Community-led development and collective land tenure for environmental justice: the case of the Caño Martín Peña community land trust, Puerto Rico

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**ABSTRACT**
Community-led land ownership can contribute to environmental justice in disaster-prone areas, particularly as it protects vulnerable communities from market-driven displacement often occurring after natural disasters. The article reviews literature linking the climate emergency with disaster resilience and collective land-based models. It brings into focus the case of the Caño Martín Peña communities in San Juan, Puerto Rico, where residents started a Community Land Trust (CLT) in Latin America and the Caribbean, resulting from an extensive process of community participation. We highlight the importance of this case as still one of the only CLT’s in the Global South, a mechanism not yet sufficiently understood as a highly developed instrument for secure land tenure and adaptation to climate change in the Global South. We analyse the mechanisms by which the CLT’s collective tenure model effectively ensures greater environmental justice – both regarding ongoing flooding issues, and specific extreme natural events such as hurricanes. Collective land ownership allows residents to remain in the area despite forces of gentrification and displacement after disasters induced by global warming. We conclude with a reflection on the need for similar land-based solutions, and summon public authorities to consider these as a route to effective environmental management.

**Introduction**
Community-led development refers to strategies and processes for local improvement which are delivered directly by organised community members. These approaches are considered significant in ‘[enabling] local residents to act collectively to promote substantial development results, including better preservation of resources, enhanced quality of life and diminished rates of inequality and social exclusion’ (Wahid et al. 2017). Here, we focus on the relevance of community-led efforts in terms of land management, with an emphasis on collective land tenure solutions – whereby land and its associated resources are owned and managed through community governance (Andersen 2011). We build on this with literature focusing on the role of land tenure in shaping societal capacity for climate change mitigation and adaptation (Shi et al. 2018; Mitchell and McEvoy 2019). There are various forms of collective land models (also referred to as communal tenure), including many not formalised and customary traditional land systems, or legally recognised frameworks such as Community Land Trusts (Davis et al. 2020). What they have in common is the aim to respond to local needs and aspirations, and for resident leadership to be at the heart of the project. Community-led development is not only about managing land once collective ownership has been secured, but also includes paramount and/or interconnected activities such as...
advocacy for supportive legislation or finance for communal land tenure, community organising and mobilisation, collective savings to finance projects, such as the provision of permanently affordable adequate housing, people-led data collection and documentation of households and neighbourhood characteristics, assets, infrastructure, and history.

Our interest in collective land tenure models and community-driven approaches is explored through the lens of two of our most pressing global challenges: managing the climate emergency and developing resilience to both extreme natural events and their consequences in terms of displacement. As Morshed (2021) points out: ‘Land is the closest thing that we know. […] The banality of land’s ubiquity could also mislead us to believe that it is apolitical. It is not.’ We in fact recognise that post-disaster displacement of communities, although linked to the destruction of homes and livelihoods – can be made permanent by economic and political processes (Álvarez de Andrés et al. 2019) which either directly or indirectly force community members to move away, resulting in the loss of valuable land (Oliver-Smith 2005). Mitchell and McEvoy (2019) state that climate change related disasters can ‘cause the displacement of large numbers of people, with resettlement camps established away from the affected parcels […]’. People without land records […] may not gain access to response and recovery funds and support’. In addition, relocation may also lead to land disputes with host communities, leading to abrasive relations and stressful living conditions (Mitchell and McEvoy 2019).

Insecure land tenure is linked to greater exposure to the risks and consequences of climate change and disasters (Carcellar et al. 2011; Dodman and Mitlin 2013; Mitchell and McEvoy 2019). Communities lacking recognised land titles were found to be most exposed to climate risks due to the areas where they are located, which are prone to landslides, flooding, drought, etc. This also limits their adaptive capacity, due to being more disconnected from formal governance processes and finance for risk mitigation (Mitchell and McEvoy 2019: viii). We argue that tenure through community-driven collective models offers ways to counter this, creating pathways to environmental justice for communities and improved overall sustainability (see also Algoed et al. Forthcoming). There is available literature on how community-led processes of land acquisition and/or management have put forward responses to disasters, such as in the case of China’s urban villages, where collective tenure has been found to be linked to greater ability to adapt to climate change (Shi et al. 2018), in the Philippines where land negotiation led by vulnerable at-risk populations have integrated disaster risk reduction strategies (Carcellar et al. 2011), in Paraguay (Pereira 2018) where mutual aid housing cooperatives actively negotiate for local flooding issues to be resolved through sustainable solutions that enable residents to avoid displacement, and in Senegal (Álvarez de Andrés et al. 2019) where community members organised to successfully implement flood prevention measures. We build further on this literature with the analysis of the collective land ownership model of the Caño Martín Peña Community Land Trust in Puerto Rico.

We keep in mind that ‘the ways in which the impacts of climate change are translated into specific vulnerabilities are strongly dependent on local circumstances’ (Dodman and Mitlin 2013) and therefore, resilience will also take different forms depending on context. In fact, we highlight that ‘resilience’ can be a loaded term – as is evidenced in one of the author’s interviews with community members in Puerto Rico. In fact, their experience is that discourses around community resilience can assume the responsibility to ‘bounce back’ after disasters lies with residents, without necessarily critiquing and addressing the systemic structures that make people vulnerable to hazards in the first place. We therefore prefer to speak of ‘vulnerabilisation’ rather than ‘vulnerability’ as a fixed condition, because it better denotes how many of these communities are made and kept vulnerable (Algoed and Hernández Torrales 2019, p. 39), when economic policy is prioritised at the expense of climate policy. Communities can and do find their own ways to recover from hazards – but in the eyes of the residents of the Caño, resilience need to include essential risk mitigation by way of investments in crucial infrastructure. For them, a post-disaster response to the devastation caused by hurricanes and floods is then rooted in ‘fair recovery’ (recuperación justa) – defined as the ability to resist involuntary displacements after disasters, and to secure sustainable long-term solutions with the participation of residents to reduce future vulnerability. Environmental justice is therefore understood in this article as the right for all to enjoy an equal level of protection from environmental threats, but our
understanding of this term also includes notions of justice based in recognition and participation, and a stronger link with broader social and spatial justice concerns (Da Schio 2021). Notable Puerto Rican scholars like García López (2018) and Bonilla and Lebron (2019) have conducted fundamental research on how environmental justice issues in Puerto Rico connect with injustices related to the colonial status of the island, and why the many self-organised initiatives on the island need urgent academic attention. This article is our contribution to those debates.

The data that this article is based on are part of a PhD research project for which the second author conducted three field visits for a total of 4 months. Field research included document review (e.g. the Laws, the Caño’s Comprehensive Development Plan, etc) and policy analysis (e.g. Puerto Rico CDBG-DR Action Plan), 40+ in-depth semi-structured and unstructured interviews, and participant observation during community and staff meetings at the different Caño community organisations. This author also conducted participatory action research (PAR) in collaboration with the last author and Caño staff, community leaders and residents, in the form of several online and in-person peer-to-peer exchanges with other communities living in similar conditions across the Global South. Interviews and observation notes were analysed using qualitative methods, such as narrative analysis. The last author has been on the Board of Trustees for the Caño CLT for almost two decades, and provides pro bono legal advice to the community leaders from the Legal Assistance Clinic of the University of Puerto Rico School of Law.

Case study: the Caño Martín Peña community land trust, Puerto Rico

CLTs and the management of environmental threats

Like many other Puerto Rican neighbourhoods, the communities along the Martín Peña channel in the capital, San Juan, were established almost a century ago as a result of the rural exodus following the rapid industrialisation of this U.S. territory. Thousands of people built their homes on what were then swamplands. Today, about 21,000 people still live in this Special Planning District (see Figure 1), which has undergone many improvements in terms of homes and urban infrastructure – although the inappropriate sewage and rainwater drainage systems remain a central problem. In fact, wastewater and various materials flow directly into the channel, blocking it and causing regular flooding. Residents have called for flood risk mitigation through the dredging and ecological restoration of this important mangrove waterway, as mangroves offer natural protection against flooding. The poverty index in the District is at 56%, significantly higher than the average in San Juan (39%). Unemployment in the District is at 25% (Algoed et al. 2018, p. 12).

To respond to the constant floodings (with contaminated water) and other community needs, such as fear of gentrification-driven displacement, residents of seven communities created the first Community Land Trust (CLT) in Latin America and the Caribbean in 2004 (see World Habitat 2015; Algoed et al. 2018; Algoed and Hernández Torrales 2019; Hernández-Torrales et al. 2020). The CLT is a model of collective land ownership whereby the ownership of the building is separated from the ownership of the land. The land is communal and held in trust by a not-for-profit entity with local governance (the CLT), whilst the households (and other entities) individually own the structures or improvements built on the land. This enables housing to remain affordable for local people (as the house prices do not include the cost of the land) and for the area's development to be community-driven through the CLT's democratic decision-making processes. It also makes land speculation and the selling off of the CLT land near to impossible, as it is held in perpetuity by the CLT (World Habitat 2015; Davis et al. 2020). Worldwide, there are now hundreds of CLT’s, most of them in the US and the UK (Centre for CLT Innovation 2022).

Social capital as a pathway to sustainable management through territorial stewardship

Overall, the level of organisation reached by the Caño communities through collective land tenure and community-driven processes enabled residents to develop resilient solutions to the pressing issues they were facing. This echoes Cochrane’s (2006) argument that social capital (in this case, the skills and voice gathered through community organising) influences the capacity to ensure sustainability and management of environmental capital (in this case, the right to own and co-manage the land and to have a strong voice about the eco restoration of the channel in a sustainable way).
The CLT resulted from an extensive community planning-action-reflection process, during which residents built social capital through the development of the skills and knowledge to assess different land tenure options and engaged with the implications of the government project to dredge the Martín Peña Channel. In fact, they welcomed the dredging but were concerned about the associated increase in land value, especially given the District’s prime location in the city. They needed a model that could support them in obtaining permanent land rights and avoid being priced out of their area. Residents used their collective understanding of the territory, and with the support of technical teams, they have developed core strategies for resilience from an environmental and legal perspective. No CLT existed in Puerto Rico, so it had to be designed from scratch. Volunteer lawyers from local universities helped residents gather existing relevant legal tools, such as surface rights deeds, and draft the dedicated ‘Ley para el Desarrollo Integral del Distrito de Planificación Especial del Caño de Martín Peña, Ley Núm. 489 de 24 de septiembre de 2004’ (Law for the Comprehensive Development of the Caño de Martín Peña Special Planning District, Act No. 489 of 24 September 2004; hereafter called Law 489). Law 489 created the first community land trust in Puerto Rico. This law ordered that all previously publicly owned land within the Caño Martín Peña Special Planning District was to be automatically transferred to a new government body created under the law, identified as Corporación del Proyecto ENLACE del Caño Martín Peña (ENLACE), after which ENLACE transferred the lands to the CLT. ENLACE is a quasipublic corporation which employs civil servants and is governed by representatives from the communities and government officials. During the planning-action-reflection process, residents designed the Comprehensive Development Plan for the Special Planning District of the Caño Martín Peña, officially adopted by the Puerto Rico Planning Board. The responsibility to implement the Plan was also given to ENLACE. The Plan prescribes the infrastructure works needed at each of the seven communities. As a consequence of its implementation, many families need to be relocated as their housing structures are...
either within the construction area or within the dredging. As a relocation administrative policy and procedure, the families are given the opportunity to stay area within the Special Planning District (if housing is available, and unless they prefer to live elsewhere). This was seen by residents as an equitable solution to tackle the flooding issue, but with a reasonable and fair offer to the affected households.

More broadly, collective stewardship of land through the CLT generally offers a strong framework for territorial management of environmental hazards and resources, especially when compared to the previously unrecognised status of residents living on public land. In contrast to individual land titles, which residents may be induced to sell to speculators, the perpetuity of the CLT model reflects the residents’ long-term interest in and for their area. In contrast to insecure tenure, which ‘reduces incentives to undertake good land management, causing environmental degradation’ (Mitchell and McEvoy 2019), collective land ownership enables long-term stewardship. The residents have a clear stake in improving their living conditions by securing sustainable managing flood risks (including restoring the mangrove channel as a flood risk mitigation measure) and building stronger housing and infrastructure, as it directly impacts their living conditions. Having security of tenure enables future planning to tackle these issues, as demonstrated in the elaboration of the Plan, and the CLT structure leverages individual and collective capacities to develop effective long-term solutions.

The operations of the Caño Martín Peña CLT was not without obstacles. In 2009, the government of Puerto Rico amended Law 489 and takes the land from the community, returns it to the government and promotes individual property titles. The CLT filed a claim in the US District Court for the District of Puerto Rico, and an intense struggle from the communities and their allies from all sectors of society (private sector, universities, labour unions, environmental groups, etc) eventually led to a return of the lands to the CLT (Algoed et al. 2018, p. 33).

Collective tenure ensuring resilience by countering gentrification and influencing political agendas to address local needs and vulnerabilities
The CLT model made it possible to counter the forces of gentrification, and fears of government-led forced evictions, which had already displaced large parts of the original Caño communities in the 1960s and 1970s. This collective land model regularised land tenure for around 1,500 households in the District. All households with buildings located within the CLT, but without previous land titles, became eligible for a surface rights deed or a long-term lease agreement. The surface rights deed is a common legal tool in Napoleonic code (which largely underpins legal systems across Latin America) and enables, among others, the right to occupy and use a piece of land. This was applied to parcels of CLT land beneath each resident’s home. The surface right can also be inherited by the family’s heirs. The CLT has been identifying homeowners in the District to recognise their surface right and to help them register their title deed in the Puerto Rico Real Property Registry.

By holding the land in trust, the CLT removed this land from the possibility of ever being sold on the market. It also regulates the resale of the improvements on the CLT land. This is done through a resale formula defined by the CLT’s general regulations, and prohibits the sale of the structures at a price exceeding a fair value determined through a market appraisal process. The CLT also has the right of first refusal, which means that the owner is obliged to notify the CLT and that the CLT gets the first option to buy the improvement on sale by the owner. This secures greater control over land rights and territorial stewardship, and guarantees permanent affordability. It is particularly significant case of resistance to the current global trend towards financialisation of land and housing, whereby these are typically regarded as a commodity for financial gain rather than as a human right (Farha 2017) and a set of resources with social and environmental value.

With ownership of over 280 acres of land, the Caño Martín Peña CLT is now one of the largest landowners in San Juan. The Group of the Eight Communities Adjacent to the Caño Martín Peña, Inc. (G-8), which is the umbrella network of community-based organisations involved in the CLT with a Board composed of the different Chairs of the Neighbourhood Councils appointed by residents, is now a powerful player in influencing policies in favour of vulnerable households. For example, around election time, the G-8 invites political candidates to sign a charter that binds them to respond to the Caño’s residents’ listed concerns if the candidates are elected. This moment typically attracts a lot of media attention and highlights the needs and priorities of this type of settlement. The CLT enables this type of approach whereby
communities successfully harness political power for a group of people who have been neglected and ignored for almost a century – putting their demands for the area’s sustainable future on the City’s agenda.

**The struggle against displacements following disasters**

**Hurricane María: bearer of new threats**

Despite achieving security of tenure over the land, threats of displacement resurfaced for the Caño Martín Peña communities, brought about by one of the Caribbean’s most destructive nature events. Puerto Rico experiences frequent hazards, in particular hurricanes. Notoriously, Hurricane María devastated the island in September 2017.

In the District, as the news of the impending hurricane become known, community members busied themselves to ensure residents were aware and ready for María. As one of the residents recounts:

> With the community councils, and staff from the CLT and ENLACE, we made teams [before Hurricane María], and we prepared leaflets, we distributed them house to house, we talked to people, we explained to them that [this hurricane] was going to be much more disastrous [than Hurricane Irma] and that they needed to be prepared.

In fact, the existing community-driven structure allowed for actual participation of residents in disaster preparedness (see Algoed et al. Forthcoming). The hurricane had dire consequences across the island, and even with the damage control measures, the Caño suffered significant devastation, leaving roughly 1,200 homes roofless and weeks of extensive flooding (Vizcaino [date unknown]).

In response to the hurricane, the U.S. Congress allocated USD 20.3 billion in Community Development Block Grant (CDBG) funds for disaster recovery to Puerto Rico. For the Caño communities, this presented an opportunity for much-needed finances to bounce back, mitigate flood risks and increase resistance to environmental hazards. As a large area made up of vulnerable communities, there would have been good reason to prioritise the Caño for these types of positive interventions. However, the Puerto Rico Department of Housing established that ‘[h]omes in the floodplain […] will not be reconstructed and eligible homeowners will be offered relocation options’ (Government of Puerto Rico 2021). The maps of floodplains cover many of Puerto Rico’s coastal cities, and encompasses most comunidades autogestionadas (self-managed communities), as well as the entire District of the Caño. This includes several areas that do not get flooded. The demarcation also ignores the plans to dredge and restore the channel, although this would reduce the risk of flooding and changing the vulnerability to hazards. However, the plans for the channel still needed additional funding for its completion, and Caño communities and Proyecto ENLACE believed this fell within the CDBG fund’s objectives of risk mitigation in preparation for future hazards.

As the much-needed funds initially were not assigned to the area, the Caño residents and community leaders saw the policy as another threat of displacement, in part by applying politics of exhaustion. In the words of Evelyn Quiñones, a Caño community leader:

> The Housing department doesn’t want to give [us] the CDBG-DR funds. I think that’s a displacement. They say: I can’t displace you, because of the CLT, but I’ll find another way to displace you. People are tired of so many floods. It’s terrible to lose your things, the stove, the fridge, the bed, you lose everything. […] They come and tell us: I’ll help you, but you must leave immediately. I’ll buy another house for you in another area. They’re displacing us.

Consider this opinion together with the statement of the then Governor of Puerto Rico, Ricardo Rosselló, in the aftermath of Hurricane María, when asked what solution he saw for people living in ‘informal’ housing:

> It’s time to go, you know, it’s not safe, […] it’s just not worth it, and we do have the opportunity to use these funds effectively and transparently, why not take this opportunity to make this transition (O’Leary and Chiriguayo 2018).

It is in the face of this renewed push from government to move people out of comunidades autogestionadas – in the case of the Caño a highly strategic urban area close to the financial district, transport infrastructure, public services, jobs, universities – that the Caño residents define resilience as fair recovery (recuperación justa) and especially the right to remain. In fact, the Caño community leaders suspect the displacement of the most vulnerable households on safety grounds will ultimately be a strategy to enable future speculative use of the land (Rodríguez Del Valle 2019).
'Recuperación Justa' and community mobilisation

Despite the challenging context, the CLT model helped structure the residents claim to stay in the area, and to channel local demands for the use of funds for post-disaster rehabilitation and environmental management. Indeed, community mobilisation and collective land management have for now succeeded in preventing further displacement. The G-8 helped residents to campaign for their needs. With technical support from staff at Proyecto ENLACE and allies such as the Estuario de la Bahía de San Juan, they lobbied the government to redirect CDBG-funds for disaster relief (DR) and mitigation (MIT) for the preparation of the dredging of the channel, the relocation within the Caño Martín Peña Special Planning District for the households living in the dredging area, the installation of a sewage system, and improvements to the drinking water supply. ENLACE and the G-8, convinced the former governor of Puerto Rico, Wanda Vázquez (who succeeded Ricardo Rosselló when he was ousted), to appeal for an amendment in the Action Plan to make the Caño communities eligible for the funds despite its location in the floodplain. As a result, the Caño communities were successful in receiving funds from CDBG-MIT. This can be seen as a success in securing greater environmental justice for the communities in the District. At the time of submitting this article, funds have been allocated by the US Congress to the US Corps of Engineers for dredging the Martín Peña waterway. This is the result of the tireless organising of the Caño community leaders for over two decades.

Whilst mobilising to secure these funds, the CLT’s resident-led processes enabled the community to spearhead recovery at various other levels (Algoed, Bassett and Rodríguez Del Valle forthcoming). Neighbourhood solidarity and strong local and international networks were rallied in the days around and after the hurricane. As expressed by Caño community leaders:

'We have learned that we must stick together. We can’t expect anything from [government]. We can’t sit around and wait for the aid to arrive. And we lived through that with María. We residents took to the streets to clean, to help each other, because if we had waited for the government, things would have been so much worse.'

'We’ve always been organised, that’s why we received help [from people]. We are recognised, and people know that the help they give will reach each and every one of the residents of the community. We always meet, twice a month, to talk about the problems of the community, we help each other. The important thing is that if you are not organised, recognised, that people don’t know how your organization works, how it moves, you will not receive help.'

Reflections on the Caño and beyond

As we have seen, the accumulation of social capital through communal tenure can be a powerful approach to countering gentrification and speculative land uses which typically disregard social and environmental sustainability. Instead, collective land management such as through CLTs enables longer term stewardship, environmental management, and disaster risk mitigation – which is an increasingly urgent matter in the face of the climate emergency.

However, despite the strengths of the model, disasters create situations where zoning for human habitation is reviewed, and new boundaries can be drawn, as we have seen in the case of the floodplains. Only time will tell if the Caño’s efforts to counter flooding through the dredging and ecological restoration of the channel will ultimately be successful, but we can already determine that they are in a stronger position to fight for their settlement’s sustainable development due to their experience in organising, mobilising, and attracting support. It is also clear that, in the face of the forces of disaster displacement, resilience must also be embedded in ‘potential to develop as a more radical and transformational agenda that opens opportunities for political voice, resistance, and the challenging of power structures’ (Shaw 2012) – and the CLT is well positioned to do this.

Currently, CLTs are rare in the Global South, but there is increasing interest, as can be demonstrated by the existence of the ‘Community Land Trusts in the Global South’ workgroup of the Centre for Community Land Trust Innovation, for example, or by the publication of a Working Paper by the Lincoln Institute of Land Policy (Cambridge, MA) on CLT’s in Informal Settlements, which assesses the feasibility of CLT instruments developed by the Caño Martín Peña communities in Puerto Rico for favelas in Rio de Janeiro, Brazil, and points to factors that can facilitate or constrain the adoption of CLT’s to protect vulnerable communities facing similar challenges (Algoed et al 2021). In Rio, a CLT is currently emerging (Fidalgo Ribeiro 2020). Until the Caño Martín Peña CLT won the 2016 World Habitat Award, the model was relatively unknown in this part of the world. The first
CLT in the Global South and in an informal settlement was the Voi CLT in Africa, established in the 1990’s (Bassett 2007; Midheme and Moulaert 2013).

The example described in this article and the literature on community-driven environmental management of land point to various strengths that are relevant to communities around the world facing disasters and the risks of the climate emergency, and their consequences (Satterthwaite et al. 2020). In particular, the formalisation of land into resilient, collective systems is particularly relevant for low-income communities as, in contexts of shortage of affordable housing, poor households typically find housing options in marginal, high-risk zones (Mitchell and McEvoy 2019; Satterthwaite et al. 2020). Communal land tenure can help them in developing resilience and manage the risks they are facing, either in situ or in community-managed resettlement. The Caño Martín Peña CLT also demonstrates that there is an important connection between the state and the community, as Proyecto ENLACE is a state-funded quasi-public corporation, with community representation in its board of directors, responsible for establishing the public policy for implementing the community-led Comprehensive Development Plan.

As much as we celebrate the ability of communal tenure models to offer greater resistance and security against politically and economically motivated displacement, we observe that a lot of the energy from communities must be dedicated to mobilising for the right to remain and ‘firefighting’ the consequences of environmental hazards, instead of having the space to focus on upgrading processes, development, and environmental management. A clear example are the delays in dredging the channel in the Caño, for which community leaders have campaigned over two decades. This is relevant not just for cases where communal land models are more recent or emerging – but also where they are longstanding and/or embedded in traditional models. Cases of successful supportive policies and public-civic collaborations around settlement upgrading and urban improvements can be found around the world, and the evidence for the keenness of communities to engage with public authorities indicate this is not only a viable solution, but also an economic and effective one (see for example Boonyabancha and Kerr 2018; Hendler and Fieuw 2018; Satterthwaite et al. 2020). Authors such as Leckie (2013) and Johnson et al. (2021) also specifically argue in favour of wider support for CLTs in the disaster context. Unfortunately, we currently witness threats to communal land ownership structure across the Caribbean, with examples from Barbuda, or other tenure forms in Providencia (Colombia), Grenada, and beyond (see presentations of community leaders from these islands in a webinar for the research project ‘Food, Land, and Climate Justice in the Caribbean’, Podea 2021) – resulting from privatisation-led disaster responses. As Leckie (2013) says: ‘many aspects of climate displacement can be resolved with land-based solutions and human rights-based improvements in domestic housing, land and property law and policy’.

A greater understanding and support from decision-makers of collective and community-driven ownership mechanisms is essential, as supportive policies and public practices can bring community-based resource management and environmental justice to reach its potential.

Notes

1. *Fideicomiso de la Tierra del Caño Martín Peña* is the legal name in Spanish.

2. The San Juan Bay Estuary Program is a non-profit that works to improve water quality and ecosystems within the Estuario de la Bahía de San Juan and its basin.

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