

SUMMARY

ADAPTATION MEASURES TO ADDRESS THE RISK OF COASTAL EROSION

2019-2023

Warning

This summary is intended to facilitate the reading and use of the report of the territorial audit office. Only the report engages the territorial audit office.

The answers, if expressed, of the administrations, organizations and local bodies concerned are included after the report.

TABLE OF CONTENTS

1	A TERRITORY EXPOSED TO COASTAL EROSION RISK	4
2	CONSOLIDATING KNOWLEDGE OF COASTAL DYNAMICS	5
3	PREVENTIVE MEASURES NEED TO BE IMPLEMENTED, INCLUDING ON CUSTOMARY LANDS, BY NEW CALEDONIA GOVERNMENT	5
4	INTERVENTIONS AND FINANCIAL RESSOURCES ARE LIMITED AND SCATTERED	6
5	A STRATEGY INTEGRATED WITH THE STILL RECENT ONE CONCERNING CLIMATE CHANGE	7

The Caledonian territory, particularly its coastal areas, faces major risks related to sea-level rise and coastal erosion, exacerbated by climate change and human pressures. This threatens populations, economic activities, and infrastructure, requiring adapted and sustainable management of these risks. In the continuation of its work on public action in response to climate change, the territorial audit office wished to examine the means and policies in place and make recommendations to improve the responses provided by local authorities to the affected populations.

This audit is also part of a broader initiative of cooperative audits on climate change led by the International Organization of Supreme Audit Institutions (INTOSAI) and more specifically the Working Group on Environmental Auditing (WGEA), as well as the Development Initiative (IDI). Nine supreme audit institutions from the South Pacific are participating in these efforts (48 globally).

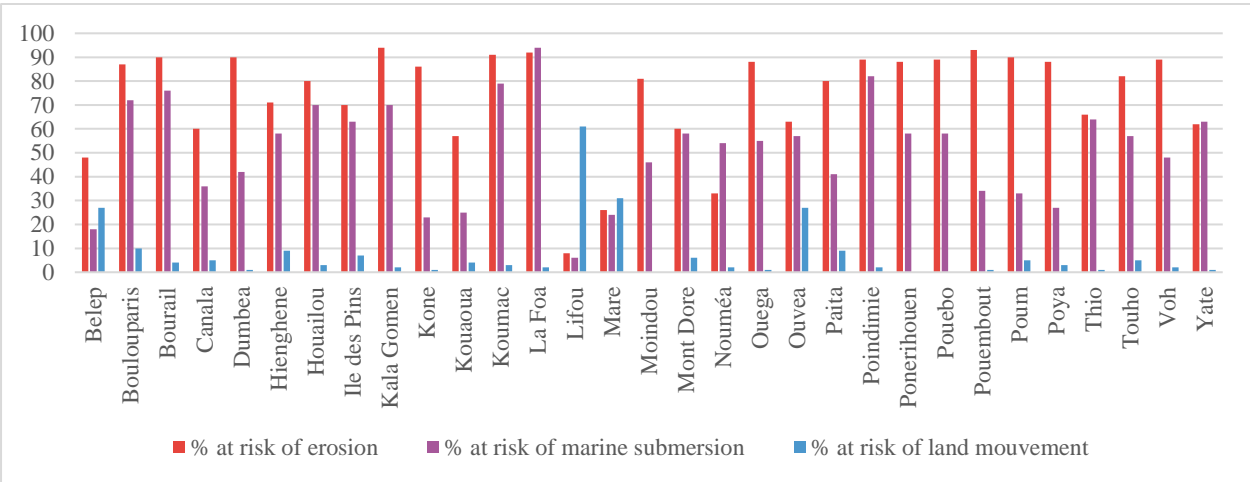
1 A TERRITORY EXPOSED TO COASTAL EROSION RISK

New Caledonia has 5,900 km of coastline (cliffs, beaches, mangroves, etc.), 71% of which is exposed to erosion and coastal retreat. The rate of sea-level rise is higher along the Caledonian coast than the global world average. Coastal retreat threatens homes, public and private infrastructure, notably roads, and developed areas. Pollution of freshwater and saltwater intrusion impact water consumption and agriculture, particularly on the Loyalty Islands.

In North Province, more than 45 % of the coastal length is occupied by humans near the coastline, with 46 % experiencing erosion. In South Province, monitoring of coastal evolution is limited to islets but insufficient on the main island. The coastlines of the Loyalty Islands, used for various economic activities, are also subject to erosion and cyclonic hazards.

In total, 31 out of 33 municipalities in New Caledonia are potentially exposed to erosion risk. The city of Nouméa has developed through numerous landfills. Between 1935 and 2016, artificialized coasts increased from less than 10 % to over 65 % of the coastal length of Nouméa, at the expense of natural spaces.

Graph n° 1: Length of communal coastline at risk of erosion, marine submersion or land movement



Source : Oblic, 2016

2 CONSOLIDATING KNOWLEDGE OF COASTAL DYNAMICS

Acquiring and developing knowledge about coastal retreat is essential to understand the dynamics of coastal systems, identify vulnerable areas, as well as existing protective structures or developments. The New Caledonia Coastal Observatory (OBLIC), created in 2013, brings together research actors and communities, and plays a crucial role in monitoring sites and producing maps and analyses. The territorial audit office recommends that this observatory be strengthened so that it can fully play its role, leading a network of actors to improve capitalization and exchange of knowledge for those involved in coastal management.

A large number of public, semi-public, and private actors, isolated or united in project consortia, are dedicated to producing knowledge, but these actions deserve more coordination. New Caledonia is engaged in major projects that will eventually map the hazard at different time scales or in case of a major climatic event. The chamber also recommends that the provinces, in liaison with the municipalities, carry out an assessment of vulnerable areas on the coastal strip and protective structures, including their maintenance status and impact on the coastline.

3 PREVENTIVE MEASURES NEED TO BE IMPLEMENTED, INCLUDING ON CUSTOMARY LANDS, BY NEW CALEDONIA GOVERNMENT

New Caledonia has the legal competency to define the framework for documents similar to natural disaster prevention plans. The territorial audit office recommends that such plans be implemented to delimit exposed areas, establish public utility easements, and define prescriptions applicable in terms of construction or securing in these areas.

No urban planning rule is enforceable on customary lands due to their inalienable, immovable, unseizable, and non-transferable character. It is therefore up to the congress of New Caledonia, if it wishes and after consulting the customary authorities, to adopt a country law specifying the impact on customary lands of public utility easements.

To finance the prescriptions imposed by natural disaster prevention plans, it will be necessary to put in place a territorial fund similar to the Barnier Fund in mainland France. The territorial audit office reiterates its observation regarding New Caledonia's competence in insurance law, offering it the possibility of linking the insurability of goods and the coverage of damages to compliance with the recommendations of natural disaster prevention plans in order to oblige their implementation and release financial resources.

Finally, the territorial audit office estimates that broad information must be provided at the municipal level as well as in customary discussions regarding the material consequences of sea-level rise to raise awareness among affected populations.

4 INTERVENTIONS AND FINANCIAL RESSOURCES ARE LIMITED AND SCATTERED

Regarding the management methods applied to coastal erosion, two types of measures can be implemented. On one hand, active protection and prevention measures that allow fixing the coastline and addressing often urgent issues at a high cost through the construction of structures or developments (dikes, walls, stone barriers, etc.). Additionally, nature-based solutions can act in the medium to long term by restoring natural ecosystems, such as mangroves or seagrass and coral reefs, at a lower cost. Pressure mitigation measures, such as integrated watershed management, also appear essential to contribute to the fight against coastal erosion in New Caledonia.

Photo n°1 : : Anse-Vata beach after cyclone Lucas (February 2021)



Source : OBLIC

On the other hand, an alternative consists of adopting a position of acceptance, also known as "living with," to adapt to the effects of erosion. This approach aims to let the coast or reef adapt naturally. It may result in the relocation of people and possibly assets to other sites. These relocation operations are often very costly and require the implementation of adapted financial tools.

In the absence of centralized information, the territorial audit office has attempted to measure the level of financial effort dedicated to addressing coastal retreat on the territory (an average of 233 MF CFP per year for New Caledonia and the North and South Provinces between 2019 and 2023). New Caledonia primarily contributes to knowledge improvement, while the North and South Provinces focus on the construction and maintenance of protective structures. Other actors, such as the French Development Agency or national scientific research operators, also intervene in this area.

5 A STRATEGY INTEGRATED WITH THE STILL RECENT ONE CONCERNING CLIMATE CHANGE

The government approved in September 2024 two draft resolutions of the congress relating, on one hand, to the declaration of a climate and environmental emergency in New Caledonia and the definition of a Caledonian strategy for climate change and, on the other hand, to the creation of a Caledonian resilience fund for climate change. The territorial audit office takes note of this encouraging initiative and notes nevertheless that these two draft resolutions have not yet been validated by the congress as of January 2025.

Furthermore, the territorial audit office invites New Caledonia to specify the actions that will be carried out within each axis of this strategy, particularly the axis relating to planning and development, their mode of financing, their time scale, and the community or operator responsible for them, including the role of provinces and municipalities, as well as indicators of achievement and expected impact. Finally, the territorial audit office invites the concerned actors to consider, in line with the work carried out in New Zealand, that the conception of strategic documents and their periodic review must allow the integration of adjustment devices to integrate new scientific or social information according to circumstances.

To improve the implementation of adaptation measures to address the risk of coastal erosion and address the identified shortcomings, the territorial audit office makes 6 performance recommendations.

PRESS RELEASE

NEW CALEDONIA FACES A DUAL CHALLENGE: RISING SEA LEVELS AND THE RAPID EROSION OF ITS COASTS, WHICH IS THREATENING PEOPLE AND INFRASTRUCTURE. ALTHOUGH ACTION HAS BEEN TAKEN, IT REMAINS INSUFFICIENT AND UNCOORDINATED.

An area vulnerable to coastal erosion, requiring greater knowledge and management

New Caledonia has 5,900 km of coastline (cliffs, beaches, mangroves, etc.), 71 % of which is exposed to erosion and retreat of the coastline, a phenomenon exacerbated by climate change and human pressures. With sea levels rising at a faster rate than the global average, managing the risk of erosion requires a better understanding of coastal dynamics. The Coastal Observatory, set up in 2013, plays a central role in monitoring changes to the coastline and producing data that is essential for understanding environmental issues. However, this structure lacks the resources to fully coordinate the many initiatives underway. The Territorial audit office recommends that its operations be strengthened so that it becomes a genuine center for capitalizing on knowledge and sharing best practice between the various public, private and scientific players. At the same time, it is crucial that the provinces, in collaboration with the municipalities, carry out an inventory of coastal issues and the state of infrastructures in order to better anticipate the impacts of the retreat of the coastline.

Limited and scattered interventions and financial resources

Financial efforts to combat erosion are insufficient, with an average of 233 MF CFP per year between 2019 and 2023. Most of this funding is allocated by New Caledonia to better understand the phenomenon, while the North and South Provinces focus on building protective infrastructure. Other players such as the French Development Agency and national scientific research operators are also involved in this area. The role of local authorities needs to be better asserted in terms of urban planning and risk management. Management remains fragmented, making intervention limited and open to improvement. A specific territorial fund, modelled on the Barnier fund in France, could offer a solution for financing the necessary measures.

A strategy to be integrated with the still recent climate change strategy

Although the government has initiated draft resolutions aimed at declaring a climate emergency and defining a New Caledonian climate change strategy (including the creation of a resilience fund), these measures have not yet been voted on by Congress. It is essential that coastal erosion management is fully integrated into this strategy, with concrete actions, a precise timetable and clear coordination between the various local authorities and stakeholders.

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