

Problems of Land Arrangement in River Boundary Areas (Study on the Winongo River, Bantul, Yogyakarta)

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ARTICLE INFO	ABSTRACT
<p>Keywords: River boundaries, regulatory effectiveness, stakeholder interpretation.</p> <p>Date logs: Received: August 15, 2024 Reviewed: August 15, 2024 Accepted: August 18, 2024 Published: August 19, 2024</p> <p>How To Cite: Hutabalian, L.R. (2024). Problems of Land Arrangement in River Boundary Areas (Study on the Winongo River, Bantul, Yogyakarta). <i>Marcapada: Jurnal Kebijakan Pertanahan</i>, 3(2), 95–112. https://doi.org/10.31292/mj.v3i2.54</p>	<p>The river border area is part of the area that needs to be preserved as a protected area. Article 15 of Presidential Decree No. 32 of 1990, which governs the management of protected areas, mandates the protection of river boundaries to safeguard the river from human activities that could compromise its water quality, deteriorate the physical condition of its banks and bottom, and disrupt its flow. However, many river border areas still fail to comply with the river boundary regulations, including the Winongo River in Tirtonirmolo Village, Bantul, Yogyakarta. This article aims to elucidate the regulations and challenges associated with managing river border areas, assess the effectiveness of implementing existing regulations, and understand the perspectives of stakeholders involved in border area management. This article employs empirical legal methods, gathering data through interviews, field observations, studies of legal regulations, research documents, and other scientific literature. This study concludes that the river border area remains a significant issue due to its non-conformity with its designation, ineffective implementation of regulations, and the disparity among stakeholders in enforcing river border area regulations.</p>

A. Introduction

The importance of rivers in an area's life is undeniable, with various functions and benefits such as drainage routes, irrigation systems, means of transportation, tourist attractions, sources of artistic inspiration, sources of drinking water, sources of knowledge and technology, and maintaining ecological balance. However, densely populated areas often neglect the role of rivers. The river border area plays a critical role in maintaining the river ecosystem, as well as the river's functions and benefits. The river border area serves as a floodwater catchment area, allowing floods to flow to the right and left sides of the river. Disturbances in the river border area, such as the existence of buildings on it, can cause total damage to the crucial functions of the river border area (Mahathir, 2018, Yogafanny, 2015, Maryono, 2009).

According to Article 2 of Government Regulation No. 38 of 2011, the state controls and owns rivers. Furthermore, Article 4 explains that the central government, provincial government, or district/city government carries out river management in accordance with their respective powers. In

line with this regulation, the Ministry of Public Works and Public Housing (PUPR) issued the Regulation of the Minister of PUPR No. 28/PRT/M/2015 concerning the Determination of River Boundary Lines and Lake Boundary Lines in more detail. It is stated in Article 13 that the determination of river boundary lines is carried out by: a. Minister, for rivers in cross-provincial river areas, cross-country river areas, and national strategic river areas; b. Governor, for rivers in cross-district/city river areas; and c. Regent/Mayor, for rivers in the river area in one district/city. Beyond that, the community plays an important role in river management to preserve and maintain river ecology (Maryono, 2020; Setyowati et al., 2021).

We must preserve the river border area as a protected area (Widiastuti et al., 2016). Priambudi & Utami, 2020; Yogafanny, 2015 state that Article 15 of Presidential Decree No. 32 of 1990 concerning the Management of Protected Areas mandates the protection of river borders. The criteria for determining the river boundary in accordance with Article 16 of the same regulation are as follows: The river boundary must be (a) at least 100 meters from both sides of the large river and 50 meters on both sides of the river outside the residential area; (b) for the river within the residential area, the river boundary must be sufficient for the inspection road, which should be about 10-15 meters.

The Yogyakarta Regional Regulation No. 10 of 2023, in Article 108, paragraph 2, explains that the river border area's special provisions overlap with tourism areas, residential areas, and agricultural areas. The Yogyakarta Regional Regulation No. 10 of 2023 permits activities as long as they don't jeopardize the river border's function.

Based on Article 46 of Bantul Regency Regional Regulation No. 4 of 2011 concerning the Regional Spatial Plan, it states that the boundary line of the river is determined as follows: a. The river outside the urban area establishes its boundary line at a minimum distance of 5 (five) meters at the foot of the embankment; b. The river within the urban area establishes its boundary line at a minimum distance of 3 (three) meters on the outer side at the foot of the embankment; The boundary line of a non-curved river outside the urban area is determined based on the following criteria: a. Large rivers, defined as those with a river watershed area of 500 (five hundred) square kilometers or more; and b. Small rivers, defined as those with a river drainage area of less than 500 (five hundred) square kilometers. Based on the following criteria, the boundary line of a non-anchored river in an urban area is determined: a. a river with a depth of not more than 3 (three) meters, from the boundary set at least 10 (ten) meters is calculated from the river bank at the specified time; b. rivers with a depth of more than 3 (three) meters to 20 (twenty) meters, from the boundary set at least 15 (fifteen) meters from the river bank at the appointed time; and c. Rivers that have a maximum depth of more than 20 (twenty) meters, the river boundary line of at least 30 (thirty) meters is calculated from the river bank at the specified time (Sutaryo, et al., 2023).

In accordance with the aforementioned regulations, we must arrange or manage the river border area appropriately to ensure it doesn't endanger the residents living on the riverbank. However, in the existing condition of the area referred to above, there are still residential buildings and residents'

activities that impact the damage to the river border ecosystem. The Winongo River border area in Kapanewon Kasihan, Bantul Regency, has numerous permanent and semi-permanent settlements under community control and use. According to Harianjogja.com, the Bantul Community Self-Help Agency (BKM) Communication Forum estimates that there are 295 hectares of slum areas in Bantul. Most of these slums are on the banks of the Winongo River and the Gajah Wong River. The Regent of Bantul, Abdul Halim Muslih, admitted that the slum area in Bantul is still quite high, so it needs the participation of all parties to handle it, both from the district government, the provincial government, and the central government.

Krisandriyana in Zubaidah & Kurniawan (2022) said that the phenomenon of slums emerged as a result of population growth exceeding the capacity of housing availability and decent settlement infrastructure, resulting in an increase in the number of people living in slums. This phenomenon is also seen in the pattern of the spread of slums in urban areas and the city of Yogyakarta, mainly concentrated in areas adjacent to rivers, especially along the three major rivers that cross the city, namely the Gajah Wong River, the Code River, and the Winongo River. Settlements along the banks of these rivers are characterized by very close distances between houses, narrow streets, residents of houses that exceed capacity, and low levels of environmental awareness of the community around the river. This causes the settlement to appear very dense and disorganized (Sadali et al., 2019; Fadjarajani et al., 2018; Aprilia & Zunggal, 2019).

This study aims to delve deeper into the government's understanding, utilization, and maintenance of river areas that don't adhere to river boundary regulations, taking into account their planning and spatial arrangement. The study also sheds light on how communities use the land surrounding rivers and how the government, along with all stakeholders, regulates their use. Article 46 of the Bantul Regional Regulation No. 4 of 2011, which pertains to the Regional Spatial Plan, explicitly specifies the river boundary line's distance and the criteria used to determine it. Many residents misuse the Winongo River, a vital asset that requires preservation, leading to slums (Sadali et al., 2019).

Numerous studies underscore this issue, such as the research conducted by Farid et al. (2023), which concluded that the establishment of river boundary lines throughout Indonesia, the issuance of new regulations on river boundary line determination, and the revocation of all previous regulations are necessary to achieve legal certainty. Hermawati's (2023) research results indicate that the emergence of problems is primarily caused by the emergence of land rights that do not align with the regulations. Meanwhile, Yogafanny (2015) emphasized the importance of a clean environment and water utilization in river management. Kudubun et al. (2020) brought attention to the impact of land use on vegetation, which can negatively impact the quality of river water. Meanwhile, Firianti's study (2019) raises issues related to the importance of green open space in the Winongo river area. Some of these studies do not examine river problems from the perspective of regional stakeholders, focusing on how each party's role contributes to the river's existence.

A. Research Methods

This study uses an empirical juridical research method with a *socio legal research approach* (Hakim, 2016, Afandi, 2022). We obtained the data for this study from primary sources such as interviews and observations, and secondary sources such as legal regulations, research documents, and other scientific works. We obtained primary data through interviews with informants at the research location, such as the Bantul Regency Land and Spatial Planning Office, the Bantul Regency Land Office, the Bantul Regency Housing and Settlement Public Works Office, and residents of the Winongo River area. We took the sample for this study at the Winongo River in Tirtonirmolo Village, Bantul. As far as the image can see, the use of border land from part of the Winongo river is filled with community settlements as seen in Figure 1 below.



Figure 1. Physical Description of the Research Location on the Image
Source: Processed by the author, 2024

B. Problems of River Border Land Arrangement in Tirtonirmolo Village

Maintaining the sustainability of the river is the responsibility of all elements of society, not just the government. However, the government has a greater responsibility in providing legal protection for river areas, especially river borders, so that the sustainability of the river is maintained. The regulation of river boundary lines nationally is regulated in Government Regulation No. 38 of 2011, which states that the river consists of a river trough and a river boundary. The river trough functions as a container space for flowing water and as a place for river ecosystem life to take place, while the river border functions as a buffer space between the river ecosystem and the mainland so that the function of the river and human activities are not disturbed by each other. In short, the regulation contains a detailed definition of a river as a natural and/or artificial water channel or container consisting of a water flow network along with water in it starting from the upstream to the mouth of the river and is bounded by boundary lines on the right and left. This means that the boundary line serves as the boundary that separates the river region from the area outside the river. Based on the explanation of Article 17 of Government Regulation No. 38 of 2011 concerning rivers, if the results of the study on the determination of river boundary lines show the existence of buildings in the border area, then the buildings will be declared in the status quo and must be gradually ordered to restore the function of river boundaries. Furthermore, Article 26 of the same regulation explains that the protection of river restoration sections aims to restore the physical condition of the river to its natural state, which is carried out through physical activities and vegetation engineering. These physical activities include the arrangement of river troughs, the arrangement of river boundaries, and the rehabilitation of river channels.

In line with Government Regulation No. 38 of 2011 Article 16, the Minister of PUPR has the authority and responsibility in determining the river boundary line. In accordance with this authority, the Ministry of PUPR issued the Minister of PUPR Regulation No. 28/PRT/M/2015 concerning the determination of river boundary lines and lake boundary lines. The two regulations have almost similar content and have not undergone significant changes, but in more detail mention the party responsible for determining the river boundary line (Farid et al., 2023). In the case of determining the river boundary line based on the Ministerial Regulation of PUPR, it is carried out by:

1. The Minister, responsible for determining river boundary lines in cross-provincial river areas, cross-country river areas, and national strategic river areas;
2. The Governor is responsible for determining river boundary lines in river areas across districts/cities; and
3. The regent/mayor is responsible for determining the river boundary line in the river area in one district/city.

Furthermore, the Bantul Government, according to its authority, issued a regent regulation that contains in more detail the categories and provisions of rivers in the Bantul Regency area. According to Bantul Regent Regulation No. 35 of 2011 concerning the Border Line, the Public Works Office, in collaboration with related agencies, is responsible for supervising and controlling the rule. The Public

Works Office, in conjunction with the Licensing Office and the Pamong Praja Police Unit (Satpol PP), issues a written warning in the event of administrative sanctions against persons or entities that violate the boundary line's provisions.

This step demonstrates the Bantul Regency Government's commitment to managing and protecting the river environment. The issuance of more detailed regent regulations allows for clearer and more consistent rule enforcement. As the responsible agency, the Public Works Office plays a crucial role in ensuring compliance with every provision, and its collaboration with relevant agencies like the Land and Spatial Planning Office, the Licensing Office, and Satpol PP enhances supervision and law enforcement efforts. We expect this structured and coordinated approach to foster a more orderly and safe environment for the community surrounding the river.

Weaknesses in the enforcement of regulations by the Bantul Regency Government have led to an increase in the density of settlements in the border area of the Winongo River. As a result, this has the potential to cause damage to the river ecosystem, such as sedimentation and siltation, caused by the waste of settlements around the river boundary. Furthermore, human activities such as house construction and other activities that interfere with the sustainability of river borders can threaten the area's ecological function. Please monitor and evaluate these regulations' effectiveness. We must properly manage challenges on the ground, like public awareness and potential conflicts of interest. Additionally, we need intensive socialization to ensure all parties comprehend and adhere to the existing regulations. The Bantul Regency Government can achieve the main objectives of this regulation, namely environmental protection and improving community welfare, through a holistic and participatory approach.

C. Problems of Land Arrangement at the Border of the Winongo River

Article 22 of the PUPR Ministerial Regulation No. 28/PRT/M/2015 says that river border areas can only be used for electricity buildings, gas and drinking water pipelines, bridges and piers, gas and drinking water infrastructure, the span of electrical and telecommunications cables, and other activities that don't make the river work less well, like planting vegetables. However, the research site, the Winongo River in Tirtonirmolo Village, reveals that the majority of the river border areas serve as residential areas. The following image map provides additional information:

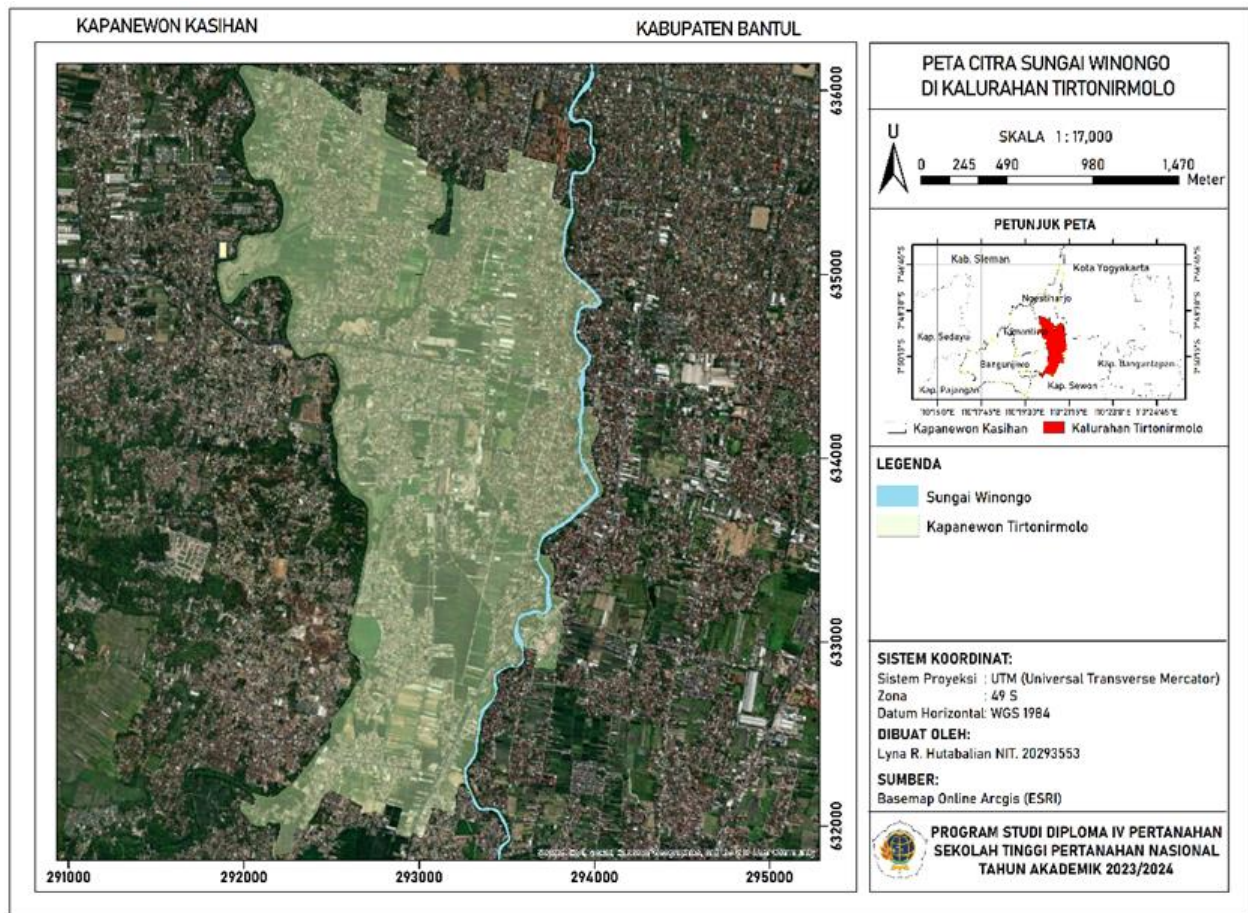
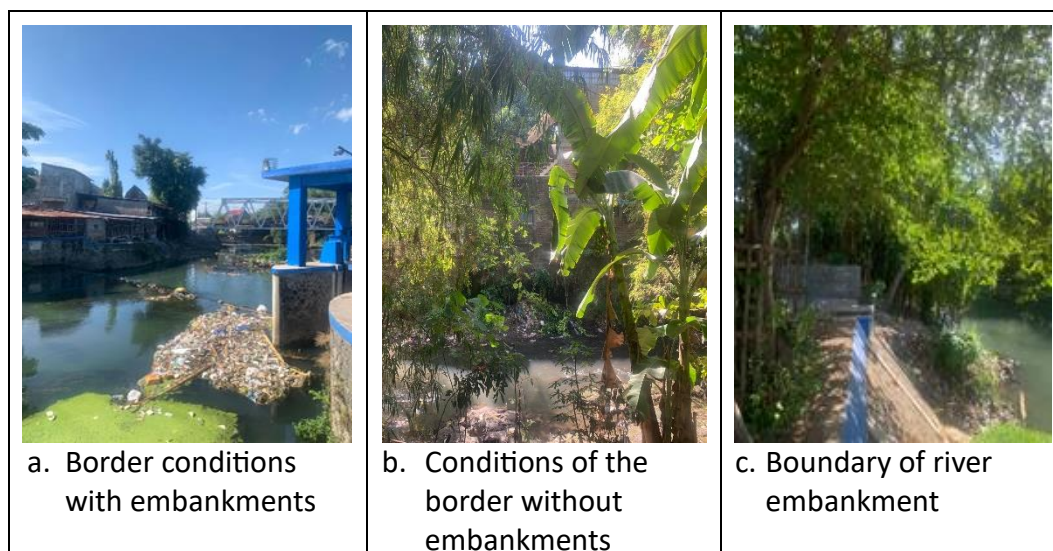


Figure 2. Image Map of the Winongo River in Tirtonirmolo Village
 Source: Arcgis Online Basemap (ESRI)

The blue line in the image above represents the digitization of the Winongo River in Tirtonirmolo Village. According to the image map above, the region appears dense, with settlements and buildings that are still close to the river border area. This condition indicates that the use of land on the border of the Winongo River in Tirtonirmolo Village is not in accordance with its designation as regulated in PUPR Ministerial Regulation No. 28/PRT/M/2015. The regulation mandates the use of river boundary areas for conservation, green open spaces, and the protection and management of river ecosystems. The goal is to preserve the environment, prevent erosion, reduce flood risk, and maintain river water quality. However, the image shows that land is used for buildings and settlements, which clearly violates the regulations. Buildings located along the river border not only interfere with the ecological function of the area but also potentially pose a risk to the safety and health of the local community, especially in the face of natural disasters such as floods.

According to the author's field observations, many people in Tirtonirmolo Village use the river border as their place of residence. Human activities closely relate to the Winongo watershed, and the land use conditions of each river crossing area influence it (Sari, 2014). Over time, more and more settlements crowded the border area of the Winongo River, disrupting the river's sustainability. Many people survive in the area, even though the river border conditions are unsanitary and vulnerable to natural disasters. The following figure provides some documentation of the research location's conditions.



Gambar 3. Kondisi Sempadan Sungai Winongo, Kalurahan Tirtonirmolo
Sumber: Dokumentasi lapangan oleh penulis, 2024

An overview of the physical condition of several points in the Winongo River border area in Tirtonirmolo Village reveals that their land use does not comply with the river boundary line provisions outlined in the Minister of PUPR Regulation No. 28/PRT/M/2015. Figure 3 (a) illustrates the condition of the Winongo river border, where a dike is already in place but residential buildings are present. According to the Ministerial Regulation mentioned in Article 7, a building must be at least 3 meters away from the river's boundary line and from the outer edge of the embankment foot along the river channel. Article 22 explains that if a dike serves as a flood control in the river boundary area, it protects the embankment by prohibiting the planting of non-grass plants, the erection of buildings, and activities that diminish the embankment's dimensions.

Furthermore, Figure 3(b) shows the condition of the river border, which does not have a river embankment but still has permanent buildings in the form of settlements. This condition contravenes the provisions of Article 5, which stipulates that unbridled rivers in urban areas must be at least 15 meters away. In Figure 3 (c), the boundary of a river without an embankment depicts a situation where the absence of an embankment leads to landslides in the surrounding area. If this situation persists for an extended period, it could further undermine the river's sustainability. People living in the border area of the Winongo River are also concerned about this problem, but their choice to live in the area is often influenced by their low social and economic conditions.

This condition also leads to differences in perceptions between the government and the public regarding the use and management of border areas, with the aim of striking a balance between conservation interests and community needs. According to the BPN's statement during an interview, the research suggests that the primary challenge in regulating the boundaries of the Winongo River is not the regulations themselves, but rather the implementation and enforcement of laws in the field. Based on Bantul Regent Regulation No. 35 of 2011 concerning the Border Line, the existing rules are quite clear and comprehensive.

The Land and Spatial Planning Office (DPTR) provided information in an interview on May 25, 2024, stating that the rules fully encompass all the provisions for the border area. However, the informant asserts that the current regulations still lack effectiveness, largely due to the dedication of relevant agencies like us. From this, we can conclude that the reality on the ground indicates that the implementation of this rule has not been conducted with full earnestness. The biggest challenge is the low level of public awareness and weak coordination between related agencies (Zulkarnaen, 2023). Opinions from local residents indicate that many of them have lived on the Winongo River border for many years, some of whom are even second-generation. The DPTR explained that their consistency in carrying out their functions as supervisors and spatial control follows the provisions contained in Bantul Regional Regulation No. 9 of 2018 concerning Detailed Spatial Plans (RDTR) and Zoning Regulations for the Kasihan Urban Area Part 2018-2038. However, the regional regulation is more effective when implemented in areas that are not border areas. The DPTR in carrying out supervision and control, especially in border areas, is still difficult to implement because it also does not have implementation instructions or technical instructions when they go to the field. The DPTR's real action or policy in the field as a form of affirmation of the rules is to install a prohibition on throwing garbage or a warning not to build any buildings in certain areas.

Therefore, the issuance of a series of river boundary regulations is relatively complete and comprehensive. However, its success depends on all parties' commitment and consistency. All aspects, from technical criteria to administrative sanctions, have been completely regulated, but the main challenge appears to be in the implementation and enforcement of the regulation. The issue is whether community socialization and education within the framework of river management can foster justice for the community. It requires a concrete solution from the government to organize it based on existing regulations, including thinking about how to move residents properly rather than evicting them (Laksitha, 2014).

D. Effectiveness of Land Regulation Implementation at River Borders

The effectiveness of land regulation implementation in the border area of the Winongo River in Tirtonirmolo Village is a complex issue that involves many aspects, ranging from policies and public awareness to the government's ability to supervise and enforce the law. According to interviews with various stakeholders and communities living along the river border, there are several significant factors that affect the effectiveness of the implementation of this regulation.

Interviews with related agencies and residents of Tirtonirmolo Village along the Winongo River's border revealed several significant factors that influenced the effectiveness of land use regulations in the area. These interviews with stakeholders provide an in-depth understanding of the challenges, constraints, and opportunities that exist in the management of river border areas. As the agency responsible for spatial management, the Bantul Regency Land and Spatial Planning Office adheres to the provisions outlined in the Bantul Regent Regulation No. 35 of 2011 concerning boundary lines and the Bantul Regency Regional Regulation No. 9 of 2018 concerning RDTR and Zoning Regulations for

Urban Areas (BWP) Kasihan Year 2018-2038. These regulations govern the use of space, including river border areas, with the dual goals of preserving the environment and ensuring sustainable development that aligns with established designations.

Regarding the rules, I believe that the public, including entrepreneurs, lacks understanding of the applicable regulations and the procedures required for space utilization applications, which poses a challenge to their enforcement. If it is realized according to the procedure, it is hoped that a safe spatial layout will be created to avoid flood risks and be productive and sustainable" (Zan Riyanto, Head of Control and Supervision of DPTR, interview on May 25, 2024).

Despite the establishment of regulations, adherence to them remains suboptimal. Based on field observations, there are still many settlements in the river border area that should be more strictly regulated. This indicates that there are major challenges in law enforcement, especially related to supervision and law enforcement. One of the main obstacles is the low public awareness of the importance of complying with applicable rules. Many residents lack understanding of the procedures required to utilize land in the river border area. Of course, the community cannot be blamed simply because they have lived on the river border for decades without any socialization, education, or government control. This is because most of the residents are separated from the river and lack other land to occupy. This means that if they want to be delivered, the government must provide them with a solution. Zan Riyanto from the DPTR Control and Supervision said that this awareness is essential to create a safe and productive spatial plan. However, without adequate understanding, people tend to ignore the existing provisions. Of course, this statement is not wise because all existing regulations appear long after the community's residents have occupied these lands.

"[...] Hamlet, as the lowest head of government and the person closest to the community and who understands the hustle and bustle of the community, must have awareness to provide understanding related to the use of space, considering that limited funds do not allow the DPTR to routinely conduct field inspections" (Zan Riyanto, Head of the Control and Supervision Section of the DPTR, interview on May 25, 2024).

Related agencies in terms of river border area management, DPTR and BPN, emphasized that the arrangement of river border areas must also consider the social and economic aspects of the community. Implementing land use regulations that disregard the economic conditions of the community can cause dissatisfaction and rejection of the implemented policies. The BPN itself evaluates the rules pertaining to the regulation of river boundaries as effective, and it is evident that the decrees and responsible agencies are unambiguous. Amaliawan Basuki, the Head of the Structuring and Empowerment Section at the Bantul Regency Land Office, made the following statement during an interview:

Every technical consideration, whether it is a border area or not, receives a spatial planning recommendation from BPN and other agencies. The Regional Spatial Planning Forum (FPRD) will

address any unresolved issues. Amaliawan Basuki, the Head of the Structuring and Empowerment Section, conducted an interview on May 25, 2024.

However, practical implementation of this rule often lacks seriousness. In fact, the biggest challenge is the low level of public knowledge and awareness due to weak coordination between related agencies. Reni, the head of the Glondong district, has pointed out to local residents that many of them have lived in the border area for many years and have a historical attachment to the land. Awareness of land rights and dependence on the land is the main reason for their survival despite the prohibition in the regulations governing the river boundary.

"[...] Some of us people there survive because that's the only land we have and we inherited from our old simbahs (grandparents)." The interview with Reni, the Head of Glondong District, took place on June 6, 2024.

This situation demonstrates that the primary challenges in regulating the border area of the Winongo River are not solely related to the existing regulations, but also to the long-term livelihood of the local population, the implementation and enforcement of relevant laws, and the lack of tangible solutions provided by the government for community planning. Low public awareness and weak coordination between related agencies add to the complexity of the existing situation. Communities often perceive government neglect, particularly when uneven construction of infrastructure like levees and drainage systems exposes them to flooding and other disasters. The DPTR acknowledges that it only conducts socialization and education about regulations once a year at the start of the year, and budget and labor limitations make routine field inspections challenging to carry out. Information from both Zan Riyanto and the DPTR indicates that the limited number of officers poses significant challenges for the DPTR to effectively supervise all river border areas. In this context, the role of village governments, especially the heads of the villages, is very important. We expect them to assist in educating the community about the proper use of space in accordance with regulations. However, without adequate support from higher levels of government, these efforts will not be enough to create significant change.

Various factors, including limited government resources, coordination between related agencies, and public awareness, greatly influence the effectiveness of land management implementation on the border of the Winongo River. The Bantul Regent Regulation and the Bantul Regional Regulation clearly establish regulations, but the main challenge is their enforcement and implementation in the field. In order to establish a safe, productive, and sustainable spatial plan, we must intensify our efforts to raise public awareness, enhance agency coordination, and allocate resources more effectively for supervision and law enforcement. Thus, we can carry out land management in the border area of the Winongo River more optimally, ensuring maximum benefits for both the environment and the local population.

E. Stakeholder Interpretation

The Community and Government of Tirtonirmolo Village

The people of Tirtonirmolo Village, especially those living in Glondong Hamlet, Dongkelan Hamlet, and Jogonalan Lor Hamlet, are located in the border area of the Winongo River. Government policies or regulations regarding the management of river border areas directly affect this group. Despite their awareness of the rules governing the use of the area, the community prioritizes meeting their economic needs and securing housing. This is understandable considering that many of them acquired land through hereditary inheritance, which has strong historical and emotional value.

"For the acquisition of land on this border, nearly all of it is hereditary land with a Letter C, some of which already possess a certificate of ownership (SHM)." Some buttons in the Glondhong area to the south are also inhabited by Sri Sultan's aides, according to Reni, Head of Glondong District, during an interview on June 6, 2024.

Based on interviews with the head of the district, it was revealed that the majority of land in the border area was obtained through generations and recognized through documents such as Letter C, with some land already having a certificate of ownership. The Yogyakarta Palace grants land, known as buttons, to individuals who serve Sri Sultan. The people of Tirtonirmolo Village are generally aware of the risks associated with living in the river border area. Floods and landslides are two of the real impacts they experience during the rainy season. The Winongo River often overflows into the yards of residents' houses, especially in the Jogonalan Lor Hamlet area, which not only causes unrest but also interferes with their comfort and safety. Garbage from surrounding areas like the South Ringroad accumulates in residential areas, exacerbating the environmental issues the local community faces. The community perceives a lack of focus from the government due to the uneven construction of the river embankment, as illustrated in Figure 3. Interviews with the Hamlet Head provided insight into the condition of the border area during the rainy season.

"The Jogonalan Lor area frequently floods during the rainy season, causing water to rise up to the yards of residents' houses." Another complaint along with this flood is that often garbage carried from the South Ringroad area accumulates in the Jogonalan area, disturbing the comfort of residents as well" (Vera, Head of Jogonalan Lor Village, interview on June 6, 2024).

Uneven embankment infrastructure exacerbates this condition. Except for a few independent community-built embankments, most areas lack adequate embankments. This indicates that infrastructure development varies within a village. Meanwhile, Jogonalan Lor has freed several Neighborhood Units (RT) to serve as roads, separating settlements from the river border. Other RT areas are still at risk of flooding due to the lack of embankments.

The Jogonalan area has no talud, but part of RT 4 has been freed as a road to distance the settlements from the river border. However, RT 5 lacks any embankments, with the exception of non-governmental ones at certain locations, resulting in the integration of most settlements with the river boundary (Vera, Head of Padukuhan Jogonalan Lor, interview on June 6, 2024)

The community, through the head of the district, has submitted their complaints to the local government, hoping that there will be more serious attention regarding the construction of the embankment that can protect them from flood risks. However, the government has yet to provide a comprehensive response to address this issue. This situation reflects the government's lack of attention or priority in managing river border areas that are critical for the community's safety and welfare. The public's dissatisfaction stems from the government's neglect of these complaints, as they perceive inadequate protection from public policy. On the other hand, the community itself is trying to overcome some of these problems in a self-help way, although this effort is still far from enough to overcome the challenges they face. According to this interpretation, the management of the Winongo river border area in Tirtonirmolo Village requires more serious attention from the local government. It is important for the government not only to issue policies, but also to ensure their implementation by building adequate infrastructure and accommodating the needs and safety of the community. Without concrete measures, environmental risks such as flooding and ecosystem damage will continue to threaten the well-being of local communities.

Authority of DPTR, DPUPR, and Kantah ATR/BPN

The Land and Spatial Planning Office (*Kundha Niti Mandala Sarta Tata Sasana*) of Bantul Regency is a government agency that has a strategic role in planning, regulating, and managing spatial planning and land in the Bantul Regency area. Bantul Regency Regional Regulation No. 12 of 2016 formed this agency, which officially began its functions in January 2017. The local government established the DPTR as part of its efforts to integrate spatial planning functions under the Public Works, Housing, and Settlement Areas Office (DPUPKP), and land functions previously managed by the Governance Office and the Village Government Office of the Bantul Regency Regional Secretariat.

In an interview, Desiana Tri Wahyuni, Head of the Spatial Planning, Building, and Environmental Regulation Section of the DPTR, explained that one of the main challenges in the implementation of river border area regulation is a lack of commitment and coordination between stakeholders. The effectiveness of river border management is highly dependent on synergy between various parties, including government agencies, the community, and the private sector. In addition, the DPTR faces significant obstacles in terms of human resources (HR) and budget. The limited number of officers and inadequate budgets are obstacles in carrying out optimal supervision and regulation. According to the provisions in the applicable Regional Regulation and Regent Regulation, we must strictly supervise land use in river border areas to prevent violations that could damage the river ecosystem and pose a risk of disaster.

The commitment of relevant agencies, including us, significantly influences the effectiveness of the current regulations. The constraints on our human resources also play a significant role, as the annual volume of applications can only reach a certain level, and a single officer manages the administrative and location review procedures. In terms of budget, we are also very lacking, perhaps

because it is not a government priority program, such as health; for example, it is the most important government program" (Desiana Tri Wahyuni, Head of the Spatial Planning, Building, and Environment Management Section of the DPTR, interview on May 25, 2024).

The Bantul Regency DPTR manages the river border area, which is a complex task that requires close coordination between various parties. Despite the DPTR's clear authority and strong legal support from Regional Regulation No. 9 of 2018 and Regent Regulation No. 35 of 2011, challenges like limited resources, stakeholder commitment, and unclear implementation guidelines complicate this task. Local governments, communities, and the private sector must work together to fortify the river border management framework, ensuring the preservation of the area and the prevention of various threats that could harm the environment and jeopardize community safety. The DPTR also emphasized the awareness of the community, especially the head of the district as the head of government closest to the community, to provide understanding related to the use of the river border area according to its designation to avoid the risk of flooding or landslides.

Meanwhile, the Public Works Office, Housing, and Settlement Areas of Bantul Regency is a regional apparatus of the implementing element of government affairs that is located below and is responsible to the regent through the regional secretary. This agency is responsible for managing government affairs related to public housing and residential areas.

"In terms of authority, the Bantul Regency Public Works Office does not have jurisdiction over rivers and tributaries." People directly apply for activities or space utilization in the river border area through BBWS and DPTR, according to Cahyo, a staff member in the Water Resources Division of DPUPKP, during an interview on June 6, 2024.

The author conducted an interview with the staff in the Water Resources Division of DPUPKP, who clarified that the Bantul Regency DPUPKP does not have authority over the management of rivers and tributaries. This authority is in the hands of the Serayu Opak River Area Center (BBWS) and the Land and Spatial Planning Office (DPTR). This means that if there are people who want to carry out activities or use space in the river border area, they must apply directly to BBWS or DPTR, not through the Bantul Regency DPUPKP. Nevertheless, the DPUPKP remains administratively involved in the process. In some cases, the DPUPKP accepts the River Boundary Line Certificate as a copy when there is an application for a permit to use the river border area. This demonstrates the DPUPKP's ongoing support in processing applications for the use of river border areas in Bantul Regency according to applicable procedures.

The DPUPKP's limited involvement in river and border area management shows a clear division of duties and authority between various government agencies. However, the public may not fully understand the procedures in place and the authorized agencies handling their applications, leading to confusion. Therefore, to prevent overlapping authorities and ensure effective and efficient management of the area, it is crucial for the DPUPKP and other related agencies to provide clear information and easy access for the public to apply for the use of space in the river border area.

Matters related to land rights on the river border are under the authority of the Bantul Regency Land Office. BPN helps provide legal certainty about the status of land in the river border area. To avoid land conflicts and disputes, the management of border areas must be based on clear legal certainty, according to BPN.

We process requests from BPN regarding the use and utilization of the land, provided that we have a permit in place. Our permits are for both business and non-business activities. Our service involves conducting technical assessments of land to determine eligibility for business or non-business licenses. If the requested location is near a river, we will not permit these activities without permission from the DPTR or the Licensing Office.

Amaliawan Basuki, the Head of the Structuring and Empowerment Section, stated in an interview on May 25, 2024, "[...] Regarding the dualism of land management, there is a land that is nationally known as embossed land; if we in DIY call it *wedi kengser*, it is dualism."

Based on an interview with Amaliawan Basuki, the process of land use and utilization permits, both for business and non-business activities, requires land technical considerations from BPN. However, for activities in the river border area, BPN will not issue permits without approval from other agencies, such as the Land and Spatial Planning Office (DPTR) or the relevant licensing office. This shows that the management of river border areas involves a wide range of stakeholders and requires cross-sectoral coordination to ensure that the policies taken are not only administratively legitimate but also support environmental and social goals. In fact, on the ground, the border area of the Winongo River is often controlled by individuals or families who have lived there for a long time, even though legally the land is state land that should be directly controlled by the state. This situation poses unique challenges in the management of river border areas, particularly in the areas of law enforcement and the restoration of border areas to their designated functions.

BPN will support activities that take place on the river border, as long as they do not cause environmental damage and are contrary to existing regulations. The role of BPN, in accordance with its authority, is to provide technical considerations on land to support the granting of location permits after the DPTR or other related agencies provide space use permits. Therefore, BPN ensures that the use of river border areas is lawful and does not jeopardize the interests of the environment or the community.

F. Conclusion

The use of land in the river border area that does not align with its designation poses a problem for land management in the Winongo River border area. The author's research reveals that residential buildings continue to cross the river's boundary line, which should be at least 15 meters away. This condition has disrupted the Winongo River border area's sustainability. The history of land acquisition, primarily through inheritance based on Letter C rights, greatly influences this situation. To overcome these problems, the government must prioritize local wisdom and understanding of the history and

socio-economic conditions of the local community. We must wisely arrange border areas to balance the interests of the environment, the community, and the government, ensuring effective and sustainable operations.

The commitment and collaboration among stakeholders greatly influences the effectiveness of land management on the Winongo River border. The implementation of the Minister of PUPR Regulation No. 28/PRT/M/2015 concerning the Determination of River Boundary Lines and Lake Boundary Lines, Bantul Regent Regulation No. 35 of 2011 concerning Boundary Lines, and Bantul Regional Regulation No. 9 of 2018 concerning RDTR-PZ BWP Kasihan 2018-2038 has not been carried out properly, as evidenced by the field conditions where numerous settlements remain located in the river border area. One of the reasons for non-compliance with existing regulations is the lack of socialization, education, and awareness among residents, which results in certain buildings and activities not adhering to the regulations.

Stakeholders who are responsible for solving problems in the management of the Winongo River border area from the perspective of the community need to pay attention to the social conditions of the people living in the border area. Embankment construction is a short-term priority to avoid the risk of landslides and floods. Meanwhile, from the perspective of the relevant agencies, the situation on the Winongo River's border, which does not align with its designation, underscores the importance of intense coordination among stakeholders. Intense coordination will foster a community understanding of how to use river border areas in accordance with their designation. This is crucial because if left unchecked, there is a risk of both small-scale and large-scale disasters.

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