Public Access to Beaches

Conflicts and Management

Edited by

MARINA SARTORE
FLAVIA M. LINS-DE-BARROS

EDITORA IVIDES

FAPERJ

EDITORA
IVIDES

PUBLIC ACCESS TO BEACHES

CONFLICTS AND MANAGEMENT

Edited by

Marina Sartore

Flavia M. Lins-de-Barros

Rio de Janeiro

2026

Editora IVIDES

1st Edition © 2026 Authors & Editora IVIDES

Editora IVIDES (Brazil) – CNPJ: 56.127.866/0001-12

Publisher: Raquel Dezidério Souto

Final Review: Raquel Dezidério Souto, Marina Sartore and Flavia M. Lins-de-Barros

Covers and Separators' Design: Renata Saules

Local of Edition: Rio de Janeiro – **ISBN**: 978-65-985676-4-4

Editora IVIDES – International Editorial Board

Raquel Dezidério Souto – Editora IVIDES (Brazil) – Editor-in-Chief

Bianca Vanesa Freddo - Universidad Nacional de la Patagonia San Juan Bosco – UNPSJB (Argentina)

Carla Juscélia O. Souza – Federal University of São João del-Rei – UFSJ (Brazil)

Daniel O. Suman – University of Miami (USA)

Heliana F. Mettig Rocha – Federal University of Bahia – UFBA (Brazil)

Juliani Brignol Walotek – Santa Catarina State University – UDESC (Brazil)

Michael K. McCall – Universidad Nacional Autónoma de México – UNAM (Mexico)

Oladokun Sulaiman Olanrewaju – Seanexus Africa | Alfred Wagener Institute (Germany)

Sabil Mandala – Pedagogical University of Maputo (Mozambique)

Séverin Ménard – Les Libres Géographes – Llg (France)

Sheina Koffler – Federal University of ABC – UFABC (Brazil)

Dados Internacionais de Catalogação na Publicação (CIP)
(Câmara Brasileira do Livro, SP, Brasil)

Public access to beaches [livro eletrônico] : conflicts and management / organização Marina Sartore, Flavia M. Lins-de-Barros. -- Rio de Janeiro : Editora IVIDES, 2026.
PDF

Vários autores.
ISBN 978-65-985676-4-4

1. Costa - Proteção 2. Litoral - Proteção 3. Meio ambiente - Conservação e Proteção 4. Políticas públicas - Brasil 5. Praias I. Sartore, Marina. II. Lins-de-Barros, Flavia M.

26-333878.0 CDD-333.9516

Índices para catálogo sistemático:

1. Meio ambiente : Conservação e proteção 333.9516

Eliane de Freitas Leite - Bibliotecária - CRB 8/8415

How to cite: SARTORE, Marina; LINS-DE-BARROS, Flavia Moraes (ed.). Public Access to Beaches: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. 153 p. ISBN: 978-65-985676-4-4. DOI:10.5281/zenodo.19058568.

eBook License: Creative Commons Attribution Non Commercial No Derivatives 4.0 International (CC BY-NC-ND 4.0). Text of the legal code. Permission to download and share the ebook is granted, provided that the author is credited, but the following are prohibited: altering its content (in any way) and using it for commercial purposes.

Legal Notice: Violation of copyright (Brazilian Federal Law n° 9,610/1998) is a crime, as established by Article 184 of the Penal Code. The texts signed in this ebook, both in terms of language and content, are the sole responsibility of the authors and do not necessarily express the views of the Editora IVIDES. Any communication with the publisher can be made by email: ivides@ivides.org.

PUBLIC ACCESS TO BEACHES
CONFLICTS AND MANAGEMENT

Edited by

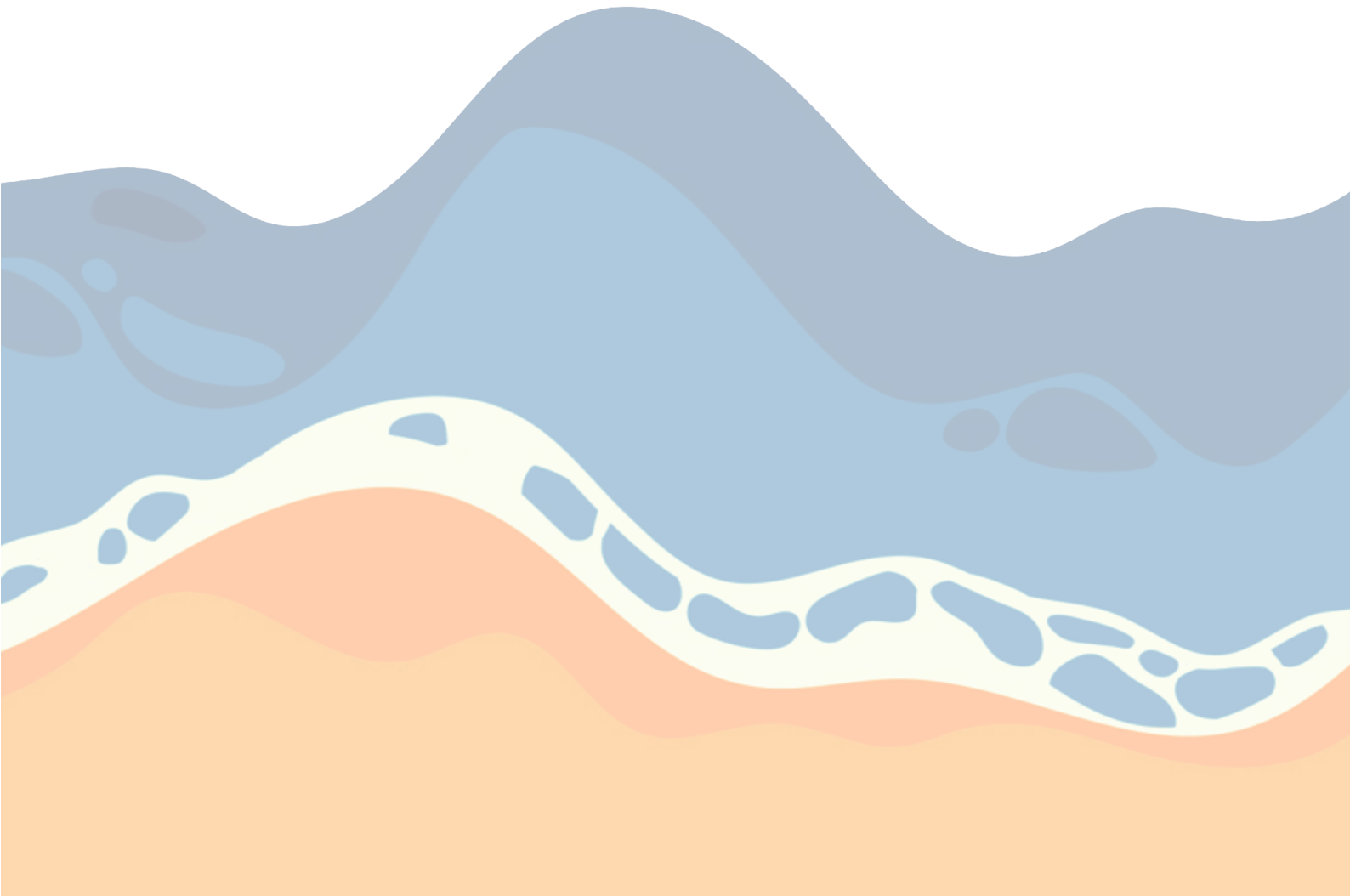
Marina Sartore & Flavia M. Lins-de-Barros

Scientific Committee

Cae Rodrigues – UFS (Brazil)
Daniel Telles – UFPR (Brazil)
Flavia M. Lins-de-Barros – UFRJ (Brazil)
Grégory Salle – CNRS (France)
Isabelle Bruno – Université de Lille and IUF (France)
Josefa Varela Guerra – UERJ (Brazil)
Leticia Parente-Ribeiro – UFRJ (Brazil)
Marcos Paulo Ferreira de Góis – UFRJ (Brazil)
Marina Sartore – UFS (Brazil)
Varlei Rui Ertel – UFSC (Brazil)

Authors

Ana Consuelo Ferreira Fontenele – ADEMA (Brazil)
Cae Rodrigues – UFS (Brazil)
Charles Lester – UCSB (USA)
Elena Eger – MRCA (USA)
Flavia M. Lins-de-Barros – UFRJ (Brazil)
Grégory Salle – CNRS (France)
Isabelle Bruno – *Université de Lille* and IUF (France)
José Ricardo Britto S. Pereira Junior – AGU (Brazil)
José Wellington Carvalho Vilar – IFS (Brazil)
Leticia Parente-Ribeiro – UFRJ (Brazil)
Marc Beyler – BEACON (USA)
Marcos Paulo Ferreira de Góis – UFRJ (Brazil)
Mariano D. Perelman – UBA and CONICET (Argentina)
Marina Sartore – UFS (Brazil)
Marinez Scherer – UFSC (Brazil)
Mario Sandoval – MRCA (USA)
Raquel Dezidério Souto – IVIDES.org (Brazil)
Setha Low – CUNY (USA)
Simone de Araujo Pereira – UFS (Brazil)
Varlei Rui Ertel – UFSC (Brazil)



CONTENTS

Preface

Marinez Scherer ix

Introduction

Marina Sartore & Flavia M. Lins-de-Barros 1

Part 1 – Beach Access: Politics and Society

1. **Beach Politics: Social, Racial and Environmental Injustice on the Shoreline**

   Setha Low 7

2. **Beach Access: Lessons from the French Case**

   Isabelle Bruno & Grégory Salle 17

3. **Beaches, Morality, and Market Mechanisms: Symbolic Struggles over Public Access**

   Marina Sartore & Cae Rodrigues 29

4. **Layers of the Urban Spectacle: Visibility and Public Access in Copacabana's New Year Eve**

   Leticia Parente-Ribeiro & Marcos Paulo Ferreira de Góis 37

5. **The Public Meaning of the Seafront: Urbanization, Littoral Gentrification, and Cultural Practices at Atalaia Waterfront**

   Simone de Araujo Pereira 47

6. **Coastal Transformation into a Residential Area: A Sociogenetic Perspective of the Beach of Balneário Camboriú – Santa Catarina**

   Varlei Rui Ertel 53

7. **Shaping Shores: The Continuous Formation of Beaches on the Buenos Aires Coast (Argentina)**

   Mariano D. Perelman 61

Part 2 – Beach Access: Management and Challenges

8. Coastal Zone Public Domain in Brazil: Study Cases from Rio de Janeiro State

Flavia M. Lins-de-Barros 71

9. The Regularization of Beach Bars in Aracaju: 15 Years of a Successful Experience

José Ricardo Britto Seixas Pereira Junior 79

10. State Environmental Administration (ADEMA) and the Challenge of Ensuring Access to Beaches

Ana Consuelo F. Fontenele 85

11. Beacon's Science Research Program: Increasing the Alignment of Actionable Science and Policy Through Co-Production

Marc Beyeler 93

Part 3 – Beach Access: Methodologies and Tools

12. Collaborative Mapping of Beach Access with OpenStreetMap

Raquel Dezidério Souto 103

13. The Next 50 years of California Beach Access: End of an Era or a New Beginning?

Charles Lester 113

14. Beach Management in Sergipe: A Trajectory of Geographic Research

José Wellington Carvalho Vilar 123

15. Who Uses the Beach? A Case Study of Coastal Access in Southern California

Marc Beyeler, Elena Eger & Mario Sandoval 131

Event and eBook Information 139

Scientific Committee and Authors' Biographies 141

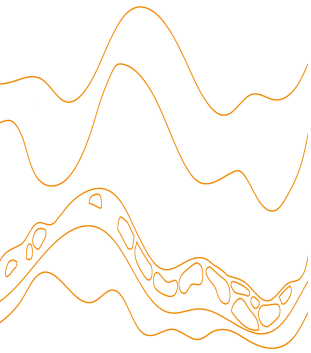
Index of Subjects 153

PREFACE

Marinez Scherer[1]

Beaches occupy a singular place in the social, ecological, and political imagination of society. They are at once dynamic ecological systems, cultural landscapes, spaces of leisure and work, and arenas where fundamental questions of rights, belonging, and power are played out. Across continents and legal traditions, beaches have historically been understood not merely as public spaces, but as part of the common heritage of humankind. They constitute shared environments whose value transcends ownership, borders, and generations.

To speak of beaches as common heritage is to recognize that they are not commodities, nor residual land awaiting development, but collective assets shaped by natural processes and social practices over long temporal scales. Their benefits, such as ecological regulation, cultural meaning, social encounter, recreation, subsistence, and identity, are indivisible and non-exclusive. No single group, generation, or economic sector can legitimately claim them without undermining the rights of others, including those yet to come.



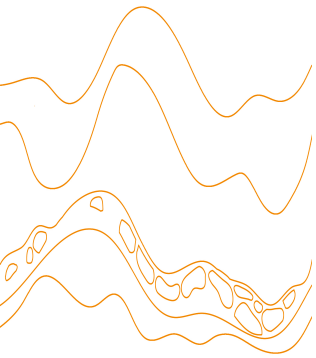
"Public Access to Beaches: Conflicts and Management" brings together an exceptional set of interdisciplinary contributions that reveal how this principle is increasingly challenged. Far from being neutral or naturally "open" spaces, beaches are actively produced, regulated, contested, and, in many cases, enclosed. Through empirical cases spanning the Americas, Europe, and Australia, the chapters show how

1 Associate Professor at the Federal University of Santa Catarina – UFSC (Brazil). Special Envoy for the Ocean at the 2025 United Nations Climate Change Conference (COP30).

public access to beaches is reshaped by governance frameworks, market forces, environmental policies, moral discourses, racial dynamics, technological mediation, and climate change responses. What emerges is a global picture of beaches as frontline territories where struggles over the commons, democracy, and environmental justice are made visible.

A central message running through this volume is unequivocal: beaches belong to humanity. Their public character is not a concession granted by states, nor a privilege conditioned by consumption or behavior. It is a fundamental collective right rooted in the idea that certain spaces must remain open and accessible because they are essential to social life, ecological integrity, and democratic coexistence. When access to beaches is restricted or subtly discouraged, what is at stake is not only leisure or tourism, but the erosion of the commons and the fragmentation of collective belonging.

The chapters demonstrate that the enclosure of beaches rarely occurs through explicit privatization alone. Instead, it advances through more diffuse and normalized mechanisms such as coastal development framed as progress; environmental protection selectively mobilized to justify exclusion; climate adaptation strategies that privilege private property over collective space; moral classifications that define legitimate and illegitimate users; and administrative or technological practices that depoliticize conflict while producing new barriers to access. In this sense, beaches operate as contact zones where global processes such as neoliberalization, racialization, securitization, and climate governance materialize at the shoreline.

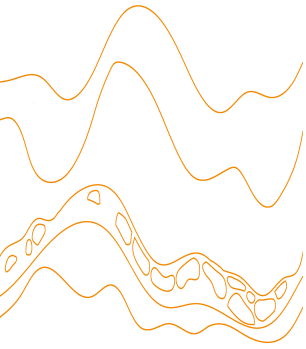


Importantly, the volume also shows that recognizing beaches as common heritage is not an abstract moral claim, but a practical governance challenge. Several chapters demonstrate how public access can be documented, mapped, protected, and politically governed. Data on

beach use reveal the continued centrality of beaches for diverse and historically marginalized populations, challenging exclusionary narratives of the coast. Collaborative mapping initiatives transform access itself into a visible and contestable object, reinforcing transparency and public accountability.

Other contributions illuminate the crucial role of public administration and environmental licensing in mediating the tension between private interests and collective rights. They show that the defense of the common heritage of beaches depends not only on constitutional principles or international norms, but on everyday regulatory decisions, institutional capacity, and political commitment. Where planning fails, deregulation advances, or enforcement weakens, the commons erodes, often irreversibly.

The ebook also highlights that safeguarding beaches as common heritage does not require the exclusion of human activity. On the contrary, it demands democratic regulation capable of reconciling environmental protection, public use, and livelihoods. Long-term experiences with the regulation of beach-based economic activities demonstrate that coexistence is possible when the primacy of the public domain is clearly affirmed and continuously enforced.



In the context of accelerating climate change, rising sea levels, and coastal squeeze, the notion of beaches as common heritage acquires renewed urgency. Adaptation strategies that sacrifice public access in the name of property protection or economic efficiency risk converting climate responses into new forms of dispossession. The disappearance or narrowing of beaches is not only an environmental loss, but a social and ethical failure that compromises intergenerational justice.

By bringing together legal analysis, ethnography, historical inquiry, geographic information science, public administration perspectives, and critical social theory, “Public Access to Beaches: Conflicts and Management” reframe beaches as what they truly are: shared socio-ecological systems whose stewardship is a collective responsibility. The volume invites readers to recognize that defending public access to beaches is inseparable from defending the commons, democracy, and the right of present and future generations to inhabit, enjoy, and care for the Earth’s coastal margins.

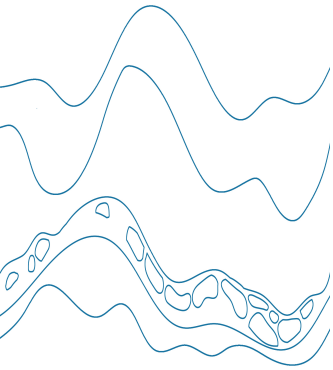
Ultimately, this book affirms a simple but profound principle: beaches are part of humanity’s common heritage, and their protection as open, accessible, and shared spaces is not optional. It is a moral, political, and intergenerational obligation.

SCHERER, Marinez. Preface. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. p. 9-12. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19562495.

INTRODUCTION

In general, beaches are widely recognized as public spaces with free access. Most public debates about beach access focus on beaches as vulnerable ecosystems, threatened by coastal erosion and sea level rise. The solutions most often proposed to address these issues involve artificial beach nourishment, through the addition of sand, and the construction of protective structures to slow down the advance of the sea.

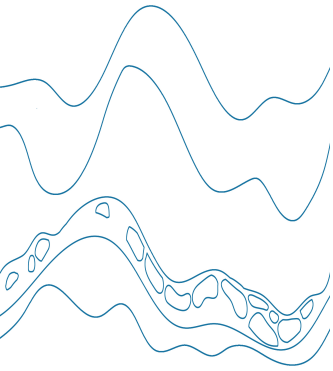
However, there is another issue related to beach access that receives far less public attention. It concerns the preservation of beaches as spaces that are truly free and open to everyone. In Brazil, in May and June 2024, social media and mainstream Brazilian news outlets echoed a movement with no clear leadership or formal agenda, but united by a single slogan: “No to the Privatization of Beaches”. Although the Brazilian Constitutional Amendment Proposal nº 03/2022 is not about privatizing beaches, this was how it was widely interpreted, revealing how deeply the idea of free and public beach access is rooted in the Brazilian social imagination. While this introduction was being written, in January 2026, a conflict between tourists and beach bar owners over fees charged for the use of chairs and umbrellas at the popular beach of Porto de Galinhas, Brazil, gained wide attention in both social media and the press.



From time to time, in different parts of the world, organized social movements, localized protests, or even sporadic conflicts emerge around disputes over free access to the coast. In California, United States, for instance, beachfront homeowners have been installing signs to prohibit or discourage public access to beaches. Across Europe, conflicts over the occupation of sandy areas by beach clubs have similarly triggered mobilizations in defense of public coastal access, including the “Towel Revolt” in Greece and the “*Mare Libero”* (Free Sea) movement in Italy.

Beaches are highly desirable spaces, whether as extensions of private property, as in the case of beachfront houses that block access with gates and fences, or as sites of commercial activity, such as those used by street vendors, surf instructors, or beach clubs seeking to profit from goods and services offered on the sand. Beaches are also valued as financial assets, since access to, or even a view of, the sea significantly increases real estate and rental prices. These are just a few examples of the private, commercial, and financial appropriation of beaches.

It was out of the shared concerns of researchers from Brazil, France, and the United States working on public beach access and coastal squeeze issues that the multidisciplinary Beach Access Network (BAN) was formed. In 2024, the network received funding through the Emerging Research Networks call of the *Fondation Maison des Sciences de L'Homme* (FMSH, France), with the project "The 'lure of the seaside' under ecological pressure: beach access between environmental justice and coastal protection". This project led to the creation of the blog "*Des lignes sur le sable – les plages sous le regard des sciences sociales*" (Lines in the sand: beaches through the lens of the social sciences)[1]. It also marked the beginning of a cycle of three annual meetings involving network members and invited guests. The first event, the I BAN Workshop[2], took place in Ventura, California, in September 2024, bringing together researchers and specialists working on beach access issues.



The second event, the II BAN Workshop, was held in Brazil, in two cities: Rio de Janeiro, at the *Casa da Ciência da UFRJ* (House of Science of UFRJ) (August 18th to 20th, 2025), and Aracaju, at the CajuHub (August 22nd and 23rd, 2025)[3]. This ebook brings together chapters that summarize presentations delivered during the II BAN Workshop. The third network

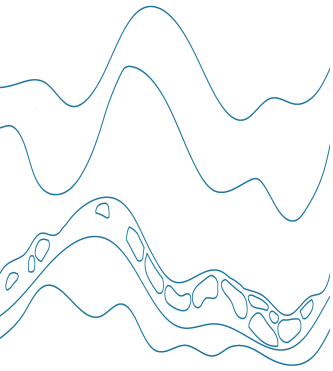
1 Available at https://plages.hypotheses.org/.

2 Available at https://plages.hypotheses.org/3104.

3 The full event program (both cities) is available at https://plages.hypotheses.org/4486. The videos from the sessions held at the Rio de Janeiro event are available at http://youtube.com/playlist?list=PLIlm6oAkYPhx8C7UfLYYxWuwI36CuoIyZ&si=9GT6w768V6f240si.

meeting is scheduled to take place in France in May, 2026. In addition to the II BAN Workshop, the BAN published, in December 2025, the special issue “Coastal Squeeze: Beaches under Socio-Economic and Ecological Pressure”[4], with open access, in the *Revista TOMO*, an academic journal published by the Graduate Program of Sociology from the Federal University of Sergipe.

The II BAN Workshop followed the same format as the 2024 meeting in California. In Rio de Janeiro, the first day began with morning sessions presenting data on coastal vulnerability and demographic growth in Brazil, with a focus on local realities. In the afternoon, international researchers presented studies on California, Argentina, Central America, and the French Mediterranean. On the second day, network members took part in technical field visits, allowing them to observe firsthand some of the conflicts and challenges discussed on the previous day. The third day featured a session dedicated to methodologies and coastal management tools used to monitor beach vulnerability and to safeguard free and public access. The event concluded with a keynote lecture by researcher Setha Low, who presented case studies related to public beach access published as chapters in the book “Beach Politics”, edited by her.



In Aracaju, the event lasted two days. On the first day, morning sessions focused on local realities, while the afternoon was dedicated to international case studies. At the end of the first day, a “Walking poster session”[5] was held, during which undergraduate, master’s, and doctoral students presented their ongoing research. On the second day, the network carried out a technical field visit, allowing participants to engage directly with the cases discussed on the first day.

4 The special issue is available at https://periodicos.ufs.br/tomo/issue/view/1328

5 Available at https://plages.hypotheses.org/6966

This ebook features short chapters that synthesize part of the presentations delivered during the II BAN Workshop. The chapters are organized into three parts. The first, titled “Beach Access: Politics and Society”, brings together contributions that discuss processes of human appropriation of beaches, with a focus on moral and power disputes and their relationship with the material aspects of beach spaces. The second part, “Beach Access: Management and Challenges”, presents chapters that explore experiences and practices in coastal management. Finally, the part “Beach Access: Methodologies and Tools” includes chapters dedicated to ways of addressing, measuring, and representing coastal vulnerability associated with human occupation.

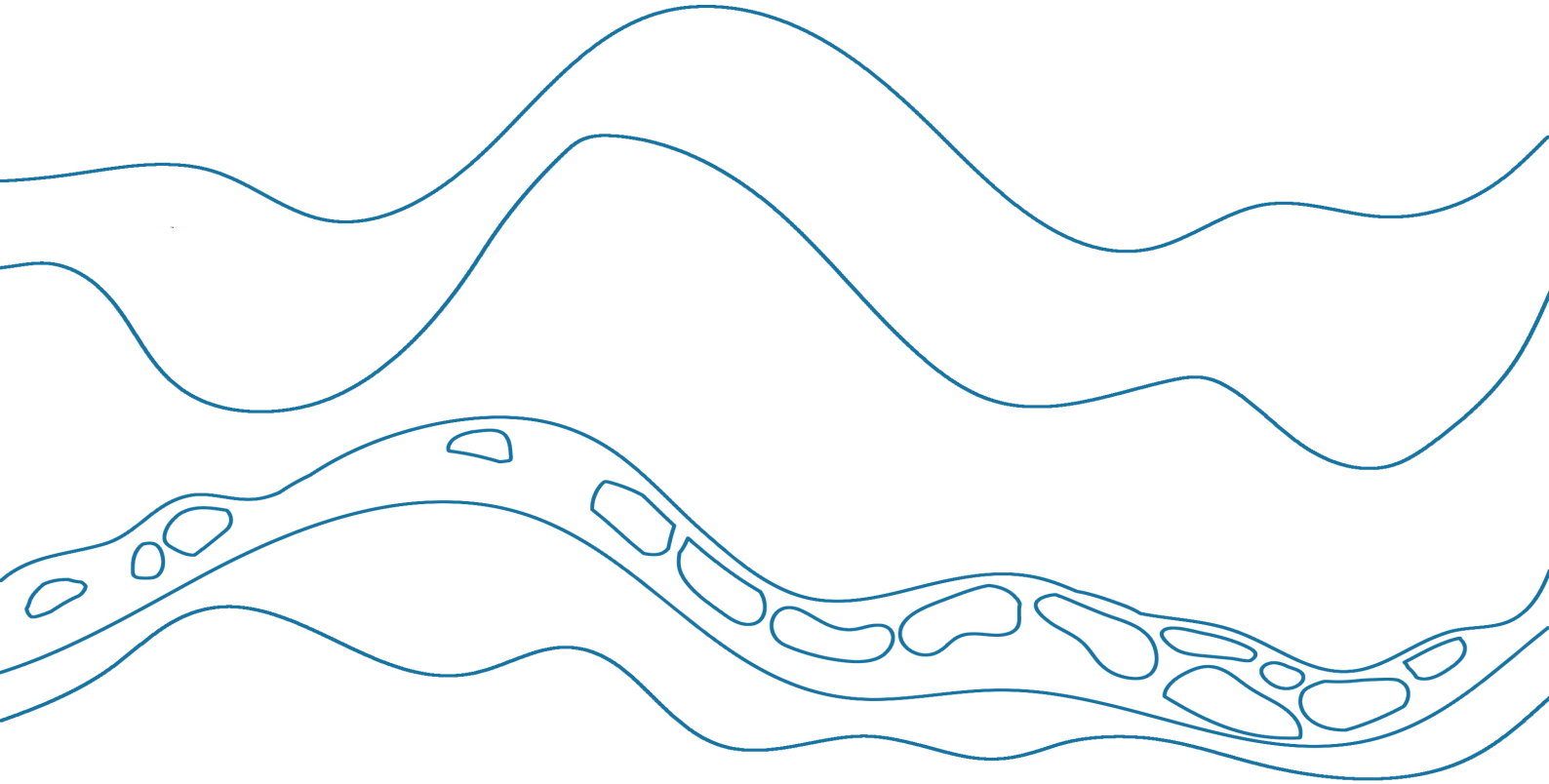
The main goal of this ebook is to show that the status of beaches, often taken for granted as public and free spaces, is not something naturally given, but rather something that has been socially constructed and historically achieved. This volume brings together reflections by members of the Beach Access Network and invited contributors who are experts in different fields, including physical and human geography, sociology, anthropology, and law, fostering the necessary dialogue to think about beaches as public and free spaces. This also entails recognizing beaches as environmentally vulnerable geographic spaces and as social territories shaped by conflicts, disputes, and inequalities.

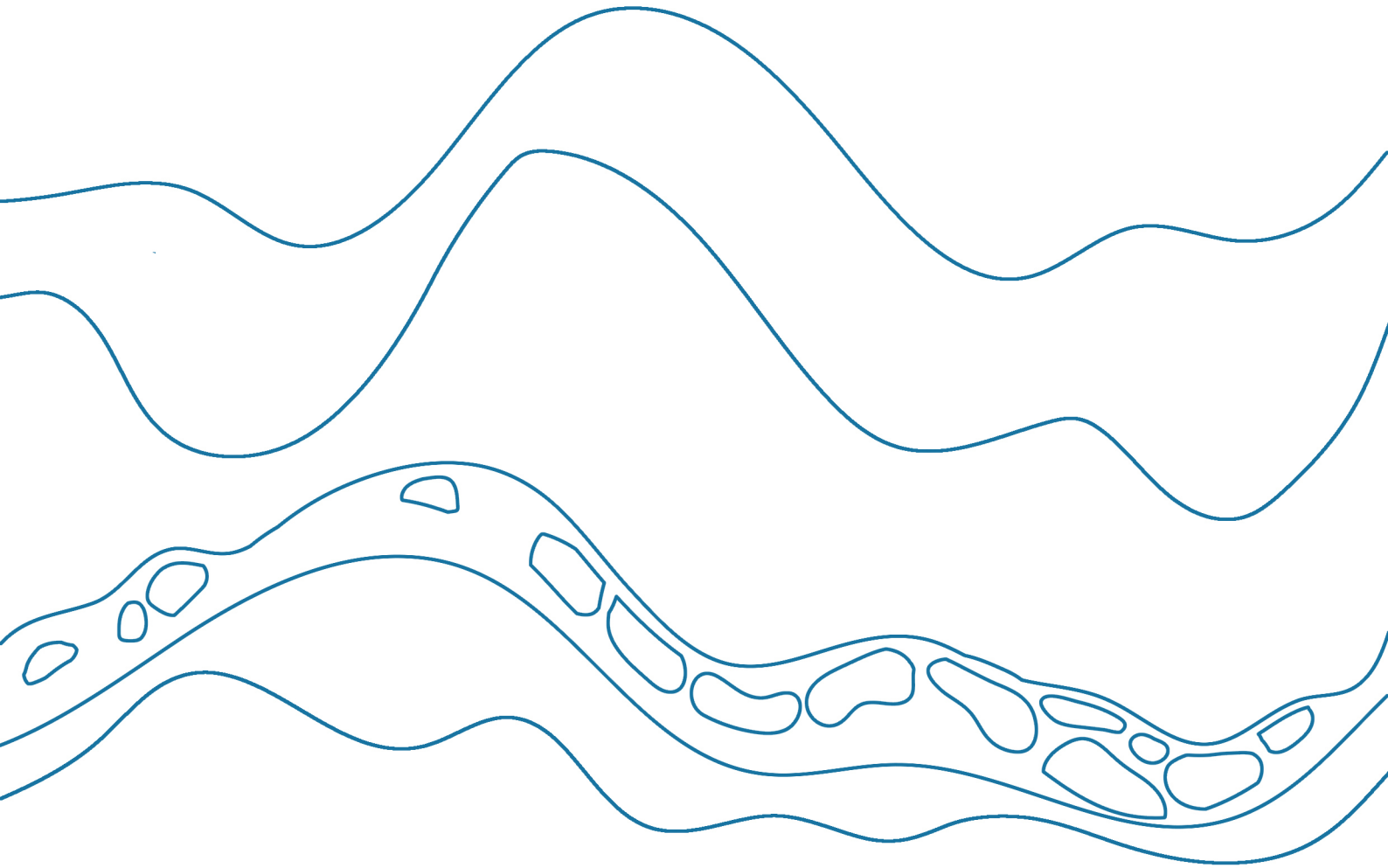
We wish you an enjoyable reading.

Marina de Souza Sartore & Flavia M. Lins-de-Barros

PART 1

Beach Access:
Politics and Society





LOW, Setha. Beach politics: social, racial and environmental injustice on the shoreline. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 1. p. 7-15. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19559004.

1 BEACH POLITICS: SOCIAL, RACIAL AND ENVIRONMENTAL INJUSTICE ON THE SHORELINE

Setha Low[1]

Abstract. Beach Politics (Low, 2025) examines how governance, environmental policy, race, and development shape the global privatization of beaches. Through cases from the U.S., Australia, Brazil, Greece, Austria, and Puerto Rico, the book reveals how legal, technical, and moral frameworks justify exclusion and dispossession. Conceptualizing beaches as "contact zones", it shows how inequality and resistance intersect on the shoreline. Across contexts, neoliberal and racial logics transform commons into commodities, while communities mobilize to defend collective access and environmental justice.

Keywords. Coastal privatization; Environmental justice; Racial inequality; Governance; Commons.

INTRODUCTION

Beach Politics addresses four interconnected questions that structure the collection's analytical framework. First, it examines the circumstances under which beach enclosure occurs, investigating the specific conditions that enable the restriction of access to spaces historically understood as commons. Second, it maps where and in what situations exclusionary strategies manifest, providing empirical documentation of beach privatization across diverse geographic and political contexts. Third, the collection analyzes how the denial of public rights is justified and rationalized through both moral and

1 The Graduate Center of the City University of New York – CUNY (USA) – slow@gc.cuny.edu.

legal frameworks, examining the discursive strategies that normalize exclusion. Fourth, it identifies the structural mechanisms that enable the erasure of local claims to access and use, including legal instruments, planning policies, and enforcement practices.

The book is organized around four general domains: governance, environment, race, and development which correspond to the most common rationales and strategies used to restrict beach access and use. Governance strategies highlight how laws, regulations, and formal and informal governance restrict beach access often resulting in protest and activism. Environmental factors examine how the protection of the shoreline, by hardening of the water's edge, limits the public's beach rights and may lead to various forms of resistance. Racialization of the beach focuses on how representations, discourses, imaginaries, and policing of racialized bodies and the beach creates a white public space. Developments of all kinds, including tourism, characterize how changes in the beach restructure not only who can use it, but also how the commodification of the beach as a human-made, artificial space can even transport the beach into a city center, where it takes on new meanings. For this chapter I have selected one example from each domain to highlight some of the findings.

While each chapter employs its own theoretical approach, I emphasize the importance of beaches as "contact zones" where multiple forms of inequality converge and where resistance is mobilized (Pratt, 1991). This framework characterizes beaches not as neutral recreational spaces but as politically charged territories where questions of belonging, citizenship, and environmental justice are negotiated. The researchers involved illustrate how beaches serve as barometers of broader social relations, reflecting patterns of racial capitalism, colonial legacies, and contemporary struggles over the commons.

GOVERNING THE BEACH: HISTORICAL PRIVATIZATION IN THE UNITED STATES

Andrew W. Kahrl's opening chapter traces the twentieth-century transformation of the Connecticut shoreline from a largely accessible public commons into a privatized landscape controlled by exclusive beach associations. Through detailed historical analysis, Kahrl narrates how wealthy families in the late nineteenth and early twentieth centuries petitioned the Connecticut legislature for charters to form private beach associations with powers over zoning, taxation, and access control. These associations — including Fenwick, Point O' Woods, White Sand Beach, Cornfield Point, and Grove Beach — employed multiple exclusionary mechanisms including “deed restrictions [that] explicitly forbade property sales to Black and Jewish people,” and membership requirements that effectively barred these groups from beach access (Kahrl, 2025, p. 24).

The Connecticut case illustrates how legal instruments can facilitate the enclosure of public resources. Beach association charters granted quasi-governmental powers to private entities, enabling them to restrict who could buy property and to control "access, traverse, swim, or relax" on what had previously been accessible coastline (Kahrl, 2025, p. 24). Even after civil rights legislation and legal challenges — including a Connecticut Supreme Court ruling that towns could not bar public access — new forms of social control emerged to maintain exclusivity (Low, 2025).

The chapter documents specific incidents of racial exclusion, including the 1940s case of writer Ann Petry, who was forcibly removed from a Connecticut beach during a family picnic and subjected to racial slurs: "No n---rs allowed on this beach" (Kahrl, 2025, p. 24). Such episodes reveal how privatization schemes were intertwined with racial projects aimed at maintaining beaches as predominantly white spaces.

SHORING UP THE COASTLINE. CLIMATE ADAPTATION AS BEACH PRIVATIZATION: THE SYDNEY CASE

Kurt Iveson and Ana Vila-Concejo examine how climate change adaptation in Sydney, Australia, particularly following severe June 2016 storms at Collaroy-Narrabeen beach, have effectively facilitated beach privatization under the guise of property protection. The storms caused significant damage to beachfront properties, with "gardens, decks, furniture and even a swimming pool collapsing into the water", creating a political crisis that foregrounded tensions between private property rights and public coastal access (Iveson; Vila-Concejo, 2025, p. 119).

Iveson and Vila-Concejo (2025) identify three interconnected conflicts. First, the construction of seawalls and rock barriers to protect private homes had the effect of narrowing and blocking access to public beaches, while property owners justified their actions through property rights, and critics became concerned about the loss of the coastal commons. Second, despite warnings from geomorphologists that "seawalls would accelerate erosion elsewhere along the shore", local authorities "framed engineering as the only 'practical' adaptation to climate change", privileging short-term property protection over long-term ecological sustainability (Iveson; Vila-Concejo, 2025, p. 132). Third, environmental activists mobilized around the slogan "Save Our Sands", framing seawalls as theft from future generations, while councilors claimed to be balancing economic growth with adaptation–a justification that community members viewed as a convenient cover for privatization.

This case study demonstrates how environmental crises can be leveraged to advance privatization agendas, with climate adaptation serving as a politically palatable rationale for coastal engineering projects that disproportionately benefit property owners while externalizing environmental costs onto the broader public.

RACIALIZING THE BEACH: POLICING AND DEVASTATION IN BRAZIL'S COASTAL COMMUNITIES

Keisha-Khan Y. Perry's chapter on Salvador, Bahia, Brazil, provides one of the volume's most powerful analyses of how tourism-led development and militarized policing work in concert to dispossess Black coastal communities. Perry documents how Gamboa de Baixo, a historically Black neighborhood adjacent to Salvador's coast, has been recast as a "coveted paradise" for tourism and luxury real estate development, with residents explicitly told that "Gamboa is the face of Bahia, but it's not a place for poor Black people to live" (Perry, 2025, p. 235).

Four intersecting conflicts are explored. First, Perry traces how urban developers, tourism authorities, and yacht clubs have systematically appropriated coastal lands, transforming "the beach they played on after school and work, the waters that provided food for their families and spiritual rejuvenation" into spaces "destined for tourism and luxury real estate development, not for poor Black people to live next to and enjoy" (Perry, 2025, p. 235). Second, the chapter documents growing police violence, including an early morning raid in which the military police killed three young people: Patrick Sapucaia, Alexandre Santos dos Reis, and Cleberson Guimaraes. In response, residents organized under the declaration "*Somos gente*" (We are people), asserting their fundamental humanity against dehumanizing state violence (Perry, 2025, p. 236).

Third, Perry examines how elite coastal infrastructure — particularly yacht clubs and cruise ship facilities — caused environmental destruction, with "rogue waves" understood by residents as caused by the artificial barrier reefs built for the yachts or the removal of sand to make it deeper for cruise and cargo ships. These infrastructure projects have resulted in beaches becoming privatized by clubs, hotels, and luxury apartments. Fourth, the chapter documents forced evictions and transportation inequality, noting that "in the 1990s, the seaside community of Preguiça, located on the beach next to Solar do Unhão, was forcibly moved to the distant periphery of Salvador", part of a broader pattern in which "Black people are forced to live farther and farther away from the coast" (Perry, 2025, p. 234).

Perry's analysis reveals how beach privatization in the Global South operates through racialized violence and displacement, with the state actively criminalizing Black presence on coasts being prepared for touristic development to erase Black histories of settlement and the taking of their lands and homes.

THE POST-POLITICAL BEACH: DEPOLITICIZING COASTAL CONFLICTS

Sabine Knierbein and Charis Christodoulou's (2025) chapter on Greece and Austria introduces the concept of the "post-political" beach to analyze how governance processes depoliticize conflicts over coastal development. Drawing on Swyngedouw's (2009) theorization of post-politics, the authors demonstrate how power operates not through overt repression but through framing coastal management decisions as technical necessities that preclude political contestation.

In Greek coastal development, redevelopment projects are reframed as technical necessities, thus stripping them of their political impact and dismissing community concerns about access and affordability as emotional or misguided. Similarly, the idea of modernization concealed the transfer of beaches and land along the beachfront to private control, such that “modern” improvements reduced the amount of public space. In Austrian lake beaches, on the other hand, official discourse portrayed the beaches lining the lakes as conflict-free spaces of leisure even as they restricted access by entry fees, zoning rules, and privatized facilities (Knierbein; Christodoulou, 2025).

Critically, the chapter reveals how policy language does not use terms like 'rights' or 'justice’", for those opposing the projects, and instead portrays people as obstructing progress (Knierbein; Christodoulou, 2025). This discursive strategy neutralizes opposition by casting development as inevitable modernization rather than as political choice, thereby "silencing political contestation" and marginalizing activists, environmentalists, and traditional beach users.

PUERTO RICO: BEACHES FOR THE PEOPLE

Katherine T. McCaffrey's (2025) chapter examines Puerto Rican coastal struggles under the framework of "*Las Playas son del Pueblo*" (The beaches belong to the people), documenting grassroots resistance to tourism-led privatization across multiple sites including Carolina, Old San Juan, and Rincón. McCaffrey (2025) argues that the commodification of the coast into 'beach' erases the coastal and ecological realities of the shoreline providing access to natural resources that were not owned or managed by other governmental or private entities.

The chapter analyzes five major conflicts. In Carolina, the grassroots organization "*Amig@s del Mar*" and activist Tito Kayak confronted Marriott International over hotel development that threatened littoral forest. On the Isleta de San Juan, protesters opposed the Paseo Caribe luxury development, with Tito Kayak executing a dramatic escape by rappelling down a crane in a red kayak into the water below. The Puerto Rican legislature responded by passing "*Ley Tito Kayak*", criminalizing such protest tactics (McCaffrey, 2025).

In the Escambrón neighborhood, residents organized as *Escambrón Unido* to prevent conversion of a heavily used public park — where people gathered to do their daily physical training and take classes — into an underground parking for the Normandie Hotel. Activists fought for a more democratic process with great public notices, time for public hearings, and more transparency. In Rincón, a protest encampment defended the endangered hawksbill turtle nesting habitat against a beachfront condominium pool project, with protesters declaring "*Yo soy Carey*" (I am the hawksbill turtle) and denouncing policies that create a paradise for those can afford it, but not for those who try to hold on to what they have left of their country (McCaffrey, 2025).

McCaffrey's (2025) analysis demonstrates how beach defense in Puerto Rico articulates environmental justice, anti-colonial politics, and democratic participation, with communities asserting collective ownership against neoliberal development regimes.

CONCLUSION: THEORICAL AND POLITICAL IMPLICATIONS

Beach Politics makes several significant contributions to scholarship on environmental justice, urban geography, and the struggle for the commons. First, the volume theorizes beaches as contact zones where social, racial, and environmental inequalities can be seen and contested revealing how coastal spaces concentrate and make visible broader structures of inequality. Second, the collection emphasizes the importance of publicization in the struggle against injustice documenting how communities employ diverse strategies — from legal challenges to direct action — to defend beach access. Third, it illustrates how discursive strategies restrict access but also can create political solidarities by examining both the mechanisms of exclusion and the networks of resistance they generate.

Several chapters uncover how emerging financial and planning instruments can redesignate public lands so they can be incorporated into the private sector—either through new forms of financialization or reallocating the rights to the land in ways that it can enter the real estate market. These emerging legal and policy tools facilitate more beach enclosure. Across diverse geographic contexts, the authors connect contemporary cases of beach privatization to longer histories of colonialism and racial capitalism especially through tourism and urban development, revealing beaches as frontiers of neoliberal urban transformation.

The volume concludes with a synthesis of challenges facing coastal communities globally that include: restricting public access, socio-racial restructuring through engineering and development, construction of moral economies that normalize exclusion, erosion of collective memory, legal and policy manipulation, environmental pressures intensified by climate change, commodification of the commons, and governance gaps that leave communities vulnerable to powerful developers and investors (Low, 2025). Together, these analyses provide essential tools for understanding and resisting the ongoing enclosure of coastal commons.

REFERENCES

IVESON, K.; VILA-CONCEJO, A. Beachfront Protection as Beach Privatization: Coastlines, Property Lines, and Climate Change Adaptation in Sydney. *In:* LOW, S. (ed.). *Beach Politics: Social, Racial, and Environmental Injustice on the Shoreline*. New York: New York University Press, 2025. cap. 6. p. 119-139.

KAHRL, A. W. Enclosing the Coastal Commons: Beach Privatization and Social Inequality in the Twentieth-Century United States. *In:* LOW, S. (ed.). *Beach Politics: Social, Racial, and Environmental Injustice on the Shoreline*. New York: New York University Press, 2025. cap. 1. p. 21-39.

KNIERBEIN, S.; CHRISTODOULOU, C. The Post-Political Beach: Conceptual and Empirical Explorations in Greece and Austria. *In:* LOW, S. (ed.). *Beach Politics: Social, Racial, and Environmental Injustice on the Shoreline*. New York: New York University Press, 2025. cap. 5. p. 97-116.

LOW, S. (ed.). *Beach Politics: Social, Racial, and Environmental Injustice on the Shoreline*. New York: New York University Press, 2025.

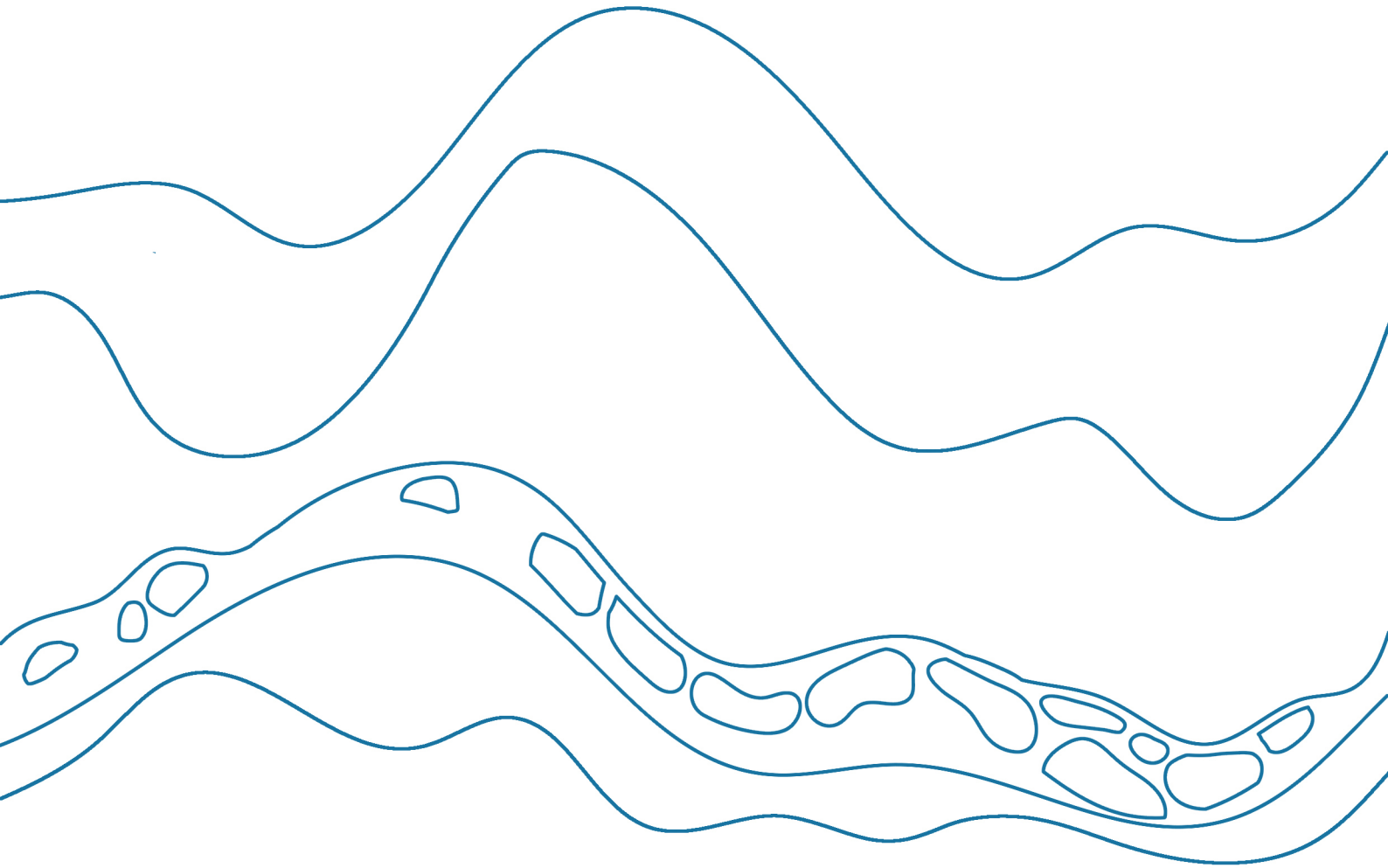
MCCAFFREY, K. T. Las Playas son del Pueblo: The Struggle for Puerto Rico's Coast. *In:* LOW, S. (ed.). *Beach Politics: Social, Racial, and Environmental Injustice on the Shoreline*. New York: New York University Press, 2025. cap. 13. p. 243-262.

PERRY, P. "A Coveted Paradise": Policing and the Devastation of Brazil's Coastal Lands. *In:* LOW, S. (ed.). *Beach Politics: Social, Racial, and Environmental Injustice on the Shoreline*. New York: New York University Press, 2025. cap. 12. p. 227-240.

PRATT, M. L. *Arts of the Contact Zone*. *Profession*, p. 33-40, 1991.

SWYNGEDOUW, E. The Antinomies of the Postpolitical City: In Search of a Democratic Politics of Environmental Production. *International Journal of Urban and Regional Research*, v. 33, n. 3, p. 601-620, 2009.

AI disclosure: "Claude by Anthropic PBC™ was used to help convert the MS Power Point™ presentation slides of my original talk into a MS Word™ document that I used as the outline for this chapter." (Message by the author).



BRUNO, Isabelle; SALLE, Grégory. Beach access: lessons from the French case. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 2. p. 17-27. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19559957.

2 BEACH ACCESS: LESSONS FROM THE FRENCH CASE

Isabelle Bruno[1]

Grégory Salle[2]

Abstract. This chapter explores how France's legal principle of free beach access allows for exceptions, particularly through commercial beach concessions. These concessions frequently lead to tensions between legal rules and actual practices. Drawing on Pampelonne Beach as a case study, we analyze how elites, development policies, and environmental pressures transform the shoreline in the context of coastal squeeze. The chapter highlights two central issues: social inequality and environmental justice, and the rise of coastal capitalism through beach commodification.

Keywords. Beach access; Coastal capitalism; Environmental justice; Commodification of Nature; Socio-spatial inequalities.

SOCIAL REPRESENTATIONS & LEGAL FRAMEWORK

In France, public access to beaches is not framed as a public policy issue as such. You don't usually hear officials debating it or see advocacy campaigns fighting for it. Generally speaking, it is taken for granted that seashores are free and open to everyone. The widely shared assumption is that anyone can go to the beach, with no distinction or restriction.

1 *Université de Lille* and *Institut Universitaire de France* (IUF, France) – isabelle.bruno@univ-lille.fr

2 Centre National de la Recherche Scientifique – CNRS (France) – gregory.salle@cnrs.fr

Furthermore, beaches are one of the few natural spaces still presumed to be free and accessible to all. This is not really the case with forests, which have become a visible social and political issue in recent years. French forests are heavily privatized: only a quarter of national forest cover is public (whether state-owned or municipal), and the public forestry service itself is being gradually dismantled to push towards privatization. In contrast, beaches remain both objectively and subjectively public spaces. You sometimes hear or read about “private beaches” in the Mediterranean context — referring to beach sections occupied by private businesses, as we will explain below — but technically this is a misnomer. Moreover, these are considered exceptions that do not challenge the prevailing principle of free access.

This principle is legally established — while providing for specific exceptions. Overall, the law guarantees free public access to beaches. This rule was included in the 1986 “Coastal Act”, which to this day remains the country’s reference text on this matter (Prieur, 2020). It’s currently codified in identical terms in the French Environmental Code:

> Pedestrian access to beaches is free except when justified reasons of security, national defense, or environmental protection require special provisions. Free public use constitutes the fundamental purpose of beaches, alongside their allocation to fishing and marine cultural activities (Article L321-9, translated by the author).

This principle is not exclusive: other legitimate (and historically older) uses are provided for, starting with fishing. Nor is it unconditional, since exceptions are provided for three main reasons (security, defense, ecology), which can sometimes overlap: for example, serious pollution can threaten the environment, public safety and public health all at once.

BEACH CONCESSIONS: A PARTIAL BUT PERMANENT EXCEPTION

There is one important exception to the principle of free access — one that is partial, but permanent: beach concessions. A beach concession is a contract through which public authorities (first at national level, then at local level) authorize the occupation of beach portions by private, profit-seeking actors to run commercial activities (mainly deckchair and mattress rental, bars and restaurants) under certain conditions and in exchange for fee payment. This is indeed a derogation from the principle of free access since on the granted portions, which are materially delimited, access is reserved for paying customers.

Legally speaking, these beach sections are not truly “private”. They remain public property even though they operate as private businesses, by means of a temporary economic occupation authorization. Since the 2000s, the system of beach concessions has even been treated as a delegation of public service. This is why this transaction come with strict conditions. Only a maximum of 20% of a natural beach area can be conceded. Also, establishments are supposed to preserve a “significant” stretch of dry sand between the first line of deckchairs and the sea for people to circulate along the shore. All in all, beach concessions constitute a special provision, but one that concerns only a small portion of the French coastline, mostly in the French Riviera, and should not challenge the principle of free access.

CONFLICTS BETWEEN LEGAL PRINCIPLES AND ACTUAL PRACTICES

It’s admittedly tempting to compare principles with practices to identify gaps. From this perspective, one can observe, for instance, how commercial establishments do not respect their obligations and encroach on public domain, thereby restricting free access. We must begin by noting that these principles themselves have been contested throughout the twentieth century, and even more so with the advent of mass tourism. This appears in the way regular legal work has been necessary to clarify or reaffirm these principles.

The 1986 Coastal Act, mentioned above, resulted from two decades of quite intense conflict over coastal occupation. Before that, there was a 1963 law that extended France's "maritime public domain" by including future tidal zones — basically, areas that get covered and uncovered by the tides. More recently, a "beach decree" had to be adopted in 2006 to more clearly regulate beach concession organization, even though the first official text on this matter dates back from 1912. In short, before criticizing how laws are applied, one should remember that legal rules themselves reflect ongoing power struggles between different interest groups.

When it comes to practices, there are roughly speaking three types of conflict:

- **Conflicts related to beach use itself.** The principle of free access does not mean freedom of use. On the contrary, the very fact that it's a public space prevents certain uses. Prohibitions are actually quite numerous. For example, making fires on beaches is strictly forbidden; since last June, smoking cigarettes there is also prohibited. In another vein, walking completely naked is forbidden outside areas dedicated to nudism. Less known is that you're not allowed to take sand, pebbles, or seagrass (even dead) home, as they are an integral part of a fragile ecosystem.
- **Conflicts related to private residential property encroachments on the public domain.** Typically, private owners who build illegally on the maritime public domain or unlawfully appropriate a portion of the shoreline, thereby hindering free circulation. Legal rules on urban planning even provide for a right of passage on a strip of at least three meters wide along the entire coastline (the French version of the right to roam), which in principle takes precedence over property rights.
- **Conflicts related to authorized commercial activities on beaches.** Typically, a beach restaurant that does not respect its obligations by exceeding its allocated portion or not leaving sufficient space to let people walk on dry sand between its establishment and the water. Historically, owners or managers of beach establishments have often played with the rules: for example, the rule requiring beach establishments to be removed during off-season is old, but it was never respected until very recently.

Thus, while public beach access is not really framed as a public policy issue *per se*, the question of public beach access emerges now and then, on the occasion of disputes, often related to legal cases. Such disputes emerged in the 1960s and 1970s, when the concessionary system was durably established. This was completely different from what one can see in Rio de Janeiro with beach kiosks. Beach clubs, especially on the French Riviera, are massive restaurants — hundreds of square meters with some hard-built structures — planted right next to the waterline. Among numerous local battles, some took on national scope, to the point that state spokespersons (including the French Minister of Public Works) had to intervene publicly several times on the subject. Since then, there have been such conflicts, handled by courts, but they receive little media coverage. They are generally considered anomalies, violations of the general principle of free access, which do not challenge it but rather allow for its confirmation.

BEACH ACCESS AND COASTAL SQUEEZE

In recent years, what has actually become a distinct public issue, while disrupting the "beach regime" described above, is coastal erosion and sea level rise. Media coverage of this issue has clearly amplified over the past decade, through examples of their potential and actual effects on seaside construction, as well as on the shrinking of certain beaches. This might seem logical for a coastal country such as France, which is considered the world's second maritime space (after the USA), with multiple coastlines: Atlantic, Pacific, and Mediterranean, not to forget the English Channel.

Of course, coastal squeeze is not just a French problem — coastal states like Brazil or California are facing it as well. However, several limitations must be noted in the French case.

First, media coverage of this problem remains sporadic and reactive. It is generally triggered by a report or study (for example, a 2024 report from the French Centre for Studies and Expertise on Risks, the Environment, Mobility and Urban Planning), or a natural disaster (such as violent storms or serious landslides) requiring emergency

measures, yet without making headlines for several consecutive days, much less weeks. Second, media coverage often remains narrowly local. It laments the disappearance of this or that beach, but rarely sets these cases within a global dynamic, even though current international scientific debate on this issue concerns risks of disappearing beaches on a worldwide scale. Third, the problem is not framed or formulated as a public access issue in its own right. This is paradoxical, since nothing threatens beach access more than the shrinking or even disappearance of beaches themselves.

THE CASE OF PAMPELONNE BEACH (FRANCE)

Our research site, Pampelonne Beach (Figure 2.1), located in the French Riviera (Bruno; Salle, 2017), is the original template for glamorous beach destinations that attracts international celebrities (like Búzios in Brazil that was actually modeled on Pampelonne and Saint-Tropez). While it's hardly representative of the whole French coast, it's at the heart of these issues in several key ways.

Figure 2.1 – A beach establishment in Pampelonne Beach, July 2020

Source: taken by the authors.

- It was the historical birthplace of the “Mediterranean model” of beaches — that is, commercially exploited beaches. While this model’s emergence is generally dated to the mid-1950s, there were earlier signs before World War II. In the 1930s, a film shoot was accompanied by the creation of a proto-beach establishment, presented locally as the first of its kind in the world. Pampelonne then established itself in the 1960s as a model of the genre, a famous “tourist resource” on an international scale, constructing the myth of “Saint-Tropez” while serving as a pilot site for several development plans.

- Pampelonne Beach has been the object of continuous legal contention. By this, we mean not only numerous disputes related to beach concession allocation, but also legal decisions and measures directly affecting its commercial exploitation, while modifying jurisprudence at the national level. In fact, Pampelonne benefits from an exceptional legal status of sorts — reflecting the influence of pressure exerted by beach owners and managers. In 2000, Pampelonne Beach “benefited” from an ad hoc legal derogation to the Coastal Act, called the Gaïa amendment (named after a French member of Parliament, not after the hypothesis proposed by James Lovelock and Lynn Margulis!). It was specially made for Pampelonne, allowing continued economic exploitation for establishments predating the Coastal Act, provided they reconciled economic activity with ecological protection. Remarkably, this amendment survived even when France’s highest court declared Pampelonne beach a “remarkable natural space” in 2002, in principle preventing beach establishment presence. Then, its principle was maintained by the 2006 “beach decree”, provided that a new development plan respecting some major principles (actually old, but never respected) was implemented, particularly a landward retreat — to the back of the beach – and removing of establishments during off-season.

- Pampelonne beach is now acclaimed as a development model at the national level, and beyond, due to a master plan adopted in 2015 of a pioneering character, often presented as unique in France, even Europe (it actually received EU financial support via the European Regional Development Fund). Acknowledging threats to a

beach that was “suffering”, this plan has deployed a twofold action addressing both terrestrial environment and marine environment, with dune restoration on one side and the creation of a light mooring zone for yachts on the other. To do this, it integrates, to some extent, the idea of “managed retreat”. On its recent tenth anniversary, it was unanimously hailed as a success and model by all actors, public and private.

Despite its merits, two key limitations emerge from this case, while also largely exceeding it. To understand this, one needs to shift from law to sociology. Because the real issue is not just about legal access rights; it’s about who actually has the power to shape and enjoy these spaces. From this perspective, let’s turn to social inequality and environmental justice, on the one hand, and beach commodification and coastal capitalism, on the other.

SOCIAL INEQUALITY & ENVIRONMENTAL JUSTICE

The manifestation of socio-environmental inequalities at Pampelonne is both evident and invisible. One need only walk along the establishments and look at the prices charged to understand that these are places reserved for well-off, even wealthy clientele. It costs about at least 600 to 1200 reais per person per day for a beach chair and basic service, parking not included. Thus, there’s a primary, obvious inequality between paying establishments and free zones. But what’s more interesting, because less intuitive, is that upper-class overrepresentation also concerns the free areas of the beach — something our fieldwork clearly uncovered. These do not offer anything close to a faithful reflection of national or even regional class structure. Pampelonne beach is far less socially diverse than Ipanema, or even Leblon. To understand this, one must consider both geophysical and symbolic barriers.

On the one hand, Pampelonne is a rural beach, isolated at the end of a peninsula. On the other hand, certain social groups do not feel at home on a beach that has long had

a reputation for being noisy, flashy, crowded, with superyachts on the sea and helicopters in the air, etc. But one must also embed the beach within a larger territory and seaside economy of which it's the core and which, in turn, contributes to shaping the place. This embeddedness within a broader context is all the more important because there's a strong tendency to disconnect Pampelonne from its natural and social surroundings. And this in two ways: either by making it a separate, autonomous, nearly-insular territory, or by wrongly associating it with Saint-Tropez — the famous neighboring town everyone knows — when it's actually located in the separate municipality of Ramatuelle and consequently managed by its municipal team. In short, there's a tendency toward double disconnection, both natural (as an ecosystem) and social (as a territory).

Within a regional economy oriented toward exclusive goods and services, the upscaling of establishments over recent decades is striking. Moreover, this does not contradict environmental efforts — quite the opposite. Respecting high-quality environmental standards thus favors large companies that can afford investing long-term and respect demanding requirements. This results in increasingly high prices and therefore an increasingly elite clientele with little or no local ties (Bruno; Salle, 2018). One should add that when thinking about "coastal gentrification", it's not only access inequality we must consider, but also retreat inequality from the coast. Who will have to move inland and who will get the privilege to stay close to the shoreline?

BEACH COMMODIFICATION AND COASTAL CAPITALISM

Beyond the problem of inequalities, there's the deeper question of social relations to beaches. By speaking of the beach as a "resource" offering "ecosystem services", we risk conveying a conception marked by utilitarian thinking that treats beaches as inert objects or commodity at our disposal rather than as dynamic, living, vulnerable environments. Envisioning the beach as a living environment, while also recognizing it as a socio-historical construction, means examining the class origin not only of beach users but also of beach uses themselves. It means that we need to trace how dominant norms and habits were imposed that govern our supposedly "natural" relation to beaches today.

Historian Alain Corbin has shown that what we think of as natural beach culture was actually “invented” by the elite (Corbin, 1994). This elite-driven process led to the eviction of popular, pragmatic uses and put local coastal populations to work serving newcomer vacationers. The beach practices we consider ordinary today — sunbathing, leisure activities — actually stem from a universalization of aristocratic, then bourgeois beach uses. This extension was not spontaneous. It was enabled by territorial development policies oriented toward economic growth, under the influence of powerful industrial sectors (construction, transportation, tourism), all aimed at profit. The result was a massification of leisure uses that established the beach as a place of recreational visit while marginalizing the subsistence relationships that coastal inhabitants maintained with these living environments.

In short, one should not forget that beaches now undergoing physical shrinking are products of socio-economic construction. These socialized, developed, and sometimes commodified spaces result from processes of land valorization, urban planning, property transfers, and conversion into commercial assets — what historian Andrew Kahrl calls “coastal capitalism” (Kahrl, 2020). Coastal spaces get inscribed in endless cycles of reinvestment and redevelopment, projecting economic imperatives of permanence and stability onto naturally unsettled and vulnerable environments.

So, to fully grasp coastal access inequalities, one must unravel the roots of the “access issue” itself. We need to recognize that what seems like the simple, universal act of “going to the beach” not only varies dramatically across time and space, but is loaded with stakes that are hotter than ever in the current state of climate emergency (Ripple *et al*. 2025).

REFERENCES

BRUNO, I.; SALLE, G. “Before long there will be nothing but billionaires!” The power of elites over space on the Saint-Tropez peninsula. *Socio-Economic Review*, v. 16, n. 2, p. 435-458, 2018. DOI: 10.1093/ser/mwy016.

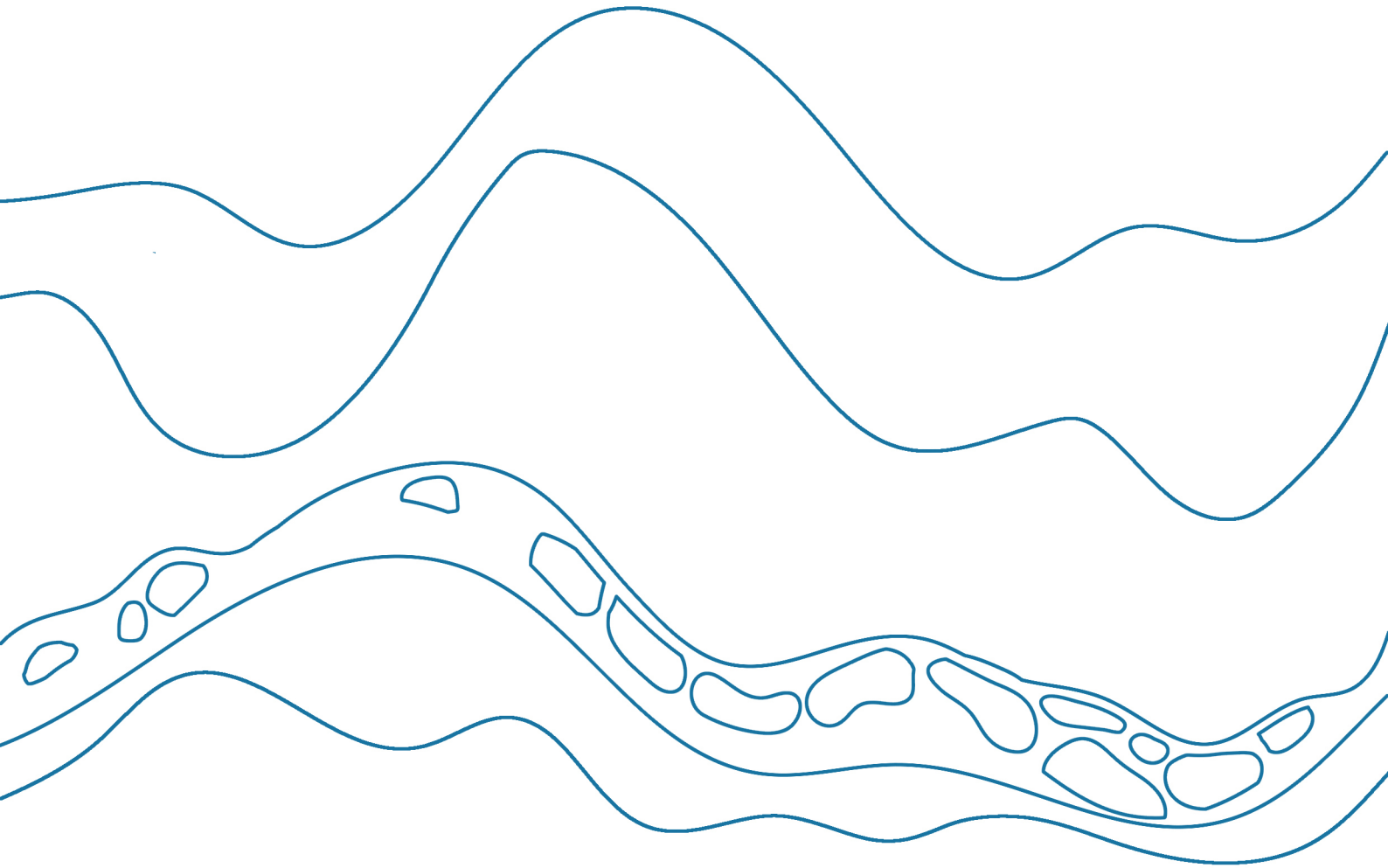
BRUNO, I.; SALLE, G. “État ne touche pas à mon matelas!” Conflits d’usage et luttes d’appropriation sur la plage de Pampelonne. *Actes de la Recherche en Sciences Sociales*, n. 218, p. 26-45, 2017. DOI: 10.3917/arss.218.0026.

CORBIN, A. *The Lure of the Sea: The Discovery of the Seaside in the Western World 1750-1840*. Berkeley: University of California Press, 1994 [1988].

KAHRL, A. W. From commons to capital: the creative destruction of coastal real estate, environments, and communities in the US South. *Transatlantica*, n. 2, 2020. DOI: 10.4000/transatlantica.16278

PRIEUR, L. France. *In:* ALTERMAN, R.; PELLACH, C. (ed.). *Regulating Coastal Zones. International Perspectives on Land Management Instruments*, London, Routledge, 2020. p. 169-189. DOI: 10.4324/9780429432699-12.

RIPPLE, W. J. *et al*. The 2025 state of the climate report: a planet on the brink. *BioScience*, v. 75, n. 12, p. 1016-1027, 2025. DOI: 10.1093/biosci/biaf149.



SARTORE, Marina; RODRIGUES, Cae. Beaches, morality, and market mechanisms: symbolic struggles over public access. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 3. p. 29-35. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19560052.

3 BEACHES, MORALITY, AND MARKET MECHANISMS: SYMBOLIC STRUGGLES OVER PUBLIC ACCESS

Marina Sartore[1]

Cae Rodrigues[2]

Abstract. This chapter examines how moral values shape conflicts over public beach access in Brazil and beyond. Although beaches are constitutionally public, they are increasingly appropriated through condos, beach bars, and resorts. Drawing on cases from Brazil, Italy, and Australia, we show that access depends not only on law but also on moral and symbolic orders defining legitimate uses of coastal space. Moralities around family, safety, and celebration legitimize or condemn economic activities on the sands. These symbolic boundaries determine who benefits from the public nature. Understanding these moral economies clarifies how public spaces are redefined amid market expansion and cultural heritage claims.

Keywords. Beach Public Access; Symbolic Struggles; Commercial Beach Grabbing; Public Space; Moral Orders.

INTRODUCTION

In Brazil, beaches are legally defined as "[…] public property for common use by the people, and free and open **access** to them and the sea is always guaranteed […] except for areas of national security or protected by law" (Federal Law nº 7,661, 1988). The law enshrines a moral value widely shared among Brazilians that beaches belong to everyone, and serve as public spaces for democracy, freedom, and equality.

1 Federal University of Sergipe – UFS (Brazil) – marinass@academico.ufs.br.

2 Federal University of Sergipe – UFS (Brazil) – caerodrigues@academico.ufs.br.

In 2024, this moral value was put to the test when a nationwide public debate erupted over Constitutional Amendment PEC 03/2022, which proposed transferring federally owned coastal lands (*Terrenos de Marinha*) to their current occupants. Officially, the proposal was presented as a technical measure to address long-standing issues in the property regularization of already urbanized coastal zones. Yet, television, newspapers, and social media turned it into something else, framing it as the “Beach Privatization PEC”, revealing deep social unease about the ongoing privatization and commercialization of beaches. Still, the issue regarding beach access enclosures rarely receives sustained attention within the sphere of public problems in Brazil. In reality, we witness a situation described by Knierbein and Christodoulou (2025) as a post-political beach in which fundamental rights to nature and public space are being lost and depoliticized while new barriers to beach access are proliferating.

The existence of organized social movements, such as the “beach towel revolt” in Greece and “*Mare Libero*” (Free Sea) in Italy, demanding the maintenance of public beach access, help us understand the different perspectives on beach access. However, the absence of organized social movements does not necessarily entail the absence of struggles. There is another way to approach beach-related disputes through the lens of symbolic struggles. Symbolic struggles are contests over meaning and over the recognition of what is legitimate in a given social space, in this case, the beach. These struggles are usually not explicit or confrontational. Rather, they unfold through language, aesthetics, and everyday classifications. We approach the beach in the sense described by Varela (2009) below.

> A beach is a privileged sociological observatory, because it is where the dominated and the dominant classes share the same space of collective leisure, and where, apparently, all power relations vanish. Yet, paradoxically, it is precisely in these moments that we can best observe those other power relations—less visible, and therefore more effective — of symbolic domination and its violence (Varela, 2009, p. 3).

In *“Paysans à la plage”* (1975), Patrick Champagne shows how peasants, through their clothing, ways of sunbathing, and modest consumption, revealed their social position when going to the beach. In contrast, elites and public employees, familiar with the codes of beach culture, rented deckchairs and frequented finer venues such as restaurants. Champagne concludes that one’s position in symbolic struggles shapes how different people access the beach. We follow Ribot and Peluso (2003) in defining access as “the ability to benefit from something,” which derives not only from legal property rights but also from a dynamic bundle of powers that includes social relations, technology, capital, norms, and cultural identities. In practice, beach access is not determined by the letter of the law but by the interplay of symbolic struggles and a bundle of powers that shape shared beliefs about which kinds of economic activities or private properties are deemed appropriate on the beach.

This chapter contributes to a sociological understanding of the social dimension of coastal squeeze, a process in which coastal ecosystems and the social uses of the shoreline become compressed between rising sea levels and fixed human-made infrastructures. We approach this social dimension through the case of beach bars and use them as an analytical lens to examine conflicts over their legitimacy on the sands. Drawing on fieldwork in Aracaju and Porto de Galinhas in Brazil, Rimini in Italy, and Bondi Beach in Australia, the chapter highlights how symbolic struggles around beach bars reveal broader tensions in the governance, accessibility, and social organization of contemporary coastal spaces.

BEACH BARS: A FORM OF COMMERCIAL BEACH GRABBING

Brazil’s Northeast is home to over 3,000 km of coastline in which beach bars or kiosks are easily found, normally built on the sand. They are a form of beach grabbing as they squeeze beach access, whether physically, with their fences, and symbolically, with their architecture and prices, turning the beach into a coveted and disputed space. During the early 2000s, the Federal Public Prosecutor’s Office attempted to demolish many beach

bars along the Brazilian coast, citing irregular land occupation and environmental damage. In Aracaju (Sergipe), after a 10-year legal dispute (2014-2024), roughly sixty beach bars remain along a 15 km stretch, now more sophisticated (expensive) than before (Fig. 3.1).

Figure 3.1 – Duna Beach: 2015 (pictures on the left) and 2021 (pictures on the right)

Source: personal files.

COMPARING NORTHEAST BRAZIL WITH AUSTRALIA AND ITALY: HOW MANY BEACH BARS? HOW MUCH PROFIT? WHICH BEACH?

Drawing on international cases from a comparative perspective, we learned that debates over the presence of beach bars often revolve around three key questions: their number – *How many?* their profitability — *How much? a*nd the quality of the beach — *Which Beach?*

How Many?

In 2019, during fieldwork in Sydney, Australia, we learned that beach bars are notably absent from the sand, as drinking on the beach is perceived as risky and associated with accidents, drowning, and behavior considered inappropriate for family spaces (Sartore; Coffey, 2019). During summer, “No Alcohol” signs dominate coastal landscapes. The absence of bars carries a positive moral sign because it protects families and ensures safety. In Brazil, by contrast, beach bars symbolize family celebration and job opportunity for tourism development. Beach bars provide food, drinks, music, and basic infrastructure, elements associated with leisure and sociability, and alcohol is seen as a natural part of this convivial atmosphere. The presence of beach bars thus carries a positive moral signal, enhancing the festive, communal, and economic character of beach life. These contrasting moral orders explain why commerce on the sand is legitimate in one context and prohibited in another. The moral classification of activities as family-friendly or dangerous, festive or excessive, free leisure spaces or job opportunities shapes the material organization of beaches and determines who can benefit from it.

In Australia, one can find beach kiosks or restaurants selling food and non-alcoholic drinks along the beach boardwalk (not on the sand). In Brazil, beach bars can operate on the sand selling food, drinks, and offering other leisure activities such as live music and playgrounds for kids. In 2024, our fieldwork in Rimini, Italy, deepened our understanding of beach bars as they have a separate concession process and are placed among the *stabilimenti balneary*, establishments that provide beach services such as rented beach chairs, paid showers and lockers, picnic tables and playgrounds. We interviewed Roberto Biagini, president of the *Mare Libero* movement. Biagini estimates that in Rimini, 90% of the sand is occupied by private *stabilimenti balneari*, while only 10% remains free for public use. Ideally, he argues, the ratio should be reversed. On the contrary, in Bondi beach, Australia, a proposal to install a temporary pop-up bar during the summer, occupying just 2% of the beach, triggered national controversy. On one side, 90% of the beach is occupied. On the other, 2% of occupation was not allowed.

How Much?

Biagini also raised questions about how much profit, noting that *stabilimenti balneari* that pay around 22,000 euros per year for their concession earn nearly 8 million euros annually. “Does that seem fair?” he asked. In Australia, by contrast, only Surf Life Saving Clubs (community-based organizations) are allowed to operate beach facilities similar to bars. Their licenses require them to offer affordable meals, and their profits must be reinvested in community programs such as swimming lessons for local children.

Which Beach?

Finally, Biagini mentioned privileged access. In Rimini, the few “free beaches” are small, scattered, and often located near less desirable areas such as the port, where the water is more polluted. The best spots, wider and cleaner, are occupied by the *stabilimenti*. We can find similar dynamics in Brazil, such as in Porto de Galinhas, (Pernambuco, Brazil) where the most prized areas are those in front of the natural pools, dominated by beach bar infrastructure. On the neighboring beach, with waves and no commercial infrastructure, a waiter once told us during fieldwork, “Oh, over there with waves? That’s not a beach”.

CONCLUSION

The ideal number of beach bars, their profits, and where they can operate vary across different societies. In Brazil, Australia, and Italy, beach bars require authorization (a concession) to operate as beaches are public domains. However, which kind of public values do societies choose? No-alcohol family gathering and safety issues or communal celebration with alcohol and economic development?

In Brazil, the Federal Public Prosecutor’s Office keeps trying to demolish beach bars. In Italy, as the *stabilimenti balneari* are considered commerce, the Bolkestein Directive is seen as a menace and proposes opening competition in service sectors to all

members of the European Union, including beach concessions. *Stabilimenti balneari* owners do not want this Directive to take effect as they claim their long concession contracts won't last if they have to compete with powerful foreign investors. These conflicts led to efforts to recognize beach bars as cultural heritage, especially when they are family-run or have long-standing ties to local communities. We've had access to an Italian study aimed at designating some *stabilimenti balneari* as cultural heritage. In Brazil, the case of Praia do Futuro (*Future Beach*) in Fortaleza, Ceará (Brazil), is emblematic: in January 2025, local law (nº 15.092/2025) officially recognized its beach bars as cultural heritage. Therefore, the law legitimizes beach bar concessions on the grounds of cultural identity and local tradition. Through this moral and legal transformation, commercial activities can remain on the sand and be reframed, acquiring a different symbolic status, not as business, but as heritage.

Beach bars can be condemned as not family-friendly, celebrated as community infrastructure, recognized as important players for tourism economic development, or sanctified as cultural heritage. The bundle of powers and the social struggles among those who decide which interpretation prevails, ultimately define the limits of beach access.

REFERENCES

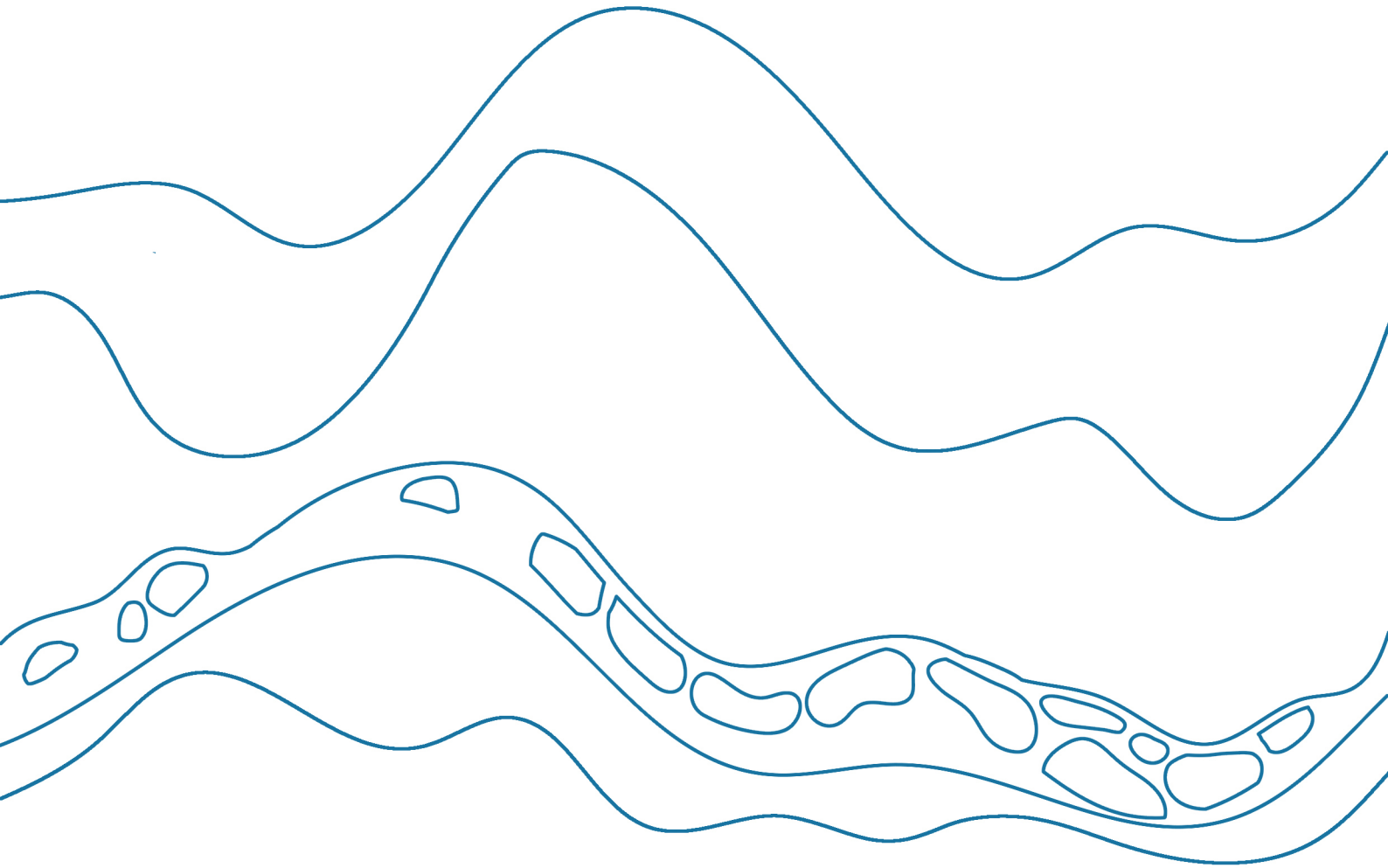
CHAMPAGNE, P. *Les paysans à la plage*. *Actes de la Recherche en Sciences Sociales*, Paris, v. 1, n. 2, 1975.

KNIERBEIN, S.; CHRISTODOULOU, C. The Post-Political Beach: Conceptual and Empirical Explorations in Greece and Austria. *In*: LOW, S. (ed.). *Beach Politics: Social, Racial, and Environmental Injustice on the Shoreline*. New York: NYU Press, 2025.

RIBOT, J. C.; PELUSO, N. L. *A Theory of Access*. *Rural Sociology*, Pennsylvania, v. 68, n. 2, p. 153-181, 2003.

SARTORE, M. de S.; COFFEY, B. Markets on the Edge: Beach Kiosk TripAdvisor Consumer Online Reviews as Dataset to Compare Australian and Brazilian Beachfront Collective Representations. *Política & Sociedade*, Florianópolis, v. 18, n. 43, p. 77-107, 2019.

VARELA, C. C. Bourdieu en la playa. Campos de fuerza y relaciones de poder sobre la arena. *Gazeta de Antropología*, Jaén, v. 25, n. 2, 2009.



PARENTE-RIBEIRO, Leticia; GÓIS, Marcos Paulo Ferreira de. Layers of the urban spetacle: visibility and public access in Copacabana's New Year's eve. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 4. p. 37-45. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19560225.

4 LAYERS OF THE URBAN SPECTACLE: VISIBILITY AND PUBLIC ACCESS IN COPACABANA'S NEW YEAR'S EVE

Leticia Parente-Ribeiro[1]

Marcos Paulo Ferreira de Góis[2]

Abstract. This study analyzes the socio-spatial evolution of Copacabana's New Year's Eve (*Réveillon*) between 1950 and 2025, treating this complex event as an indicator of social and urban change. We trace the event's history through three distinct phases, each defined by a unique regime that governs public visibility: the analog "Ritual Dualism" (1950–1975), the industrial "Mass Spectacle" (1976–2010), and the emerging "Algorithmic Governance" (2011–2025). By examining archival imagery and digital infrastructure, we argue that the waterfront's public nature has fundamentally mutated. The transition reveals that access is shifting from a regime of negotiated visibility based on social friction to one of biometric control. The beach transforms into a programmable "Code/Space", where the right to the city is increasingly conditional on digital legibility.

Keywords. Copacabana waterfront; Public space; Urban spectacle; Algorithmic governance; Regimes of visibility.

1 Federal University of Rio de Janeiro – UFRJ (Brazil) – leticiapr@igeo.ufrj.br.

2 Federal University of Rio de Janeiro – UFRJ (Brazil) – marcosgois@igeo.ufrj.br.

INTRODUCTION

The Copacabana waterfront is more than just a leisure space or a static postcard for global tourism; it operates as a complex urban laboratory where the tensions, aspirations, and contradictions of the Brazilian metropolis are dramatized and periodically reinvented. This continuous reinvention reaches its climax during the *Réveillon*, the New Year's Eve celebration that represents the peak of social visibility for the coastline. Recognized as one of the world's largest public gatherings in an open space, it transforms the beach into a stage for millions, amplifying the city's dynamics on a colossal scale.

The *Réveillon* is not merely a festivity, but a "geographical event" in the sense proposed by Milton Santos (2006). Far from being a fleeting occurrence, the event is the active force that makes time tangible, fusing it with the material world to redefine the "used territory". By focusing on this specific event, we can observe a momentary but revealing synthesis where the city's "system of objects" (infrastructure, lighting, barriers) and "system of actions" (rituals, policing, celebration) converge. This convergence exposes the underlying logic of urban organization, highlighting how the territory is continuously reorganized to meet shifting social and political ends.

Tracing the genealogy of this event requires an archaeological perspective that avoids simple narratives of linear development (Foucault, 2008). Instead, we view the trajectory of Copacabana's celebration as a succession of distinct strata, or historical phases. Each stratum delineates a specific regime of practices governing what could be seen, said, and done on the sands. This approach allows us to identify ruptures in the material and social fabric of the city, tracing the transition from the analog intimacy of candlelit rituals to the industrial scale of fireworks barges, and finally to the digital omnipresence of biometric sensors.

Crucially, these material transformations act as markers for the mutation of public space itself. We interpret the changing nature of the beach through the regimes of "visibility" and "co-presence" analyzed by Paulo Gomes (2018), who argues that the public nature of space is defined by the politics of who can see and who is seen. The public character of Copacabana is not static; it is contingent on how visibility is constructed and

controlled. We argue that the *Réveillon* has evolved from a regime of “negotiated visibility” — characterized by the friction of class and race differences — to an algorithmic regime where the public is fragmented into data profiles, fundamentally altering the political nature of co-presence.

To reconstruct these vanished strata, we rely on the analysis of visual and statistical data sources. For the 20th century, we analyze the illustrated magazines (*O Cruzeiro* and *Manchete*) which functioned as primary apparatuses for the "education of the gaze” among affluent urban elites. Applying Ana Maria Mauad’s historical-semiotic methodology (2005), we treat the press photographs as archaeological artifacts. By dissecting the "photographic space" and the "space of experience" within these images, we can decode the shifting power dynamics and visual narratives that crystallized in each era. For the contemporary period, where the control infrastructure is often imperceptible to the unassisted eye, we analyze the official sources concerning digital infrastructure and data flows that now constitute the event itself.

Through this integrated theoretical lens, we identify three major strata: the phase of "Rituals and Balls", the phase of "Mass Spectacle", and the emerging phase of "Algorithmic Governance", exposing the distinct configuration of the public space of Copacabana Waterfront in Rio de Janeiro.

THE RITUAL DUALISM AND THE NEGOTIATED CITY (1950–1975)

The first archaeological stratum reveals a city operating under a logic of strict spatial segregation and non-digital materiality. In this phase, the Réveillon was not a unified mass event, but a fragmented territory defined by a stark vertical/horizontal dichotomy. This spatial configuration reflected a specific "system of objects" and "system of actions" (Santos, 2006) that regulated the public nature of the beach through a negotiated regime of visibility.

The *vertical space*, constituting the domain of the local elite and international tourists, was epitomized by the Copacabana Palace Hotel. Within this, the "system of

objects" was characterized by exclusion and technological insulation: air-conditioned salons—celebrated in magazines like *O Cruzeiro* as a triumph over the tropics—crystal glassware, and black tie. Concurrently, the "system of actions" operated through the reproduction of social distinction; the "society column" served as a mechanism of curated visibility, restricting recognition to a hermetic circuit of peers.

In sharp contrast lay the *horizontal space* of the sands, the territory of Afro-Brazilian practitioners of Umbanda and Candomblé. For these groups, the beach functioned as an open-air *terreiro* (sacred ground) dedicated to *Iemanjá*, the Queen of the Sea. The materiality here was artisanal and deeply symbolic: devotees dressed in white, dug wax candles into the sand to resist the wind and launched small wooden boats into the surf. These vessels carried offerings of white flowers, perfume, mirrors, and combs, intended to vanish into the waves as gifts to *Iemanjá*. Economically, this stratum operated on a logic of ritual expenditure: the destruction of material value (offerings cast into the sea) to accrue spiritual capital, transforming the coastline into a porous liminal threshold between the urban and the divine.

The "regime of visibility" in this period was defined by the contrast between light and dark. The beach was physically dark, illuminated only by the flickering, organic luminescence of thousands of candles. This darkness was functional; it provided a veil of intimacy necessary for the rituals of trance and incorporation. Co-presence was characterized by a "negotiation of alterity". The elite observed the rituals from the safety of terraces or through brief, thrill-seeking excursions to the water's edge (Figure 4.1).

The visual narrative of this period reveals a specific "pedagogy of the gaze". Press photographs from *O Cruzeiro* and *Manchete* frequently framed these rituals through an ethnographic, exoticizing perspective. The "photographic space" privileged medium-shots of possessed bodies, while the "space of experience" was captioned to reinforce the myth of "racial democracy", describing the descent of the morro (hillside *favelas*) to the asphalt (the "formal" city) as a temporary, magical concession rather than a right to the city.

Figure 4.1 – Photo-report on the New Year's Eve celebration in Rio de Janeiro

Source: *O Cruzeiro* Magazine, Jan 20, 1951.
http://memoria.bn.gov.br/docreader/DocReader.aspx?bib=003581&pagfis=73940

This stratum began to erode due to infrastructural shifts. The aerial cascade known as *Chuva de Prata* (Silver Rain) in the late 1960s introduced aerial spectacles, while the completion of the beach nourishment via hydraulic fill (*aterro*) in 1971 physically expanded the sand strip. This widening of the territory created the "geographical condition of possibility" for the massification that would follow, preparing the ground for the transition from a space of ritual inscription to a space of industrial spectacle.

THE SOCIETY OF THE SPETACLE AND THE INVENTION OF THE CROWD (1976–2010)

The second archaeological stratum marks a major shift. The logic of the Afro-Brazilian rituals was displaced and subsequently given new meaning by the logic of the media spectacle. The catalyst for this transformation was the introduction of large-scale pyrotechnics managed by the hotel industry. In 1977, the Hotel Méridien inaugurated the "waterfall of fire" (*cascata de fogos*) from its rooftop. Conceptually, this shifted the

collective gaze from the horizontal plane of the sand/sea (the domain of *Iemanjá*) to the vertical plane of the hotel/sky (the domain of capital). The hotel facade effectively functioned as a screen before the advent of LED technology. This "verticalization of the spectacle" altered the use of the territory by establishing a new hierarchy of attention.

The consolidation of this stratum occurred in the early 1990s with the advent of mega-concerts, notably Jorge Ben Jor (1993) and Rod Stewart (1994), the latter drawing a record-breaking 3.5 million people. This transition demanded a radical mutation in the "system of objects". The event's material constitution underwent a radical hardening: the artisanal fragility of wax and wood yielded to the brute reality of heavy industrial infrastructure (steel stages, delay towers for audio distribution, and massive electrical generators).

The "system of actions" shifted from participation to spectatorship. The spatial arrangement became unidirectional: millions of bodies facing a stage, consuming a performance rather than enacting a rite. The circular geometry of the *terreiro* gave way to the linear geometry of the audience (Figure 4.2).

Figure 4.2 – Photo-report on the New Year's Eve celebration in Rio de Janeiro

Source: *Manchete* Magazine, Jan 07, 1995. http://memoria.bn.gov.br/docreader/004120/287093

Designed for the television camera, the event prioritized broadcast aesthetics over local practice. The darkness of the previous stratum — functional for ritual privacy — was banished by high-powered floodlights, rendering the crowd visible and consumable as an image. The tradition of wearing white, originally a religious requirement for practitioners, was appropriated and secularized by the media as a "visual uniform" for the masses. From the privileged viewpoint of the helicopter shot, this created a homogenized "human carpet", a representation of the "Marvelous City" that erased class distinctions and racial tensions.

The tension between the explosive "system of objects" and the dense "system of actions" culminated in a tragic rupture during the 2000/2001 transition, when fireworks launched from the sand caused an accident with multiple injuries. This trauma forced a definitive reorganization of the territory: in 2002, pyrotechnics were moved to offshore barges. This displacement detached the spectacle from the land, transforming the entire 4-kilometer waterfront into a unified viewing platform, a "media event" where the city's image was packaged and sold to a global audience.

ALGORITHMIC GOVERNANCE AND THE CODE/SPACE (2011–2025)

The third and current stratum represents a technological and fundamental rupture accelerated by the post-pandemic context (2021–2025). In this phase, the beach is transformed into a programmable environment, entering the era of "Code/Space", where software and physical space are mutually dependent (Kitchin; Perng, 2016). The underlying logic of the event shifts from visibility (the spectacle of the crowd seen from above) to legibility (the individual identified by the machine).

The "system of objects" undergoes a radical mutation. The heavy industrial infrastructure of the previous stratum is supplemented, and increasingly governed, by a cybernetic layer. Unlike the photographic archive of the 20th century, the evidence of this stratum is often invisible: public procurement contracts for facial recognition cameras and biometric gates. This layer is composed of fiber optic networks, biometric sensors, and a

network of smart cameras, implemented in 2024, capable of real-time facial recognition. These objects act as data collectors, converting physical presence into digital data.

The Réveillon "regime of visibility" underwent a fundamental shift. The panoramic and homogenized visibility (the "human carpet") becomes forensic and algorithmic. The anonymity that historically defined the public nature of the *Réveillon* — the freedom to be one among many — is eroded. Access to the event is filtered through digital checkpoints (QR codes for transport) and physical blockades equipped with metal detectors.

Governance shifts from reaction to prediction; from "containing the crowd" to anticipating its movements through algorithmic risk assessment. The spatial configuration of the 2024/2025 cycle reflects this logic: the dispersion of stages along the Leme-Copacabana axis was not merely an artistic decision, but a crowd-control strategy designed to reduce density and facilitate monitoring.

Simultaneously, the participant transforms from a spectator into a "prosumer" of data (simultaneously producer and consumer). The crowd functions as a "mesh network" of smartphones. The act of celebration is inextricably linked to the act of transmission (streaming via 5G). Visual analysis of this era reveals a fragmentation of the narrative: there is no longer a single "official photo" of the event, but billions of simultaneous uploads that feed the very algorithms monitoring the crowd. The body on the sand is now a node in a smart city network, constantly producing the data used to govern it.

CONCLUSION

The socio-spatial archaeology of the Réveillon in Copacabana reveals that the urban beach is not a static natural substrate, but a dynamic palimpsest — a layered record of diverse histories — where different times, technologies, and social rules overlap. By avoiding predetermined narratives of "modernization" or nostalgic lamentations for a lost "authenticity", this analysis exposes the structural ruptures that have continuously redefined the "used territory". The trajectory from the "Analog City" to the "Society of the Spectacle", and finally to the current "Code/Space", demonstrates that the production of the festive event is inextricably linked to the production of the city itself.

For the broader study of public access and conflicts in urbanized coastal zones, the methodological approach proposed here – integrating the materiality of the "system of objects" with the "regimes of visibility" – offers a critical analytical lens. We demonstrate that the "public" nature of the beach is not an immutable legal guarantee, but a condition that is technically produced and visually managed. The conflicts inherent to the waterfront are not merely disputes over physical space but struggles over the "regime of visibility" that governs co-presence.

In the contemporary stratum, the challenges to public access in coastal areas have mutated. The barriers are no longer just physical or social, as in the era of the "vertical/horizontal" divide, but increasingly informational and biometric. The transition to *algorithmic governance* suggests that the right to the city is becoming conditional on digital legibility. The conflict shifts from the visible negotiation of bodies in the sand to the invisible management of data flows. Consequently, technology does not merely support the event; it imposes a new rationality that reshapes the collective life of the city altering the very experience of the crowd.

As we move into an era of so-called “smart” territories, analyzing the conflicts over public access to the beaches requires looking beyond the sand and the sea, decoding the complex entanglement of images, algorithms, and infrastructures that now constitute the urban waterfronts. The *Réveillon* is thus revealed as a recurring geopolitical laboratory where the limits and the very definition of public access are continuously tested and redrawn.

REFERENCES

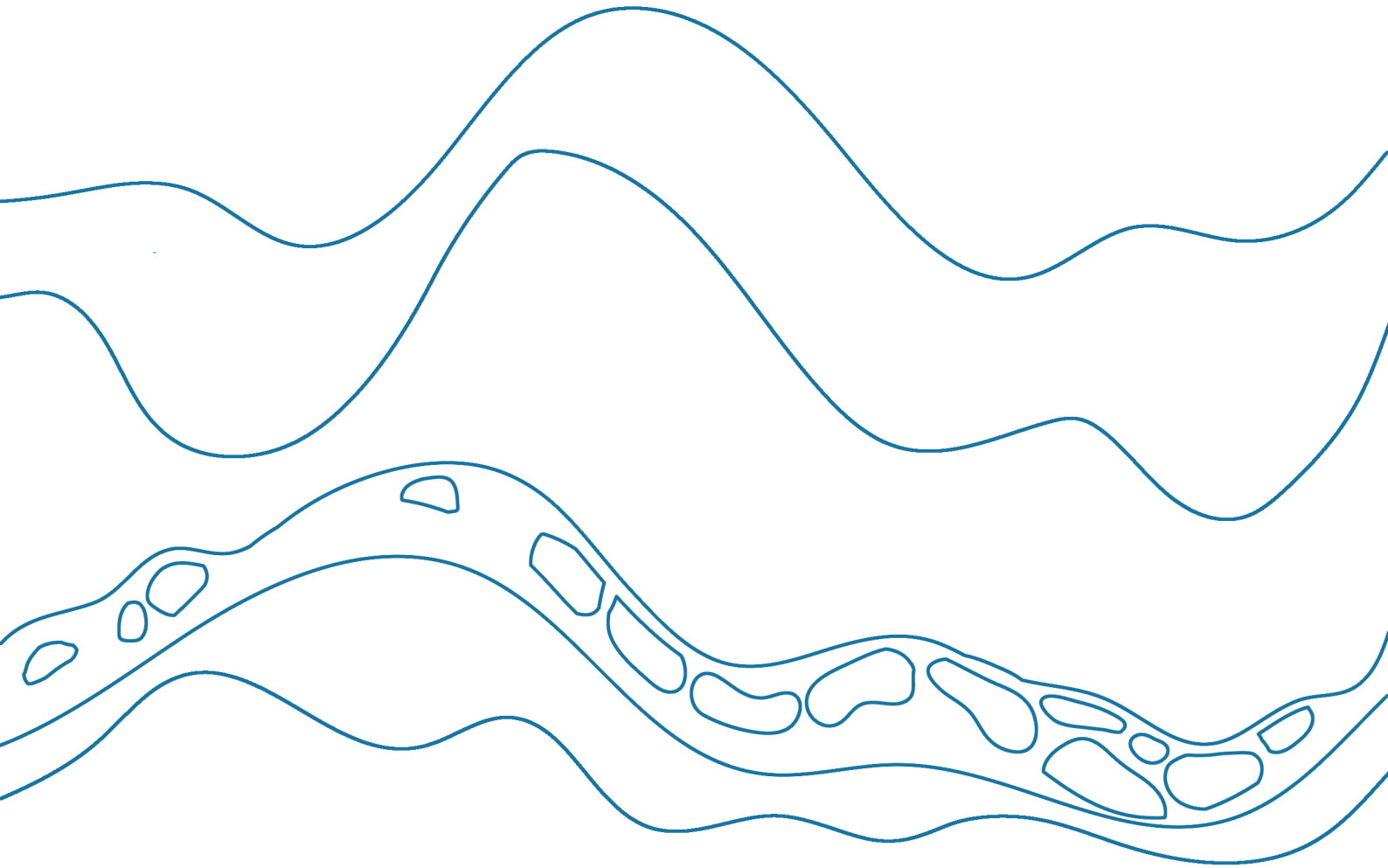
FOUCAULT, Michel. *A arqueologia do saber*. Rio de Janeiro: Forense Universitária, 2008.

GOMES, Paulo César da Costa. Espaço público, espaços públicos. *GEOgraphia*, Niterói, v. 20, n. 44, p. 115-119, 2018.

KITCHIN, Rob; PERNG, Sung-Yueh (ed.). *Code and the City*. London: Routledge, 2016.

MAUAD, Ana Maria. Na mira do olhar: um exercício de análise da fotografia nas revistas ilustradas cariocas, na primeira metade do século XX. *Anais do Museu Paulista*, São Paulo, v. 13, n. 1, p. 133-174, 2005.

SANTOS, Milton. *A Natureza do Espaço*: Técnica e Tempo, Razão e Emoção. São Paulo: Edusp, 2006.



PEREIRA, Simone de Araujo. The public meaning of the seafront: urbanization, littoral gentrification, and cultural practices at Atalaia waterfront. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 5. p. 47-52. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19561306.

5 THE PUBLIC MEANING OF THE SEAFRONT: URBANIZATION, LITTORAL GENTRIFICATION, AND CULTURAL PRACTICES AT ATALAIA WATERFRONT

Simone de Araujo Pereira[1]

Abstract. This chapter analyzes the transformation of the Atalaia Waterfront in Aracaju (Brazil) as an urban intervention that reconfigured public life in the coastal zone. Based on anthropological and ethnographic research conducted between 2010 and 2012, it presents the concept of littoral gentrification to describe the symbolic and material revaluation of coastal spaces, where modernization and aesthetic ordering coexist with subtle forms of exclusion. The Atalaia Waterfront has become an emblematic environment where consumption, leisure, and tourism interact with conflicts surrounding public use and boundaries of belonging. By understanding the waterfront as simultaneously beach and city, the study reveals how public meanings are negotiated in everyday practices, showing that coastal areas function as urban laboratories where social, political, and aesthetic values are continuously produced, contested, and reinvented.

Keywords. Urban anthropology; Public space; Coastal urbanization; Atalaia waterfront; Littoral gentrification.

INTRODUCTION

At the invitation of the international research network Beach Access Network (BAN), I participated in the event “Beach Management: Public Spaces, Vulnerability, Conflicts, and Challenges”, held in Aracaju on August 22, 2025, where I presented an analysis of urban intervention processes in coastal zones, highlighting their socio-spatial impacts and the challenges associated with coastal management.

1 Federal University of Sergipe – UFS (Brazil) – simoneap@academico.ufs.br.

My presentation focused on the urban interventions carried out at Atalaia Beach, located in the city of Aracaju, capital of the State of Sergipe in northeastern Brazil. This location is an expressive example of how coastal urbanization transforms the symbolic and practical dimensions of public life. Once characterized as a natural beach area, it became the target of successive interventions, especially from the late 1990s onward, aiming to integrate leisure, tourism, and a modernized aesthetic identity into the urban landscape—resulting in the space now known as the “Atalaia Waterfront.” This movement reflects a broader trend in many contemporary cities, in which beach areas are modified according to tourism interests.

In this sense, the ideas presented here highlights the method used, the results obtained, and the conclusions derived from the discussion. Regarding methodology, the research was guided by a qualitative approach, combining documentary analysis with ethnographic field observation conducted between 2010 and 2011.

The results indicate a long and ongoing process of urban interventions, initiated in the 1990s with the objective of inserting Aracaju into the Northeast tourism market, at the time promoted as the “Brazilian Caribbean.” Unlike other northeastern capitals, Aracaju's beaches have dark sand and water, contrasting with the turquoise-blue waters characteristic of other capitals. Thus, with public funding for tourism promotion and considering the natural features of Aracaju’s coastline, a process of altering the coastal landscape began. The Atalaia Waterfront became a mediating space between the city and the beach, incorporating practices typical of both environments.

The conclusion identifies coastal urbanization as a process of “littoral gentrification,” characterized by transforming the natural beach — understood as dark — into a beach symbolically reconstructed through physical structures painted in blue tones, designed to evoke the perception of the “Brazilian Caribbean” and the idea of blue sea.

MATERIAL AND METHODS

The research adopted a qualitative analytical approach, combining documentary investigation and fieldwork carried out between 2010 and 2011. Urban planning documents, architectural projects, and historical records were examined to reconstruct the intervention process at the Atalaia Waterfront.

Fieldwork included observation of spatial dynamics along the waterfront, photographic documentation, and informal interviews with users, workers, vendors, and public agents. Inspired by the interpretative tradition of urban anthropology (Simmel, 1950; Geertz, 1973), the study conceives the waterfront as a space where meanings are produced through practices, correlating with Geertz's (1973, p. 5) notion that "man is an animal suspended in webs of significance he himself has spun."

This approach made it possible to identify the waterfront not only as built infrastructure but as a symbolic and contested territory, where inclusion, exclusion, aestheticization, and public identity converge. It is within this context that the concept of littoral gentrification emerges, grounded in the socio-spatial dynamics observed and interpreted through ethnographic analysis.

RESULTS

The research allowed the Atalaia Waterfront to be understood as a liminal space—a physical structure carrying the symbolism of the interrelation between the urban and the natural. Its architectural design introduced various urban facilities along the coastline, organized into architectural groupings referred to as squares, which included sports facilities, cultural centers, open areas, and restaurants. This organization both facilitates public interaction and generates subtle forms of segregation.

To align the tourist's expectation of "being at the beach" with the city's goal of joining the Northeast tourism market, the "Brazilian Caribbean", the built structures are predominantly blue. Multiple structures were designed to conceal the dark-colored sea and

offer, in the tourist's first visual encounter, walls and surfaces painted in "sea-blue" tones. The images presented in the original document illustrate how these aesthetic elements repeat along the entire waterfront.

Daily uses of the waterfront vary over time. In the morning, physical exercise and access to the beach are predominant. In the afternoon, under intense sunlight, bars and restaurants are more frequented. At night, the area becomes significantly more active, with people strolling along the boardwalk, filling bars and restaurants, and using most available facilities such as the skate park, playground, and sports courts. These overlapping uses reveal the coexistence of urban and beach practices.

Thus, the Waterfront becomes a symbolic boundary where a "public meaning of the seafront" emerges — a way of being in public that combines the contemplative rhythm of the beach with the performative visibility of the city. When analyzing urban interventions on the coast, one identifies the symbolic use of the beach-nature in constructing a narrative of consumption embedded in seaside urban spaces (Figures 5.1 and 5.2).

Figure 5.1 – Some equipment and a wall in blue tones in the background

Source: personal archive.

Figure 5.2 – Low wall delimiting Praça dos Arcos, with a predominance of the color blue

Source: personal archive.

Coastal interventions have also established a process of "Littoral Gentrification," a symbolic and material reconfiguration that privileges certain aesthetic and social standards over others. Unlike the gentrification of central neighborhoods, this process does not displace residents but redefines the seafront as a site of social and tourist distinction.

Littoral gentrification represents an urbanization that symbolically retains the feeling of being at the beach, revealing uses and counter-uses (Leite, 2007) within a landscape that evades the symbolic control of urban traces observed in the everyday life of the polyphonic city. The Atalaia Waterfront, through its complex dynamics, may be understood through Gilles Deleuze's metaphor of a patchwork quilt, whose physical structures and user practices create a mosaic of "places" stitched together by "interstitial spaces," made public through encounters among diverse groups.

This definition shows that littoral gentrification is not merely an aesthetic or urbanistic process; it is also a symbolic dynamic that reconfigures the beach as an extension of the city without erasing its plural character. From an analytical perspective, littoral gentrification illustrates how urban interventions not only organize space but also produce new hierarchies of visibility and belonging. The waterfront's design materializes political and cultural values that determine who can occupy, use, and represent the beach as part of the city's public identity.

CONCLUSION

The Atalaia Waterfront synthesizes the complexity and contradictions of contemporary coastal urbanization, in which aesthetic ideals, economic strategies, and public access intertwine. The process of littoral gentrification reveals how coastal modernization can generate tourist appeal while also producing subtle forms of exclusion, transforming beaches into arenas of distinction and social regulation.

Considering the event's central theme—public access to beaches—the Atalaia Waterfront illustrates the analytical challenges involved, as it reflects aspects present in other coastal realities. Access has been limited in some areas while guided in others. However, restrictions are not only physical—they are also symbolic, creating the need to identify each area and examine the uses and limitations imposed.

Thus, the urban intervention at Atalaia Beach, resulting in the urban expression known as the “Atalaia Waterfront,” can be understood as a process of “Coastal Urbanization,” in which the natural beach is simultaneously highlighted and overshadowed by the physical architecture of urban structures.

REFERENCES

GEERTZ, Clifford. *The Interpretation of Cultures*. New York: Basic Books, 1973.

LEITE, Rogério Proença. *Urban Enrichment and the Construction of Public Space*. São Paulo: Annablume, 2007.

SIMMEL, Georg. *The Metropolis and Mental Life*. *In:* WOLFF, Kurt H. (ed.). *The Sociology of Georg Simmel*. New York: Free Press, 1950.

ERTEL, Varlei Rui. Coastal Transformation into a residential area: a sociogenetic perspective of the beach of Balneário Camboriú, Santa Catarina. *In:* SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 6. p. 53-60. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19561373.

6 COASTAL TRANSFORMATION INTO A RESIDENTIAL AREA: A SOCIOGENETIC PERSPECTIVE OF THE BEACH OF BALNEÁRIO CAMBORIÚ – SANTA CATARINA

Varlei Rui Ertel[1]

Abstract. This study explores the transformation of the Central Beach of Balneário Camboriú by investigating changes in the occupation of beachfront land. The text presents an analysis of the transformation of the beachfront from a fishing and farming community to its current state as a luxury residential area. The study is based on archival research and demonstrates how the coastal area was reshaped through the aspirations of local groups during the mid-twentieth century. Additionally, the extant research establishes Balneário Camboriú as a paradigmatic case for understanding how coastal environments are socially produced.

Keywords. Coastal occupation; Symbolic power; Balneário Camboriú; Commodification.

INTRODUCTION

Since at least the early twentieth century, the Central Beach of Balneário Camboriú (BC) has been the setting for distinct processes of appropriation of its coastal strip. Contemporary disputes concerning this area are associated with the consolidation of a high-end real estate market that commercializes the experience of "coastal living" and aligns it with a particular model of urbanization. This model, frequently referred to as 'the

1 Federal University of Santa Catarina – UFSC (Brazil) – varleiruiertel@gmail.com.

Brazilian Dubai', is marked by the presence of very tall skyscrapers, with several buildings nearing 300 meters, concentrated along the shoreline. It reflects contemporary transformations in the forms of access to and use of beaches, which are deeply intertwined with political, cultural, and economic factors. At the same time, this urban configuration serves to consolidate social hierarchies that are sustained by both the material and symbolic dimensions of social life.

From a sociogenetic perspective — that is, by analyzing the origins of residential occupation along the seafront and the persistence of the current model — it becomes possible to expand our understanding of how coastal environments have been shaped to serve the interests of particular social groups. In short, attaining property ownership along the coastline entails a considerable financial investment, often amounting to several million reais. This phenomenon, however, is not exclusive to BC; it is also observable in other Latin American beaches, including Concón in Chile and Punta del Este in Uruguay. This creates an opportunity to examine and analyze the mechanisms and resources that are mobilized to legitimize this model of coastal elitization.

Historiographical records indicate that the Central Beach began to be frequented for leisure and sociability in the late 1920s, when access to the region improved and hotels such as Jacob Schmitt (1928) and the Miramar Hotel (1932) were founded. The initial vacationers — predominantly from the nearby cities of Blumenau and Itajaí and belonging to the industrial and port bourgeoisie — would later become proprietors of seasonal residences. This transfer of property occurred through the subdivision and sale of lands near the beach. These lands had historically been held by local farmers and had long been regarded as having low economic and social value (Christoffoli, 2001).

The interaction between these social groups, whose conceptions of coastal land use differed substantially, triggered a process of territorial reconfiguration oriented toward the construction of second homes—properties used primarily for occasional or seasonal stays. Consequently, a territorial dispute emerged concerning competing local development projects. On one side were subsistence farmers and fishers, who were descendants of Azorean colonists. On the other side were German immigrants and

vacationers who were linked to manufacturing and the liberal professions (Teixeira, 2020). The historical outcome of this dispute was favorable to the latter. According to the to the data, between 1948 and 1951, 239 new residences were constructed (Silveira Junior, 1953) — a process that intensified continuously over the following decades. Subsequent to this period, the seafront has emerged as a site that has attracted significant real estate investment. A particularly salient phenomenon is the observation that, between the years 2020 and 2025, BC was recognized as the Brazilian city with the highest land price per square meter. Economic sociology provides a valuable framework for comprehending the evolution of this market, especially by elucidating the interplay between the material and symbolic economies. In this context, a residence is not merely a commodity or financial investment but also a symbolic good, socially recognized as an expression of the group that inhabits it (Bourdieu, 2006). Consequently, the phenomenon of seafront occupation and the subsequent real estate appreciation are indicative not only of structural transformations in markets but also of collective aspirations associated with prestige, inheritance, and social distinction.

THE BEACH AS A SOCIAL SPACE UNDER DISPUTE

The sociological study of beaches has evolved beyond the confines of a mere focus on leisure practices, a trajectory initiated by the seminal contributions of Patrick Champagne in *Les paysans à la plage* (1975). Beaches have since been recognized as privileged sites for analyzing social stratification — settings in which power dynamics can be observed in a particularly tangible way, through disputes over access to both material and symbolic resources (Bruno; Salle, 2018).

From this perspective, the beach is conceptualized as a social space that is disputable, appropriated by social groups subjected to symbolic domination. This phenomenon of social domination is not confined to formally constituted institutions but is also exhibited by informal or semi-formal institutions. These informal or semi-formal institutions possess the capacity to appropriate and reinforce dominant values and representations (Bourdieu, 1989). For instance, the idea and aspiration of attaining a

fulfilling lifestyle in retirement by residing near the beach has become increasingly prevalent, particularly when propagated through market discourse.

The process of constructing social reality tends to establish what can be termed a gnoseological order: the immediate meaning of the world, and in particular the social world, presupposes what Durkheim called logical conformism, that is, a homogeneous conception of time, space, number, and causality, which enables agreement among minds. This construction is what Bourdieu (1989) defines as symbolic power — the capacity to "make see and make believe", to construct through utterance and mutual recognition between those who exercise power and those who are subjected to it. It is precisely in this entanglement between social structure and meaning production that beliefs are constituted, stabilized, and reproduced, above all through the legitimacy of those who articulate them.

The evocation of dominant ideas perpetuated through narratives contributes to maintaining the worldviews of agents who justify themselves within the existing social order, thereby sustaining consensus. In the case of BC, we will see how one group acted as a precursor by advocating for a series of seafront transformations, helping to create a space that aligns with the logic of the residential market.

From a methodological standpoint, this research is based on archival research of materials collected from the *Hemeroteca de Santa Catarina* and the *Arquivo Histórico de Balneário Camboriú*. The corpus includes a 1954 newspaper article from the regional daily *A Nação*, photographs, and historiographical records. These documents illustrate the analyzed process and make it possible to identify the aspirations, values, and perceptions that circulated in mid-twentieth-century Brazil. During this period, the model of territorial occupation of the shoreline underwent a decisive change.

THE CONSOLIDATION OF A COASTAL OCCUPATION MODEL

From 1954 to 1964, Central Beach underwent a transition from the status of a district to the aspiration of achieving autonomous municipal status, independent from Camboriú. During this period, the coastal region was politically subordinated to an inland urban center whose economy was structured far from the sea. However, even prior to the formal establishment of municipal autonomy — which was later enacted by legislative decision — there were already mobilizations by actors interested in reconfiguring the waterfront. In this context, the *Sociedade do Progresso da Praia* (SOPRO, "Society for the Progress of the Beach") assumed this duty.

The claims advanced by SOPRO can be traced to a 1954 article published in *A Nação*, in which the association presented an action plan requesting public authorities to expand infrastructure with the aim of enhancing the beach's tourist value. Among the proposals were the installation of lifeguard stations and the urbanization of the seafront — initiatives designed to consolidate the seaside area as an economic attraction centered on tourism.

The article was purportedly presented as "the expression of the legitimate interests of the local community". However, the document also noted the absence of representatives from Camboriú's municipal administration in the drafting of these proposals. This absence reveals both the emergence of an organized process of claim-making and the asymmetry of power relations among the groups involved. Local actors sought to influence decisions within an institutional field in which they did not yet hold a dominant position.

The document also included requests for improvements in sanitation and public lighting, finally culminating in an explicit defense of the region's administrative autonomy — that is, its municipalization. This agenda reveals that certain groups mobilized discursive, organizational, and political resources to consolidate a specific model of coastal development. In this sense, the demand for administrative autonomy can be conceptualized as a strategy to ensure institutional representation and to insert their

claims into the local legislative arena, particularly in view of the upcoming municipal elections. The document was emphatic:

> The president of SOPRO warned all members that now is the decisive moment to defend their aspirations, and those who fail to vote in the upcoming elections in Camboriú will have no right to complain later if their just aspirations are not fulfilled (MOVIMENTA-SE [...], 1954, p.6, translated by the author).

Consequently, it was through these purportedly so-called *"just aspirations"* that a social group came to contest the future of the beach, gradually attaining greater decision-making power within formal institutions. The consolidation of this project became evident in 1969, when the municipal government, in coordination with the state government, commissioned a plan to regulate land use in seaside resorts — the *Basic Plan for Urban and Tourist Development* — which, in 1970, served as the foundation for the first *Master Plan of Balneário Camboriú* (Municipal Law nº 128). This institutional milestone formalized the prevailing seafront occupation model

The institutionalization of the Master Plan during the 1970s marked the consolidation of the seafront occupation model. However, it also sparked new disputes over the types of residences that should occupy beachfront land. The prevailing model of unrestricted vertical construction in this contest is evident. In this regard, several elements contributed to its legitimation.

A notable example encapsulates the core elements of the desired modernization and local progress narrative, as exemplified by a civic parade held on Brazil's Independence Day. In the 1970s, a group of children marched along *Avenida 7 de Setembro*, carrying large placards depicting newly constructed high-rises along the seafront. This moment, which has been documented through a photographic medium, embodies a multitude of social representations. This civic march, in essence, underscores the symbolic presence of young students, who are traditionally regarded as the nation's future. It reinforces the developmentalist ideal that was prevalent during that period: the

urbanization by skyscrapers. The act of youth carrying such images indicates an implicit association between urbanization and the concept of social progress, thereby positioning buildings as tangible symbols of a desired and idealized future envisioned by local actors. Therefore, this event functioned as both a celebration of patriotism and a symbolic expression of collective expectations regarding the use of the seafront.

CONCLUDING REMARKS

The coastal transformations of the beachfront manifest as distinct processes of appropriation, observable in the consolidation of a prevalent model of seafront occupation. This model is frequently cited as a reference point for the structuring of other coastal spaces and for processes of real estate valorization. The perpetuation of this urban pattern does not imply the absence of conflict; on the contrary, the shoreline remains a space that concentrates and continually updates disputes over who may occupy it and which uses should prevail.

In this regard, the field of sociology is tasked with revealing the dynamics that articulate economic interests, symbolic aspirations, and power relations in the production of this space. By doing so, sociology situates such practices within a broader historical and social process that shapes and redefines the coastline as an object of investment, distinction, and desire.

REFERENCES

BOURDIEU, Pierre. Disposições dos agentes e estrutura do campo de produção. *In*: BOURDIEU, Pierre. *As estruturas sociais da economia*. Porto: Campo das Letras, 2006. cap. 1. p. 37-127.

BOURDIEU, Pierre. *O poder simbólico*. Rio de Janeiro: Bertrand Brasil, 1989.

BRUNO, Isabelle; SALLE, Grégory. 'Before long there will be nothing but billionaires!' The power of elites over space on the Saint-Tropez peninsula. *Socio-Economic Review*, v. 16, n. 2, p. 435-458, 2018.

CHAMPAGNE, Patrick. Les paysans à la plage. Actes de la recherche en sciences sociales, v. 1, n. 2, p. 21-24, 1975.

CHRISTOFFOLI, Angelo Ricardo. Introdução do lazer, como prática de sociabilidade da burguesia, no litoral de Santa Catarina (1900-1950). *Cinergis*, Santa Cruz do Sul, v. 2, n. 1, p. 143-153, 2001.

MOVIMENTA-SE a Praia de Camboriú, na defesa dos seus legítimos interesses. *A Nação, Blumenau*, Blumenau, n. 401, p. 6, 19 fev. 1964. Available at: https://hemeroteca2.cultura.sc.gov.br/docreader/DocReader.aspx?bib=883662&hf=hemeroteca2.cultura.sc.gov.br&pagfis=11305. Access: jan. 2025.

SILVEIRA JUNIOR, Norberto. *Álbum Fotográfico-Descritivo da Praia de Camboriú*. Camboriú, 1952.

TEIXEIRA, Nildo. Balneário de Camboriú: Formação Social, econômica e política. Balneário Camboriú: Publixer, 2020.

PERELMAN, Mariano D. Shaping shores: the continuous formation of beaches on the Buenos Aires coast (Argentina). *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 7. p. 61-68. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19561405.

7 SHAPING SHORES: THE CONTINUOUS FORMATION OF BEACHES ON THE BUENOS AIRES COAST (ARGENTINA)

Mariano D. Perelman[1]

Abstract. This chapter explores the continuous formation of beaches on the Buenos Aires coast, examining them not as fixed natural entities but as dynamic socio-material configurations. Drawing from ethnographic research with street vendors and beachgoers, it introduces the concept of *beach time* to highlight the seasonal, political, and economic dimensions that shape these spaces. Beaches emerge through the interaction of human and nonhuman actors, ecological cycles, regulations, and imaginaries that extend beyond the shoreline. Far from static, they are contested sites where work, leisure, morality, and politics intersect. In Argentina, beaches act as indicators of economic trends, arenas of urban order, and stages of public debate. By situating beaches within local histories and global processes, this work rethinks them as generative spaces of coexistence, negotiation, and social imagination.

Keywords. Beach time; Buenos Aires; Public space; Informality; Human-nonhuman relations.

INTRODUCTION

I want to begin by noting that my entry point into “beach studies” is somewhat unusual: it originates in my research with street vendors in a city that has no beach — or no longer has one — the city of Buenos Aires.

1 University of Buenos Aires – UBA and National Scientific and Technical Research Council – CONICET (Argentina) – mdperelman@gmail.com.

The southern riverfront of the city once had its own bathing resorts, especially for working-class residents. My mother used to tell me that when she was young, people still visited those resorts, particularly the saltwater pools of “La Salada” (named after the saline groundwater they drew from) — the same place where one of the largest informal markets in Latin America stands today. But with river pollution and the rise of Mar del Plata as a seaside resort not just for elites, beaches — and then pools — began to disappear.

In my mother’s home, which comes from a family undoubtedly considered part of the “poor,” there are dozens of photos of her with her siblings, parents, aunts, and uncles vacationing on the beaches of Mar del Plata.

My interest in beaches is perhaps influenced by those beautiful black-and-white photos that I still pull out of a box almost every time I visit my parents. Today, people can still “go to the river to cool off or swim,” especially in the Tigre area or the Paraná Delta, but there aren’t any real beaches anymore.

Figure 7.1 – Photo of the Balneario Municipal de la Costanera Sur of the Ciudad de Buenos Aires, 1930 decade

Source: Argentinian newspaper “Página |12”.

If the beaches of Buenos Aires have physically disappeared, ruins and repurposed spaces still remain along the city's waterfront. It’s often said that Buenos Aires is a city that has turned its back on the river. Yet, the beach continues to reappear in different forms.

My interest in beaches started from a comment made by a street vendor during fieldwork. In a conversation, he said that they weren't a mafia, as the media claimed— that the real mafia was “on the beach” (Perelman, 2025). That remark made me realize that “the beach” goes far beyond its physical space and instead acts as a contrasting concept in how vendors organize and understand their own practices, both in Buenos Aires and in Mar del Plata. I also began to see how the beach reemerges in the imaginations of Buenos Aires residents, especially in spring, as a symbol of desire and expectation.

Here, I aim to develop some of the processes that shape beaches in the Province of Buenos Aires, considering both historical and situational perspectives.

Going to the beach can mean different things — it's the result of struggles over space. It varies across different moments (historical and seasonal).

There is extensive literature on how specific beaches can serve as markers of social differentiation or as racial reinforcement, but that is not the path I wish to pursue here. Instead, I’m interested in how people utilize the beach in various ways, and as a result, the beach itself evolves. These uses differ with climate, ecological cycles, and structural changes, reflecting Evans-Pritchard’s distinction regarding the Nuer (Evans-Pritchard, 1987). Some researchers contend that beaches represent a complex relationship between nature and culture and should be examined with attention to their physical, nonhuman elements.

Nonhuman actors shape beaches, and the beach itself encourages us to act — just as we act for the beach. Maybe it’s time to rethink the naturalist boundary between nature and culture, inside and outside.

But it is necessary to explore further. We understand that leisure beaches are a recent social construction and have historically been contested spaces. However, how those conflicts develop and how beaches “enter into politics” — to paraphrase Vinciane Despret’s beautiful book on animals (Despret, 2020) — is essential.

From my case study (Buenos Aires), I want to contribute to the understanding of beaches, acknowledging that not all beaches fit this framework, but hoping to offer insights that can travel. I'm particularly interested in shorter time frames, even as I recognize that these are only meaningful when grounded in the longue durée that is always returning.

Let me clarify. I want to emphasize the seasonal nature of mass beach usage. In Buenos Aires Province, a beach isn't the same throughout the year. This is crucial: many beaches (co)exist within the same physical space, depending on the season.

SHAPING SHORES: CLIMATE, RELATIONS AND POWER RELATIONS

Argentina's climate means that beaches — especially in Buenos Aires Province — become pilgrimage sites for thousands of people between mid-December and the end of February. The "summer season" disrupts everyday life in beach towns, transforming them into temporary urban configurations. These months shape what I call beach time — a distinct temporal register. During this time, beaches serve as sites of rest and leisure, but also of work for hundreds of street vendors who come to "do the season." The media pays close attention to what happens on the beach, while tens of thousands enjoy their free time there. Countless processes unfold that constitute the summer beach. To understand this, we must attend not just to the spatiality (the beach itself), but also to the temporality (summer) as a constitutive dimension of the beach as a social configuration.

The summer beach differs from other beaches (in winter, on weekends). They are not the same beach, and the social relationships they foster are distinct.

My fieldwork indicates that to work on the beach, vendors engage in various practices that allow them to utilize it as a commercial space. This occurs during a specific period — beach time. This leads me to a broader point**:** everything that takes place on the beach is interconnected. The interaction of human and nonhuman actors within and through materiality — the continuum of these processes — creates the beach. As materiality and actors evolve throughout the year, so too does the beach.

In Rio de Janeiro, during ongoing fieldwork with Alejandro Louro, we discovered that sand plays a central role in labor disputes; for instance, wet and dry sand affect how vendors move and display their goods. The beach is naturally divided in multiple ways.

Materiality generates ways of moving, circulating, and presenting oneself, and creates special relationships between work and leisure for both vendors and vacationers. Vendors are not consistently present throughout the year, which influences the experiences of other beachgoers. During the summer, vendors emerge as central figures, crucial to the beach's social ecology. This involves a substantial amount of work.

The framework of relationships, legislation, tacit norms, materiality, and other nonhuman actors constitutes public space — and thus the beach. That's why beaches differ throughout the year. I use the notion of *beach time* to emphasize this specificity and to denaturalize the concept of the beach as a singular, unchanging space.

I also want to stress that people are constitutive of the beach itself (e.g., beach bars, vendors, lifeguards, etc.). People do not imagine beaches without vendors, for example.

This leads to another point. As Bidet and Devienne (2017, p. v-vi) wrote:

> The metropolitan scale is essential, as it is often at this level that decisions regarding development, access, and acceptable uses of the shores are made. Second, the regional level matters insofar as the development of coastal tourism may be linked to the decline of a once-dominant economic activity further inland (...). Finally, the international dimension must be taken into account. The advent of cheap air travel in the 1970s accelerated the development of seaside tourism in developing countries, which brought different populations into contact (...). Where these different scales meet, coastal spaces can become the center of major scandals.

Clearly, beach temporality is not shaped in isolation but emerges through metropolitan, regional, and planetary processes.

Hansen and Verkaaik (2009, p. 6) said about cities having an Urban Charisma. They refer to two aspects: one is the charisma of a city as its 'soul' or mythology that is emitted from its buildings, infrastructure, the historicity of its sites, and anonymous crowds. The other is also charisma to be found in the city — in its crowds, in the styles and reputations of its people, their knowledge, and the special skills and extraordinary acts that the city enables and necessitates. Just as cities possess their own charms, something similar happens with beaches.

Relational approaches such as these, however, often overlook another key aspect: how beach spatiality speaks to us contextually, inviting us to act.

At the beginning, I emphasized the longue durée. But I also want to consider how beaches are built situationally, through processes shaped by local and global dynamics — by the people who vacation and by the discourses that define what beaches are.

In Argentina, the beach becomes a way of talking about prices and the economy. Numbers about how many people go to the beach become key indicators in national debates about the economic situation. The cost of "tents," "umbrellas," and rentals becomes part of public conversation, both at the metropolitan and national levels, as the beach acts as a thermometer of consumption. Moreover, beaches in Argentina are often contrasted with those of neighboring countries — especially Brazil (and, to a lesser extent, Uruguay).

In another work (Perelman 2025), I wrote that, as public spaces, beaches are sites where conflicts arise and are resolved. In Argentina, the summer beach becomes a highly politicized space. Beach time is when security policies, anti-drug operations, and political campaigns are launched. But it is also when private conflicts become public, challenging dominant lifestyles and moral values. Beach time is pivotal in constructing urban order through behaviors and interactions. This produces norms of "proper" conduct based more on morality than legality. Yet these effects do not operate the same way outside beach time.

Let me add one more point: talking about the beach can be a political act. To paraphrase (Austin, 1975), saying is doing. Governments and aligned media may show

crowded beaches as a sign of prosperity; the opposition often tries to show the opposite. In everyday life, people express political allegiances through beach talk.

SOME ENDING WORDS

Just as vendors contrast beach-time selling with narratives of criminalization, thousands of people invoke the beach to define themselves and their relation to space. Where does the beach end? This might sound naïve, or overly romantic. But as recent scholarship has shown, thinking about how spaces, things, and nonhuman actors make us do things is not trivial — and must be taken seriously.

An ethnographic perspective helps us understand that experiencing the beach constitutes the beach itself. While much research focuses on legislation, geography, or the environment, approaching the beach through space and social relations allows us to rethink it as a physical, symbolic, imagined, and contested space. That's why the beach, as I said, has both a form and a temporality that must be understood in relation to everyday life. The beach is constructed through what happens during the season and outside of it. Beaches are not only practices that take place on the sand, but also far away from it.

Beaches are multiple, imagined constructions. In this complex world, struggles for work, recognition, and urban order gain central importance.

Beaches, in short, are part of a liminal urban space, a special area for negotiating lives between human and non-human actors. The beach is a generative economy that differs from that of the city but cannot be understood without it. The beach is good for thinking about social relationships.

The study of beaches also opens up the possibility of considering the spaces of coexistence between humans and non-humans. The legitimate forms of use and the interspecies conflicts that occur in shared spaces. Thus, beaches appear as a legitimate place of interaction with certain species, where the ways of being are negotiated. This allows us to (re)think the relationship of land appropriation as a locus of coexistence between different species.

REFERENCES

AUSTIN, J. L. *How to Do Things with Words*. Oxford: Oxford University Press, 1975.

DESPRET, V. *Quand le loup habitera avec l'agneau*. Nouvelle éd. augmentée. Les Empêcheurs de penser en rond. Paris: La Découverte, 2020.

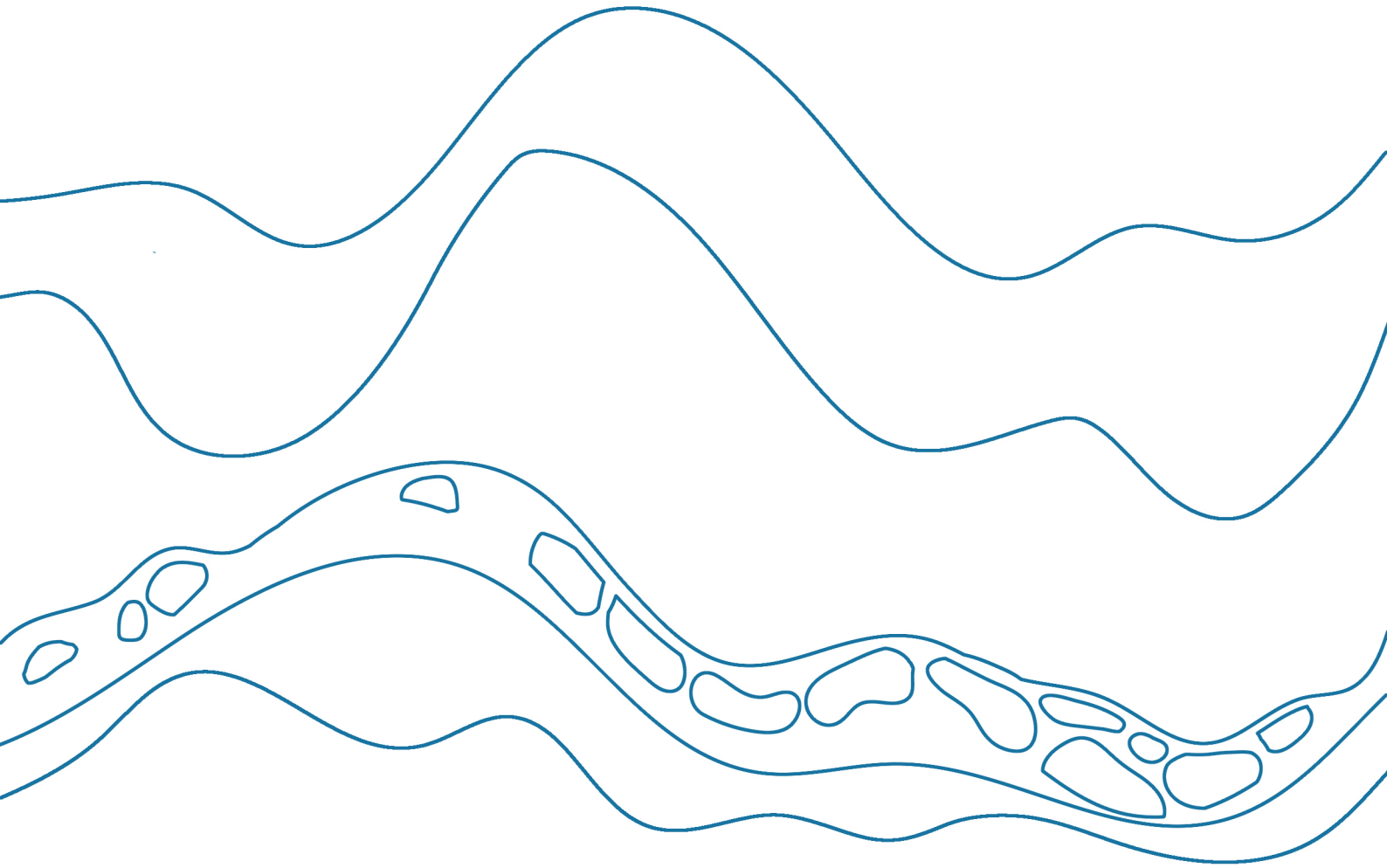
EVANS-PRITCHARD, E. E. *Los Nuer*. Barcelona: Anagrama, 1987.

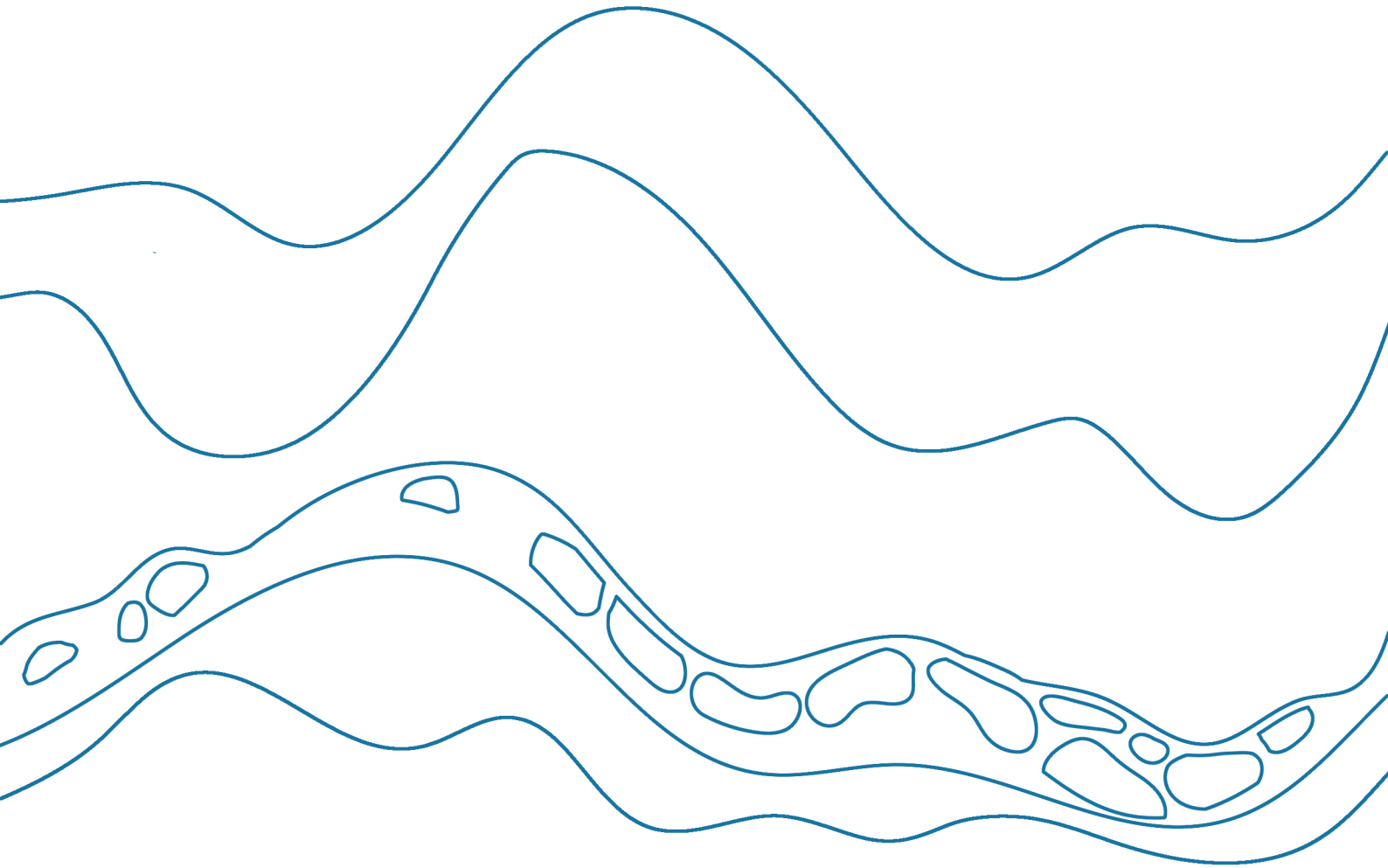
HANSEN, T.; VERKAAIK, O. Urban Charisma: On Everyday Mythologies in the City. *Critique of Anthropology*, [*s. l.*], v. 29, n. 1, p. 5-26, 2009.

PERELMAN, M. Beach Time: The Politics and Moral Order of Argentina's Urban Beaches. *In*: LOW, S. M. (ed.). *Beach Politics: Social, Racial, and Environmental Injustice on the Shoreline*. New York: New York University Press, 2025. cap. 4. p. 82-96.

PART 2

Beach Access:
Management and Challenges





LINS-DE-BARROS, Flavia Moraes. Coastal zone public domain in Brazil: study cases from Rio de Janeiro State. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 8. p. 71-77. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19561647.

8 COASTAL ZONE PUBLIC DOMAIN IN BRAZIL: STUDY CASES FROM RIO DE JANEIRO STATE

Flavia Moraes Lins-de-Barros[1]

Abstract. This chapter presents a territorial and legal discussion of beach management in Brazil with study cases from Rio de Janeiro, based on the presentation delivered during the II Beach Access Network Workshop. It focuses on the Brazilian coastline as public domain, the legal frameworks that govern its management, and the importance of recognizing oceanographic and geomorphological characteristics in territorial definitions. The discussion emphasizes the contradictions between federal legislation and local practices, the risks of privatization, the potential increase in vulnerability and the need for territorial equity in coastal governance, with examples from the coastline of Rio de Janeiro state.

Keywords. Beach management; Brazilian coastline; Public domain; Coastal geomorphology; Territorial equity.

INTRODUCTION

The Brazilian coastline is one of the longest in the world, extending over 8,500 kilometers and encompassing a wide variety of geomorphological formations. These coastal territories are legally defined as public domain and are regulated by federal legislation. However, the implementation of the existing legislation is often inconsistent, and local practices frequently contradict constitutional principles.

1 Federal University of Rio de Janeiro – UFRJ (Brazil) – flaviamlb@igeo.ufrj.br.

This chapter aims to offer a discussion of the challenge of spatially delimiting the public space in the coastal zone and the beach as a legally established management territory in Brazil. It emphasizes the importance of understanding the beaches and the whole coastal zone through their multiple perspectives, including the geomorphological, social and territorial dimensions. Furthermore, the association between the legal definitions of coastal public space and oceanographic and geomorphological characteristics is highlighted, underscoring the complexity and the need to understand the physical processes in conjunction with the legal framework. In this context, the coastal zone and beaches are seen both as a social space and a territory with multiple interests and uses, but also as a dynamic physical system. The discussion is grounded in a brief review of the major laws concerning the coastal zone as public space, with emphasis on the Brazilian Constitution, the National Coastal Management Plan (PNGC), Federal Sea, and the Urban Land Parceling Law, highlighting the contradictions between federal legislation and local practices with examples from Rio de Janeiro state.

LEGAL FRAMEWORK AND PUBLIC DOMAIN

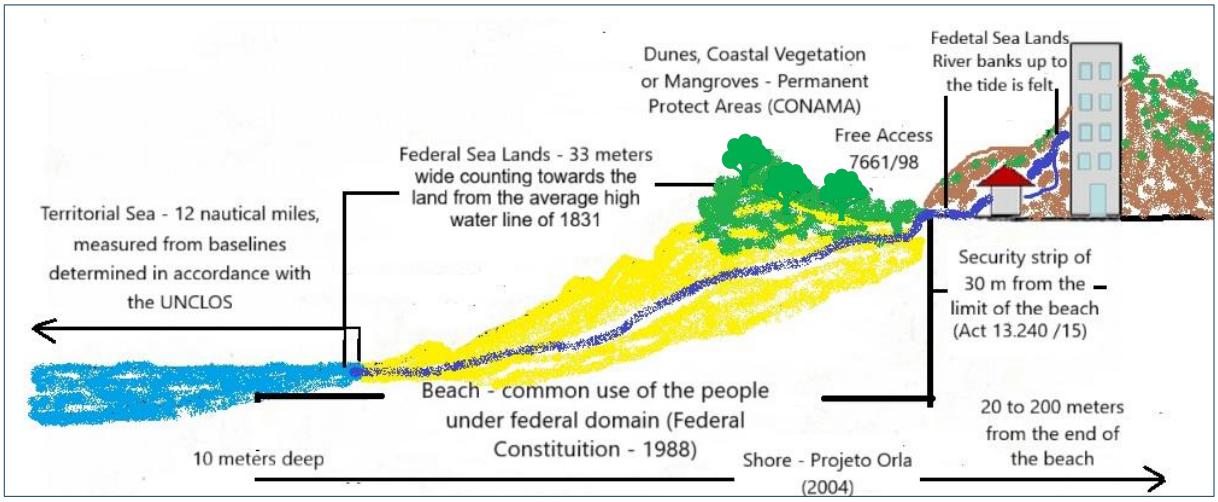
Brazil has a robust legal framework that ensures not only that beaches are public and freely accessible, but also that other coastal ecosystems are public and legally protected and cannot be occupied (Figure 8.1). One of the most important and ancient laws regarding the public domain in the coastal zone is Act n° 9.760/46, which defines the Federal Sea Lands. These lands and all properties within them belong to the Federal Government and require permission for use. On beaches, this law defines a strip of property owned by the Federal Government, 33 meters wide measured from a very specific line: the average of the spring tides of the year 1831 (called Average High Water Line – LPM 1831). At estuaries, the river banks are also considered as Sea Land up to the point where the tide is felt (up to a water level variation of 5 cm).

Two other important laws concerning the coastal zone public domain are the Federal Constitution of 1988 and the National Coastal Management Plan (PNGC), established by Law n° 7.661/1988. The first defines beaches as assets of common use of

the people and under the domain of the Union. This classification guarantees free access and prohibits privatization. The second determines that beaches are public goods for the common use of the people, with free and open access. This means that beaches are public spaces and cannot be privatized or have their access privatized. According to the PNGC, a beach is the area periodically covered and uncovered by water, plus the subsequent strip of detrital material, such as sand, gravel, pebbles, and stones, up to the limit where natural vegetation begins, or, in its absence, where another ecosystem begins.

In Brazil, coastal ecosystems are also protected by federal laws. Since the Forest Code of 1965, permanent protected areas have been defined, including the dune-stabilizing coastal vegetation (restingas) and mangroves. In these ecosystems, any occupation is forbidden. In 1981, the National Council for the Environment (Conama) was established to protect the environment, with the participation of civil society in its decision-making. Since then, several resolutions have been created to regulate permanently protected areas, among other environmental rules in the country. In 2002, Resolution n° 303/2002 defined dunes as ecosystems, and established their full protection, regardless of vegetation presence or absence.

Figure 8.1 – Legal framework concerning the coastal zone public domain in Brazil and other legal limits



Source: adapted from Lins-de-Barros & Milanes Batista (2020).

GEOMORPHOLOGY AND OCEANOGRAPHIC PROCESS: CHALLENGES IN DEFINING COASTAL TERRITORIES

The legal definitions that delimited the management of coastal areas mentioned above are often confused or pose many operational and conceptual difficulties for application. One reason is the need to understand geomorphology and oceanographic processes in defining coastal territories. The coastal zone, and specifically the beaches and estuaries, are highly complex systems. Estuaries are characterized by the combination of land-sea interactions, with influences from tides, waves and rivers. Beaches are shaped by tides, waves, winds, sediment transport, deposition and erosion. They include not only the sandy strip but also the intertidal zone and adjacent formations that are part of the coastal system. Understanding the geomorphological nature of beaches is essential for accurate territorial delimitation and for ensuring that management practices respect the natural dynamics of the coastline.

In Brazil, where the coastline is more than 10.000 kilometers long and has a great ecosystem diversity, defining the tide range in estuaries is not an easy work. In the Northern region, for example, there is evidence of tidal disturbance of the river flow up to 900 km from the mouth of Amazon's river, beyond the city of Óbidos (PA). In contrast, sedimentary rock cliffs are the predominant landforms along the northeastern coastline, with the river plain restricted to the mouths of the main rivers. Tidal influence usually does not exceed approximately 10 km in most estuaries of the Northeast region because of these characteristics. In the Southeast and South regions, the influence of the tide is limited by the low tidal range and increased slope due to the proximity of the mountains. This variety of processes and landscapes makes it difficult to identify the tidal influence with variations of up 5 cm in the estuaries, as established by Federal Sea Law. On beaches, one of the challenges is related to shoreline changes due to natural and anthropic processes since 1831, the year of reference for the delimitation of the Federal Sea Law.

The shore limits defined by *Projeto Orla* (Shore Project), created in 2001 and regulated by Act 5300/2004, were influenced by morphodynamic criteria suggested by

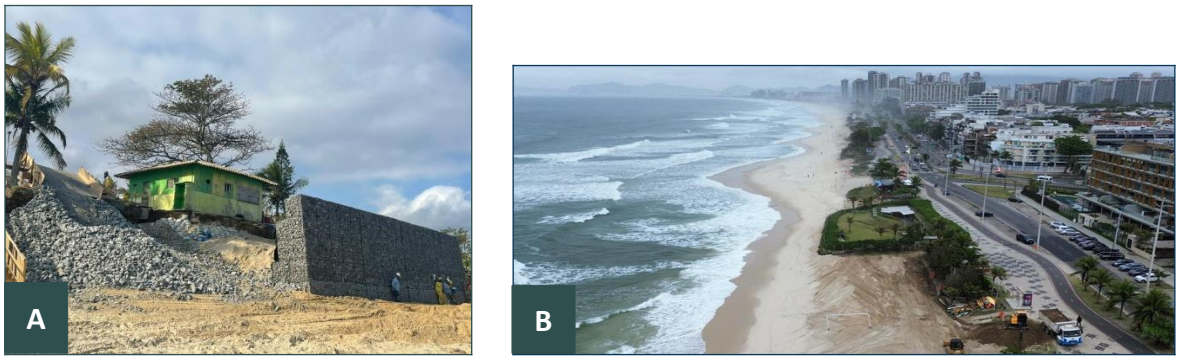
Muehe (2001) to establish a minimum protection zone and maintain the aesthetics of the landscape. The sea limit of the shore was legally defined as 10 meters deep, because from this depth onward, the action of waves on sediment transport and variations in seabed topography become negligible along much of the Brazilian coast (Muehe, op.cit). This specific aspect of coastal geomorphology, related to the processes of transport and sediment balance of beaches, was the main criterion for determining this legal limit. The land limit, in turn, is fundamentally based on sea-level rise projections, considering the foreshore slope and projections of coastline retreat, as also suggested by Muehe (2001). This proposal also takes into account the degree of urbanization of the shoreline, aiming to propose wider non-building zones in areas that are still unoccupied or where there is evidence of coastal erosion. Legally, these boundaries are not considered non-building areas, despite the recommendations, but rather as the territorial management space of the shoreline. Each municipality can request the federal government to manage this space through a project guided by national guidelines.

CONTRADICTIONS BETWEEN FEDERAL LEGISLATION AND LOCAL PRACTICES: CASES OF RIO DE JANEIRO COASTLINE

Despite the legal framework related to the public domain of the coastal zone, and coastal environmental laws, there are many examples of illegal occupation, some of which are currently in court, as seen along the Rio de Janeiro coastline (Figure 8.2). In some cases, local governments authorize constructions and interventions that violate federal legislation. This practice undermines the democratic character of coastal territories and facilitates exclusionary urbanization. Moreover, the irregular occupation of permanent protected areas, such as dunes, coastal vegetation, and mangroves, and the inadequate uses of security strip and the shoreline, aggravate beach vulnerability to storms and sea level rise. Several studies point to the current vulnerability of beaches to coastal erosion in the state of Rio de Janeiro, highlighting the need for protective zones, the recovery of natural dune barriers, and restoration of mangroves and dune vegetation. However, the advance of development is disregarding these warnings and recommendations, going

against national and international guidelines for adapting to climate change and rising sea levels. This scenario also facilitates the advance of beach privatization, as it limits access and threatens to reduce the width of the beaches.

Figure 8.2 – Examples of illegal occupations: A – Camboinhas Beach at Niterói (RJ) in 2024, showing the irregular occupation of this Kiosk on the top of the dune, which motivated the construction of a wall on the beach, worsening the problem. B – Windsurf Association at Barra da Tijuca Beach (RJ), constructed well into the beach.



Source: collection of the Marine Geography Laboratory (UFRJ).

CONCLUSIONS

Although the legal framework in Brazil is robust regarding the coastal zone, it is evident that there are many challenges in adequately applying the laws and legal norms. The geomorphological and oceanographic complexity of the coastal zone, and the associated processes, make evident the necessity of considering scientific knowledge to better understand the limits and concepts that underpin the legislation. This approach includes recognizing the physical processes that shape the coast and ensuring that legal definitions align with environmental realities. The two examples of local practices presented above, from Rio de Janeiro state, provide only a small sample of the problems faced in delimiting, monitoring, and solving conflicts in the Brazilian coastal zone. Such situations often result in the occupation of landforms and ecosystems, reducing their ability to function as natural barriers and exacerbating the vulnerability of beaches to extreme storm events and rising sea levels. Furthermore, the potential risk of losing the sandy area

intensifies conflicts over public space and raises new questions for management and adaptation. This reality highlights the need to establish governance models that consider the multidimensionality of beaches: on the one hand, a complex and vulnerable natural system; on the other, a space of multiple uses and values, often in conflict. Amid these different forces and pressures, the challenge is to ensure the permanence of beaches as public spaces for all, address conflicts within their territories and increase ecological and physical resilience to climate change.

REFERENCES

BRASIL. Decreto nº 5.300, de 7 de dezembro de 2004. Regulamenta a Lei nº 7.661, de 16 de maio de 1988, que institui o Plano Nacional de Gerenciamento Costeiro. *Diário Oficial da União*, seção 1, Brasília, DF, ano 141, n. 235, p. 2, 8 dez. 2004.

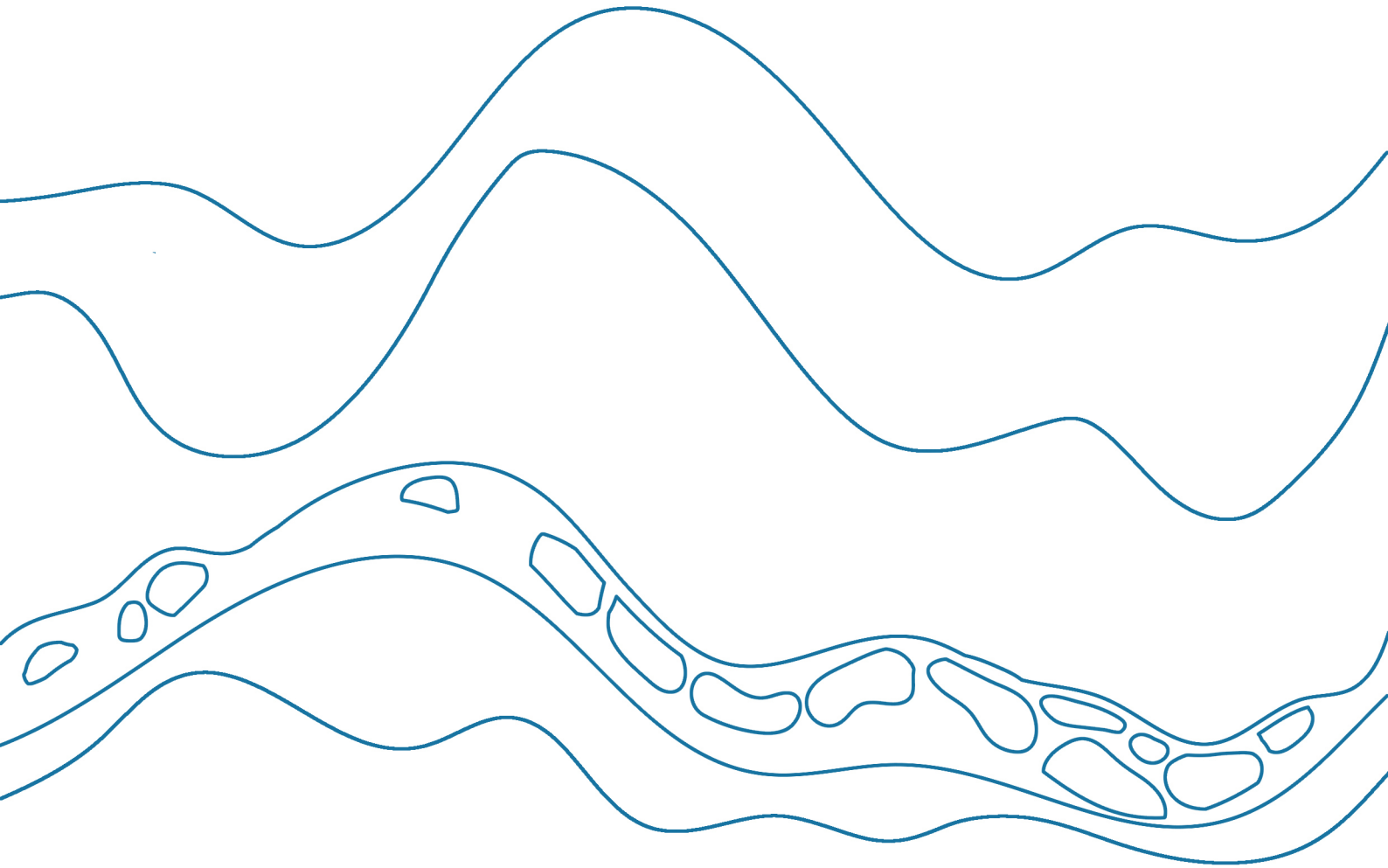
BRASIL. Lei Federal nº 9.760, de 5 de setembro de 1946. Dispõe sobre os bens imóveis da União e dá outras providências. Diário Oficial da União, seção 1, Brasília, DF, ano 9, n. 205, p. 12500, 5 set. 1946.

BRASIL. Lei Federal nº 7661, de 18 de maio de 1988. Institui o Plano Nacional de Gerenciamento Costeiro – PNGC. *Diário Oficial da União*, seção 1, Brasília, DF, ano 126, n. 92, p. 8633, 18 maio 1988.

BRASIL. Conselho Nacional do Meio Ambiente (CONAMA). Resolução nº 303, de 20 de março de 2002. Dispõe sobre parâmetros, definições e limites de Áreas de Preservação Permanente. *Diário Oficial da União*, seção 1, Brasília, DF, ano 139, n. 90, 13 maio 2002.

LINS-DE-BARROS, F. M.; MILANÉS BATISTA, C. Os limites espaciais da zona costeira para fins de gestão a partir de uma perspectiva integrada. *In*: Souto, R. D. (org.). *Gestão Ambiental e sustentabilidade em áreas costeiras e marinhas*: conceitos e práticas. v. 1. Rio de Janeiro: Instituto Virtual para o Desenvolvimento Sustentável – IVIDES.org, 2020. cap. 1. p. 22-50. DOI: 10.5281/zenodo.10722220.

MUEHE, Dieter. Definição de limites e tipologias da orla sob os aspectos morfodinâmico e evolutivo. *In*: BRASIL. Ministério do Meio Ambiente; Ministério do Planejamento, Orçamento e Gestão. *Projeto Orla:* subsídios para um projeto de gestão. Brasília: MMA; MP, 2004. cap. 13. p. 15-38.



PEREIRA JUNIOR, José Ricardo Britto Seixas. The regularization of beach bars in Aracaju: 15 years of a successful experience. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 9. p. 79-83. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19561684.

9 THE REGULARIZATION OF BEACH BARS IN ARACAJU: 15 YEARS OF A SUCCESSFUL EXPERIENCE

José Ricardo Britto Seixas Pereira Junior[1]

Abstract. The text provides a brief account of the regularization of beach bars in Aracaju (2009-2010), established to prevent demolitions and reconcile environmental protection, public use, and economic activity. The joint action of public authorities, entrepreneurs, and society resulted in a pioneering model that ensured the continued operation of these establishments under urban planning, sanitary, and environmental standards. Fifteen years later, the initiative continues to produce positive effects, although it relies on ongoing oversight and faces risks from legal changes and economic pressures.

Keywords. Urban Regularization; Coastal Management; Beach Bars.

THE EXPERIENCE REPORT

At the invitation of the coordinators of the research network "Beach Access Network", I took part in the 2nd BAN meeting to present the experience of regulating the so-called "beach bars" ("*barracas de praia*" in Portuguese), that is, bars and restaurants built on beach sand, in the city of Aracaju, in the State of Sergipe, and to discuss their current situation.

1 Attorney of the Union. Former Chief Attorney of the Union in the State of Sergipe (Brazil). Responsible for the project to regularize beach bars in the city of Aracaju, Sergipe.

Fifteen years after the beginning of the regularization project, it is with satisfaction that I observe that the initiative continues to produce results, ensuring the economic and tourism development of the region, while still requiring further improvement and administrative enforcement.

As reported at the event, in the exercise of their supervisory functions, state agencies, particularly the Federal Public Prosecutor's Office, acted against the existence of the so-called "beach bars", calling for their complete demolition and removal. In other words, the prosecutorial authority argued that Brazilian beaches should be entirely cleared of occupation and left without infrastructure for tourism and local users, invoking arguments of maximum environmental protection and irregular occupation, and excluding human presence from the environment, even in urban areas that include state capitals.

Such measures resulted in a series of demolitions of these establishments across the country, notably including the bars at Aruana Beach in Aracaju, Sergipe, and all beach bars in the city of Salvador, Bahia, carried out between 2006 and 2010.

In response to the sadness and negative impact caused to the tourism sector, the Federal Government Attorney's Office in Sergipe launched the "*Projeto Orla Legal*" (Legal Waterfront Project) in 2009 and, before taking any removal measures against the remaining establishments, coordinated with all relevant agencies to assess the possibility of regularizing these activities in accordance with legal requirements.

A public hearing was scheduled for May 5, 2010, as a positive step to allow society to express its views on whether these establishments should be maintained or whether it agreed with their demolition.

The public hearing attracted significant interest, with the auditorium of the Federal Court in Sergipe completely full. No one spoke against the existence of these establishments, resulting in unanimous support for the adoption of measures to regularize them. Within this framework, the responsibilities and necessary actions to achieve this objective were discussed, highlighting specific measures in the areas of environmental management, urban planning, federal heritage, public health surveillance, and fire safety.

On the environmental side, the premises for obtaining installation and operation environmental licenses were established, with emphasis on addressing the issue of sanitary waste and the need to construct a “sealed pit”, a hermetically closed container designed to collect and store sewage for subsequent removal.

On the urban planning side, maximum building areas were defined, as well as the limits of constructions in the “*restinga”* zones, ensuring they did not encroach on areas of common public use, that is, the “beach sand”. The removal of fences restricting public access was also mandated, along with aesthetic standards and, finally, the requirement for the municipality to issue a “use permit.”

The Federal Heritage Superintendence allowed interested parties to apply for an “occupancy concession” upon payment of fees, a provisional measure revocable at any time, but one that would ensure the legality of using federal property and prevent entrepreneurs from being legally classified as trespassers.

Finally, the public health authorities and the fire department specified the required compliance measures for each bar or restaurant, thereby ensuring public health standards and the safety of beachgoers.

This extensive institutional coordination was motivated by the recognition that this economic sector directly employed 1,800 people in Aracaju alone and generated another 3,000 indirect jobs (including street vendors, coconut and peanut sellers, fishmongers, taxi drivers, etc.), serving as the main engine of “sun and beach” tourism. It was responsible for revenue of R$ 542,382,867 (in 2012) from 498,939 tourists, according to data from the Sergipe Tourism Secretariat.

Beyond tourism, this sector has a significant impact on the local economy, as it is the main public leisure space in Aracaju, receiving more than 40,000 people per day during the summer, of whom 50% are tourists, according to data provided by the Beach Bar Association.

Thus, the “*Projeto Orla Legal*” stands out for engaging public authorities receptive to dialogue and collaborative work, enabling the development of a pioneering and

exemplary model for Brazil. Prior to the Sergipe experience, the prevailing approach had been the demolition of all seaside constructions; through this project, however, a collectively devised solution was implemented, allowing these establishments to continue operating legally in the city of Aracaju.

Through this Project, a significant contribution was made to the development of citizenship, as it enabled the social inclusion of bar owners, resolving disputes between the State and entrepreneurs without the intervention of the Judiciary. In doing so, it exemplified the phrase attributed to Mahatma Gandhi: “It is not work that dignifies man, but man who dignifies work”.

In the same context, it is understood that human beings are an integral part of the environment, and it is the duty of the State (*lato senso*) to enable and regulate economic activities. The right to work, together with the right to a sustainable environment, constitutes one of the pillars of our social contract.

For those not interested in visiting these establishments, the seafront of Sergipe’s capital provides opportunities for other free recreational activities. Aracaju has approximately 30 km of coastal shoreline, offering ample space for various activities, including different sports, with easy access via a highway running along the coast from river mouth to river mouth.

The results, fifteen years after this initiative, are already evident. There is no expectation of a repeat of demolition operations. The Aracaju seafront remains a postcard of Northeastern beauty and now features more regulated beach uses.

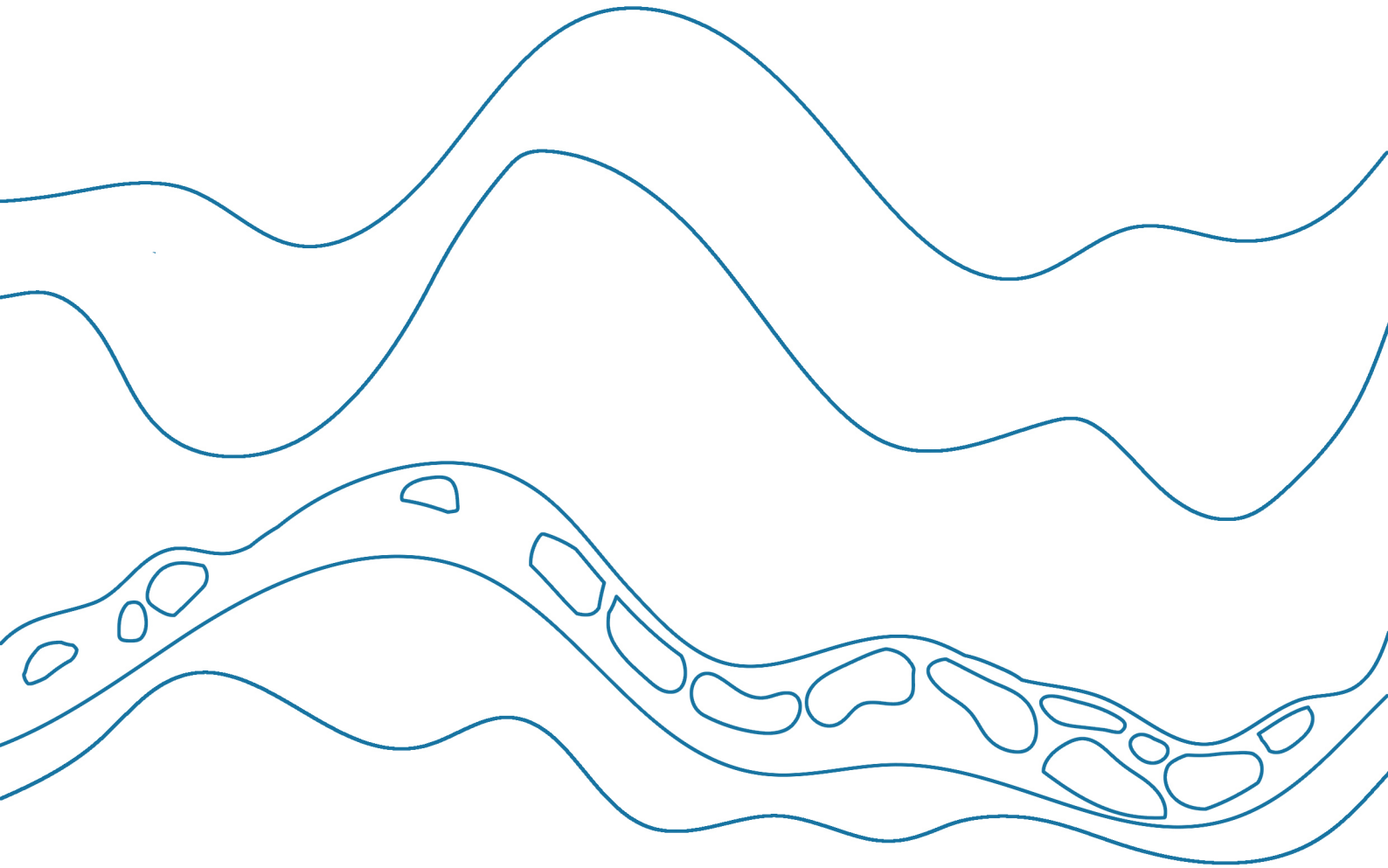
Following the legal certainty established by the project, the beach areas south of the capital underwent urban intervention and requalification, and large-scale developments have emerged on the sites of the former “beach bars”, some now more sophisticated and operating with complex management structures. These establishments are expected to operate under the effective supervision of the competent authorities.

Despite this positive scenario, vigilance remains necessary. Initiatives are currently under consideration in the National Congress to extinguish the Union’s ownership of coastal lands and their extensions, effectively enabling the privatization of beaches and,

consequently, altering their status from public property for common use to private property, with the potential to restrict access or use by third parties.

Authorities and entities involved in the Aracaju experience report challenges related to staffing and political interference that could compromise the technical framework underpinning the regularization. If such a path is pursued, it could ultimately lead to the demolition scenario the project sought to prevent.

It is essential that those responsible do not allow economic interests to override the environmental and social regulations that supported the regularization, and that they maintain the understanding that this economic activity must continue to operate in accordance with the environmental, sanitary, and social standards that authorized its ongoing functioning and current development.



FONTENELE, Ana Consuelo F. State Environmental Administration (Adema) and the challenge of ensuring access to beaches. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 10. p. 85-92. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19561726.

10 STATE ENVIRONMENTAL ADMINISTRATION (ADEMA) AND THE CHALLENGE OF ENSURING ACCESS TO BEACHES

Ana Consuelo F. Fontenele[1]

Abstract. Adema, as a Public Administration body in the state of Sergipe, Brazil and created by State Law nº 2,181/1978, operates in the Environmental Licensing, Inspection, and Monitoring of ventures and activities that are potentially polluting and utilize natural resources. Environmental Licensing is one of the twelve instruments of the National Environmental Policy (Federal Law nº 6,938/1981). As part of the National Environment System – SISNAMA, it acts at the state level as a mediator between economic development and environmental preservation, and between private and collective rights. It implements public policies for territorial planning and coastal management through project analysis, the establishment of environmental conditions, the requirement for studies, and compensatory and remedial measures.

Keywords. Coastal management; Environmental licensing; Environmental disputes.

1 Professional Master's Program in Environment – Profciamb, Federal University of Sergipe – UFS (Brazil). Environmental Analyst at the State Environmental Administration – ADEMA (Sergipe) – anaffontenele@gmail.com.

INTRODUCTION: REGULATION, ENVIRONMENTAL LICENSING, AND MANAGEMENT OF CONFLICTS

Access to beaches in Sergipe is of singular importance within the Law, involving environmental, urban planning, property, and public use issues. ADEMA, the Sergipe's state agency that issues environmental licenses, often faces both legal and technical challenges when interpreting the laws and technical standards that regulate the use and conservation of the coast, given the vulnerability of the Sergipe shoreline.

For Tricart (1977), vulnerability and fragility are related to morphological characteristics and susceptibility to erosive processes due to the morphodynamic structure of the relief. The degree of fragility describes the behavior of the Sergipe coast in the face of oscillations in the flows of energy and matter, stemming from anthropogenic actions, natural events, and the relationship between society and nature in the historical process of constructing the coastal zone. These factors drive the beach system dynamics beyond its internal thresholds of variation, surpassing its capacity for damage recovery and breaking its equilibrium.

Vulnerability, according to Esteves (2011), occurs when transformations in the system promote alterations in its structure and dynamics. The spatial approach considers both social and environmental aspects as instruments for analyzing the processes that operate in the dynamics and territorial planning of the Sergipe coastal zone.

Accessibility to the beaches of Sergipe is generally referred to as the ease of reaching goods, services, the right to leisure, economic activities, and destinations which, together, are often recognized as opportunities for the development of the individual and society. However, a technocratic and exclusive management approach, to the detriment of a democratic, integrated, and participatory one, has been promoting various land use and territorial planning conflicts that impact the political organization of the municipalities comprising the Sergipe coastal zone.

The coastal zone of Sergipe extends for approximately 160 km and comprises 24 municipalities, 7 of which are coastal (bordering the sea). Compared to other coastal zones, the vulnerability and fragility of the Sergipe coast along much of its length are due to its composition of low coastal plains, dunes, and sandbanks (*restingas*). The soils are predominantly sandy, porous, and poorly consolidated which facilitates erosion by wind and water and allows for saltwater intrusion (the advance of seawater over freshwater aquifers), as occurs at the mouth of the São Francisco River.

Urban occupation on dunes and *restingas* by real estate ventures, roads, and infrastructure destroys ecosystems that provide natural protection against erosion and flooding. These structures have led to the fencing off of areas and the closure of traditional access routes, turning beaches that were once *de facto* public into areas difficult to reach for non-guests or residents. Several beaches on the southern coast of Sergipe experience accelerated erosion, where the sea frequently reaches walls and structures, requiring continuous containment works. Coastal neighborhoods in Aracaju and other cities suffer from sea invasion during high tides and storms. The salinization of soil and water is a real threat to agriculture and water supply in coastal communities. Furthermore, the loss of biodiversity primarily impacts the survival of fishing, extractive, and shellfish-gathering populations in the state. Also, on the northern coast, in the municipalities of Pacatuba, Brejo Grande, and Pirambu, erosion and the dynamics of mangroves and rivers have constantly altered access routes, requiring frequent maintenance of sand roads and traditional fishing ports that, without public investment, become impassable and inaccessible.

> [...] Given the fragilities and vulnerabilities of environmental systems, environmental planning assumes great importance as it seeks to reconcile territorial planning with the limitations and capacities of the territory. This aims to minimize impacts and their negative effects on socioeconomic systems, enabling the maintenance and/or improvement of the quality of life of the resident population (Freitas, 2024).

When analyzing the integration of accessibility criteria into the management instruments and environmental licensing procedures for ventures and activities in the Sergipe Coastal Zone at ADEMA, we found that the loss of beach accessibility in Sergipe is a consequence of inadequate planning and management of the coastal territory. The privatization of public lands, the protection of private property, and predatory economic development at the expense of public common use and environmental preservation have historically made the use of coastal resources inaccessible to the vast majority of the population.

MATERIAL AND METHODS

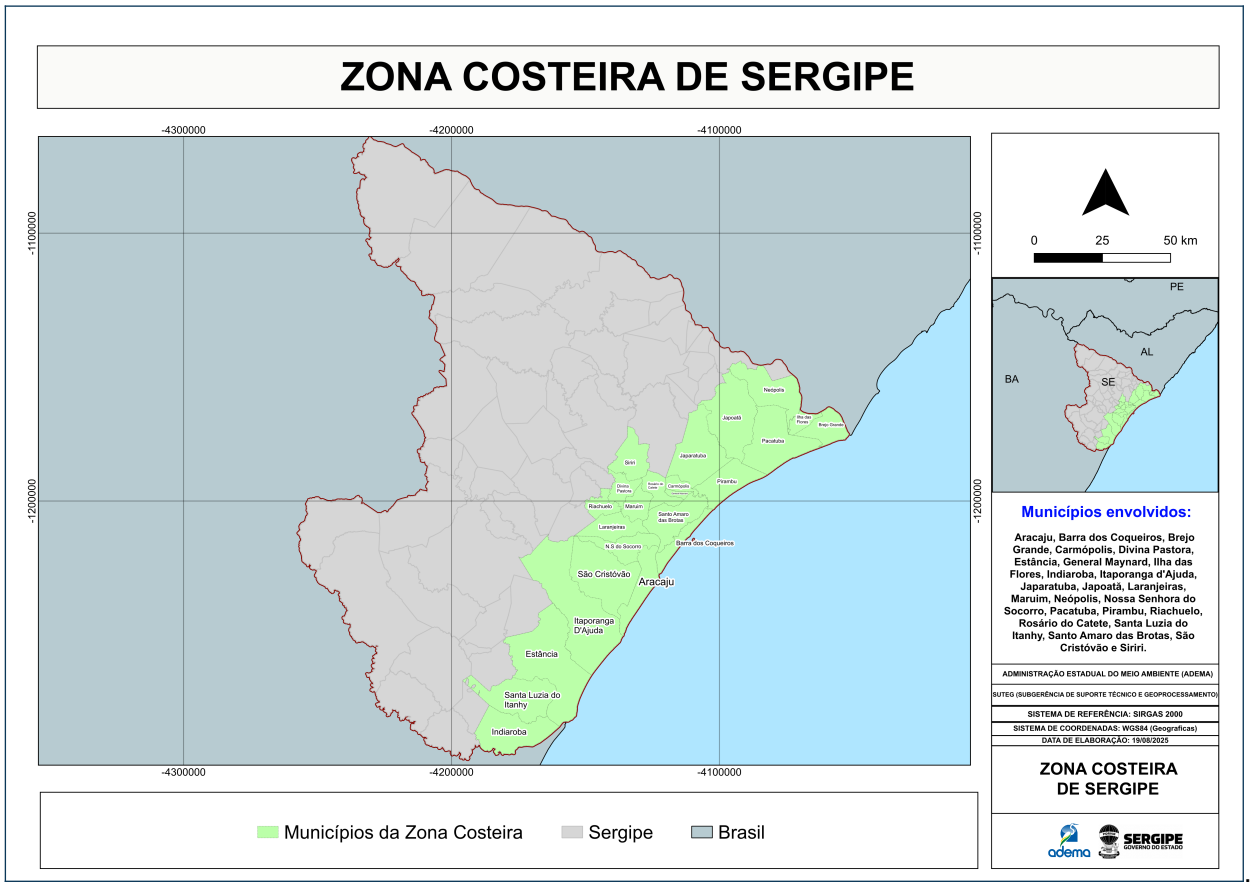
Documentary and legal research was conducted through the analysis of the Federal Constitution, Coastal Management - Gerco (Law nº 7,661/88 - PNGC), Decree nº 5,300/2004, Law nº 10,257/01 (City Statute), State Law nº 8,497/2018, Coastal Economic-Ecological Zoning - ZEEC (State Laws nº 8,980, 9,147 and 9,146 of 2022), the State Gerco Plan (Law nº 8,634/2019), Rural Environmental Registry - CAR (Federal Laws nº 12,651/2012 and nº 6,938/1981), National Forest System - SINAFLOR (Federal Law nº 11,428/2011), and National Wildlife System - SISFAUNA (Complementary Law nº 140/2011, Federal Laws nº 9,605/1988 and nº 5,197/1967). Environmental Impact Assessment - EIA (CONAMA Resolution nº 01/1996); Projects, Programs, and Plans for Conservation, Preservation, Remediation, and Compensation (State Law nº 8,497/2018) were also analyzed.

Subsequently, field visits were conducted and institutional documents such as environmental studies, terms of reference, technical opinions, and environmental inspection reports were analyzed.

The study considered the municipalities located inland such as Carmópolis, Divina Pastora, General Maynard, Ilha das Flores, Indiaroba, Japaratuba, Japoatã, Laranjeiras, Maruim, Neópolis, Nossa Senhora do Socorro, Pirambu, Riachuelo, Rosário do Catete, Santa Luzia do Itanhy, Santo Amaro das Brotas, São Cristóvão and Siriri. It also considered coastal municipalities such as Aracaju, Barra dos Coqueiros, Brejo Grande,

Estância, Itaporanga d'Ajuda, Pacatuba, Pirambu which including the analysis of their geopolitical and technical components of the coastal zone.

Figure 10.1 – Definition of the municipalities that comprise the Coastal Zone of Sergipe, according to MMA Ordinance nº 34/2021



Source: ADEMA (2025).

Data on the environmental licensing processes for ventures and activities in the Sergipe Coastal Zone over the last three years was collected from the internal SIGA system, as well as data on land use and occupation conflicts in environmental preservation areas and common-use areas.

Field visits were organized by coastal region (north, south, and center). Beach zones were mapped starting from the first occurrence of *restinga* vegetation in the beach system, extending towards the continental shelf, in accordance with Law nº 7,661/88 (PNGC) and the *Projeto Orla*, which mandates a protection zone of 50 meters for *restinga* in urban areas and up to 200 meters in rural areas.

RESULTS

Based on the survey and inspection, several irregular occupations were identified in the coastal zone, including occupations in Permanent Preservation Areas (APP), destruction of native vegetation, construction of barriers and dikes, decreased biodiversity, population concentration in fragile areas, and difficulty in incorporating accessibility into the coastal environmental licensing process, particularly between residential condominiums and the mandatory shoreline setback.

Furthermore, challenges identified include the non-existence of specific regulations, lack of structural capacity within the environmental agency, conflicts between existing regulations, a lack of ongoing training for the technical staff, and difficulties in monitoring environmental licenses and conducting inspections.

CONCLUSION AND RECOMMENDATIONS

To ensure the effective protection of the coastal zone by ADEMA, it is imperative to adopt a management model that prioritizes prevention and precaution. This model must encompass a rigorous environmental licensing process, with constant monitoring and enforcement—tools capable of curbing irreversible impacts and avoiding the judicialization of proceedings.

It is essential to propose public policies that deter ventures which create barriers to beach access, constituting a clear violation of the fundamental right to come and go and to the enjoyment of the commons. To technically support these decisions, it becomes indispensable to require studies on coastal dynamics, capable of guiding the licensing process and halting disordered urbanization, which historically ignores the vulnerability of these ecosystems.

The current scenario of politicization of the municipalization of environmental licensing, provided for by Federal Law nº 15,190/2025 (General Licensing Law), intentionally weakens SISNAMA, the system to which ADEMA belongs. It is characterized as a dismantling of environmental licensing, with the clear objective of flexibilization and deregulation, subjugating environmental protection to the interests of economic *rationale*.

To counter this logic, it is necessary to advocate for concrete instruments within the scope of licensing, such as

- To require the maintenance of a free passage corridor (right-of-way) along the entire beach;
- To define land-use zoning, clearly delimiting areas for private use to ensure they do not impede public circulation;
- Prohibit physical barriers, vetoing the installation of walls, fences, and security booths that obstruct access;
- Require clear signage to guide the public regarding access points;
- Demand robust compensatory measures, such as the construction of footbridges, restrooms, and support facilities that improve access for all.

The challenges are profound and reflect the structural conflicts of society: regulation versus deregulation; economic power versus nature; private interest versus the public domain; the logic of profit versus environmental quality; and, ultimately, the clash between multinational corporations and major business owners on one side, and traditional communities on the other, revealing a bourgeois environmental policy that systematically excludes the working class from the right to a balanced environment.

REFERENCES

BRASIL. Lei Federal nº 7661, de 18 de maio de 1988. Institui o Plano Nacional de Gerenciamento Costeiro – PNGC. *Diário Oficial da União*, seção 1, Brasília, DF, seção 1, ano 126, n. 92, p. 8633, 18 maio 1988. Available at: https://www.planalto.gov.br/ccivil_03/leis/l7661.htm. Access: oct. 12, 2025.

ESTEVES, C. J. de O. Risco e vulnerabilidade socioambiental: aspectos conceituais. *Caderno IPARDES – Estudos e Pesquisas*, Curitiba, v. 1, n. 2, p. 62-79, 2011. Available at: https://ipardes.emnuvens.com.br/cadernoipardes/article/view/421. Access: oct. 13, 2025.

FREITAS, ÉDER, G. *Os componentes naturais e a fragilidade ambiental dos sertões do São Francisco na região semiárida de Sergipe*. 2024. 258 f. Thesis (PhD in Geography). Departamento de Geografia, Universidade Federal do Ceará, Fortaleza, 2024.

SERGIPE. Assembleia Legislativa do Estado de Sergipe. Lei nº 8.634, de 27 de dezembro de 2019. Institui o Plano e o Sistema Estadual de Gerenciamento Costeiro, cria o Conselho Estadual de Gerenciamento Costeiro (CEGC). *Diário Oficial do Estado de Sergipe*, Aracaju, 30 dez. 2019. Available at: https://aleselegis.al.se.leg.br/Arquivo/Documents/legislacao/html/l86342019.html. Access: oct. 12, 2025.

TRICART, J. *Ecodinâmica*. Rio de Janeiro: IBGE, Diretoria Técnica, SUPREN, 1977. 91 p.

BEYELER, Marc. BEACON's Science Research Program: increasing the alignment of actionable science and policy through co-production. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 11. p. 93-99. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19561748.

11

BEACON's SCIENCE RESEARCH PROGRAM: INCREASING THE ALIGNMENT OF ACTIONABLE SCIENCE AND POLICY THROUGH CO-PRODUCTION

Marc Beyeler[1]

Abstract. This manuscript reports on efforts by BEACON to expand its research by integrating natural resource and ecological protection and human use socio-cultural topics and issues, including public beach use and beach users. BEACON, the Beach Erosion Authority for Clean Oceans and Nourishment, is a Joint Powers Agency responsible for coastal sediment and beach management focused on public sandy beaches. A central priority of BEACON's management, policy, and science support programs and activities is to develop better data and a deeper understanding of beach use and beach users, in order to support beach management and promote expanded and equitable coastal beach access. BEACON has accelerated its use of the best available science to support decision-making and has adopted a co-production model for its research program to address compounding threats to coastal resources and coastal communities, including drought, fire, and flood cycles, and continued development, as well as the need for more transparent and inclusive research and policy initiatives.

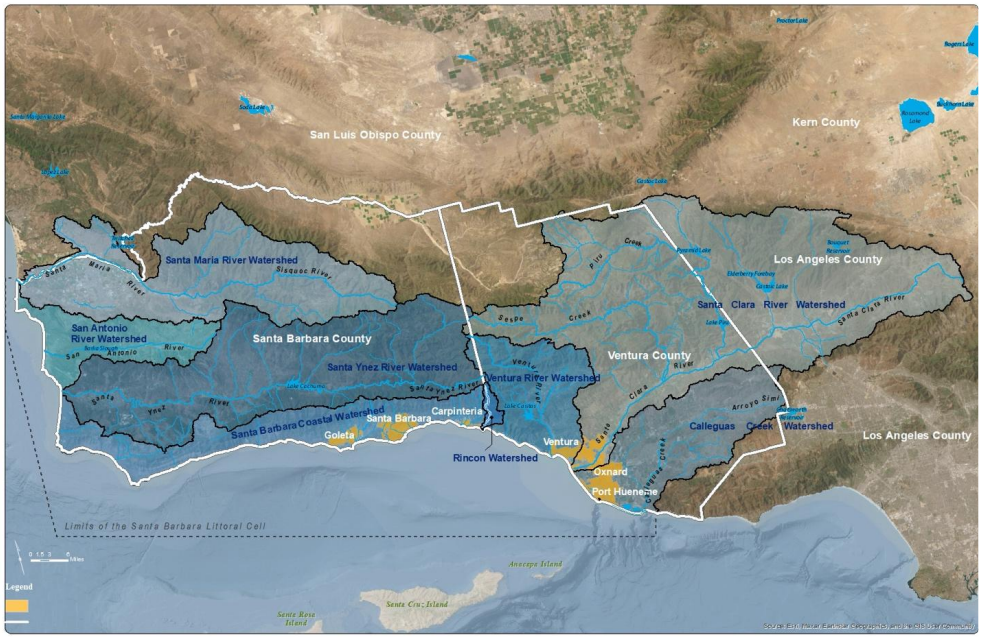
Keywords. Beach Management; Coastal Governance; Public Beach Use; Socio-cultural Dimensions; Co-produced Science.

1 Beach Erosion Authority for Clean Oceans and Nourishment – BEACON (USA) – beyeler@beacon.ca.gov.

INTRODUCTION AND BACKGROUND

The BEACON Coast encompasses the counties of Ventura and Santa Barbara, along more than 150 miles of the southern California coast, including the beaches of the so-called 'American Rivera' in Santa Barbara (Figure 11.1). This important coastal region faces many threats and challenges, including a multitude of management and governance demands requiring BEACON to seek out the best available science, as well as to support new initiatives or activities that would assist with decision-making and outcomes, including coastal and beach management.

Figure 11.1 – The 'BEACON Coast', encompassing Santa Barbara and Ventura counties in southern California



Source: BEACON Project.

A key strategic objective at BEACON is to bridge the identified gaps between science and decision-making, better integrating science into BEACON's program and project initiatives. BEACON acts as a "boundary"[2] organization, facilitating and connecting

2 Boundary organizations often involve "both scientists and decision-makers, along with professionals who facilitate collaboration between them". Boundary organizations provide places for developing long-term relationships, promoting two-way communication, and developing tools to facilitate collaborative work.

regional and local coastal resilience policy and science efforts, offering multiple opportunities for scientists and managers to generate, exchange, evaluate, and use knowledge to better link science to policy.

While the pace of science research in the BEACON coast is accelerating, the existing pathways between these science efforts and regional policies and programs, including BEACON's programs and policies, remain incomplete.

In the past five years, BEACON has implemented several coordinated activities between scientists, policy managers and decision-makers, including developing science advisors to BEACON, and developing a Science Research Agenda, including surveying scientists, agency management personnel, and stakeholders, as part of a year-long assessment of science needs and science resources available to BEACON.

Out of this effort came the suggestion to form a Science Advisory Committee and develop a Science Research Agenda to assist BEACON in better aligning research and policy needs. In November 2020, the BEACON Board approved Bylaws for a BEACON Science Advisory Committee (SAC), and appointed 12 original members. In 2021, the BEACON SAC reviewed how science research and data collection could be improved, enhanced, and expanded to increase alignment with, and better inform, decision-making, adopting a Science Research Agenda (SRA).

The SAC's focus with the SRA has been on developing program elements that better integrate research and policy on the multiple values of regional sediment management (RSM), coastal resource and ecosystem management, regional climate change and sea level rise (SLR) adaptation planning, and coastal access and beach use.

CO-DEVELOPMENT PRACTICES

The formation and operation of the SAC and the development of the Science Research Agenda (SRA) represents an innovative attempt to better integrate those engaged in science and policy and move towards co-development (or co-production) of science, research and management. The SAC members are joined in the SAC and its deliberations with two 'manager liaisons', seen as science and policy connection to the management community. As part of the SAC's activities, a regular summit with regional managers is included as an essential element in the co-production activities aimed at improved links between science and policy. In addition, BEACON has sponsored regular topical meetings and workshops between scientists, stakeholders, members of public, and representatives of the Chumash.

In the past four years, BEACON has been successful in identifying funding to advance key initiatives outlined in the Science Research Agenda to support integrating its physical, ecological, and social-cultural research programs through regional social-ecological systems frameworks, built on analyzing the range of ecosystem services connected to coastal resource protection and coastal access and development planning.

With regard to human use of coastal resources, and in particular coastal access and beach use, BEACON has supported social science data assembly and analysis efforts including social cultural as well as socioeconomic monitoring and survey data.

BEACON staff intends for these coordinated beach-use research efforts to contribute to regional beach-use, beach management, and governance monitoring program, incorporating data collection, data management, data analysis, and development of decision-support tools. BEACON formed a data research 'working group' of scientists, technical personnel and agency managers and decision-makers to develop novel beach use data and to collaborate on the research.

COMMENTS ON THE BEACON SCIENCE RESEARCH AGENDA AND RESEARCH INITIATIVES

The BEACON staff and SAC have received input requesting additional research and greater focus on participation and substantive comments from community representatives on related topics of communication, engagement and equity. BEACON also has received many suggested additions from representatives of the Chumash Tribe on several consultation and engagement issues.

Equity, Community Engagement, Involvement and Communication: The BEACON SAC and BEACON staff have received a great amount of input regarding the need to recognize the importance of providing opportunities for the full involvement of members of the public and interested stakeholders to solicit plan review, program development and policy priorities.

BEACON has received comments on the need to expand research efforts addressing social-cultural data and information needs. One important research topic is the need to focus on additional research addressing differential vulnerabilities facing underrepresented communities. Suggestions included research on hazards and risks, research on 'extreme event' response planning, and research on community-scale/neighborhood-scale adaptation actions.

Chumash Tribal Consultation: Importantly, Chumash representatives have provided comments on physical, ecological, and social science research areas, identifying the assessment of sensitive coastal physical and ecological resources, used for purposes of social-cultural and traditional practices, as a gap not yet addressed in either current or planned physical and ecological monitoring planning. The input cited the lack of adequate social-cultural research on the use of sensitive coastal resources by traditional Chumash coastal communities. Finally, tribal representatives cited lack of adequate research on governance and engagement needs, especially new or innovative Tribal consultation models, and new collaborative community-based science and research models.

CONCLUSION

The BEACON research and science policy initiatives, which incorporate elements of a co-development framework and practices, offers one example of attempts to shorten the distance between science and policy while broadening the scope and depth of engagement and input. BEACON is developing an updated Science Research Agenda to be completed in 2026 and a five-year research program in which these topics and issues will be examined more thoroughly. Additional efforts are needed to address the needs of stakeholders and under-represented communities, as well as to address the concerns of Tribal representatives. Over time, BEACON seeks to improve its efforts aimed at further developing decision-support tools and advancing science and policy integration, while providing greater transparent engagement and input venues and processes to address more equitable community participation in policy and decision-making.

REFERENCES

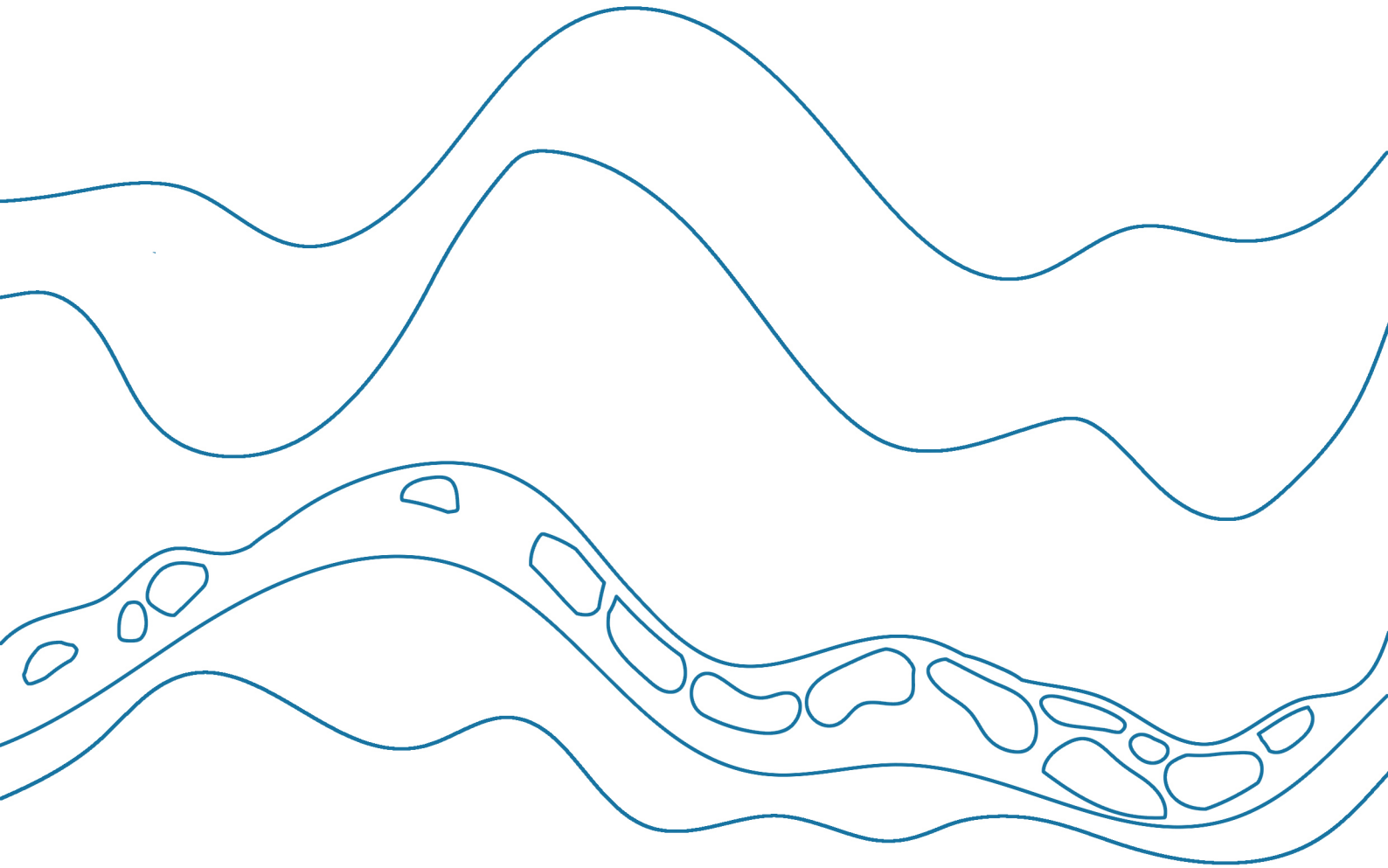
BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND NOURISHMENT (BEACON). *Advancing coastal resilience: framework analysis for integrating regional sediment management and coastal adaptation in the Santa Barbara Littoral Cell*. Project report. BEYELER, M.; PATSCH, K.; HORN, D.; DUGAN, J.; JOHNSTON, K.; WARRICK, J.; RAAF, A. (org.). Ventura, CA: BEACON, jan. 2025.

BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND NOURISHMENT (BEACON). *Estimating beach visitation using cell phone locational data: a pilot study of Ventura, Santa Barbara, and Los Angeles Counties*. PATSCH, K.; HORN, D.; BEYELER, M.; EGER, E.; EGER-BEYELER, A.; SANDOVAL, M.; MERRILL, N. (org.). BEACON; Mountains Recreation & Conservation Authority (MRCA); California Sea Grant; The Bay Foundation. Ventura, CA: BEACON, ago. 2024.

BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND NOURISHMENT (BEACON). *Final draft science research agenda*. Elaborated by the Science Advisory Committee (SAC). Ventura, CA: BEACON, 2021.

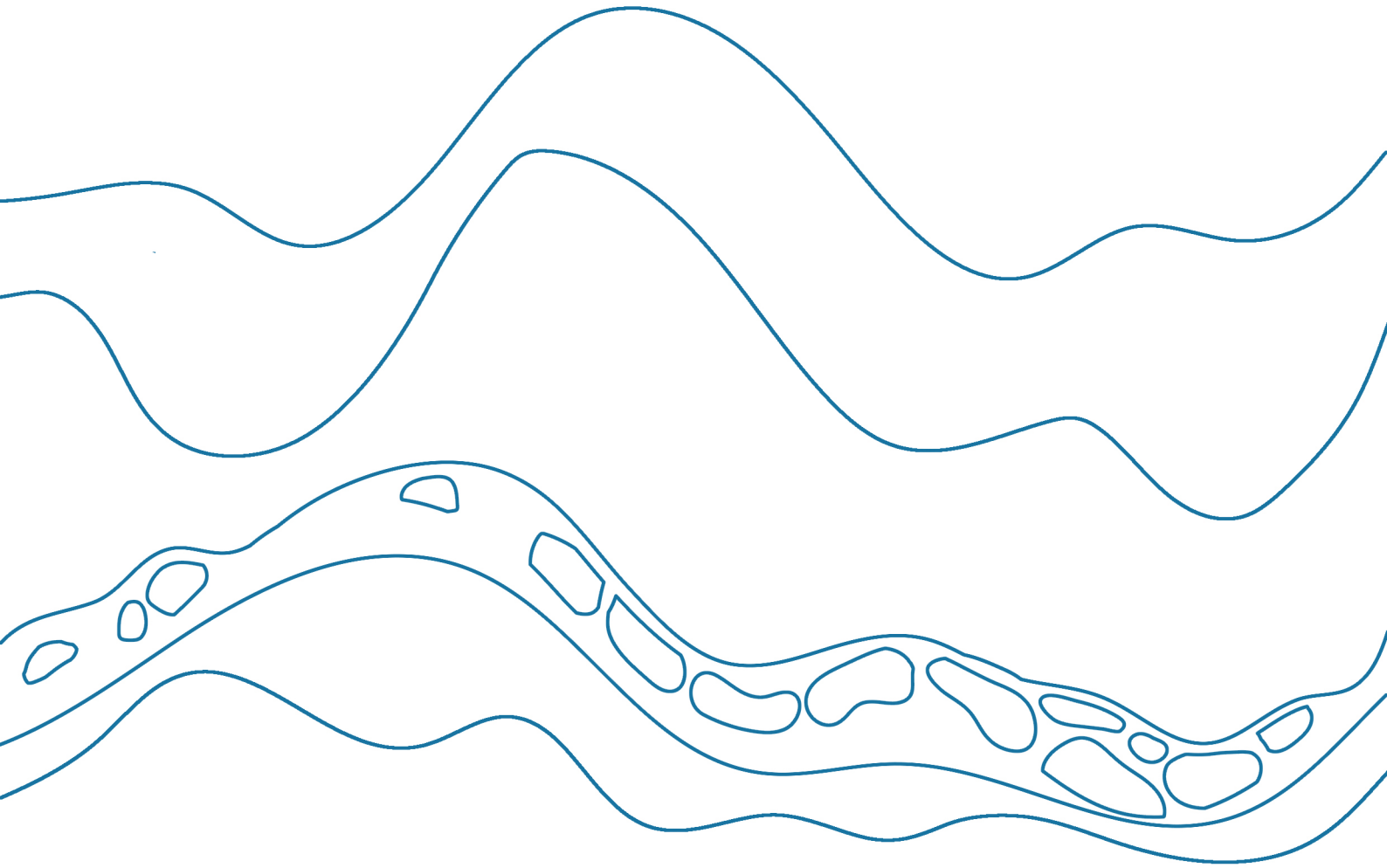
BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND NOURISHMENT (BEACON). *Summary memo: Manager–Scientist Summit, November 28, 2023*. Ventura, CA: BEACON, mar. 2024.

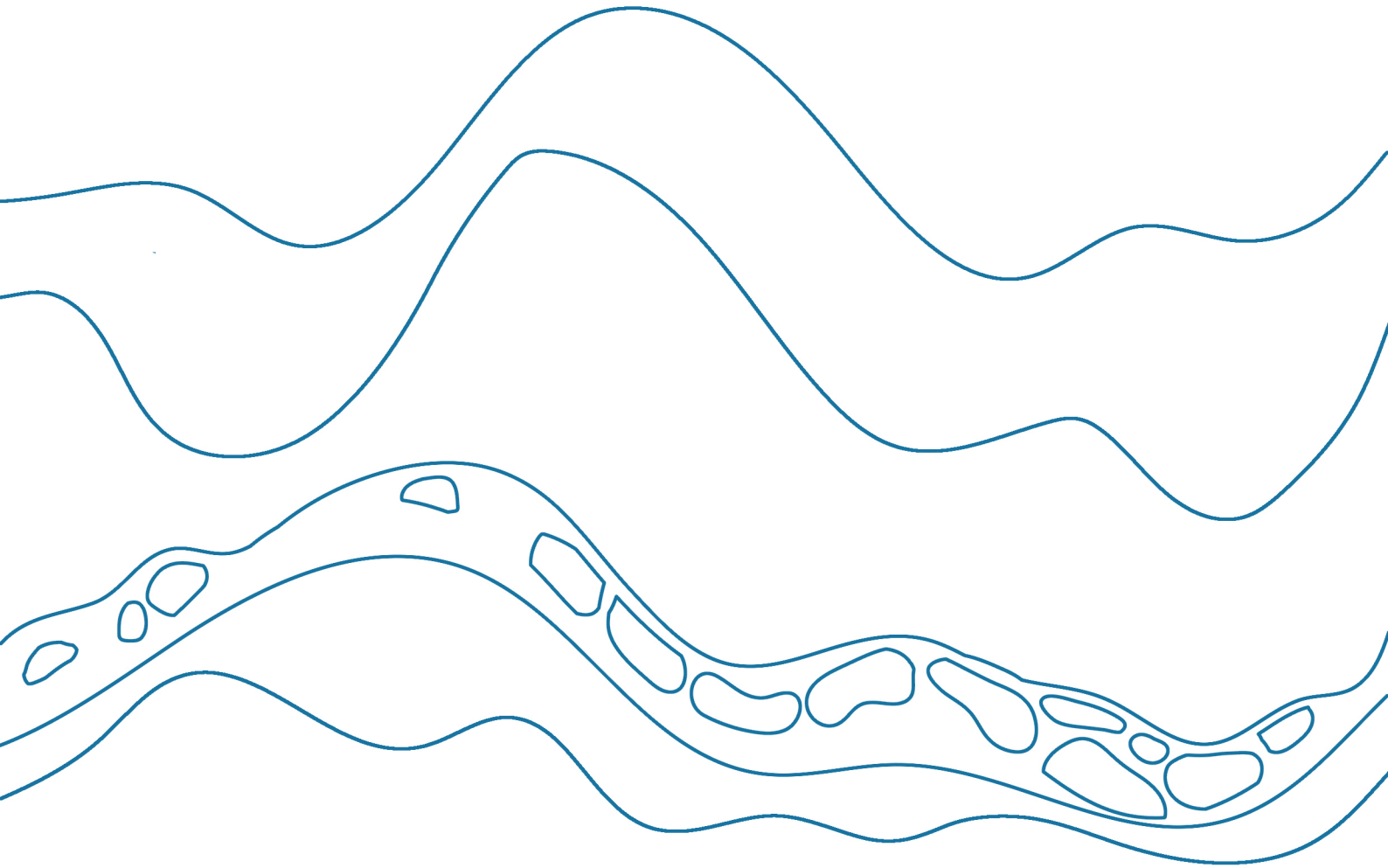
PATSCH, Kiki; MERRILL, Nathaniel; HORN, Dorothy; BEYELER, Marc; EGER, Elena; EGER-BEYELER, Ari; SANDOVAL, Mario. Estimating beach visitation using mobile device-derived location data in Southern California, USA. *Journal of Coastal Research*, v. 41, n. 5, ago. 2025.



PART 3

Beach Access:
Methodologies and Tools





SOUTO, Raquel Dezidério. Collaborative mapping of beach access with OpenStreetMap. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 12. p. 103-112. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19561833.

12 COLLABORATIVE MAPPING OF BEACH ACCESS WITH OPENSTREETMAP

Raquel Dezidério Souto[1]

Abstract. This chapter provides a scheme for tagging features related to beach access using the OpenStreetMap (OSM). The general tagging scheme of OSM, documented on the Wiki OSM, provides some useful tags related to the type of access, ways, barriers, gates and others. The importance of the cartographic scale is also demonstrated with examples. With the publication of this chapter, the author expected to assist in mapping beach access in Brazil and other countries, to show the advantages and constrains of using this solution and to emphasize the importance of open data in this context.

Keywords. Beach access; OpenStreetMap; Collaborative mapping; VGI; Point of interest.

INTRODUCTION

The collaborative mapping gained significant importance with the advent of the global OpenStreetMap project, which already has millions of users and billions of features mapped in its digital and online cartographic database. The project has a data model based on the Extensible Markup Language (XML), which facilitates the organization and use of its data in a wide range of derivative applications, such as mobile device applications, location-based services, geoservices, data converters, routers, etc. (Souto *et al.*, 2025). The project has been in existence for 22 years and has an active community of mappers on every continent in the world.

1 The Virtual Institute for Sustainable Development – IVIDES.org™ | IVIDES DATA™ IT Consulting– ivides@ivides.org. This text has a full version available at https://doi.org/10.5281/zenodo.17858614.

The use of data provided by collaborative mapping contributes to the economy with more data being collected in less time and over larger areas. This is all made possible by its decentralized model, which relies on the activity of volunteers who contribute data from familiar locations. On the other hand, the quality of the data is not sufficient for its application in official systematic mapping, requiring the processing of the extracted data, a mapping stage known as validation. During validation, the geolocation of objects and the adequacy of attributes are verified.

This collaborative mapping solution, considering its operational limitations (locations with poor Internet signal coverage, limited ability of certain people to use equipment and systems), has been successfully used to map features that are not mapped in official mapping efforts. The level of detail is high and the mapping of features at this scale is referred to as “micromapping.” Thus, it is possible to map roads, buildings, points of interest, among others, in detail.

Access is among the attributes that is not captured by official mapping efforts and smaller-scale mapping, or by satellite image processing. In the OpenStreetMap project, it is possible to cover this topic with local mapping, distinguishing between a range of access types: public or private access, limited to consumers, with barriers and entrances, access by mode (pedestrians, bicycles, vehicles) etc., allowing for the detailing of attributes that are important in mapping beach access.

Thus, this chapter aims to detail the use of OpenStreetMap in mapping beach access, since this is an important issue in the Brazilian context and the digital cartographic base provides the necessary resources for data recording and subsequent analysis. This tagging scheme was presented in the "II Beach Access Network Workshop: public access to beaches: management and conflicts", realized at the Rio de Janeiro (Brazil), in August 18-20, 2025, and improved in this study.

MAPPING BEACH ACCESS POINTS ON OPENSTREETMAP

The OpenStreetMap is a global collaborative mapping project that maintains a digital cartographic database, since 2004. The main features of the project are:

- The project records and distributes geographic data from around the world;
- The collaborative data is globally contributed online by individuals and organizations;
- It can be accessed by anyone and edited by those who create a free user account;
- It runs under an open license – Open Data Commons Open Database License (ODbL), which means that the data can be used by third parties, with the condition of to do attribution (© OpenStreetMap) and to keep data open;
- It is independent of hardware or software;
- It operates with simple features (as point, line and polygon) or complex features (as multipoints, polylines and multipolygons);

The attributes of mapped features are stored as tags, and the OpenStreetMap model has an extensive set of them, covering many topics (OpenStreetMap [...], [2025]). Tags are composed of key=value pairs, according to the XML model, and some are important in the context of the beach access mapping (Box 12.1).

Box 12.1 – Tags related to the beach access in the general tagging model of the OpenStreetMap

Theme	key=value	Description
Type of Highway	highway=residential	Way in residential areas.
	highway=pedestrian	Way to mainly/exclusively access for pedestrian in shopping or residential areas.
	highway=footway	For designated footpaths; e.g., mainly/exclusively for pedestrians. This includes walking tracks and gravel paths.
	highway=sidewalk	Part of a highway set aside for the exclusive use of pedestrians and sometimes cyclists too.
	highway=path	To describe small pathways (where a vehicle cannot pass).
	highway=service	To describe a way to a specific property.
	highway=steps	To describe flights of steps.
	highway=living_street	Residential streets where pedestrians have legal priority over cars, speeds are kept very low.
	highway=cycleway	For designated cycleways.
Kind of surface	surface=*	To describe the physical surface of roads, footpaths and other surface features, particularly regarding material composition and structure. The values to (*) can be: paved | unpaved | asphalt | concrete | paving_stones | sett | cobblestone | metal | wood | compacted | fine_gravel | gravel | pebblestone | plastic | grass_paver | grass | dirt | earth | mud | sand | ground.
	smoothness=*	Specifies the physical usability of a way for wheeled vehicles due to surface regularity/flatness. The values to (*) can be: excellent | good | intermediate | bad | very_bad | horrible | very_horrible | impassable.
Restriction and access	barrier=*	To specify types of barriers. The values of (*) can be: entrance | gate | yes | block | cable_barrier | wall | fence |cycle_barrier | motorcycle_barrier | lift_gate.
	access=*	Used in conjugation to barrier=* to specify the kind of access. The (*) can be: public | private | yes | no.
	wheelchair=*	Used in conjugation with barrier=* to specify if provides access to wheelchair or not. The values of (*) can be: yes | no | limited.
	locked=*	Used to mark a gate, barrier or other feature as locked or not. The values to (*) can be: yes | no.
	open=*	This applies to objects such as gates (e.g. barrier=gate) and the value of (*) can be: yes | no | partial | full.

Source: organized by the author with information of the OpenStreetMap tagging model, available at the Wiki OSM Map Features (https://wiki.openstreetmap.org/wiki/Map_features).

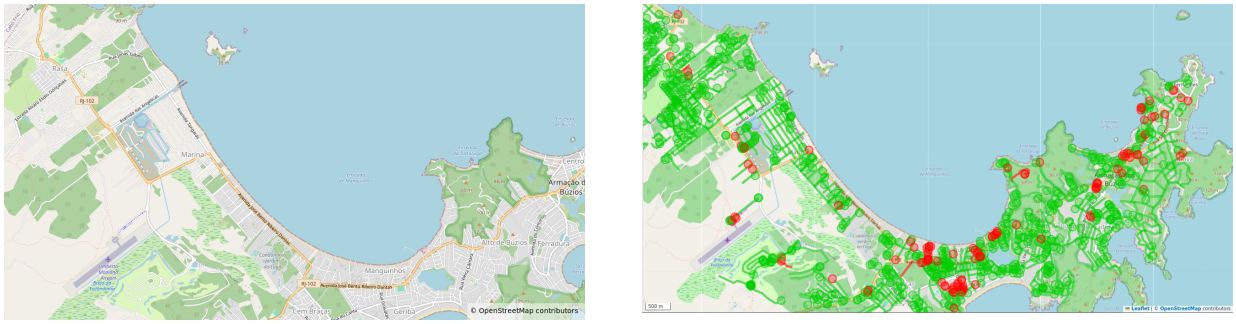
THE IMPORTANCE OF THE SCALE AND THE GEOVIEWER

Depending on the scale observed and the geoviewer adopted, accesses and restrictions are showed in different ways, which can lead to misunderstandings. The Boxes 12.2 to 12.6 provide some examples with some common tags: highway=residential, highway=service, access=private, access=no, and barrier=gate.

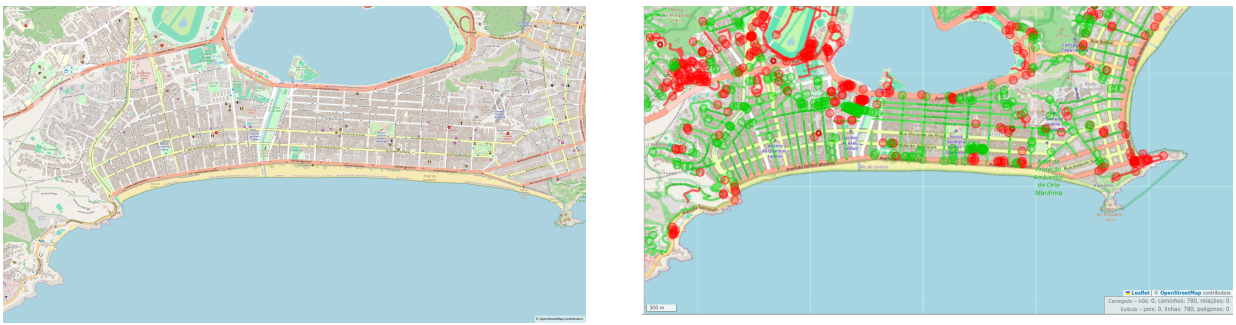
Box 12.2 shows that the types of highways (residential and service) are not visible on the rendered map (hosted in the principal domain, osm.org), but can be easily identified on the map with the markings for the types in green and red. This is possible by consulting the overpass turbo website (overpass-turbo.eu), which allows you to structure simple to complex queries by accessing actual OSM data.

Box 12.2 – Tags related to the beach access mapped in the OpenStreetMap – **types of highway**

Enseada de Manguinhos (Búzios, Brazil)



Ipanema Beach (Rio de Janeiro, Brazil)

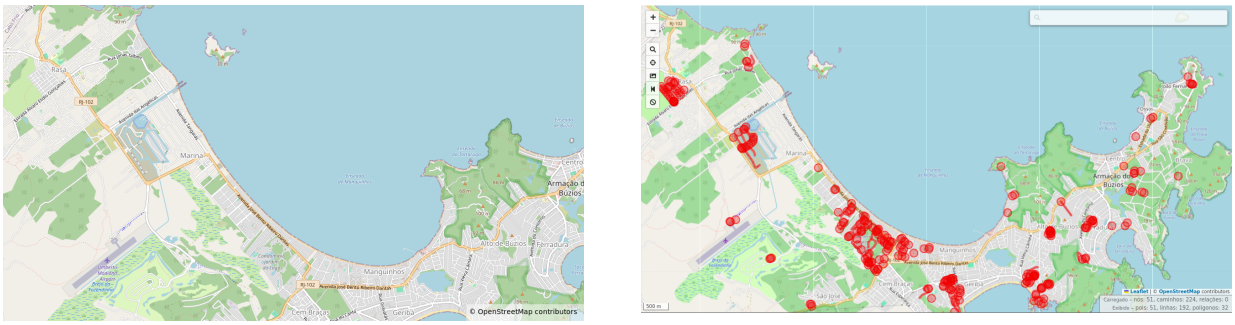


Left maps: viewed in the rendered map (https://osm.org). Right maps: viewed in the overpass turbo, filtering tags **highway=residential** (green), **highway=service** (red). Source: organized by the author, using overpass turbo (https://overpass-turbo.eu). Map data © OpenStreetMap.

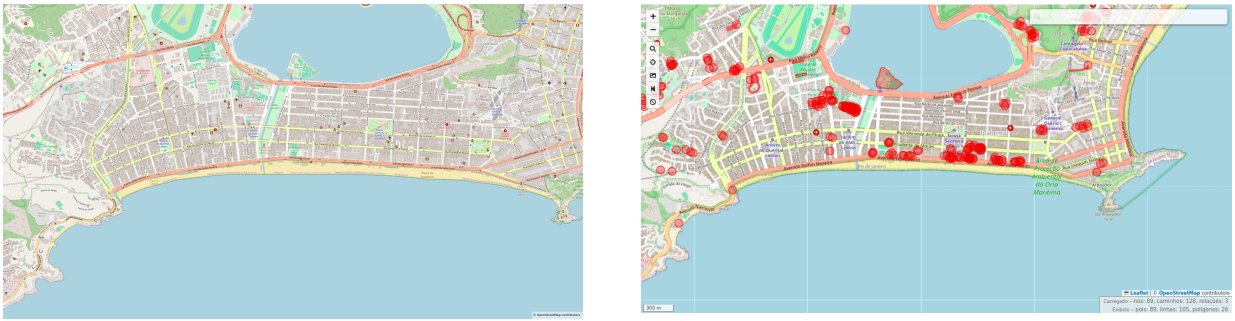
The verification of the access can identify private accesses (access=private) (Box 12.3) and gates (barrier=gate) (Box 12.4), since even a residential road may have restricted public access and physical barriers, with gates being the most common barrier, but also including fences (barrier=fence), walls (barrier=wall), and specific for bicycles (barrier=cycle_barrier), motorcycles (barrier=motorcycle_barrier).

Box 12.3 – Tags related to the beach access mapped in the OpenStreetMap - **private access**

Enseada de Manguinhos (Búzios, Brazil)



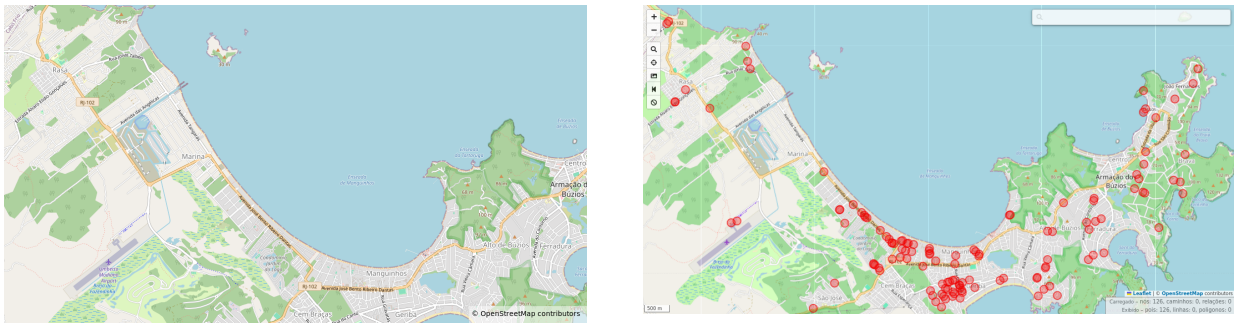
Ipanema Beach (Rio de Janeiro, Brazil)



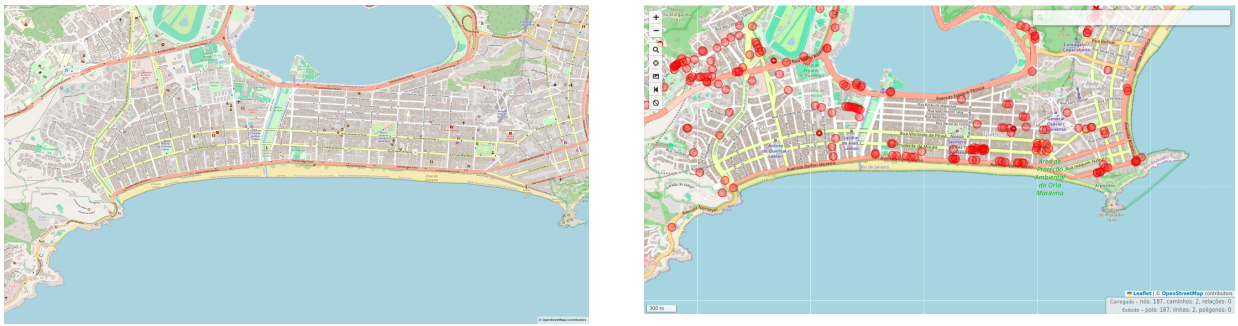
Left map: viewed in the rendered map (https://osm.org). Right map: viewed in the overpass turbo, filtering tag **access=private** (red). All the features are related to the access to buildings and condominiums. Source: organized by the author with overpass turbo (https://overpass-turbo.eu). Map data © OpenStreetMap.

Box 12.4 – Tags related to the beach access mapped in the OpenStreetMap - **barrier (gate)**

Enseada de Manguinhos (Búzios, Brazil)



Ipanema Beach (Rio de Janeiro, Brazil)

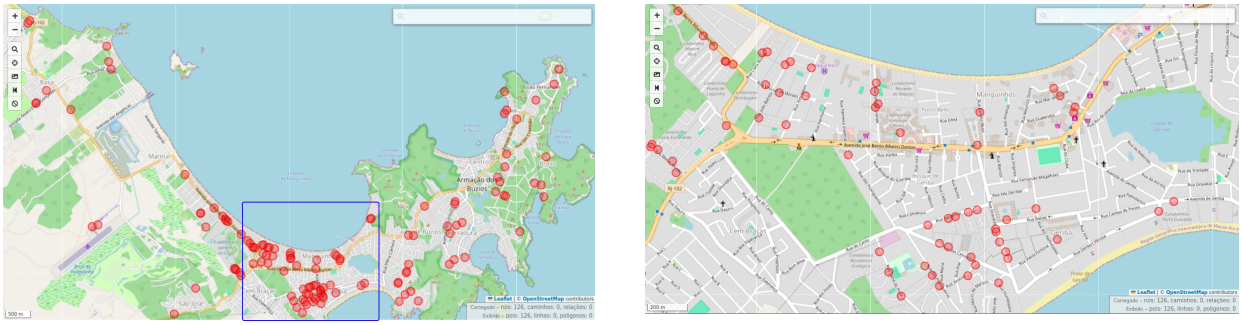


Left map: viewed in the rendered map (https://osm.org). Right map: viewed in the overpass turbo, filtering tag **barrier=gate** (red). All the features are related to the access to buildings and condominiums. Source: organized by the author with overpass turbo (https://overpass-turbo.eu). Map data © OpenStreetMap.

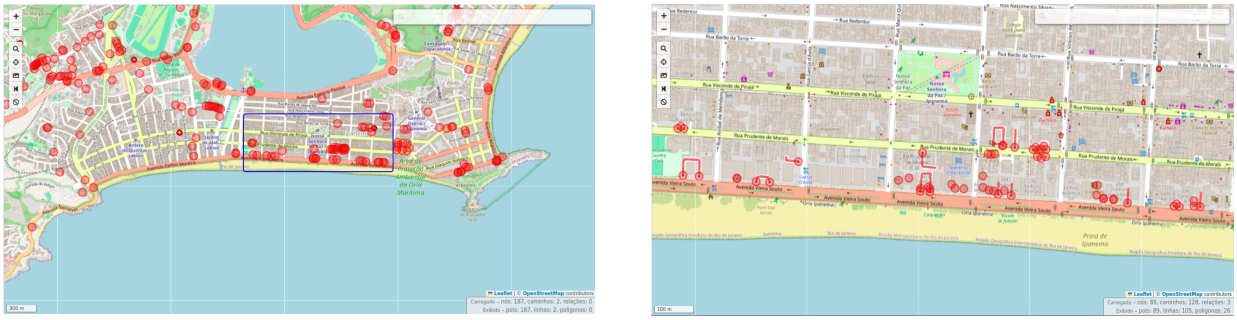
Boxes 12.5, 12.6(1) and 12.6(2) show the importance of the zoom level for the access evaluations. In all cases of the Box 12.5 – Enseada de Manguinhos (Búzios, Brazil) and Ipanema Beach (Rio de Janeiro, Brazil), can be verified (by increasing the zoom level) that there are no constrains to the beach access, but in the case of the Mira Beach (Mira, Portugal) – Boxes 12.6(1) and 12.6(2), there is a point of prohibited access (access=no).

Box 12.5 – Tags related to the beach access mapped in the OpenStreetMap – **barrier (gate) (Zoom)**

Enseada de Manguinhos (Búzios, Brazil)



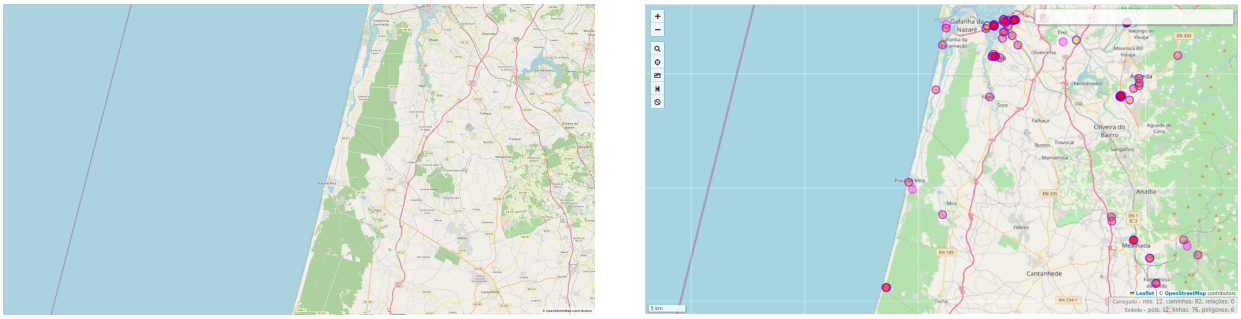
Ipanema Beach (Rio de Janeiro, Brazil)



Areas viewed in the overpass turbo, filtering tag **barrier=gate** (red). Left map: regular view. Right map: zoom to an specific area (marked with a blue square) showing the location of the mapped gates. Source: organized by the author with overpass turbo (https://overpass-turbo.eu). Map data © OpenStreetMap.

Box 12.6(1) – Tags related to the beach access mapped in the OpenStreetMap - **no access**

Mira Beach (Mira, Portugal)

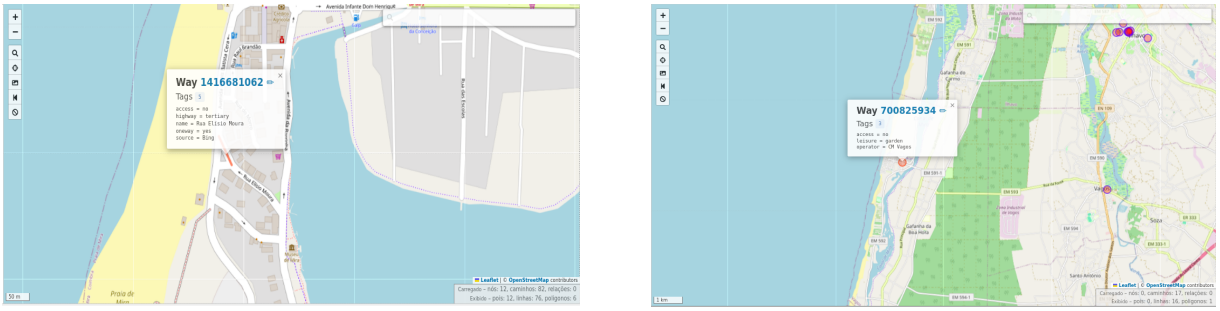


(a) (b)

Mira Beach (Mira, Portugal) – (a) view in the OSM (https://osm.org); (b) view in the overpass turbo, filtering tag **access=no** (lilas). Source: organized by the author with overpass turbo (https://overpass-turbo.eu). Map data © OpenStreetMap.

Box 12.6(2) – Tags related to the beach access mapped in the OpenStreetMap – **no access**

Mira Beach (Mira, Portugal)



(a) (b)

Mira Beach (Mira, Portugal) - view in the overpass turbo, filtering tag **access=no** (lilas) – (a) and (b): zoom to show the presentation of pop-up with information about tags. Note that (a) shows a highway with restriction of access to the beach, but can not be identified in the (b) due to the scale. Source: organized by the author with overpass turbo (https://overpass-turbo.eu). Map data © OpenStreetMap.

CONCLUSION

The OpenStreetMap has a robust data model that allows for the mapping of features related to beach access, but all the cases presented in this study demonstrate that the mapping and evaluation of beach access must be carried out carefully so as not to lead to mistaken conclusions that do not correspond to reality. Thus, the zoom level and the correct application of labels must be observed, as well as the positional accuracy of these points (nodes) and lines (ways) often mapped with mobile devices or based on satellite images, which are not accurate enough to guarantee geopositional accuracy.

Despite these and other limitations (such as poor access to the Internet or unfamiliarity with the use of computer equipment and systems), the cartographic database has served well as a support for mapping these features that are directly related to beach access. In addition, its collaborative and global nature allows for mapping a larger area in less time and at reduced costs. The openness of the data represents an advantage, as it allows its use by a wide range of applications and for the development of derivative products, such as access maps, coastal monitoring systems, land use plans, etc.

Finally, the application of the collaborative mapping can promote the identification of mappers with the localities, enhancing the value of the beach space and promoting citizen science, since these people can generate crowdsourced data, based on their local spatial knowledge. With the publication of this chapter, we hope to encourage the adoption of collaborative mapping of beach access monitoring, showing also its advantages and limitations to a wider audience that may be interested in this topic.

REFERENCES

OPENSTREETMAP CONTRIBUTORS. *Wiki OSM - Map Features*. Available at: https://wiki.openstreetmap.org/wiki/Map_features. Access: nov. 16, 2025.

SOUTO, R. D.; FERNANDES, A. B. S.; LIMA, G. T.; LOPES, M. L. V.; CAETANO, P. M.; VIANNA, T. dos S. *102+ List of the most cited software in the weeklyOSM*. Rio de Janeiro, IVIDES DATA, oct. 09, 2025. Available at: https://doi.org/10.5281/zenodo.17309214. Access: nov. 16, 2025.

LESTER, Charles. The next 50 years of California Beach access: end of an era or a new beginning? *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 13. p. 113-122. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19562047.

13 THE NEXT 50 YEARS OF CALIFORNIA BEACH ACCESS: END OF AN ERA OR A NEW BEGINNING?

Charles Lester[1]

Abstract. California's coast, long protected by strong public access laws and the public trust doctrine, now faces accelerating sea level rise that is eroding beaches, shifting legal boundaries, and intensifying conflicts over property rights, armoring, and managed retreat. As coastal squeeze threatens to eliminate beaches, the ecological, cultural, and recreational functions of these socio-ecological systems are increasingly at risk. Coastal squeeze will also challenge governance assumptions and require adaptive legal, planning, and community strategies. Emerging approaches such as nature-based solutions, managed retreat, hybrid designs, and coordinated regional planning illustrate how California may sustain beach resilience. The state's evolving experience offers a preview of the complex choices coastal societies worldwide will face as they seek to balance public rights, equity, ecology, and climate resilience in an era of rising seas.

Keywords. California coastal management; Public beach access; Sea level rise; Coastal squeeze; Socio-ecological systems.

1 Ocean and Coastal Policy Center. Marine Science Institute, University of California, Santa Barbara (UCSB, USA) – charleslester@ucsb.edu.

INTRODUCTION

Over the last half-century, California has created one of the world's strongest legal and institutional frameworks to protect public access to and along the shoreline. The policy framework grew from widespread public concern that unchecked coastal development was rapidly restricting access and degrading coastal ecosystems. Today, the specter of sea level rise raises fundamental questions about the future of public beach access. At the same time, deep social and political debates about property rights, armoring, managed retreat, equity, and the future of coastal communities are challenging the foundations of California's coastal management program.

A LEGAL FOUNDATION FOR PUBLIC ACCESS

Modern coastal management in California began in the early 1970s, when public concern over privatization of beaches and rapid coastal development led to a political turning point. Voters approved Proposition 20 in 1972, declaring the coast a "natural resource belonging to all the people" and establishing a temporary coastal commission with broad permitting authority. Four years later, the California Coastal Act of 1976 made this framework permanent. The new law established a strong mandate to protect and provide "maximum public access" while safeguarding natural resources and balancing development pressures. The law also required that development not block or diminish the public's ability to reach and use the shoreline.

One of California's major policy tools has been the use of public access easements, often required as conditions of private coastal development. These easements secure corridors for public access, such as vertical paths to the beach, lateral walking routes along the shoreline, upland trails, and scenic viewpoints. Over the years they have opened shoreline locations for the public that were historically blocked or effectively privatized by exclusive developments. They have also helped ensure continuous beach access as private properties redevelop in places like Malibu.

The state of California also has broad duties under the public trust doctrine, which establishes that tidelands and submerged lands belong to the public. Public trust responsibilities include ensuring access, protecting navigation and fishing, and, increasingly, considering ecological and cultural values. Together, access easements and the public trust doctrine create a multilayered system that supports one of the most protected and accessible coastlines in the world. But this system must now address rapidly changing shoreline conditions that challenge its original assumptions.

RISING SEAS AND THE CHANGING REALITY OF PUBLIC ACCESS

Climate change and global sea level rise are reshaping the coastline. Observations and projections point to accelerating sea level rise along the Pacific coast, with serious consequences for beaches. Even modest increases in sea level cause more frequent flooding, loss of sand, and erosion of dunes and bluffs. Storm surges reach farther inland, and once-rare extreme water levels occur with greater regularity.

For beaches, which often rely on accommodation space to migrate landward, rising seas introduce a fundamental spatial problem: many beaches will not have enough room to survive in place. Expert projections suggest that California may lose up to two-thirds of southern California's beaches by 2100 due to sea level rise. The shoreline is backed by a dense mosaic of homes, roads, seawalls, and critical public infrastructure like rail lines and highways. These structures prevent beaches from shifting inland. As a result, beaches are increasingly trapped between the rising sea and fixed human developments — a process known as coastal squeeze.

The coastal squeeze is already apparent in many places: narrow beaches pressed against seawalls in Malibu; shrinking seasonal beaches in Pacifica and Solana Beach; and disappearing sand in parts of Santa Cruz County, Ventura County, and Del Mar. These changes reduce recreational space, diminish ecological habitat, and undermine the public's legal right to use the shoreline. They also raise difficult questions about how to adapt along urbanized shorelines.

A familiar response to erosion is shoreline armoring — seawalls, revetments, and other hard protection structures designed to defend upland property. While armoring protects buildings in the short term, it often accelerates the loss of the beach directly in front of it. Over time, armoring can eliminate entire stretches of public shoreline. California now faces dozens of situations in which armoring protects private homes while the public beach erodes away. The social and legal conflicts around this dynamic will only intensify as sea level rise accelerates. The question becomes: can a coastal management system built on maximizing public access continue to function if the beaches themselves are disappearing?

PUBLIC ACCESS, PROPERTY RIGHTS, AND EMERGING LEGAL CONFLICT

One of the most challenging implications of sea level rise involves the migration of legal boundaries. Under the public trust doctrine, the boundary between public tidelands and private uplands moves with the tides. As sea levels rise, the public trust line shifts inland. Structures that were once above the reach of tides may eventually lie on land that, legally, belongs to the public. This raises difficult questions for regulators and communities:

- What happens when homes or seawalls cross onto public trust land?
- Can these developments remain? Or must they be removed?
- Who bears the cost of shifting tidelines?

These are not abstract questions. They are already arising in parts of California, and at least one court has affirmed the government's authority to enforce ambulatory boundaries between public and private land against encroaching private interests.

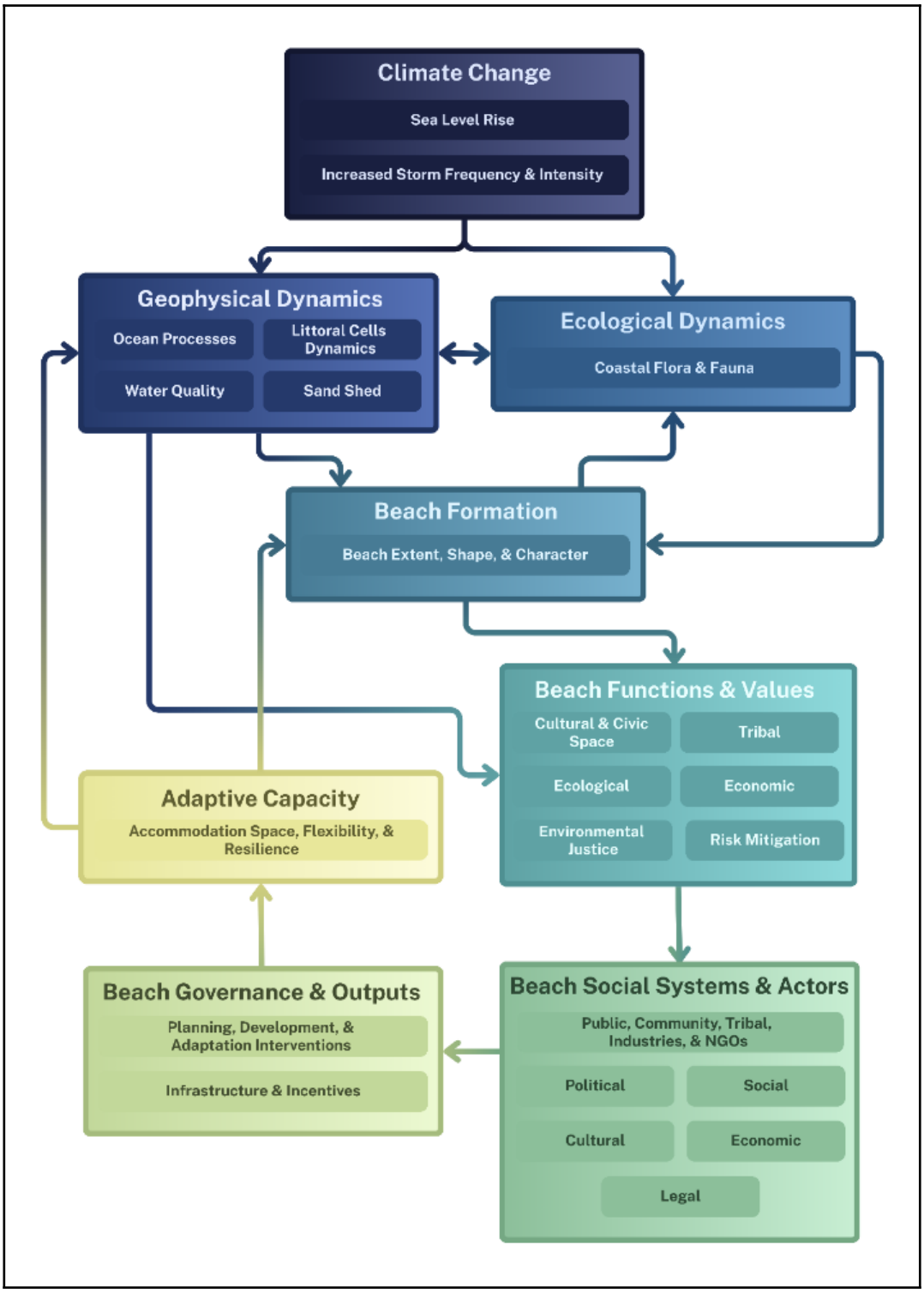
For homeowners, relocation or loss of property represents a major personal and financial burden. For the public, the loss of the beach represents the loss of a shared cultural and environmental resource. For governments, decisions about permit approvals, armoring, and enforcement involve risks of litigation, community resistance, and political backlash. These conflicts are likely to expand dramatically in the coming decades. Internationally, coastal nations will face similar tensions wherever private land meets public tidelands. California's experience provides a preview of the kinds of legal and social dilemmas that climate change will force coastal societies to confront.

BEACHES AS SOCIO-ECOLOGICAL SYSTEMS

Beaches are not simply recreational spaces, they are complex socio-ecological systems (Figure 13.1). Different zones of the beach (swash, mid-shore, upper beach) support distinct communities of invertebrates, birds, and plants. These ecosystems play roles in nutrient cycling, water filtration, and shoreline stability. As beaches narrow or disappear, these ecological functions decline. Habitat for shorebirds and other wildlife shrinks. Natural processes that filter water or replenish dunes are disrupted. The loss of a beach is not only a loss to the public, it is a loss to the ecological fabric of the coastline.

California's beaches are also culturally significant. California's Tribal communities have long held relationships with coastal lands for ceremony, subsistence, stewardship, and heritage. Recent examples of tribal land reacquisitions — for instance, the Kashia Coastal Reserve demonstrate growing recognition of the need to restore traditional Tribal access to and governance of coastal environments, including beaches. These cultural dimensions remind us that coastal management is not only about property and ecology; it is about identity, justice, and social belonging.

Figure 13.1 – The beach socio-ecological system



Source: Lester *et al*. (2025).

California's beaches also support billions of dollars of economic activity through tourism, recreation, and coastal businesses. They serve as public open spaces in increasingly dense metropolitan regions. They support public health, climate resilience, and community cohesion. The future loss of beaches will be a significant economic loss.

A socio-ecological systems perspective recognizes all the dimensions of beach environments. It makes clear that losing a beach affects far more than the shoreline itself, it weakens interconnected ecological, cultural, social, and economic systems.

BUILDING COASTAL RESILIENCE

To address accelerating change, California is developing a more integrated concept of beach resilience. Resilience refers to the capacity of beaches as socio-ecological systems (including geophysical, ecological, built environment, and governance institutions) to withstand immediate impacts, recover from disturbances, adjust to new conditions, and potentially transform when necessary to sustain core public values. This perspective acknowledges that adaptation will involve more than protection. In some cases, transformation, including relocation, redesign, or new land uses, will be essential for beaches to survive.

In California, emerging strategies for achieving resilient beaches include:

- Nature-based solutions, such as dune restoration and sediment management that enhance ecological and protective functions.
- Managed retreat or realignment and relocation of vulnerable structures to allow beaches space to migrate inland.
- Hybrid approaches, combining limited armoring with ecological restoration and phased retreat over time.

- Coordinated regional planning, needed because sediment flows, wave dynamics, and coastal access networks transcend local boundaries.
- Equity-centered planning, ensuring that adaptation efforts do not disproportionately burden or exclude disadvantaged groups.

California's exploration of a statewide Beach Resiliency Plan represents an attempt to create coherent adaptation strategies that reflect the interconnected and multidimensional nature of beaches. Such a plan may include identification of priority beaches, guidance for local governments, regional sediment programs, and statewide coordination of adaptation pathways for long-term beach resiliency. This kind of planning may be relevant to coastal regions around the world that face similar conditions of urbanization, erosion, and social inequality.

CALIFORNIA'S NEXT ERA: CHOICES AND COMMITMENTS

California's experience shows that protecting public access requires more than laws and easements—it requires sustained commitment, adaptive governance, and difficult public conversations. The future of the state's beaches will depend on whether society chooses to adjust its relationship with the shoreline or continues to defend the status quo until beaches are lost. The choices ahead include:

- Wether to rely on armoring or invest in living shorelines;
- Wether to plan for retreat or defend fixed property lines;
- Wether to expand equitable access or allow rising costs and shrinking beaches to limit inclusivity;
- Wether to protect ecological processes or prioritize infrastructure;
- Wether to treat beaches as expendable margins or as essential socio-ecological systems.

California offers a cautionary but perhaps hopeful example. The state's strong legal framework, history of public engagement, and emerging resilience planning provide a foundation for transformative coastal stewardship. But the outcome remains uncertain. New climate challenges, such as the 2025 catastrophic wildfires that burned down hundreds of beachfront homes in Malibu, reframe our discussions of vulnerability, and create difficult juxtapositions of community values. Should we build back better, and stronger, in the same places, or should we perhaps consider development patterns anew, especially with looming sea level rise?

CONCLUSIONS

Public access to California's beaches has been one of the state's great societal achievements. Yet climate change now challenges that achievement at its most fundamental level: many beaches are shrinking or disappearing, and with them the public rights, ecological functions, and cultural values they support. Responding to these changes will require a combination of legal innovation, ecological restoration, community engagement, and long-term adaptation planning. Whether California can chart a path that preserves beaches for future generations will depend on how all these elements are integrated. For coastal communities worldwide, the California case offers insight into how to balance access, equity, ecology, and climate resilience in an era of rapid environmental change. But it also exposes the deep social challenges that we will need to grapple with if we are to maintain public beaches as vital civic and cultural spaces for future generations.

REFERENCES

LESTER, Charles. CZM in California: Successes and Challenges Ahead. *Coastal Management*, v. 41, n. 3, p. 219-244, 2013. Available at: https://doi.org/10.1080/08920753.2013.784891. Access: 08 nov. 2025.

LESTER, Charles. *Protecting public trust shoreline resources in the face of sea level rise.* Santa Barbara: Ocean and Coastal Policy Center, Marine Science Institute, University of California, 2021. Available at: https://digitalcommons.humboldt.edu/cgi/viewcontent.cgi?article=1059&context=hsuslri_state. Access: nov. 8, 2025.

LESTER, Charles; MANLEY, Caitlin; DINH, Yvonne; ROZAL, Samantha; COOPER, Ashley; WINTERS, Lauren; MUNSTER, Katie; BOK, Tatiana; WRUBEL, Nick. *Planning for Sea Level Rise on California's Coast***:** Status, Trends, and Recommendations. Ocean and Coastal Policy Center, Marine Science Institute, University of California, Santa Barbara, California, 2023. Available at: https://ocpc.msi.ucsb.edu/california-coastal-adaptation-project. Access: nov. 8, 2025.

LESTER, Charles; PATSCH, Kiersten; CASTRO-SOTOMAYOR, José; DUGAN, Jenifer; GRAY, Summer; KING, Philip; MCDOUGALL, Ella; NEUMAN, Kriss; REINEMAN, Dan; JENKINS, Sarah; MOURIER, Lilia; SCALZO, Miranda. *Planning for beach resilience*: A framework for understanding beach appropriation and the coastal squeeze, Revista TOMO, Special Issue - Coastal Squeeze: Beaches under Socio-Economic and Ecological Pressure, São Cristóvão, v. 44, e22912, 2025, DOI: 10.21669/tomo.v44.22912.

VITOUSEK, Sean; BARNARD, Patrick L.; LIMBER, Patrick; ERIKSON, Li H.; COLE, Blake. *A model integrating longshore and cross-shore processes for predicting long-term shoreline response to climate change. Journal of Geophysical Research: Earth Surface*, v. 122, n. 4, p. 782-806, 2017. Available at: https://doi.org/10.1002/2016JF004065. Access: abr. 11, 2025.

VILAR, José Wellington Carvalho. Beach Management in Sergipe: a trajectory of geographic research. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches:* Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 14. p. 123-129. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19562141.

14 BEACH MANAGEMENT IN SERGIPE: A TRAJECTORY OF GEOGRAPHIC RESEARCH

José Wellington Carvalho Vilar[1]

Abstract. The text revisits debates presented at the Beach Access Network event (Aracaju, 2025), highlighting the vulnerability, conflicts, and spatial planning of Sergipe's beaches. Drawing on the trajectory of the GESTAC research group, it emphasizes the socio-economic valorization of beaches and the environmental challenges arising from accelerated urbanization. Finally, it proposes a framework for an integrated geographic approach to the coastline.

Keywords. Coastal Management; Sergipe's Beaches; Territorial Planning; Conflicts; Environmental Vulnerability.

INTRODUCTION

The workshop "Beach Management: Public Spaces, Vulnerability, Conflicts, and Challenges", held in Aracaju on August 22, 2025, and promoted by the Beach Access Network (BAN), focused on discussions about public access to beach environments, particularly in terms of conflicts and territorial planning.

In the first part of the workshop, issues inherent to Sergipe's beaches were discussed, especially their condition as vulnerable public spaces and the conflicts related to their use and occupation. It was during this session that my talk took place, in which is presented an overview of research conducted in the field of geography, particularly by the Territorial Management of Coastal Environments research group (GESTAC), led by me, a

1 Federal Institute of Sergipe – IFS (Brazil) – wvilar@yahoo.com.br.

geographer formerly affiliated with the Federal Institute of Sergipe and now retired.

The text is divided into two parts. In the first, revisit key issues concerning beaches within the context of the Sergipe coastline. In the second, highlight selected state-led interventions, particularly the use of specific management instruments, and refer to relevant research produced by GESTAC. Finally, present a preliminary analytical framework aimed at broadening the debate on beaches from a geographic perspective, while acknowledging the essential role of interdisciplinarity in territorial management activities.

BEACHES IN THE CONTEXT OF THE SERGIPE COASTLINE

Sergipe's beaches correspond to a geomorphological model of prograded coasts, characterized by rectilinear and filamentous forms embedded in a Quaternary coastal plain and marked by erosion problems, particularly at the mouths of major rivers and at the Sergipe River estuary, where urbanization and metropolitan expansion play a decisive role in environmental instability and social vulnerability.

Once considered inhospitable environments, an "empty and invisible space" lacking socially recognized value (Corbin, 1989; Santos, 2015), Sergipe's beaches have become highly valued areas, where processes of occupation and real estate interest have intensified. The former Aracaju Expansion Zone (ZEU), the only remaining unoccupied area available for the city's internal expansion, and Barra dos Coqueiros, a neighbouring municipality entirely established on a Holocene plain, have both experienced accelerated occupations, largely in the absence of adequate protection for their naturally vulnerable environments.

It was during this period, marked by rising social valorization and increasing environmental vulnerability, that my first consultancy projects on the Sergipe coastline were initiated. These projects aimed to support the State Environmental Administration (ADEMA) through the survey and systematization of information to inform coastal zone management planning in Sergipe and territorial planning initiatives on the southern coast of the state (Vilar, Araújo, Silva, 2021; 2022)

At that time, the debate focused on a systemic conception of coastal environments, integrating physical elements with human, economic, and political dimensions. The analytical framework was grounded in the idea of Sustainable Development, and beaches were conceived as transition zones between the oceanic and continental worlds, with the atmosphere as an overarching layer. Three worlds meet in a single place, and the beach, due to its rare and strategic location, has become a target of real estate speculation, as society has increasingly developed a desire to live by the sea and even to own homes with direct access to the sandy beach. Living by the sea has thus become an economic and cultural value of great significance. This perspective has reshaped the geography of the coastline, and as a result, beach spaces and their associated environments have undergone major transformations and significant impacts.

The idea of considering coastal spaces as territories served as a reference for interpreting the Sergipe coastline and its beach environments and led to the creation of the Sergipe Coastline Digital Atlas. Within this framework, several issues were addressed, including the process of regionalization, which resulted in the proposal of a new classification dividing Sergipe into three coastal areas: the Northern, the Metropolitan, and the Southern Coasts.

The Northern Coast is characterized by more natural beaches, protected both by the Santa Isabel Biological Reserve (REBIO) conservation unit and by historically difficult access, which has begun to ease in recent years with the paving of the SE-100 North highway. The Metropolitan Coast includes the most polluted beaches in Sergipe and is the area most strongly affected by coastal urbanization. The Southern Coast is accessed via the SE-100 South highway, which includes bridges over rivers that have reduced travel

distances, facilitated access to Aracaju and even to Salvador, the capital of the neighboring state of Bahia, and stimulated second-home development and real estate tourism activities.

TERRITORIAL PLANNING OF BEACHES IN SERGIPE

As Brazil launched the National Coastal Management Program (GERCO), responsible for territorial planning initiatives along the Brazilian coastline, the need emerged for a specific instrument focused on beach environments, leading to the creation of the *Projeto Orla* (Waterfront Project) in the early 2000s. In Sergipe, Maritime Waterfront Intervention Plans were developed for coastal municipalities, beginning with Aracaju and later expanding to the southern and northern coasts.

The greatest contribution of the *Projeto Orla* was its participatory and relatively simple methodology, based on a structured script that provided the foundations for integrated coastal management and the key inputs for the formulation of a management project. The plan addressed central issues such as the delimitation of the intervention area; the preparation of a diagnostic assessment, including the definition of environmental quality parameters; shoreline classification; scenario building encompassing current conditions, trends, and desired futures; and the elaboration of an Intervention Plan. As a participatory project, its plans relied on the effective collaboration of populations who live, work, or vacation in beach zones and other environments associated with coastal spaces.

The Spanish school of Integrated Coastal Management, particularly through the work of geographer Barragán Muñoz (2014) of the University of Cádiz, had already exerted a clear influence, serving as both a theoretical and methodological reference for local studies.

In addition to works based on the *Projeto Orla*, was supervised several master's and doctoral theses within the Graduate Program in Geography (PPGEO) at the Federal University of Sergipe (UFS). Notable among these are studies by Letícia Bianco Barros de Moraes Lima on sun-and-beach tourism[2]; Priscila Pereira Santos on second-home development[3]; Claudio Roberto Braghini on the territorial management of coastal conservation units[4]; and Alessandra Magna dos Santos de Souza on coastal urbanization and environmental conflicts[5].

FINAL CONSIDERATIONS AND PATHS FORWARD

The trajectory of studies on the Sergipe coastline is long-standing and marked by positive outcomes, including a significant body of academic work developed within the GESTAC research group and grounded in the integrative perspective offered by geography. Nevertheless, much remains to be done, particularly in the fields of management and territorial planning, especially in addressing conflicts.

In summary, the study of the Sergipe coastline invites an understanding of economic and social uses and abuses, the functioning of natural systems, processes of environmental degradation, the need for conservation, and the often-chaotic socio-spatial transformations driven by the multiple agents involved in the production of regional and coastal spaces (Vilar, Araújo; Silva, 2022). Within Sergipe's coastal space, natural dynamics intersect with the dynamics of territorial occupation, as well as with regional formation, territorial arrangements, and landscape configurations that express human–nature relations, collectively shaping cultural, social, political, and economic reconfiguration. These processes are best understood through the integrated and synthetic perspective offered by geography, grounded in its spatial dimension.

2 Available in Portuguese at https://ri.ufs.br/jspui/handle/riufs/5435 (Accessed: January 14th, 2026).

3 Available in Portuguese at https://ri.ufs.br/handle/riufs/5596 (Accessed: January 14th, 2026).

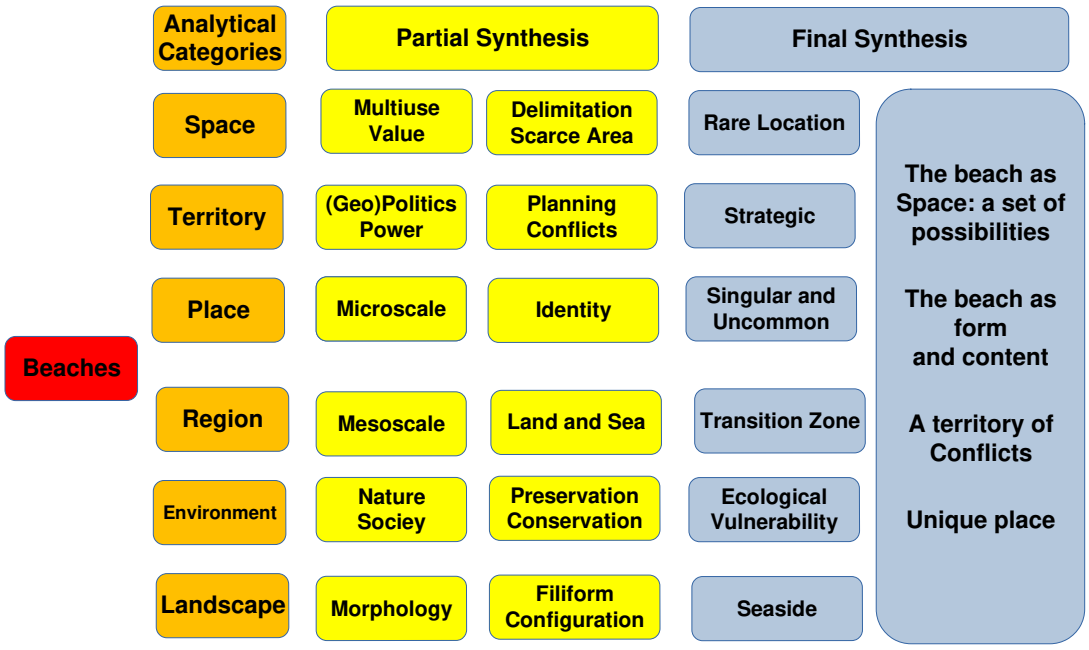
4 Available in Portuguese at https://ri.ufs.br/handle/riufs/5459 (Accessed: January 14th, 2026).

5 Available in Portuguese at https://ri.ufs.br/handle/riufs/5472 (Accessed: January 14th, 2026).

Based on my previous research and professional experience, was developed Figure 14.1 as a preliminary effort to systematize the discussion of coastal environments in general and, more specifically, of Sergipe's beaches. This framework adopts a critical perspective grounded in analytical categories that help to elucidate the beach simultaneously as a place, a space, and a territory. In this sense, beach environments, always understood within a broader coastal context, can be conceived as rare and strategic spaces, fragile and singular places, and territories under dispute.

Long live the beautiful, conflictive, and problematic tropical beaches of Sergipe, in northeastern Brazil. Their future depends on all of us.

Figure 14.1 – In search of the conceptual nature of beaches



Source: produced by the author (2025).

REFERENCES

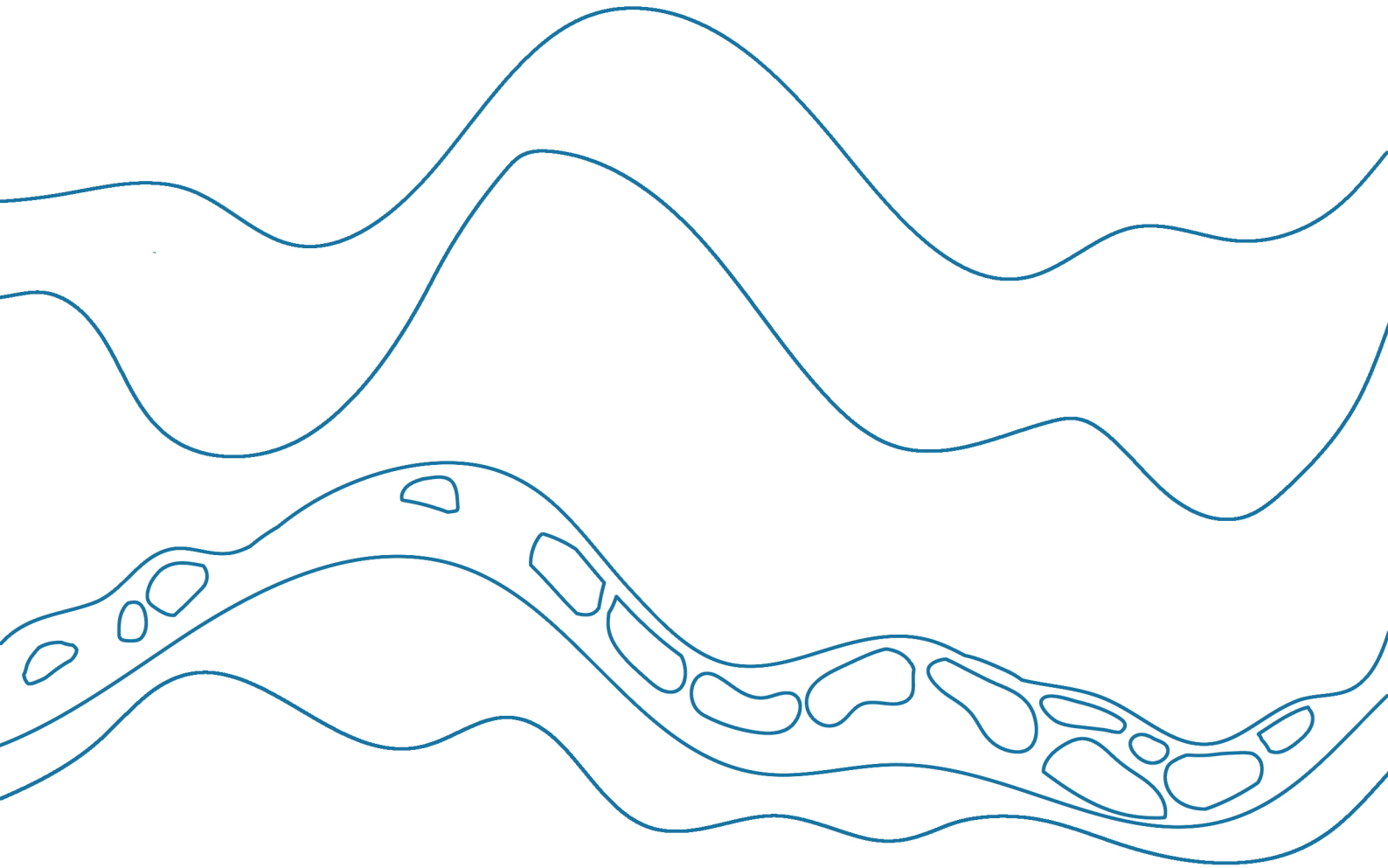
BARRAGÁN MUÑOZ, J. M. *Política, Gestión y Litoral: uma Nueva Visión de la Gestión Integrada de Áreas Litorales*. Madrid: Editorial Tébar, 2014.

CORBIN, A. *O Território do Vazio: A Praia e o Imaginário Ocidental*. São Paulo: Companhia das Letras, 1989.

SANTOS, R. H. dos. *Entre águas e agentes: vivências e (in)visibilidades nos territórios do litoral de Sergipe*. 2015. Tese (Doutorado em Geografia) – Universidade Federal de Sergipe, São Cristóvão, 2015.

VILAR, J. W. C.; ARAÚJO, H. M. de; SILVA, J. A. da (org.). *Geografia do Litoral Sergipano*. Aracaju: Editora IFS, 2022.

VILAR, J. W. C.; ARAÚJO, H. M. de; SILVA, J. A. da (org.). *Territórios Costeiros do Nordeste do Brasil*. Aracaju: Editora IFS, 2021.



BEYELER, Marc; EGER, Elena; SANDOVAL, Mario. Who uses the beach? A case study of coastal access in Southern California. *In*: SARTORE, Marina; LINS-DE-BARROS, Flavia (ed.). *Public Access to Beaches*: Conflicts and Management. Rio de Janeiro: Editora IVIDES, 2026. cap. 15. p. 131-138. ISBN: 978-65-985676-4-4. DOI: 10.5281/zenodo.19562178.

15 WHO USES THE BEACH? A CASE STUDY OF COASTAL ACCESS IN SOUTHERN CALIFORNIA

Marc Beyeler[1]
Elena Eger[2]
Mario Sandoval[3]

Abstract. While the economic value of the beach is increasingly well documented, beaches continue to be undervalued, in both market, and non-market terms, and too little understood on all terms, including equity, diversity, and inclusion. Our research focuses on combining different coastal access and beach data into an integrated coastal access research project, using the data source of mobile phone location-derived 'big data', coupled with traditional beach counts and beach use survey methods to analyze beach attendance and beach use, and beach user practices, preferences and behaviors at select beach access locations in Southern California. In this manuscript we report on important research questions, analyzing beach user origin and destination and demographic data to better understand both barriers to coastal access and opportunities to equitably expand coastal access facilities and programs. This manuscript details initial research results focusing on selected coastal and beach access locations in Santa Barbara and Ventura counties, and in Malibu, along Santa Monica Bay, in Los Angeles County. We undertook a detailed analysis of multiple access locations, integrating the spatial locational information with up-to-date demographic data. Our research can help amplify the growing body of data and research that documents the multiple natural and human values supported by beaches in order to inform changing environmental justice and community resilience policies toward use, visitation and protection, enhancement, restoration, management and stewardship of beaches.

Keywords. Coastal access; Beach use patterns; Environmental justice; Big data analytics; Community resilience.

1 Beach Erosion Authority for Clean Oceans and Nourishment – BEACON (USA) – beyeler@beacon.ca.gov.

2 Mountains Recreation and Conservation Authority – MRCA (USA) – elena.eger@mrca.ca.gov.

3 Mountains Recreation and Conservation Authority – MRCA (USA) – mario.sandoval@mrca.ca.gov.

INTRODUCTION

Coastal access is an essential element of coastal law and planning in California, and beach visitation is a priority for local residents and visitors alike. However, many important barriers to full beach and coastal access remain, and several threats to the continued operation and use of coastal access facilities persist. While coastal access public agencies and academic experts work hard to address these barriers to coastal access, there has historically been limited funds for social science data collection to support improved and expanded beach and coastal access.

BEACON and its collaborators, Mountains Recreation and Conservation Authority (MRCA) and California State University Channel Islands (CSUCI) have supported the development of and utilized the 'best available social science' as a regular and essential component of advancing our practice and addressing the many barriers to coastal access for decades. At the same time, social science data collection efforts have received limited funding for some time. To address critical long-standing data and information needs, new efforts are needed.

BEACON, MRCA and CSUCI have examined beach use and beach users for several decades, utilizing traditional beach count and beach survey methods. Many of these efforts are dated, however, and new data collection has been needed. BEACON, MRCA, and CSUCI seek increased understanding of public use and value of beaches using the best available social science to better plan for resilient regional sandy beaches. The partners identified cell phone location-derived data as a new source of beach use information to complement and augment traditional methods.

RESEARCH QUESTIONS

We investigated several complementary research questions regarding beach use and beach users, including:

- What is the historical experience of collecting beach user visitation information in Southern California?
- What new sources of data can be used to better understand who uses beaches and who are beach users?
- Can cell phone location-derived 'big data' offer new opportunities for a cost-effective data and data analysis method to better under beach users and beach use?
- Who uses the beach?
- How do popular narratives of the coast and beach as an exclusive 'whites only' landscape inhibit a more accurate representation of beach use and beach access, so as to minimize the estimation of non-traditional and non-white beach users?
- Do/How do traditional sources of demographic data in the US (US Census information) contribute to a 'constructed narrative' of who uses beaches that minimizes the estimation of non-traditional and non-white beach users?

RESEARCH METHODS

BEACON and MRCA have invested time and resources in developing and collecting and analyzing new cell phone data available for locational analysis of beach use and user origin, including negotiating an Memorandum of Understanding (MOU) with research university (CSUCI) and key subject matter researchers; identifying and recruiting author of proof-of-concept (Dr. Merrill, EPA); and coordinating collaboration among several entities, including, importantly, forming a "working group" to share data, share funding and personnel resources, share methodologies, share products and partnerships between scientists, managers, and stakeholders.

We identified data collection practices and analysis methodologies involving cell phone location-derived beach use data. We developed on-the-ground beach count methodologies to be used to complement and integrate with cell phone location-derived data. We were able to manipulate purchased file data, assisted by United States Environmental Protection Agency (US EPA) expert, and successfully coded to Geographic Information System (GIS) locations for data locational analysis and data visualization. We aligned our new data 'points of interest' with other data collection efforts and sources, including other beach access locations. We developed a Pilot Project involving more than four-dozen access points to collect mobile phone location data and to collect survey information and beach count information across three adjoining counties, Los Angeles, Ventura, and Santa Barbara in Southern California (Figure 15.1).

Figure 15.1 – Beach Access Data Research Pilot Project. Source: CSUCI.

We have been able to better describe and analyze beach users from diverse communities, including disadvantaged and under-served communities in multiple counties throughout Southern California, so as to improve active development, management, and stewardship of coastal access with regard to under-served and under-represented communities (Figures 15.2 and 15.3).

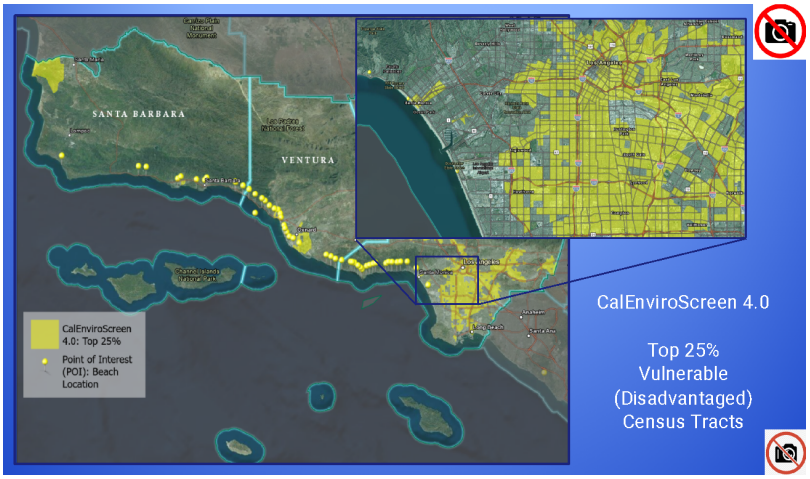


Figure 15.2 – Identifying disadvantaged communities

Source: US Census Tract.

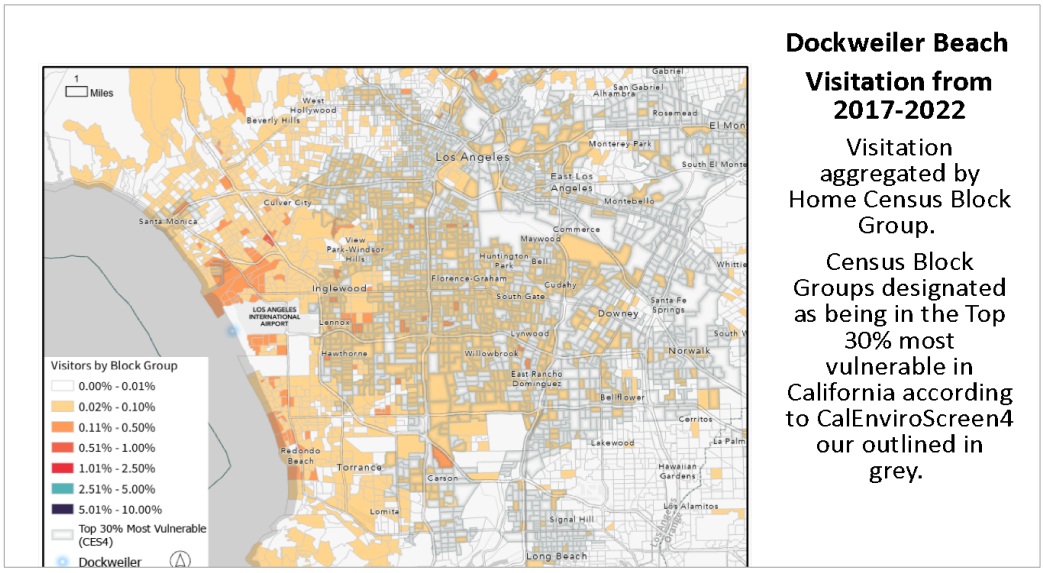


Figure 15.3 – Identifying beach users to specific beach access points from 'disadvantaged communities'

Source: US Census Tract.

RESEARCH INITIAL RESULTS AND DISCUSSION

As part of larger coastal access data collection and analysis efforts, cell phone location-derived 'big data' does potentially offer new opportunities for a useful and applicable data source to support data analysis to better understand beach users and beach use, but only in combination with other on-the-ground visitor counting and data collection methods. We observe from our research that current demographic data categories in the US have the effect of minimizing the estimation of non-traditional and non-white beach users.

Notwithstanding significant and persistent barriers and constraints to visiting and using beaches, the reported origin data documents wide use of beaches across diverse economic and social groups, including by many underserved and underrepresented communities of color, living near and distant from any coastal location.

The documented experience across the Southern California coastal destinations studied is that beaches remain, to some important degree, a democratic 'public place', in spite of historic discriminatory and racist government, and systemically restrictive social policies. Our research reporting cell phone data documenting beach use in a portion of Southern California, including trip origin and beach destination information over a 7+-year period, reveals the importance of the Beach as a vital and essential environmental, natural resource, and community 'central place', serving a large and diverse urban coastal population.

Critically, our initial research shows that during the initial two years of the COVID pandemic, beaches proved to be essential, durable and repeated community refuges, both informally and formally, through several different stages of quarantine and public health crisis policy management. Beaches became an outlet for individuals, families, communities, and local, regional, and state and federal governments, as all tried to negotiate safe and healthy community practices.

CONCLUSION AND RECOMMENDATIONS

Our most recent research and data collection and analysis results reveal the several and multiple inter-woven treads of a very complicated integrated and combined Social-Ecological System (SES), with shifting relationships, baseline conditions, power, perceptions, practices, values, and behaviors. Going forward we forecast the need for new data, research and analysis sources and methods, combined with new research paradigms, that involve multiple interests and parties in beach use research, including users and organized user groups. Equity as a goal and a practice must be built into the framework of data prioritization, collection sources and methods, and analysis frameworks.

We identify important challenges to beach management and conservation, with both the COVID and post-COVID periods revealing the many fault lines evident at the coast, and over beach and coastal access. We argue that many of these challenges can be addressed in part through increased research on socio-cultural factors utilizing novel approaches, such as co-management systems, frameworks, and practices that recognize beaches as social-ecological systems and promote integrated management, stakeholder involvement, and long-term-adaptive planning for sustainability. Our research can help amplify the growing body of data and research that documents the multiple (and complementary) natural and human values supported by beaches, including environmental justice, equity, climate and health needs.

REFERENCES

BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND NOURISHMENT – BEACON. *Advancing Coastal Resilience: Framework Analysis for Integrating Regional Sediment Management and Coastal Adaptation in the Santa Barbara Littoral Cell. Project Report.* Beyeler, M.; Patsch, K.; Horn, D.; Dugan, J.; Johnston, K.; Warrick, J.; Raaf, A. Prepared for: Beach Erosion Authority for Clean Oceans and Nourishment (BEACON), jan. 2025.

BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND NOURISHMENT – BEACON. *Estimating Beach Visitation Using Cell Phone Locational Data: A Pilot Study of Ventura, Santa Barbara, and Los Angeles Counties.* Patsch, K.; Horn, D.; Beyeler, M.; Eger, E.; Eger-Beyeler, A.; Sandoval, M.; Merrill, N. Prepared for: Beach Erosion Authority for Clean Oceans and Nourishment (BEACON), Mountains Recreation & Conservation Authority (MRCA), California Sea Grant, The Bay Foundation, Aug. 2024.

PATSCH, K.; MERRILL, N.; HORN, D.; BEYELER, M.; EGER, E.; EGER-BEYELER, A.; SANDOVAL, M. Estimating beach visitation using mobile device-derived location data in Southern California, USA. *Journal of Coastal Research*, v. 41, n. 5, Aug. 2025.

EVENT AND EBOOK INFORMATION

II BEACH ACCESS NETWORK (BAN) WORKSHOP
Public Access to Beaches: Conflicts and Management

Event Agenda

August 18th to 20th, 2025 – *Casa da Ciência da UFRJ*, Rio de Janeiro City, State of Rio de Janeiro, Brazil.
August 22nd and 23rd, 2025 – *Caju Hub*, Aracaju City, State of Sergipe, Brazil.
May, 2026 – Ramatuelle, France.

Event Coordination

Marina Sartore – Federal University of Sergipe (UFS, Brazil)
Flavia M. Lins-de-Barros – Federal University of Rio de Janeiro (UFRJ, Brazil)

Event Support

- *Casa da Ciência da UFRJ* (Brazil)
- Federal University of Sergipe (UFS, Brazil)
- Federal University of Rio de Janeiro (UFRJ, Brazil)
- *Fondation Maison des Sciences de l'Homme* (FMSH, France)
- *Fundação Carlos Chages Filho de Amparo à Pesquisa do Estado do Rio de Janeiro* (FAPERJ, Brazil)
- Graduate Program in Development and Environment (UFS, Brazil)
- Graduate Program in Geosciences and Basin Analysis (UFS, Brazil)
- Graduate Program in Sociology (UFS, Brazil)
- *Institut Universitaire de France* (France)
- Intelligent Maritime Solutions (Portugal)
- *Laboratório de Geografia Marinha e Gestão Costeira Integrada* (UFRJ, Brazil)
- *Observatório das Metrópoles – Núcleo Aracaju* (Brazil)
- Ocean Pact (Brazil)
- *Secretaria do Patrimônio da União* (Brazil)
- *Université de Lille* (France)

eBook Published by

— Production of the ebook

Editora IVIDES (Brazil)

Raquel Dezidério Souto – Publisher

eBook Edited by

— Conceptualisation of the ebook, inviting authors and compiling the original texts

Marina Sartore – Federal University of Sergipe (UFS, Brazil)

Flavia M. Lins-de-Barros – Federal University of Rio de Janeiro (UFRJ, Brazil)

eBook Scientific Committee

- Cae Rodrigues – Federal University of Sergipe (UFS, Brazil)
- Daniel Hauer Queiroz Telles – Federal University of Paraná (UFPR, Brazil)
- Flavia M. Lins-de-Barros – Federal University of Rio de Janeiro (UFRJ, Brazil)
- Grégory Salle – *Centre National de la Recherche Scientifique* (CNRS, France)
- Isabelle Bruno – *Université de Lille* and *Institut Universitaire de France* (IUF, France)
- Josefa Varela Guerra – Rio de Janeiro State University (UERJ, Brazil)
- Leticia Parente Ribeiro – Federal University of Rio de Janeiro (UFRJ, Brazil)
- Marcos Paulo Ferreira de Góis – Federal University of Rio de Janeiro (UFRJ, Brazil)
- Marina Sartore – Federal University of Sergipe (UFS, Brazil)
- Varlei Rui Ertel – Federal University of Santa Catarina (UFSC, Brazil)

Scientific Committee and Authors' Biographies

Ana Consuelo Ferreira Fontenele

Sergipe State Environmental Administration (ADEMA, Brazil)

https://orcid.org/0000-0003-1790-8421

Ana Consuelo Ferreira Fontenele received her PhD and postdoctoral training in Geography from the Federal University of Sergipe (UFS, Brazil). She worked in the Environmental Inspection Department (GEFIS) and in the Environmental Impact Assessment Department (GEAIA) from 2008 to 2022, at the Sergipe State Environmental Administration (ADEMA, Brazil). She currently serves as an Adjunct Professor in the Professional Master's Program in Environmental Sciences (PROFICIAMB-UFS, Brazil) and as Coordinator of Plans and Programs at the Sergipe State Secretariat for the Environment and Climate Action (SEMAC, Brazil). She has experience in environmental sciences and environmental licensing, with an emphasis on environmental management, working mainly on the following topics: education, environment, agroecosystems, sustainable development, pesticide impacts, environmental licensing, coastal economic-ecological zoning, environmental education, coastal management, and continuing education in water resources management.

Cae Rodrigues

Federal University of Sergipe (UFS, Brazil)

https://orcid.org/0000-0001-7519-838X

Cae Rodrigues received his PhD in education from the Federal University of São Carlos (Brazil). He is an Associate Professor from the Department of Physical Education at the Federal University of Sergipe (Brazil). He has held the position of visiting researcher at the University of Lille (France), the University of Bologna (Italy), the Federal University of São Carlos (Brazil), La Trobe University (Australia), and the University of the Sunshine Coast (Australia). He conducts research and supervises doctoral projects on the topic of outdoor education, ecomotricity, and environmental justice. Currently, he is the editor of Special Editions for The Journal of Environmental Education.

Charles Lester

Ocean and Coastal Policy Center at UCSB (USA)

https://orcid.org/0000-0002-1107-0026

Charles Lester received his PhD and JD from UC Berkeley (USA). He is the director of the Ocean and Coastal Policy Center in the Marine Science Institute at UC Santa Barbara (UCSB, USA), where he researches, writes, and advises about sea level rise, coastal resilience, and other aspects of coastal law, policy and management. Charles previously worked for the State of California and the California Coastal Commission for twenty years, including serving as the agency's fourth executive director from 2011 to 2016. Previously, Charles was an Assistant Professor of Political Science at the University of Colorado, Boulder, where he taught environmental law and policy, with a focus on public lands governance and coastal zone management. Charles has expertise in integrated coastal management and California coastal law and policy and speaks regularly on coastal management, adaptation and resilience.

Daniel Telles

Federal University of Paraná (UFPR, Brazil)

https://orcid.org/0000-0002-0873-0484

Daniel Hauer Queiroz Telles is an Associate Professor and coordinator of the Marine Geography and Coastal Management Lab (GEOCOST) at the Center for Marine Studies of the Federal University of Paraná (CEM-UFPR, Brazil). He received a Master's degree in Space, Society and Environment and a PhD in Human Geography (University of São Paulo, Brazil). Daniel is also a lecturer and researcher in the Graduate Program in Coastal and Oceanic Systems (PGSISCO-CEM-UFPR). He works on and coordinates teaching, research and extension projects on territorial planning and management instruments, integrated coastal management, coastal/ marine/ oceanic governance, island studies, beach management tools, participatory governance in protected areas and estuarine management guidelines. Representative and advisor of the University in regional collegiate bodies for the environment, territory and coastal zone in Brazil. He is a reviewer for scientific journals and works in national and international research networks in the areas of geography, governance, protected areas, coastal and marine space.

Elena Eger

Mountains Recreation and Conservation Authority (MRCA, USA)

https://orcid.org/0009-0008-0956-6365

Elena Eger received a joint Juris Doctorate from the University of California (San Francisco, USA) and Masters in City and Regional Planning from the University of California, Berkeley (USA). She is counsel for and leads the Coastal Access team at the Mountains Recreation and Conservation Authority (MRCA, USA), a governmental agency that provides public coastal access over its and the lands of the Santa Monica Mountains Conservancy and along the Malibu coast. Born and raised in California, she has dedicated most of her career advocating statewide for the preservation of coastal natural resources and public access for all to those resources. She is passionate about ensuring that every Californian is able to exercise their constitutional right of equitable access to enjoy the beaches, coves, dunes, wetlands, views, parks, bluffs, bays & estuaries along the exquisite California coast.

Flavia M. Lins-de-Barros

Federal University of Rio de Janeiro (UFRJ, Brazil)

https://orcid.org/0000-0003-2006-9948

Flavia Moraes Lins-de-Barros received her PhD in Geography from the Federal University of Rio de Janeiro (UFRJ, Brazil) and recently completed a one-year postdoctoral fellowship in Geosciences and Basin Analysis at the Federal University of Sergipe (UFS, Brazil). She is Associate Professor in the Department of Geography at UFRJ. She has been a member of the Brazilian Program of Marine Geology and Geophysics since 2014, the international Ibero-American network *Proplayas* since 2017, and the Women for the Ocean League since 2021. Since 2014, she has coordinated the Marine Geography and Integrated Coastal Management research group at UFRJ and, since 2018, the outreach project “Mar à Vista: Sandy Beach Monitoring Network”. She is the author of the ebook “*Geografia Marinha e Cultura Oceânica: Contribuições da Geografia ao Ensino sobre o Oceano e Áreas Costeiras nas Escolas*” (Marine Geography and Ocean Literacy: Geography’s Contributions to Teaching about the Ocean and Coastal Areas in Schools). She is also one of the contributing authors to the special issue “Coastal Squeeze: Beaches under Socio-Economic and Ecological Pressure”, published in the *Revista TOMO*, which, alongside this ebook, emerged from the activities of the Beach Access Network (BAN) in 2025.

Grégory Salle

Centre National de la Recherche Scientifique (CNRS, France)

https://orcid.org/0000-0002-8025-5593

Grégory Salle received his PhD in political science from Sciences Po (Paris, France) in 2006. Currently a senior researcher at the *Centre National de la Recherche Scientifique* (CNRS), he has been working on topics ranging from prison to the beach and from the penal system to environmental inequality. The author of “Superyachts: Luxury, Tranquility and Ecocide” (Polity, 2024, translation of Helen Morrison), “Carceral Utopia” (Éditions Amsterdam, 2016) and “A Global History of Model Prisons” (Polity, 2026), he has been a visiting scholar at Cornell University (2010), UC Berkeley (2017), and Université Saint-Louis – Bruxelles (2019), and was appointed to the *Chaire internationale de Criminologie 2021* at the *Université Libre de Bruxelles*. Together with Isabelle Bruno, he coordinates the research network “The ‘Lure of the Seaside’ Under Ecological Pressure: Beach Access Between Environmental Justice and Coastal Protection”, supported by the *Fondation Maison des Sciences de l’Homme* (FMSH, France). This project funded the Beach Access Network (BAN) Workshop from which this ebook is one of the key outcomes. He is also one of the co-editors of the special issue “Coastal Squeeze: Beaches under Socio-Economic and Ecological Pressure”, published in the *Revista TOMO*, which, alongside this ebook, emerged from the activities of the Beach Access Network (BAN) in 2025.

Isabelle Bruno

Université de Lille and *Institut Universitaire de France* (IUF, France)

https://orcid.org/0000-0002-1451-8316

Isabelle Bruno received her PhD in Sociology of International Relations from Sciences Po (Paris, France). She is currently a Professor of Political Science at the University of Lille (France). Since 2015, she has been developing a new line of research on socio-spatial and socio-environmental inequalities, approached through the study of conflicts over coastal appropriation. After an initial investigation conducted with the sociologist Grégory Salle on Pampelonne Bay in the Saint-Tropez peninsula, she was invited to UC Berkeley to carry out a study on California’s coastal access policies, funded by a Fulbright Fellowship (2017). From 2020 to 2023, she has been carrying out a research entitled “Who Owns the Beach When the Sea Level Rises?”, as a member of the *Institut Universitaire de France* (IUF) and, since 2024, she has been coordinating the project “The ‘Lure of the Seaside’ Under Ecological Pressure: Beach Access Between Environmental Justice and Coastal Protection”, supported by the

Fondation Maison des Sciences de l'Homme (FMSH, France). The latter project funded the Beach Access Network (BAN) Workshop, from which this ebook is one of the key outcomes. She is also one of the co-editors of the special issue "Coastal Squeeze: Beaches under Socio-Economic and Ecological Pressure", published in the *Revista TOMO*, which, alongside this ebook, emerged from the activities of the Beach Access Network (BAN) in 2025.

José Ricardo Britto Seixas Pereira Junior

Advocacia-Geral da União (AGU, Brazil)

https://orcid.org/0000-0002-9674-4092

José Ricardo Britto Seixas Pereira Junior is a PhD candidate in Ibero-American Administrative Law at the University of Coruña (Spain) and a researcher at the Legal Institute of the Faculty of Law of the University of Coimbra (Portugal). He received his Master's degree in Constitutional Law from the University of Coimbra (Portugal) (2016). He previously served as Chief Federal Attorney of the Union in the State of Sergipe (Brazil); Coordinator of the Attorney General of the Union's School (AGU) in Sergipe; General Legal Coordinator at the Regional Attorney's Office of the Union in the 1st Region; and General Legal Coordinator for Land Regularization in the Legal Amazon within the Legal Advisory Office of the Special Secretariat for Family Agriculture and Agrarian Development (Brazil). His professional experience centers on Constitutional and Administrative Law, with work focused on public administration, civil procedure, environmental law, consumer law, citizen participation, public procurement, and cooperative societies.

José Wellington Carvalho Vilar

Federal Institute of Sergipe (IFS, Brazil)

https://orcid.org/0000-0001-5061-5116

José Wellington Carvalho Vilar received his PhD in Geographical Analysis in Land-Use Planning from the University of Granada (Spain) (2000). He is a retired Senior Professor from the Federal Institute of Sergipe (IFS, Brazil) and the leader of the Research Group on Territorial Management of Coastal Environments (GESTAC). He has experience in human geography, working mainly on the following topics: territorial planning of coastal environments, coastal urbanization, and tourism-oriented territorial planning. He is author of the ebook "*Geografia do litoral sergipano*" (Geography of the Sergipe Coast).

Josefa Varela Guerra

Rio de Janeiro State University (UERJ, Brazil)

https://orcid.org/0000-0001-9406-6470

Josefa Varela Guerra received her PhD in Oceanography (on Dynamics of sediment transport) from the University of Washington (USA) (2004). At present, she is an Associate Professor at the Rio de Janeiro State University (UERJ), where she teaches and conducts research primarily on the sedimentary dynamics and evolution of coastal systems, such as bays and sandy beaches. Currently, one of her central interests is the response of such systems to sea-level rise and increasing storminess. She is also part of a national network dedicated to disseminating the citizen science through the CoastSnap Brazil project.

Leticia Parente-Ribeiro

Federal University of Rio de Janeiro (UFRJ, Brazil)

https://orcid.org/0000-0002-1185-4517

Leticia Parente-Ribeiro received her Master's degree in Geography from the Federal University of Rio de Janeiro (UFRJ, Brazil), where she researched the twin cities of Foz do Iguaçu and Ciudad del Este and their spatial interactions along the Brazil-Paraguay border. She is an Assistant Professor in the Department of Geography at the Federal University of Rio de Janeiro and a member of the Territory and Citizenship Research Group (Brazil). Her research focuses on beach economics, coastal cities, and the historical geography of coastal urbanization. She is also one of the contributing authors to the special issue "Coastal Squeeze: Beaches under Socio-Economic and Ecological Pressure", published in the *Revista TOMO*, which, alongside this ebook, emerged from the activities of the Beach Access Network (BAN) in 2025.

Marc Beyeler

Beach Erosion Authority for Clean Oceans and Nourishment (BEACON, USA)

https://rocketreach.co/marc-beyeler-email_1794280

Marc Beyeler received his Master's degree in Public Affairs from the University of California, Santa Barbara (USA). He is the executive director of the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) and Research Associate at the University of California, Santa Cruz (USA). He is currently developing partnerships focused on ocean, coastal and marine conservation, community and urban planning and design, and strategic and financial planning, providing timely problem solving

services to senior executives and their staffs and boards. Marc has been affiliated with the University of California, Santa Cruz, both as a researcher and lecturer, focusing on coastal and marine policy and governance, and the social and environmental significance of place, where he has lectured in the Sociology and Environmental Studies departments.

Marcos Paulo Ferreira de Góis

Federal University of Rio de Janeiro (UFRJ, Brazil)

https://orcid.org/0000-0003-3197-1566

Marcos Paulo Ferreira de Góis received his PhD in Geography from the Federal University of Rio de Janeiro (Brazil) on the topic of nocturnal landscapes in the city of Rio de Janeiro. He works as an Adjunct Professor in the Department of Geography at the Federal University of Rio de Janeiro, teaching Theory of Geography, Geographic Research, and History of Geographic Thought. He is a a member of the Territory and Citizenship Research Group. He has experience in urban and cultural geography, working mainly on tourism urbanization, public policies and city representations, urban economy, and nocturnal urban landscapes. He is also one of the contributing authors to the special issue “Coastal Squeeze: Beaches under Socio-Economic and Ecological Pressure”, published in the *Revista TOMO*, which, alongside this ebook, emerged from the activities of the Beach Access Network (BAN) in 2025.

Mariano D. Perelman

University of Buenos Aires (UBA) and National Scientific and Technical Research Council (CONICET, Argentina)

https://orcid.org/0000-0002-4914-3198

Mariano D. Perelman received his PhD in Anthropology from the University of Buenos Aires (UBA, Argentina). He is a Professor in the Department of Anthropology at UBA and a Researcher at the National Scientific and Technical Research Council (CONICET, Argentina). His work examines how people navigate uncertainty in their everyday lives. Drawing on economic and political anthropology, as well as the anthropology of money and work, and grounded in a livelihood-centered perspective, he has conducted ethnographic research with informal waste pickers, street vendors, and middle-class dollar savers in Buenos Aires. He is also the author of a chapter in the book “Beach Politics: Racial, Social, and Environmental Injustice”, edited by Setha Low. He is one of the contributing authors to the special issue “Coastal Squeeze: Beaches under Socio-Economic and Ecological Pressure”, published in the *Revista TOMO*, which emerged from the activities of the Beach Access Network (BAN) in 2025.

Marina Sartore

Federal University of Sergipe (UFS, Brazil)

https://orcid.org/0000-0002-7935-4105

Marina de Souza Sartore received her PhD in Social Sciences from the Federal University of São Carlos (Brazil). She is an Associate Professor from the Department of Social Sciences at the Federal University of Sergipe (Brazil). She has been holding position as short-term visiting researcher at the *Université de Lille* (France), University of Bologna (Italy), the Royal Melbourne Institute of Technology (Australia) and the University of the Sunshine Coast (Australia). She conducts research and supervises doctoral projects on the topic of commercial appropriation of beaches. She is one of the organizers of the ebook "*Distopias do Litoral*" (Coastal Dystopias), published in Portuguese in 2021. She is also one of the co-editors of the special issue "Coastal Squeeze: Beaches under Socio-Economic and Ecological Pressure", published in the *Revista TOMO*, which, alongside this ebook, emerged from the activities of the Beach Access Network (BAN) in 2025.

Marinez Scherer

Federal University of Santa Catarina (UFSC, Brazil)

https://orcid.org/0000-0002-3059-0019

Marinez Eymael Garcia Scherer is PhD in Marine Sciences and a Associate Professor at the Federal University of Santa Catarina (UFSC, Brazil). In addition, in 2025 she was appointed Special Envoy for the Ocean for COP 30 by the COP Brazilian Presidency, supporting stakeholder engagement and dialogue on ocean and climate issues under the Brazilian Presidency. Her research focuses on Integrated Coastal Zone Management (ICZM), Marine Spatial Planning (MSP), Ecosystem-Based Management (EBM), and the ocean-climate nexus. She has extensive experience in public policy and coastal and ocean governance, having served as ICZM and MSP Coordinator at Brazil's Ministry of Environment and Climate Change (2023-2024). As an experienced MSP and trainer, she has worked across South and North America, the Caribbean, Africa, and the East Asian Sea Region. She also co-leads the Regional Training Center Cono Sur of the Ocean Teachers Global Academy (OTGA). Marinez is also co-chair of the IOC/UNESCO Working Group on Sustainable Ocean Planning and Management.

Mario Sandoval

Mountains Recreation and Conservation Authority (MRCA, USA)

https://mrca.ca.gov/about/contact-information/

Mario Sandoval is an urban planner and conservationist with over 10 years of experience on the Malibu coast (USA) completing open space and coastal acquisitions/ donations, long-range planning, capital project implementation for public access/ recreational development and amenities that maximize public coastal access for historically excluded communities.

Raquel Dezidério Souto

Virtual Institute for the Sustainable Development – IVIDES.org

IVIDES DATA™ IT Consulting (Brazil)

https://orcid.org/0000-0001-9957-4650

Raquel Dezidério Souto received her PhD in Geography from the Federal University of Rio de Janeiro (UFRJ, Brazil) and currently holds a postdoctoral position at the same university. She is the president of the Instituto Virtual para o Desenvolvimento Sustentável (IVIDES.org, Brazil), the publisher of the Editora IVIDES and the owner of IVIDES DATA™, an information technology consulting based in Rio de Janeiro. She participates in international networks, such as Red Proplayas and Red Ibermar, and collaborates with research laboratories in Brazil and other countries – Mexico, Argentina, Angola, Cameroon and Mozambique. She organized the first Brazilian literary series about coastal and marine sustainability, titled "*Gestão Ambiental e Sustentabilidade em Áreas Costeiras e Marinhas: conceitos e práticas*" (Environmental management and sustainability in coastal and marine areas: concepts and practices), with two volumes released (https://ivides.org/livros). She publishes in the fields of participatory and collaborative mapping and coordinates an open, self-paced training course on OpenStreetMap (https://curso-osm.ivides.org), which formed more than 400 people. She is also a Brazilian Portuguese editor for the weeklyOSM – https://weeklyosm.eu, and for the official OpenStreetMap Foundation's blog – https://blog.openstreetmap.org/.

Setha Low

The Graduate Center of the City University of New York (CUNY, USA)

https://orcid.org/0000-0003-1590-6342

Setha Low received her PhD in Cultural Anthropology from the University of California, Berkeley (USA). She trains doctoral students in the anthropology of space and place, urban anthropology, the anthropology of the body, and the role of cultural values in historic preservation. She also directs the Graduate Center's Public Space Research Group. Her ethnographic research on public space in Latin America and the United States has earned her numerous distinctions, including a Getty Fellowship, an NEH Fellowship, a Fulbright Senior Fellowship, and a Guggenheim Fellowship. She served as president of the American Anthropological Association from 2007 to 2009. Her current work examines how private governance shapes New York City cooperatives and condominiums, focusing on the growing influence of corporate logic in both domestic and public spaces. She published "Beach Politics: Racial, Social, and Environmental Injustice" in 2025 and contributes with a chapter to this ebook.

Simone de Araujo Pereira

Federal University of Sergipe (UFS, Brazil)

https://orcid.org/0000-0003-4240-7522

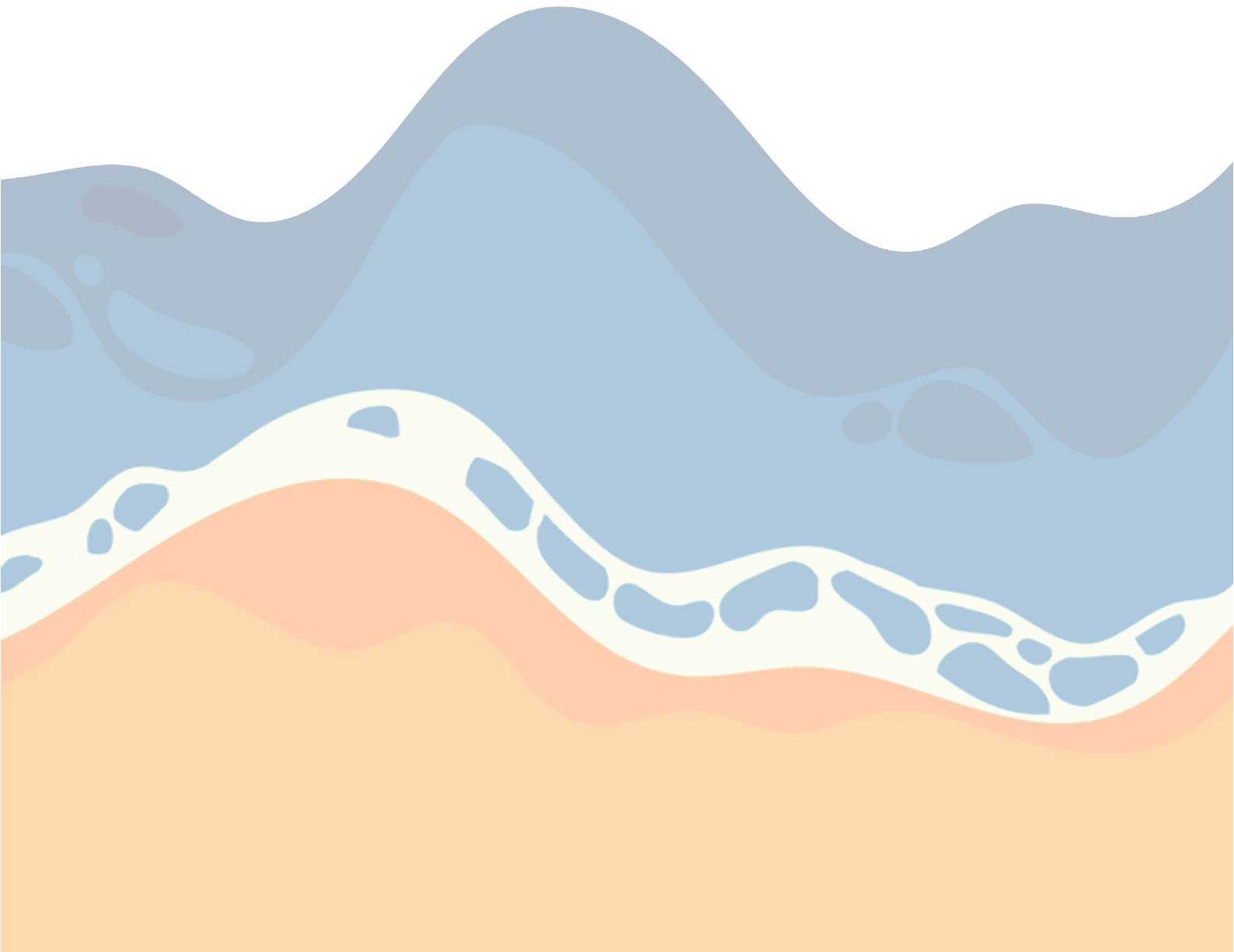
Simone de Araujo Pereira holds a PhD in Sociology from the Graduate Program in Sociology at the Federal University of Sergipe (Brazil), which included a doctoral internship (sandwich modality) at the Centre for Social Studies of the University of Coimbra (Portugal). Her dissertation examined the public meaning of the urban beach. She is currently a faculty member in the Department of Social Sciences at the Federal University of Sergipe. She is one of the organizers of the ebook "*Distopias do Litoral*" (Coastal Dystopias), published in Portuguese in 2021. Her research explores the occupation and uses of coastal spaces, with particular attention to the urbanization of seafronts, the interplay between public and private uses of waterfronts, and the development of guidelines for coastal planning and management.

Varlei Rui Ertel

Federal University of Santa Catarina (UFSC, Brazil)

https://orcid.org/0009-0006-8168-2497

Varlei Rui Ertel is a PhD candidate in the Graduate Program in Sociology and Political Science at the Federal University of Santa Catarina (Brazil). He completed a six month doctoral internship (sandwich modality) at the *Centre d'Études et de Recherches Administratives, Politiques et Sociales* (Ceraps) at the *Université de Lille* (France). His work lies primarily in sociology, with an emphasis on economic sociology and urban sociology, focusing on the social construction of markets and the urban and commercial appropriation of coastal areas. He is also one of the contributing authors to the special issue "Coastal Squeeze: Beaches under Socio-Economic and Ecological Pressure", published in the *Revista TOMO*, which, alongside this ebook, emerged from the activities of the Beach Access Network (BAN) in 2025.



INDEX OF SUBJECTS

Beach

Conflicts 1; 3-4; 10-13; 20-21; 29; 31; 35; 45; 47; 59; 63; 66-67; 86; 89-91; 103; 112; 115-116; 123; 127-128

Public Access x; xii; 1; 3; 9; 14-15; 17-18; 22; 45; 51; 81; 103; 107; 112-113; 115; 119; 123

Squeeze 2-3; 18; 21; 31; 112; 114

Coastal

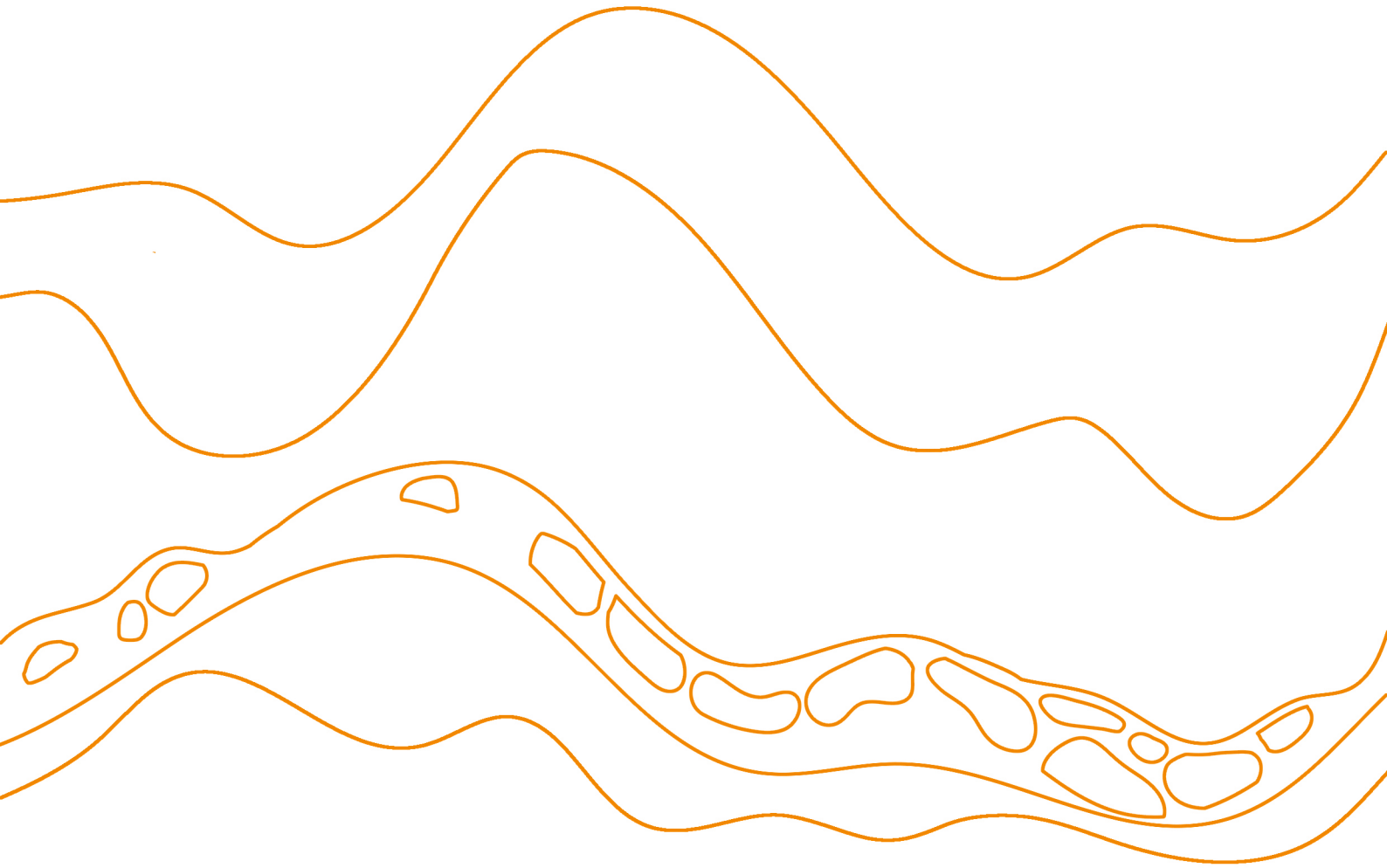
Erosion x; 1; 10; 15; 21; 74-75; 87; 93-98; 114-115; 119; 124

Management 3-4; 12; 45; 47; 71-72; 74-75; 77; 79; 81; 83; 85-86; 88; 90; 93-95; 97

Policies x; 8; 14; 17; 26; 66; 85; 91; 95; 132; 136

Vulnerability 3; 47; 71; 75; 77; 86-87; 91; 120; 123-125

Environmental Justice *x; 2; 7-8; 14; 17; 24; 131; 137*



Editora IVIDES

CNPJ 56.127.866/0001-12

Rio de Janeiro (Brazil)

International Editorial Board

https://ivides.org/livros | ivides@ivides.org

This project included the following fonts:

Arial, Arial Black, Cantarell, Cantarell Extra Bold, Helvetica.

This ebook brings together contributions that tackle the challenges of managing public access to beaches, focusing on conflicts, management experiences, as well as conceptual and operational tools. The chapters, which synthesize debates presented at the II Beach Access Network (BAN) Workshop held in Brazil in 2025, offer an analytical framework to address the growing pressures surrounding beach environments, particularly those arising from environmental protection imperatives, social and environmental justice claims, and competing economic interests. In doing so, the volume underscores that beaches, often assumed to be naturally public and free, are socially constructed spaces whose status is historically achieved and continuously contested.

Reflecting the core conviction of the Beach Access Network, the volume articulates perspectives from specialists focused on the human dimensions of beaches and those engaged with their environmental dynamics, emphasizing the need to cross disciplinary boundaries. Composed of short chapters, the ebook invites readers to move beyond the common-sense view of beaches as spaces primarily associated with leisure and holidays. By engaging with the contributions gathered here, readers are encouraged to see beaches through multiple lenses and to approach these spaces with greater critical awareness.

EDITORA IVIDES

FAPERJ
Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro

ISBN: 978-65-985676-4-4
CBL
9 786598 567644

DOI 10.5281/zenodo.19058568