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TECHNICAL REPORT

BAIKAL BASIN TRANSBOUNDARY DIAGNOSTIC ANALYSIS

STAKEHOLDERS FOR SUSTAINABLE MANAGEMENT IN THE BAIKAL BASIN

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ABBREVIATIONS AND ACRONYMS

EIMC - Environmental Impact Monitoring Center
 MNEGD - Ministry of Nature, Environment and Green Development
 RB - Republic of Buryatia
 MCUD - Ministry of construction and urban development
 MRT - Ministry of Roads and Transportation
 MIA - Ministry of Industry and Agriculture
 SSIA - State Specialized Inspection Agency
 MTA - Mongolian Tourism Association

STAKEHOLDERS FOR SUSTAINABLE MANAGEMENT IN THE BAIKAL BASIN

PROBLEM AREA		KEY SECTORS AND GROUPS CAUSING THE PROBLEM	GOVERNING / DECISION-MAKING AUTHORITIES	KEY GOVERNING BODIES FROM CIVIL SOCIETY
DEGRADATION OF AQUATIC AND TERRESTRIAL HABITATS	Modification of ecosystems	INDUSTRY Heavy manufacturing, including Baikal and Selenge pulp and paper mills; Aircraft manufacturing plant in Ulan-Ude; Meat processing plant in Ulan-ude; Locomotive repair plant in Ulan-Ude; Marble mining in Slydyanka; Gusinozerskaya coal mine; Dzhidinsky mining (although the company closed, its facilities continue to have a negative impact); Light manufacturing industry (e.g. food and beverages production, textile industry); Agro-processing industry.	Mongolia: Environmental Impact Monitoring Center (EIMC); Ministry of Nature, Environment and Green Development (MNEGD). Russia: Federal Service for Ecological, Technological and Nuclear Supervision (under Ministry of Natural Resources and Ecology); Republic of Buryatia (RB) Ministry of Economy (investment policy); RB Ministry of Industry and Commerce (coordination); RB Ministry of Natural Resources (regulation).	Mongolia: TNC; WWF; WCS; The Asia Foundation (US); GIZ; Mongolian Environmental Civil Council (MESCC); Mongolian Rivers and Lakes Association; Mongolian Tourism Association (MTA); Community Association for Sayan ecoregion; Local livestock herding community associations; Hunter associations. Russia:
		ENERGY PRODUCTION Hydroelectric power plants; Thermal power stations in Ulan-Ude, Gusinozerk, Baikalsk, and Selenginsk; Coal mine industry.	Mongolia: Environmental Impact Monitoring Center (EIMC) of the MNEGD; Ministry of Nature, Environment and Green Development (MNEGD). Russia: Federal Ministry of Energy (coordination); Federal Agency for Water Resources and Federal Service for Ecological, Technological and Nuclear Supervision (both under Ministry of Natural Resources and Ecology) (control); RB Ministry of Natural Resources (regulation); RB Ministry for the development of transport, energy and road infrastructure, including energy department (coordination).	

		<p>MINING</p> <p>Industrial mining companies (e.g. non-ferrous and precious metals, coal, limestone, uranium, oil); Informal / Illegal mining workers</p>	<p>Mongolia: Ministry of Energy; Environmental Impact Monitoring Center (EIMC) of the MNEGD.</p> <p>Russia: Federal Service for Ecological, Technological and Nuclear Supervision (under Ministry of Natural Resources and Ecology) (control); Federal Agency for Subsoil Use (under Ministry of Natural Resources and Ecology) (coordination); Ministry of Natural Resources of the RB (regulation).</p>	<p>WWF; Green Peace, units of the Russian Geographical Society; Fund for Protection of Lake Baikal; national and regional universities; Institutions of Russian Academy of Sciences (including Siberian Branch);</p>
		<p>URBANISATION</p> <p>Town planners; Property developers; Construction companies; Communication companies; Urban populations</p>	<p>Mongolia: Ministry of construction and urban development (MCUD).</p> <p>Russia: Federal Service for Ecological, Technological and Nuclear Supervision (under Ministry of Natural Resources and Ecology) (control); Ministry of Construction and Modernization of Housing Industry of the RB (coordination); Administrations of Municipalities (coordination).</p>	

PROBLEM AREA		KEY SECTORS AND GROUPS CAUSING THE PROBLEM	GOVERNING / DECISION-MAKING AUTHORITIES	KEY GOVERNING BODIES FROM CIVIL SOCIETY
DEGRADATION OF AQUATIC AND TERRESTRIAL HABITATS (CONTINUED)		TRANSPORT & INFRASTRUCTURE Town planners; Ports Authorities; Construction companies; Transport industry; Servicing industry; Water transport.	Mongolia: Ministry of construction and urban development (MCUD); Ministry of Roads and Transportation (MRT). Russia: Federal Service for Ecological, Technological and Nuclear Supervision (under Ministry of Natural Resources and Ecology) (control); RB Ministry for the development of transport, energy and road infrastructure (coordination); Administrations of Municipalities (land issues).	Russia (continued): Scientific Council of the Baikal of Siberian Branch of Russian Academy of Sciences; Public Council on Lake Baikal in Irkutsk Region Government; Buryat Regional Association for Baikal; local NGOs, including: Buryat Regional Department on Lake Baikal (BRO Baikal); All-Russian Society for Nature - Buryatia, of Irkutsk and Chita branches; Interregional Public Organization "Great Baikal Trail"; NGO "Baikal Wave"; Tahoe-Baikal Institute, Public Organizations "Fringe", "Firn",
		AGRICULTURE & LIVESTOCK KEEPING Large-scale and small-scale farmers (vegetables, potatoes, grains); Cattle industry (bovine livestock, sheep, goats, poultry)	Mongolia: Ministry of Industry and Agriculture (MIA). Russia: Federal Service for Supervision in the Sphere of Environmental Management (control); RB Ministry of Agriculture and Food (coordination); Administrations of Municipalities (land issues).	
		FISHERIES & AQUACULTURE Fish farmers (omul, sig, sturgeon)	Mongolia: n.a. Russia: RB Ministry of Agriculture and Food (regulation); Baikal Basin Management for the Protection, Reproduction of Fish Resources and Fisheries Management (control).	
		TOURISM National tourism and recreation industries; National and international tourists	Mongolia: Ministry of Culture, Sport and Tourism. Russia: RB Tourism Agency (coordination); RB Ministry of Natural Resources (regulation); Administrations of Municipalities (waste and land issues).	
	Land degradation	AGRICULTURE & LIVESTOCK KEEPING Large-scale cattle industry (mainly keepers of cows, sheep, and goats); Traditional pastoralists	Mongolia: Ministry of Industry and Agriculture (MIA); Local governments (Aimag and Soum administration); MNEGD. Russia: RB Ministry of Agriculture and Food (coordination); Administrations of Municipalities (land issues).	
	Deforestation	INDUSTRY Industrial loggers; Small-scale loggers; Timber industry; Paper industry	Mongolia: Ministry of nature, environment and Green Development. Russia: Federal Forestry Agency (coordination, control); Republican Forestry Agency (regulation).	

		<p>ILLEGAL EXPLOITATION</p> <p>Industrial loggers; Small-scale loggers; Timber industry</p>	<p>Mongolia: Ministry of nature, environment and Green Development.</p> <p>Russia: Federal Forestry Agency (coordination, control); Republican Forestry Agency (regulation).</p>	"Save Baikal".
		<p>MINING</p> <p>Industrial mining companies (e.g. non-ferrous and precious metals, coal, limestone, uranium, oil); Informal / Illegal mining workers</p>	<p>Mongolia: Ministry of nature, environment and Green Development; Ministry of Mining.</p> <p>Russia: Federal Forestry Agency (control); Federal Agency for Subsoil Use (regulation).</p>	

PROBLEM AREA		KEY SECTORS AND GROUPS CAUSING THE PROBLEM	GOVERNING / DECISION-MAKING AUTHORITIES	KEY GOVERNING BODIES FROM CIVIL SOCIETY
DEGRADATION OF HABITATS	Deforestation	<p>TRANSPORT</p> <p>Town planners; Construction companies</p>	<p>Mongolia: Ministry of Roads and Transportation.</p> <p>Russia: Republican Forestry Agency (regulation); RB Ministry for the development of transport, energy and road infrastructure (coordination).</p>	See above
		<p>AGRICULTURE</p> <p>Large-scale and small-scale farmers</p>	<p>Mongolia: Ministry of Industry and Agriculture (MIA); Local governments (Aimag and Soum administration); MNEGD.</p> <p>Russia: Republican Forestry Agency (control); RB Ministry of Agriculture and Food (coordination); Administrations of Municipalities (coordination).</p>	
UNSUSTAINABLE FISHERIES AND WILDLIFE	Over-exploitation of aquatic biota	<p>FISHERIES & AQUACULTURE</p> <p>Artisanal/subsistence fishermen; Industrial fishing fleets (largely focusing on endemic Omul, but also sig, roach, yelets, perch); Recreational fishermen; Aquaculture farms</p>	<p>Mongolia: National fisheries authorities; Ministry of Industry and Agriculture (MIA).</p> <p>Russia: National fisheries authorities (regulation, control); RB Ministry of Agriculture and Food (regulation); Baikal Basin Management for the Protection, Reproduction of Fish Resources and Fisheries Management (regulation, control).</p>	

MODIFICATION OF HYDROLOGICAL FLOWS	Over-exploitation of wildlife	ILLEGAL EXPLOITATION Artisanal/subsistence fishermen; Industrial fishing fleets; Recreational fishermen; Traditional/indigenous hunters; Recreational hunters	Mongolia: Local governments; Aimag and Soum authorities; Ministry of NEGD. Russia: Federal Fisheries Agency (regulation, control) ; Baikal Basin Management for the Protection, Reproduction of Fish Resources and Fisheries Management (regulation, control).
		TOURISM National tourists; Urban and rural populations	Mongolia: Ministry of Culture, Sport and Tourism. Russia: Burpriroda (under the Ministry of Natural Resources of RB) (regulation, control).
		ILLEGAL EXPLOITATION Urban and rural populations	Mongolia: State Specialized Inspection Agency (SSIA). Russia: Burpriroda (under the Ministry of Natural Resources of RB) (regulation, control).
	Water level increase	ENERGY PRODUCTION Hydroelectric power plant companies (e.g. Irkutskenergo in Irkutsk)	Mongolia: Ministry of Mining. Russia: Federal Agency for Water Resources (under Ministry of Natural Resources and Ecology) (regulation, control); Federal Ministry of Energy (coordination).
		MINING Industrial mining companies	Mongolia: Ministry of Mining. Russia: Federal Agency for Water Resources (under Ministry of Natural Resources and Ecology) (regulation, control); Federal Agency for Subsoil Use (under Ministry of Natural Resources and Ecology) (coordination).

PROBLEM AREA		KEY SECTORS AND GROUPS CAUSING THE PROBLEM	GOVERNING / DECISION-MAKING AUTHORITIES	KEY GOVERNING BODIES FROM CIVIL SOCIETY
MODIFICATION OF HYDROLOGICAL FLOWS	Water level decrease in the catchment basin (including groundwater supplies)	AGRICULTURE Large-scale farmers (vegetables, potatoes, grains)	Mongolia: Ministry of Industry and Agriculture (MIA); Local governments (Aimags and Soums administration); MNEGD. Russia: Federal Agency for Water Resources (under Ministry of Natural Resources and Ecology) (regulation, control).	See above
		MINING Industrial mining companies	Mongolia: Ministry of Mining. Russia: Federal Agency for Subsoil Use (coordination); Federal Agency for Water Resources (both under Ministry of Natural Resources and Ecology) (regulation, control).	
		URBANISATION Town planners; Sewage plants; Water purification plants; Urban populations	Mongolia: Ministry of construction and urban development (MCUD) Ministry of NEGD. Russia: Federal Service for Veterinary and Phytosanitary Supervision (control).	
		AGRICULTURE & LIVESTOCK KEEPING Large-scale farmers (vegetables, potatoes, grains)	Mongolia: Ministry of Industry and Agriculture. Russia: Federal Agency for Water Resources (under Ministry of Natural Resources and Ecology) (regulation, control).	
BIOLOGICAL INVASIONS	Alien species invading aquatic habitats	TRANSPORT Transport industry (mostly large barges that use ballast water)	Mongolia: n.a. Russia: Federal Service for Veterinary and Phytosanitary Supervision (control).	
		FISHERIES & AQUACULTURE Aquaculture farms	Mongolia: Ministry of NEGD Ministry of Industry and Agriculture. Russia: Federal Service for Veterinary and Phytosanitary Supervision (control).	
		TOURISM & RECREATION National and international tourists	Mongolia: MNEGD. Russia: Federal Service for Veterinary and Phytosanitary Supervision (control).	
	Alien spp invading terrestrial habitats	TRANSPORT Transport industry; Timber industry	Mongolia: n.a. Russia: Federal Service for Veterinary and Phytosanitary Supervision (control).	
		AGRICULTURE & LIVESTOCK KEEPING Large-scale and small-scale farmers	Mongolia: MNEGD Ministry of Industry and Agriculture. Russia: Federal Service for Veterinary and Phytosanitary Supervision (control).	

		TOURISM & RECREATION National and international tourists	Mongolia: MNEGD. Russia: Federal Service for Veterinary and Phytosanitary Supervision (control).	
DECLINE OF WATER QUALITY	Chemical contamination	INDUSTRY Heavy manufacturing (e.g. ferrous and non-ferrous metallurgical industry, pulp and paper industry in Baikal and Selenginsk); Light manufacturing industry (e.g. food and beverages production, textile industry); Agro-processing industry; Petrol industry; Air pollution from power stations (e.g. Guzinoozersk, Severobaikalsk)	Mongolia: Department of Water Affairs; MNEGD, State Specialized Inspection Agency (SSIA). Russia: Federal Service for Ecological, Technological and Nuclear Supervision (control); Federal Service for Supervision in the Sphere of Environmental Management (control).	

PROBLEM AREA	KEY SECTORS AND GROUPS CAUSING THE PROBLEM	GOVERNING / DECISION-MAKING AUTHORITIES	KEY GOVERNING BODIES FROM CIVIL SOCIETY
DECLINE OF WATER QUALITY	Chemical contamination (continued)	MINING Industrial mining companies (e.g. non-ferrous and precious metals, coal, limestone, uranium, oil); Informal / Illegal mining workers	See above
		TRANSPORT Transport industry; Urban populations using transport	
		AGRICULTURE Large-scale and small-scale farmers	
		URBANISATION Urban and rural populations; Solid waste operators	
		Mongolia: MNEDG; Ministry of Mining; SSIA. Russia: Federal Service for Ecological, Technological and Nuclear Supervision (control); Federal Service for Supervision in the Sphere of Environmental Management (control).	
		Mongolia: MNEDG, Ministry of Mining, SSIA. Russia: Federal Service for Ecological, Technological and Nuclear Supervision (control); Federal Service for Supervision in the Sphere of Environmental Management (control).	
		Mongolia: MNEDG, MIA. Russia: Federal Service for Veterinary and Phytosanitary Supervision (control).	
		Mongolia: MNEGD; MCUD; Local governments. Russia: Federal Service for Ecological, Technological and Nuclear Supervision (control); Federal Service for Supervision in the Sphere of Environmental Management (control).	

Microbial contamination	DEFENCE	National armies	Mongolia: n.a. Russia: Ministry of Defence (coordination); Federal Service for Ecological, Technological and Nuclear Supervision (control); Federal Service for Supervision in the Sphere of Environmental Management (control).
	INDUSTRY	Heavy manufacturing (e.g. ferrous and non-ferrous metallurgical industry, pulp and paper industry); Light manufacturing industry (e.g. food and beverages production, textile industry); Solid waste operators; Livestock industry; Agro-processing industry; Petrol industry	Mongolia: MNEGD, MIA. Russia: Federal Service for Ecological, Technological and Nuclear Supervision (control); Federal service for veterinary and phytosanitary supervision (control).
	AGRICULTURE	Large-scale and small-scale farmers	Mongolia: MIA. Russia: Federal Service for Veterinary and Phytosanitary Supervision (control).
	URBANISATION	Urban and rural populations; Municipal wastewater treatment facility operators	Mongolia: MNEGD; MCUD; SSIA. Russia: Federal Service for Ecological, Technological and Nuclear Supervision (control); Federal Service for Veterinary and Phytosanitary Supervision (control); Sanitary-epidemiological Service (control); Administrations of Municipalities (coordination).
	HEALTH	Hospitals and clinics	Mongolia: MNEGD; Ministry of Health. Russia: Sanitary-epidemiological Service (control).

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DECLINE OF WATER QUALITY (continued)	Eutrophication	AGRICULTURE & LIVESTOCK KEEPING	Mongolia: SSIA; MNEGD. Russia: Federal Service for Ecological, Technological and Nuclear Supervision (control); Administrations of Municipalities (coordination).	See above
		URBANISATION	Mongolia: SSIA; MCUD. Russia: Federal Service for Ecological, Technological and Nuclear Supervision (control); Administrations of Municipalities (coordination).	

	Thermal	INDUSTRY Thermo-electric power facilities (e.g. Guzinoozersk and Severobaikalsk in Russia)	Mongolia: n.a. Russia: Federal Service for Ecological, Technological and Nuclear Supervision (control).
	sedimentation	INDUSTRY Industrial loggers; Small-scale loggers; Timber industry; Paper industry	Mongolia: MNEGD;SSIA. Russia: Republican Forestry Agency (regulation, control).
		AGRICULTURE & LIVESTOCK KEEPING Large-scale and small-scale farmers; Cattle industry	Mongolia: MIA; MNEGD. Russia: RB Ministry of Agriculture and Food (coordination); Administrations of Municipalities (land issues).