



# Gerenciamento Costeiro e Gestão Portuária



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# Gerenciamento Costeiro e Gestão Portuária

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## THE POSSIBILITY OF A MUNICIPAL COASTAL MANAGEMENT PLAN (PMGC) IN THE MUNICIPALITY OF SÃO LUÍS INDEPENDENT OF A STATE PLAN FOR COASTAL MANAGEMENT (PEGC) OF MARANHÃO

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**ABSTRACT:** The Coastal Zone, defined as a national patrimony by the Constitution of 1988, is a biome in which terrestrial ecology and management directly impact the oceanic area, having as a geographic space the interaction of the air, a maritime band corresponding to twelve miles and a terrestrial band corresponding to the territorial limits of the Coastal Municipalities according to Law 7.661/88 and Decree 5.300/04. Despite having the second largest Northeastern Coastal Zone, the MA does not have PEGC and consequently its municipalities did not institute the PMGC. The present study is a pioneer aiming to demonstrate the possibility of establishing a Municipal Plan of Coastal Management in São Luís-MA without the PEGC

of the MA, a possibility that can be used in other municipalities in Brazil. The methodologies here used were bibliographic, based on consultation with works of doctrinators; and laws, as well as papers on the subject, published either in paper or digitally. The basic principles of the legislations herein analyzed are protection of the environment, sustainable use and pollution control, aiming at conservation for present and future generations.

**KEYWORDS:** State; Integrated, Legislation, Coastal Zone

### 1 | INTRODUCTION

Coastal Zones have, in the passing of human history, symbolized a place for diversity and natural richness; societies that harbored coastal zones in their territories were prosper, as they had water in abundance for their own consumption as well as for irrigating their crops. They also used coastal zones to enjoy the diversity of aquatic organisms that were part of their eating habits, for the development of sports, and for navigation, which is an essentially coastal activity and even served as a route to discover novel territories (SOUSA; FEITOSA, 2009)

Humans appropriated from this coastal environment mainly to provide food and build

homes for themselves. Thus, the Coastal Zone is a place with historical value, natural resources, diverse vegetation and natural and mineral wealth to be preserved (VITTE, 2003).

Colonization of American areas began through seaways (MORAES, 2007), firstly because this is the place where the settlers first had contact with the colonized land and later due to the natural resources available in that area.

Men did not worry about the regeneration capacity of the explored resources and even about the consequences of this very impact in their daily life. Thus, anthropic action generated impacts, and these generate costs to society and to the Public Authorities. These costs could have been invested in other areas if there were adequate management and mitigation of removal and use of natural resources.

Concern about the environment has evolved from something previously considered as irrelevant to a societal need. Sustainable development has become one of the basic principles to be followed everywhere in the world for development and economic progress; however, such progress must aim at the preservation and conservation of the environment as a whole.

Together with the concern with preserving and conserving the environment there was the creation of tools and organizations responsible for this protection, establishing measures and criteria to be adopted by all States (HINTZ, 2016).

Nowadays, the environment is a concern for the society of the entire world. The search for progress and the rapid advance sustained by profits and by a “model” of life led man to withdraw resources from nature. Natural resources are withdrawn mainly for feeding, construction/installation of houses and establishments in the most diverse areas, making this place a human settlement and its consequent economic development.

The Coastal Zone, defined as a national patrimony by the Constitution of 1988, is a biome in which terrestrial ecology and management directly impact the oceanic area, having as a geographic space the interaction of the air, a maritime band corresponding to twelve miles and a terrestrial band corresponding to the territorial limits of the Coastal Municipalities according to Law 7.661/88 and Decree 5.300/04.

The Coastal Zone in the state of Maranhão occupies an area of 38,504 km<sup>2</sup> of continental surface, 390.32 km<sup>2</sup> of oceanic area, with a length of 640 km. It is morphologically well cut by bays, coves, estuaries, with the presence of islands and extensive mangroves in the coastal strip.

The methodologies used for the development of the present study were the bibliographical and documentary, based on consultation with works of doctrinators, laws, as well as articles on the subject, published either in paper or digitally. First a survey was made on the conceptualization of Coastal Zone, coast, coast and border.

After, the conceptual survey of environment and space and geographical location. A legislative search was made on the protection of the Coastal Zone of the state of Maranhão and of the Municipality of São Luis. The main use of the Ludovicense Coastal

Zone was identified from the EEZ and an on-site visit. And lastly, the gathering of these data to carry out the present work.

## 2 | THE POSSIBILITY OF A PMGC IN THE MUNICIPALITY OF SÃO LUIS

Coastal Zones represent a place that holds historical value, besides natural and mineral wealth, a rich vegetation, and natural and environmental resources that must be preserved and protected.

Initially, coastal zones were used to facilitate flux of people and goods from colonies, with some cities being widely recognized even today for their port and mercantile function. The Brazilian coastline is broad, reaching about 8,000 km from Oiapoque in Amapá to Chuí, at the extreme south of Rio Grande do Sul (Ab´Saber, 2005).

Brazil has an area of approximately 8,500,000 km<sup>2</sup>, of which the continental band of the Coastal Zone occupies about 442,000 km<sup>2</sup>, that is, 5.2% of the lands that emerge from the national territory. It has a coastline of 7,408 km, without taking into account the coastal cuts which would extend the mentioned extension, raising it to more than 8.5 thousand km facing the Atlantic Ocean (Comissão Nacional Independente sobre os Oceanos, 1998).

Mode of colonization also influenced in the population, and here we highlight the Portuguese settlements, which were mainly situated in the coastal zones; the first Portuguese settlements in Brazilian lands were, with rare exceptions, in the Coastal Zone.

The ports that served the most important production circuits ended up generating densification zones in their surroundings, originating the first networks of cities, embryos of later regional systems. Such cities were usually located at the junctions of the roads, serving a function of intermediate warehouses drained by the main port.

Marroni and Asmus (2005) define the Coastal Zone by its geographic characteristics in a broad way, that is, gathering geographic areas such as the geosphere, hydrosphere and atmosphere and bringing them together in only one characteristic relief, considering all the environment around it and this environment defined by the authors as the oceanic edge.

It is important to note that the Constitution of 1988 considers the Coastal Zone as a set of goods that is national, that is, without a holder, which must be preserved. The United Nations Conference on the Law of the Sea defines the Coastal Zone in a way that demonstrates an individual and specific character and is the place where the interaction between land and sea occurs.

In the concept of Coastal Zones defined by the Interministerial Commission for Sea Resources we can notice there is a concern in delineating interactions between land and sea, also reported by the United Nations Conference on the Law of the Sea,



with the distinction of including environmental resources and delimiting the terrestrial and maritime range.

On the other hand, the National Plan for Coastal Management briefly gathers concepts from the Constitution, from the United Nations Conference on the Law of the Sea and from the Interministerial Commission for Sea Resources. When the Plan reports on the interaction between land and sea, it uses concepts from the Conference and from the Commission; when it either refers or not to renewable resources, it shows a concern for these resources as national goods (a concept from the Constitution). These resources could be understood as those present in the ocean space according to the concept of the Conference and could also be understood as those present in the terrestrial and maritime range according to the concept of the Commission, and as the plan itself assumes when it says; “[...] covering both a sea and an inland waterway [...]”.

Finally, the Plan brings up the principle of legality when it states that “[...] shall be defined by the Plan [...]”, a principle that is present in our Magna Carta and is credited in its article 225 when it predicts that its use will be defined in the form of the “Law”, thus it can be observed that although the concept of Coastal Zone of the National Plan does not bring a set of explicit definitions in its bulge, one can observe several intrinsic concepts from an extensive interpretation.

Moraes (1999) identifies the political-administrative divisions as elements that delimit the Coastal Zone, highlighting Municipalities as spaces for political action and management, and the pattern of land use as an “economic factor to qualify places”.

Thus, the Coastal Zone, defined as a national patrimony by the Constitution of 1988, is a biome in which terrestrial ecology and management directly impact the oceanic area, having as a geographic space the interaction of the air, a maritime band corresponding to twelve miles and a terrestrial band corresponding to the territorial limits of the Coastal Municipalities according to Law 7.661/88 and Decree 5.300/04.

Coastal Management is a consecutive process of research and projection of the sustainable use of the existing resources from Coastal Zones, observing the numerous factors that interact in this environment.

The National Plan for Coastal Management (II) comprises 17 Coastal States, of which only 8 have a State Plan for Coastal Management defined in specific legislation (AP, CE, ES, PE, PR, RN, SC e SP), as observed in Figure 1. Only three Municipalities have a Municipal Plan of Coastal Management: Florianópolis, Itapoá (both from SC), and Itaparica (BA).

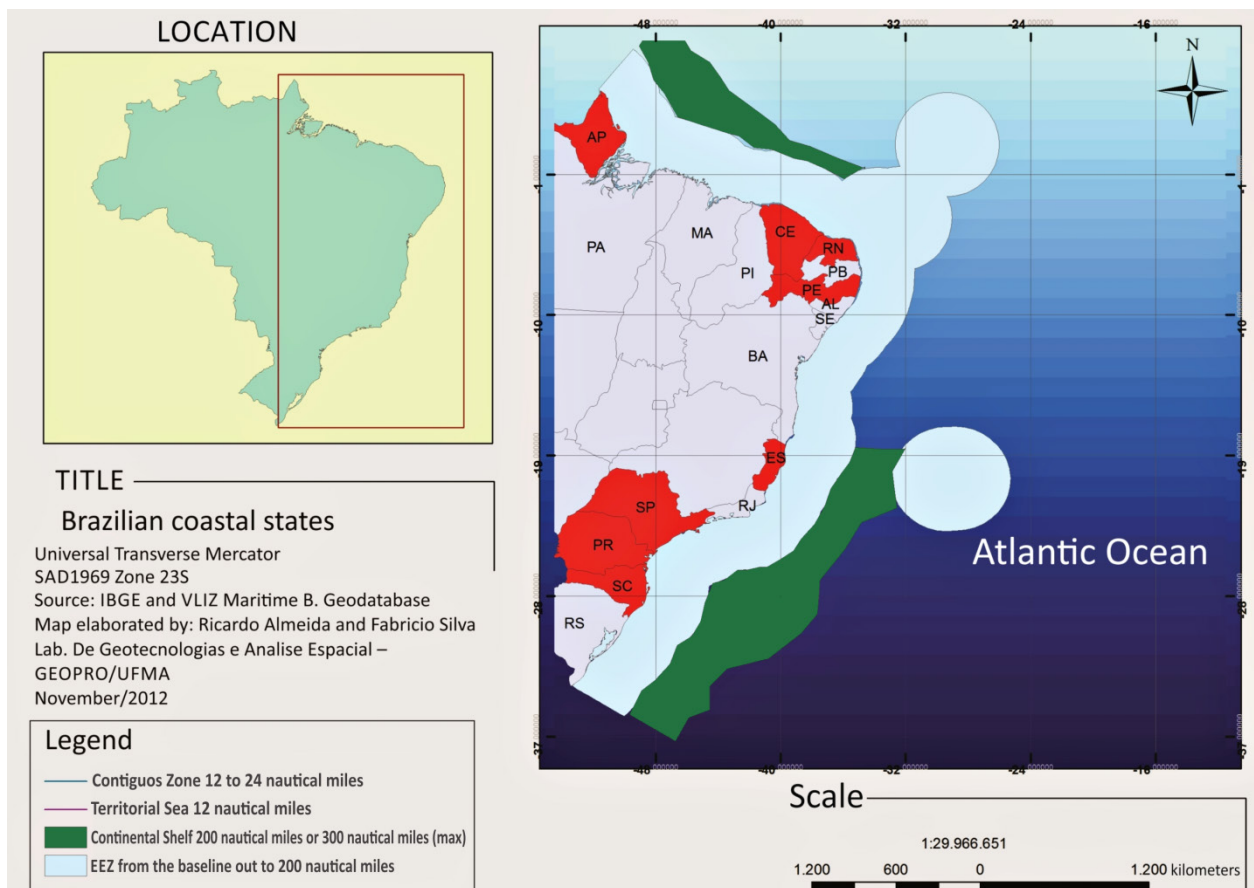


Figure 1. Coastal States from the Brazilian territory that possess a State Plan for Coastal Management.

Source - Núcleo de Geoprocessamento e Análise Espacial – GEOPRO/UFMA – Map designed by: Ricardo Almeida and Fabricio Silva.

It is relevant to mention the following concepts (SADLER, B. and VERHEEM, R. 1996): a) policy is the general line of conduct or direction that the government is or will be adopting, supported by value judgments that guide its decision-making processes, b) plan is a strategy composed of objectives, alternatives and measures, including the definition of priorities, designed to enable the implementation of a policy, c) program is an organized agenda of the commitments, proposals, instruments and activities necessary to implement a policy, and may or may not be integrated into a plan.

To Polette; Pogetti (op. cit., 2003), the many difficulties encountered throughout the 1980s to implement management programs revealed that the complexity of coastal zones required an also more complex, broad and integrated notion of coastal management. From the 1980s onwards, the current concept of Integrated Coastal Management (ICM) began to arise, encompassing issues ranging from environmental preservation and resources, to social issues such as land use, conflicts between different activities, among others.

The ICM was internationally consolidated beginning from the Rio-92 Conference (LIMA, 2009), being, according to the definition of Biliiana Cicin-Sain and Robert W. Knecht (1998), “[...] a continuous and dynamic process through which decisions are made for the sustainable use, development and protection of the areas and coastal

and marine resources. “ The authors state that the ICM presents the following phases: a) identification and survey of themes, b) initial preparation and planning, c) formal adoption and financing, d) implementation, e) operation, f) evaluation (CICIN-SAIN and KNETCH 1998, p.58).

When considering the term ICM, the adjective “integrated” refers to the need for consideration of the entire coastal ecosystem: both continental and marine spaces, traditionally addressed by different government agencies, in a fragmented way (SALZANO, 2013).

Even if the legislation does not carry this adjective “integrated”, it is understood that in the management of the Coastal Zone “[...] one cannot devise isolated actions and the integrated work becomes inevitable or necessary, according to the fundamentals of coastal management” (ASMUS et al., 2006, p.2).

### **3 | THE POSSIBILITY OF A PMGC IN THE MUNICIPALITY OF SÃO LUIS**

In Environmental Law, the principle of sustainable development is always taken into account and the environment is a diffuse good, and so it belongs to the community, not having a specific “holder”. As a rule the Union edits general norms and all political entities have competence to legislate concurrently on the environment (AMADO, 2012).

According to article 24, VI, VII and VIII of the Federal Constitution, it is important to emphasize that this article is an instrument of the law provided for in article 225, in which it imposes on the Government has the duty to defend and preserve the environment.

According to article 30, I and II, of the Magna Carta, the jurisdiction of municipalities, which are responsible for legislating on matters of local interest and supplementing state and federal legislation, as appropriate (AMADO, 2012), is the STF’s understanding local interest of the Municipality must be understood as something peculiar or special and not as something exclusive and particular. The Constitution authorizes municipalities to legislate further to legislative norms at the federal or state level, adjusting to this fact to treat this supplementary rule of the Municipality on the local peculiarities of this municipality, never extrapolating its competence (MORAES, 2012).

The Coastal Zone of the State of Maranhão (MA) has an approximate extension of 640 km, extending west-east from the mouth of the Gurupi River, on the border with the State of Pará, to the Parnaíba River delta, at the border with the State of Piauí, being the second most extensive in Brazil and the Northeastern Region, surpassed only by the state of Bahia (SOUZA; FEITOSA, 2009).

As the state norms that reference the Coastal Zone of MA, we have, as presented in Table 1:

| MA LEGISLATION                      | COMMENTARY  |
|-------------------------------------|---|
| State Constitution of 1993          | Consecration of the protection of the coastal zone as “area of relevant ecological interest” (Art.241, V, d).   |
| Law nº 5.405/92                     | Establishes the Environmental Protection Code and creates the State Environment System (SISEMA). Its Chapter IV (of soil, fauna and flora), Section IX, Art. 132 to 140 is on Coastal Management.   |
| Law nº 8.089/04                     | Provides for the State Policy for the Development of Fisheries and Aquaculture.   |
| Law nº 8.149/04                     | Concerns the State Policy on Water Resources, the Integrated Water Resources Management System, and provides other measures.  |
| Law nº 8.528/06                     | Provides for the Forest Policy and Protection of Biodiversity in the State of Maranhão.   |
| Law nº 10.421/16                    | Provides for the promotion of protection and regulation of shrimp farming, recognizing it as an agroforestry and pastoral activity, of relevant social and economic interest, establishing the conditions for its sustainable development in the State of Maranhão.   |
| Law nº 10.316/15                    | Establishes the Ecological-Economic Macro zoning of the State of Maranhão.  |
| Decree nº 13.494/92                 | Regulates the Code of Protection of the Environment of the State of Maranhão. Chapter III (of soil, fauna and flora), Section VII, Art. 103 to 107 regulates Coastal Management.  |
| Decree nº 20.189/03                 | Approves the Coastal Zoning of the State of Maranhão.   |
| Resolution CONSEMA nº 002/04        | Provides for the environmental licensing of shrimp farms in the coastal zone and other propitious areas in the territory of the State of Maranhão.  |
| Order SEMA nº 18 of August 16, 2016 | Provides for the accreditation of companies specialized in the implementation and administration of technical services of Conformity, Measurement and Effectiveness (CME) of ballast water and sediments of ships and vessels that dock at the Ports of Maranhão, aiming at compliance with Resolution A. 868 (20) - IMO, of Law 9.966 / 2000, of NORMAM 20 / DPC, of RDC No. 72/2009 (ANVISA) and of Legislative Decree No. 148/2010, which approved the text of the International Convention for the Control and Ballast Water and Sediments of Ships (2004). |

Table 1. State norms that are instrumental for coastal management in Maranhão.

Source: Prepared by the authors.

The Maranhão Coastal Zone is foreseen in the State Constitution as an “area of relevant ecological interest”. The state has instituted by decree its Coastal Zoning and by law the Ecological-Economic Macro zoning, as well as there being specific legislation in the context of the Coastal Zone in the state scope.

Based on the uses of the Coastal Zone of the island of São Luis and its protection, the PMGC can be established based on the participation of the community that is used in the Coastal Zone ludovicense as the traditional communities that reside there and are in conflict due to non-protection and regulation of the Coastal Zone.



## 4 | CONCLUSION

Considering that the protection of the environment is of legislative competence competing with all federative entities, there is the understanding that the Municipality of São Luis may, in a supplementary way, establish its Municipal Plan of Coastal Management, considering that it is a matter of local interest, being limited to particularities that federal or state law did not address.

As São Luis is an island and its seafront extends to other Municipalities (Paço do Lumiar, Raposa and São José de Ribamar), these would have as a solution the insertion of a consortium or public agreement among Municipalities.

As São Luis is an island and its seafront extends to other Municipalities (Paço do Lumiar, Raposa and São José de Ribamar), these would have as a solution the insertion of a consortium or public agreement among Municipalities.

The contribution of this work to the integrated management of coastal areas would be to demonstrate a legal basis for the protection of the municipal Coastal Zone when the state does not have its PEGC and also the possibility of making an agreement between neighboring Municipalities.

Finally, it is important to highlight the integration of the instruments with their combined reading so that there is a strategic political interpretation of the same standard prioritizing actions in the Coastal Zone, and thus also bringing the Academy and the Government closer to the integrated coastal management, resulting in studies that contribute with the public policies being formulated and the elaboration of instruments.

## REFERENCES

AB'SABER, N.A. **O Litoral do Brasil**. São Paulo: Editora Metalivros, 2005.

AMADO, F. A. Di T. **Enlightened environmental law**. Rio de Janeiro: Forensic; São Paulo: Method, 2012.

ASMUS, M.; KITZMANN, D. LAYDNER, C; TAGLIANI; ARMANINI, C. R. **Gestão Costeira no Brasil: instrumentos, fragilidades e potencialidades**, 2006. Disponível em: <<http://www.praia.log.furg.br/Publicacoes/2006/2006a.pdf>> . Acesso em: 30 agosto 2016.

ASMUS, BRASIL. Constituição (1988). **Constituição Federal**. 3.ed. São Paulo: Revista dos Tribunais, 1998.

\_\_\_\_\_. **Lei 6.938, de 31 de agosto de 1981**. Disponível em: <[http://www.planalto.gov.br/ccivil\\_03/leis/l6938.htm](http://www.planalto.gov.br/ccivil_03/leis/l6938.htm)>. Acesso em: 19 janeiro 2017.

\_\_\_\_\_. **Lei N° 7.661, de 16 de maio de 1988**. Diário Oficial [da] República Federativa do Brasil, Brasília, DF, 16 maio. 1988. Disponível em: <[http://www.planalto.gov.br/ccivil\\_03/leis/L7661.htm](http://www.planalto.gov.br/ccivil_03/leis/L7661.htm)>. Acesso em: 22 setembro 2016.

\_\_\_\_\_. **Lei 10.257, de 10 de julho de 2001** – Estatuto das Cidades - Diretrizes Gerais da Política Urbana. Disponível em: <[http://www.planalto.gov.br/ccivil\\_03/leis/leis\\_2001/l10257.htm](http://www.planalto.gov.br/ccivil_03/leis/leis_2001/l10257.htm)>. Acesso em: 19 dezembro 2016.

\_\_\_\_\_. **Decreto Lei N° 5.300, de 7 de dezembro de 2004.** Diário Oficial [da] República Federativa do Brasil, Brasília, DF, 7 dezembro. 2004. Disponível em: < [http://www.planalto.gov.br/ccivil\\_03/\\_ato2004-2006/2004/decreto/D5300.htm](http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2004/decreto/D5300.htm) >. Acesso em: 22 agosto 2016.

\_\_\_\_\_. **Decreto 5.377, de 23 de fevereiro de 2005.** Aprova a Política Nacional para os Recursos do Mar – PNRM. Disponível em: <[http://www.planalto.gov.br/ccivil\\_03/\\_Ato2004-2006/2005/Decreto/D5377.htm](http://www.planalto.gov.br/ccivil_03/_Ato2004-2006/2005/Decreto/D5377.htm)>. Acesso em: 16 julho 2016.

\_\_\_\_\_. **Decreto nº 1530, de 22 de junho de 1995.** Declara a entrada em vigor da Convenção das Nações Unidas sobre o Direito do Mar, concluída em Montego Bay, Jamaica, em 10 de dezembro de 1982. Disponível em: <[http://www.planalto.gov.br/ccivil\\_03/decreto/1995/D1530.htm](http://www.planalto.gov.br/ccivil_03/decreto/1995/D1530.htm)>. Acesso em: 16 julho 2016.

\_\_\_\_\_. **Instrução Normativa N° 5, de 21 de maio de 2004.** Diário Oficial [da] República Federativa do Brasil, Brasília, DF, 21 maio. 2004. Disponível em <[http://4ccr.pgr.mpf.mp.br/institucional/gruposdetrabalho/gtpesca/03\\_in\\_mma\\_05.2004\\_especies\\_ameacadas.pdf](http://4ccr.pgr.mpf.mp.br/institucional/gruposdetrabalho/gtpesca/03_in_mma_05.2004_especies_ameacadas.pdf)>. Acesso em: 12 julho 2016.

CICIN-SAIN, B.; KNECHT, R.W. **Integrated coastal and ocean management – concepts and practices.** Washington: Island Press, 1998.

COMISSÃO NACIONAL INDEPENDENTE SOBRE OS OCEANOS – **Relatório aos tomadores de decisão do País.** Rio de Janeiro: Comissão Nacional Independente sobre os Oceanos, 1998.

HINTZ, J. K. **Meio ambiente: princípios e tutela do direito ambiental.** 2016.

GUADAGNIN, D. L. **Diagnóstico da Situação e Ações Prioritárias para a Conservação da Zona Costeira da Região Sul** - Rio Grande do Sul e Santa Catarina. FEPAM, Porto Alegre, 1999.

LIMA, L. S. **A participação no conselho ambiental da Ilha dos Marinheiros (Rio Grande/RS): diálogos entre a Educação Ambiental transformadora e o gerenciamento costeiro integrado.** Rio Grande, Dissertação (Mestrado em Gerenciamento Costeiro) – Universidade Federal do Rio Grande, Rio Grande, 2009.

MARRONI, E. V.; ASMUS, M. L. **Gerenciamento Costeiro: uma proposta para o fortalecimento comunitário na gestão ambiental.** Pelotas: Editora da União Sul-Americana de Estudos da Biodiversidade – USEB, 2005. 149p.

MORAES, A. C. R. **Beira do mar, lugar comum?** A valorização e a valoração dos espaços litorâneos. 1997. In: MORAES, Antonio Carlos Robert. Contribuições Para a Gestão da Zona Costeira do Brasil. Elementos para uma Geografia do Litoral Brasileiro. São Paulo: Annablume, 2007.

\_\_\_\_\_. **Contribuições para a Gestão da Zona Costeira do Brasil.** São Paulo: Hucitec/EDUSP, 1999.

POLLETE, M.; PAGETTI, S. L. Gesamp Icam e PNGC – Análise comparativa entre as metodologias de gerenciamento costeiro integrado. **Revista da Sociedade Brasileira para o Progresso da Ciência, nº4 Tema e Tendências: Gestão das Águas**, p. 27-30. 2003.

SALZANO, L. F. **Indicadores da qualidade de vida na zona costeira e sua relação com os direitos fundamentais previstos na constituição federal brasileira de 1988.** Dissertação (Mestrado em Gerenciamento Costeiro) – Universidade Federal do Rio Grande, Rio Grande. 2013

SADLER, B.; VERHEEM, R. – **Strategic Environmental Assessment: Status, Challenges and Future Directions.** Ministry of Housing, Spatial Planning and the Environment of the Netherlands, The Hague, 1996.

SOUZA, U. D. V; FEITOSA, A. C. **Ocupação e uso da zona costeira do Estado do Maranhão, Nordeste do Brasil**. Encontro Nacional de Geógrafos da América Latina. Montevideu, Uruguai, 2009.

VITTE, A. C. **O litoral brasileiro**: a valorização do espaço e os riscos socioambientais. Territorium, n. 10, p. 61-67, 2003.

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