

Project 11 - Dams and Reservoirs

Comments:

CATEGORY	FACTOR	COMMENTS	
AIR	odour	human health	
	noise		
	vibration		
WATER	heavy metals:	molecular bonding in soils, reference 2 , human health, flora, fauna, aquatic life	
	mercury (Hg)		
	arsenic (As)		
	selenium (Se)		
	vanadium (Vn)		
	beryllium (Be)	water quality, aquatic life, human health	
	faecal coliforms		
	nutrients		
	biological oxygen demand (BOD)		
	chemical oxygen demand (COD)		
	total organic carbon (TOC)		
	dissolved oxygen		
	inundation of lands		landscape, flora, fauna, soil, socio-economic
	basin hydraulic loss		aquatic life, landscape, soil
	streamflow variation		aquatic life, landscape, erosion/ sedimentation, flora, fauna
	changes to estuaries		aquatic life, flora, fauna, landscape, erosion
	sedimentation		aquatic life, water quality
scouring	aquatic life		
turbidity	aquatic life, water quality		
change in pH			
CLIMATE	changes in surface water temperature		
	changes in humidity		
FLORA	changes in natural vegetation	reservoir, changes in water system	
	disturbance of aquatic habitat		
	disturbance of plant habitat		
	disturbance of natural vegetation		
	decrease in biodiversity		
	impact of threatened species		
	changes in species population		
	changes in aquatic food web		
	changes in mammal food web		
impact on protected areas			
FAUNA	migratory changes - fish	reservoir, changes in water system	
	migratory changes - mammals		
	disturbance of wildlife habitat		
	decrease in biodiversity		
	impact on threatened species		
	changes in species population		
changes in mammal food web			
SOIL	shoreline erosion	changes in water system	
LANDSCAPE	land use changes		
	visual aspects		
	physical composition		
	impact on sensitive lands		
HISTORICAL MONUMENTS	historical sites	changes in water levels	
	archaeological changes		
	palaeontological changes		

CATEGORY	FACTOR	COMMENTS
HUMAN HEALTH & SAFETY	changes in disease incidence	
	increase in parasitic disease	increase humidity along shoreline, changes in natural vegetation
	risk of surface water contamination	heavy metals in intermolecular bonding of soils, other pollutants
CULTURAL HERITAGE	cultural changes	
	land use changes	
	way of life	
SOCIO-ECONOMIC	changes to well being of life	
	changes to quality of life	
	quality of recreational facilities	
	quantity of recreational facilities	
	present use of natural resources	
	potential use of natural resources	increase recreation, fishing, swimming
	employment opportunity	recreation facilities, dam site
economic development - transboundary	hydro-electricity sales, recreational opportunities	

References

1. Proceedings of the EMEP Workshop on Emission Inventory Techniques, Regensburg, Germany, 2-5 July, 1991, EMEP/CCC-Report 1/91
2. Economic Commission for Europe Convention of Long-range Transboundary Air Pollution, Task Force on Heavy Metal Emissions, June 1994
3. Economic Commission for Europe, Convention on the Transboundary Effects of Industrial Accidents
4. Economic Commission for Europe, State of Knowledge Report of the UN ECE Task Force on Persistent Organic Pollutants
5. Recommendations to ECE Governments on the Prevention of Water Pollution from Hazardous Substances