Aquatic Life-Work: Making Life on the River's Edge

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Abstract

Aquatic Life-Work: Making Life on the River's Edge examines how Afro-descendant river communities in St. Mary and St. Ann, Jamaica, make and sustain collective life through relationships with the Rio Nuevo and White River. Drawing on ethnographic research, this thesis develops the concept of **aquatic life-work** through four interrelated dimensions: reproduction, infrastructure, protection, and collective continuity. Aquatic life-work situates present practices of life-making within longer histories of relationships with freshwater, including access to water, territorial claims, community governance, and responsibilities to future generations. Revealing that making life on the river's edge is not a single adaptive response to environmental risk, but an ongoing collective process through which communities negotiate the conditions and authority of life-making. Moving beyond resilience as the primary framework for understanding adaptation, this aquatic life-work demonstrates how river communities sustain, protect, and carry forward collective life under conditions of contested authority.

Dedication

This thesis is dedicated to my grandmother Herma, my great grandmother Ms. Vie and my Uncle Tony. Without whom, this research would not be possible.

This thesis is also dedicated to Anna, Michael, Marc, Clarke, Uncle Mike, Samuel, and Joseph who were generous with their knowledge, stories and experiences. I hope that I have handled your words with the care they deserve.

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1. Introduction – What Does it Mean to Be Small?

"We are small, but we are mighty."

Rivers have long been sites of refuge, sustenance, recreation, and economic activity for Afro-descendant communities in Jamaica. Yet despite their significance, the spatial relationships between Black communities and freshwater environments remain comparatively underexplored within climate adaptation. River-dependent communities are vulnerable to various ecological and climatic events such as hurricanes, droughts, flooding, and uneven access to freshwater often due to pressure on infrastructure, water systems and competing demands. In response to this collective risk, river-dependent Jamaicans have developed various strategies of adaptation and survival rooted in specific cultural, social, and environmental contexts. There is a collective understanding of the labour needed to make and sustain life on the river's edge, despite a lack of control over the conditions that may complicate, constrain or undermine the life-making process. The Jamaican patois word, *tallawah (or talawah)* demonstrates this dynamic, often used in the phrase "we likkle but we tallawah," and believed to have origins in the Ghanaian Ewe word *talala* (*Rasta/Patois Dictionary*, 2025). Tallawah describes Afro-Jamaicans as the small people or the small island (likkle), but with a capacity and capability that extends beyond this smallness (tallawah). To be *small,* as rural Jamaicans often describe themselves in relation to the state (Galvin, 2020, p.41), is to occupy a position of limited authority over the resources and conditions necessary to make life. Yet limited authority does not equate to limited capacity. To Uncle Mike, one of my research participants, tallawah means to be "small but mighty," or small but still "capable of great things." To Joseph, another participant, it translates as an unintentional bravery and propensity to "find a way," despite the *small* position one may occupy. As Joseph describes, "in many cases mi nah feel like it's intentional, it's just that we're always there so we just find a way." Tallawah describes a positionality in relation to history, access to resources, will and a practice of continuity. Communities may have limited formal authority over the institutions, economies, infrastructures, and policies that shape their lives, while still being expected to make life. While many interpretations focus on *small* as being the size of the island, Uncle Mike, Joseph and the other research participants show that *small* often relates to the labour of making life versus the influence over the conditions that necessitate that survival.

Tallawah demonstrates one approach to how Afro-Jamaican communities understand collective capacity: being small does not mean being incapable. However, tallawah alone does not reveal what it takes to exercise that capacity, nor does it fully account for the conditions under which people are required to do so. Present-day disaster management and climate adaptation increasingly use concepts such as vulnerability and resilience to describe how communities experience and respond to environmental risk. Yet an outcomes-based reading may conclude that these communities are remarkably capable and adaptable, obscuring the labour required to sustain collective life in river environments. What does it mean to continually have to *"find a way"* to make and sustain collective life when the authority over the conditions of that life is unevenly distributed? The core question guiding this thesis concerns: ***what forms of labour sustain and shape collective life, and how are these practices shaped by the authority communities hold over the conditions of life-making?***

I use the concept of **aquatic life-work** to name this labour: the material, relational, and collective work through which Afro-Jamaican river communities make and sustain life. Aquatic life-work extends Beverley Mullings' (2021) concept of life-work by examining how life-making is constituted through historically specific relationships with freshwater environments. The river is not simply the setting in which this labour occurs; it is a site of knowledge, attachment, livelihood, responsibility, and collective life, shaped by longer histories of living with and relating to freshwater, labour and governance. Aquatic life-work therefore, makes visible what is obscured when collective capacity is understood primarily as strength, adaptability, or persistence, examining the everyday practices through which communities reproduce themselves, maintain the infrastructures necessary for life, protect people and places, and sustain collective continuity across generations. These dimensions are not discrete forms of labour; they are interrelated processes through which collective life is continually made and remade. In this sense, aquatic life-work is not only about sustaining life in the face of environmental and political change, but about the ongoing work of maintaining relationships that make collective life possible, through repairing and renewing relations with one another, with place, and with the waters on which life depends. This relational work is inseparable from questions of authority: to make and remake collective life is also to assert a claim over the conditions through which life can be sustained, reproduced, and carried forward. In this context, authority refers not simply to formal or legally recognized power, but to the capacity to define,

organize, govern, and shape the conditions through which collective life is made. Authority may be partial, contested or constrained, by other forms of political, economic, and social authority.

Four interrelated analytical dimensions were identified through the research process: reproduction, infrastructure, protection and collective continuity. Reproduction concerns the labour through which households and communities sustain everyday life, including the care, subsistence, social relations, and material practices necessary for collective reproduction. Infrastructure attends to the work of building, maintaining, repairing, and navigating the material systems through which people access and move within river systems. Protection encompasses practices of caring for and defending people, places, and aquatic environments, particularly where formal systems of protection are inadequate or unevenly distributed. Collective continuity concerns the intergenerational labour through which knowledge, relationships, practices, and possibilities for collective life are maintained and carried forward. Together, these dimensions reveal that making life on the river's edge is not a single adaptive response to environmental risk, but an ongoing collective process.

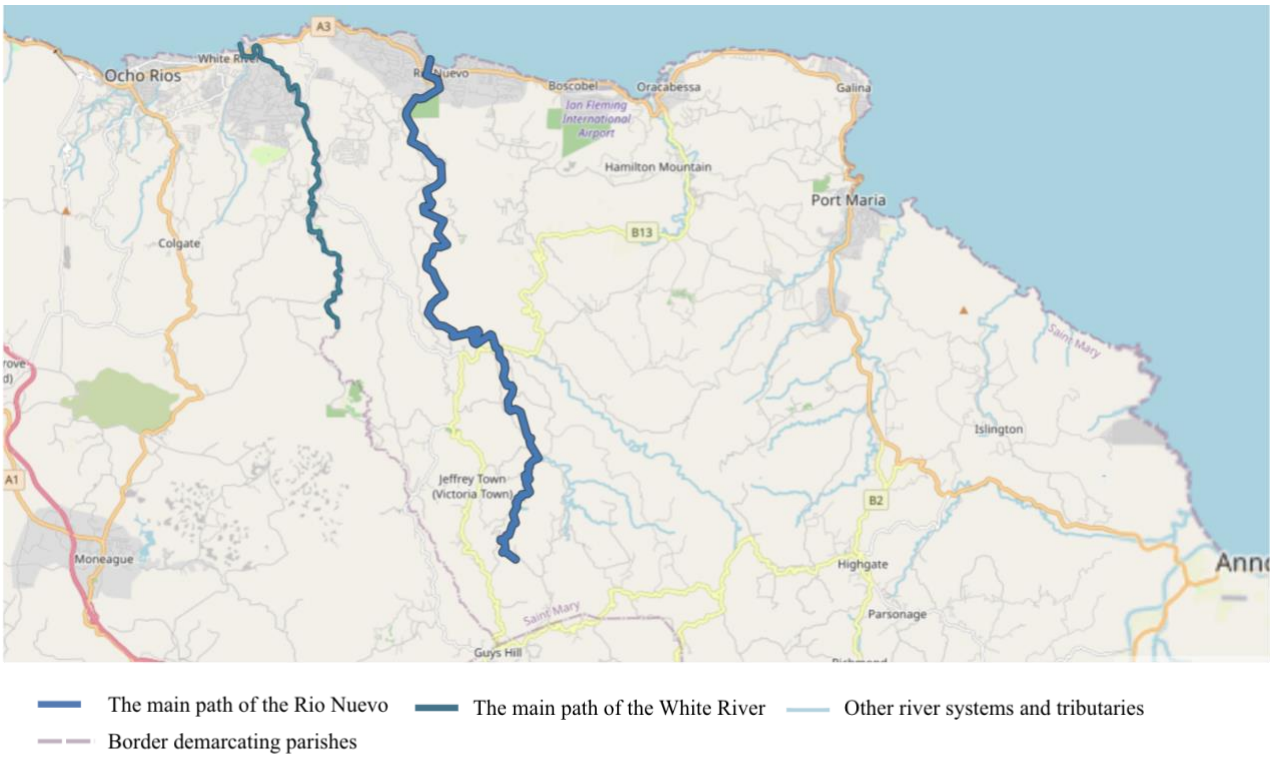
Through interviews, participatory mapping, life-path mapping, historical genealogy, and spending time with river communities, I examine how these interrelated dimensions of aquatic life-work reveal a persistent tension over Afro-descendant communities' authority over the life-making process within freshwater environments. On one side is the capacity and increasingly the expectation to adapt, repair, maintain, protect, and sustain collective life; and on the other are the historical and contemporary processes through which that life-making labour is constrained, displaced, or undermined. Across this thesis, I trace how policies, dispossession, formal and informal systems of protection shape this tension, while also locating its contemporary expressions within longer histories shaped by legal, political, and spatial formations extending from the colonial period through emancipation and into the present.

This project is deeply informed by my grandmother's knowledge, memories, and guidance. Long before this project began, she shared stories of the rivers she frequented as a child and the ecological, cultural, and spiritual relationships that connected communities to waterways. These experiences influenced my interest in river environments and my understanding of rivers as more than sites of resource use, risk, or economic activity. Conducting fieldwork in places connected to my family history meant that I also carried emotional, cultural,

and familial investments throughout the research process. This position afforded certain forms of familiarity and access such as finding research participants, understanding the language, feeling comfortable in the field, while also requiring ongoing reflexivity. I also approach this work as a researcher, trained in a Canadian institution and therefore carry assumptions that shape how I interpret knowledge, place, and environmental change. Rather than attempting to eliminate these positionalities, I approached them as part of the research process. Guided by the methodological commitments outlined below, I sought to remain attentive to participants' interpretations, stories, and priorities while allowing conversations, observations, and relationships to shape the direction of the research.

1.1 Overview of Fieldwork

Figure 1 - Map of Rio Nuevo & White River, Saint Mary, Jamaica



Note. Author's adaptation of maps from WaterwayMap.org, based on OpenStreetMap data and Natural Earth boundary data (WaterwayMap.org, 2026).

My fieldwork was conducted on Jamaica's northern coast at Rio Nuevo and the White River (Blue Hole) primarily in Saint Mary parish (Figure 1), but also bordering the parish of Saint Ann. Saint Mary is one of Jamaica's smallest parishes, in terms of population, with around 116,497

people according to the 2022 census (Statistical Institute of Jamaica, 2022). Much of Saint Mary is characterized by rugged mountainous terrain, limestone geology, and an extensive network of rivers, springs, and underground waterways (Ministry of Local Government and Community Development, 2025). The Rio Nuevo runs for approximately 24kms before emptying out into Rio Nuevo Bay and the White River runs for about 27kms before emptying out into the sea. Emerging in the mountains near Guys Hill, Saint Mary and disappearing into underground caves and networks, White River appears shorter on many maps than its documented length (National Library of Jamaica, 2020) Both rivers originate in Jamaica's central limestone plateau, made up of the cockpit country, dry harbour mountains and a series of underground rivers and cave systems (Satchell, 2019).

The parish has numerous underground and above ground rivers and springs due to its porous limestone make up. According to Veront Satchell (2019), a Jamaican Geographer, rivers have been a key feature of the settlement and socio-economic development of Saint Mary, with many of the settlements in Saint Mary taking the name of the rivers their associated with, more so than other parishes (Satchell, 2019). The wetter climate and abundance of rivers and springs have supported agriculture, specifically bananas, yams and coffee farming (Ministry of Local Government and Community Development, 2025). However, its location on Jamaica's north-eastern coast, and high mountain ranges make it vulnerable to hurricane damage even in instances where hurricanes or tropical storms have not made direct landfall. This is largely due to tropical moisture rising into the mountains and triggering extreme concentrated rainfall, flash floods and landslides that often cut off rural mountainside communities (Satchell, 2019). This was the case in October 2025, when Hurricane Melissa made landfall on the Southern coast of Jamaica in the parish of Saint Elizabeth, devastating the town of Black River. The hurricane was a category 5, one of the strongest hurricanes to have hit the island, causing extreme damage to infrastructure, housing, water access, transportation, airports, livestock and agriculture. Saint Mary, was not as severely damaged as some of the southern parishes but still experienced fallen trees, blocked roads, flooding, landslides, heavy rains, intense winds that removed roofs from homes and the significant loss of livestock like chickens (Television Jamaica, 2025b; Television Jamaica, 2025c). Significant damage was experience amongst banana farmers whose crops are extremely susceptible to intense weather (Television Jamaica, 2025c).

I arrived in Jamaica several weeks after Hurricane Melissa, originally intending to conduct fieldwork in Saint Elizabeth. The extent of infrastructural and environmental damage required me to adapt my research plans and ultimately redirected the fieldwork toward Saint Mary and the Rio Nuevo and White River communities. While the hurricane provided an immediate context of environmental disruption, participants' accounts quickly extended beyond the storm itself. Questions of water access, livelihoods, mobility, care, infrastructure, and collective support emerged as ongoing concerns rather than temporary responses to disaster. The aftermath of Melissa therefore became an important context through which I encountered the longer-standing practices of making and sustaining life that are examined throughout this thesis.

1.2 Literature Review

Aquatic life-work emerges from the following overlapping theories and approaches concerning vulnerability, resilience, Black life-making, and the significance of aquatic environments. While scholars have separately examined how communities adapt to environmental change, and how labour extends beyond formal employment to sustain collective existence, these conversations have often remained separate and rarely centered on the riverscape. This section brings these literatures into dialogue in order to establish the conceptual foundations of aquatic life-work. I begin by examining resilience as a dominant framework for understanding adaptation and survival under conditions of vulnerability and insecurity through the work of Brad Evans and Julian Reid, before engaging Beverley Mullings' application of social reproduction and the concept of life-work as a way to better understand work outside of the formal definition and in the Jamaican context. I then turn to Ulrich Oslender's concept of aquatic space, which contextualizes these arguments in relation to rivers and explores rivers as socio-spatial environments. Bringing these literatures together provides the foundation for theorizing aquatic life-work as the labour through which Afro-descendant river communities secure collective life.

Brad Evans and Julian Reid (2013) provide an important intervention into resilience discourse that helps distinguish resilience from aquatic life-work. Their most significant contribution is not a rejection of resilience itself, but a critique of its transformation from a descriptive concept into a political rationality (Evans & Reid, 2013). Originally developed within ecology, resilience referred to the capacity of a system to absorb disturbance without collapsing.

Holling, who is widely credited with introducing the concept to systems theory, defined resilience as the amount of stress a system can absorb before shifting into an alternative state (Weichselgartner & Kelman, 2014, p.251). As resilience migrated from ecological systems into discussions of human systems during the 1970s, it increasingly became associated with the capacity of individuals and communities to adapt to disruption, recover from crisis, and continue living despite adversity (Weichselgartner & Kelman, 2014, p.251). As Evans and Reid (2013) observe, resilience came to describe "the ways in which life learns from catastrophes so that it can become more responsive to further catastrophes on the horizon" (p.84). The political implications of this shift are significant, as it normalized insecurity as an inherent feature of living. It also began to shift the responsibility of individual security onto communities while states focused on capital-S security for the state (Evans & Reid, 2013). The result of this shift was a focus on adapting to insecurity rather than transforming the conditions that produce it (Evans & Reid, 2013). Evans & Reid connect the rise of resilience discourse and similar frameworks with the global neoliberal turn, a time of increased austerity measures, state divestment from social welfare, the withdrawal of social supports and the prioritization of market-based solutions (2013; Mullings, 2009). The emergence of the 'resilient individual,' alongside neoliberal forms of governance increasingly transferred responsibility for adaptation, care, and continuity from institutions to communities themselves. This trend in many ways has continued in contemporary climate adaptation and disaster recovery discourse, where the emphasis often falls on strengthening communities' capacities to *adapt* rather than addressing the political and economic conditions that make certain populations vulnerable in the first place. Under these conditions, questions of security become secondary to questions of adaptation. Rather than asking how insecurity might be reduced, resilience discourse increasingly asks how individuals and communities can learn to live with it.

However, the dominance of resilience as a governing framework does not necessarily mean that individuals and communities simply accept or reproduce the conditions of insecurity that resilience discourse presents as inevitable. Patricia Noxolo's (2018) work on *in/security,* for example, emphasizes that people actively negotiate between security and insecurity even as those negotiations remain constrained by unequal distributions of power and opportunity. This emphasis on negotiation opens space for understanding adaptation not only as a response to the conditions of insecurity, but also as a site of agency through which people may maintain,

articulate and alter the conditions under which they live. Aquatic life-work names this process, as a series of inter-related practices through which people not only sustain relationships and secure access to resources, but also alter and create the conditions for collective continuity. While the responsibility of adaptation is shifted more and more onto communities, as Evans and Reid argue, their analysis does not fully address how communities respond to this redistribution of responsibility, and what happens when the labour required to sustain life is itself stretched by the withdrawal of institutional support.

Beverley Mullings (2009; 2021) exploration of social reproduction under neo-liberalization and 'life-work,' demonstrates the impact of neoliberal restructuring and the transformation of social reproduction processes within the Jamaican context, specifically through the period between 1980 and 2007. As the Jamaican state transitioned toward neoliberal modes of social and economic governance beginning in the 1980s, specifically through divesting from social and psychological welfare programs, there was both a construction and deconstruction of social and spatial reproduction, by altering and stretching the spatial strategies communities deployed to cope with state divestment.

While other scholars have already documented "the crisis of social reproduction that has accompanied the economic restructuring of the Jamaican economy and the wider Caribbean," Mullings identifies a critical gap in the literature, arguing that "few have examined how the qualitative shifts in the organization of economic production and social reproduction have affected the intensity of the ongoing crisis" (p. 175). Mullings examines the changing relationships between the state, civil society, households, and communities, arguing that neoliberal governance undermined the social relations and institutions that had historically "maintained the stability and reproducibility of the social order" (p.175). In combination with mass migration, the methods for securing life increasingly became stretched across international borders to fill the gap created by declining state investment in communities. As Mullings explains, "the migrant networks of the 1980s functioned primarily to maintain and improve investments in the social reproduction of children that were formerly provided by the state" (p.179). What is significant here is not simply the movement of money and material goods, but the redistribution of the labour required to secure life. "In exchange for grandmothers, siblings and other close family members taking responsibility for the care and socialization of children

left behind," migrants sent remittances home (p.179). By stretching the spaces of social reproduction across international borders, Jamaican migrants attempted to fill the void created by the retreat of the state and private sector from social reproduction. What Mullings reveals is not only a crisis of social reproduction but also the limits of labour itself. The labour of securing life did not disappear with neoliberal restructuring; rather, it was redistributed across households, communities, and transnational networks. This redistribution did not give communities greater influence over the conditions that produced the need for additional labour in the first place. The capacity to sustain life through households, communities, and transnational networks could compensate for the withdrawal of state support only to a limited extent; it could not necessarily restore the institutions, resources, or social conditions that had been withdrawn. Communities could take on greater responsibility for securing life without gaining greater capacity to shape the economic, political, and spatial conditions in which that life was sustained. This distinction is important for aquatic life-work, which asks not only how community labour sustains collective life, but also how they negotiate and exercise influence over the conditions through which that life is made possible.

It is precisely within these systemic gaps that Mullings (2021) locates *life-work*, offering a framework to articulate how Afro-Jamaican communities have historically sustained life in spite of state abandonment.

Drawing from Mitchell et al.'s (2003) "Life's Work," which sought to break down the barriers and epistemological distinctions between work inside and outside the home (pp.1-2). Mullings (2021) develops 'life-work,' to place greater emphasis on the diverse forms of work that sustain life and to challenge the tendency to associate particular forms of work with particular places (p.152). Emerging from a broader critique of labour geography, she argues discourse around work has "largely restricted itself to the study of waged workers, largely located in the global North, and often in formal sector unionized jobs (p.152). In doing so, labour geography has often overlooked the many forms of labour that sustain life but exist outside of formal employment. As Mullings argues, these recognized forms of work "represent only a sliver of the activities that generate surplus value within capitalist systems" (p.152). By questioning what counts as work and who counts as a worker, life-work expands the boundaries of labour beyond formal employment to include the unpaid, informal, reproductive, and often

unrecognized forms of labour necessary for sustaining life. Tracing a history that disregards the work of survival, Mullings highlights how provision grounds and slave markets were enslaved-led spaces of accumulation and reproduction that served the purpose of securing enslaved communities rather than simply reproducing capitalist production. As she argues, "social reproductive labour... also served another crucial purpose for enslaved peoples within the plantation system – it produced value that could not be appropriated, when slaves engaged in life-work for themselves" (p.153). The significance of these spaces was not simply economic. The value produced through life-work shaped the social and political solidarities shared among enslaved communities and created opportunities for life-making both within and beyond the plantation order. In questioning the "traditional separation of productive and reproductive work," Mullings demonstrates a generational continuum linking contemporary forms of labour with the often-unrecognized life-making practices of enslaved communities (p.153). Life-work therefore emphasizes the labour of securing space for social reproduction and situates it as an ongoing process. While these spaces existed within broader systems of domination, they also provided opportunities to create forms of value, care, and collective life that could not be fully captured by those systems. Building on Mullings' concept of life-work, aquatic life-work extends its focus beyond the blurring of productive and reproductive labour to consider how collective life is sustained across time and through relationships with freshwater. It attends not only to the reproduction of life in the present, but to the ways present practices are situated within longer histories of access to water, territorial rights, customary and generational claims, and community governance. Aquatic life-work recognizes that sustaining collective life involves maintaining and negotiating relationships to freshwater that have been inherited, contested, and carried forward across generations.

The entanglement between people, water, and the more-than-human entities that exist within river environments make up what Ulrich Oslender defines as the aquatic space: "particular assemblage[s] of spatial relations that results from human entanglements with an aquatic environment characterized by intricate river networks, significant tidal ranges, labyrinthine mangrove swamps and frequent inundations" (Oslender, 2016, p.47). From the aquatic space we gain a vantage point on the continuous negotiations and concessions necessary for making life on the river's edge. Oslender uses aquatic space as a set of specific social relationships among Afro-Colombians through which to explore the political and social movements that have led to

community councils and collective governance along river basins. Oslender explores the relational ontology present in river communities between water, more-than-human inhabitants, and the socio-cultural and political assemblages that emerge through everyday life. His work focuses on the organizing nature of Black rural communities and the significance of everyday practices: the rise and fall of the tide as a means of transportation, the spirituality of emerging from the river and returning to it, the river as family, and the river as home. All of these become the foundation for social, political, and economic organization.

Similar to the disruption of social reproduction described by Mullings (2009), Oslender (2016) demonstrates how family and community relations have been spatially stretched from rural riverscapes to urban environments and reconfigured into an "urban village system," remaining in constant contact with family in the Pacific river basin and sending money home whenever possible (p.116). The reorganization of social reproduction under changing economic conditions is not unique to urban Jamaica, river communities are similarly shaped by processes that stretch the labour of securing life across space. In this way, Oslender's work suggests that the concerns raised by Mullings around social reproduction, migration, and securing are equally relevant within aquatic environments and river communities, leaving an important intervention point for aquatic life-work. While Oslender highlights the socio-cultural and political significance of river communities, he also demonstrates the limits of labour and securing life through formal recognition alone. Prior to the 1991 Colombian Constitution and the subsequent passage of Law 70 of 1993 (commonly referred to as the Black Communities Law), Afro-descendant communities were not constitutionally recognized as a distinct ethnic group with collective rights. Instead, as Oslender explains, Colombia operated through a:

> "racial order in which Black people were both included (as ordinary citizens, participating in the overarching process of *mestizaje*) and simultaneously excluded (as inferior citizens who only marginally participated in national society and were discriminated against)" (p.135).

The passing of the 1991 constitution brought forward two major outcomes for Afro-descendants, the first of which was recognition as a minority ethnic group "worthy of protection," defined in the constitution and state census and a subsequent article that allowed for later legislation to grant collective land rights to rural afro-descendant communities in the pacific region of

Colombia (p.136). This later legislation became the Ley 70 or Law 70, which opened up 50% of the entire pacific coast region to collective land titling (p.136). However, Oslender (2016) questions how far legal recognition and territorial rights progressed the lives of Black Colombians (p.135), of which included a requirement to ensure the conservation and sustainability of the land, "the right to collective land property is thereby directly linked to the obligation of conservation, for which the local communities are now held responsible," ascribing Black communities the role of "guardian," over the forested area (p.163). There were also several territorial omissions when petitioning for collective title, such as mangrove areas, which were considered public, despite many rural Black communities in the pacific coast region living in or around mangroves (p.156). The land titling process itself, required demarcation and boundary-making, which would sometimes put Black and Indigenous groups at odds, attempting to demarcate ownership over previously held "overlapping territorialities" (p.182). The requirement of exclusionary boundaries ignores the customary and social relationships of reciprocity, where previously "resources or land that belong to one group [could] be used by others if the social relations [were] sufficiently close in order to turn strangers into practical members – yet without them acquiring rights" (p.182). The *logic of the river,* as Oslender describes it, did not align with the administrative description of community council's and therefore had a strained application in Black river communities, who consistently challenged the meaning of *tierras colectivas* (collective lands) from their perspective (p.156). The tension here is not solely regarding authority within formal political and administrative systems, but also over the authority to define, represent, and organize collective life on terms that reflect communities' own understandings of their relationships to one another and to the river.

Formal recognition can provide important forms of territorial protection and political representation, but it does not necessarily confer the authority to determine what territory means, how it should be governed, or which relationships constitute legitimate forms of belonging and access. The challenge, then, is not simply whether communities possess recognized rights or protections, but whether they have meaningful authority to self-define, self-represent, and organize the conditions through which collective life is made and that one form of authority can undermine another. Where these forms of authority remain constrained, formal recognition may coexist with continued tensions over access, belonging, governance, and the reproduction of life.

This distinction is particularly relevant within the Jamaican context where no equivalent constitutional protections for Afro-descendant territorial rights exist.

Evans and Reid, Mullings, and Oslender provide the conceptual foundations for aquatic life-work. Evans and Reid demonstrate how resilience has shifted from an ecological concept into a governance rationality that increasingly normalizes vulnerability and transfers responsibility for adaptation onto communities. Mullings reveals how neoliberal restructuring transformed the conditions of social reproduction in Jamaica and highlights the diverse forms of labour through which communities continue to secure life despite the erosion of social supports through her concept of life-work. Mullings critique surrounding the definition and limits of labour complicates resilience narratives that situate communities as being able to compensate for a lack of state investment. Oslender provides a spatial framework for understanding how Afro-descendant communities organize social, political, and economic life through river environments while also revealing the limits of formal recognition and state-led protections. By bringing life-work and aquatic space into conversation, aquatic life-work offers a framework for examining how vulnerability, insecurity, labour, and relations to aquatic environments are negotiated through the everyday practices of securing. The interrelated dimensions of aquatic life-work depend, in part, on communities' ability to exercise collective influence over the conditions of social reproduction; however, that influence is always negotiated among multiple forms of authority that may enable, constrain, or undermine one another.

1.3 Research Participants

This research draws primarily on seven formal participants and several informal participants across two river communities in Saint Mary and Saint Ann. Participants ranged from their mid-twenties to late sixties and seventies and included vendors, fishers, tour guides, photographers, educators, contractors, retired river labourers, and community members whose lives and livelihoods were connected to the river in different ways. While participants occupied diverse social and economic positions, all either worked, frequented, or relied upon one or both of the study rivers and lived in communities situated alongside them. Participants described relationships to the river that combined recreation, livelihood activities, sustenance, and community life. These relationships included fishing, bathing, washing clothes, water fetching, tourism-related work, informal vending, and cultural and social activities. Many participants also

shared generational connections to the river through family histories and childhood experiences. While some participants engaged with the river primarily through livelihood activities, others drew on decades of experience living alongside and working within river environments. To protect anonymity, participants are identified through pseudonyms. Throughout the thesis, individual participants are introduced in greater detail as they illuminate specific dimensions of aquatic life-work. This approach allows participants' stories, experiences, and relationships to the river to emerge within the context of the themes they identified.

Table 1 - Research Participants Overview

Participant	River	Relationship to River	Key Themes
Anna	Rio Nuevo	Vendor, mother, tourism worker	Reproduction, recovery, livelihoods
Clarke	Rio Nuevo / Tiger-Sambo	Elder, fisher, community member	Memory, continuity, generational knowledge/connection
Michael	White River / Blue Hole	River worker, governance participant	Infrastructure, labour, mobility
Joseph	White River	River worker, resident of water lock-off community	Reproduction, water access, disaster preparedness
Marc	White River	Community advocate, river steward	Protection, enclosure, access
Uncle Mike	White River	Elder and long-time river user	Environmental change, river knowledge, intergenerational perspectives, continuity
Samuel	White River	Younger river worker	Youth livelihoods, economic precarity

1.4 Methodology & Methods

Rather than beginning from vulnerability alone, this thesis asks how Afro-descendant communities maintain, nurture, and reproduce relationships with one another, with place, and with more-than-human worlds. Black geographic scholarship describes our current methodological period as an "Age of Repair," arguing that anti-Blackness has troubled relationships with community, kin, ancestors, land, water, and more-than-human entities, but has not destroyed them (Bruno et al., 2024). As they explain, "racial capitalism is not so great and mighty as to truly destroy our connectivity to our many relations. These relations are fraught and perhaps thinned out but not destroyed" (Bruno et al., 2024, p.1). Repair therefore requires more than documenting harm. It requires attending to the relationships and practices through which Black life continues. Repair is "an imagining, building, and discursive practice about Black life that is not defined through harm and/or resistance to it" (Bruno et al., 2024, p.1). Since the

original harms of enslavement were fundamentally anti-relational, severing relationships between people and land, kin, and community, repair must be centered on fostering relations outside the terms of whiteness. This orientation is particularly relevant within the context of research exploring land, water and alternative governance forms. Throughout my fieldwork, participants described relationships to rivers that exceeded economic livelihoods and labour alone. Rivers emerged as spaces of recreation, spirituality, memory, healing, ecological knowledge, and community. Participants described fishing, bathing, herbal medicine, beekeeping, family histories, and stories of river spirits. My own grandmother brought me to a river she frequented as a child and shared stories of river mummas, entities that inhabit Jamaican waterways and continue to shape local understandings of rivers. While this thesis focuses on the labour of securing life through aquatic life-work, reducing river relationships to labour alone risks reproducing a long tradition of understanding Black life primarily through work, extraction, and survival. Therefore, centering Afro-descendant relationships to plants, animals, elements, ancestors, and more-than-human worlds allows us to move beyond frameworks of harm and attend to forms of ecological knowledge and relation that both predate and will likely outlive racial violence. This research is informed by Black Geographies and Caribbean methodological traditions that challenge the separation of academic knowledge from community knowledge. Central to this approach is Walter Rodney's concept of *groundings*, which sought to produce "real knowledge" through engagement with communities (Williams et al., 2022, p.163). *Reasoning*, the primary method of groundings, is a collective process of dialogue, reflection, and knowledge-making through conversation and shared experience. Groundings as a methodology, and reasoning as its method, foreground Caribbean ways of doing, knowing, and being while centering questions of value, responsibility, and collective knowledge production (Williams et al., 2022, p.164). Rooted in "dialogical engagement," this tradition understands knowledge as something created through relationships rather than detached observation (Williams et al., 2022, p.164). Therefore, *groundings* seeks to encourage communities to write and interpret their own histories through dialogue and oral history (Williams et al., 2022, p.164). *Groundings* recognize community members as knowledge holders whose histories, experiences, and interpretations are essential to understanding the world. This thesis approaches river communities through that tradition, understanding research as a collaborative process of documenting, interpreting, and

contributing to Afro-descendant understandings of river life, environmental change, and collective futures.

My fieldwork utilized three main methods of data collection: semi-structured interviews, life-path mapping and participatory mapping. I chose these methods to encourage participants to guide the questions and flow of dialogue.

Semi-structured Interviews

All 7 participants engaged in semi-structured interviews. This method was chosen as a way to encourage participants to tell their own stories, share their understanding of the research themes and identify new themes. Interviews covered the following themes: personal and communal experience leading up to and in the aftermath of Hurricane Melissa; their understanding/definition of key terms such as tallawah and resilience; relationships to land and water; understanding of climate and environmental change; disaster response and recovery; migration; changes to livelihoods, income and roles and responsibilities associated with life and working along the river.

Life-Path Mapping

To understand how relationships and access the rivers changed over time, I utilized life-path mapping. Mapping events along an individual's life path can illuminate the relationship between time, space, memory and socio-ecological change while revealing how environmental change is experienced, remembered, and interpreted across generations (Ellegård, 2018). Participants described their life-paths in relation to the river, from childhood to adulthood, discussing movement towards and away from the river based on different life events: economic opportunity, environmental disaster, displacement and family relocation. Life-path mapping was especially helpful in illuminating the collective continuity dimension of aquatic life-work by demonstrating if and how relationships to rivers have been sustained, strained, lost and passed on. Anna, Clarke, Michael, Uncle Mike and Joseph all participated in the life-path mapping method.

Participatory Mapping

Anna, Clarke and Michael all contributed original maps to this research. I chose participatory mapping as a method to demonstrate their own spatial understandings of the river as a system of relationships and networks. Participatory mapping allows participants to be the authority over what constitutes the river space instead of using maps created outside of the community. These maps emerged from the identities, experiences and spatial understandings of the individuals who live and work alongside the river. This method can create an alternative archive through which to view the riverscape (Hawthorne, 2023). The creation of this archive is a practice in world-making, self-representation and place-making actively produced through relationships, memories and cultural understandings.

1.5 Conclusion & Chapters Overview

Aquatic Life-Work: Making Life on the River's Edge proceeds in four chapters. Following this introduction, methodological overview and literature review, *Chapter 2: Which is the Elder? River Relations and Brackish Beginnings* necessarily situate Afro-descendant river relationships within in a longer history of encounter and re-orientation. The practices of securing life in river environments are complicated by and in many ways are shaped by colonial governance, freshwater enclosure and post-emancipation labor arrangements but are not necessitated by them. Providing an important genealogy for aquatic life-work. *Chapter 3: Aquatic Life-Work* illustrates aquatic life-work in practice through participant maps, interviews, and fieldwork observations, examining the four interconnected dimensions of securing life within river environments while connecting participants' experiences to broader contemporary environmental and socio-political dynamics. The final chapter, concludes this thesis with the implications of aquatic life-work for understanding Afro-descendant river communities, climate adaptation, and the ongoing labour of securing freshwater futures. Together, these chapters argue that aquatic life-work offers an alternative framework for understanding climate adaptation, one that shifts attention from surviving environmental disruption to the continual work of creating, securing, and reproducing collective life within freshwater environments.

2. Which is the Elder? River Relations and Brackish Beginnings

The Path and the River

The path has crossed the river,
The river has crossed the path,
Which is the elder?
We made the path and found the river:
The river is from long ago,
The river is from the Creator of the universe,
Kokon Tano,
Birefia Tano,
River God of the King of Ashanti:
Noble river, noble and gracious one,
When we are about to go to war
We break the news to you.
Ta Kofi, noble one,
Firampon condolences!
condolences!
condolences!
Ta Kofi, noble one,
The drummer of the Talking Drum says
He is kneeling before you.
He prays you, he is about to drum on the Talking Drum.
When he drums, let his drumming be smooth and steady.
Do not let him falter:
I am learning, let me succeed.

Ashanti poem from Ghana, an extract from a drum poem in praise of the river God Tano (Mapanje & White, 1983, p.113)

2.1 The Estuary

This thesis largely develops the concept of aquatic life-work through contemporary ethnographic research and fieldwork, following Hurricane Melissa, however, as revealed through interviews with community members, the practice of survival cannot be traced to a singular event or disaster. Understanding these practices therefore requires looking beyond the singular event to the longer histories through which rivers became spaces of life-making, contestation, and governance. The question that emerges, then, is: how did Jamaican rivers become contested relational spaces through which life was made and secured? The labour of surviving and securing life must be situated within longer histories of community labour, river relations, and cultural crossings that precede colonial capture and have been carried, transformed, and remade through enslavement, colonial governance, and postcolonial spatial reorganization. This chapter traces river relations in Jamaica, and various encounters that have shaped how life was secured under enslavement through the river, how freshwater became a site of post-emancipation struggle, and how early infrastructure projects sought to reorganize existing river relations. By situating Afro-Jamaican river relations within this history, this chapter lays the foundation for understanding the contemporary practices I later theorize as aquatic life-work.

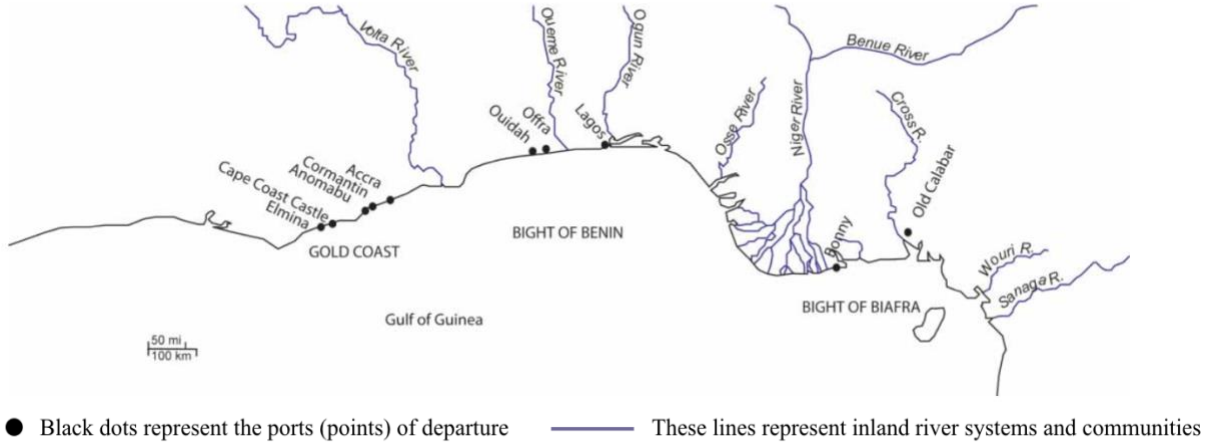
The poem that opens this chapter asks: *The path has crossed the river. The river has crossed the path. Which is the elder? The river or the path?* Invites us to understand rivers and their accompanying social worlds as relational, each coming to shape the other through encounter. Rather than searching for an original point of departure, the poem directs our attention to the reciprocal processes through which rivers and social worlds co-constitute each other. Aquatic life-work emerges from this relational genealogy, not as a practice that begins with the Middle Passage, emancipation, tourism, or contemporary climate change alone, but one that has been continually remade through multiple encounters that have reshaped Afro-descendant relationships with rivers. Reading aquatic life-work through this longer genealogy reveals that the labour of securing life in and through rivers cannot be understood solely as a response to necessity or environmental crisis. It is equally rooted in enduring river relations that preceded the Caribbean path while being continually transformed through it. The *path* is the encounter on the shores of the island and the river emerges as the elder. Aquatic life-work learns from these encounters and those that precede them. It approaches Afro-descendant river worlds not as

products of a single historical moment, but as socio-natural formations constituted through successive encounters. This understanding came into sharper focus during my first visit to Rio Nuevo in January 2026. I was greeted by a nice young man who ushered me towards the riverbank, he was a raft tour operator. I introduced myself and told him a bit about my project. He assured me that I was in the right place and that if I really wanted to understand the river, I first needed to know its story: "Riyah Novah has an interesting story," he said. His comment echoes the historical genealogy that follows in this chapter: the river cannot be understood through its present condition alone. As we continued, the raft operator pointed out different flora, mentioning how Hurricane Melissa had caused extreme flooding - with the river rising up to the bank, reaching the path. Trees had fallen, the typical route of the tour was obstructed by large logs and the river was barren from fish. He explained that the normal color of the river is a lighter, still green-ish hue and depending on the day, in the shallower parts you can see the river to the bottom. He used a large wooden stick to demonstrate how deep the river can get, fluctuating from shallow to as deep as 25 feet at its deepest parts. Before long we had turned a corner and were greeted by the sea. I came to understand this nexus as an *estuary,* a place where the freshwater of the river met the saltwater of the sea: a messy and unique ecological zone with the conditions for "some of the most productive ecosystems on earth, and also, some of the most vulnerable" (Baldwin, 2024, p.212). In these zones the water is constantly in motion driven by the tides of the sea and the currents of the river, resulting in what is understood as *brackish waters*: waters that are saltier than freshwater and less salty than seawater. I was intrigued by this zone, the immediate change in scenery, as though we entered a whole new environment. In the estuary, the solid definitions of what we define as the sea and the river collapse into a swirl of green and blue, creating what appears to be something new, something *brackish.* Baldwin (2024) describes the brackish space as one of "relationality and (re)invention, it conjures a before and an after of the present, a history and a future the opening creates" (p.218). Thinking with Baldwin's conception of brackish waters pulls the themes of this chapter together and illuminates the genealogical journey of aquatic life-work. Freshwater and saltwater are distinct, but are changed with encounter. Long before contemporary discussions of climate adaptation, Afro-descendant communities were already navigating environmental uncertainty, freshwater scarcity, and attempts at enclosure through rivers, wetlands, swamps, and estuaries.

2.2 Situating River Relations

In Afro-diasporic water beliefs, "water is a natural archive" (Stewart, 2025, p.74) representing "flow, communication and shared knowledge," rivers may carry water from one place to another, but they also act as messengers of "energy, prayer, wisdom and spiritual messages" (Manbo Konnen Ki Fe, 2026). So, when Charles Long describes Afro-descendants in the diaspora as "water people," and asks us to "go back into the water," to reorient ourselves, he is calling for a reading of relations that predates the fracture and disruption of enslavement and colonialism (p.60). For the purposes of aquatic life-work, Long's intervention helps us to refuse situating the origins of Afro-Jamaican river relations on the shoreline of Jamaica.

Figure 2 - Major Ports of Departure and Inland River Systems, West Africa



Source. Newman et al. (2013, p. 381).

Newman et al. (2013), challenge one of the dominant spatial assumptions of Atlantic history, arguing that coastal departure points often obscure the inland landscapes, communities, and waterways from which enslaved people came. Figure 2 maps the major ports of departure for those who were forcibly transported to Jamaica, while illustrating that these coastal sites "reveal little about the actual regional origins" of the enslaved (Newman et al., 2013, p. 38). Instead, many originated from inland societies connected through extensive river systems. As Newman et al. note, many had never previously seen either the coast or the port from which they departed. Reading these histories through river basins rather than ports foregrounds aquatic worlds that predate the Atlantic crossing and complicates narratives that begin Afro-Caribbean river relations with slavery. This distinction matters because it unsettles a coastal imaginary of the transatlantic slave trade, it redirects attention to the inland rivers and watersheds that structured

everyday life before enslavement. This map invites us to shift our analytical attention from the coast to the inland landscapes and waterways through which many people lived and moved before forced displacement. Complicating narratives that begin Afro-Caribbean river relations with slavery, instead suggesting that displacement involved the violent *re-orientation* of existing aquatic life worlds rather than their creation. A reading of river relations as completely disconnected from African heritage or starting when the ship reaches the coast, can inadvertently render enslaved Africans as arriving in Jamaica without usable histories of collective life and water relations that helped to *sustain* life. Read alongside Long's, "going back into the water," aquatic life-work requires wading deeper and beyond the historical archive of colonial violence into alternative aquatic origins:

> "For the 11 million and more who survived their involuntary Atlantic journeys, the Simbi, Olokun, and other water spirits were awaiting their arrival, ready to remind them—and they are still here to remind us—to respect, to look back at, to regard the cultural traditions and lifeways that sustain balance and belonging across all modes of matter and spirit" (Stewart, 2025, p.66).

While, the middle passage is often regarded as the site of severing relations, many scholars regard the practices and aquatic understandings of historical West African's as surviving the passage and contributing to the aquatic worlds of Afro-descendants in the Americas, "as it relates to [Afro-descendant] people, water cannot be completely totalized as the domain of destruction because water was also the locus of their reorientation and re-creation" (Stewart, 2025, p.62).

From the time of leaving the riverine and coastal worlds of West Africa, enslaved and freed Afro-descendants began the work of reorientation, developing intimate relations with the aquatic spaces of the island of Jamaica, through "riparian and swampy landscapes to procure food and seclude themselves away from those who meant them harm … across generations, they transmitted knowledge of how, when, and where to use water spaces and locate water supplies to their descendants" (Fontanilla, 2023, p.26). In the Jamaican context, the swamp land as an aquatic space often acts as a defensive site used for protection but also a site of commoning and the making of collective life. Rivers, estuaries, swamps, and wetlands were environments where afro-descendant communities could facilitate movement, conceal runaways, complicate military campaigns, and create openings through which alternative political possibilities emerged. As

Sheller describes, “Commoning took place at the juncture of built and natural environments (woods, rivers, swamps)... wherever runaways and resistors established counter practices of mobile survival” (Sheller, 2023, p.37). These aquatic environments offered more than physical refuge, they created opportunities through which Afro-descendant communities could move, gather, evade capture, and develop practices of securing beyond direct colonial supervision, “camouflaged by forests and swamps” (Ferdinand 2022, p.149). As imperial powers competed to establish authority, rivers, swamps, and the island's interior became increasingly important to movement, refuge, communication, and collective survival. Rather than waiting for the plantation order to stabilize before carving out spaces of autonomy, Afro-descendant communities made use of imperial uncertainty to extend practices of life-making that had already begun through aquatic relations. Many accounts of enslaved autonomy begin by acknowledging provision grounds as a form of carved-out space, but enslaved communities were also making life through the fissures and constraints of colonial rule in ways that exceeded these recognized forms of autonomy. Rivers, swamps, mangroves, estuaries, and the ecological knowledge required to navigate them formed an infrastructure of securing, with many enslaved communities seeking refuge and sustenance in swampy environments (either out of necessity or want) where Europeans couldn’t or wouldn’t access: *“Unlike Europeans who remained fearful of malarial mangroves (the name is another African loanword—in this case from Wolof), Africans gravitated to them as familiar and productive environments, supplying firewood, fish, and shellfish.”* (Morgan et al., 2022, p.108)

2.3 Making Life Beyond the Plantation

For the rest of the 16th century into the 17th, the British began the work of *creating a British Jamaica,* through political and economic institutions, granting land rights to settlers, enforcing religion, introducing the English language and the solidification of plantation economies (Morgan, 2023). The governance system established by enslavers sought to prevent escape, regulate free Black populations, suppress rebellion, and limit spiritual practices associated with Obeah and communal gathering, often conducted along rivers, springs, and other freshwater environments (Long, 1774).

As Rodriques argues, colonial churches functioned as “extensions of plantation power,” that worked to isolate enslaved Africans from their own religious traditions and systems of

meaning (2025, p.246). Across the British Caribbean, slaveowners "enacted legislation that curtailed the religious activities of enslaved Africans," while colonial authorities increasingly deployed the term "Obeah" as a catchall category for spiritual and healing practices deemed threatening to colonial authority (Rodriques, 2025, p.247). The regulation of rivers therefore extended beyond concerns of resource management or plantation production; river regulation was also a mechanism through which the colonial state sought to control spiritual and cultural expression. These early spatial arrangements established patterns of freshwater governance, enclosure, and unequal access that would continue to shape relationships to rivers and freshwater resources. Enslavers claimed the right to allow and gatekeep access to these spaces, in many ways as Fontanilla argues, ensuring an enslaved population that remained drastically close to starvation and dehydration (Fontanilla, 2023). Water resources were enclosed through physical barriers such as fences and stone walls, with limited access granted to enslaved people considered to be on the "inside," while "juridical laws prohibited unfettered use" for those on the outside (Fontanilla, 2023, p.22-23). The significance of this is less about the governance regime of the British and more about the cycles of engineered vulnerability that co-exist with natural disasters. Often producing communities living at the margins of survival long before hurricanes, droughts, or floods occurred. When ecological events inevitably occurred, enslaved populations often experienced the worst impacts, while simultaneously bearing the burden of rebuilding infrastructure, restoring plantations, and securing the survival of their own communities. Enslaved populations in the 1680s, "did not have the ability to seek safety in the same way as freemen. The damage and destruction wrought by powerful storms took a heavy toll [on enslaved populations], who were ill fed in the best of times, let alone in the wake of hurricanes" (P. J. Morgan et al., 2022, p. 197). Drought was particularly devastating and illuminating for both the enslaved and enslavers, revealing the consequences of enclosure, scarcity, and vulnerability that continue to shape disaster experiences across the Caribbean today. Enslaved communities, already living with restricted access to freshwater, were forced to contend with crop failure, famine, dehydration, and intensified labour demands. Many enslaved individuals in times of drought were responsible for supplying enslavers with water that they themselves could not access:

> "It cost the daily labour of near twenty slaves to supply me and my family with water from ponds eight miles distant," reported the governor of the English Leeward Islands in

> April 1689. Fresh water acquisition, purification, and storage became a preoccupation for all classes of people, but, with the plantation's transformation of landscapes, the impact of water scarcity fell most heavily on the enslaved themselves" (P. J. Morgan et al., 2022, p. 221).

Drought because of both natural and socio-economic factors meant freshwater was simultaneously abundant and scarce. Water existed throughout the landscape, yet access to it was unevenly distributed through systems of enclosure and forced labour. The vulnerability experienced by enslaved communities was therefore not simply environmental; it was actively produced through the spatial organization of plantation society.

Despite enclosure and scarcity, rivers remained essential sites through which life was sustained, relationships were maintained, and alternative social worlds were created. Afro-Jamaican communities maintained relationships to freshwater environments that extended far beyond material survival. Rivers were spaces through which communities reproduced social, cultural, spiritual, and political life. They provided water for everyday subsistence, but they also served as sites of gathering, healing, mourning, celebration, and communal belonging. Historical West African communities, particularly those of Ashanti, Yoruba, and Igbo backgrounds, brought with them indigenous beliefs in water deities and the sacredness of water (Sparkes, 2021). In Jamaica, and specifically Saint Mary these traditions became intertwined with local religious and folk practices where African-derived spiritual traditions, including Obeah, remains especially prominent (Davis, 2013). One manifestation of these traditions was the River Mumma (sometimes referred to as Mami Wata), a female freshwater spirit believed to inhabit rivers, springs, and other waterways. Sparkes (2021) notes that many believe River Mummas resided in "every fountainhead of an inexhaustible and considerable stream of water in Jamaica." (p.2). The River Mumma is a healer and protector, with the ability to "increase the curative powers of the water" (Sparkes, 2021, p.2), while also being understood as a "mysterious and powerful water creature, an exacting and punitive force toward those who violate taboos, display antisocial characteristics such as greed and selfishness, and intrude upon natural habitats" (Stewart, 2025, p.66). River Mumma traditions reflected efforts to understand and navigate ecological uncertainty. In some communities, the connection remains, as described by Stewart (2025), "Adult children of farmers in the parishes of Hanover and Saint Mary have shared with field

researchers narratives of their parents' encounters with mermaids or "myamaids," farmers would rely on river mummas for both spiritual and material guidance, "deepen[ing] their regard for the water, the soil, the ancestors buried within the earth, the crops they cultivated, and the herbs and plants that supplied medicinal support for their health and wellness. The mermaids taught them what to avoid, how to cohabitate with nature, and how to accept their identities as nature beings themselves" (Stewart, 2025, p.66). In some communities, it was understood that "the waters were made for them, and if you catch one the river would dry up" (Sparkes, 2021, p.28). The River Mumma, therefore, "represented yet another attempt to deal with the reality of the circumstances within which Jamaican people had to operate … the legend of the River Mumma was not constructed outside of context; she had been spotted in the communities where her presence might make a difference" (Sparkes, 2021, p.28). River Mumma demonstrates that relationships to rivers extended beyond labour, subsistence, and economic activity into spiritual and communal life. River Mumma traditions reveal how some communities made sense of ecological and climatic vulnerability. Rather than understanding floods, droughts, and other environmental changes solely as climatic events, River Mumma provided a framework through which communities could interpret, negotiate, and respond to the uncertainties of life alongside rivers.

Water was necessary for cooking, cleaning, childbirth, and agricultural work, but it was also central to practices surrounding death and remembrance. Rivers were woven into the intimate rhythms of birth, care, labour, mourning, and community life (Fontanilla, 2023, pp. 60–61). As Fontanilla notes, the allowance of Sundays created opportunities for enslaved communities to cultivate provision grounds, fish, visit family, gather with friends, attend dances, and travel beyond the immediate confines of plantation labour (p.91). Along the Great River watershed, a free woman of colour known as Reid hosted large dances several times each year that attracted enslaved people from across the region. Participants travelled throughout the night to attend gatherings where they shared food, music, conversation, and community before returning home in time for market day (pp.95-95). Fontanilla notes that the dances provided opportunities for enslaved people to enjoy "feasts of yams, plantains, rum and water and to supplement diets that were otherwise nutritionally deficient, making the gatherings important spaces of both sustenance and social life" (p.98). While these gatherings undoubtedly contributed to physical survival, reducing them to questions of subsistence alone would overlook their broader significance. The dances transformed the riverscape into a social and political commons.

They provided opportunities for exchange, relationship-building, and collective life beyond the immediate reach of plantation authority, "the river was a space where people of African descent could engage in conversation, political debate, and the exchange of ideas, without the absolute reference point being the predicament of slavery or the omnipresence of white supremacy" (pp.98-99).

Fontanilla identifies Yam Spirit dances, celebrations of harvest but also as occasions for renewing social bonds, testing political alliances, and collectively addressing misfortune within the community. They provided opportunities for people to eat, gather, strengthen relationships, and collectively recharge from the physical and emotional drain of plantation life. In this sense, the dances revealed that securing life involved more than physical survival alone. The gatherings themselves became a form of community infrastructure, creating the social, emotional, and material support necessary to endure the insecurities of slavery. Even as colonial authorities sought to regulate freshwater environments and restrict access to them, rivers remained crucial spaces through which Afro-Jamaican communities sustained themselves materially, socially, and culturally. It is precisely because rivers functioned as sites of securing that they continued to attract colonial attention and regulation into the post-emancipation period where the abolition of forced labour was no longer the official organizing mechanism for British governance.

2.4 Re-Ordering the River

Emancipation did not resolve the tensions surrounding freshwater access in Jamaica. Instead struggles over rivers, water, and aquatic spaces were reconfigured through new forms of governance, property relations, and environmental enclosure. As Fontanilla argues, "Immediate contestation over the meaning of Emancipation vis-à-vis environmental enclosure, especially of freshwater reserves, established structural trends, processes, and pressures that continued to shape Black social life in Jamaica over the rest of the nineteenth century" (Fontanilla, 2023, p. 130). By 1807, the importation and sale of Africans was formally abolished by the British parliament, however slavery continued for another 25 years (Morgan, 2023b). Abolition did not grant automatic freedoms to the enslaved, that would not legally happen until 1834 when the British government enacted emancipation of enslaved individuals (Morgan, 2023b). However, emancipation from slavery did not necessitate freedom of movement and unfettered access to land and water use. Changes to the actual legal code were minimal and mostly encompassed

"governing murder, master-worker relations and landlord-tenant relations" (Fontanilla, 2023, p.135). The organizing principle shifted from property via persons to private property regimes, where the planter class reserved the exclusive right to allow or deny use to land and waters. The shifting labour dynamics between the enslaver and previously enslaved, meant Afro-Jamaican's now had access to reproduce their own labour, altering the customary relationship and informal understanding over use of water and land. Under slavery, enslavers exercised near total control over labour while maintaining some interest in the reproduction of enslaved life as commodity which meant concessions around some customary practices and negotiated uses of land and water such as provision grounds, Sunday markets, and river gatherings. Newly freed people could negotiate wages, withdraw their labour and begin to seek livelihoods beyond the plantation (Fontanilla, 2023). Rather than expanding access to freshwater resources, many former enslavers sought to retain control over rivers, ponds, reservoirs, and wetlands, without an *obligation* to ensure Black subsistence. In this context, practices that had once existed through custom, negotiation, or informal use increasingly became subject to enclosure, surveillance, and criminalization. Access to freshwater, land, tenure, and other essential resources increasingly became tools through which labour could be regulated and dependency reproduced.

Planters/Enslavers who were increasingly shifting into *landowners* attempted to maintain the forced labour regime by charging high rents on their lands for "anyone who was not an employee" (Besson, 2021, p.163). Using rivers and ponds for freshwater required legal title over both sides of the water, a privilege often only granted to large planters and the crown (Fontanilla, 2023). These tensions were intensified by recurring drought conditions during the first decades after emancipation. Rivers and streams that had once flowed year-round disappeared entirely, while estates located upriver redirected increasingly limited supplies towards plantation production (Fontanilla, 2023, pp. 224–226). Fontanilla (2023) notes that, "sugar estates upriver stressed the flow and volume of watercourses by funneling whatever water survived the drought to themselves, sapping supplies from those downriver" (p.155). As rivers dried, local Black populations became increasingly dependent upon planter-controlled wells, tanks, and reservoirs. Plantation rivers were increasingly engineered to sustain sugar production. Provision grounds, which were the primary sites through which enslaved and later emancipated Afro-Jamaicans secured food, were typically located inland away from freshwater sources (P. J. Morgan et al., 2022). Provision grounds typically relied on rain water rather than river irrigation,

which meant during droughts Afro-Jamaican's were especially vulnerable and reliant on planter-owned wells (P. J. Morgan et al., 2022). The unequal allocation of freshwater was therefore embedded within the plantation landscape itself, where water infrastructure reproduced plantation production rather than Black subsistence.

Figure 3 - Illustration of Trinity Estate, Saint Mary, Jamaica



Source. Hakewill (1825)

The estate plan (Figure 3) records the river as an element of plantation production, situating mills, estate buildings, and cultivated lands in relation to freshwater. Read alongside evidence that provision grounds remained largely dependent on rainfall (Morgan et al., 2022), the plan reveals an uneven organization of water within the plantation landscape. Freshwater infrastructure was incorporated into the sugar production of the estate, while the spaces through which enslaved communities secured subsistence remained largely outside these systems. The significance of the map therefore lies not simply in the presence of the river, but in what it reveals about the colonial allocation of water: rivers were organized to reproduce plantation production rather than to support Black subsistence, even in times of crisis. Planters in drier

regions increasingly transformed freshwater scarcity into a mechanism of anti-Black governance, taking advantage of freshwater scarcity and manipulating drought conditions to their advantage in labour negotiations and disputes – aligning labour agreements with access to freshwater, where access to plantation owned water resources could be granted in exchange for work arrangements that often-included unpaid labour and low wages (Fontanilla, 2023). During one severe drought a man named Joe Martin stole a bucket of water from a planter-controlled pond and was subsequently sentenced to imprisonment. To avoid this punishment, he accepted a public whipping instead (Fontanilla, 2023). His experience illustrates the contradictions of emancipation. Rather than dismantling the spatial logics of plantation governance, emancipation frequently introduced new legal forms, where activities associated with everyday survival became grounds for punishment, eviction, indebtedness, and legal intervention. Rivers, ponds, reservoirs, and streams were more precariously accessed for drinking, bathing, fishing, washing, or irrigation and dependent on individuals possessing legal title to the surrounding land. By the mid-nineteenth century, these patterns were increasingly embedded within formal governance structures. Legislation establishing public water companies and regulating water reserves disproportionately targeted activities performed by ordinary Afro-Jamaicans; bathing, washing clothes, cleaning animal hides, draining water, and other customary uses of rivers and ponds became subject to regulation and punishment (Fontanilla, 2023, pp.164-165). Activities that had long formed part of everyday life in and around rivers were increasingly reframed as violations of property and public order. Therefore, Afro-Jamaican's "responded by doing whatever they could to acquire land of their own, either by purchase or through informal occupation ("squatting"), so that they would not be vulnerable to planter manipulation" (Besson, 2021, p.163). Creating a "*familyland*," land tenure structure "which could not be sold but was for the use of all the descendants of those who originally acquired it." (Besson, 2021, p.163). In doing so, Afro-Jamaican's subverted private property regimes in order to secure collective and continual ownership for newly freed Afro-Jamaican's and those in generations to come. These "free villages," are some of most long-lasting strategies of the post-emancipation period which "still have residents descended from those who originally established them." These villages provided access to rivers and freshwater under a regime of increasing enclosure. Through collective land practices, Afro-Jamaican communities secured conditions for maintaining relationships to rivers and freshwater that extended across generations despite the continued

expansion of private property regimes. Afro-Jamaican communities were not simply seeking inclusion within colonial property regimes, but developing alternative forms of collective tenure through which relationships to land, freshwater, and kin could be secured across generations. Familyland and free villages therefore represent more than strategies of survival; they reveal enduring forms of Afro-Jamaican institution-building that challenged the individualized logics of British private property while sustaining collective continuity under conditions of increasing enclosure.

2.5 Conclusion

Aquatic life-work, did not emerge in response to contemporary climate risks alone. It has been taking place within these spaces for generations. Enslaved communities and freed Afro-Jamaican's used the limited time and space available to them to "develop new practices of labor cooperation, reminiscent of—yet different from—African models of work. Time to talk across the fences to a passing neighbor or to cross the fences themselves and fish in the adjacent rivers. Time to mark the work tempo with old songs, to learn rhythm while working, and to enjoy both the rhythm and the work. Time to create new songs when the old ones faded away. Time to take care of the needs of the family, to meet a mate, to teach children how to climb a tree" (Trouillot, 2002, p.203). Despite repeated attempts at regulation and enclosure, communities continued to secure water, food, sociality, cultural continuity, and collective futures through aquatic environments. The contemporary riverscape inherits these histories. The raft tour guide made it clear that to understand today's relation I must understand the history of the river. The tensions between community securing and state governance that characterize Jamaica's freshwater today are not new phenomena but the latest manifestation of a much longer struggle over the meaning, use, and governance of the river. Understanding these histories provides the foundation for examining how contemporary river communities continue to secure life amid ecological change, tourism development, freshwater scarcity, and competing demands on the river.

3. Aquatic Life-Work

I entered this research with a clear vision of what I thought was the story of river communities in Jamaica; a post-Hurricane Melissa island mired by disaster, vulnerability, and loss. I was ready to write a thesis about resilience. However, as I entered the field, it became clear that the story is not one of resilience versus vulnerability or the ability to overcome versus not. The story is about what happens in between – the work of communities making life in and outside of various conditions with the intention of preserving relationships to the river in the present and for future generations.

The framing through which I originally understood this thesis echoed my own critiques towards resilience as a condition; what happens when we focus heavily on the destination and not the path that brought us there? A focus on the path, asks us to "go back into the water," to understand the histories, relations and systems that have shaped present-day circumstances. Chapter 2 demonstrated how Jamaican rivers became contested relational spaces formed through long histories of encounter and re-orientation. In this way, the previous chapter traced the genealogy of Afro-Jamaican river relations as a basis for aquatic life-work, as not completely *defined* by vulnerability but still shaped by significant encounters: the middle passage, enslavement, colonialism, droughts, hurricanes and water scarcity, as both natural and engineered phenomena. Chapter 3, *Aquatic Life-Work* details through contemporary ethnographic fieldwork the interconnected dimensions of aquatic life-work.

Aquatic life-work refers to the labour undertaken by Afro-descendant river communities to secure life in and through aquatic spaces and maintain river relations through time and across generations. Extending beyond formal employment arrangements and encompassing the practices of reproduction, maintaining infrastructure, protection and collective continuity that sustain river-community relationships. Through semi-structured and walking interviews, participant mapping and participant observation in the wake of Hurricane Melissa, we are introduced to aquatic life-work through the experiences of Anna, Michael, Joseph, Marc, Clarke, Uncle Mike and Samuel.

3.1 Participants and Field Sites

Fieldwork was conducted primarily at Rio Nuevo and White River/Blue Hole, where I worked alongside community members whose lives and livelihoods are deeply connected to these rivers. The following participants appear throughout this chapter, each illuminating different dimensions of aquatic life-work:

Anna

Anna is a mother and a business owner with her partner Andre, together they have 3 children. They engage in tourism work at the estuary of Rio Nuevo in Saint Mary, relying primarily on the customers from the adjacent rafting businesses nearby. While tending to their vending spot, Anna is also known to organize beach clean-ups at the adjacent beach. She was introduced to me by the rafter at Rio Nuevo. Much of my time at the river was spent talking with Anna while she tended to customers and while Andre went fishing for the meals they sell.

Michael

Michael is a photographer at Blue Hole/White River, he is of Maroon descent and has lived and travelled all around the Eastern parishes of Jamaica. He is very close with his family and attributes a lot of his success and well-being to his parents, especially his mother who he calls a "warrior," as she's known in their community. Michaels loves the beauty of working on the river, especially since he grew up around Rio Grande.

Joseph

Joseph owns and runs his own water tank repair business in a community situated directly in between White River and Rio Nuevo. He grew up in both Saint Mary and Kingston and came back to his community to live in his family home. In the rivers Joseph grew up in, he had to worry about mermaids and crocodiles. He loves going to Blue Hole/White River. I spent a lot of time exploring different rivers with Joseph and he helped to introduce me to other research participants

Marc

Marc is a vendor at Blue Hole/White River. He enjoys working along the river because it brings “good energy” and provides “a place for Black people to gather.” Marc is very community oriented and dedicated to maintaining community spaces. I didn’t spend that much time with Marc but learned a lot about the socio-political aspects of Blue Hole and its importance in the community.

Clarke

Clarke is an elder who no longer lives in Saint Mary but grew up there. I was connected with Clarke through family. Clarke describes himself as a “bushman,” and throughout our time together would gather various plants and herbs to make us tea. He also keeps bees in the city and brought me honey. I was lucky enough to meet some of Clarke’s family members including his granddaughter and visit rivers that he frequented as a younger person. He grew up near springs/streams that branch off of the main Rio Nuevo waterway.

Uncle Mike

Uncle Mike is also an elder who lives in a community near the Rio Nuevo. He used to be a teacher and now maintains a community store with his wife. I didn’t spend a lot of time with Uncle Mike but he did illuminate important generational differences as it relates to river relations among older and younger people.

Samuel

Samuel is a younger participant and vendor at Blue Hole/White River, who grew up going to Blue Hole/White River with his family. He has experienced significant hardships and was kind enough to share his story and his relationship to the river as a result.

Taken together, participants' interviews, observations, and maps reveal that aquatic life-work is not a singular practice but a constellation of interconnected forms of labour through which river relations are made and maintained. While these practices overlap in everyday life, four recurring dimensions emerged across the fieldwork: reproduction, infrastructure, protection, and collective

continuity. These dimensions are presented separately for analytical purposes, but in practice they are mutually constitutive. The sections that follow examine each of these dimensions in turn. Participant maps are introduced alongside interviews and observations where they illuminate the spatial organization of aquatic life-work, revealing how participants understand and inhabit river relations on their own terms.

3.2 Reproduction

Reproduction forms the first of these dimensions. In this research, I examine reproduction as the labour of securing the conditions necessary for life in the present through the river. This includes the use of rivers to obtain food, water, livelihoods, care, and other necessities of everyday life. While river-based reproduction often becomes especially important when formal systems are inaccessible, insufficient, or failing, reproduction also reflects longstanding relationships through which communities sustain themselves materially and socially. A focus on reproduction therefore "facilitates an understanding of not only the ways that people secure their daily and long term means of existence within capitalist systems, but also how they maintain the social structures and relations that reproduce a given social order" (Mullings, 2009, p. 175). Building on Mullings' conception of social reproduction, I examine how communities surrounding the river reproduce the material conditions necessary for life. Specifically, I explore reproduction through four interconnected dimensions: the material conditions of life (food, water, housing, and livelihoods); access to the river and river-based activities; the entanglement of reproduction and water governance that shape those conditions of access; and the social relations through which life is sustained. Reproduction is foundational to aquatic life-work as it establishes the conditions upon which the other dimensions depend, introducing us to the labour required to protect access, build and maintain infrastructure and pass on river relations to the next generation. Communities cannot protect rivers they cannot access, maintain infrastructures they cannot sustain, or transmit relations across generations when material conditions (food, water, housing and work) are not reproduced.

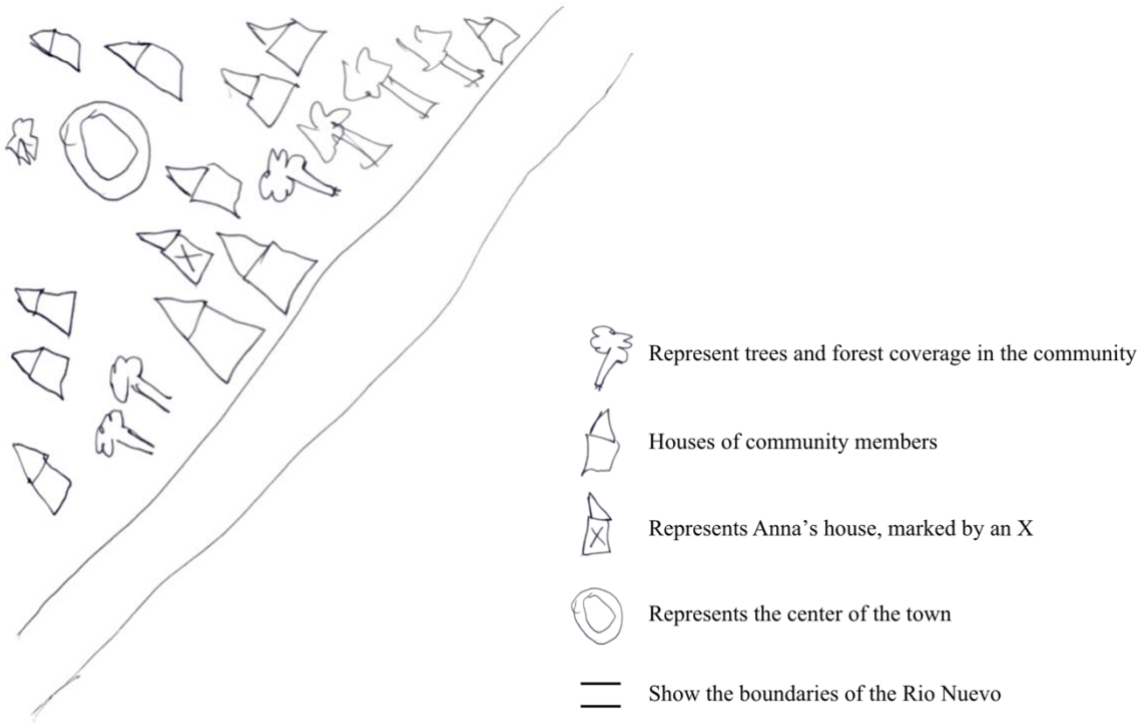
> It was a regular day of the week; I opened my phone to a message from one of my research participants, the message was a file with no words or context. I opened the message expecting to see a picture of her daughters or her husband fishing early on the

> river. In our last conversation she was telling me how she was getting into the sport of fishing on the river, simply because she enjoyed it and her husband who had grown up fishing was teaching her and her kids. Instead, I opened the message to see a dark, grainy video, of which I could make out the bright orange hue of flames, the shadow of the vendor stall and the reflection of the moon on the river water. A man's voice shouted from across the river that someone had set the vendor stall of my research participant and her family ablaze. My research participant, who I'll call Anna – had recently decided to develop her vendor business on the river full time after Hurricane Melissa destroyed her crops and killed all of her chickens. Anna cooks and prepares drinks, while telling visitors about the river. Her husband fishes for the meals they sell and shows visitors who travel down the river on the rafts different fishing techniques. "It's better fi mi an mi family dan fi work fi someone else." Anna's home was also damaged during the hurricane when a cotton tree fell on top of it. One of the first things Anna said to me was "the river's very important."

Anna's experience demonstrates reproduction as a key dimension of aquatic life-work. Following Hurricane Melissa, the means through which she had previously secured life for her family was severely disrupted. Her crops were destroyed, her chickens killed, and her home damaged. The river became one avenue through which she could reproduce the material conditions necessary for survival and, potentially, improve them. Through vending, tourism work, fishing, and other river-based activities, Anna sought not only to recover from the storm but to generate income, support her children, and work toward longer-term goals such as building a concrete home, so that in the event of another storm her home would be ready. Her quote about the river being very important, further emphasizes this point because as she explains, if she didn't have river work to fall back on, she's not sure what she would have done after Melissa. She even suggested potentially moving to find another river, if this one was not available or accessible. This is significant because it reveals the river as both a place for work, but also as a means of reproducing life itself. Faced with the loss of crops, livestock, and housing, Anna did not imagine moving toward another formal labour market or economic opportunity. Instead, she imagined moving toward another river. As part of my interviews, I asked participants to draw the river from their own perspective. The following maps emerged from the identities, experiences, and spatial understandings of the individuals who live and work

alongside the river, revealing how participants understand the river on their own terms, foregrounding the places, relationships, and features they deem significant rather than assuming they view the river through scarcity, disaster, or vulnerability. This distinction is important, as Hawthorne (2024) cautions against the overwhelming tendency to represent Black geographies primarily through pain, deprivation, and oppression (p.3). “Black geographic scholarship is more than an inventory of dead and dying Black communities,” (p.3) the participant maps presented here offer an alternative archive, an archive generated from within the community’s own epistemological and spatial frameworks rather than through colonial, state, academic, or extractive modes of knowledge production.

Figure 4 - Anna's Map of Rio Nuevo, Saint Mary, Jamaica (2026)



Beginning with Anna’s map of Rio Nuevo (Figure 4), Anna was hesitant to draw a map as she didn’t really think that was something she would be good at; drawing wasn’t really her thing. However, she agreed and seemed to enjoy the exercise. The two lines show the river, and the surrounding area is her community, covered in trees and homes. While drawing, she

mentioned that “everyone” (represented by the houses pictured on the map) in her community uses the Rio Nuevo for their daily needs, saying that she thinks “probably 90% use the river to bathe.” Anna walks up and down the river to get to and from her vendor spot at the estuary. What’s notable to me about Anna’s map is less about what she included and more about what she didn’t. She didn’t include much in terms of roads, infrastructure, or businesses, although physically there are major roadways present in the area as the river sits adjacent a large gas station and other businesses. The river itself becomes the main organizing feature, which is a bit different from maps that place roads, infrastructure, or even homes as the central theme.

The river, for Anna, occupies one connected ecosystem or community. Her home and her neighbours are not separate from the river space, even though physical infrastructure exists between them. In this map, the community and the river are inseparable. Having lived in the community since birth on family land, the river appeared less as a resource and more as part of the everyday landscape through which life unfolds. This aligns closely with what she shared in her interview around river-work, the river is not represented as something outside of the community, but as something embedded within daily life. For Anna and the surrounding community, which faces water lock-offs, scarce economic opportunities outside of tourism related work – the river acts as a key site of reproduction to secure life in the present day.

Following Hurricane Melissa, Anna turned to the river to generate income, support her family, and work toward rebuilding her home. Her experience demonstrates how the river functions as a means through which life can be reproduced when other forms of livelihood become precarious or unavailable, however, this reproduction is dependent upon continued access to the river itself. The ability to secure food, water, income, and other necessities through aquatic spaces is shaped by broader conditions of access, infrastructure, and environmental change. Reproduction therefore involves more than the labour of sustaining life; it also depends upon the continued availability of the resources and relationships through which that labour takes place. This concern emerged repeatedly in participant accounts. Joseph, who works as a water tank repair person and lives in a community situated between Rio Nuevo and White River noted that workers employed in formal sectors were often afforded greater mobility, access, and support during emergencies and overall because their labour was recognized as essential. To him, informal workers, including many of those who work on and around the river were not

granted the same privileges despite performing labour that remained critical to community well-being or personal subsistence. These distinctions become especially significant during periods of disruption, when access to water, employment, and mobility can determine how effectively communities are able to reproduce everyday life.

One of the most significant pressures facing the White River and Rio Nuevo is the growing demand placed upon freshwater systems. Rivers such as the Rio Nuevo and White River are expected to simultaneously support domestic consumption, tourism, livelihoods, ecological functions, and municipal water infrastructure. Yet the infrastructure responsible for distributing water has struggled to keep pace with these competing demands. As a result, communities situated directly alongside major freshwater systems frequently experience water insecurity despite their proximity to the resource itself. Joseph mentioned to me that his community which relies on pumped water from White River, experiences regular planned water shut-offs due to the lack of available water flow or unplanned shut-offs due to debris and water pump failures. The state-owned National Water Commission (NWC) extracts freshwater from Saint Mary's rivers and springs, including the Rio Nuevo and White River, to supply municipal centres and northern tourism corridors ((National Water Commission Jamaica, 2023). During a 2025 townhall meeting, residents from several Saint Mary communities who rely on White River expressed frustration over deteriorating infrastructure and unreliable water access. One NWC representative explained that "water is being rotated between communities, when one community is dry, water is flowing in another community," while residents questioned both the reliability and cost of a service, they described as increasingly inconsistent (Television Jamaica, 2025). Frequent pump failures at the White River facility have further reduced production capacity, in some cases to less than 40 percent, resulting in strict water rationing schedules and prolonged service interruptions.

Water insecurity is experienced unevenly across Jamaica, rural and low-income communities often rely on rainwater harvesting, water-fetching from rivers, standpipes, and private water trucking because of inadequate infrastructure or the inability to afford consistent piped water access (Wright, 2026). As Wright (2026) notes, water trucks can cost as much as J$25,000 ($220-$250 CAD) per load, nearly five times the standard National Water Commission rate. Access to water is therefore shaped not only by geography, but also by economic capacity.

Importantly, the issue is not simply one of volume. As discussed in the previous chapter, scarcity has historically been produced through uneven access and distribution rather than absolute absence. Further, solutions to water insecurity are often organized through measurement, allocation, technological efficiency, and the commercialization of water services, drawing "water further into the circuit of capital" (Moore, 2023, p. 1). Accumulation strategies often conflict with the conditions necessary for social reproduction and ecological sustainability. The pressures facing communities along the White River and Rio Nuevo reflect this tension. While rural communities are increasingly expected to adapt to water insecurity and environmental change, they often possess limited influence over the broader political and economic decisions shaping freshwater systems. Jamaica's National Water Resources Master Plan (2022), identifies tourism as a major and growing consumer of freshwater, noting that "tourism continues to grow and is, therefore, increasingly adding to local and seasonal pressures on water supply systems" (p.107). Hotels alone account for "approximately 6 MCM/year or 88.9%" of tourism-related freshwater consumption, with projected demand expected to increase substantially over the coming decades (p.117). Though, only consuming an estimated 1% nationally of freshwater resources, resorts and hotels are often geographically concentrated in key coastal areas (ie. Negril, Montego Bay, Ocho Rios), making the demand higher in localized contexts (Mitchell, 2016). Water for these concentrated tourist centers typically comes from nearby inland rivers that are already struggling to keep up with local water demands, "resulting in a spatial separation of supply and demand that favours the tourists versus the local population." (Litvin & Fyffe, 2008, p.9). While such projections are intended to support long-term water management, they also reveal how freshwater is increasingly organized around competing economic demands. In contexts, such as Joseph's and Anna's who live in inland, river communities but are still located relatively close to tourism concentrations, the result is uneven and inconsistent access to water that has implications beyond daily use, "such challenges stymie social and economic well-being at the micro, meso and macro levels such as livelihood, social and community activities." (Caribbean Development Bank, 2024, p.3).

This dynamic is particularly interesting when considered alongside the experiences of river workers at White River. Vendors along White River, and concentrated heavily at the estaury, experience this daily as 'unregulated' river work intensifies:

> "Concerns over the "explosion" of informal activities at the White River attraction just outside Ocho Rios, St Ann, has prompted tourism officials to conduct a maximum capacity study aimed at reducing the load on the river. Currently, there are least 10 different operations on the White River. But only three are licensed with the River Rafting Authority and the Jamaica Tourist Board, according to state agency Tourism Product Development Company Limited, TPDCo, in its initial assessment" (The Gleaner, 2023).

While planning documents frame freshwater through demand projections, infrastructure, and allocation, these competing pressures are experienced materially by those whose livelihoods depend upon the river itself. Along the White River estuary, river-based tourism has expanded significantly over the last two decades. What was once primarily a fishing and boating area has increasingly become organized around tourism services, with rafting operators, tour guides, food vendors, craftspeople, and informal tourism workers relying on the river for tourism work as a primary source of income. The Tourism Product Development Company (TPDCo) has acknowledged these pressures, noting that while the White River has provided livelihoods for fisherfolk for generations, "increased demand for tours for cruise ship and other visitors has fuelled informal commercial activity on the White River" (The Gleaner, 2023). In response, TPDCo has proposed conducting a carrying-capacity study aimed at "reducing the load on the river," although the organization noted that such a study would not necessarily result in the formalization of existing rafting and vending operations (The Gleaner, 2023). The concern, therefore, is not simply the number of people utilizing the river, but the growing pressure placed upon a finite aquatic space expected to support an increasing number of economic and domestic activities.

Figure 5 - Photograph of White River, Saint Mary, Jamaica



Source. Connolly (2026)

When I visited the White River estuary at the beginning of my fieldwork, these pressures were immediately visible. The area was heavily congested with tourism activity. Visitors could scarcely walk a few steps without being approached by vendors offering rafting tours, boat excursions, food, crafts, or other tourism-related services. I do not describe this scene to suggest there are "too many vendors" or to reinforce narratives that frame informal economic activity as a problem. Rather, the density of activity reveals a river under pressure, much like the state itself, vendors are attempting to secure livelihoods within an economy increasingly dependent upon tourism as one of the few viable pathways for economic mobility. The remnants of an estuary driven by fisherfolk remains, however now driven by the need to adapt to a tourist-based economy. The issue is therefore not the presence of vendors themselves, but what their increasing numbers reveal about the broader political economy of the riverscape. Communities have long depended on the river for livelihoods, however, now under increasingly constrained circumstances driven the increasing commodification of the aquatic space, competing demands on freshwater and the governance arrangements that regulate access. Demonstrating the labour that takes place within constrained political economies that often undermine the reproduction of life. Despite this, communities continue to reproduce life through river relations that exceed strictly economic means.

While participants frequently described the river as a means of securing income, they also emphasized its importance in reproducing the social relationships through which community life is sustained. Reproduction within aquatic life-work therefore extends beyond livelihood alone. It also includes the creation of spaces where people find belonging, guidance, opportunity, and pathways into adulthood. Samuel, a younger river worker at Blue Hole, described turning to the river following the murder of his mother. He recalled feeling lost and uncertain about his future, particularly given the limited opportunities available to young men in the surrounding community. The river, however, provided more than a place to grieve. Having visited the river with his family as a child, it became a space where he found community, belonging, and eventually work. Samuel explained that before young people began finding employment at the river, violence within the community was more common and many youths had few alternatives. In his view, the governance structure and employment opportunities created around the river offered a different path. The significance of Samuel's account therefore lies not only in personal recovery but in the ways the river reproduces the economic *and* social conditions necessary for life. Marc echoes Samuel's sentiments, describing the ways that, "the river takes the youths off the road, they come here young and then find work when they grow up." The river, in this sense, acts as a space of socialization, opportunity, and guidance, where younger generations learn skills, build relationships, and find pathways into adulthood.

Michael who also started working at Blue Hole/White River as a young man admitted he wasn't looking specifically to do photography, "Well, not to do photography, really. But, you know, to find a job. Because I was doing security work before. I was working with [omitted] for three months. And I was a tour guide also before doing security work. You know? And then find myself doing photography." Michael enjoys the atmosphere, the "vibes," "peace," and "creativity," that comes with working alongside the river. Michael, Marc and Samuel, demonstrate that reproduction encompasses a broader set of social, economic and relational conditions through which life can be sustained on the river.

Reproduction within aquatic life-work remains an ongoing negotiation rather than a guaranteed outcome. Many participants turned toward the river because other pathways for securing life had become precarious, inaccessible, or insufficient. The river functions as a site through which people can generate income, access water, build community, and create

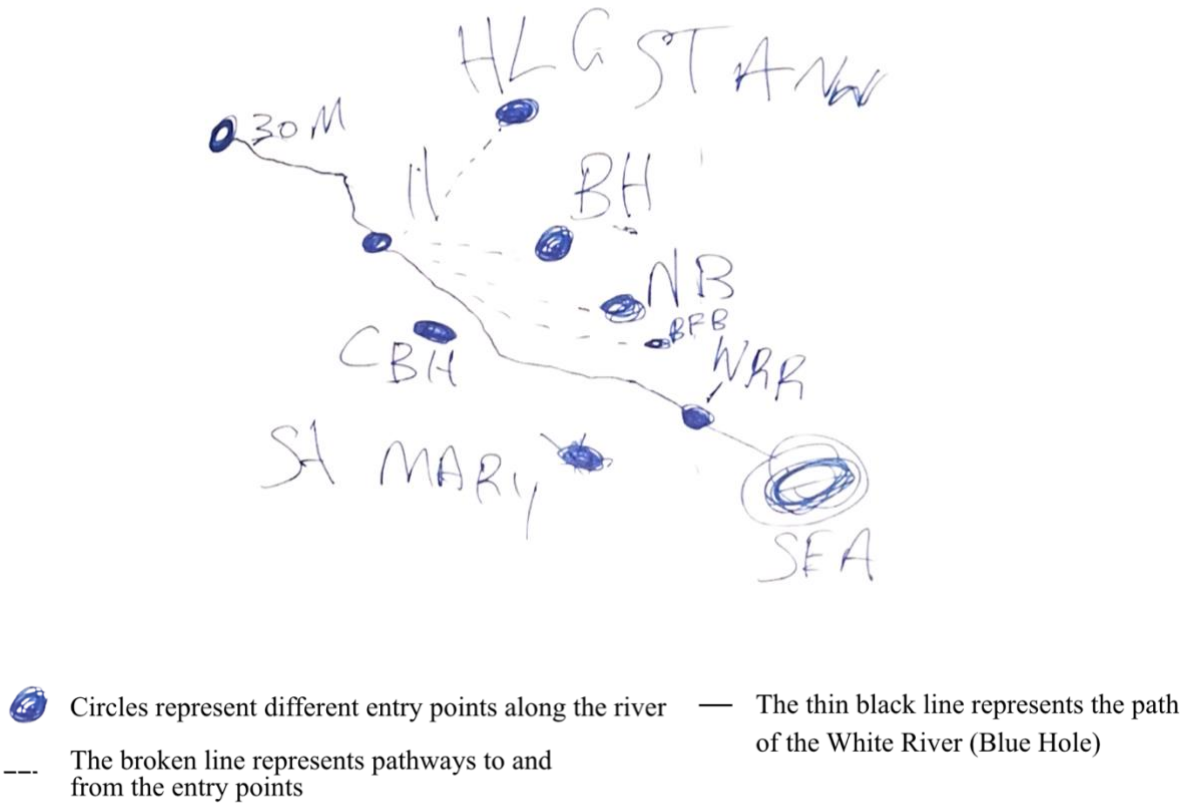
opportunities otherwise unavailable to them. However, because of competing demands on the aquatic space, the capacity of rivers to perform this reproductive function cannot be taken for granted. While rivers remain important sites of life-making, they do not exist outside broader political and economic structures. Reproduction within aquatic life-work reveals not only the importance of rivers to community survival, but also the consequences of living in a society where access to formal systems of labour, water, and economic security remains unevenly distributed. Across participant accounts, the river emerged as a space through which people secured work, income, community, and opportunity when other pathways became unavailable or uncertain. Anna increasingly turned toward the river as a means of supporting her family and rebuilding her livelihood, while Joseph's experiences with water lock-offs and freshwater scarcity highlighted the importance of reliable access to water itself. Samuel found belonging and employment following the loss of his mother, Michael moved between occupations before finding work at the river, and Marc described how river-based employment created alternatives for younger generations who might otherwise struggle to find opportunities. Together, these accounts demonstrate that reproduction within aquatic life-work extends beyond economic survival alone. It encompasses the material and social conditions through which communities secure livelihood, access essential resources, build relationships, and create possibilities for collective life. The ability to rely upon the river for reproduction cannot be taken for granted. Access to the river remains contingent upon broader political, economic, and environmental conditions, making reproduction an ongoing process of negotiation.

3.3 Infrastructure

Within aquatic life-work, infrastructure entails the building and maintenance of the physical, social, ecological, cultural, and governance systems that make river life possible. Aquatic life-work reveals two interconnected dimensions of infrastructure. The first is *relational* infrastructure, referring to the organizational arrangements through which people, places, rules, mobility, and responsibilities are coordinated to sustain collective river life. The second is *cultural* infrastructure, referring to the practices, rituals, and forms of collective preparation that sustain the emotional, social, and cultural conditions through which communities continue to navigate disruption.

Commonly, infrastructure has been articulated as the physical structures that drive urban environments such as "systems of highways, pipes, wires or cables," viewed as "making the city productive, reproducing it, and positioning its residents, territories, and resources in specific ensembles where the energies of individuals can be most efficiently deployed and accounted for" (Simone, 2004, p.407). However, as AbdouMaliq Simone (2021) argues in *People as Infrastructure*, infrastructure extends beyond the physical systems of cities and communities to the technical mechanics of everyday securing. This entails paying attention to the "continuous recombination of people's experiences and practices" to extend the meaning of infrastructure and define these practices of coordination as legitimate infrastructures of survival. Simone explores the ways people *become* infrastructure as a means to make up for gaps in governance. Throughout my fieldwork, infrastructure appeared as resource-sharing, rules-based participation and the community maintenance required to sustain the riverscape. Infrastructure, therefore, is not limited to physical structures, but also includes the collective coordination of life-making activities - the norms, and forms of coordination that allow communities to continue living and working alongside the river. This dimension of aquatic life-work emerged most clearly through Michael's interview and map of Blue Hole/White River, and highlights a form of *relational* infrastructure that refers to the organizational arrangements through which people, places, material objects, rules, and responsibilities are coordinated to secure collective life. Relational infrastructure focuses less on the people or relationships in general and more on the configuration of those relationships along the river. Certain actors function as the connective tissue of relational infrastructure, linking otherwise dispersed people, places, practices, and responsibilities into a coordinated system capable of sustaining collective river life.

Figure 6 - Michael's Map of the Blue Hole/White River Infrastructure (2026)



Michael's map demonstrates this through visualizing the labour structure, mobility, and tenure arrangements of Blue Hole as a socio-economic assemblage. His map is organized around entrances, routes, and workspaces, illustrating the ways people move through and make use of the river. Different entrances correspond to different working arrangements, communities, and forms of access. Dashed lines indicate pathways and movement between different locations, while the changing elevations along the river corridor are demonstrated through "30 M." Unlike Anna's map, which collapses community and ecology into a single spatial diagram, Michael's map demonstrates how labour is structured across the landscape, maintained through ongoing coordination, stewardship, and collective effort. The map provides a visual representation of the connective mechanics that make river life possible. Economic relationships emerge because of the river's connective capacity rather than replacing it. The economic structure is then shaped by the connective logic of the river through profit-sharing arrangements, independent work

contracts, and community governance. Workers contribute a portion of their earnings back to the community, particularly to support elders who continue to occupy positions at the river entrances. In exchange, workers gain access to tourism revenue and the flexibility to determine their own schedules and work arrangements (ie. photographer, tour guide, vendor etc.). Michael explained that anyone wishing to work on the river must abide by a set of community rules, publicly displayed on a signboard, including expectations around the treatment of visitors such as 'no harassment of women or guests,' and 'respectful conduct,':

> "The boss man get the people which is good for us because you know when you get the people and people come to his business place then you give the workers [the opportunity] to give them service to the guests taking them up [the river], show them around, make sure them safe and when they go back down those people pay and give them a tip for their service yeah and that's how them survive."

For Michael, river-work relies upon an ecosystem of reciprocity and coordination in order to function and endure. The tourism economy is not sustained by individual labour alone but through a broader infrastructure of relationships, responsibilities, and shared obligations. For the vendors at Blue Hole, there is an understanding that by working together the community benefits rather than just the individual. This is clear through the organization of the river, the owner or "boss," provides the physical infrastructure such as entrance stalls, washrooms, lockers, stairways, signs, marketing, employs the gate workers who sell tickets that attract the tourists to Blue Hole. The elders are around to tell people about the river from their memory, some sell trinkets, some just hang out by the river, some hand out waivers. Their presence highlights that infrastructure extends beyond physical maintenance and economic activity to include the social relationships and forms of knowledge that help sustain the river as a community space. The youths benefit from this infrastructure by gaining access to tourism revenue, younger workers can choose a variety of mediums to participate such as photography, rafting, tour guides, diving and vendor work. The tour guides bring the tourists up and down the river, providing customers to the photographers who can then sell photo packages without ever having to leave the top of the cascade. The financial proceeds are then shared among the community and other workers. In this way, each worker has a tangible interest in maintaining the river through clean-up and repair.

Repair in this context extends beyond the physical maintenance and sustenance of the river to the ethics of care for the people who work and live alongside it, especially in time of disaster and crisis.

Following Hurricane Melissa, the river experienced some damage and it was community members and workers who were among the first to return, clear debris, repair damaged areas, and prepare the site for continued use while also repairing and maintaining their own communities:

> "When I came back the day after the hurricane the place was really messy, next day everybody start coming together and we do day by the activities by cleaning the river, them haffie dive, those who can dive - dive and tek the sticks out of the water so it's still safe, it was a lot of work trust me yeah and we did it by coming together and do it because we need a job, so we have to come together and do it."

For Michael, the community occupies a necessary position in ensuring that river work can continue because workers collectively undertake the labour required to keep it accessible, safe, and functional. Both Michael and Marc noted that government support post-Melissa was limited; clean up and recovery depended largely upon the willingness and capacity of community members to organize the cleanup themselves. For Marc, this collective response reflects a broader ethic that governs relationships on the river. When I asked Marc to describe the river and working on the river, he said, "community is the ethos of the river," emphasizing that the river can only function when people work together to maintain it. Infrastructure, in this sense, is not simply a collection of physical structures or organizational arrangements but a shared commitment to collective responsibility. The labour of maintaining the river, supporting workers, and responding to disruption depends upon social relationships that encourage cooperation.

Infrastructure also extends beyond the river work itself, to the community members who rely on the river for daily living, especially in times of disaster and crisis. As Joseph explained:

> "Whenever there is a hurricane, the preparation isn't really easy, mentally nah really easy - as much as you can batten down your house, you're never really sure - there can always be a tree or a light post drop pon your house, somewhere crucial."

For Joseph, disaster or hurricane preparation involved both physical and emotional labour, producing a collective shift in attention and responsibility:

> "I was in a position to not get much damage [but] it's a different experience, it changes the day, the mindset for the day, and just fe witness how the sky look like, its a natural process but it looks unnatural. Any plans for the day become about the hurricane. Being outside, you see other people a try a get something done, have people a look aluminum zinc, we try help somebody and prepare themself, zinc roof, put block pon the roof, take down them solar, put boards pon dem window, park them car in a safe place and just prepare - get them family together."

I found this notion of a mindset shift particularly important, as the entire day becomes organized around the collective work of preparation. Joseph's description illustrates that infrastructure is not simply material but organizational. The approaching hurricane reorganizes social time, redistributes responsibilities, mobilizes neighbours, and coordinates collective action. Infrastructure operates not only through physical preparations such as securing roofs or moving vehicles, but through the temporary reconfiguration of everyday life around collective readiness. Communities also organize the emotional and social conditions. Joseph explained that when he was younger, he often thought hurricanes were fun. Similar sentiments emerged elsewhere. I asked both Joseph and Anna about the hurricane "pre-ritual" where young people gather before a storm, listening to music, dancing in the rain, cooking food, and spending time with neighbours and family, often on the riverside. Anna no longer participates but laughed as she explained that she used to. She also described hurricanes as being "fun" when she was younger. Joseph fondly reflected, "For me, mi love the rain, it relax me, mi love the weather." Both Anna and Joseph has uneven experiences and challenges post-Hurricane Melissa. Joseph experienced relatively limited damage, while Anna, who is raising three children, experienced much greater impacts – yet living relatively close to one another. Both pointed toward forms of gathering, celebration, and anticipation that occur before the storm arrives. Alongside boarding windows, securing roofs, moving vehicles, and checking on neighbours, communities also prepare themselves mentally and emotionally for *disruption*. Communities do not wait until after disaster to begin

the work of recovery and securing life. The work begins before the storm arrives and not solely in physical preparation. Before the storm arrives, people gather not only to prepare physically, but to prepare themselves socially and emotionally for what may follow. Music, food, laughter, and time spent with family, friends, and neighbours create a temporary reprieve before a period of heightened uncertainty or instability. In this sense, the gathering functions as a socio-cultural buffer, strengthening the relationships and emotional reserves that communities will draw upon during and after the storm. Similar to the dances hosted by Reid along the Great River, these gatherings provide a replenishing environment through which people temporarily restore themselves socially, culturally and physically in order to renew the capacities required for the ongoing labour of securing life. While the conditions differ significantly, both practices reveal the importance of the collective in sustaining communities through periods of hardship and uncertainty. These are the social and emotional infrastructures through which communities collectively prepare themselves for what may come.

When I asked Anna how she thought Jamaicans were able to overcome hardships such as hurricanes, she responded bluntly, “All now, me nah over.” When I followed up and asked whether she thought people were overcoming, she replied, “Well, no, we must start it as well. I don’t think people are overcoming.” Even reflecting on previous storms her response was that “some of the hurricanes... people are overcoming. But this one is startling.” So even prior to Hurricane Melissa, people had not fully overcome before another hurricane arrived. Anna’s comments complicate dominant understandings of resilience that assume recovery follows disturbance. For her, a hurricane is not a singular event followed by a period of recovery, but one moment within an ongoing process of navigating disruption. Climatic events become layered onto existing social, economic, and environmental pressures, making it difficult to identify a singular moment of recovery or return. This distinction is important. Anna's account demonstrates why infrastructure cannot be understood as an emergency response. Disruption is ongoing, the organizational, relational, and cultural arrangements that support collective life must themselves be continuously maintained. Infrastructure is therefore an ongoing condition of aquatic life-work rather than a temporary response to crisis. The preparations described by Joseph and the cultural practices surrounding hurricanes are not simply mechanisms for bouncing back after disaster. They constitute forms of cultural infrastructure that help

communities continue functioning amid uncertainty, loss, and disruption. The work of securing life therefore persists regardless of whether recovery is underway or complete. Communities continue to prepare, gather, support one another, and maintain the relationships necessary for collective life even when they are not yet "over" what has happened.

Infrastructure within aquatic life-work refers to the systems, relationships, and forms of coordination that make life on the river possible. While these infrastructures become especially visible during moments of disruption, they are not created by crisis itself. Rather, they are built and maintained through the ongoing labour of community members who organize, govern, care for, and sustain the riverscape, as a form of life-making and securing. Aquatic life-work identifies two interrelated forms of infrastructure. Relational infrastructure refers to the deliberate organization of mobility, tenure, governance, connective geographies, and the coordination of connective actors (elders, youths, land owners, workers, guides) and material arrangements along the river. Cultural infrastructure refers to the shared practices, rituals, and collective forms of preparation through which communities sustain the emotional, social, and cultural capacities necessary to continue life amid ongoing uncertainty.

3.4 Protection

"They try to take away any place where Black people can come together freely."

Across interviews, participants repeatedly described threats to the river not simply as environmental issues but as threats to access, community autonomy, and the future of the river itself. Protection therefore emerged as the third significant component of aquatic life-work. Protection as a key element of aquatic life-work was particularly evident at Blue Hole/White River and less pronounced at Rio Nuevo. Whereas reproduction concerns reproducing the material conditions necessary to secure life and infrastructure concerns the coordination of people, relationships and resources that sustain life, *protection* concerns defending the political conditions that allow communities to continue securing life through the river. Protection involves maintaining the relationships, infrastructures, and access arrangements that allow river life to continue despite ongoing pressures from development, regulation, and privatization. Through everyday practices of maintenance, assertions of community sovereignty, land tenure and legal

recognition, Afro-Jamaican river communities actively work to protect the river as an aquatic space. Here, community sovereignty does not refer to state sovereignty, but to the community's authority to collectively determine how the river is accessed, maintained, and cared for. Therefore, protection as a key component of aquatic life-work asks: *who has the authority to organize life around the river?*

After Hurricane Melissa, there was a sense of vulnerability among the workers at Blue Hole, to them the river was at its most vulnerable. There was damage to surrounding trees, debris in the waters, steps and stairs had been completely torn apart and shops where vendors would sell trinkets and woodware were also damaged. Alongside repairing the river for returned use, there was an urgency to repair the river to comply with safety and health regulations. Marc explained that at Blue Hole, he and others felt that government actors and regulatory agencies were constantly looking for gaps in infrastructure and governance that could justify intervention in the river space. Typically, using interventions such as safety, conservation, public health – which alone seem valid and reasonable. In the context of growing land and water capture across the island of Jamaica, Marc perceived these interventions as potential pathways through which access could be reduced, controlled, or transformed. As he put it, "They try to take away any place where Black people can come together freely." For Marc, he felt that any place owned, operated and governed by Black Jamaican's was under the threat of being taken away. But this sentiment extended beyond the river as just a physical space, for Marc the river is not only a significant life-making space within the community, but also one of the few places where Black Jamaican's can collectively determine how life is organized. Protecting access to the river, therefore is also about protecting the spaces through which community authority is enacted. As Marc put it, "the river is an organizing place for Black people," emphasizing its importance to remain in the community. To further this point, Marc shared the example of another river in Saint Ann: *Little Dunn's River*, the sister cascade to the Dunn's River Commercial Park (National Government owned). Little Dunn's had been community governed and occupied for several decades by local Rastafarians (Gilchrist, 2025). "Rastafarians carved out the pathways leading to the sea and river in the 1960s, unmasking gems and pruning the spaces into what is enjoyed today," many in the Saint Ann Rasta community lived along the river and beach area before land adjacent to the rivers and falls was acquired by the Urban Development Corporation

(UDC) (Gilchrist, 2025). The UDC cited lack of management, maintenance and safety hazards, eventually erecting fences and posting security guards around the area (Gilchrist, 2025). Little Dunn's River is currently the subject of a court case led by the Jamaica Beach Birthright Environmental Movement (JaBBEM) against the UDC to stop the fencing off and enclosure of one of the only free natural river, waterfall and beach areas left in and around Ocho Rios (Duncan & Lugg, 2026). Marc shares this example as one of many that explain why vendors at White River/Blue Hole are very aware of the conditions under which the Blue Hole operates and their commitment to maintenance as a key component of protection. Participants frequently described community maintenance not only as stewardship but as a strategy for securing continued access. Marc explained that "the community works together to maintain the areaarea, we don't lose it," identifying maintenance as a form of protection amongst vendors and community members at White River/Blue Hole. Otherwise, the "Government tries to come and find loopholes, any excuse to take over the river ... is it unsafe? Unsanitary? Not well managed?" For Marc, the threat was not hypothetical but a continual pressure shaping how the community understood its relationship to the river. Clean-ups, repairs, safety practices, and everyday governance reduce the opportunities through which outside authorities can justify intervention. Participants understood maintenance as a way of minimizing the opportunity for "loopholes" that might otherwise be used to remove community authority over the river. Protection is one of the only components of aquatic life-work that is necessitated solely by vulnerability. Rather than support the maintenance and safety of river spaces *with* the community, community authority is displaced due to gaps in safety and governance, further emphasizing Marc's sentiments around capture as opposed to collaborative or sovereign governance. While communities worked to recover from Hurricane Melissa, the loss of tourism revenue, and widespread damage to the riverscape, they were simultaneously expected to repair, maintain, and safeguard the very conditions through which the river remained accessible. The labour of maintenance also has its limits. Communities can reduce opportunities for intervention, but they cannot resolve the broader legal and political structures through which community authority over the river continues to be contested. Maintenance alone cannot prevent capture. Protecting river futures also requires navigating the legal and customary arrangements through which community authority is recognized, contested, and defended.

In some instances, securing river futures also requires formal recognition. Organizations such as JaBBEM demonstrate this dynamic through their efforts to protect public access to beaches, rivers, and other commons using the courts and existing legal frameworks. The Prescription Act of 1882, is one of the few existing legal mechanisms through which Jamaicans can defend customary access to beaches, waterways, and adjacent lands. Under Sections 2 and 4 of the Prescription Act, uninterrupted public use of beaches, pathways, watercourses, fishing grounds, and other aquatic spaces for a period of twenty years establishes an "absolute and indefeasible right" of access (The Prescription Act, 1882).

However, in practice, this is not always guaranteed. Certain legislation, such as the National Reconstruction and Resilience Authority Act (NaRRA), passed in May 2026 to accelerate recovery after Hurricane Melissa, was designed to "serve as the central coordinating body for post-hurricane reconstruction, aimed at eliminating bureaucracy, reducing fragmentation, and preventing project delays" (Patterson, 2023). The Act is framed as embedding "stronger standards of resilience, climate adaptation, fiscal discipline and institutional accountability" (Office of the Prime Minister, Government of Jamaica, 2026). Yet NaRRA also provides sweeping reconstruction powers that can interrupt long-standing relationships to place. Reconstruction projects under NaRRA do not have to resolve claims based on long-term public use or assess prescriptive rights during project approvals, limiting the practical protections offered by the Prescription Act if communities are relocated or displaced, creating "a pipeline of efficient displacement and dispossession" (Taylor, 2026).

These concerns are amplified by the ways reconstruction and relocation has already been linked to recovery post-Hurricane Melissa. Most recently, in Parottee, Saint Elizabeth, the parish where Hurricane Melissa made landfall, residents who could not afford to rebuild their homes and businesses have been told they will be relocated and provided container homes. Prime Minister Holness stated, "We have already indicated to the people of Parottee that the area has to be relocated and we will do it in such a way that their livelihood will be preserved, the value of their asset will be preserved, but most importantly their dignity will be preserved," with NaRRA serving as the coordinating body for the relocation (K. Williams, 2026). However, many residents are not interested in relocating and would prefer to remain where they have lived for generations and rebuild their homes and communities. As one resident explained, "The majority

of us live off the sea and the pond in Parottee. We do tourism and we catch fish, so we really don't want to relocate" (K. Williams, 2026). Another resident, a fisherman since 1975, similarly stated, "We don't want to relocate from Parottee... Since the hurricane I lost my boat and house, but if I relocate from here, I won't have any income. Here we will survive with our daily hustling" (K. Williams, 2026). The experiences of Parottee residents illustrate a dimension of protection that focusing solely on White River/Blue Hole or Rio Nuevo would obscure. While the material impacts of Hurricane Melissa varied across communities, the devastation in Saint Elizabeth demonstrates that reconstruction and intervention are, at times, necessary. The question is therefore not whether communities should receive support, but how recovery is imagined and implemented. NaRRA and the logic of repair assumes that communities can be protected through relocation. However, the reluctance of many Parottee residents to relocate reflects more than an attachment to place. It suggests a lack of confidence that state-led reconstruction can recreate the social, ecological, and economic conditions through which life has long been secured. While the government framed relocation as a means of preserving livelihoods, residents instead emphasized their relationships to the sea, the pond, and their "daily hustling" through which those livelihoods are made possible. The issue, then is not solely about relocation, but whether relocation and reconstruction can sustain the relationships to the ponds and sea through which communities retain authority over how life is secured.

This tension extends beyond post-disaster recovery. As Rachel Goffe (2024) argues, Afro-Jamaican communities have long secured life through forms of tenure and occupation that exceed liberal understandings of property. The authority to care for and govern aquatic spaces is negotiated through an uneasy relationship between formal recognition, customary tenure, and private property. While post-emancipation access to land emerged through a variety of formal and informal arrangements, many river communities today continue to rely upon family land and customary tenure rather than individualized title alone. As Marc noted, people who "own" land around the river have been able to build and develop because of the river revenue, which in turn "deters them from selling" because they can afford not to. Rather than functioning solely for individual accumulation, some articulation of private land helps to sustain collective access to the river:

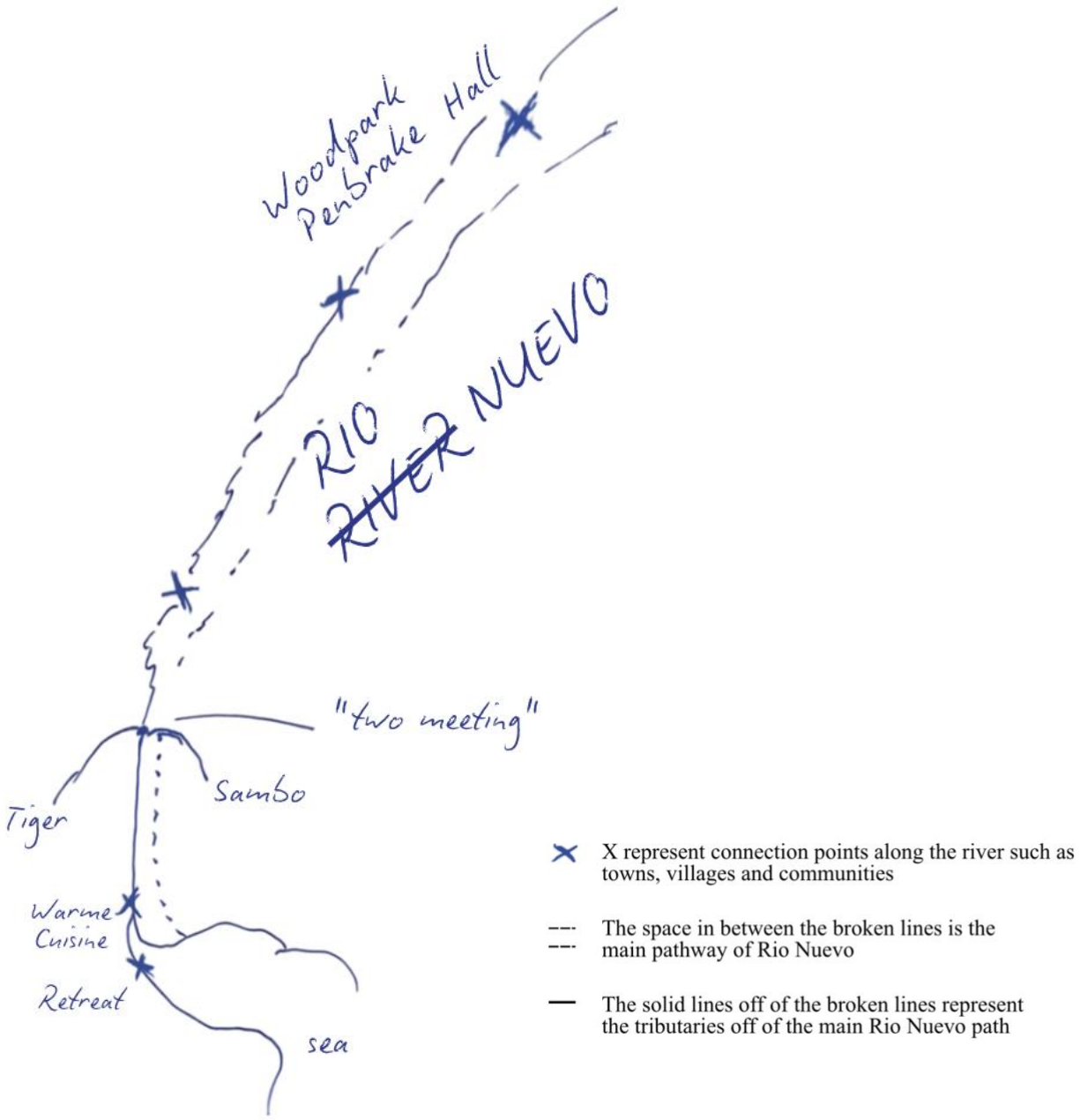
> "family land makes a way for collective rooted- ness in the Earth in the midst of monopolization, allowing those who live elsewhere to return to a place where they belong, sometimes materialized through reaping fruit from trees, or returning to build a house. By allowing for both a right of return and a claim to place in perpetuity, the logic of family land (if not always its reality) exemplifies the simultaneity of mobility and rootedness" (Goffe, 2024, p.21).

However, as Goffe (2024) notes, family land is itself increasingly under pressure. As families grow, relationships become more geographically dispersed, and economic pressures intensify, the ability of family land to sustain collective access becomes increasingly uncertain. Protection therefore cannot be understood as a settled achievement. Rather, it remains an ongoing negotiation through which communities seek to preserve access and authority despite the growing limits of customary tenure alone.

3.5 Collective Continuity

Romy Opperman argues that dominant approaches to intergenerational justice are limited by their grounding in liberal political philosophy, which tends to privilege "an anthropocentric, individualistic, primarily 'free' self as universal" and therefore produces a detached understanding of human and community life that overlooks the generational and more-than-human relationships through which societies are sustained (Opperman, 2022, p.62). As a result, obligations to future generations are often obscured, rather than sustained through the intergenerational and terrestrial relationships that make collective life possible. Opperman argues for a reconceptualization of humans as *generational-terrestrial beings*, emphasizing that individuals exist not in isolation but within ongoing relationships that extend across generations and environments (Opperman, 2022, p.62). The final dimension of aquatic life-work shares a similar approach. Collective continuity aligns with the idea of generational-terrestrial beings by examining how river relations are sustained, taught, and passed on across generations as a necessary condition of community life. Representing the broader purpose toward which the other dimensions of aquatic life-work are oriented.

Figure 7 - Clarke's Map of Rio Nuevo, Saint Mary, Jamaica (2026)



Clarke's map (Figure 7) differs markedly from conventional representations of Rio Nuevo. Like Anna's map, Clarke did not begin with roads, property boundaries, or built infrastructure, he began with the place where the Tiger and Sambo rivers meet. Each of the communities represented on the map are connected through the river itself, making the people in those places connected as well. His map feels both geographic and mnemonic, documenting not

only where places are located but how they are remembered and experienced. Clarke foregrounds waterways, communities, and river junctions. The map charts neither ownership nor development, but relations: between rivers, communities and memories. As he spoke and drew his map, he demonstrated these connections by putting the bottoms of his palms together to demonstrate where the Tiger and Sambo rivers met, referring to it as the "two meeting" place. The Tiger and Sambo rivers clearly held significance for him and he readily returned to them throughout our conversation. These areas were not located on the 'official,' map and when we later drove to find them, we relied solely on his navigation and memory of the landscape.

Figure 8 - Photograph of "Two-Meeting Place" Rio Nuevo, Saint Mary, Jamaica



Source. Connolly (2026)

By the time I visited the Tiger-Sambo meeting place, the area was quiet as he described, yet through Clarke's stories, the riverscape became populated with memories, relationships, and forms of life that were no longer immediately visible. His map combined with his interview transformed the river into an archive of inherited knowledge: learning to swim from his father, learning to fish from his cousin, carrying baskets, collecting water, and working along the riverbanks. Clarke's story was the one most told through a lens of grief, he was very excited to be able to share a piece of his history but his excitement was tempered by the fact that his own children and grandchildren, did not grow up around this river. He did not get to teach them to

fish or to swim, to watch the river "come down," or collect stones. For him, "so much of the river has changed." On one of our returns to the Tiger-Sambo meeting place we were accompanied by his granddaughter and the river became a site of transmission once again. Clarke pointed to where communities had once stood, where he had learned to swim, where families collected water, and where the rivers joined. Memory was not simply being recalled; it was being transferred. Clarke's map and story do not organize Rio Nuevo through ownership or territory but through *encounters* and *relations*. This relational orientation echoes a much longer Black geographic tradition that understands community not through property, but through lived relationships with land and water. Such relations are not inherited automatically; they must be cultivated, practiced, and passed between generations. Collective continuity therefore depends on the ongoing work of teaching these relations rather than assuming they persist on their own. Uncle Mike had a similar sentiment towards the generational differences in how youths and elders relate to the river, describing how the relationship differs because "their language nah the same as wi language, they go out a road trouble people." For Uncle Mike, a shift from community-based work and relationality with rivers, waters, lands, community members were largely due to limited economic opportunities which left youths without stability, as parents and grandparents migrated and work opportunities became scarce. *'Out a road to make trouble,'* describes violent, criminal or troublesome activity. For both Uncle Mike and Clarke, there is a mourning or grief over the particular set of relationships that the river once sustained. Collective continuity therefore extends beyond the persistence of individual communities. It is about ensuring that the relationships, knowledges, and possibilities that sustain life remain available to those who come after.

My own path to the river began with my grandmother, who grew up fishing for shrimp, washing clothes, fetching water, and cooking alongside friends and family. When we returned to Jamaica, it was her knowledge that enabled me to recognize these rivers not as unfamiliar research sites but as places to which I was already connected. Her familiarity with local customs, language, and river life shaped every stage of the research. This was perhaps the final expression of collective continuity revealed through the research process itself. The research was not simply documenting aquatic life-work; it was participating in it. The relationships that made this project possible had not begun with me. They were inherited through generations of interaction with

rivers, communities, and aquatic spaces, making this research not only an account of aquatic life-work, but one small continuation of it. In this sense, aquatic life-work is not only reproduced through fishing, swimming, washing, labour, and stewardship. It is also reproduced through stories, memories, and relationships that make future engagements with the river possible. The research is not only *about* aquatic life-work, it **is** aquatic life-work. Collective continuity, then, is not simply the transmission of knowledge about rivers; it is the continuation of the relationships that make river life possible.

3.6 Conclusion

Across participants, the river emerges as a connector between livelihoods, governance, memory, and future generations. Reproduction, infrastructure, protection and collective continuity demonstrate that aquatic life-work is not a singular form of labour but a relational process through which Afro-descendant river communities create, maintain, protect, and carry forward the conditions necessary for collective life. While each dimension foregrounds a different aspect of this work, they are deeply interconnected. Reproduction depends on securing the material conditions necessary for life. Both Anna's and Samuel's experiences illustrate the continual labour of reproducing the material conditions of life through food, water, work, and care.

Infrastructure concerns the intentional coordination of the social, cultural, and governance systems that make this reproduction possible. Michael, along with Joseph, demonstrate that infrastructure extends beyond the physical to encompass the norms and coordination of relationships that sustain river relations, as demonstrated by Michael's map of Blue Hole river infrastructure.

Protection involves the practices through which communities maintain access to rivers through creative tenure arrangements, legal recognition, and sustained relations to place. Marc reminds us that protection within aquatic life-work requires more than legal acknowledgement, it requires the understanding of the river as a space of community autonomy and expression of Black sovereignty to preserve the authority of making life on the river's edge.

Finally, collective continuity extends this labour across generations through storytelling, teaching, memory, and the transmission of responsibilities to both ancestors and descendants. Both Clarke and Uncle Mike, alongside Samuel's reflections on the future, show that this labour ultimately exceeds the present. Clarke valued returning to the river not only for himself but as a relation he could pass on to his granddaughter. Uncle Mike, mourned the relationships elders and youths had when they relied on land and water-based relations, as a driver of a common language amongst the community.

Therefore, aquatic life-work depends upon the ability to carry river relations across generations. This continuity does not require communities to preserve the same livelihoods, occupations, or ways of using the river unchanged. Instead, as demonstrated by the community members introduced through this research, it involves maintaining the relationships, responsibilities, and authority that allow each generation to make life with the river in ways that respond to changing social, political, and environmental conditions. Samuel's experiences illustrate this possibility. His return to the river was not a return to the past, but the creation of a future grounded in an enduring relationship to place. Similar processes are evident at both Rio Nuevo and Blue Hole/White River, where younger generations continue to forge new livelihoods and forms of collective life because those river relations have been protected and passed on.

4. Conclusion

"Everybody has a right to live" (Even our ancestors and descendants)

Moving with Anna, Michael, Marc, Clarke, Uncle Mike, Samuel, and Joseph through the groundings of their river worlds reveals worlds far more expansive than the language of vulnerability or adaptation can capture. What may initially appear as a "small" community living alongside a river is, on closer attention, a dense set of relationships and responsibilities extending across neighbours, ancestors, descendants, land, water, and more-than-human life. Joseph's observation that *"it's just that we're always there so we just find a way"* is not simply evidence of an enduring capacity to adapt, it is the continual work required to remain there: to reproduce life, maintain relationships, repair and build infrastructure, protect access to water and land, carry knowledge across generations, and sustain collective worlds through changing conditions. These worlds are not merely places in which people endure environmental change. They are actively made and remade through the labour of those who live within them. Attending to this labour also changes how river communities appear within dominant accounts of environmental insecurity. Frameworks centred on resilience and adaptive capacity can identify exposure, vulnerability, and the capacity to respond, but they can obscure the labour through which life is continually made possible. They can make communities appear primarily as subjects responding to conditions that have been produced elsewhere. Yet the ethnographic and historical material in this thesis demonstrates that river communities are neither simply passive subjects of environmental change nor wholly autonomous authors of their conditions. They are shaped by the political, ecological, economic, and historical conditions in which they live while simultaneously working to reshape those conditions. The question, then, is not simply whether communities have the capacity to respond to changing circumstances, but what authority they possess to alter, define, and organize the conditions through which collective life is made.

Blue Hole (White River) makes this dynamic particularly visible. Its collective governance arrangement does more than allow community members to respond to changing environmental and social conditions; it actively reorganizes those conditions by establishing collective practices for managing access, labour, resources, and responsibility. What emerges at

Rio Nuevo may represent a related process, as Anna and her family work to establish forms of organization around the river and create the necessary conditions of life to support it. These examples demonstrate that life-making is not only something communities do within existing conditions. The causes of adverse conditions - including hurricanes, drought, water insecurity, land dispossession, tourism development, and regulatory intervention are produced across different scales, while responsibility for care, response, and continuity is frequently concentrated within communities themselves. The labour of sustaining life can therefore remain local even when the authority to determine its conditions are held elsewhere.

This tension between responsibility and authority also extends deep into the history of Afro-Jamaican river worlds. The genealogy chapter demonstrates that the struggle to make and define life has never been limited to responding to environmental threats. Through river-yam dances, provision grounds, River Mummas, and other practices, formerly enslaved people and their descendants made meaning, claimed relations, and established worlds within and through the riverscapes they inhabited. Emancipation shifted the scales of authority over the life-making process where formerly enslaved people gained greater responsibility for organizing their own lives while continuing to encounter structures that constrained their ability to determine the conditions under which that life could unfold. This produced an enduring tension over who could claim, organize, and define living. That struggle continues in different forms.

Across the cases examined in this thesis, Afro-descendant communities negotiate access, formal and informal rights, cultural practices, and political and collective governance arrangements in relation to rivers and other aquatic spaces. Oslender's (2016) account of aquatic spaces helps make visible how Afro-descendant spatial practices exceed the categories through which dominant institutions seek to govern them. The experiences of vendors at White River, the Rasta community at Little Dunn's River, and the struggles over access and authority in Parottee similarly demonstrate that these are not simply disputes over resources or responses to environmental change. They are struggles over who can remain, who can access, who can govern, and whose relationships to the aquatic space are recognized as legitimate. Interventions justified through development, conservation, tourism, or disaster governance can therefore alter

not only material access to rivers but the relationships through which communities reproduce collective life.

Aquatic life-work names these tensions by locating them within a longer history of struggle over the authority to live and to define living. The four interrelated dimensions developed throughout this thesis: ***reproduction, infrastructure, protection, and collective continuity***; make visible the different forms this struggle takes. They show that life-making is neither an individual achievement nor a condition that can be secured once and for all. It is a continual, collective, and generational process through which people sustain one another, maintain material worlds, protect relationships and access, and carry responsibilities forward. The capacity to do this is always conditioned by relations of power. Authority may be formal or informal, collective or individualized, recognized or denied, and held unevenly across communities, institutions, and generations. Aquatic life-work therefore draws attention not only to the labour required to sustain life, but to the ongoing negotiations over who has the authority to determine the conditions under which that labour can continue. This has implications for how we understand post-emancipation and "post-colonial" Jamaica in a period increasingly marked by climate insecurity, tourism development, environmental governance, and renewed reparations discourse. Climate change does not introduce these struggles over authority; it intensifies and reorganizes longstanding ones. Hurricanes, droughts, changing water access, and other forms of environmental insecurity become entangled with older questions of land, governance, racialized dispossession, and the recognition of community authority. The focus is not simply how communities will withstand a more uncertain climate, but how existing relations of authority will shape whose worlds are protected, whose relationships are maintained, and whose understandings of the future are allowed to organize environmental decision-making. In this context, making space for Afro-Jamaican river worlds means making space for the forms of knowledge, governance, relationship, and authority through which those worlds have been sustained.

Returning to the *Age of Repair* introduced in the methodology of this thesis, repair must therefore be understood as more than responding to harm or increasing communities' capacity to withstand future crises. As Bruno et al. (2024) remind us, Black livingness "includes an

expansiveness that is about building, maintaining, and nurturing relations" (p. 2). Aquatic life-work offers one way of attending to this expansiveness. It shifts attention toward the everyday and generational labour through which Afro-Jamaican communities continue to maintain relationships with rivers, kin, ancestors, descendants, and more-than-human worlds despite centuries of dispossession. Repair, in this sense, is not only about restoring what has been damaged. It is also about creating the conditions in which relationships can continue to generate life. As Goffe (2024) reminds us, "everybody has a right to live" (p. 27). The river worlds encountered throughout this thesis suggest that this right extends beyond the individual and beyond the present. It encompasses ancestors whose labour shaped these river worlds, the descendants who will inherit them, and the more-than-human worlds with which collective life is entangled. To recognize this right is therefore to recognize the responsibilities through which life is carried across generations, as well as the authority required to sustain those responsibilities.

Aquatic life-work makes these relationships and struggles visible, but it also asks us to look beyond the apparent *smallnes*s of river communities toward the expansive worlds they sustain. To move beyond the question of whether communities can endure and toward the more fundamental question of whether they have the authority and conditions necessary to continue making life on their own terms.

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