



# Mauritania

**Mauritania has a Master Plan for the management of its coastline which has been in the implementation phase since 2006. This master plan is currently being updated.**

## MR1 NOUADHIBOU PENINSULA AND THE BAIE DU LÉVRIER

This whole area is characterized by the creation of the Nouadhibou free zone<sup>1</sup>. A deep-water port is now under study. According to available information, the free zone would not be limited to the Nouadhibou peninsula, but would also cover the East side of the Baie du Lévrier, which is considered as an extremely sensitive ecosystem.

The Nouadhibou ore port is currently being extended to enable it to host vessels weighing up to 250 000 tonnes. The port is located in the Baie du Lévrier and it has several jetties and docks. It has a mineral terminal to export the iron ore from the Northern part of the country via the Point Central port (operated by the Société Nationale Industrielle et Minière, SNIM). Of notice is that this port is located near the Cap Blanc reserve.

The construction of a new dock of more than 600 m has just been completed. Operations were conducted between 2011 and 2012 to remove the wrecks in the port's bay and access channel. The port has been certified ISO 9001.

The extension of Nouadhibou's fishing port and the building of an agro-industrial processing plant are also significant developments in this sensitive area.

There are also some developments in mining operations in this area, especially in the Tasiast gold mine, the extension of which was officially launched in November 2015. Mauritania exports huge amounts of iron ore via the Nouadhibou ore terminal. Production is mainly concentrated in the northern area in State-run mines (SNIM), and several new iron mines are in the project phase. Other ongoing operations are focused on copper and gold. Water necessary for these mining activities would be collected from the Baie du Lévrier.

A new road has also been built between the Nouakchott-Nouadhibou route and the coast towards the village of Mamghar. This road mainly passes through the Banc d'Arguin national park. Its impacts have been highlighted in an assessment report on the UNESCO's world heritage to which belongs the Banc d'Arguin national park. The town of Chami, located on the fringes of this park, is experiencing a rapid development, mainly with the new location of the protected area's facilities.

We are witnessing a north-ward extension of the Nouadhibou conurbation and the Casado Centre.

<sup>1</sup> Law 2013-001 of 2 January 2013 / <http://www.ndbfreezone.mr/>



## NOUADHIBOU Développement Urbain

Réserve d'urbanisation à long terme



		ENVIRONMENT	
MR1-a	1 - CAP BLANC		
<b>BASELINE</b>			
Diagnosics	Rocky coastline, Cap Blanc satellite reserve located near a small population of monk seals ( <i>Monachus monachus</i> ). There is practically no human occupation.		
Dynamics	No remarks, there was a sand bank migration that led to the grounding of a ship. Currently the ship is a wreck and responsible for the observed migration. Reduction of the sandbank's height.		
Stakes	Pollution risks from the port traffic of Nouadhibou and the neighbouring ore port.		
Actions	Strict protection of the site. Vigilance as regards pollution risks.		
Priority level	Low	Monitoring - Observation	No recommendation
<b>DEVELOPMENTS SINCE 2010</b>			
Evolution of stakes	Ongoing developments around the town of Nouadhibou (free zone), and on the extension site of the SNIM's ore port can have significant impacts on the Cap Blanc site. Impacts related to the evolution of the Cansado port that need to be monitored.		
Priority level	Medium	Monitoring - Observation	Watch-keeping for the purpose of anticipation
Protected Area	YES	Hazards	Not reported
<b>Cap Blanc Satellite Reserve</b> <a href="#">WDPA ID Satellite Reserve: 5174</a>			MR1-a
An annex to the Banc d'Arguin national park (see. MR2-a Banc d'Arguin national park) was established by decree n°86-060 of April 2 on the creation of the Cap-Blanc Satellite Reserve.			

		PERI-URBAN AND PORT	
MR1-b	2 - CANSADO POINT AND BAY		
<b>BASELINE</b>			
Diagnosics	Rocky plateau (sandstone). Town and mine port of Cansado. Oil terminal Landscape quality bay site, Nouadhibou urban beach.		
Dynamics	No remarks		
Stakes	Pollution risks from industrial activities. Grounding and dismantling of wrecks in the Cansado Bay.		
Actions	Vigilance as regards risks of pollution. Impact assessments need to be conducted for the establishment of a joint development zone if there are plans to build new industrial installations.		
Priority level	Low	Monitoring-observation	Watch-keeping for the purpose of anticipation
<b>DEVELOPMENTS SINCE 2010</b>			
Evolution of stakes	Extension of the Cansado ore port		
Characterization of port installations	Ongoing developments in this area are mainly characterized by the extension of the ore port (the construction of a new dock with more than 600 m has just been completed). Operations were conducted between 2011 and 2012 to remove the wrecks in the port's bay and access channel. The port has been certified ISO 9001. A <a href="#">free zone</a> directly connected to the port is being established. Ripraps are being laid for the construction of a jetty between the ore port and Cansado		
Priority level	Medium	Monitoring - Observation	Regular
Protected Area	NO	Hazards	Not reported

MR1-c	3- URBAN COASTLINE AND NOUADHIBOU HARBOUR		
<b>BASELINE</b>			
<b>Diagnostics</b>	Major port and associated industrial installations. Limited residential housing. Fish processing site connected to the fishing port of the Baie du Repos		
<b>Dynamics</b>	No remarks		
<b>Stakes</b>	Treatment of the sewage from all port and industrial activities		
<b>Actions</b>	Seek a global sanitation solution that deals with all sewage. Development and signposting of access channels to the port areas.		
<b>Priority level</b>	Medium	<b>Monitoring-observation</b>	Regular
<b>DEVELOPMENTS SINCE 2010</b>			
<b>Evolution of stakes</b>	Extension of the Cansado ore port Extension of the fishing port, agro-industrial installations Earthmoving works to build a wharf		
<b>Characterization of port installations</b>	Ongoing developments in this area are mainly characterized by the extension of the ore port (the construction of a new dock with more than 600 m has just been completed). Operations were conducted between 2011 and 2012 to remove the wrecks in the port's bay and access channel. The port has been certified ISO 9001. A <a href="#">free area</a> directly connected to the port is being established. Ripraps are being laid for the construction of a jetty between the ore port and Cansado		
<b>Priority level</b>	Medium	<b>Monitoring - Observation</b>	Regular
<b>Protected Area</b>	NO	<b>Hazards</b>	Not reported

2010



2013



Evolution of the port of Nouadhibou and related infrastructures between 2010 (above) and 2013 (below)  
 -Source: Google Earth)

Key developments include:

(i) building of two new wharves/breakwater in the southern part, (ii) warehouse facilities east of the fishing port.

		ENVIRONMENT	
<b>MR1-d-e</b>	<b>4-NORTH NOUADHIBOU, BAIE DE L'ETOILE AND BAIE DU LÉVRIER</b>		
<b>BASELINE</b>			
<b>Diagnostics</b>	<p>Baie de l'Etoile: wetlands system claiming a conservation status. Outstanding natural ecosystem, tourist and housing facilities on the southern bank.</p> <p>South of the Baie de l'Etoile/sandy spit separated from the Nouadhibou conurbation by a salty wetland depression (hosting cord-grasses), sparse residential housings)</p> <p>Baie du Lévrier: Diversified, sandy, rocky shore bordering a shallow marine environment with high ecological and fish-related value. The East shore is not occupied, beginning of a land appropriation of the Western bank outside Nouadhibou. Important archaeological sites.</p>		
<b>Dynamics</b>	No remarks		
<b>Stakes</b>	<p>Privatization of the sea front near the Baie de l'Etoile (this entails risks in the event of a marine surge) Pollutions and risks of wetlands distortion in the Baie de l'Etoile.</p> <p>Baie du Lévrier: risks-related to the build-up of pollutants from port and urban activities in the Baie du Lévrier.</p>		
<b>Actions</b>	<p>Strict protection of all sites, both biological and landscape heritage. Control of urban development near Nouadhibou. Development of a guideline on coastal development, also known as sector scheme. The classification of the Baie de l'Etoile is yet to be materialized.</p> <p>Strict protection of all sites, both biological and landscape heritage. Control of the urban development near Nouadhibou.</p>		
<b>Priority level</b>	Medium	<b>Monitoring-observation</b>	<b>Intense and regular</b>
<b>Remarks</b>	Recommended engagement of IUCN teams and local NGOs in the observation process		
<b>Developments since 2010</b>			
<b>Evolution of stakes</b>	<p>Ongoing developments in this sector are mainly characterized by the expansion of mining and the construction of related infrastructure, especially a seawater intake facility in the Baie du Lévrier.</p> <p>The eastern shore sector of the Baie du Lévrier (MR1-e) was linked to the whole Banc d'Arguin, since it does not present any stakes. The evolution of mine stakes on this shore and the fact that both the East and the West banks are directly affected by pressures and pollution from Nouadhibou's facilities, justify the association of MR1-e and MR1-e sector, though these are differentiated by distinct levels of stakes concentration that are obviously more important on the West shore.</p> <p>It is necessary to monitor the impacts related to the extension of the fishing port and agro-industrial facilities, the organic and chemical pollution as well as the extension of the Cansado mine port</p>		
<b>Priority level</b>	Medium	<b>Monitoring - Observation</b>	<b>Intense and regular</b>
<b>Protected Area</b>	YES	<b>Hazards</b>	Not reported

<b>Protected area of the baie de l'étoile (in the process of registration)</b>	MR1-d
No ID WDPA	
<p>The drive for the conservation of the baie de l'étoile was initiated in 2010 with the establishment of the Commission d'Orientation et de Suivi de la Directive d'Aménagement du Littoral de la Baie de l'étoile (Joint Order n°2346/MDEDD/MPEM on the establishment of the Commission d'Orientation et de Suivi de la Directive d'Aménagement du Littoral de la Baie de l'étoile de Nouadhibou and on the operating rules of the latter).</p> <p>A «plan for the development and management of a multi-purpose marine protected area in the baie de l'étoile» was prepared and proposed in December 2013.</p> <p>A «scientific report on the study of the baie de l'étoile» was jointly prepared by IMROP and IUCN in January 2014.</p>	

## MR2 BANC D'ARGUIN - NORTH NOUAKCHOTT

The MR2 zone is mainly centred on the Banc d'Arguin national park.

Developments in this area mainly include:

- The development of the town of Chami on the Eastern limit of the natural park, that hosts the park's management infrastructure.

- The construction of a road linking Mamghar to the Nouakchott - Nouadhibou route. The major part of this road is located within the national park.

- The construction of the Tannit fishing port, capable of accommodating 300 pirogues. The project has a total cost of 80 million Euro.

		ENVIRONMENT	
MR2-a	6- BANC D'ARGUIN (BANP)		
<b>BASELINE</b>			
<b>Diagnostics</b>	It is a land and marine area with a high ecological and fishing-related value that motivated its classification on the list of World heritage national parks. It is currently subjected to a tourist development in line with conservation objectives. Imraguen populations of the BANP, many spontaneous settlement sites located at the park's edges on the road connecting Nouakchott to Nouadhibou.		
<b>Dynamics</b>	Complex, wide fossil delta, extensively documented by the PACOBA project		
<b>Stakes</b>	Conservation of the ecological complex of Banc d'Arguin in a context of economic strains and growing trade incentives, especially with regards to fisheries from the park. Control of access conditions, especially those related to the prohibition of trawling in shallow waters. Tourism to be developed. Endemic subspecies nesting sites (spatulas), flooding risks for some villages (Iwik and R'gueiba)		
<b>Actions</b>	Implementation of the BANP development and management plan.		
<b>Priority level</b>	Low	<b>Monitoring-observation</b>	Regular
<b>Remarks</b>	Recommended engagement of the Banc d'Arguin National Park's teams in the observation-monitoring process. Banc d'Arguin Observatory established in the framework of the PACOBA project. Establishment of a watchdog on the sea level.		
<b>Developments since 2010</b>			
<b>Evolution of stakes</b>	Expansion of mining and building of related infrastructure, especially with the project of a seawater intake facility near the park. Construction of a wind turbine plant. The remote impacts of the port of Nouadhibou should be taken into account. The construction of a road linking Mamghar to the Nouakchott - Nouadhibou route. The expansion of the town of Chami can be an attractive centre right next to the Park.		
<b>Priority level</b>	<b>Medium</b>	<b>Monitoring - Observation</b>	Regular
<b>Protected Area</b>	YES	<b>Hazards</b>	Not reported

<b>Banc d'Arguin National Park (IUCN Category II)</b> <a href="#">National park WDPa ID 797</a> <b>Banc d'Arguin Ramsar Site</b> <a href="#">WII / Ramsar site: WII ID: 1MR001 – 250 / WDPa ID : 17726</a> <b>Banc d'Arguin World Heritage Site</b> <a href="#">UNESCO WH ID : 506 / UNESCO WH WDPa ID : 20388</a> <b>Cap Blanc Satellite Reserve</b> <a href="#">WDPa ID Satellite Reserve: 5174</a>	MR1-e MR2-a MR2-b
<p>The Banc d'Arguin National Park was created on 24 June 1976 by decree N°76/147/P.R on the creation of the Banc d'Arguin national park.</p> <p>It has been identified as a wetland of international importance / Ramsar site on 22 October. 1982 (1 200 000 ha).</p> <p>An annex to the Banc d'Arguin national park was created by decree n°86-060 of April 2, 1986 on the creation of the Cap-Blanc Satellite Reserve.</p> <p>Visits were regulated by order n°R-132 of 11 August 1986 on the regulation of visits to the Banc d'Arguin national park and the Cap-Blanc satellite reserve.</p> <p>The Banc d'Arguin National Park was put on UNESCO's world heritage list in 1989 based on natural criteria (ix) and (x).</p> <p>Law n°2000/024 of 19 January 2000 on the Banc d'Arguin national park specified the boundaries, development, conservation, protection and management modalities, as well as the criminal policy framework and surveillance.</p> <p>The park's organization and functioning were specified by decree N°2006-058 of 14 June 2006 on the rules governing the organization and functioning of the Banc d'Arguin national park.</p> <p>The rules implementing law n°2000/024 of 19 January 2000 was set by decree n°2006-068 of 03 July 2006.</p> <p>The 2010-2014 development and management plan of the Banc d'Arguin National Park was completed in December 2009 and approved by the park's governing council on 28 January 2010.</p>	

		ENVIRONMENT	
<b>MR2-b</b>	<b>7 - MAMGHAR – MAJHRAT</b>		
<b>BASELINE</b>			
<b>Diagnostics</b>	Sandy shore that can be crossed at low tides, backed by important dune formations. A few settlement points		
<b>Dynamics</b>	Shifting, coast subject to the shore drift, a few points vulnerable in the event of marine surges. Probably important wind sediment inputs circulated through the regional coastal drift.		
<b>Stakes</b>	Lack of drinking water, reducing the prospects for development. Protection of stabilizing plants in a context of nomadic cattle breeding.		
<b>Priority level</b>	Low	<b>Monitoring-observation</b>	No recommendation
<b>Developments since 2010</b>			
<b>Evolution of stakes</b>	Ongoing developments in this sector are mainly characterized by the construction of a road connecting Mamghar to the Nouadhibou-Nouakchott route and partly crossing the Banc d'Arguin National Park.		
<b>Priority level</b>	<b>Medium</b>	<b>Monitoring - Observation</b>	<b>Regular</b>
<b>Protected Area</b>	YES	<b>Hazards</b>	Not reported



		ANTICIPATION	
<b>MR2-c</b>	<b>8 - TANIT – SEBKHRA N'DRAMCHA</b>		
<b>BASELINE</b>			
<b>Diagnostics</b>	Sandy shore that can be crossed at low tides, backed by unstable low dune belts Hinterland characterized by the sebkhra N'Dramcha. Project to develop the Tanit fishing port. Very small residing population concentrated in a few settlement points.		
<b>Dynamics</b>	Shifting, littoral subject to the coastal drift, a few points vulnerable in the event of marine surge. Very low wind sediment inputs at the level of the great sebkhra.		
<b>Stakes</b>	Lack of drinking water, reducing the prospects for development, searching for viable alternatives in the development of the N'Dramacha sebkhra. Protection of stabilizing plants in a context of nomadic cattle breeding.		
<b>Actions</b>	Anticipation of peripheral development, in case the Tanit port project is launched.		
<b>Priority level</b>	Low	<b>Monitoring-observation</b>	Watch-keeping for the purpose of anticipation
<b>Developments since 2010</b>			
<b>Evolution of stakes</b>	Ongoing developments in this sector are mainly characterized by the creation of the port of Tanit, the construction of which started in 2014. This port should accommodate about 300 pirogues.		
<b>Priority level</b>	<b>Medium</b>	<b>Monitoring - Observation</b>	<b>Regular</b>
<b>Protected Area</b>	NO	<b>Hazards</b>	Not reported

		ANTICIPATION	
<b>MR2-d</b>	<b>9 - DJEIDRAT</b>		
<b>BASELINE</b>			
<b>Diagnostics</b>	Sandy shore that can be crossed at low tides, backed by unstable dune belts with variable heights. In the southern adjacent to Nouakchott, there is a surf terrace that can easily be developed. This sector also hosts the new Djreida airport project.		
<b>Dynamics</b>	Shifting, coast subject of the shore drift, a few points vulnerable in the event of marine surge.		
<b>Stakes</b>	Protection of stabilizing plants in a context of nomadic cattle breeding.		
<b>Actions</b>	Anticipation of a potential housing development (reserve of land) in the northern part of Nouakchott induced by the Nouakchott-Nouadhibou route and the Djreida airport project.		
<b>Priority level</b>	low	<b>Monitoring-observation</b>	Watch-keeping for the purpose of anticipation
<b>Developments since 2010</b>			
<b>Evolution of stakes</b>	Ongoing developments in this area are mainly characterized by the construction of the new airport in the area proposed by SDLAO Extractions of conchitic sands		
<b>Coastal protection</b>	Stabilization of dunes in several points		
<b>Priority level</b>	<b>Medium</b>	<b>Monitoring - Observation</b>	<b>Regular</b>
<b>Protected Area</b>	NO	<b>Hazards</b>	Movement of dunes requiring stabilizing works

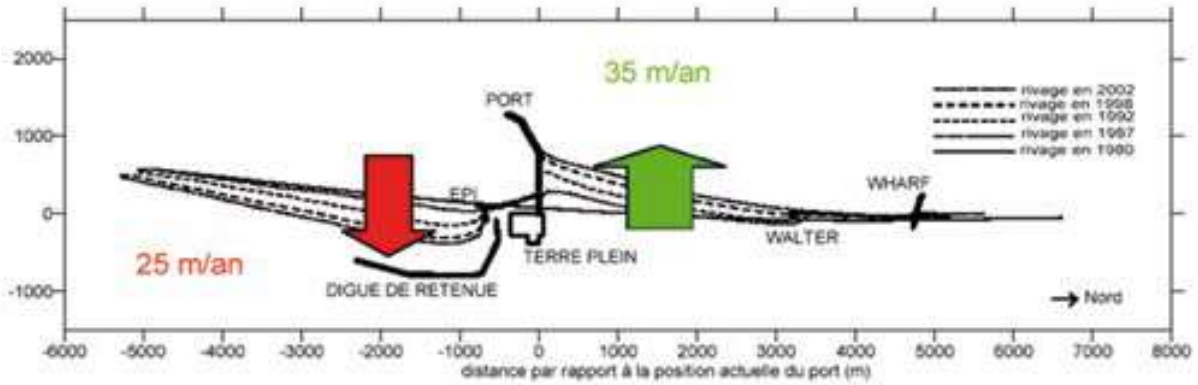
## MR3 NOUAKCHOTT

Note the Aftout es-saheli South-North depression, which is parallel to and near the shoreline and is located along Mauritania's coast, from the Senegal River delta to Nouakchott. This long "gutter" considerably increases extended flood risks in the event of major marine intrusions.

The construction of the Port of Nouakchott that has a jetty perpendicular to the longshore drift flow, triggered serious erosion issues south of the port which are currently being handled.

		URBAN & TOURISM	
MR3-a	10 - NORTH NOUAKCHOTT		
<b>BASELINE</b>			
<b>Diagnostics</b>	Coastal part of Nouakchott's urban area. Very important fishing centre in the northern part, wharf. Despite the considerable accretion noted north of the Nouakchott port embankment, the offshore bar is generally low and even very low at the local level. Conquest of the maritime public domain in the North of the fishing port, walls separating different «concessions» on the beach.		
<b>Dynamics</b>	In the North of the sector (in the area of «hut»), we noticed a sharp reduction of the shoreline. Despite the presence of the port and its jetty, located further in the south, we noticed an upper beach berm and an erosion of hard materials in the duneline. Between the fishing port and the wharf, there is a narrow offshore bar with local saddle that favours marine intrusion in the event of surges.		
<b>Stakes</b>	Sand extractions in several points. Constructions (mainly hotels) on the dune. High attendance leading to the subsidence of the dune ridge. Development of the urban coast and protection of the dune ridge. Prohibition of sand extractions. A project to establish a semi-urban neighbourhood on 5 km of coastline that is likely to affect the dune ridge as well as the scarce natural vegetation.		
<b>Actions</b>	Development of accesses to the shore and protection of the dune ridge. Plan to connect sensitive spaces. Prohibition of sand extractions. Prohibition of constructions. Protection of stabilizing plants.		
<b>Priority level</b>	High	<b>Monitoring-observation</b>	Regular
<b>Developments since 2010</b>			
<b>Evolution of stakes</b>	Nouakchott further urban expansion northward. Changes in the jetty/main wave quelling of the port by a perpendicular work in the second semester of 2015.		
<b>Coastal protection</b>	Stabilization of dunes in several points		
<b>Priority level</b>	High	<b>Monitoring - Observation</b>	<b>Intense and regular</b>
<b>Protected Area</b>	NO	<b>Hazards</b>	Heavy erosion

				PERI-URBAN AND PORT
MR3-b	11 - SOUTH NOUAKCHOTT – PK28			
<b>BASELINE</b>				
<b>Diagnostics</b>	Coastal part of Nouakchott’s urban area highly subject to erosion. A few protection schemes. Very thin littoral rim, completely invisible in some points, wide back swamp near the shore that can be connected to the sea in the event of marine intrusion through lower points.			
<b>Dynamics</b>	High erosion, private areas providing sediment inputs via the port’s jetty. Major marine intrusions already noticed. Scoured and unearthed protective breakwater.			
<b>Stakes</b>	Very high risks of marine intrusion with submersion in precarious neighbourhoods in sebkhra and potential flooding of the depression near the Eftout es Sahéli. Deterioration of facilities located south of the port. Risks of increased groundwater table level that can permanently rise to the surface.			
<b>Actions</b>	Consolidation and strengthening of anti-erosion facilities. Relocation of the populations living in most vulnerable areas. Establishment of an early-warning system and a flood risk prevention plan. Total protection of dune ridges as well as stabilizing plants. Prohibition of any construction. A by-pass solution should be envisioned in the port.			
<b>Priority level</b>	<b>Very high</b>	<b>Monitoring</b>	<b>Intense and regular</b>	
<b>Developments since 2010</b>				
<b>Evolution of stakes</b>	Southward continuation of Nouakchott’s urban expansion. Extension works at the port of Nouakchott. At the southern end of the area: finalization of the tourist complex in 2014. Construction of half a dozen fish-processing plants on the beach in the southern part of the area from 2011 to 2015.			
<b>Characterization of port infrastructures</b>	The port of Nouakchott, also known as China-Mauritania friendship port is located south of the town of Nouakchott, on the Atlantic Coast. It comprises a jetty/wave quelling located in the northern part and that gave rise to phenomena of accretion north of the port and erosion in the southern part (a wave quelling/embankment was built in the area in 2011 to mitigate such a phenomenon: T-shaped riprap). The port’s extension works started in September 2009 and were carried out by China Road and Bridge Corporation - SNCTPC (construction of an oil wharf, a protective breakwater and a 5km protective embankment), that increased the port’s capacity by 3 to 3 million tonnes per year, were completed in August 2014 (with a total cost of 220 million dollars of Chinese loans).			
<b>Coastal protection</b>	Operations have been carried out to clog the gaps of and strengthen the dune ridge, drain and treat the rainwater in lower sebkas. Construction of a wave quelling/embankment (T-shaped riprap) in 2011 to mitigate the erosion phenomenon caused by the port facilities in the southern part.			
<b>Priority level</b>	<b>Very high</b>	<b>Monitoring - Observation</b>		<b>Intense and regular</b>
<b>Protected Area</b>	NO	<b>Hazards</b>		High erosion and flooding episodes



*Historic evolution of the shoreline in the port of Nouakchott (according to Ould Moustapha)*



*Consolidation works on the dune ridge in Nouakchott.*



*Evolution of the port of Nouadhibou and related infrastructure between 2011 (above) and 2015 (below)  
-Source: Google Earth)*

*Key developments include: (i) Construction of a new wharf (2013), (ii) 5 km westward extension of the wave quelling/protective embankment and (iii) construction of a wave quelling/ripraps south of the port so as to mitigate the erosion.*

## MR4 SOUTH MAURITANIA AND SENEGAL RIVER DELTA

Note the Aftout es-saheli South-North depression, which is parallel to and near the shoreline and which is located along Mauritania's coast, from the Senegal River delta to Nouakchott. This long "gutter" considerably increases extended flood risks in the event of major marine intrusion.

This whole area is characterized by a certain development of tourist activities with the creation of some accommodation structures. At the same time, some sand mining

activities have also been noticed. In the southern part, oil exploitation is ongoing.

It should also be noted that an important gas deposit has recently been discovered on the Senegalese border, off Saint-Louis.

		ENVIRONMENT & ANTICIPATION	
<b>MR4-a</b>	<b>12 - PK28 – SOUTH TIGUENT<sup>1</sup></b>		
<b>BASELINE</b>			
<b>Diagnostics</b>	Sandy coast backed by a narrow offshore bar (sometimes less than 100m) limited in the east by the Aftout as Saheli depression, occasionally submersible. Low human occupation mainly on the four served points (fishing centres).		
<b>Dynamics</b>	High natural instability		
<b>Stakes</b>	Protection of the dunes' stabilizing plants in a context of populations settling around the few existing villages, with a cattle-breeding activity less subject to water-availability constraints. Persistent local risks of marine intrusion in the Aftout marine depression.		
<b>Actions</b>	Consolidation of the facilities surrounding the villages, total protection of the plants of the adjacent dune. Limitation of constructions and urban scattering in inter-village spaces. Control on material extractions.		
<b>Priority level</b>	Medium	<b>Monitoring-observation</b>	Regular
<b>Developments since 2010</b>			
<b>Evolution of stakes</b>	The construction of a hotel and a factory should help increase the attractiveness of this sector for further developments.		
<b>Mining activities</b>	Sand mining and oil and gas exploration		
<b>Priority level</b>	Medium	<b>Monitoring - Observation</b>	Regular
<b>Protected Area</b>	NO	<b>Hazards</b>	Not reported

<sup>1</sup> The precise delimitation of this sector will have to be confirmed during the next regional technical events

		ENVIRONMENT & ANTICIPATION	
<b>MR4-b</b>	<b>13 - SOUTH TIGUENT – CHOTT BOUL</b>		
<b>BASELINE</b>			
<b>Diagnostics</b>	Slightly curved straight coastline. Wider sand formations (1 to 2km) between the shore and the Aftout depression. Area farther away from the asphalted-road connecting the area to Nouakchott, so it is relatively inaccessible, except via the beach. Chott Boul protected area, a former outlet of a branch of the Senegal's river. This small marine protected area has an ornithological interest, as do the Tumbos I and II marshes (or North and South), located away from the duneline and hosting a nesting population of dwarf flamingos. The West shore of these marshes is bordered by acacia plantations located at the duneline's base, with important regeneration capacities in an isolated environment where the grazing pressure is still Medium.		
<b>Dynamics</b>	This sector is more stable than the previous ones; however, it is subject to the long shore drift and to active winds.		
<b>Stakes</b>	Oil prospecting? Development of a discovery tourism favoured by the close biosphere reserve of the Senegal river? An increased human occupation is unlikely.		
<b>Actions</b>	No remarks, preservation of natural environments in the framework of the Cross-border biosphere reserve of the Senegal river's delta.		
<b>Priority level</b>	Low	<b>Monitoring-observation</b>	Watch-keeping for the purpose of anticipation
<b>Remarks</b>	Recommended engagement of the Diawling National Park's teams in the observation-monitoring process.		
<b>DEVELOPMENTS SINCE 2010</b>			
<b>Evolution of the concerns</b>	Development of some low-capacity tourist-accommodation structures <sup>2</sup>		
<b>Mining activities</b>	Black sand mining and intensification of oil and gas exploration. Aftout water pipe (Source: MOLOA 2014 Regional Technical Workshop)		
<b>Priority level</b>	<b>Medium</b>	<b>Monitoring - Observation</b>	<b>Regular</b>
<b>Protected Area</b>	NO	<b>Hazards</b>	High erosion and flooding episodes

		ENVIRONMENT	
<b>MR4-c</b>	<b>14 - CHOTT BOUL – GHARA (RBTDS)</b>		
<b>BASELINE</b>			
<b>Diagnostics</b>	This area is an integral part of the the Senegal's Delta Cross-border Biosphere Reserve (RBTDS), which was classified by UNESCO on 27 June 2005. The Diawling National Park is the area's main conservation centre. The refilling with seasonal water, from the OMVS dams, the Diawling National Park's ponds, enabled an impressive ecological rehabilitation of this area since 1996. It is a wide floodplain sprinkled with clay basin, the monotony of which is only broken by terraces, dykes and dunes. There is a set of embankments and gates structuring the basins across the river. The altitude is generally very low, peaking at about 20 metres. Some areas are below the sea level (up to 0.5m). There is a population of migrating birds.		
<b>Dynamics</b>	There is a wide duneline facing the ocean, though it is certainly unstable and subject to important wing movements. It heavily depends on the modalities for freshwater inputs management. This area, which is subject to tidal influence (including from saltwater wedge) seems to have increased when a breach was opened in the Barbarie Split in neighbouring Senegal, thus disrupting various activities, especially fishing activities in brackish areas.		
<b>Stakes</b>	Conservation of a set of unique wetlands of international importance of migrating birds, promotion of a tourist development consistent with the constraints related to the sites' preservation and that benefits from the proximity of Saint-Louis as well as from the favourable context of the RBTDS. Challenges drinking water supply.		
<b>Actions</b>	Implementation of the RBTDS development and management plan. POLMAR Plan and anti-oil-spill measures.		
<b>Priority level</b>	low	<b>Monitoring</b>	Regular
<b>Observation</b>	Recommended engagement of the Diawling National Park's teams in the observation-monitoring process.		
<b>Developments since 2010</b>			
<b>Evolution of stakes</b>	A project to build a multi-purpose port is being considered		
<b>Mining activities</b>	Sand mining and oil and gas prospecting		
<b>Priority level</b>	<b>Medium</b>	<b>Monitoring - Observation</b>	Regular
<b>Protected Area</b>	YES	<b>Hazards</b>	Not reported

<b>Ramsar du Chat Tboul Site</b> <a href="#">WII / Ramsar site: WII ID: 1MR003 / WDPA ID : 900595</a>	MR4-c MR4-d
The Chat Tboul area was put on the Wetland of International Importance site/ Chat Tboul Ramsar Site on 10 November 2000 (WII ID: 1MR001 – 1044 / WDPA ID: 900595 (1 200 000 ha).	

<b>Diawling National Park</b> <a href="#">National park WDPA ID 9310</a> <b>Diawling Ramsar Site</b> <a href="#">WII / Ramsar site: WII ID: 1MR001 – 666 / WDPA ID : 95349</a>	MR4-c MR4-d
Decree n°91-005 of 14 January 1991 on the creation and organization of an administrative public body, called Diawling National Park. The body's by-laws were approved through order n°R-204 of 2 April 2000 on the approval of the Diawling National Park's by-law. A 1996-2001 master development plan for the Diawling National Park and its peripheral region was drafted in December 2001. The park was identified as a wetland of international importance / Ramsar site on 23 October 1994 (15 600 ha). It was put on the Montreux Record on 28 February 2002.	

<b>Senegal river Delta cross-border biosphere reserve (Mauritania)</b> <a href="#">RBTDS: WDPA ID 902500</a>	MR4-c MR4-d	SN1-a SN1-b
The Senegal river Delta cross-border biosphere reserve (Mauritania-Senegal) was included in the world biosphere reserves network by UNESCO's International Coordinating of the Man and Biosphere Programme on 29 June 2005. The reserve mainly comprises the following protected areas: Mauritania: The Diawling National Park, the Chat Tboul Ramsar Site, Moedina's Reserves Forest. Senegal: The Barbarie Split National Park, the Gandon Natural Classified Reserve, the Mpal-Mérinaguène Reserved Forest, The Massara-Foulane Reserved Forest, the Tilène Reserved Forest, the Djoudj National Birds Park, the Naère Reserved Forest.		

		ENVIRONMENT	
<b>MR4-d</b>	<b>15 - NDIAGO</b>		
<b>BASELINE</b>			
<b>Diagnostics</b>	Isolated sector located on a very narrow offshore bar. A few villages (Moyo, Ndiago) mainly inhabited by fishermen. Mangrove natural areas of regional importance in the Mboyo islands, especially for the reproduction of migrating mullet populations.		
<b>Dynamics</b>	Very narrow offshore bar (about 200m) with flood-prone areas on its margins. Very unstable area, though the dune-line's volume is considerable in some areas.		
<b>Stakes</b>	Preservation of the mangroves of the Mboyo islands. Drinking water supply for the communities living in the area. Some communities living in risky sites in the event of surges.		
<b>Actions</b>	The development of human occupation should be limited. Measures aimed at preserving mangrove trees.		
<b>Priority level</b>	Low	<b>Monitoring-observation</b>	Regular
<b>Remarks</b>	Recommended engagement of the Diawling National Park and RBTDS teams in the observation-monitoring process.		
<b>Developments since 2010</b>			
<b>Evolution of stakes</b>	Sand mining and oil and gas prospecting: discovery of a major gas deposit off Saint-Louis, across the border.		
<b>Priority level</b>	<b>Medium</b>	<b>Monitoring - Observation</b>	Regular
<b>Protected Area</b>	YES	<b>Hazards</b>	Non-reported