, COM (2006) 216 final
- Council regulation No. 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)
- MCPFE, 2003. Vienna Resolution 5 - Climate Change and Sustainable Forest Management in Europe
- Council decision of 20 February 2006 on Community strategic guidelines for rural development (programming period 2007 to 2013) (2006/144/EC) (Council of the European Union, 2006)
- Council Regulation (EC) No. 1257/1999 of 17 May 1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain Regulations
- Council Regulation (EC) No. 2152/2003 concerning monitoring of forests and environmental interactions in the Community (Forest Focus)
- Council Resolution 1999/C 56/01, on a forestry strategy for the European Union
- White Paper: Energy for the future - renewable sources of energy, COM(97) 599 final
- Directive 2001/77/EC, on the promotion of the electricity produced from renewable energy source in the internal electricity market

- Directive 2003/30/EC, on the promotion of the use of biofuels or other renewable fuels for transport
- Biomass Action Plan, COM(2005) 628 final
- EU Strategy for Biofuels (Commission of the European Communities, 2006)

From the text of the above policy instruments, ECNC extracted those pressures that have a potential impact on biodiversity (either positive or negative). An initial list of the pressures that will be considered in BioScore can be found below.

Note that the list of pressures needs further development as it has been explained in Section 2 of the period activity report

This deliverable is deliverable 2 according to Annex 1.

Drivers, sectors or general pressures	Pressures (extracted from the policy instruments)
Climate change	increase in concentration of greenhouse gases
	methane emissions
	emissions of carbon fossil fuels
	greenhouse gas emissions from aviation, marine shipping and motor vehicles including N ₂ O/ emissions of greenhouse gases from human activities
	desertification
	ground-level ozone and particulates/ particulate matter/ ozone pollution
	Non-CO ₂ greenhouse gases
	Sea level rise
	landward intrusion of salt water
	sulphur dioxide
	nitrogen oxides/ ammonia and nitrous oxide emissions to air/ emission of Nox from motor vehicles
	ozone layer depletion
	humidity
	global warming
	energy consumption
	Fine dust
	deposition of acidifying substances (nitrogen oxides, sulphur dioxide and ammonia)
	airborne eutrophication pollutants
	artificial radionuclides
	atmospheric deposition of pollutants
	increasing number of storms and hurricanes
	storm surges
	increase in frequency of extreme weather events (droughts, floods, storms, hail, heat waves)
	droughts
	wind
	heat waves

Drivers, sectors or general pressures	Pressures (extracted from the policy instruments)
	<p>intense precipitation regimes</p> <p>hydrological risks</p> <p>increased fire frequency and pest outbreaks</p> <p>forest fires</p> <p>Hydrological changes in the subsoil</p> <p>Change in the natural fire frequency</p>
Agriculture	<p>water contamination from the intensive cultivation of land and from industrial waste water</p> <p>intensive sheep farming</p> <p>acidification/ acid deposition/ acidification of inland waters and soils</p> <p>polluting substances from agriculture/ Pollution by substances listed in Annex III, from urban, industrial, agricultural and other installations (list of substances to check in the decision)/ diffuse pollutants (airborne acidifying and eutrophication substances, nitrates from farm sources, pesticides)</p> <p>nutrients from sewage and agriculture/ nitrates from agricultural sources/ nitrogen coming from other sources/ nitrogen compounds from livestock manure/ excess nutrient nitrogen in the form of ammonia and nitrogen oxides/ excess of nitrates/ Nitrogen deposition/ nutrient imbalances / ammonia emissions from agriculture/ land-application of all nitrogen - containing fertilisers/ nitrogen compounds from chemicals and other fertilizers/ inputs of nutrient nitrogen</p> <p>overgrazing</p> <p>insect and fungus infestation/ pest infestations</p> <p>intensive agricultural use/ intensive agricultural systems/ intensification of production systems</p> <p>use of agr-chemicals</p> <p>excessive livestock intensity</p> <p>use of heavy machinery</p> <p>soil loss and declining fertility/ soil loss</p> <p>Discharge of livestock effluents in the water</p> <p>intensive livestock production</p> <p>pollution from diffuse sources</p> <p>application of livestock manure</p> <p>eutrophication</p> <p>soil sealing</p> <p>exceedence of critical loads and levels of air quality</p> <p>land contamination</p> <p>decline in soil organic matter</p> <p>aridity</p> <p>organic matter and nutrients</p> <p>soil compaction</p> <p>salinisation</p> <p>landslides</p> <p>excessive use of fertilisers</p>

Drivers, sectors or general pressures	Pressures (extracted from the policy instruments)
	antibiotics contained in animal feed
	erosion
	Changes in soil nutrient balance
Land management	Exploitation of land and sea areas
	habitat fragmentation
	land-take/ destruction of biotopes
	deterioration/ destruction/deterioration of habitats
	land degradation/ habitat degradation
	deforestation
	afforestation
	loss of high quality arable land
	land use
	industrial forms of agricultural and silvicultural land use
	monoculture
	elimination of wetlands and hedgerows
	deterioration or destruction of breeding sites or resting places
	ill-considered land use and development
	abandonment of traditional practices
	over-exploitation
	abandonment of high-nature-value farmland/ abandonment of land
	tropical deforestation
	mining
acid mine drainage	
Habitat loss	
Chemicals	pesticides/ biocides/ fungicides/ herbicides/ insecticides/ use of persistent herbicides on railroads
	Use of industrial fluorinated gases HFCs (hydrofluorocarbons), PFCs (Perfluorocarbons) and SF6 (Sulphur hexafluoride)
	use of chemicals
	discharges, emissions and losses of Priority Hazardous Substances
	chemical substances with POPs (carcinogenic, mutagenic or toxic)
	bio-accumulative substances/ bioaccumulation and persistence of substances
	harmful active substances
	specific synthetic pollutants
	specific non-synthetic pollutants
	nitrate
	ammonium
	chemical reagents
	acidifying contaminants
	heavy metals
	organic compounds
	sodium
	magnesium
calcium	

Drivers, sectors or general pressures	Pressures (extracted from the policy instruments)
Waste	hazardous waste
	Waste
	waste-water
	waste landfills
	storage or disposal of tailings
	inadequate waste and wastewater recycling and treatment
	sewage sludge
Pollution	electromagnetic pollution sources
	deposition of pollutants
	emission of pollutants
	diffuse contamination
	pollution originating from industrial activities
	contamination risks associated with the transport of dangerous goods
	emissions of hazardous substances
	air contamination from household emissions and road traffic
	acid rain
	polluting emissions from large combustion plant and mobile resources
radioactive substances	
Disturbances	noise
Killing	capturing/killing
	hunting
	removal of nests
	unsustainable harvesting
	fishing/catches
	overharvesting
	management of fish stocks
	deliberate capture of specimens
	deliberate destruction or taking eggs from the wild
deliberate picking, collecting, cutting, uprooting or destruction of plants	
Water	increase water stress
	water supply
	water quality
	groundwater depletion
	salinization of groundwater
	water pollution
	eutrophication of rivers and lakes
	pollution of groundwater
	nitrate content of water (surface waters and groundwater)
	nitrate concentration in freshwaters
	Abstraction of freshwater/ Direct and indirect abstractions of groundwater/ Water abstraction for urban, industrial, agricultural, and other uses
	Emissions of hazardous substances to water
	Alterations to the level of bodies of groundwater
Incidents in which the water is accidentally polluted	

Drivers, sectors or general pressures	Pressures (extracted from the policy instruments)
	Changes to the hydromorphological characteristics of a given body of water Pollution of water by individual pollutants or groups of pollutants Water flow regulation water shortages contamination of water release of aluminium and other toxic metals into aquatic systems leaching out of nutrients water runoff from roads and airport runways leakage of hazardous substances
Urban development	use of land for urban development and transport urban sprawl/ sprawling suburbs congestion urban construction/ traffic and congestion/ construction concentrations of acute poverty
Tourism	unrestrained tourism recreation walking tourism skiing
Infrastructure	new transport routes fragmentation of habitats by infrastructure and urbanisation infrastructure for transport infrastructure investment industrial facilities military facilities land take by transport infrastructure disturbance of groundwater flows due to construction work dams
Forestry	Afforestation of ecologically valuable agricultural or other land e.g. high nature value farmland area Cultivation of energy crops on set-aside land Increase of land parcel size and loss of small landscape elements – including woody hedgerows Creation of evenaged single-species stands (in forests where there used to be more structural and species diversity) Change of hydrological balance in the subsoil Establishment of short-rotation tree plantations Increased use of residues and roundwood for energy production could lead to: decreased share of deadwood in forests (by taking out natural losses and by removing more of the felled wood out of the forest) increased management intensity (more thinnings and final fellings) changes in the age class structure of the forest stand Increase in forest disturbances Alien invasive species

Drivers, sectors or general pressures	
	Pressures (extracted from the policy instruments)
	Desertification on non-revegetated forest burnt areas