Abstract: Rapid population growth is different from the availability of clean water. In addition, water availability is also influenced by natural factors due to the dry season. Water purification problems often occur in urban and rural areas due to a lack of services to distribute water purification installations. Almost all islands in Java and Sumatra are experiencing a water crisis, such as the Batang Arau River in the city of Padang. The issues raised are related to how the local government's policy revitalizes the Batang Arau River, which is contaminated by garbage, household, and industrial waste. Revitalization efforts from the government and related agencies still need to improve in the form of budgets and a need for more public and business awareness about river cleanliness. It is necessary to establish an institution that has legality and deals explicitly with watershed pollution as well as possible—changing the lifestyle of people related to the river by providing counseling and knowledge to manage waste and not throw it into the river and to care more about the surrounding environment. With its own interests, the government needs to pay more attention to the environmental impacts of these interests, especially those related to river conservation.

Keywords: Pollution; Policy; Revitalization

1. Pendahuluan

Water resources are natural resources that bring significant benefits to human life. All aspects of life cannot be separated from water use, so we must maintain water availability for sustainability and to meet our daily needs. Water is a natural resource controlled by the state; as stated in Article 33 Paragraph (three) of the 1945 Constitution that the earth and water and the natural resources contained therein are controlled by the state and constitute the most significant wealth in the world. Water resources are an opportunity that must be managed properly and wisely and utilized as well as possible for the benefit of the people. State guarantees the

The right to the use of water resources by the community, both individuals and the state. The central and local governments are responsible for managing and controlling water resources. The welfare of human life can be measured by the fulfillment of the availability of clean water, but currently, water availability is experiencing many problems, such as its management and development, which can be fully utilized for the community. Water resources can play a role in aspects of life, namely for washing, drinking, and other activities that require water and are also used by the community in aspects of agriculture and fisheries. Therefore we must manage water resources to be used in the long term.

The utilization of water resources must be dedicated to the interests and welfare of the people in all fields, namely social, economic, cultural, and national security, and defense, which creates growth and social justice and the ability to lead to a just and prosperous
society based on Pancasila. Thus to achieve this goal, every action taken by the government is given a firm, clear, complete, and comprehensive legal basis to ensure legal certainty for the people of Indonesia.

The availability of clean water does not match rapid population growth. In addition, water availability is also influenced by natural factors due to the dry season. Water purification problems often occur in urban and rural areas due to a need for more services to distribute water purification installations. In the community's life, the river is a natural provision that greatly fulfills the community's water needs. So that there are people who live on the banks of the river in search of water resources. Residents depend on all their activities from the river and even throw garbage into the river. This harms watershed such as pollution, so water nowadays requires attention, which is quite severe, especially from the local government.

It is complicated to maintain good water quality because waste products pollute water from human activities and the quality and quantity of air resources. Almost all islands in Java and Sumatra are experiencing a water crisis, such as the Batang Alau river in Padang. Erosion, sedimentation, and pollution are the effects of a lack of attention to the Batang Arau watershed. Watersheds have different functions. Rivers are pure streams of water, but watersheds place more emphasis on the water cycle.

2. Metode Penelitian

The research methodology used in this article is normative juridical. This study discusses, investigates, and explains issues using procedures or principles of favorable rules. The normative legal research method helps review various legal norms, such as statutes, related to the problem that is the subject of discussion or debate. The problem of this research is the policy of the Padang City Government in revitalizing the Batang Arau river. No regulatory product regulates the revitalization of the river circulation area so that it causes prolonged pollution of the Batang Arau River. Normative research is used because this research analyzes how the government deals with the use of laws and regulations related to the management of water resources and the need for legal products that specifically regulate the management of water resources in efforts to revitalize river basins.

3. Discussion

3.1 The Impact of Watershed Pollution on the Availability of Water Resources

Batang Arau is a river with strategic value for the community and is experiencing a severe waste problem. This is based on findings in December 2018 by the Worldwide Fund for Nature (WWF) that 82 percent of 550 rivers in Indonesia have been damaged due to garbage and a lack of understanding about clean rivers. Pollution from this waste also occurs
in the Batang Arau River, especially the river that crosses Batang Arau District in Padang City, South Padang District.¹

The water quality of the Batang Arau River has been degraded from upstream to downstream due to factory, household, and household waste. Upstream there is a cement mine and a rubber factory. There is an upstream mining area for cement raw materials and a rubber factory. Meanwhile, in the downstream area, there are hotels, markets, hospitals, and places where fishing boats dock in the downstream area.² The waste that pollutes the Batang Arau river water causes several negative impacts, namely as follows:

a. Water Crisis

The Batang Arau River Basin experiences a water crisis almost throughout the month. The availability of water from the Batang Arau River needs to catch up with the great demand of the surrounding community for clean water. So water in the Batang Arau River area must be supplied from other river basins. The PDAM supplies part of it in the Batang Air Angin and Batang Kuranji watersheds. Water shortages create new problems, such as conflicts between communities due to water conflicts for agricultural land and between communities and industries that use water for production.

b. Flood

High rainfall can cause catastrophic flooding in the Batang Arau river area due to the obstruction of river waters by garbage accumulated in the downstream area. Even though sometimes water is abundant because of rainwater, it cannot be fully utilized for the community's needs because it has been contaminated with various wastes from the upstream area. Critical land is the cause of damage to watersheds, so the operation of the watershed could be more optimal in the water supply so that the frequency and number of floods and droughts increase.

Management of water resources is explained in Law Number 17 of 2019, which states that related to the management of water resources is regulated in Article 1 Paragraph 8: Management of water resources is an effort to plan, implement, monitor, and evaluate the protection of water resources, the use water resources, and management of the destructive power of water. The Law on Water Resources is implemented through Government Regulation of the Republic of Indonesia No. 42 of 2008 concerning the Management of Water Resources. Due to existing regulations, water management must be guided by these legal regulations³


The destructive power of water needs to be overcome by preventing, overcoming, and restoring environmental damage due to the destructive power of water. Control of the destructive power of water is comprehensive and has several stages: prevention, mitigation, and recovery. Control of the destructive power of water takes precedence over prevention efforts through planning to control the destructive power of water, which is manifested in an integrated and comprehensive water resources management pattern. Pollution of the Batang Arau River has had a broad impact on people's lives and needs serious handling from the Padang city government. Therefore a policy is needed that regulates and can at least give fresh air to the condition of the Batang Arau River in people's lives.

3.2 Policies of the Government and Institutions of the City of Padang in Revitalizing the Batang Arau River

Based on Law no. 23 of 2014 concerning regional government, district/city governments do not have the authority to manage water bodies. The central government carries out watershed management authority. In contrast, the application of watershed management in one district/city and districts/cities in (one) province means the affairs of the provincial government. Provisions in the Appendix to the Law on Regional Management also need to disclose in detail the responsibilities and authorities of the government in managing water bodies.

The law provides the right to manage water bodies only in the central and provincial governments. According to the new water law, districts/cities can make policies for managing water bodies in their territory based on the tasks and authority to manage water resources. Regarding the tasks and authorities regulated in the new water law, it will make it easier to handle problems related to managing water bodies in each region more quickly. Regency/City Regional Governments can formulate and implement district/city regional policies quickly and effectively.²

According to Article 1 (2) of Government Regulation No. 37 of 2012, water management means a human contribution to regulating the reciprocal relationship between natural resources and humans in the field of water and all its activities to achieve ecosystem sustainability and harmony and continue to increase the consumption of natural resources for society. Management of water bodies is essentially the regulation of land use or rational optimization of land use for various purposes and other environmentally friendly activities in such a way that it can be assessed by fundamental indicators (final indicators) regarding the quantity, quality, and continuity of land use and flow at the outlet of water bodies.³

Urban management aims to increase, conserve and protect water bodies to achieve sustainable water productivity (water extraction) for the benefit of agriculture, forestry,

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arable agriculture, animal husbandry, fisheries, industry, and society. The demand for land increases with population growth. The cause is also increasing industrial interest and regional development, which causes changes in conditions, uses, and division of forest areas into other denominations. The increasing needs of local communities in modern times can reduce water resources due to their management, making them unable to meet people's livelihood needs and creating conflicts of interest in affected areas. In this context, a comprehensive, efficient, and effective management system is needed with the authorities and all stakeholders in protecting and controlling pollution for the benefit of society.

The Padang city government has acted upon the Batang Arau River pollution problem along with stakeholders by making integrated efforts to optimize the improvement of Batang Arau river water quality. One of the focuses of the government at this time is to reduce the river quality index downstream, which is still at level IV, and efforts are being made to reduce it to level II. The efforts made by the Padang city government are to revitalize the Batang Arau river. River revitalization is a government action to revitalize or repair rivers that were originally polluted into clean rivers that can be used for community needs. Decree of the Minister of Public Works No. 18 of 2010 concerning Guidelines for Area Revitalization, Revitalization is an effort to increase the value of land/areas by developing places that can increase the function of the previous place. The improvement scale has macro and micro levels. The process of revitalizing the area includes improving the physical, economic, and social aspects.

The revitalization carried out by the Padang city government to protect the river from waste, and garbage requires various management from upstream to downstream. The Environmental Service has tried to prevent and accommodate waste, especially in the Batang Arau River area. As a preventive measure, we urge the public to keep the river clean by carrying out outreach activities to keep the river clean and putting up stickers with the message of keeping the river clean in the homes of residents who live around the river. In addition to these steps, the Padang City Government has issued a circular letter regarding improving the cleanliness of the City of Padang, including sanctions prohibiting littering and Mayor Regulation Number 109 of 2019. Padang City Regional Regulation Number 21 of 2012 concerning Waste Management regulates Article 13 provisions on incentives and incentives for companies or communities in waste management. Existing regulations are less effective in revitalization efforts because more officers are needed to supervise.

The garbage disposal carried out by the City of Padang daily cleans the watershed by collecting garbage from the mouth of the river using a garbage collector. This garbage carrier is a form of support for business cooperation and CSR activities for the City of Padang. However, the need for more budget for modern waste collection facilities and equipment is also a constraint in its implementation. In addition to processing estuary
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waste, the Padang City Environmental Service tests upstream waste treatment. In 2022, the agency planned to install floating cubes in the river that flows into Batang Arau. However, due to the 2022 budgeting, this plan was canceled. Efforts to maintain the cleanliness of the Batang Arau River are not only the responsibility of the Padang city government but also require awareness from business actors and the community to carry out Revitalization activities.

4. Conclusion

In the effort to restore the Batang Arau River, the government and related agencies have encountered several obstacles in carrying out efforts to clean up the Batang Arau River. This difficulty can be overcome by awareness of the community and the business world to protect the river environment by treating waste not and adequately disposing of waste in river basins where the water will also be used as needed. So if it is still polluted and continues to throw garbage, it will cause health problems for the people around the river. The implementation of water resources management in the Batang Arau River should involve the community by forming a community consisting of people around the river to support success in managing the river and tackling pollution. The relevant government must also impose serious sanctions against those still throwing garbage in the Batang Arau River. In implementing sanctions, it is necessary to have supervision from an institution that has legality with the establishment by the regional government of Padang City to oversee waste disposal in the Batang Arau River. When revitalization is going well, it is crucial to involve the private sector in developing watersheds into tourism areas—fishing trips, rafting trips, river trips, etc. For the cleaning work to run well, it is necessary to work together to keep the environment clean. Along with the development of the operational area and the Batang Arau river, the local community, especially those along the route, have the potential for economic development, for example, by opening stalls, becoming supervisors, cleaning footpaths, and recycling waste for sale.

References


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