

Comparison of the Implementation of Regional Spatial Plans on Environmental Quality in Dewa Ruci and Glagah Beaches, Purworejo Regency

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Abstract

The Regional Spatial Plan (RTRW) is an instrument in controlling the use of space to maintain environmental sustainability, especially in coastal areas that have a high level of ecological vulnerability. Dewa Ruci Beach and Glagah Beach in Purworejo Regency are developing as coastal tourist areas with differences in the implementation of RTRW that have an impact on environmental quality. This study aims to analyze and compare the implementation of RTRW on environmental quality in the two regions. The research method used is qualitative with a normative juridical approach through a study of Law Number 26 of 2007 concerning Spatial Planning, RTRW regional regulations of Purworejo Regency, as well as laws and regulations related to the management of coastal areas and the environment. Data were obtained through literature studies on primary, secondary, and tertiary legal materials, and supported by indirect



observations, limited interviews, and documentation. The analysis was conducted in a comparative descriptive manner to identify similarities, differences, and implications of the implementation of RTRW in both research locations. The results of the study show that the implementation of RTRW at Glagah Beach is relatively more effective and in accordance with the normative provisions of spatial planning, which is reflected in the control of space utilization, coastal boundary protection, and environmental conservation efforts. Meanwhile, the implementation of RTRW at Dewa Ruci Beach still faces obstacles in terms of control and law enforcement, resulting in an impact on the quality of the environment that is less than optimal. This study concludes that the implementation of RTRW normatively has a significant effect on the quality of the coastal environment and requires strengthening supervision and consistency of spatial planning policies.

KEYWORDS

Regional Spatial Plan, Coastal Area, Environmental Quality, Space Utilization Control.

Introduction

Regional Spatial Planning (RTRW) is a planning instrument, regional development that is regulated in a certain systematic way and based on the principles of sustainability, equality, and balance between environmental, social, and economic functions. The RTRW serves as the main reference for controlling the use of space, directing regional growth, and preventing conflicts of interest in land use, whether for infrastructure, industrial, residential, or environmental conservation development. Serves to regulate space so that its utilization is more efficient, empowered to use, and maintain environmental sustainability is very important in coastal areas, where the dynamics of interaction between land and sea are very complex, as well as significant pressures. from economic activities based on tourism,

fisheries, sea transportation, to residential areas.¹ RTRW not only regulates land use but also plays a role in maintaining the quality of the environment so that it remains sustainable and sustainable.²

In Purworejo Regency, the implementation of RTRW in coastal areas is an important issue, especially in Dewa Ruci Beach and Glagah Beach, both of which have great potential in the tourism sector but face different environmental challenges. Dewa Ruci Beach, located in Purwodadi District, Purworejo Regency, is one of the new tourist destinations that is growing rapidly. The area is known for its pristine natural panorama, as well as the presence of coastal vegetation, as well as local public activities that depend on life in the fisheries sector and small-scale trade.

With the increase in tourist visits, significant changes in the use of space in this area have occurred. Many areas initially functioned as conservation areas and protection of coastal vegetation. Initially it was converted into a tourist area, the development of roadside stalls, parking areas, and photo spots. If seen from the perspective of the Purworejo Regional RTRW, it is better to designate the region as an area with the main function of tourists who continue to look at the conservation of the coastal environment. This suggests that although the RTRW has regulated the use of coastal areas in a certain ideal way, its implementation practices still face serious limitations on the aspects of supervision and compliance with regulations.

Glagah Beach, located on the border of Purworejo Regency, is a protected tourist area that has been developed and has a relatively more complete infrastructure. Glagah Beach is famous for its breakwaters.³ The

¹ Ahmad Faisal Yadi, Iwan Suprayogi, Mohamad Fauzi, and Bochari Bochari, "Analysis of Clean Water Needs Based on the Regional Spatial Plan (RTRW) of Pekanbaru City in 2038," *SAINSTEK* 10, no. 2 (2022): 131–37.

² Diah Ayu Bunga Ramadhani, Nur Miladan, and Kusumastuti, "Review of Non-Structural Disaster Mitigation Readiness in Dealing with Tsunami Disasters in Coastal Areas of Kuta District," *Region: Journal of Regional Development and Participatory Planning* 18, no. 1 (2023): 241–60.

³ F.S. Fujaya, AS Sembel, and DM Rondonuwu, "Analysis of Characteristics of Tsunami-Prone Areas in the Coastal Areas of Bitung City," *Sabua: Journal of the Built Environment and Architecture* 13, no. 1 (2024): 79–86.

development of large-scale tourism has a negative impact on the quality of the environment. Spatial planning control in coastal areas is in line with conservation efforts and sustainable use of marine resources, and focuses on protecting coastal vegetation and preventing land degradation due to uncontrolled land-use change. The pace of development is not balanced with strict environmental management. For example, the construction of tourism infrastructure that juts into the sea accelerates sedimentation, while excessive tourism activities increase the risk of water pollution. Another problem is the loss of a large part of the original vegetation of the beach as a consequence of the development of tourist facilities and residential areas, so that the area becomes again prone to abrasion and water intrusion.⁴

The RTRW formally provides clear planning directions, the implementation of which tends to prioritize short-term economic interests over maintaining the quality of the long-term environment. Dewa Ruci Beach and Glagah Beach again face a dilemma in the implementation of RTRW, namely the gap between plans and actual practices.⁵

The main difference lies in the scale and intensity of development. Dewa Ruci Beach is still in the early stages of development, so the main problem is weak supervision of land conversion and lack of public and tourist awareness about environmental sustainability. Glagah Beach, which has been developed for a long time, faces a more complex problem, namely ecosystem degradation due to large-scale infrastructure development and mass tourism pressures. Meanwhile in Glagah Beach, the presence of investors and tourism developers is often dominant compared to the voice of the local public, so that there is an uneven use of space. Misalignment

⁴ Rosari, A., "Regulation of Space Utilization in the Coastal Areas of West Sumatra Province: An Analysis of Padang City Regional Regulation Number 14 of 2012 concerning the Spatial Plan of Padang City for 2010–2020," *Journal of Legal Certainty and Justice* 3, no. 2 (2021): 65–83.

⁵ Septian Anugrah et al., "Analysis of the Alignment of RZWP3K and RTRW Integration of Riau Islands Province (Case: Coastal Environment of Bintan Island)," *Journal of Marine Research* 11, no. 3 (2022): 455.

between planning is a major factor in the difficulty of maintaining the quality of the coastal environment.⁶

The garbage problem is a classic recurring problem on both beaches. At Dewa Ruci Beach, there is no integrated waste management system, so plastic and organic waste often accumulate inside along the coastline. Meanwhile, in Glagah Beach, even though there is already a management system, the volume of waste produced by tourists is far from the management capacity, so most of the area remains polluted. This problem clearly shows the weak implementation of the RTRW, which should emphasize the principles of sustainable development, including tourism waste management. Some of the problems that have arisen include several cases related to the implementation or spatial planning activities in the Dewa Ruci and Glagah Beach areas.⁷

Table 1. Cases Related to the Implementation of Spatial Planning/Activities in the Dewa Ruci and Glagah Beach Areas

Yes	Month and Year	Case	Case Contents	Remarks
1.	June 2025	Dewaruci Festival 2025	The Purworejo Regency Government held the Dewaruci Festival at Dewa Ruci Beach to encourage tourism and MSMEs, which increased activities in coastal areas.	Demonstrate the use of beach space for public events, which impacts the local economy, cleanliness, and environmental carrying capacity
2.	April-May 2025	Relocation of Dewaruci	The government is relocating traders from the beach to	Demonstrate social conflicts in the implementation of

⁶ JD Ariyani, S. Sukmawati, and RN Listyawati, "Ecotourism Development in the Coastal Area of Sedati District, Sidoarjo Regency Based on Community Participation," *Journal of Spatial Planning* 18, no. 2 (2023): 80.

⁷ Aswal Fitra Yadi et al., "Analysis of Clean Water Needs Based on the Regional Spatial Plan (RTRW) of Pekanbaru City in 2038," *SAINSTEK* 10, no. 2 (2022): 131–37.

		Beach Traders	culinary areas, but some traders are refusing for fear of incurring losses.	RTRW, which relate to land use compliance, tourism planning, and control. Environmental Quality
3.	April 2025	Decline Visit to Glagah Beach	Tourist visits to Glagah Beach are declining due to security concerns and the potential for a tsunami, which has an impact on economic activity and utilization of the area.	As a comparison for the implementation of coastal space management. And how about environmental issues The Influence of the Quality of Tourist Areas.

From these three cases, it can be concluded that the implementation of RTRW in coastal areas still faces significant challenges. At Dewa Ruci Beach, the festival and the relocation of traders show the opportunities and conflicts between economic interests and environmental sustainability. The case at Glagah Beach shows how external factors, such as the threat of disasters, can affect the effectiveness of spatial planning.⁸ Overall, the implementation of RTRW is not a simple process that requires synergy between the government, the community, and economic actors.

Table 2. Edward III Policy Implementation Model

Implementation Variables	Key Indicators	Explanation	Examples of RTRW Implementations
Communication	Clarity of information, consistency of message, intensity of	Policies must be communicated clearly, precisely, and consistently to all implementers and the public to avoid	Socialization of the boundaries of protected areas, settlements and tourism to the community as well as coordination between OPDs.

⁸ D. M. Rosyid, Sujantoko, H. D. Armono, E. B. Djatmiko, W. Wardhana, R. W. Prastianto, and M. K. Wardhani, "Study on the Management of the South Coast Mangrove Area of Bangkalan Regency Based on Law No. 1 of 2014," *Sewagati* 5, no. 3 (2021): 111.

	socialization	misinterpretation and rejection.	
Source	Human resources, budget, facilities, information	Policy implementation requires adequate resources so that it can run effectively and does not stop at the document level alone.	Availability of spatial planning, budget monitoring, and regional mapping technology experts.
Disposition (Attitude of the Executive)	Commitment, integrity, motivation	The attitude and commitment of implementing officials will determine the success of the policy, even if communication and resources are available.	Officials who strictly enforce spatial planning regulations without personal conflicts of interest.
Bureaucratic Structure	Division, Work Procedures, Coordination	A clear and uncomplicated bureaucratic structure supports effective and efficient policy implementation.	Clear space utilization licensing mechanism and inter-agency coordination.

The policy implementation model developed by George C. Edward III emphasizes that successful implementation is influenced by four key variables: communication, resources, the disposition or attitude of the implementer, and the bureaucratic structure. This model provides a systematic analytical framework to evaluate the extent to which policies can be implemented according to their objectives. The Edward III model is particularly relevant because the implementation of spatial planning

policies often faces obstacles in inter-agency communication, limited resources, unresponsive officials, and complex bureaucracy.⁹

The first research by Praja & Asran (2025) discusses an environmentally friendly urban spatial planning strategy with an ecological approach in urban planning in Makassar City. This study emphasizes that spatial planning is not only a matter of regulating spatial function, but also an important instrument in maintaining the balance of urban ecology through the integration of sustainability principles in development policies. This research is relevant because it shows that spatial planning should ideally be the main guideline to avoid excessive exploitation of the environment, including in coastal areas. However, the focus of the research is more focused on the urban context, so it has not specifically discussed the complexity of implementing RTRW in tourist coastal areas that have direct pressure from tourism activities and coastal economies.

The second study by Rachmawati, Kamal, & Khakhim (2023) highlights the spatial analysis of mangrove rehabilitation in the coastal area of Ngombol, Purworejo. This study confirms that the rehabilitation of the coastal environment, especially through mangrove planting, is an important part of ecosystem restoration and strengthening the resilience of coastal areas to abrasion. This research makes a great contribution in understanding the ecological aspects of the Purworejo coast, especially in the context of conservation. However, this study focuses more on environmental rehabilitation programs and has not examined in depth how RTRW as a spatial planning policy is implemented in practice and how conflicts of interest in tourism development can affect the quality of the coastal environment.

⁹ Nini Apriani Rumata and Rizka Damayanti, "Control of Space Utilization Deviations in the Coastal Area of Makassar City," *LOSARI: Journal of Urban and Residential Architecture* 7, no. 2 (2022): 173–85.

Research by Kusumaningrum, Saputra, & Nurwijayanti (2024) discusses changes in coastal vegetation density in the Glagah area, Kulon Progo, between 2018 and 2023. This study shows that the development of coastal tourism areas has a significant impact on changes in vegetation cover that function as coastal natural protectors. This study is particularly relevant because it illustrates the ecological consequences of large-scale tourism development, such as the loss of coastal vegetation and the increased risk of abrasion. However, this study emphasizes more on the analysis of vegetation changes based on spatial data, without directly linking to the implementation aspect of the RTRW policy, especially in the context of controlling space use and compliance with spatial planning regulations.

The next research by Milandika, Yudartha, & Wirantari (2024) raises the concept of collaborative governance in the sustainable development of tourism villages. The study emphasizes the importance of collaboration between governments, local communities, and the private sector in ensuring tourism development runs in line with environmental sustainability. This study provides a perspective that the success of tourism space governance is highly dependent on the participation of related actors. However, this study highlights the collaborative governance model in general and does not specifically discuss how the implementation of RTRW as a formal spatial planning instrument can experience gaps in practice, especially in coastal areas that experience pressure from investment and mass tourism.

Soemitro (1990) and Moleong (2017) are important methodological foundations in this study. Soemitro emphasized relevant legal and jurimetric research methodologies to understand RTRW policies as binding legal products, while Moleong emphasized the importance of a qualitative approach in exploring social realities, conflicts of interest, and the dynamics of policy implementation in the field. These two references reinforce that it is not enough to study the implementation of RTRW only from formal documents, but must also be reviewed from social practices, the behavior of implementation actors, and their impact on the environment.

Based on these five studies, it can be concluded that previous studies have made a major contribution to understanding environmentally friendly spatial planning, rehabilitation of coastal ecosystems, vegetation changes due to tourism development, and the importance of governance collaboration. However, the main limitation of the previous study lies in the absence of a comparative study that directly compares the implementation of RTRW in two tourist beach areas in the same administrative area, namely Purworejo. Some studies only focus on ecological aspects such as vegetation or mangrove rehabilitation, while the policy aspect of RTRW as a spatial control instrument has often not been analyzed in depth from an implementation perspective. In addition, previous research tends to highlight only one location, so there has been no difference in policy implementation patterns between beaches that are still developing such as Dewa Ruci and beaches that have been developing for a long time such as Glagah.

The research *gap* in this study lies in the lack of research that directly links the implementation of RTRW to the quality of the coastal environment through a comparative approach of two coastal tourism areas that have different development characteristics. In fact, the implementation of RTRW is very decisive for the sustainability of coastal areas because RTRW should be a guideline in preventing the conversion of conservation land, controlling tourism infrastructure development, and maintaining a balance between economic interests and the preservation of coastal ecosystems. This gap is even more evident when practice on the ground shows the existence of social conflicts in the relocation of traders, the dominance of investors in development, as well as classic problems such as litter and degradation of coastal vegetation that have not been optimally addressed.

The urgency of this research is very important because coastal areas are areas that are vulnerable to ecological damage due to tourism pressures, economic development, and climate change. The implementation of RTRW that is not effective can cause abrasion, seawater intrusion, loss of coastal

vegetation, and a decrease in environmental quality which ultimately harms local communities and threatens the sustainability of the tourism sector itself. Therefore, this research is urgent to be carried out to evaluate the extent to which RTRW is actually carried out as a spatial control instrument, not just a formal document. The significance of this research lies in its contribution in providing academic and practical understanding of the implementation of RTRW in tourist coastal areas.

This research not only enriches the literature on spatial and environmental policies, but also provides recommendations for local governments in strengthening supervision, increasing community participation, and ensuring that tourism development does not sacrifice environmental quality. In addition, this research is also important for local communities so that their rights in the use of space are not excluded by investor domination. The novelty of this research lies in the comparative approach between Dewa Ruci Beach and Glagah in the context of the implementation of RTRW on environmental quality. This study integrates the Edward III policy implementation model to analyze communication factors, resources, implementer disposition, and bureaucratic structure in the implementation of RTRW. Thus, this study not only assesses environmental impacts ecologically, but also examines the root causes of policies and governance that cause gaps between plans and practices on the ground.

Therefore, the researcher is interested in learning more deeply how the implementation of RTRW on the two beaches is carried out and on the quality of the environment, so this study is entitled "Comparison of the Implementation of Regional Spatial Plans on Environmental Quality at Dewa Ruci and Glagah Beaches, Purworejo Regency". Based on the background of the above problems, the researchers formulated several problems, including:

1. How is the Implementation of the Regional Spatial Plan Compared to the Quality of the Environment at Dewa Ruci Beach

and Glagah Beach in the Management of Coastal Areas in Purworejo Regency?

2. Why Is There a Difference in the Implementation of the Regional Spatial Plan between Dewa Ruci Beach and Glagah Beach in Purworejo Regency?

Methods

This research uses a qualitative approach with a normative juridical method that focuses on legal studies of norms, principles, and provisions of laws and regulations that govern spatial planning and coastal environmental protection, especially the implementation of the Regional Spatial Plan (RTRW) of Purworejo Regency. The focus of the research is directed at how RTRW is carried out in the management of coastal areas, especially in Dewa Ruci Beach and Glagah Beach which have different dynamics of tourism development. Research data was obtained through literature studies by examining primary legal materials such as local laws and regulations, secondary legal materials in the form of journals, books, and previous research results, and tertiary legal materials such as legal dictionaries or encyclopedias. In addition, this research is also supported by indirect observations, limited interviews as complementary data, and documentation to strengthen the empirical picture related to environmental conditions and space utilization practices in coastal areas.

Data analysis was carried out using a comparative descriptive method, namely comparing the implementation of RTRW at Dewa Ruci Beach and Glagah Beach to identify similarities, differences, and implications for the quality of the coastal environment. This approach allows researchers to see the gap between normative spatial planning and the reality of implementation in the field, including its impact on environmental sustainability aspects. To ensure the validity and credibility of the research results, the triangulation technique of sources, methods, and time is used so that the data obtained can be tested for accuracy from various perspectives.

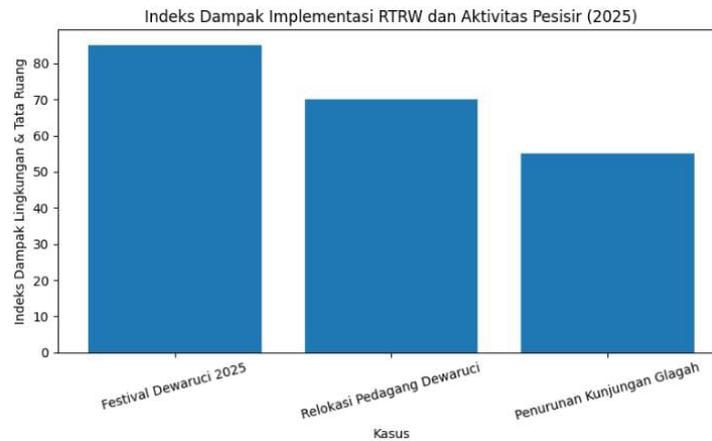
Thus, this research method is expected to be able to provide a clear and systematic picture of the effectiveness of RTRW implementation in maintaining a balance between tourism development and coastal environmental protection in Purworejo Regency.

Result and Discussion

Based on the graph of the Impact Index of RTRW Implementation and Coastal Activities in 2025, it can be seen that the 2025 Dewaruci Festival at Dewa Ruci Beach has the highest impact index value of 85, followed by the Dewaruci Beach Traders Relocation policy with a score of 70, and the case of Decreased Visits to Glagah Beach with a value of 55. This data shows that the higher the intensity of coastal space utilization, the greater the impact on environmental quality and regional spatial planning. The Dewaruci Festival, which triggered a surge in tourism and MSME activities, put the greatest pressure on cleanliness, environmental carrying capacity, and spatial planning zoning control (RTRW).

The relocation of traders is in the middle position, as it not only aims to regulate the space in accordance with the RTRW but also encourages socio-economic dynamics in coastal communities.¹⁰ Meanwhile, the decrease in visits to Glagah Beach has led to a reduction in activities in the area, so that environmental pressure is relatively lower, but it still has an impact on the sustainability of coastal management.

¹⁰ R. M. Sari, I. Taufik, A. Marzan, and E. Kusnadi, "Analysis of Opportunities and Challenges for RTR Implementation of the Integrated South Coast Area of Banten Province," *Journal of Civil Engineering, Technology and Sciences* 1, no. 2 (2025): 92–102.



Graph 1. Data on the Impact Index of RTRW Implementation and Coastal Activities

1. Comparison of the Implementation of Regional Spatial Plans on Environmental Quality at Dewa Ruci and Glagah Beaches in Coastal Area Management in Purworejo Regency

Coastal areas are designated as protected areas with limited cultivation and agricultural functions, given their vulnerability to abrasion, hydrometeorological disasters, and degradation of coastal ecosystems. Dewa Ruci Beach and Glagah Beach are both included in this policy framework, but the implementation of RTRW on the ground shows different approaches and levels of consistency, which directly impact the environmental quality of each area. At Dewa Ruci Beach, the implementation of RTRW still faces various structural and technical challenges that have an impact on the quality of the coastal environment. The decline in ecological quality due to lack of vegetation and suboptimal waste management is related to the prevention of marine pollution from land activities, as well as the need to preserve biodiversity and prevent coastal land degradation.

Spatial planning in this area is directed as a coastal tourist area with the principle of environmental conservation, but in practice the use of space

tends to develop faster than the capacity of local government control and supervision. This can be seen from the existence of tourist facilities and economic activities that have not fully paid attention to the provisions of the beach boundary in accordance with the principle of protecting beach space based on Article 56 paragraph (2) of Law Number 26 of 2007.¹¹

Pressure on coastal ecosystems is increasing, characterized by reduced natural vegetation, garbage problems during the peak season of visitors, and the potential for a decline in the visual and ecological quality of coastal areas. This condition shows that the RTRW at Dewa Ruci Beach has not fully functioned as an effective tool to control the use of space. The quality of the environment at Dewa Ruci Beach is greatly influenced by the weak integration between spatial planning and environmental policy implementation.¹²

Article 19 of Law Number 26 of 2007 stipulates that spatial planning must be carried out in an integrated manner between planning, utilization, and spatial control. However, at Dewa Ruci Beach, the control of space utilization through the mechanism of licensing, supervision, and the application of administrative sanctions as stipulated in Article 35 and Article 61 of the law has not been running optimally. As a result, environmental quality tends to fluctuate and depends on the awareness of business actors and individual visitors, rather than on a structured spatial management system. This shows that there is a gap between the legal norms of RTRW and the reality of beach management at the site level.

In contrast to Dewa Ruci Beach, Glagah Beach shows a relatively more consistent and directed RTRW implementation towards environmental protection. In the RTRW of Purworejo Regency, Glagah Beach is positioned as a strategic coastal area that not only functions as a tourist destination but also as an environmental buffer zone, with coastal vegetation and a green

¹¹ Sodikin, "Spatial Analysis of Land Use Suitability and Direction of Spatial Pattern Improvement in Coastal Areas of Indramayu Regency," *Ranah Research* 7, no. 6 (2025): 4442–4453.

¹² ZPA Monoarfa, MTA Gobel, and MR Syukri, "Coastal Area Management to Reduce Disaster Risk," *Journal of Jambura Urban and Regional Planning* 1, no. 1 (2023): 10–22.

belt to control abrasion. The implementation of this policy can be seen through restrictions on development in coastal border zones, more concentrated tourist facilities, and sustainable coastal vegetation conservation efforts. These practices are in line with the principles of sustainability and preventive measures regulated in Article 2 of Law Number 26 of 2007, thereby ensuring a relatively better quality of the environment of Glagah Beach.

The quality of the environment at Glagah Beach is influenced by the integration of spatial planning policies and coastal environmental management. Efforts to preserve vegetation, control abrasion, and manage waste more systematically reflect the application of the principle of spatial function protection as mandated in Article 33 paragraph (4) of the 1945 Constitution and strengthened in Article 3 of Law Number 26 of 2007. Although the pressures of development and tourism activities remain, a relatively more effective spatial utilization control system allows negative impacts on the environment to be minimized. Thus, the RTRW at Glagah Beach not only functions as a planning document, but also as an operational guideline in maintaining the quality of the coastal environment.¹³

A comparison of the implementation of RTRW in Dewa Ruci Beach and Glagah Beach shows that the difference in environmental quality is not only determined by the natural characteristics of the area, but more by the level of compliance with spatial planning and the effectiveness of space utilization control. Article 61 of Law Number 26 of 2007 requires everyone to comply with the spatial planning that has been set, but this level of compliance seems to be more internalized at Glagah Beach than at Dewa Ruci Beach. At Dewa Ruci Beach, the use of space that tends to be reactive to short-term economic needs has the potential to sacrifice environmental

¹³ FES Haris and M. Jamal, "Implementation of Regional Regulation Number 3 of 2019 concerning Development and Development Plans for Housing and Residential Areas in Bontang City," *Journal of Government Science* 11, no. 3 (2023): 99–106.

quality, while at Glagah Beach there are more balanced efforts between economic, social, and ecological interests.¹⁴

Table 3. Comparison of RTRW Implementation and Quality of the Coastal Environment

Comparative Aspects	Dewa Ruci Beach	Glagah Beach
Area Function	A coastal tourist area with conservation principles, yet growing rapidly.	Strategic coastal areas and environmental buffer zones.
Space Utilization	Many tourist and economic activities are close to coastal boundaries.	Development is limited to certain zones in accordance with the RTRW.
RTRW Control	Supervision and sanctions are not the optimal solution, as they tend to be reactive.	The control is relatively consistent and directed.
Environmental Protection	Vegetation decreases, garbage problems increase when the number of visitors is high.	Coastal vegetation and green belts are better preserved.
Policy Integration	Planning and implementation have not been integrated.	Integrated spatial planning and environmental management.
Impact on Environmental Quality	High ecological stress and environmental quality fluctuate.	The quality of the environment is relatively stable and maintained.

Table 3 presents a comparison of the implementation of the Regional Spatial Plan and its effect on the quality of the environment at Dewa Ruci Beach and Glagah Beach. This comparison highlights how differences in spatial governance and control mechanisms affect coastal sustainability. Although both beaches are coastal areas with tourism potential, the way

¹⁴ H. Mubarak, A. Salim, and S. Bahri, "Sustainable Coastal Area Development in the Coastal Area of Barru Regency," *Journal of Urban and Regional Studies* 6, no. 2 (2024): 254–264.

RTRW is implemented creates different environmental outcomes in each location. At Dewa Ruci Beach, the area serves primarily as a tourism zone based on conservation principles, but rapid development has pushed many economic and tourism activities closer to the shoreline. This condition shows that space utilization often exceeds the planned limits. As a result, land use tends to prioritize short-term economic gains over long-term ecological balance.

In contrast, Glagah Beach implements stricter zoning based on RTRW. Construction is limited to predefined areas, allowing buffer zones and protected spaces to function properly. This controlled utilization helps reduce pressure on coastal ecosystems and supports sustainable tourism management that is aligned with spatial planning regulations. Regarding the control mechanism, supervision at Dewa Ruci Beach is relatively weak and mostly reactive, meaning that law enforcement actions occur after violations have occurred. This reduces the effectiveness of RTRW as a preventive instrument. Meanwhile, Glagah Beach shows more consistent and targeted control, allowing for early prevention of space abuse and better compliance with planning policies.

The results of environmental protection also differ between the two locations. At Dewa Ruci Beach, the coastal vegetation has declined and the garbage problem has increased significantly during the peak period of tourist visits, which contributes to environmental degradation. In contrast, Glagah Beach maintains coastal vegetation and green belts more effectively, which helps to stabilize the coastline and improve overall environmental resilience.

The impact of the implementation of RTRW on environmental quality is more positive at Glagah Beach than at Dewa Ruci Beach. Weak policy integration and high ecological pressures at Dewa Ruci Beach lead to fluctuating environmental conditions, while Glagah Beach benefits from integrated spatial planning and environmental management. This comparison shows that consistent RTRW enforcement and zoning

discipline are key factors in maintaining the quality of the coastal environment.

2. Differences in the Implementation of Regional Spatial Plans between Dewa Ruci Beach and Glagah in Purworejo Regency

The RTRW is prepared as a legal instrument that regulates the spatial structure and spatial pattern of an area in an integrated manner as mandated by Law Number 26 of 2007 concerning Spatial Planning, especially Articles 1 and 14 which emphasize that spatial planning aims to create a safe, comfortable, productive, and sustainable regional space. Dewa Ruci Beach and Glagah Beach have different roles in the spatial structure of the Purworejo coast, so the policy to control, utilize, and supervise these spaces is not uniformly implemented in accordance with the direction of the RTRW.

Dewa Ruci Beach tends to be developed as a local tourist area based on recreation and community social activities. The implementation of RTRW in this area is relatively looser in terms of space use due to its orientation on local economic development, tourism, and supporting services. This is in line with the principle of space utilization in Article 33 of Law Number 26 of 2007 which states that the use of space must refer to the RTRW and can be carried out for social, economic, and cultural activities as long as it does not conflict with the function of the space that has been determined.¹⁵

The existence of food stalls, recreational facilities, and tourist activities at Dewa Ruci Beach is easier to develop because it is considered in line with the function of the tourism cultivation area stipulated in the RTRW. Glagah Beach has more vulnerable physical and ecological characteristics, so in the RTRW of Purworejo Regency, this area is mainly designated as a coastal

¹⁵ D. M. Rosyid, S. Sujantoko, H. D. Armono, E. B. Djatmiko, W. Wardhana, R. W. Prastianto, and M. K. Wardhani, "Study on the Management of the South Coast Mangrove Area of Bangkalan Regency Based on Law No. 1 of 2014," *Sewagati* 5, no. 3 (2021): 111.

protected area or an area with a special protection function. The RTRW at Glagah Beach is stricter because it considers the carrying capacity of the environment and the carrying capacity, as stipulated in Article 19 of Law Number 26 of 2007, which states that the determination of protected areas aims to protect environmental sustainability and prevent damage to the ecosystem. As a result, physical development activities and space utilization at Glagah Beach are strictly limited and require a more complex licensing process than at Dewa Ruci Beach.

The difference in implementation is also influenced by the space utilization control policy regulated in the RTRW and its derivative regional regulations. Article 35 of Law Number 26 of 2007 explains that the control of space utilization is carried out through zoning regulations, permits, incentives and disincentives, as well as sanctions. Glagah Beach, as an area with a strategic environmental function, tends to be subject to stricter zoning, while Dewa Ruci Beach receives more flexible zoning for tourism and community economic activities. This difference in zoning is what actually creates a difference in the implementation of RTRW in the field.¹⁶

Institutional factors and local government capacity also contribute to the differences in RTRW implementation on the two coasts. Article 65 of Law Number 26 of 2007 emphasizes that local governments have the authority to regulate, encourage, implement, and supervise spatial planning in their respective regions. In practice, surveillance at Glagah Beach tends to be more intensive because this area prioritizes environmental protection, while at Dewa Ruci Beach, surveillance focuses more on tourist facilities and public order. This difference in priorities affects the consistency of the implementation of RTRW regulations in each location.

¹⁶ Yuli Purwaningsih and Adi Wibowo, "Spatial Analysis of the Suitability of Serang City Industrial Estate Based on RTRW Using the Multi-Criteria Analysis Spatial Method," *Geodika: Journal of Geography Science and Education Studies* 8, no. 2 (2024): 112–126.

The difference in the implementation of RTRW is also inseparable from the level of participation and interests of the local community. Article 60 of Law Number 26 of 2007 gives the right to the community to participate in spatial planning, including planning, utilization, and control of space. At Dewa Ruci Beach, community participation in tourism economic activities is relatively high, encouraging local governments to be more adaptive to the socio-economic needs of residents. Meanwhile, in Glagah Beach, the interests of conservation and environmental protection often take precedence over the short-term economic interests of the community, so the implementation of RTRW tends to be stricter and more normative.¹⁷

The difference in the implementation of Spatial Planning (RTRW) between Dewa Ruci Beach and Glagah Beach in Purworejo Regency is a logical consequence of differences in spatial functions, environmental characteristics, zoning policies, institutional capacity, and local social dynamics. This difference is in line with the principles of spatial planning, which emphasizes the harmony of the use of space with the plan that has been determined, as stipulated in Articles 3 and 26 of Law Number 26 of 2007.

Table 4. Comparison of RTRW Implementation of Dewa Ruci Beach and Glagah Beach

Aspects	Dewa Ruci Beach	Glagah Beach
Utilization Orientation	Local economic development, tourism, and support services.	Protection of the carrying capacity and capacity of the environment.
Flexibility Level	Relatively loose on socio-economic activities.	It is relatively strict and restricts physical development.
Zoning Policy	More flexible zoning regulations for tourism businesses.	Zoning regulations are stricter with restrictions on coastal boundaries.
Licensing Mechanism	It is simpler and easier to adapt to the needs of	It is more complex and selective due to its

¹⁷ RM Sari et al., "Analysis of Opportunities and Challenges in the Implementation of the Integrated South Coast Spatial Plan of Banten Province," *Journal of Civil Engineering, Technology and Science* 1, no. 2 (2025): 92–102.

	residents.	protective function.
Government Supervision	Focus on structuring tourism facilities and order.	Focus on environmental protection and abrasion control.
Community Participation	High level of tourism economic activity.	More focused on conservation and compliance with RTRW.
Environmental Quality Implications	Environmental pressure tends to increase.	The quality of the environment is relatively better maintained.

Table 4 illustrates the contrasting orientations in the implementation of RTRW at Dewa Ruci Beach and Glagah Beach. At Dewa Ruci Beach, the use of space is mainly oriented towards the development of the local economy, tourism, and supporting services. This orientation encourages a relatively flexible treatment of socio-economic activities, supported by more permissive zoning policies for tourism businesses and simpler and adaptive licensing mechanisms. Government oversight in the region tends to prioritize the regulation of tourism facilities and public order, while public participation is largely concentrated on tourism-related economic activities. While this approach encourages economic growth, it also leads to increased environmental pressures as development expands closer to sensitive coastal zones.

The implementation of RTRW in Glagah Beach emphasizes more on protecting the carrying capacity of the environment. Spatial control is relatively tight, with restrictive zoning and coastal boundary restrictions limiting physical development. The licensing mechanism is more complex and selective, reflecting the protection and buffer functions of the region. Government oversight focuses more on environmental protection and abrasion control, and community participation is geared towards conservation and compliance with spatial regulations. As a result, the quality of the environment at Glagah Beach is better maintained compared to Dewa Ruci Beach, showing that the protection-oriented RTRW approach

contributes more effectively to sustainable beach management.¹⁸

An economically-driven and flexible approach, as seen at Dewa Ruci Beach, tends to accelerate space utilization but also increases ecological risks when controls and zoning are not strict enough. Meanwhile, protection- and discipline-oriented implementation at Glagah Beach shows how strict zoning, selective licensing, and conservation-based community participation can balance development with environmental sustainability.¹⁹ These findings confirm that effective RTRW implementation must not only facilitate economic activities but also prioritize environmental carrying capacity to ensure long-term coastal resilience.

Conclusion

The quality of the coastal environment at Dewa Ruci Beach and Glagah Beach is greatly influenced by the consistency and effectiveness of the implementation of Regional Spatial Planning (RTRW). Dewa Ruci Beach shows a tendency to weaken the control of space use, especially in the regulation of coastal boundaries, monitoring tourism activities, and the arrangement of supporting facilities, which results in increased pressure on coastal ecosystems and fluctuations in environmental quality. On the other hand, Glagah Beach implements RTRW in a more targeted and sustainable manner through stricter zoning policies, physical development control, and protection of coastal vegetation, resulting in a relatively better quality of the coastal environment. These differences are influenced by spatial function, environmental characteristics, zoning policies, and regional management priorities. Dewa Ruci Beach is more flexible in supporting tourism and the

¹⁸ Naila Authori, Kismartini Kismartini, and R. Slamet Santoso, "The Development of Kampung Bahari in the Perspective of Sustainable Development in the Coastal Area of Tambaklorok City, Semarang City," *Journal of Public Policy and Management Review* 11, no. 2 (2022): 245.

¹⁹ Cantika Al Marfuah, Yudha Rahman, Adnin Musadri Asbi, and Husna Tiara Putri, "Population Dynamics and Coastal Land Closure of Bumi Waras District using Dynamic Systems," *Journal of Regions and Environments* 13, no. 1 (2025).

local economy, while Glagah Beach emphasizes more on environmental protection. Therefore, the implementation of RTRW is not only important for compliance with national laws but also serves as a strategic instrument to maintain the carrying capacity of the coastal environment and realize participatory and fair governance.

The management of coastal areas needs to be directed at a balance between the use and protection of the environment through an approach based on carrying capacity and capacity of the area, especially in the busy season of visitors by limiting the intensity of space use and arranging tourist facilities centrally so as not to exceed the spatial function stipulated in the RTRW. There is a need for increased integration between spatial planning and coastal environmental management policies, especially in Dewa Ruci Beach, through strengthening supervision, enforcement of zoning regulations, and involving the community in protecting coastal areas, so that tourism development can be balanced with efforts to protect coastal ecosystems in a sustainable manner.

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