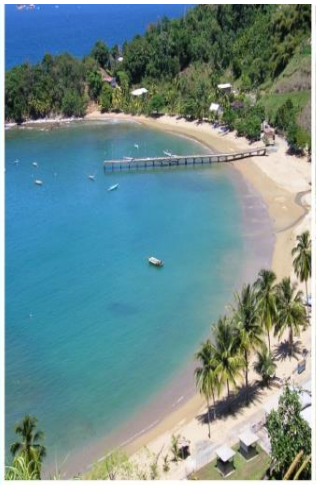
Integrated Coastal Zone Management

ICZM

Policy Framework











Integrated Coastal Zone Management Policy Framework

Approved by the Cabinet, Government of the Republic of Trinidad and Tobago
August 2023

COMMITTEE MEMBERS

The members of the ICZM Inter-Ministerial Committee (appointed in 2018/2019) were:

- Mr Sterling Chadee (2018)/ Mr Ric Javed Ali (2019) - Ministry of Planning and Development (Chair)
- Dr Rahanna Juman - Institute of Marine Affairs (Deputy Chair)
- Ms Candice Gray-Bernard (2018)/ Mr Kerry Sheppard (2019) - Coastal Protection Unit, Ministry of Works and Transport
- Mr Deon Brebnor - Tobago House of Assembly
- Ms Lavaughn Jack-Ovid - Ministry of Energy and Energy Industries
- Captain Neville Wint (2018)/ Mr Muhammad Anwar Baksh (2019) - Office of Disaster and Preparedness Management
- Ms Lara Ferreira (2018)/ Ms Elizabeth Mohammed (2019) - Fisheries Division, Ministry of Agriculture, Lands and Fisheries

The members of the ICZM Inter-Ministerial Committee (co-opted in 2019) were:

- Ms. Nadia Gour – Environmental Management Authority

The members of the ICZM Steering Committee (appointed in 2012) were:

- Dr Rahanna Juman - Institute of Marine Affairs (Chair)
- Dr Floyd Homer - Ministry of Environment and Water Resources (Deputy Chair)
- Mr Christiaan Harrigan/Ms Xiomara Chin - Environmental Management Authority
- Ms Ann Marie Phillip-Bacchus- Ministry of Energy and Energy Industries
- Ms Marie Hinds - Town and Country Planning Division
- Ms Rhona Jitta - Forestry Division, Ministry of Environment and Water Resources
- Ms Elizabeth Mohammed/Ms Lara Ferreira - Fisheries Division, Ministry of Food Production
- Ms Simone Medina - Ministry of Tourism
- Mr Wayne Quintal - Ministry of Works and Infrastructure
- Captain Kirton Huggins - Maritime Services Division, Ministry of Transport
- Dr Ellis Burris - Tobago House of Assembly
- Ms Alesha Naranjit - Council of President of the Environment

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1.0 BACKGROUND

Integrated Coastal Zone Management (ICZM) has been identified as the best approach globally to achieve balance between development and conservation by managing human activities within the coastal zone, and addressing conflicts amongst different resource users and uses. It is a continuous and dynamic process that addresses all three dimensions of sustainability – socio-cultural, economic and environmental - and is also a strategy to adapt to climate change impacts, and to reduce vulnerability to coastal hazards. Its overall goal is to improve the quality of life of citizens who depend on coastal resources by promoting economic development and sustainable livelihoods while maintaining the services provided by coastal ecosystems.

In April 2012, the Cabinet of Trinidad and Tobago appointed a Multi-Sectoral Steering Committee to develop an Integrated Coastal Zone Management Policy Framework, Strategies and Action Plan for Trinidad and Tobago. The Committee was chaired by the Institute of Marine Affairs (IMA) and comprised representatives from the Ministries of Environment and Water Resources, Tourism, Works and Infrastructure and Energy and Energy Affairs, the Tobago House of Assembly, the Environmental Management Authority, the Town and Country Planning Division, Maritime Services Division, Fisheries Division, Forestry Division and the Council of Presidents of Environmental Non-Governmental Organizations. A draft ICZM policy framework was prepared and submitted to the Ministry of Environment and Water Resources in 2014.

During the period 2013-2016, a number of technical studies funded by the Inter-American Development Bank (IDB) were conducted to inform the ICZM process. These included a review of the policies, legislation and the institutional arrangement for ICZM in Trinidad and Tobago, a coastal vulnerability assessment for South West Tobago and an analysis of the economic contribution of the coastal zone. In 2018, Cabinet appointed an Inter-Ministerial Committee chaired by the Ministry of Planning and Development and comprising representatives from the Institute of Marine Affairs, Ministry of Energy and Energy Industries, the Tobago House of Assembly, Fisheries Division of the Ministry of Agriculture, Lands and Fisheries, Coastal Protection Unit of the Ministry of Works and Transport and the Office of Disaster and Preparedness Management to finalize the ICZM Policy through a public consultative process, and to oversee its implementation.

Since ICZM is a participatory and consensus-building exercise that requires a variety of skills and expertise, in developing the Policy, the Steering Committee engaged stakeholders – government agencies, the business sector, the energy sector, fisherfolk and the general public – through thematic working groups and public consultations. The information generated from these consultations and interactions during the period 2012-2014 was used to develop the Integrated Coastal Zone Management Policy Framework for Trinidad and Tobago. The Inter-Ministerial ICZM Committee revised the policy in 2019 based on comments received from stakeholders through a continuous public consultative process conducted over the period 2018-2019, and undertook another revision

in 2020 to reflect any national policy and legislative changes as well as international legal instruments of relevance to ICZM.

2.0 INTRODUCTION

Human use and exploitation of coastal and marine resources has created largely negative impacts on these resources and over time, they have become degraded. Global climate change and climate variability adds to the continuous pressure on these coastal environments especially in Small Island States (SIS), many of which are faced with a limited resource base, logistical challenges and rising pressures from economic development (Nurse *et al*. 2014).

Trinidad and Tobago is the southern-most country in the Caribbean archipelagic chain. Trinidad has a surface area of 4,828 km^2 while Tobago is substantially smaller with an area of 300 km^2. Collectively, the country has a coastline length of 704 km. The country's jurisdictional sovereignty and responsibility extends beyond the terrestrial into the marine through its archipelagic waters, territorial sea and Exclusive Economic Zone (EEZ). The collective areal extent of these encompasses 77,502 km^2 of waters surrounding the islands. Trinidad and Tobago therefore has a land to sea ratio of 1:15, which indicates the importance of the marine and coastal sphere to the country.

The country has always relied on its coastal and ocean resources for economic prosperity primarily from oil and gas exploration, tourism and fisheries. According to an analysis of the contribution of Trinidad and Tobago's coastal zone to the national economy undertaken as part of the feasibility studies for a climate–resilient coastal zone management program, the estimate of GDP (2015) immediately on the coastline was US$2.14 billion and within the broader coastal zone (EEZ) was US$22.5 billion; 81% of total GDP (CH2M Hill Halcrow, 2016). It is estimated that almost 80% of all socio-economic activities and 70% of Trinidad and Tobago's population are located along the coast (CSO, 2010). Approximately 8% of all public and private infrastructure by value is located immediately on the coastline, while 89% of the total value of physical assets lies within the broader coastal zone inclusive of the EEZ (IDB, 2013).

New economic policies, aimed at diversifying the economy and developing the blue economy, would see investments in the tourism, agriculture, aquaculture and maritime sectors, all of which depend on a healthy coastal environment. Policies to reduce greenhouse gases would lead to the development of alternative renewable energy sources some of which could be generated along the coast from tides, waves or wind.

Notwithstanding this, Trinidad and Tobago faces challenges in the management and sustainable use of its coastal and ocean space and resources. In 2016, the Institute of Marine Affairs produced the First State of Marine Environment (SOME) Report. The report provided a scientifically grounded understanding of the condition of Trinidad and Tobago's coastal and marine ecosystems, habitats and species, which is extremely important for its development and sustainability. It also detailed how the status of these resources have been, and are being affected by a range of natural and human pressures to which they are subjected such as land-based pollution and impacts from climate

change. The degradation of coastal and marine ecosystems (coral reefs, mangrove swamps, seagrass beds, beaches), mainly from anthropogenic impacts such as pollution has made them more vulnerable to impacts from climate change, and other emerging issues like impacts from invasive alien species (IAS) and *Sargassum* blooms. Within the context of the "blue economy", this report has also shown the imperative need to safeguard Trinidad and Tobago's fisheries resources – a source of livelihood and nutrition for some of this country's most marginalised groups and communities. Several species of commercially important fish were found to be fully exploited or overexploited. Fish and shellfish nursery habitats such as mangrove swamps and seagrass beds also need to be conserved and/or restored to ensure food security (IMA, 2016).

While not on the hurricane track, the coast of Trinidad and Tobago is highly vulnerable to natural hazards, particularly small storm and flooding events that tend to disrupt economic activity. In fact, there is evidence that the frequency of these small events have increased five-fold between 2005 and 2015, when compared to the previous decade (DesInventar data base). A 2013 IDB financed study estimated that probable direct loss due to floods and storms in 2012 was US$1.1 billion (with a 1/100 return period), and average annual loss was US$55.7 million.

This vulnerability to natural hazards is likely to increase with climate change, which is projected to exacerbate floods linked to extreme rainfall events, rising sea level, and tropical storms (Nurse *et al*., 2014). Studies from pilot coastal zone management projects in South West Tobago suggested that in a high emissions scenario the country could experience sea level rise in the range 62 cm to 1.15 m by 2100, with resultant significant increases in coastal flooding and erosion risks (Halcrow, 2015). Further, climate change could result in average summer temperature increase of over +3.5°C, with a similar warming effect anticipated in the ocean, which could have negative impacts on marine and coastal biodiversity. The sectors projected to be heavily impacted by climate change include: agriculture, human health, human settlements, coastal zones and water resources (McCue, 2014).

For SIS, it is inevitable that conflicts would arise where several human activities occur in the same limited area and depend on the same natural resources. In Trinidad and Tobago, there is conflict between the oil and gas sector and fisherfolk, while coastal communities have continued to express concerns about the loss of beach property and access due to coastal development to facilitate industrial, tourism and housing expansion. Climate change, sea level rise and heightened erosion in some areas also exacerbate the problems associated with many interests competing for limited coastal space.

Integrated Coastal Zone Management is a means to sustainably manage Trinidad and Tobago's coastal and ocean space, resources and activities. As a participatory process, it requires discourse, co-ordination and harmonization among Government agencies and other stakeholders, including communities. It also endeavors to improve governance so that, *inter alia*, conflict is alleviated, a

balance between conservation and development considerations is fostered, sustainable livelihoods are promoted and the vulnerability of coastal populations is reduced.

In Trinidad and Tobago, there are no specific laws that address ICZM. However, there are some 20 pieces of legislation that can potentially address coastal zone management (Appendix 1). While it may be perceived that sufficient laws exist to enable effective management of coastal resources and activities, most of the laws are worded in a general manner, with the intent being the passage of regulations to provide for specificity. Unfortunately, there has been a reluctance to use such regulatory powers and this has resulted in some laws being largely unenforceable (Ramlogan, 2013). Similarly, there are 24 policies that touch on aspects of ICZM (Appendix 1). However, the main issues with respect to policies are that they are outdated, lack specificity, or have been inadequately implemented. In addition, the various policies address coastal zone management in a piecemeal and fragmented manner which is not conducive to promoting ICZM comprehensively.

The many laws and policies impacting on coastal areas give rise to as many as twenty-nine (29) institutions having a defined legal and/or policy role in aspects of coastal management. This creates problems such as overlapping jurisdiction, the independence syndrome, and a lack of proper co-ordination of the work of enforcement and management agencies. Another debilitating problem confronting State entities with responsibility for aspects of coastal zone management is the lack of sufficient resources, the most important being financial resources. An institutional impediment is the presence of little or no public awareness of the importance of coastal areas to the society. Public education programs are limited, sporadic and have generally failed to transform attitudes towards sustainably using coastal areas in Trinidad and Tobago. These problems have led to unsustainable utilization of our coastal resources (Ramlogan, 2013).

3.0 DEFINITION OF THE COASTAL ZONE

The coastal zone is defined as the geographical area covering both the maritime and the terrestrial parts of the shore, including off-shore islands, salt-water ponds and wetlands in contact with the sea. The coastal zone of Trinidad and Tobago shall mean all areas of sea extending to the limit of the Exclusive Economic Zone (EEZ) and includes the shoreline and coastal lands, which are inland areas above the high water mark that influence the quality or composition of coastal waters, or are influenced in some way by their proximity to coastal waters.

For the purpose of this Policy, the area will be zoned into:

Terrestrial (Figure 1) **Zone T1**- Immediate and direct impact area

This zone (T1) shall be delineated on the seaward side as the line of low-water at mean low-water spring tides and on the landward side as the five meter contour. The 5 m contour represents the limit of immediate and direct impact of sea level rise and storm surges.

Zone T2- Area of influence

This zone (T2) shall be the area contained between the 5 m contour and the 90 m contour. This area and Zone T1 contains most of the urban, industrial and agricultural areas of the country and influences the marine and coastal areas through direct and indirect impacts.

Sea (Figure 2) **Zone S1**- Immediate and direct impact area (3 nautical miles)

This zone (S1) shall be delineated on the landward side from the low-water at mean low-water spring tides and shall extend to a distance of three nautical miles offshore parallel with the mean high water mark, consistent with the outer limit defined for the coastal nearshore in the Water Pollution Rules, 2019.

Zone S2- Territorial Sea

This zone (S2) shall extend outward from the three nautical mile seaward boundary of zone S1 to the outer limits of the territorial sea, not exceeding 12 nautical miles from the archipelagic baselines described in section 6 of the Archipelagic Waters and Exclusive Economic Zone Act, 1986.

Zone S3- Exclusive Economic Zone

This zone (S3) is the Exclusive Economic Zone (EEZ) of Trinidad and Tobago and is the area of sea between the outer limits of the territorial sea and a distance of 200 nautical miles seaward from the baseline from which the territorial sea is measured unless otherwise determined by agreement between Trinidad and Tobago and adjacent States concerned, on the basis of international law.

Maps delineating the T1 and T2 zone for Trinidad and Tobago are provided in Appendices 2-17

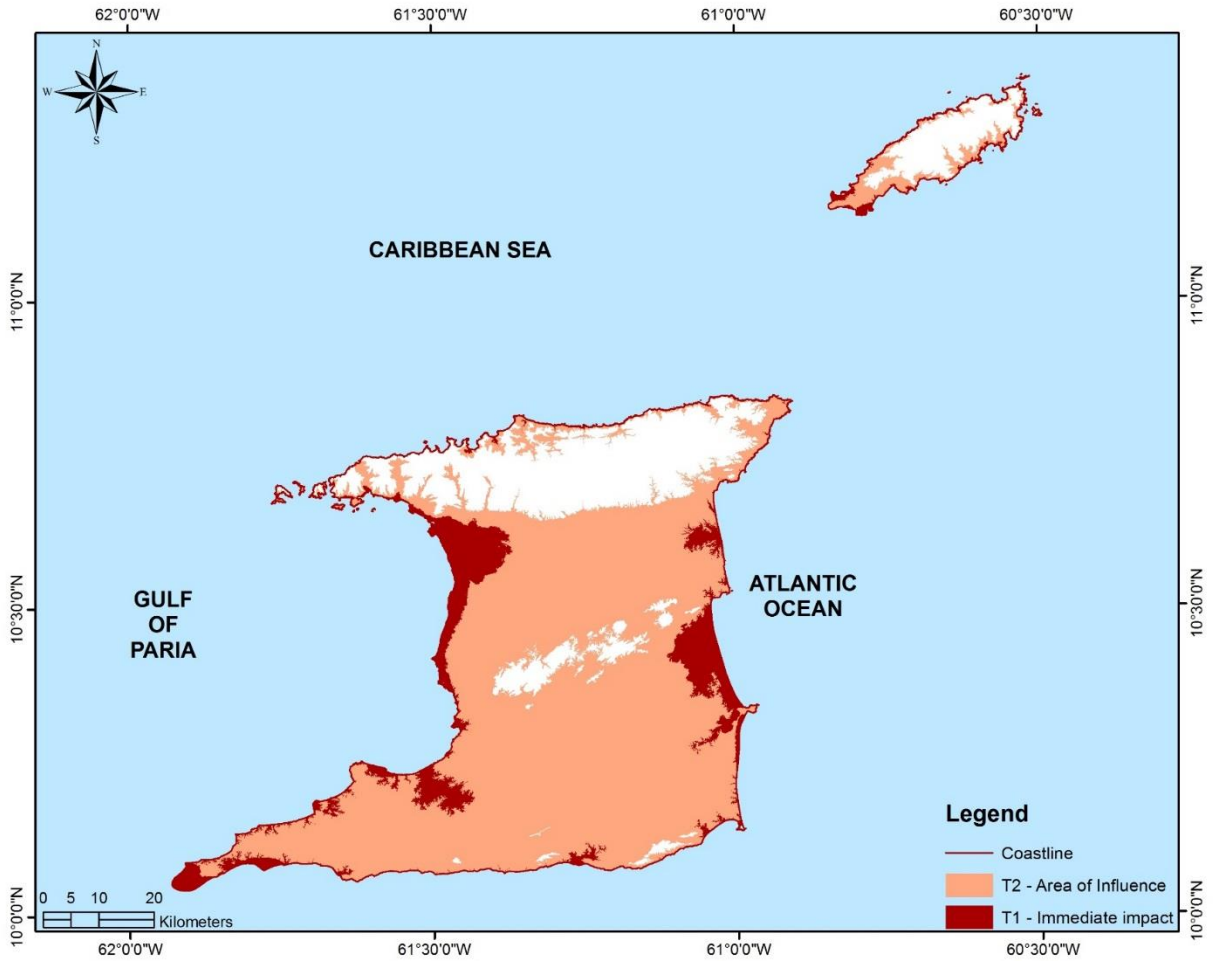


Figure 1: Map Showing Terrestrial Boundaries of the Coastal Zone of Trinidad and Tobago

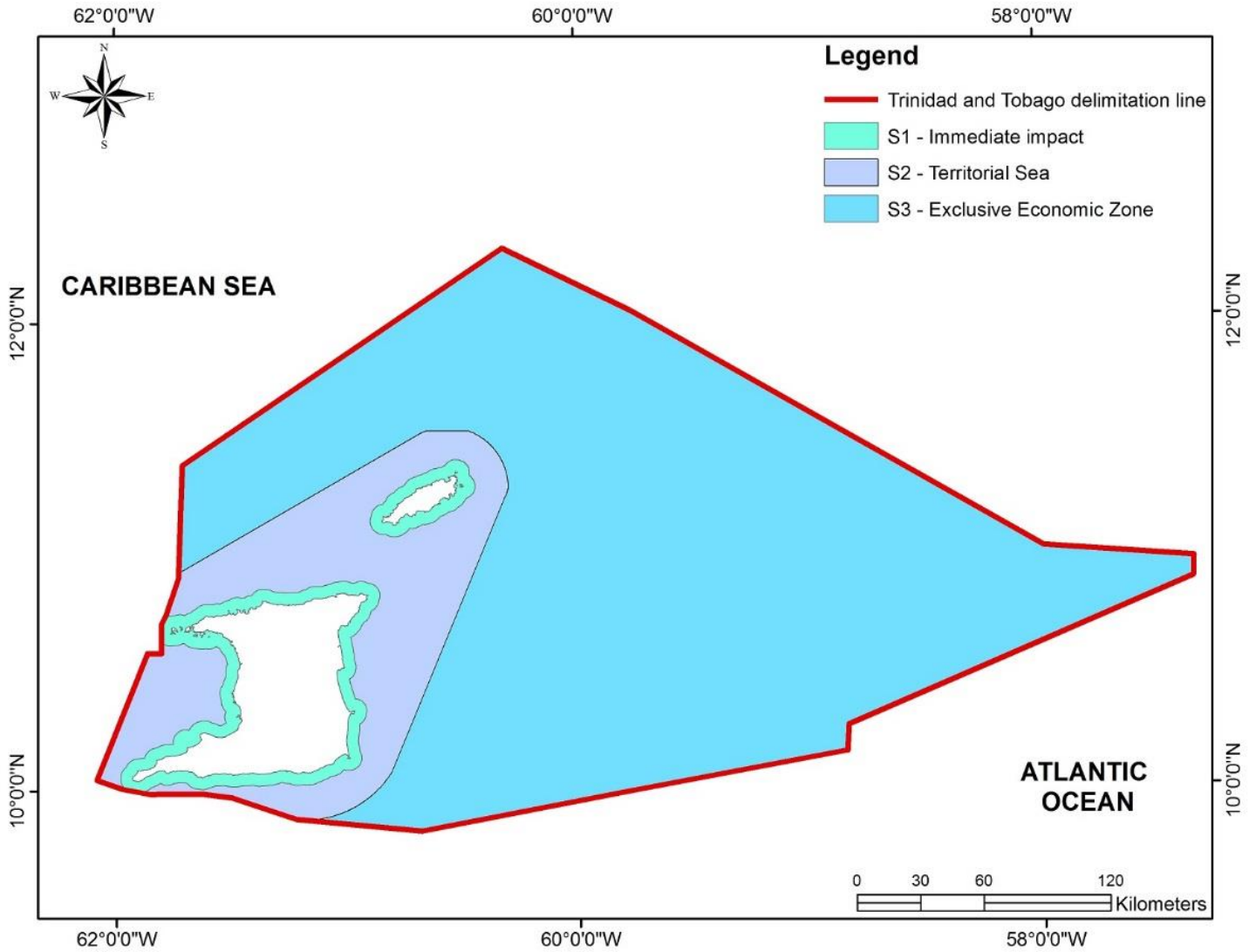


Figure 2: Map Showing Seaward Boundary of the Coastal Zone of Trinidad and Tobago

4.0 COASTAL ISSUES

The Central Statistical Office (First Environmental Compendium) reported: -

- more than 70% of the population resides within the coastal zone, particularly along the west coast of Trinidad and in South West Tobago, and 80% of urbanized land is located within or adjacent to coastal areas;
- 80% of industrial activities of strategic national importance are located in the coastal zone;
- 60% of small scale economic activities significant for the support of human lives are located in the coastal zone;
- Approximately 50% of the country's national transportation arteries; coastal roads, bridges and ports are in the coastal zone;
- Approximately 90% of tourist facilities and hotel rooms in the country are located within the coastal zone areas;
- Coastal areas account for about 90% of annual fish production.

At the same time, the coastal zone houses the most biologically diverse ecosystems on the islands such as coral reefs, seagrass beds, rocky shores, beaches, mudflats, mangrove swamps, littoral woodlands and scrubs. These ecosystems provide a range of provisioning, regulating, cultural and supporting services that include erosion control, storm protection, floodwater retention, water quality maintenance and climate regulation. Despite their importance, these ecosystems are under severe pressure because of population growth, increasing urbanization, industrialization and tourism in coastal areas, and the associated catchments.

Through an intense consultation process with various stakeholder groups - coastal communities, fisherfolk, the energy sector, the business sector, non-government organizations, and government agencies - the following issues were identified in the coastal zone of Trinidad and Tobago (Table 1). Stakeholders indicated that these issues should be directly or indirectly addressed by an ICZM Policy.

Table 1: Issues identified by stakeholders in the coastal zone of Trinidad and Tobago

SECTOR/ ACTIVITIES	ISSUES
Oil and Gas	Oil spills; loss of productive fishing grounds; dumping of drilling mud; seismic survey impact on fisheries; mangrove destruction; user conflicts; restrictions imposed on fishermen in areas where oil spill response activities or rig operations are in progress; contamination of shoreline/beaches.
Shipping and Maritime Transport	Abandonment of derelict vessels; pollution from ships; maritime traffic management; excessive speed of vessels and jet skis; reclamation for port development and

	associated dredging; under developed/under-utilized transport linkages; ballast water discharge; use of harmful anti-fouling paints.
Fisheries	Overfishing; lack of knowledge on fish stock/observed decline in fish stock; harmful fishing practices; lack of infrastructure for the fishing sector (landing sites, storage, fish processing facilities etc.); illegal fishing by foreigners; piracy; by-catch of turtles and associated damage to fishing nets; ghost fishing by discarded nets, invasive species.
Agriculture	Deforestation; pollution – fertilizers, animal waste, and sediment pollution.
Mining	Deforestation; sand mining; sediment pollution.
Built Development	Lack of regulations on building set- backs; unplanned/ unregulated development; land tenure; land reclamation; loss of mangroves and seagrass beds; coral reef destruction; loss of public access to the coast; lack of facilities on beaches; conflicts at and destruction of cultural and heritage sites; pollution – domestic and solid waste.
Tourism	Damage to coastal ecosystems; domestic and solid waste pollution; loss of public access to beaches; user conflicts.

The over-arching issues identified that span all sectors include: -

Climate Change and Coastal Vulnerability - Coastal erosion; lack of/ineffective coastal defenses; increased storm surges; increased coastal flooding; rougher seas; change in weather patterns; increased occurrence of extreme events; sea level rise.

Governance - Inadequate enforcement of existing laws; ineffective laws, regulations and standards; lack of education, public outreach and awareness; lack of science-based management; institutional ineffectiveness; bureaucracy; corruption; lack of accountability; user conflicts; lack of alternative livelihood options.

5.0 POLICY GOAL

This policy will facilitate an integrated approach to coastal zone management aimed at maintaining and where necessary, enhancing the functional integrity of the coastal resource systems while enabling sustainable economic development through rational, inclusive decision-making and planning.

6.0 POLICY OBJECTIVES:

1. To promote a cooperative, coordinated, accountable and integrated institutional mechanism for coastal zone planning and management;
2. To design and manage developments in the coastal zone to be in harmony with the aesthetic, environmental, and cultural attributes of the islands;
3. To plan and manage development in the coastal zone so as to avoid increasing exposure of people, property and economic activities to significant risk from natural and anthropogenic impacts including climate change (eg. coastal flooding, salinization);
4. To maintain the diversity, health and productivity of coastal and marine processes and ecosystems for the benefit of current and future generations;
5. To rehabilitate damaged or degraded coastal ecosystems and habitats, and establish and effectively manage a system of coastal zone protected areas;
6. To promote and enhance pollution control and waste management activities to ensure that they have minimal adverse impact on human health, and on coastal ecosystems and their ability to support beneficial human uses;
7. To alleviate poverty in the coastal zone through pro-active development initiatives that generate sustainable livelihood options;
8. To conduct planning and management activities in the coastal zone in a manner that promotes learning through continuous research, monitoring, review and adaptation;
9. To ensure continual meaningful public participation and to promote partnerships between the State (national and local government), the private sector and civil society in order to foster co-responsibility in coastal management;
10. To promote public awareness and build capacity amongst coastal zone managers and other stakeholders to ensure more effective coastal zone planning and management;
11. To fulfill international, regional and trans-boundary responsibilities as they relate to coastal zone management.

7.0 STRATEGIES

OBJECTIVE 1: To promote a cooperative, coordinated, accountable and integrated institutional mechanism for coastal zone planning and management.

Strategies:

1. Review and formalize legislative and institutional arrangements that foster better co-ordination and integration;
2. Clarify the roles and responsibilities of all government departments involved in coastal management;
3. Streamline administrative procedures for authorizing coastal activities;
4. Ensure the provision of adequate financial, technical and human resources for integrated coastal zone management;
5. Establish appropriate institutional arrangements to address conflicts, and develop capacity in conflict management;
6. Develop and implement a holistic and integrated strategy to facilitate improved compliance;
7. Strengthen law and enforcement efforts as well as voluntary compliance.

OBJECTIVE 2: To design and manage developments in the coastal zone to be in harmony with the aesthetic, environmental, and cultural attributes of the islands.

Strategies:

1. Control the siting of infrastructure in the coastal zone and determine adequate setback and buffer zones along the coast;
2. Restrict non-water dependent land uses from being located in the coastal zone;
3. Encourage appropriate forms of coastal development, economic activities, settlement and building;
4. Implement measures where approvals issued by government agencies for land development near coastal zones are subject to requirements established by the Policy;
5. Ensure preservation of cultural/natural heritage sites in the coastal zone, including underwater sites;
6. Ensure public access to beaches/shoreline with due consideration to public safety;
7. Formulate and institute a building code for all buildings and structures in the coastal zone;
8. Develop and enforce regulations to restrict the alteration of landforms and vegetative cover in dynamic coastal zone areas;
9. Develop guidelines and enforce regulations for the disposal of solid and liquid wastes in the coastal zone;
10. Promote Marine Spatial Planning (MSP) in the coastal zone.

OBJECTIVE 3: **To plan and manage development in the coastal zone to avoid increasing exposure of people, property and economic activities to significant risk from natural and anthropogenic impacts including climate change (e.g. coastal flooding, salinization).**

Strategies:

1. Encourage protection and maintenance of dynamic coastal features that act as a buffer against natural coastal processes and hazards;
2. Conduct coastal vulnerability and risk assessments with due consideration for socioeconomic factors and incorporate appropriate preventative and adaptive measures into all planning and management policies and decision-making processes to account for projected changes in climate, particularly increases in sea level;
3. Develop and implement a holistic programme for coastal zone protection;
4. Establish legislation for the design, construction and implementation of coastal protection infrastructure and measures.

OBJECTIVE 4: **To maintain the diversity, health and productivity of coastal and marine processes and ecosystems for the benefit of current and future generations.**

Strategies:

1. Identify and protect unique sensitive environments and habitats in the coastal zone;
2. Promote sustainable fisheries and agricultural practices in the coastal zone;
3. Develop and implement an effective programme for monitoring and compliance with relevant national laws;
4. Promote participation of all stakeholders, including users, in management of the resource;
5. Implement programme to manage and control the introduction of alien invasive species (e.g. lionfish, *Sargassum*) into the coastal and marine zones;
6. Establish Environmental Sensitive Index mapping of the coastal zone and share associated information with all stakeholders, to ensure plans and procedures are formulated for the protection of all sensitive areas.

OBJECTIVE 5: **To rehabilitate damaged or degraded coastal ecosystems and habitats, and establish and effectively manage a system of coastal protected areas.**

Strategies:

1. Identify significantly degraded coastal areas and ecosystems, and develop and implement rehabilitation management plans;
2. Ensure effective management of marine protected areas that cater for ecological and human use requirements.

OBJECTIVE 6: **To promote and enhance pollution control and waste management activities to ensure minimal adverse impact on human health, and on coastal ecosystems and their ability to support beneficial human uses**.

Strategies:

1. Undertake audit of land-based and sea-based pollution sources;
2. Reduce pollution entering rivers and estuaries by promoting best watershed management practices;
3. Promote a more coordinated and effective approach to monitoring and enforcement, and develop and implement mechanisms to encourage compliance;
4. Implement a comprehensive national water-quality monitoring programme;
5. Integrate pollution and waste management into land-use planning on the coast;
6. Promote installation of appropriate sanitation, waste reception and management systems in coastal communities and the yachting and shipping sectors, inclusive of cruise ships;
7. Institute mechanisms to mitigate ship-based pollution (e.g. oily waste, bilge, noxious liquids, sewage, garbage, air pollution, noise, ballast water, antifouling paints with Tributyltin);
8. Develop and implement compensatory and remediation frameworks in line with the polluter pays principle.

OBJECTIVE 7: **To alleviate poverty in the coastal zone through pro-active development initiatives that generate sustainable livelihood options.**

Strategies:

1. Integrate coastal zone planning efforts with existing national planning and economic development frameworks;
2. Identify and promote opportunities for sustainable economic development in the coastal zone;
3. Design and implement an awareness, education and training programme focused on sustainable coastal zone livelihoods.

OBJECTIVE 8: **To conduct planning and management activities in the coastal zone in a manner that promotes learning through continuous research, monitoring, review and adaptation.**

Strategies:

1. Develop and implement a coordinated coastal research programme that meets the need of agencies with responsibility for coastal zone management;
2. Identify research priority areas and potential projects relating to coastal zone management;
3. Establish a 'State of the Coast' Reporting System;

4. Design and implement a monitoring and evaluation programme;
5. Secure adequate funding, and encourage private sector investment and public private partnership in research and monitoring;
6. Develop a centralized coastal information management system, data repository and data sharing agreement;
7. Encourage research papers within technical institutions focused on new techniques for the preservation of coastal zones, and how they can be implemented in our environment.

OBJECTIVE 9: **To ensure continual meaningful public participation and to promote partnerships between the State (national and local government), the private sector and civil society in order to foster co-responsibility in coastal management**.

Strategies:

1. Identify and pursue partnership opportunities in Trinidad and Tobago;
2. Develop and institutionalize meaningful engagement processes with key stakeholders;
3. Implement partnership demonstration projects;
4. Conduct training programme and capacity building initiatives to ensure partners/ stakeholders have the necessary capacity and skills.

OBJECTIVE 10: **To promote public awareness and build capacity amongst coastal zone managers and other stakeholders to ensure more effective coastal zone planning and management.**

Strategies:

1. Develop and implement a specific awareness programme for politicians and decision makers;
2. Develop and implement a comprehensive coastal zone awareness programme for all citizens;
3. Develop and implement a training and capacity building programme for coastal zone managers;
4. Provide follow up technical support and advice to trainees;
5. Incorporate coastal zone management principles into existing education programmes.

OBJECTIVE 11: **To fulfill international, regional and trans-boundary responsibilities as they relate to coastal management.**

Strategies;

1. Identify and fulfill international and regional obligations, pertaining to coastal zone management, under Conventions and Agreements to which Trinidad and Tobago is party;

2. Pursue opportunities for regional research, monitoring, surveillance and enforcement on shared-living resources;
3. Identify and adopt international best practices in coastal zone management;
4. Identify and pursue trans-boundary partnerships and opportunities for knowledge transfer and capacity building.

8.0 NEXT STEPS

Upon completion of the public consultation process, and in anticipation of Cabinet's approval of the ICZM Policy Framework, the Inter-Ministerial ICZM Committee initiated development of an Action Plan with appropriate timelines, key targets and indicators for implementing the Policy. This task includes determining the most appropriate legal and institutional arrangement for ICZM. Based on the institutional and legislative arrangement, the relevant agencies and Ministries/Divisions would be co-opted as required to implement the Action Plan.

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Appendices

Appendix 1: LIST of KEY POLICIES, PLANS, LEGISLATION AND INTERNATIONAL INSTRUMENTS PERTAINING TO COASTAL ZONE MANAGEMENT

LIST OF KEY POLICIES AND PLANS IMPACTING ON COASTAL ZONE MANAGEMENT

Biological Diversity Policies
National Biodiversity Strategy and Action Plan, 2017 - 2022
National Fisheries Policy, 2016
National Forests Policy, 2011
National Protected Areas Policy, 2011
National Policy and Programmes on Wetland Conservation For Trinidad And Tobago, 2001

Pollution Policies
National Environmental Policy, 2018
Draft Upstream Effluent Management (UEM) Policy, 2018
National Waste Recycling Policy, 2015
Integrated Solid Waste/Resource Management Policy for Trinidad and Tobago, 2013

Industry-Based Policies
Draft Revised National Tourism Policy of Trinidad and Tobago, 2020
Yachting Policy, 2018
Draft National Spatial Development Strategy for Trinidad and Tobago, 2013
Trinidad and Tobago Tourism Master Plan, 1995
Ecotourism Policy

Developmental Policies
National Development Strategy (Vision 2030), 2016-2030
Comprehensive Economic Development Plan for Tobago: Clean, Green, Safe and Serene, 2013 -2017
ODPM Strategic Plan, 2010-2015
Strategy for Reduction of Carbon Emissions in Trinidad and Tobago, 2015
Innovation for Lasting Prosperity: Medium Term Policy Framework, 2011-2014
Working for Sustainable Development in Trinidad and Tobago, 2012
Framework for Development of a Renewable Energy Policy for Trinidad and Tobago, 2011
Vulnerability and Risk Assessments: Preliminary Vulnerability Assessments, 2011
National Physical Development Plan of Trinidad and Tobago, 1984
Comprehensive Disaster Management Policy Framework for Trinidad and Tobago
North East Tobago Management Plan

General Environmental Policies
Draft National Integrated Water Resources Management Policy, 2018
National Action Programme to Combat Land Degradation in Trinidad and Tobago, 2006-2012
Climate Change Policy, 2011

LIST OF KEY LEGISLATIONS PERTAINING TO COASTAL ZONE MANAGEMENT

State Lands Act Ch. 57:01 (rev. 2011)
Forests Act Ch. 66:01 (rev. 2011)
Fisheries Act 67:51 (rev. 2011)
Control of Importation of Live Fish Act Ch. 67:52 (rev. 2011)
Environmentally Sensitive Areas Rules made pursuant to the EM Act
Environmentally Sensitive Species Rules made pursuant to the EM Act
Water Pollution Rules made pursuant to the EM Act
Marine Areas (Preservation and Enhancement) Act Ch. 37:02 (rev. 2011)
Oil Pollution of Territorial Waters Act Ch. 37:03 (rev. 2011)
Territorial Sea Act Ch. 1:51 (rev. 2011)
Archipelagic Waters and Exclusive Economic Zone Ch. 51:06 (rev. 2011)
Continental Shelf Act Ch. 1:52 (rev. 2011)
Motor Launches Act Ch. 50:08 (rev. 2011)
Harbours Act Ch. 50:06 (rev. 2011)
Port Authority Act Ch. 51:01 (rev. 2011)
Shipping Act Ch. 50:10 (rev. 2011)
Chaguaramas Development Authority Act Ch. 35:02 (rev. 2011)
Carenage Pier Act Ch. 51:03 (rev. 2011)
La Brea Jetty and Tramway Act Ch. 51:04 (rev. 2011)
Caribbean Fisheries Training and Development Institute Act Ch. 39:53 (rev. 2011)
Carriage of Goods by Sea Act Ch. 50:02 (rev. 2011)
Three Chains (Tobago) Act 1865 Ch. 57:04 (rev. 2011)
Submarine Areas of Gulf of Paria (Annexation) Order, 1942
Malaria Abatement Act Ch. 28:50 (rev. 2011)
Dry River Act Ch. 26:50 (rev. 2011)
Litter Act Ch. 30:52 (rev. 2011)
Waterworks and Water Conservation Act Ch. 54:41 (rev. 2011)
Water and Sewerage Authority Act Ch. 54:40 (rev. 2011)
Environmental Management Act Ch. 35:05 (rev. 2011)
Summary Offences Act Ch. 11:02 (rev. 2011)
Public Health Ordinance Ch. 12:04 (rev. 1950)
Noise Pollution Rules made pursuant to the EM Act
Air Pollution Rules made pursuant to the EM Act
Highways Act Ch. 48:01 (rev. 2011)
Protection of Wrecks Act Ch. 37:04 (rev. 2011)
Petroleum Act Ch. 62:01 (rev. 2011)
Drilling Regulations, Mines, Borings and Quarries Act Ch. 61:01 (rev. 2011)
Tourism Development Act Ch. 87:22 (rev. 2011)
Town and Country Planning Act Ch. 35:01 (rev. 2011)
Municipal Corporations Act Ch. 25:04 (rev. 2011)
Tobago House of Assembly Act Ch. 25:03 (rev. 2011)
Certificate of Environmental Clearance Rules and Designated Activities made pursuant to the EM Act
Institute of Marine Affairs Act Ch. 37:01 (rev. 2011)
Disaster Measures Act Ch. 16:50 (rev. 2011)

DRAFT LEGISLATION PERTAINING TO COASTAL ZONE MANAGEMENT

The Fisheries Management Bill, 2020
Draft Waste Management Rules, 2018
The Planning and Facilitation of Development Bill, 2013
The Shipping (Marine Pollution) (No. 2) Bill, 2004
Planning and Development of Land Bill, 2001
Forests, Protected Areas and Wildlife Bill

LIST OF RELEVANT INTERNATIONAL LEGAL INSTRUMENTS THAT CAN ASSIST IN COASTAL ZONE MANAGEMENT

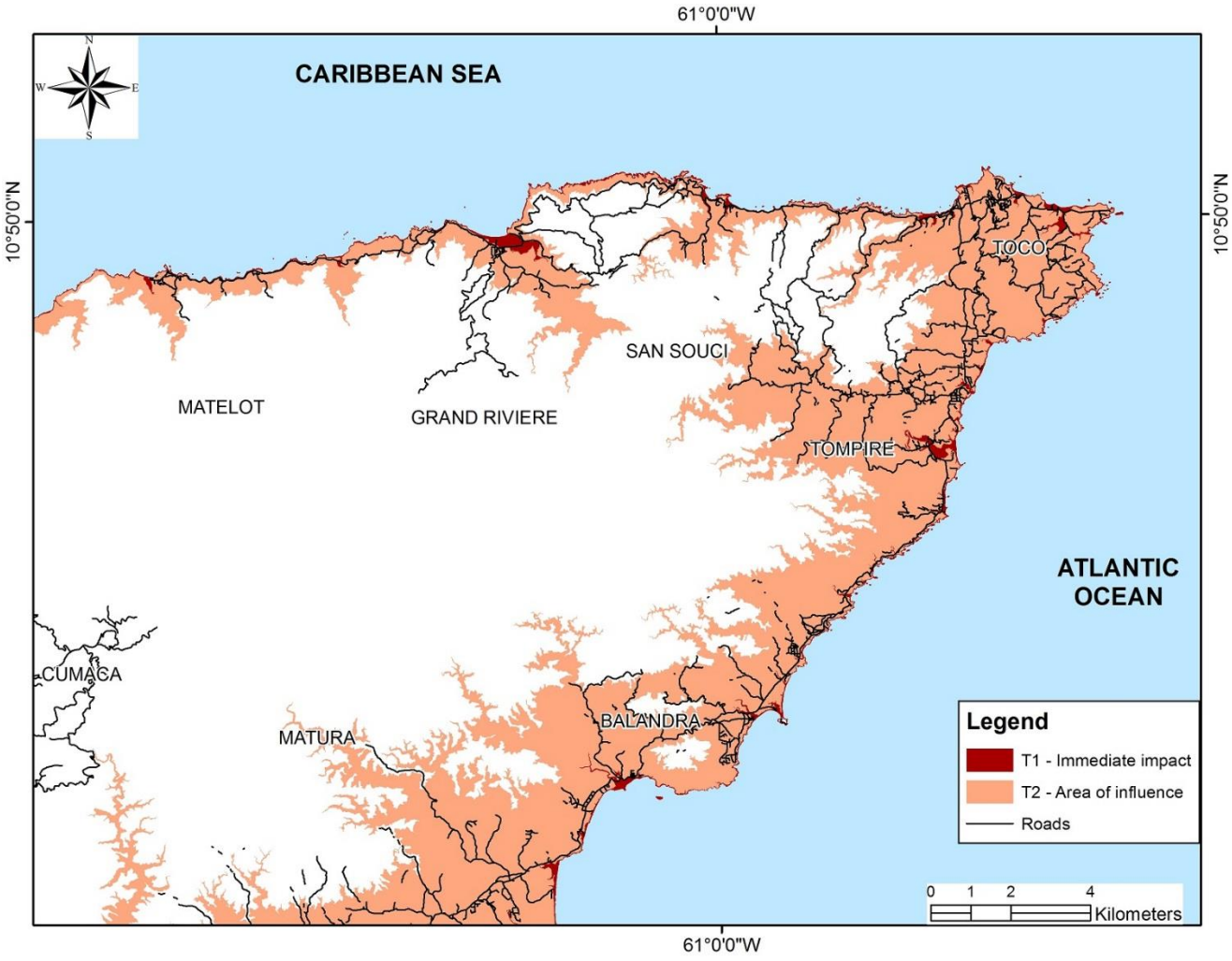
Biological Diversity
Convention on Biological Diversity (CBD), 1992
Convention on the International Trade in Endangered Species of Wild Fauna and Flora, 1978
Convention on Wetlands of International Importance (the Ramsar Convention), 1971
Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972
Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere, 1940

Marine Areas
Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, 2016
International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004
Convention for the Protection of Underwater Cultural Heritage, (Paris, 2001)
Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1996
Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 1995
Protocol of 1992 to Amend the International Convention on Civil Liability for Oil Pollution Damage of 1969
Protocol of 1992 to amend the International Convention on the Establishment of an Convention on Limitation of Liability for Maritime Claims, 1976
International Convention on Oil Pollution Preparedness, Response and Co-Operation, 1990
The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989
Convention for the Protection and Development of the Marine Environment of the Wider Caribbean (Cartagena Convention and Protocols), 1983
Protocol Concerning Specially Protected Areas and Wildlife to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region [SPAW Protocol], 1990
Protocol Concerning Co-Operation in Combating Oil Spills in the Wider Caribbean Region, 1983
Protocol concerning Pollution from Land-Based Sources and Activities to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, 1999
United Nations Convention on the Law of Sea, 1982

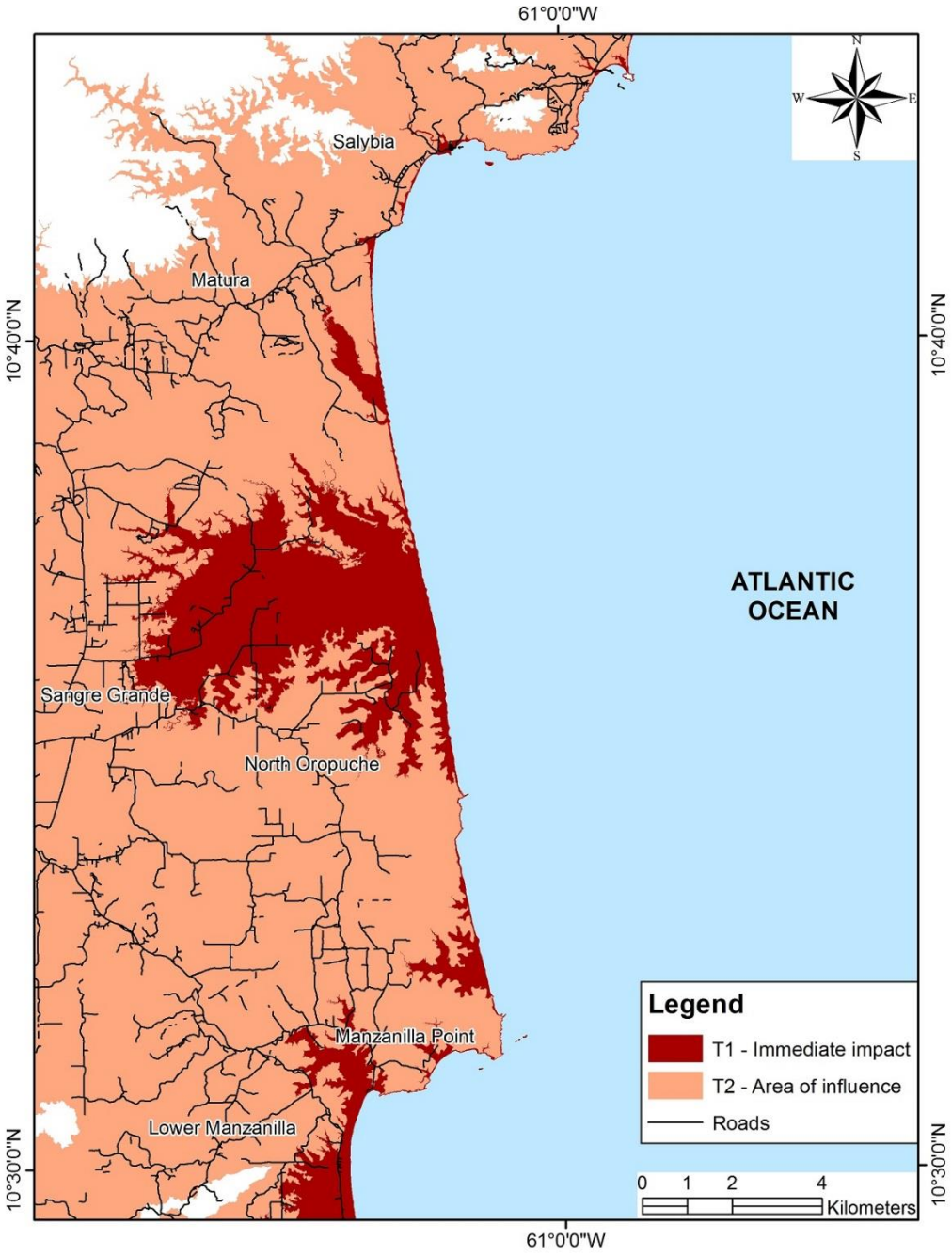
International Fund for Compensation for Oil Pollution Damage of 1971
International Convention for the Prevention of Pollution from Ships (MARPOL Convention, 1973)
International Convention For The Safety Of Life At Sea (Solas), (London, 1974)
Convention on the International Regulations for Preventing Collisions at Sea, 1972 (as Amended)
International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969
International Convention for the Conservation of Atlantic Tunas, 1969
Convention on the High Seas, 1958
Convention on the Territorial Sea and the Contiguous Zone, (Geneva, 1958)
Convention on the Continental Shelf, 1958
Convention on Fishing and Conservation of the Living Resources of the High Seas, (Geneva, 1958)

General Instruments
The Paris Agreement, 2016
The Revised Treaty of Chaguaramas, 2001
Kyoto Protocol, 1997
UN Framework Convention on Climate Change, 1992

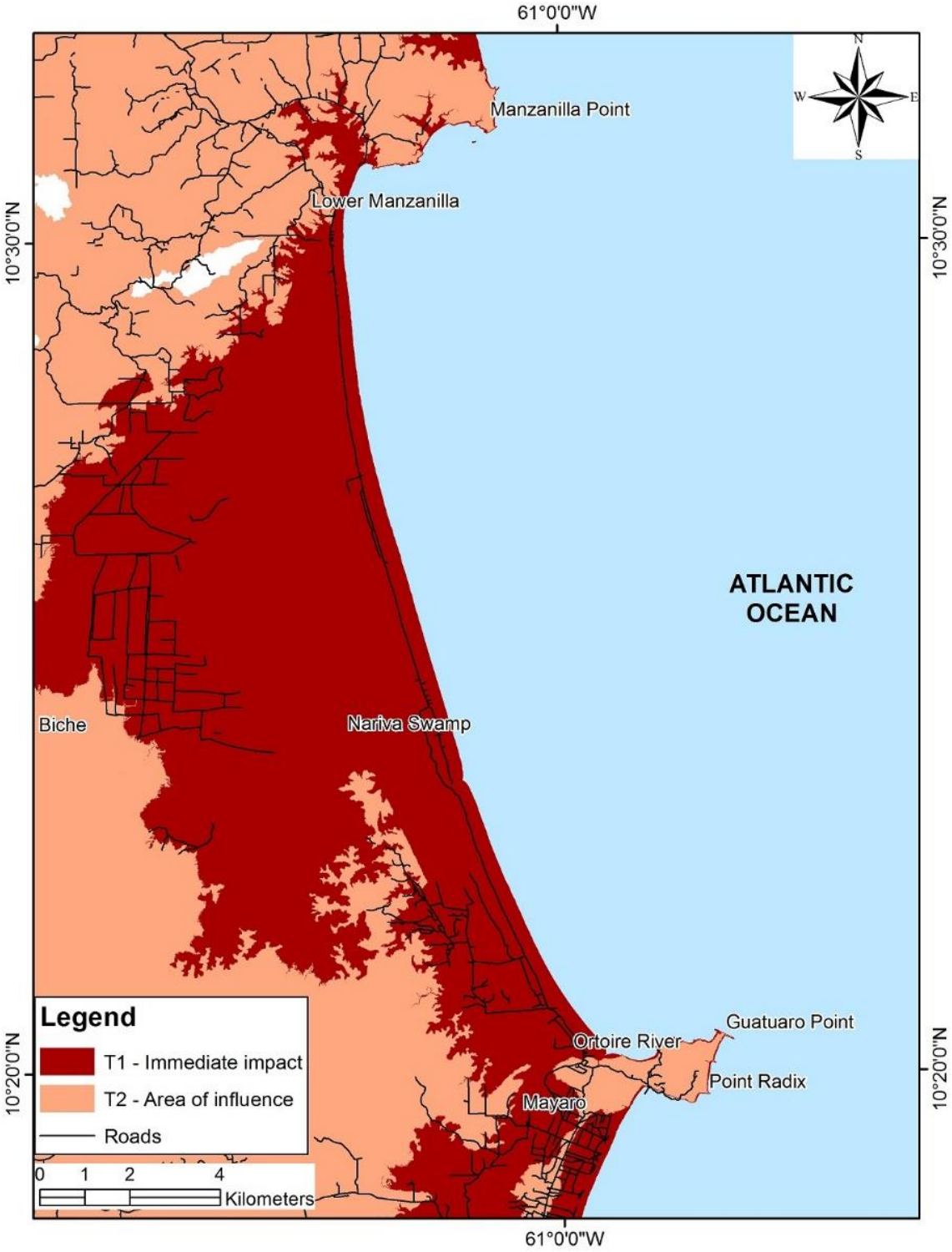
Appendix 2: Map Showing Terrestrial Boundaries of Coastal Zone in Northeast Trinidad



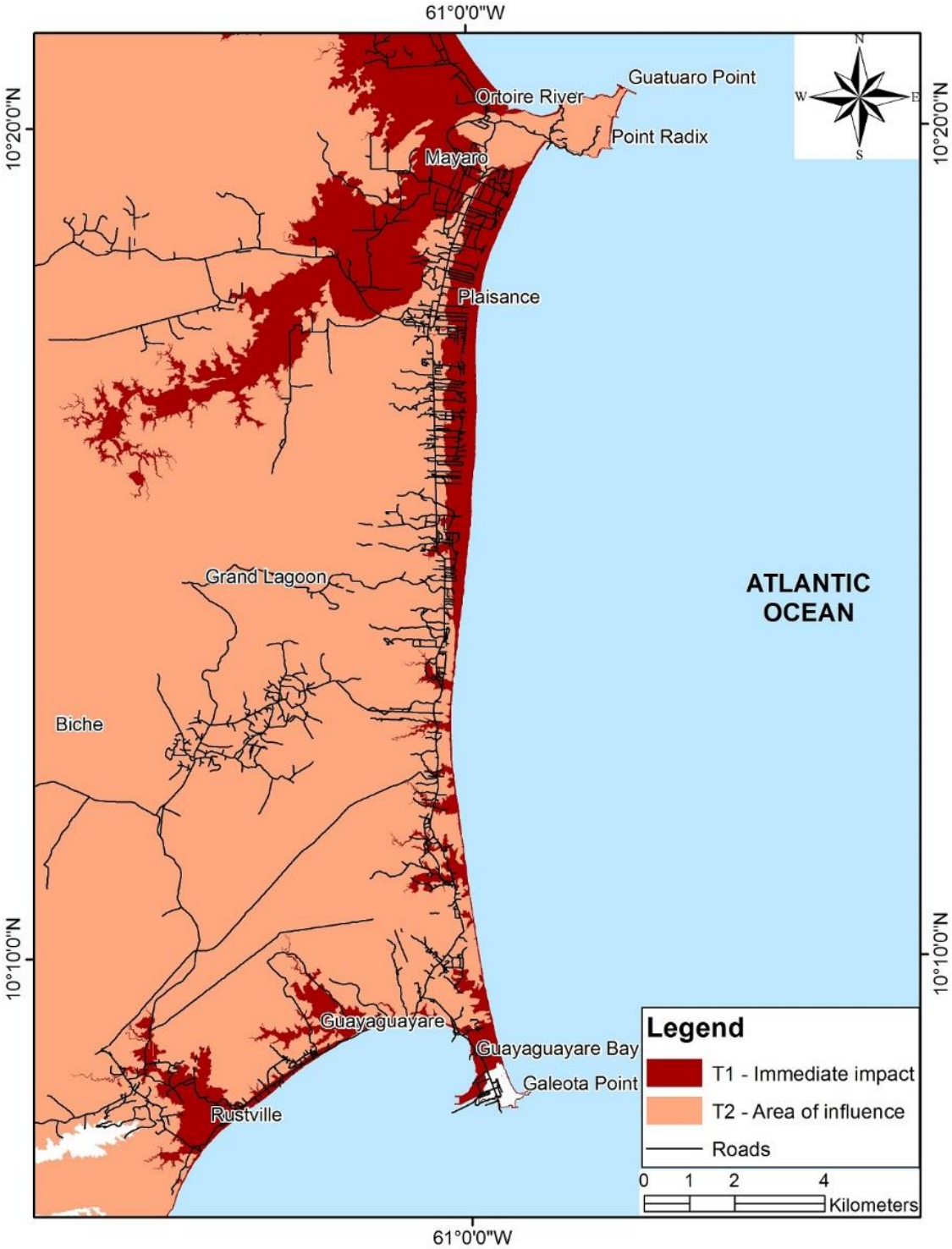
Appendix 3: Map Showing Terrestrial Boundaries of Coastal Zone along the East coast of Trinidad from Salybia to Manzanilla



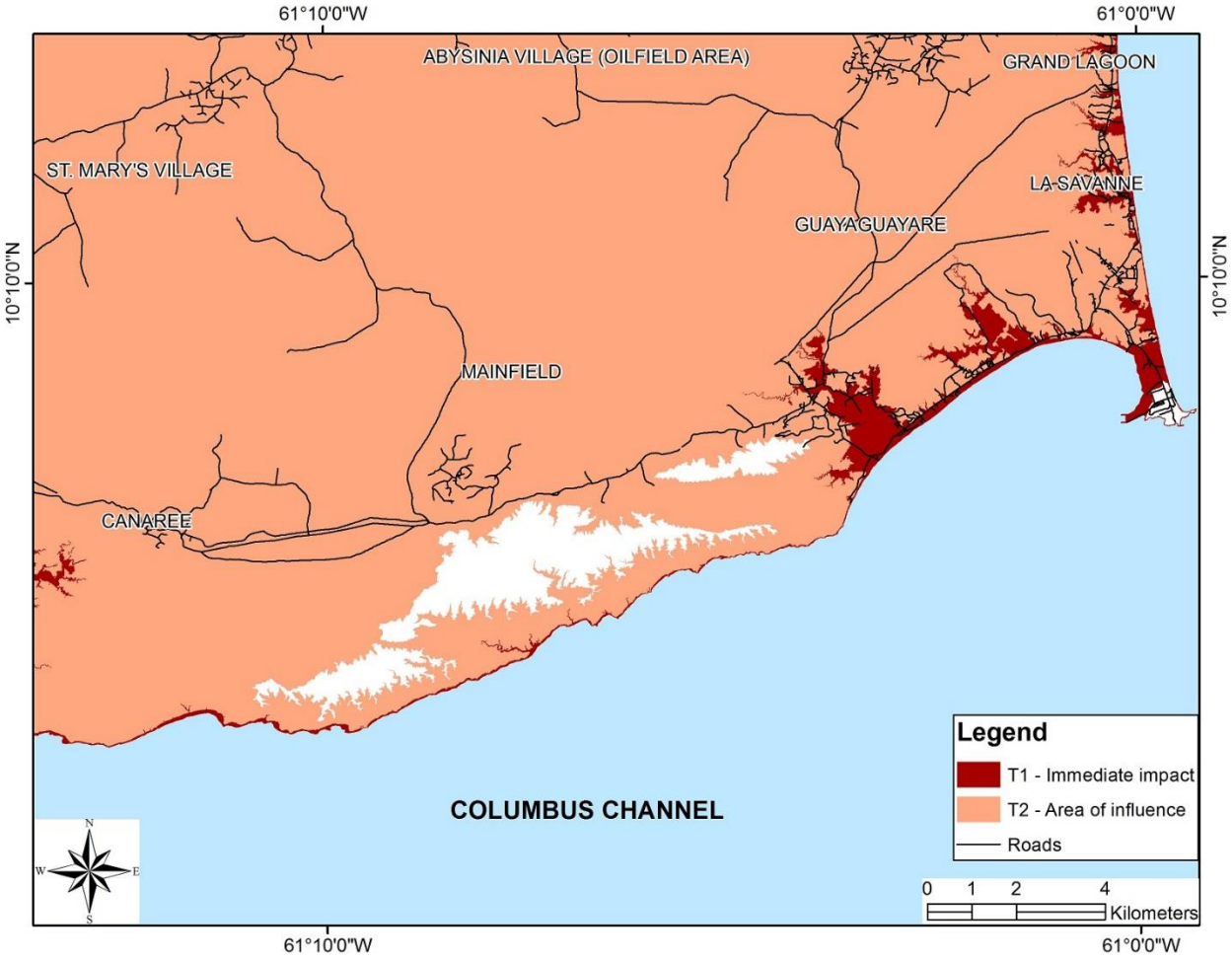
Appendix 4: Map Showing Terrestrial Boundaries of Coastal Zone along the East coast of Trinidad from Manzanilla Point to Point Radix



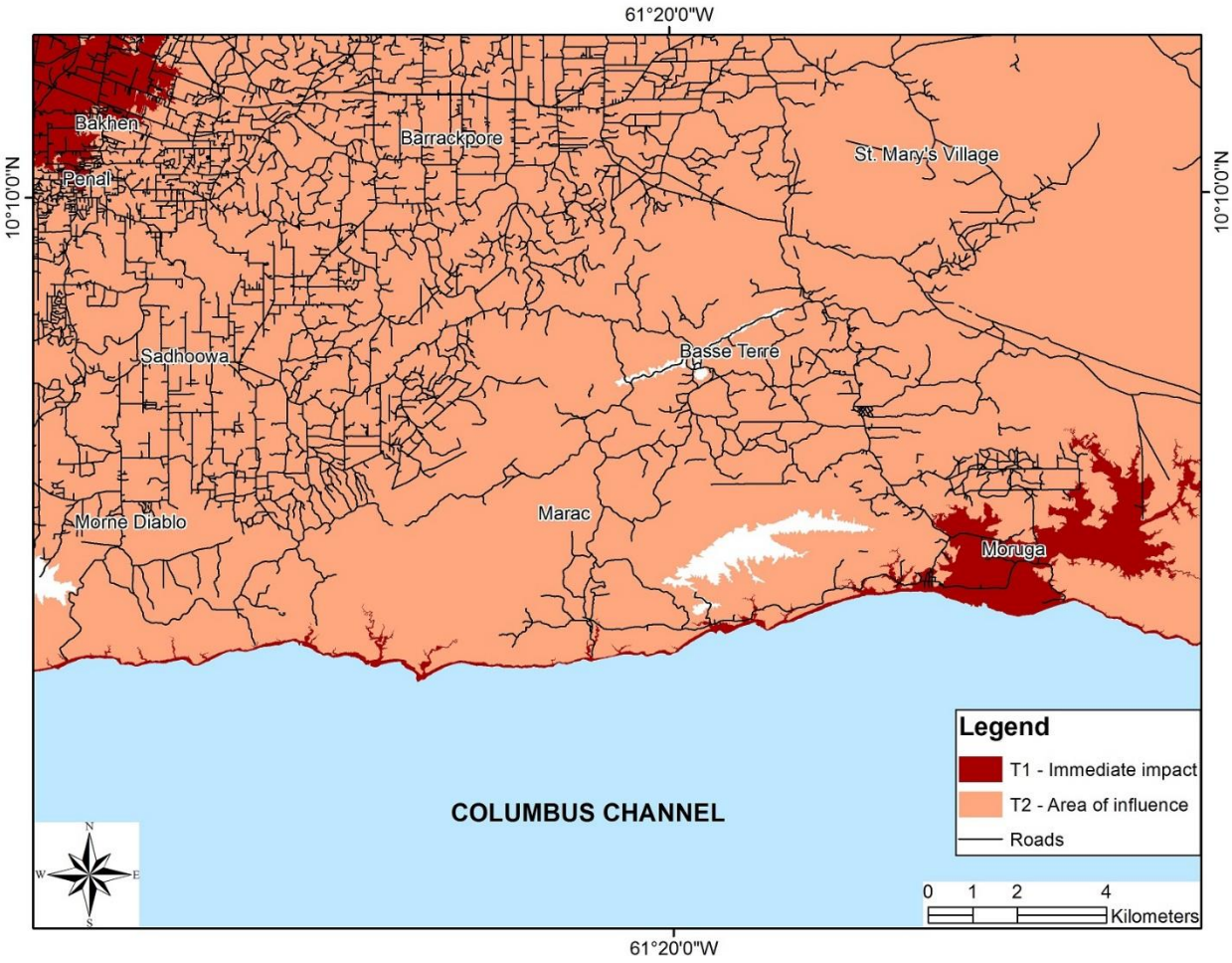
Appendix 5: Map Showing Terrestrial Boundaries of Coastal Zone along the East coast of Trinidad from Point Radix to Galeota Point



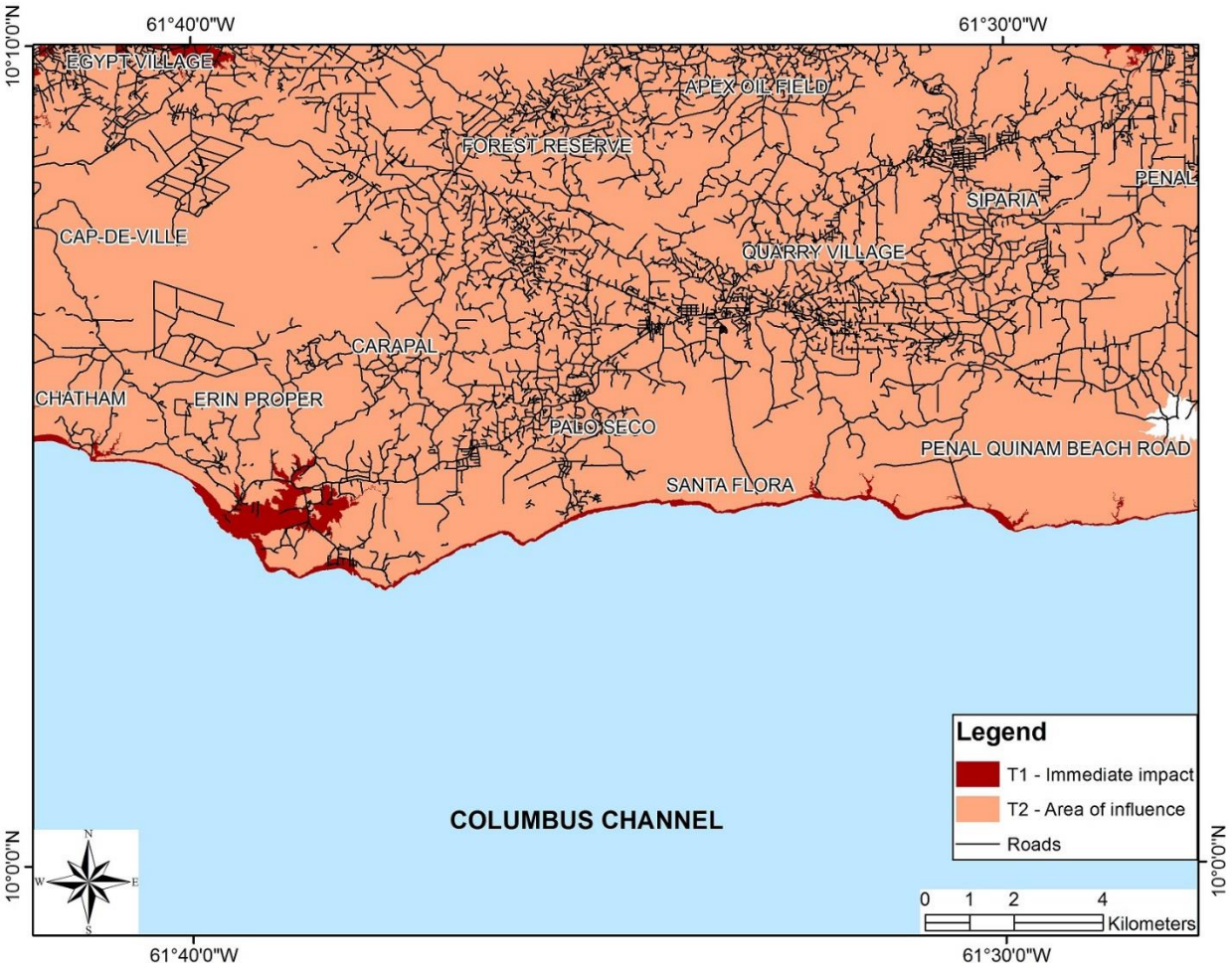
Appendix 6: Map Showing Terrestrial Boundaries of Coastal Zone in Guayaguayare Bay, Trinidad



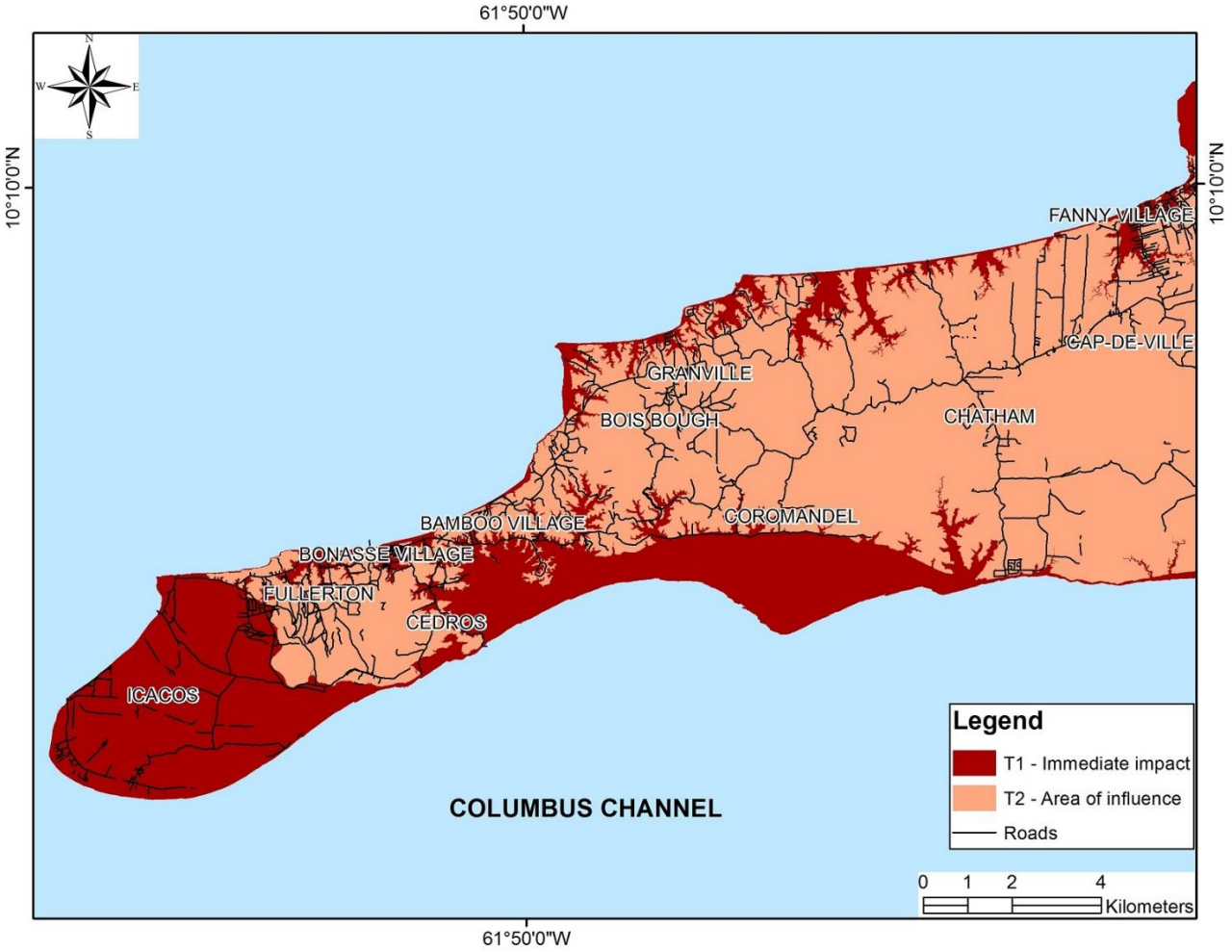
Appendix 7: Map Showing Terrestrial Boundaries of Coastal Zone in Moruga and along South coast of Trinidad



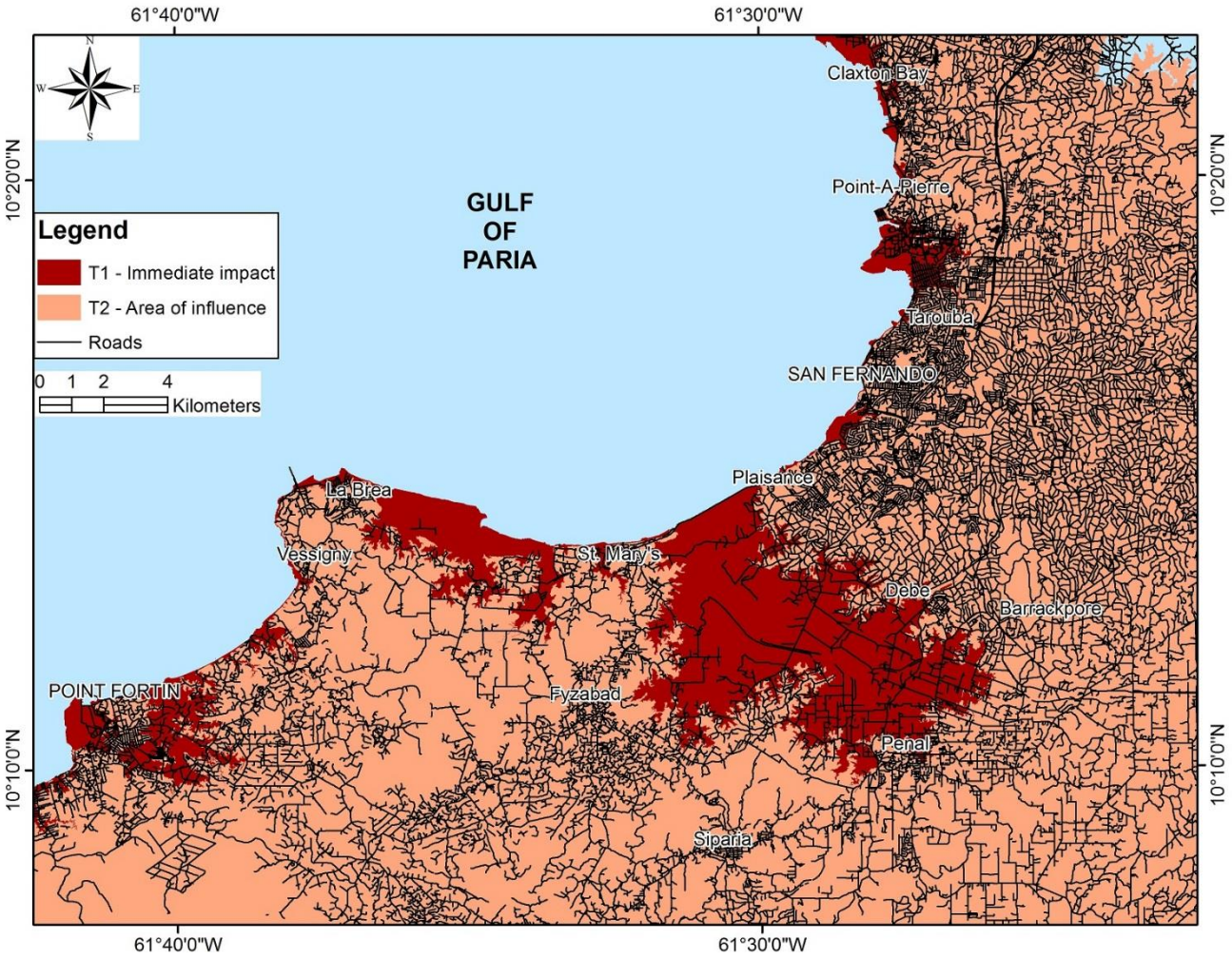
Appendix 8: Map Showing Terrestrial Boundaries of Coastal Zone and along central South coast of Trinidad



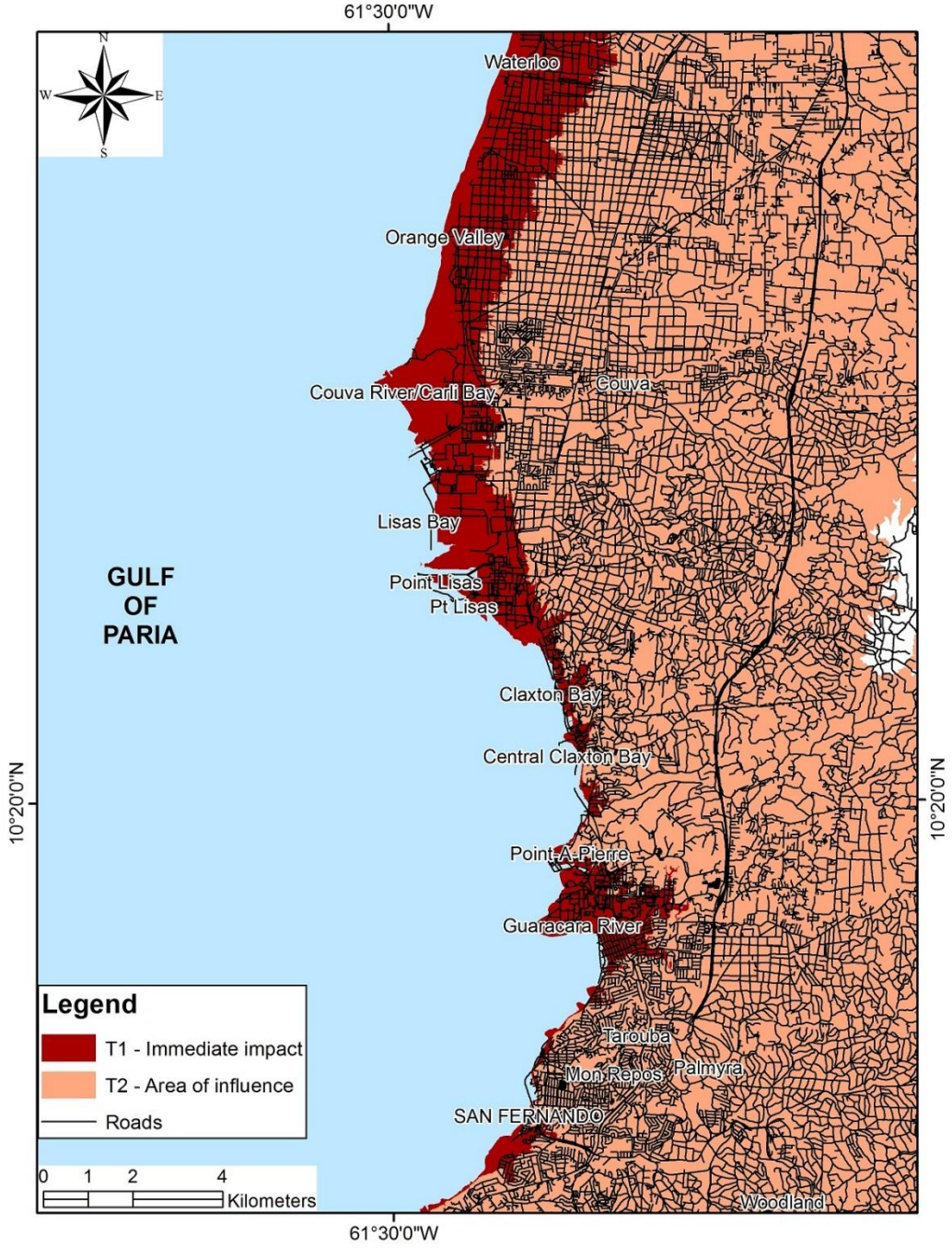
Appendix 9: Map Showing Terrestrial Boundaries of Coastal Zone along Southwest peninsula of Trinidad



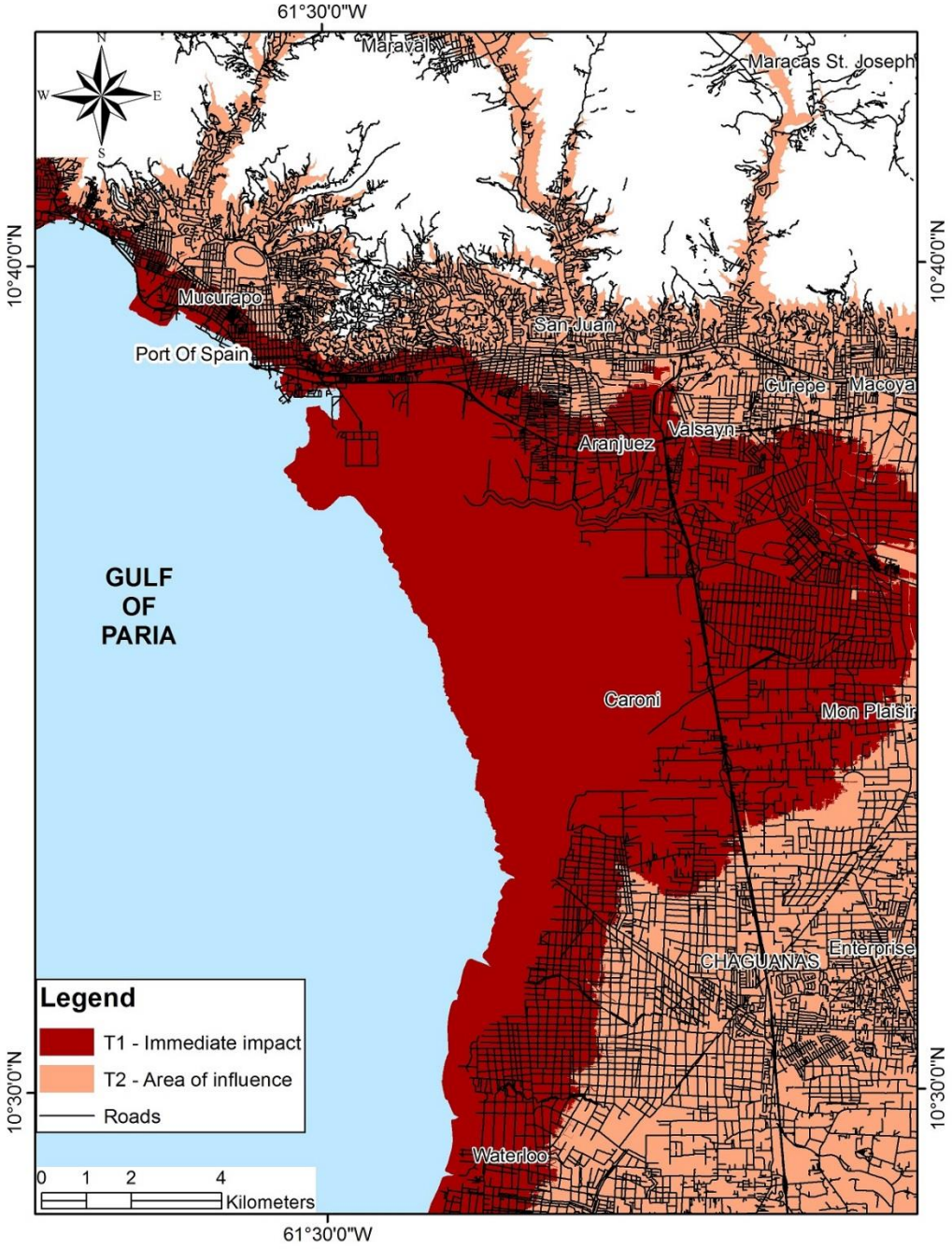
Appendix 10: Map Showing Terrestrial Boundaries of Coastal Zone along West coast of Trinidad from Claxton Bay to Point Fortin



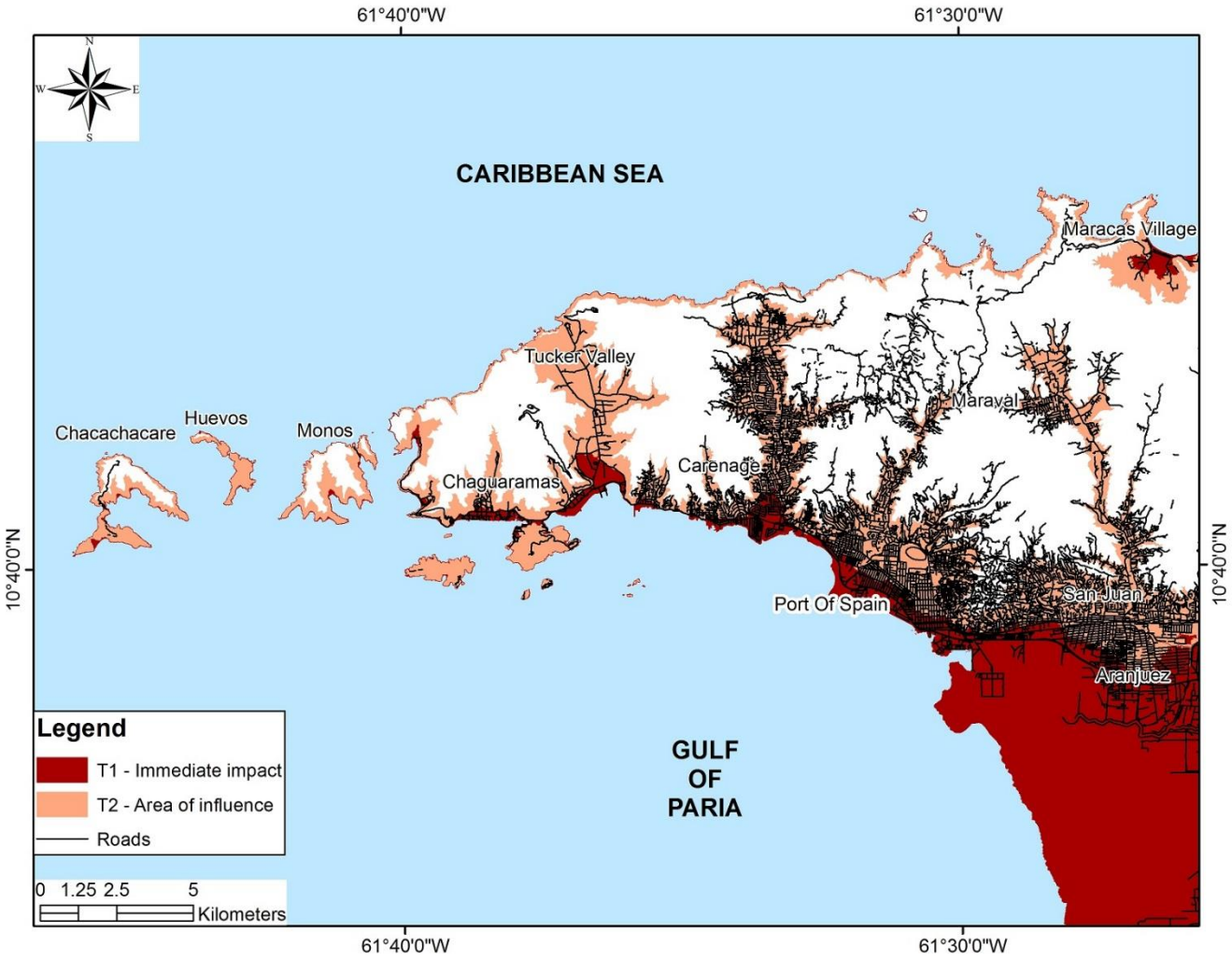
Appendix 11: Map Showing Terrestrial Boundaries of Coastal Zone along West coast of Trinidad from Waterloo to San Fernando



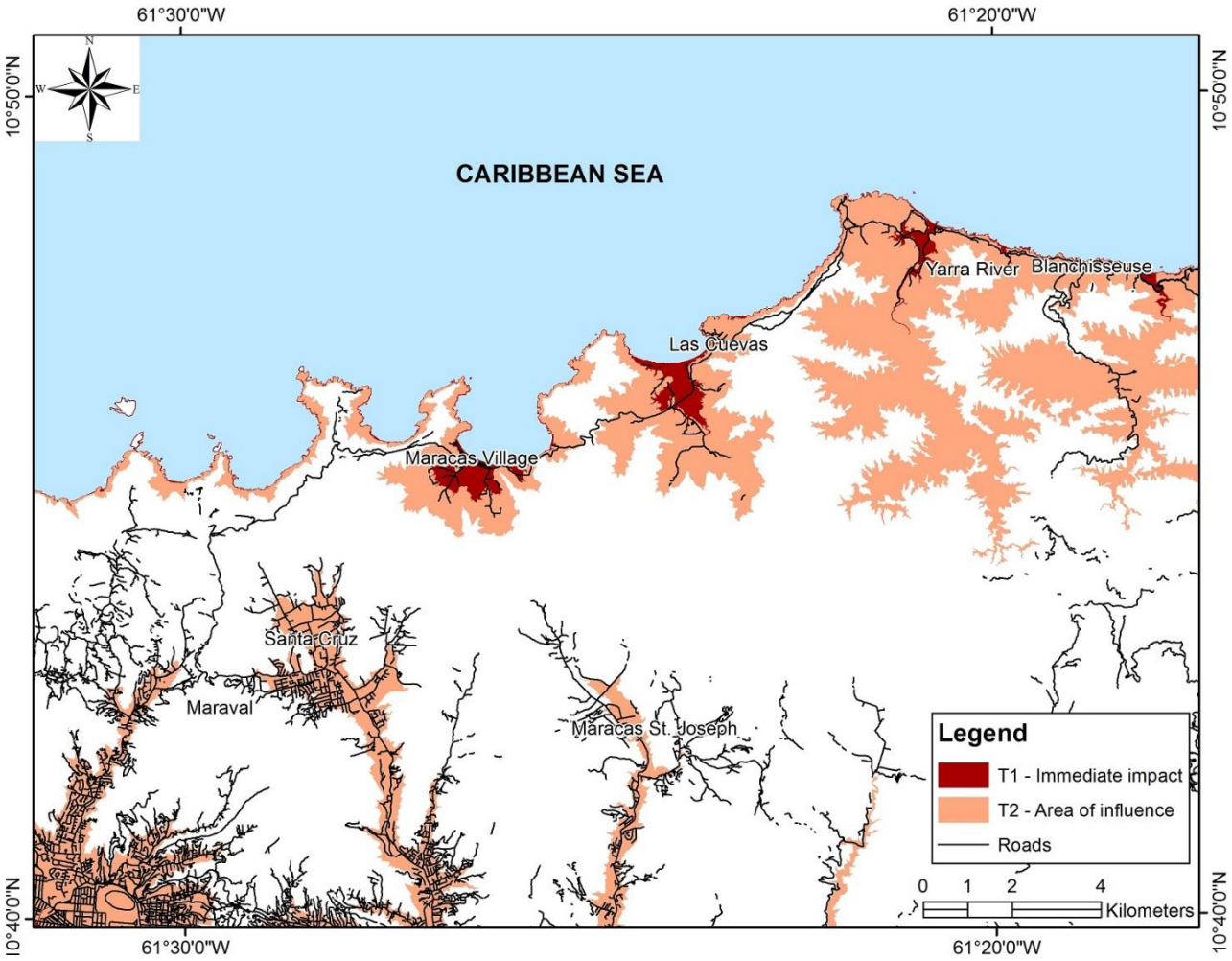
Appendix 12: Map Showing Terrestrial Boundaries of Coastal Zone along West coast of Trinidad from Mucurapo to Waterloo



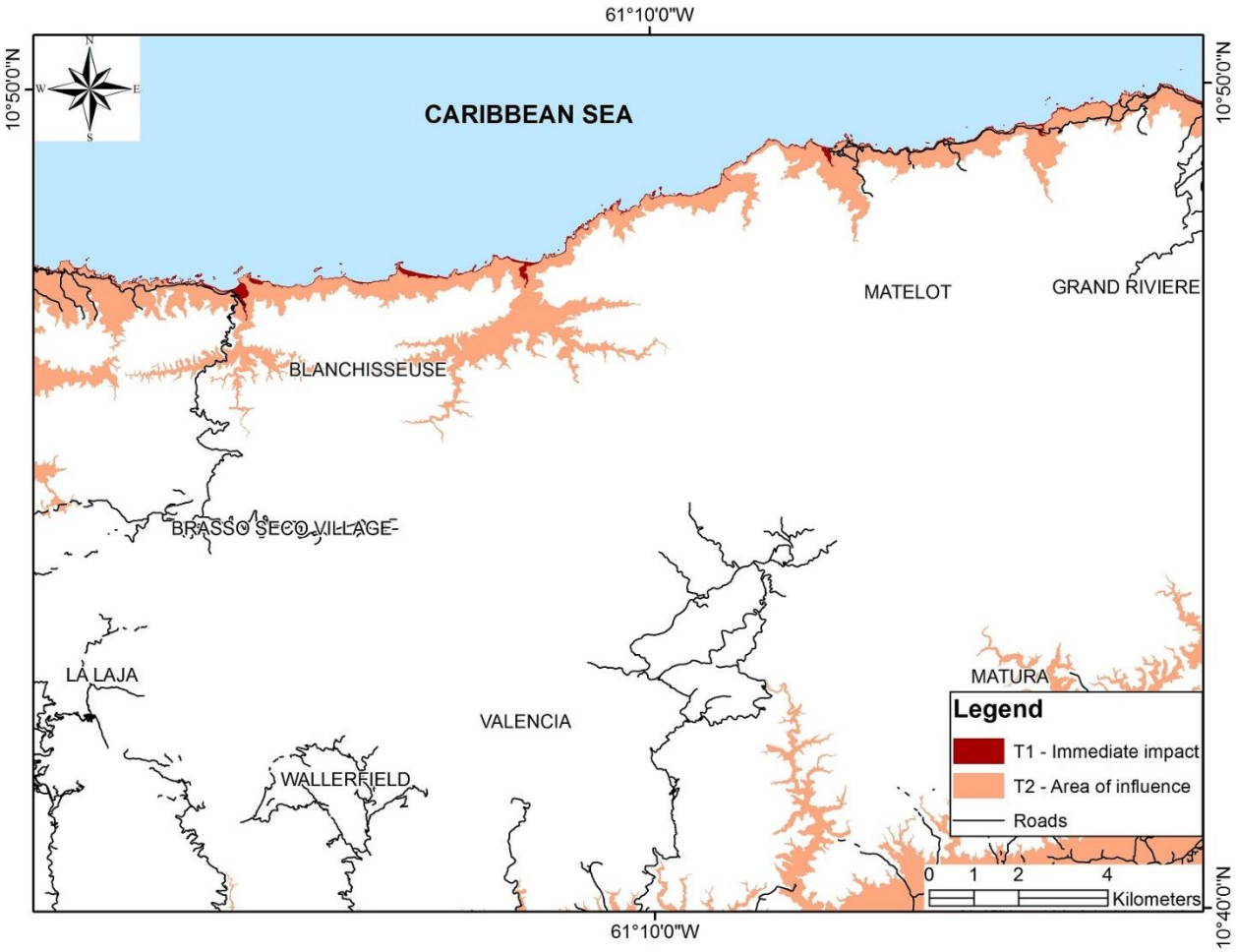
Appendix 13: Map Showing Terrestrial Boundaries of Coastal Zone along the Northwest coast of Trinidad



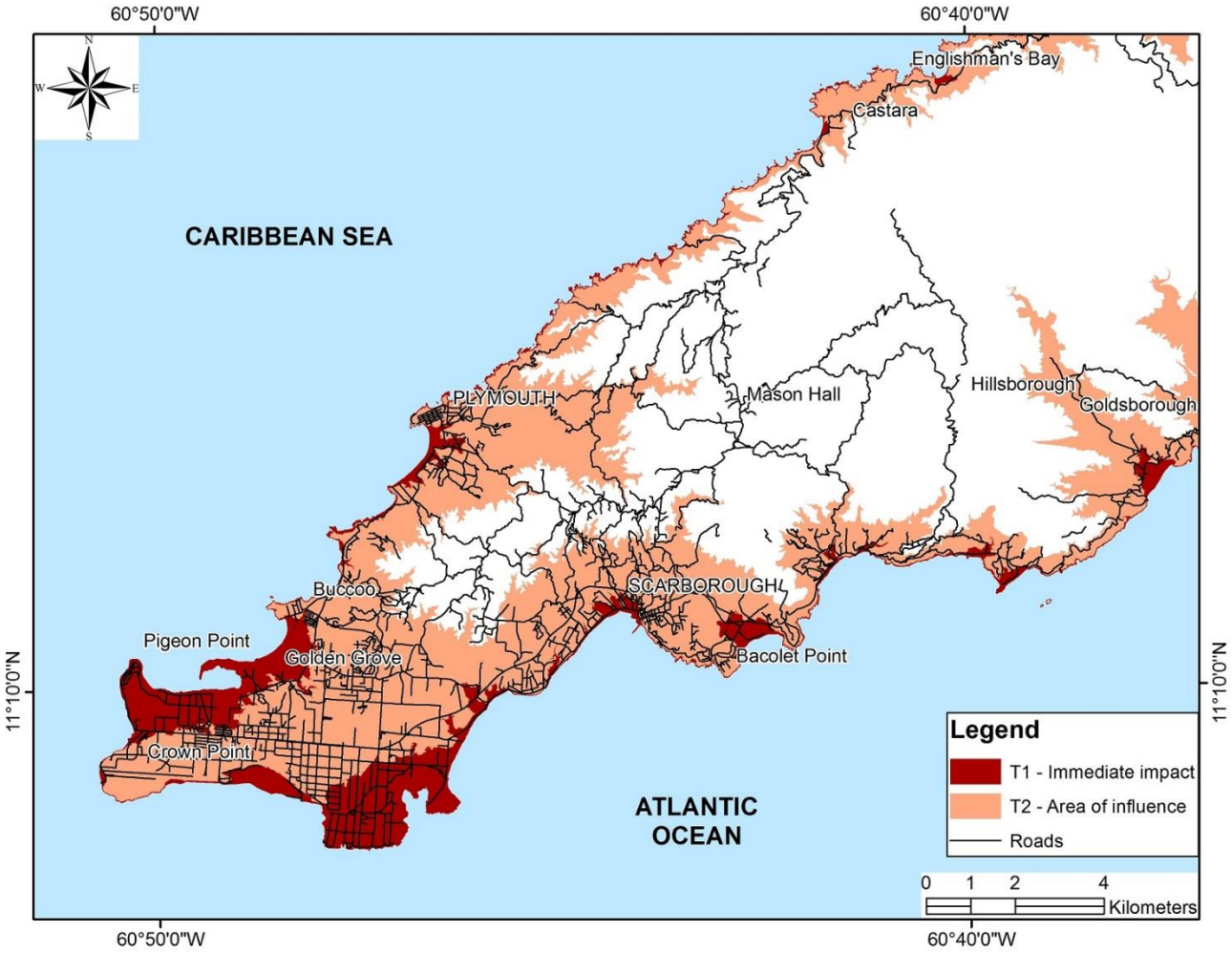
Appendix 14: Map Showing Terrestrial Boundaries of Coastal Zone along the North coast of Trinidad from Maracas to Yarra River



Appendix 15: Map Showing Terrestrial Boundaries of Coastal Zone along the North coast of Trinidad from Yarra River to Matelot



Appendix 16: Map Showing Terrestrial Boundaries of Coastal Zone in Southwest Tobago



Appendix 17: Map Showing Terrestrial Boundaries of Coastal Zone in Northeast Tobago

