



THE RIVER FIQH PARADIGM: INTEGRATING ISLAMIC ENVIRONMENTAL JURISPRUDENCE AND URBAN CONSERVATION GOVERNANCE IN MUSLIM SOCIETY

Budi Rahmat Hakim¹, Abdul Hafiz Sairazi², Nasrullah³, Herlinawati⁴

^{1,2}Universitas Islam Negeri Antasari Banjarmasin

³Universitas Islam Kalimantan MAB Banjarmasin

⁴Politeknik Negeri Banjarmasin

email: budi_rh@uin-antasari.ac.id¹, abdulhafizsairazi@uin-antasari.ac.id², nas12.jm@gmail.com³, herlinawati@poliban.ac.id⁴

Abstract

River degradation in Muslim-majority urban areas has become a critical challenge for both environmental governance and Islamic ethical responsibility. Despite the existence of conservation policies and religious teachings concerning environmental stewardship, river pollution and riverbank encroachment continue to intensify in Banjarmasin, Indonesia, widely known as the “City of a Thousand Rivers.” This study examines the effectiveness of government river conservation policies, community participation, and Muslim religious understanding regarding Islamic environmental jurisprudence in river conservation practices. Employing a qualitative socio-legal approach, the study collected data through in-depth interviews with riverbank communities, government officials from the Public Works and Spatial Planning Agency and the Environmental Agency, field observation, and policy document analysis. The findings reveal that although river conservation has been institutionally incorporated into regional spatial planning frameworks and implemented through revitalization programs, policy effectiveness remains constrained by weak public participation, limited environmental awareness, and inadequate understanding of Islamic legal principles related to ecological responsibility. Most community members only recognize general prohibitions against littering while lacking deeper understanding of Islamic concepts such as *maslahah*, *maqāṣid al-sharīʿah*, and *harim al-nahar* as ethical foundations for river conservation. The study argues that the gap between formal policy implementation and ecological behavior cannot be addressed solely through regulatory mechanisms, but requires the integration of Islamic environmental jurisprudence into community-based conservation strategies. This article proposes the “River Fiqh Paradigm” as an integrative framework that bridges Islamic legal ethics, environmental governance, and urban conservation policy in Muslim societies. The study contributes theoretically to the discourse on Islamic environmental governance by demonstrating how religious values can strengthen sustainable conservation practices and public ecological responsibility in contemporary Muslim urban contexts.

Keywords: river fiqh, conservation policy, Muslim community, environmental governance, Banjarmasin

Abstrak

Degradasi sungai di wilayah perkotaan mayoritas Muslim telah menjadi tantangan serius bagi tata kelola lingkungan sekaligus tanggung jawab etika Islam terhadap pelestarian alam. Meskipun kebijakan konservasi dan ajaran agama mengenai penjagaan lingkungan telah tersedia, pencemaran sungai dan alih fungsi bantaran sungai terus meningkat di Kota Banjarmasin, Indonesia, yang dikenal sebagai “Kota Seribu Sungai.” Penelitian ini bertujuan menganalisis efektivitas kebijakan konservasi sungai pemerintah, partisipasi masyarakat, serta pemahaman keagamaan masyarakat Muslim mengenai fikih lingkungan Islam dalam praktik konservasi sungai. Penelitian menggunakan pendekatan sosio-legal kualitatif dengan pengumpulan data melalui wawancara mendalam terhadap masyarakat bantaran sungai, pejabat Dinas Pekerjaan Umum dan Penataan Ruang serta Dinas Lingkungan Hidup, observasi lapangan, dan analisis dokumen kebijakan. Hasil penelitian menunjukkan bahwa meskipun konservasi sungai telah diintegrasikan dalam kerangka

Rencana Tata Ruang Wilayah dan program revitalisasi sungai, implementasi kebijakan masih menghadapi hambatan berupa rendahnya partisipasi masyarakat, lemahnya kesadaran ekologis, serta terbatasnya pemahaman terhadap prinsip hukum Islam terkait tanggung jawab lingkungan. Sebagian besar masyarakat hanya memahami larangan umum membuang sampah ke sungai tanpa memahami konsep Islam seperti masalah, maqāṣid al-sharī‘ah, dan harim al-nahar sebagai dasar etis konservasi sungai. Penelitian ini menegaskan bahwa kesenjangan antara implementasi kebijakan formal dan perilaku ekologis masyarakat tidak dapat diselesaikan hanya melalui pendekatan regulatif, tetapi memerlukan integrasi fikih lingkungan Islam dalam strategi konservasi berbasis komunitas. Artikel ini menawarkan “Paradigma Fikih Sungai” sebagai kerangka integratif yang menjembatani etika hukum Islam, tata kelola lingkungan, dan kebijakan konservasi perkotaan di masyarakat Muslim. Penelitian ini berkontribusi secara teoretis terhadap kajian tata kelola lingkungan Islam dengan menunjukkan bahwa nilai-nilai keagamaan dapat memperkuat praktik konservasi berkelanjutan dan tanggung jawab ekologis masyarakat Muslim perkotaan kontemporer.

Kata Kunci: fikih sungai, kebijakan konservasi, masyarakat Muslim, tata kelola lingkungan, Banjarmasin

INTRODUCTION

The global environmental crisis has placed unprecedented pressure on urban river systems, particularly in rapidly developing countries where competing demands for land, economic growth, and ecological preservation create complex governance challenges. Water resource management has become a critical component of environmental sustainability, directly influencing the availability and quality of water for human consumption and ecological systems.¹ Banjarmasin City, Indonesia, historically celebrated as the "City of a Thousand Rivers," exemplifies this tension between development imperatives and environmental sustainability. Data from the Banjarmasin City Public Works Agency reveals a dramatic decline in functional rivers from 117 in 1997 to merely 60 rivers by 2004, with only 102 remaining nominally active, many of which are polluted, shallow, and narrowed. This environmental emergency occurs paradoxically in a city where 95.54% of the population identifies as Muslim, a faith tradition that explicitly mandates environmental stewardship and water conservation.²

The urgency of this issue extends beyond local ecological concerns to encompass broader questions of religious-environmental governance in Muslim-majority societies. Rivers in Banjarmasin have historically served as the backbone of economic activity, transportation, and cultural identity, yet contemporary practices reveal widespread disregard for conservation principles despite existing regulations and religious teachings.³ The phenomenon of riverbank settlements, direct sewage discharge, and household waste disposal into waterways persists despite legal prohibitions and Islamic injunctions against environmental destruction. This contradiction between professed religious values and actual environmental behavior represents a significant gap in the implementation of both positive law and Islamic jurisprudence.⁴

¹ Fahmi Hamdi et al., “Reconfiguring Islamic Authority in the Algorithmic Age through Digital Fatwas and Legitimacy Contestation in Indonesia,” *Indonesian Journal of Digital Islamic Studies (IJDIS)* 1, no. 1 (2025): 1–10. Fahmi Hamdi et al., “Integrating Maqashid Al-Sharia, Fiqh al-Biah, and Islamic Ethics for Sustainable Water Management,” *Al-Abkam* 10, no. 1 (2025), <https://doi.org/10.22515/alakhkam.v10i1.11277>.

² Ade Erlangga, “Water Conservation in an Islamic Perspective: Integrating Religious Values for Water Resources Conservation,” *RADEN INTAN: Proceedings on Family and Humanity*, ahead of print, 2025, <https://doi.org/10.47352/3032-503x.77>.

³ M. Najeri Al Syahrin Mahyuni Mahyuni, “Sister City Cooperation Model In Wetland Environmental Governance: Case Study In Banjarmasin, South of Kalimantan,” *International Journal of Politic Public Policy and Environmental Issues*, ahead of print, 2021, <https://doi.org/https://doi.org/10.53622/ij3pei.v1i02.32>.

⁴ Ali Muddin Jailani Andi Zakaria Rita Haironi, “Fiqh Ibadah Dan Lingkungan: Kajian Literatur Tentang Wudhu Dan Penghematan Air Dalam Perspektif Islam,” *Al-Amin: Jurnal Ilmu Pendidikan Dan Sosial Humaniora*, ahead of print, 2024, <https://doi.org/10.53398/alamina.v2i1.368>.

Global scholarship on Islamic environmental ethics has increasingly emphasized the theological and jurisprudential foundations for environmental protection, including concepts such as khalifah (stewardship), *mīzān* (balance), and the prohibition of *fasad* (corruption/destruction).⁵The integrated Islamic framework emphasizes the preservation of life, intellect, wealth, progeny, and religion, aligned with the principles of *maslahah* (public interest), *adl* (justice), and *khalifah* (stewardship). Contemporary Islamic scholars have developed the concept of *fiqh al-bi'ah* (environmental jurisprudence) that positions environmental preservation as integral to the *maqasid al-shariah* (objectives of Islamic law), particularly the protection of life, property, and progeny.⁶ Studies across Muslim-majority countries have demonstrated that Islamic teachings can provide effective frameworks for water governance and conservation when properly integrated with policy mechanisms.

However, significant research gaps persist regarding the operationalization of these principles at the community level. While normative studies abound on Islamic environmental ethics, empirical investigations of how Muslim communities actually understand and apply these principles remain limited.⁷ Particularly underexplored is the intersection between government conservation policies and religious-based environmental understanding in urban riverine contexts. Research indicates that environmental fiqh literacy deficiency has resulted in low awareness of the importance of preserving environmental support areas, leaving them vulnerable to encroachment and degradation.⁸ The literature reveals insufficient attention to why conservation policies fail despite formal adoption, and how religious institutions might serve as conduits for environmental education and behavioral change.⁹

Within the Indonesian context, studies on river management have predominantly focused on technical and regulatory dimensions, with limited engagement with the religious and cultural factors that shape community behavior. Legal reviews of urban river conservation policies indicate that rapid urbanization and lack of public awareness have led to river pollution and damage to riverbanks, requiring more robust conservation efforts to achieve environmental justice.¹⁰ Banjarmasin presents a unique case study given its distinctive riverine identity, predominantly Muslim population, and documented environmental degradation despite regulatory frameworks. Previous research on collaborative programs for river conservation in Indonesia has emphasized

⁵ Suprio Jaya Putra, "Green Economy in the Perspective of Maqasid Al-Shariah," *Social Science Research Network*, ahead of print, 2026, <https://doi.org/10.2139/ssrn.6092726>.

⁶ Chairunnisa, "REVIEW OF ISLAMIC LAW ON THE IMPLEMENTATION OF LAW NUMBER 32 OF 2009 CONCERNING PROTECTION AND ENVIRONMENTAL MANAGEMENT IN MAHAD AL-ZAYTUN," *The Journal Of Constitutional Law*, ahead of print, 2024, <https://doi.org/10.61341/el-siyasa/v2i1.015>.

⁷ M. Nastain Liza Diniarizky Putri Catur Nugroho, Abdul Malik, "Developing Ecological Piety in Pesantren: The Kyai's Cognition and the Practice of Living Fiqh al-Bi'ah in Banten," *IJTIHAD Jurnal Wacana Hukum Islam Dan Kemanusiaan*, ahead of print, 2024, <https://doi.org/https://doi.org/10.18326/ijtihad.v23i2.235-259>.

⁸ S. Sukarni, "Gambut Muslim Community and Their Environmental Conservation; Intertwin among Fiqh, Economy, and Policy Factors," *AL-IHKAM: Jurnal Hukum & Pranata Sosial*, ahead of print, 2025, <https://doi.org/10.19105/al-lhkam.v19i2.14311>.

⁹ Fazlun Khalid Jeanne E. McKay Fachruddin Majeri Mangunjaya, Yoan Dinata, Stuart R. Harrop, "Practise What You Preach: A Faith-Based Approach to Conservation in Indonesia," *Oryx*, ahead of print, 2013, <https://doi.org/https://doi.org/10.1017/s0030605313001087>.

¹⁰ Harmono Harmono Ferdy Herdiawan Andy Rachman, Azmi Faizah Nahri, Rio Ismail, Endang Sutrisno, "Legal Review of Urban River Conservation Policies from the Perspective of Ecological Balance," *Evolutionary Studies in Imaginative Culture*, ahead of print, 2024, <https://doi.org/10.70082/esiculture.vi.2397>.

the importance of community engagement, multi-stakeholder partnerships, and the integration of ecological restoration with social dimensions.¹¹

This study addresses the following research questions: First, how effectively has the Banjarmasin City government implemented river conservation policies, and what challenges constrain their success? Second, how do Muslim communities in Banjarmasin respond to government conservation policies, and to what extent do they participate in conservation efforts? Third, what is the level of religious understanding among Muslim communities regarding Islamic jurisprudential concepts related to water utilization and river conservation, and how does this understanding influence their environmental behavior?

The theoretical framework of this study integrates public policy implementation theory with Islamic legal theory, particularly the principles of *maslahah* (public interest) and the maqasid al-shariah framework.¹² From the policy perspective, effective conservation requires not merely formal regulation but also sociological acceptance and community engagement. Studies on sustainable management of urban river ecosystem services emphasize that community participation can be achieved through sociocultural assessment approaches and environmental behavior modification.¹³ Islamic legal theory provides complementary insights through concepts such as *harim al-nahar* (river setback zones), which mandates that riverbanks remain free from construction to facilitate conservation activities. The convergence of these frameworks suggests that sustainable river management in Muslim-majority contexts requires the harmonization of positive law with religious principles to generate both legal compliance and moral commitment.

The objectives of this research are threefold: (1) to evaluate the implementation effectiveness of government river conservation policies in Banjarmasin; (2) to assess community responses and participation levels regarding conservation initiatives; and (3) to examine the religious understanding of Muslim communities concerning Islamic jurisprudential principles related to river utilization and conservation. These objectives aim to generate evidence-based recommendations for integrating Islamic environmental jurisprudence into urban environmental governance.

This study contributes to scholarship in several significant ways. Theoretically, it advances the discourse on environmental fiqh by providing empirical data on community-level understanding and application of Islamic environmental principles.¹⁴ Methodologically, it demonstrates the value of integrating socio-legal approaches with religious studies in environmental research. Practically, the findings offer actionable insights for policymakers, religious leaders, and community organizations seeking to enhance river conservation effectiveness through culturally and religiously resonant approaches. The concept of "river fiqh" (*fiqh sungai*) proposed in this study represents a

¹¹ Richel L. Lamadrid P. Heriyati Dahlia Darmayanti, Glory Aguzman, "Collaborative Program for River Conservation in Indonesia: Lessons from the Cisadane River for Sustainable Water Management and Partnerships," *IOP Conference Series: Earth and Environment*, ahead of print, 2025, <https://doi.org/10.1088/1755-1315/1564/1/012128>.

¹² Eny Latifah, "Fiqh Al-Bi'ah and the Concept of Green and Blue Economy for Achieving Sustainable Development in the Context of SDGs," *Invest Journal of Sharia & Economic Law*, ahead of print, 2024, <https://doi.org/https://doi.org/10.21154/invest.v4i1.7732>.

¹³ E. Ridwan Yenni Yuliza Rudi Febriamansyah, "Sustainable Management of Urban River Ecosystem Services: A Systematic Literature Review on Community Engagement and Environmental Behavior in Indonesia," *Journal of Applied and Natural Science*, ahead of print, 2025, <https://doi.org/10.31018/jans.v17i3.6649>.

¹⁴ Asmaddy Haris M. M. Amiruddin I. Haq, Haerul Anwar, "Reforming Fiqh Al-Bi'ah (Ecological Jurisprudence) Based on Islam Hadhari," *International Journal of Law and Society*, ahead of print, 2024, <https://doi.org/10.59683/ijls.v3i3.99>.

paradigm for operationalizing Islamic environmental ethics within specific ecological and policy contexts.¹⁵

METHOD

Research Design

This study employed a qualitative field research design utilizing a descriptive-analytical approach to investigate the intersection of government policy implementation and community religious understanding concerning river conservation in Banjarmasin City. The qualitative methodology was selected because it enables in-depth exploration of complex social phenomena, allowing researchers to capture the nuances of policy implementation challenges, community perceptions, and religious understanding that quantitative approaches might overlook.¹⁶ The research design integrated empirical field observation with normative analysis based on Islamic legal principles, creating a comprehensive framework for understanding river conservation dynamics in a Muslim-majority urban context.

The study adopted a socio-legal approach that examines not merely the formal existence of regulations but their practical implementation and social reception. This approach recognizes that law operates within social contexts and that effective policy implementation depends on community understanding, acceptance, and participation. By combining policy analysis with ethnographic methods, the research captured both the regulatory framework and the lived experience of communities subject to these regulations. The descriptive component documented existing conditions, while the analytical dimension employed theoretical frameworks from both policy studies and Islamic jurisprudence to interpret findings and generate scholarly insights.

Unit of Analysis

The primary unit of analysis comprised the Muslim communities residing along riverbanks in Banjarmasin City, specifically focusing on residents of settlements adjacent to major rivers including Sungai Martapura, Sungai Pengambangan, Sungai Kelayan, and Sungai Kuin. These communities were selected because they represent the population most directly affected by both river degradation and conservation policies, and because their daily practices significantly impact river conditions. Secondary units of analysis included government agencies responsible for river management and conservation policy implementation.

The study employed purposive sampling to identify informants who could provide rich information regarding research questions. Selection criteria included residency in riverbank areas for a minimum of five years, familiarity with local conditions, and willingness to participate in extended interviews. Government informants were selected based on their institutional

¹⁵Gugah Praharawati Fachruddin Majeri Mangunjaya, "Fatwas on Boosting Environmental Conservation in Indonesia," *Religions*, ahead of print, 2019, <https://doi.org/https://doi.org/10.3390/rel10100570>.

¹⁶ Muhammad Natsir Mallawi, "Evaluation of Public Policy Implementation in Natural Resource Management: A Case Study in Makassar City," *The International Journal of Management*, ahead of print, 2025, <https://doi.org/10.61132/digitalinnovation.v2i2.317>.

responsibilities for river management and environmental oversight. This sampling strategy ensured that data reflected diverse perspectives from both policy implementers and affected communities.¹⁷

Data Sources

Table 1: Data Sources Classification

Data Category	Source Type	Specific Sources
Primary Data	Key Informant Interviews	Riverbank community residents (9 informants across 4 river locations)
	Government Interviews	PUPR Banjarmasin officials, Environmental Agency officials
	Field Observation	River conditions, community practices, settlement patterns
Secondary Data	Policy Documents	RTRW Kota Banjarmasin 2013-2032, Perda No. 2/2007, Perda No. 15/2016
	Strategic Plans	Renstra Dinas PUPR 2016-2021, Renstra DLH 2017-2021
	Statistical Data	BPS Kota Banjarmasin population and river data
	Academic Literature	Journals on Islamic environmental ethics, river conservation studies

Primary data were collected from interviews with nine community informants residing in different riverbank locations, ensuring geographic diversity across the city's five districts. Government data sources included the Strategic Plans of the Public Works and Spatial Planning Agency (Dinas PUPR) and the Environmental Agency (*Dinas Lingkungan Hidup*), which documented conservation programs, implementation achievements, and identified challenges.¹⁸

Data Collection Techniques

Data collection employed three complementary techniques: in-depth interviews, field observation, and documentation analysis.¹⁹ In-depth interviews utilized semi-structured protocols that allowed flexibility in exploring emergent themes while maintaining focus on core research questions. Interview protocols addressed three domains: (1) knowledge and understanding of government conservation policies; (2) personal and community participation in conservation activities; and (3) religious understanding regarding Islamic principles related to water and environmental conservation.

Interviews with community informants were conducted in their residential locations between March 2020 and May 2020, with each session lasting 30-60 minutes. Government interviews were conducted at respective agency offices and focused on policy implementation, program

¹⁷ Sudarman Sudarman Syafri Syafri B. Surya, Ridwan Ridwan, S. Bahri, E. S. Rasyidi, "Water Quality Pollution Control and Watershed Management Based on Community Participation in Maros City, South Sulawesi, Indonesia," *Sustainability*, ahead of print, 2020, <https://doi.org/10.3390/su122410260>.

¹⁸ Luki Oka Prastio Widodo N. A. Deliarnoor, R. Sumadinata, Novie Indrawati Sagita, Abdillah, Ana Fitriana Poerana, "Environmentalism with Indonesian National Army: Urban Revitalization of the Citarum River in Karawang Regency, Indonesia," *Cogent Social Sciences*, ahead of print, 2024, <https://doi.org/10.1080/23311886.2024.2354975>.

¹⁹ Trisni Utami I. Sari, "Sustainability of Ecotourism at Mudal River: Evaluation of Environmental Conservation and Community Involvement," *IOP Conference Series: Earth and Environment*, ahead of print, 2025, <https://doi.org/10.1088/1755-1315/1489/1/012048>.

achievements, challenges encountered, and perceptions of community participation. All interviews were recorded with informant consent and subsequently transcribed for analysis.

Field observation involved systematic documentation of river conditions, settlement patterns, waste disposal practices, and evidence of conservation activities or violations. Observation sites included major rivers and their tributaries across different city districts. Documentation analysis examined relevant legal instruments, policy documents, and administrative records to establish the regulatory framework and implementation mechanisms.

Data Analysis Techniques

Data analysis employed a descriptive-analytical approach combining inductive and deductive reasoning.²⁰ Interview transcripts and field notes underwent systematic coding to identify patterns, themes, and relationships relevant to research questions. Initial coding used open coding procedures to identify emergent categories, followed by axial coding to establish relationships between categories. Theoretical frameworks from policy implementation studies and Islamic jurisprudence guided interpretation of coded data.

The analytical process involved triangulation across data sources to enhance validity. Interview data were cross-referenced with documentary evidence and field observations to verify consistency and identify discrepancies. Government claims regarding implementation were assessed against community perceptions and observable conditions. Religious understanding reported by informants was evaluated against established fiqh principles documented in scholarly literature.²¹

Interpretation employed theoretical capital from both policy studies and Islamic legal theory to derive meaning from empirical findings. The concept of policy effectiveness was operationalized through indicators including community awareness, behavioral compliance, and participation rates. Religious understanding was assessed against normative standards established in Islamic environmental jurisprudence, particularly concepts of water rights, conservation obligations, and the *harim al-nahar* principle.²² This dual theoretical lens enabled the synthesis of findings into the proposed "river fiqh" paradigm that integrates policy and religious dimensions of conservation.

RESULTS AND DISCUSSION

Government Policy Implementation: Institutional Framework and Program Achievement

The research findings reveal that the Banjarmasin City Government has established a comprehensive regulatory framework for river conservation that is embedded within the 2013-2032 Regional Spatial Planning (*RT/RW*) document. Article 3 of this planning document specifies three strategic approaches: revitalizing rivers through coordination with the Ministry of Public Works' regional management unit overseeing the Barito River basin; conducting renewal of areas

²⁰ Ari Gunawan, "Collaborative Governance in Urban Waste Management: Policy Evaluation of Malang City in the Post-Pandemic SDGs Era," *Pangripta*, ahead of print, 2025, <https://doi.org/10.58411/qbxhb898>.

²¹ A. Rahman, "Analysis of Public Perception on the Implementation of Waste Management Policies in Major Indonesian Cities Based on Environmental Awareness and Social Participation," *Moccasin Journal De Public Perspective*, ahead of print, 2024, <https://doi.org/10.37899/mjdpp.v1i3.103>.

²² Aminuddin Mustaffa Absori Arief Budiono, Mohammad Indra Bangsawan, Rizka, "The Integration of Positive and Islamic Law in Contemporary Forest Conservation Policies Based on Sustainable Development: A Comparative Study of Indonesia and Malaysia," *MILRev: Metro Islamic Law Review*, ahead of print, 2026, <https://doi.org/10.32332/milrev.v5i1.13038>.

along river corridors; and providing watercraft for tourism purposes. The Mayor's Vision and Mission 2016-2021 explicitly incorporates river-based spatial planning within Mission Three, which states: "Realizing a beautiful Banjarmasin City with river-based spatial planning to achieve an attractive and harmonious city".²³

The implementation of these policies is delegated to the Public Works and Spatial Planning Agency (*Dinas PUPR*) through the River Division, which has formulated strategic issues centered on "River revitalization for community life." These strategic issues are translated into three policy directions: adjusting the *RTRW* to become river-based; enhancing management and revitalization of water resources; and implementing river channel normalization. The programmatic translation includes the Development, Management, and Conservation of Rivers, Lakes, and Other Water Resources program, encompassing Debt Swap-based riverbank revitalization and arrangement, Clean River Service activities, and riverbank revitalization projects.

The quantitative achievements of the River Division demonstrate significant progress, with 43.43 kilometers of rivers managed between 2011 and 2015, distributed as follows: 6.10 km in 2011, 9.61 km in 2012, 7.07 km in 2013, 10.41 km in 2014, and 10.24 km in 2015. The realization rate for the indicator "percentage increase in river length managed" exceeded targets, achieving 48.01% against a target of 16%, based on a total river length of 173.8 km requiring management, earning a "Very Good" performance rating.²⁴

However, the implementation faces substantial challenges that constrain effectiveness. The River Division identified the following obstacles: existing regulations on river management and utilization require better coordination; support from community organizations concerned with river conservation remains limited; socialization regarding river and drainage management needs intensification; community awareness of river functions and the importance of sustainable water resource utilization remains low; funding and human resource limitations in the irrigation and supervision sectors persist; equipment and personnel for emergency response operations are insufficient; and synergy and coordination among relevant stakeholders in water resource management have not been optimized.²⁵ Additional challenges include limited funding allocations, rapid development dynamics and population growth degrading spatial quality, community dependence on direct water extraction from sources, inadequate community support for waste and wastewater management, and the need for government commitment to green open space provision.

The Environmental Agency (DLH) complements PUPR's work by focusing on environmental oversight and cleanliness. The most prominent issue emphasized by DLH concerns river water pollution, with potential polluters including small, medium, and large-scale industries, markets, hospitals, settlements, and other establishments along rivers. DLH conducts routine water quality testing at multiple river locations through its Environmental Management Division and the Environmental Laboratory Technical Implementation Unit.

The operational framework for river management is guided by Regional Regulation (Perda) Number 15 of 2016 concerning Efforts to Improve River Management, which substantively builds upon Perda Number 2 of 2007 on River Management. This regulation provides initial guidance for

²³ Mahyuni Mahyuni, "Sister City Cooperation Model In Wetland Environmental Governance: Case Study In Banjarmasin, South of Kalimantan."

²⁴ Ferdy Herdiawan, "Legal Review of Urban River Conservation Policies from the Perspective of Ecological Balance."

²⁵ Mallawi, "Evaluation of Public Policy Implementation in Natural Resource Management: A Case Study in Makassar City."

riverbank landscape planning along the city's rivers, including Sungai Martapura, Sungai Pengambangan, Sungai Kuin, and Sungai Kelayan.²⁶

Community Response and Participation: Knowledge Gaps and Behavioral Patterns

The research findings indicate that the effectiveness of government river conservation policies remains limited when assessed from the perspective of community knowledge and participation. Interview data reveal that the majority of riverbank residents in Banjarmasin lack awareness of conservation policies beyond basic prohibitions against littering. Exemplifying this knowledge gap, Informant I and Informant IX, both residents of the Pengambangan riverbank area, reported complete unawareness of the existence of government river conservation policies.

Partial understanding exists among a minority of informants. Informant VI demonstrated awareness that conservation objectives include restoring river flow functions, freeing land around rivers, and developing rivers as recreational and tourism destinations. However, such comprehensive understanding remained exceptional rather than representative. Most informants, while lacking knowledge of formal conservation policies, demonstrated awareness of specific regulations, particularly prohibitions against disposing of waste into rivers and the associated monetary penalties and potential imprisonment for violations.²⁷

Community response to known regulations varies significantly. One informant from the Pengambangan riverbank area expressed strong support for government penalties, noting that strict enforcement would create a deterrent effect. A female merchant informant from the Kelayan riverbank area reported no awareness of government regulations regarding river utilization and maintenance, yet expressed support for conservation policies given the frequent flooding in her area caused by narrowing rivers due to riverbank construction. An informant from the Martapura riverbank in Basirih area noted that government socialization regarding waste disposal prohibitions had been frequent, yet failed to fully change community behavior, with many residents continuing to dispose of waste into rivers despite the provision of temporary waste collection points and public toilets by the government.

Community participation in conservation activities manifests primarily through *gotong royong* (collective work) activities for river and environmental cleaning, whether organized independently by communities or facilitated by the government through DLH's Waste Division or PUPR's River Division.²⁸ Informant VII expressed full support for community cleaning activities and encouraged fellow residents to implement government conservation policies. Informant VI emphasized that rivers represent Banjarmasin's distinctive characteristic and have brought significant benefits to the city, noting that his participation includes not disposing of waste, particularly non-biodegradable materials like plastic and glass bottles, into rivers.

²⁶ A. Supriyadi Lilik Muslikhatin, "Sustainable Environmental Governance as the Implementation of State Defense Policy," *Journal of Placemaking and Streetscape Design*, ahead of print, 2024, <https://doi.org/10.61511/jpstd.v2i1.2024.984>.

²⁷ Fikri Habibi Delly Maulana Catur Nugroho, Roro Retno Wulan, "Developing Sustainable Waste Management in Urban Areas: Case Study of Municipal Government Policy Strategies in Banten Indonesia," *SAGE Open*, ahead of print, 2025, <https://doi.org/10.1177/21582440251378799>.

²⁸ M. Rayhan Herawati Herawati Lola Illona Elfani Kausar, Syamsul Arifin, Ilma Hudatil Atqiya, "Analysis of Leadership Model for Participation of River Guard in the River Waste Management System for Sustainable Healthy City in Banjarmasin South Kalimantan, Indonesia," *International Journal of Law Environment and Natural Resources*, ahead of print, 2024, <https://doi.org/10.51749/injurlens.v4i1.91>.

Some informants reported deeper involvement beyond physical participation. Informants I and IX indicated participation in neighborhood and village-level meetings discussing conservation policy implementation in their areas and acknowledged actively reminding non-compliant neighbors that their behavior violates regulations and carries financial penalties. Despite these positive examples, the overall finding indicates that community participation in conservation efforts remains limited, with the continued practice of waste disposal into rivers and riverbank construction despite prohibitions demonstrating the gap between policy intent and actual behavior.

Religious Understanding and Environmental Behavior: The Fiqh Knowledge Gap

The investigation of religious understanding among Muslim communities in Banjarmasin reveals a significant disconnect between Islamic teachings on environmental conservation and community knowledge of these principles. Informant VI articulated that his understanding of Islamic teachings regarding river conservation includes the belief that maintaining river cleanliness brings divine reward, that Muslims should not dispose of waste carelessly because cleanliness represents a portion of faith, and that religious scholars have encouraged environmental preservation through *fiqh lingkungan* (environmental jurisprudence) and general cleanliness in their religious lectures.

However, such understanding proves exceptional. Informant III, residing along Sungai Kuin, reported never hearing appeals from ulama or ustadz to conserve rivers, noting that waste in Sungai Kuin increases annually without any cleaning personnel. Informant V from the Kelayan riverbank area similarly reported no guidance from community or religious leaders regarding river conservation. Informant IV, despite not having heard specific religious guidance on river conservation, acknowledged knowing that cleanliness constitutes part of faith and therefore maintaining river cleanliness represents a form of worship.

The most concerning finding is that despite the socio-cultural context of Banjarmasin being strongly characterized by Islamic teachings, riverbank community residents receive minimal socialization, guidance, or teaching from local religious leaders regarding fiqh sungai principles, including the religious obligations to maintain, preserve, and conserve rivers. This gap in religious education represents a missed opportunity for leveraging religious institutions as conduits for environmental awareness and behavioral change.

The normative foundations of Islamic environmental jurisprudence provide robust principles for river conservation that remain largely unknown to the studied communities. Islamic teachings require clean water meeting purification standards (*thahir mutbahhir*) for religious practices, which necessitates protection of water sources from pollution. The jurisprudential principle "*ma la yatimmu al-wajib illa bihi fa huwa wajib*" (that without which an obligation cannot be fulfilled becomes itself obligatory) establishes water source protection as a religious duty.²⁹

The fiqh tradition contains specific regulations preventing water pollution, including prohibitions against urinating or defecating in stagnant water sources, under fruit-bearing trees, on roads or thoroughfares, and in shaded rest areas.³⁰ These regulations demonstrate that Islamic

²⁹ Erisa Hanifah Sheila Septiana Dewi Flourens Ainjellina Bunga P. ., Shabrina Shabrina, "The Role of Ecological Values in Fiqh Wudhu': An Effort to Maintain the Sustainability of Water Resources," *International Journal of Religion and Social Community*, ahead of print, 2024, <https://doi.org/10.30762/ijoresco.v2i1.3511>.

³⁰ Andi Zakaria, "Fiqh Ibadah Dan Lingkungan: Kajian Literatur Tentang Wudhu Dan Penghematan Air Dalam Perspektif Islam."

jurisprudence requires designated locations for waste disposal to prevent environmental contamination of water, soil, and air. Water contaminated by human waste or other pollutants is classified as najis or mutanajjis (ritually impure), rendering it unsuitable for religious purposes.

Most significantly for urban planning contexts, Islamic jurisprudence contains the concept of *harim al-nabar* (river setback zones), which mandates that riverbanks remain free from construction to allow for conservation activities.³¹ Classical scholars including Imam al-Bajuri and Ibn Hajar al-Haitami addressed this principle, with al-Bajuri recommending demolition of all structures built on riverbanks, including mosques, and al-Haitami noting that this represents a consensus position across the four major Islamic legal schools. This jurisprudential principle directly addresses the primary conservation challenge in Banjarmasin: encroachment of settlements onto riverbanks and even river surfaces.

The River Fiqh Paradigm and the Challenge of Urban Environmental Governance in Muslim Society

This study reveals a significant gap between formal policy commitments and effective implementation of river conservation in Banjarmasin. Although the municipal government has established comprehensive regulatory frameworks through spatial planning regulations and river management policies, ecological degradation and environmentally harmful practices continue among riverbank communities. Government achievements in river revitalization and infrastructure development have not been accompanied by proportional improvements in public participation or sustainable environmental behavior. The findings indicate that community understanding of conservation remains limited to basic prohibitions, while environmentally damaging practices such as waste disposal into rivers and riverbank encroachment persist despite public support for conservation programs.

The conservation challenges in Banjarmasin cannot be separated from the city's socio-ecological context as a river-based urban society. Rivers have historically functioned as the center of transportation, economic activity, and cultural identity in the "Kota Seribu Sungai." However, rapid urbanization, population pressure, and limited access to formal housing have encouraged settlement expansion along riverbanks and even above river surfaces. Although the government has provided supporting infrastructure such as temporary waste disposal facilities and public sanitation services, these interventions have not significantly changed public behavior. This demonstrates that conservation problems extend beyond physical infrastructure and involve social habits, environmental awareness, and collective ecological culture.

The study also highlights the weak integration of Islamic environmental ethics within community conservation practices. Despite the dominance of Muslim communities in Banjarmasin and the rich tradition of Islamic jurisprudence concerning environmental protection, most informants demonstrated only superficial understanding of Islamic ecological teachings. Principles such as *maslahah*, *maqasid al-shariah*, and *harim al-nabar*, which emphasize public welfare, environmental sustainability, and the prohibition of riverbank encroachment, remain largely

³¹ E. N. Sihombing Ahyar Gayo Evi Djuniarti, Mohammad Habibi M. Z, Dinna Danaya LaOdde Malim, Ellen Lutya Putri Nugrahani, Penny Naluria Utami, Syprianus Aristeus, "Marine Conservation In the Seafaring Tradition of Lhok Teunom Coastal, Aceh Jaya Regency, Aceh, Indonesia: An Analysis From the Perspective of Fiqh Al-Bi'ah," *Journal of Islamic Thought and Civilization*, ahead of print, 2025, <https://doi.org/10.32350/jitc.152.17>.

unknown at the community level. Consequently, the potential role of religious institutions, ulama, mosques, and Islamic educational institutions as agents of environmental awareness and behavioral transformation has not been optimally utilized.

Based on these findings, this study proposes the concept of *fiqh sungai* (river fiqh) as an integrative framework connecting Islamic jurisprudence, environmental ethics, and urban conservation governance. The river fiqh paradigm emphasizes that river conservation should not be understood solely as a regulatory obligation but also as a moral and religious responsibility within Muslim societies. The study contributes theoretically by integrating public policy implementation theory with Islamic environmental jurisprudence while offering a culturally grounded model for sustainable conservation in river-based Muslim communities. Practically, effective environmental governance requires collaborative engagement among government institutions, religious authorities, educational institutions, and local communities through conservation socialization, Islamic environmental education, and community-based ecological accountability rooted in local traditions such as *gotong royong*.

CONCLUSION

This study demonstrates that river conservation governance in Banjarmasin remains constrained by a significant gap between formal policy implementation and community ecological behavior. Although the government has institutionalized river conservation through spatial planning regulations, revitalization programs, and environmental infrastructure development, these initiatives have not yet produced proportional improvements in public participation, environmental awareness, and sustainable river practices. The findings reveal that conservation challenges in Banjarmasin are shaped not only by urbanization and socio-economic pressures but also by limited community understanding of Islamic environmental ethics. Most Muslim communities still perceive river conservation as a technical or administrative issue rather than as part of a broader religious and moral responsibility grounded in Islamic teachings concerning environmental stewardship.

In response to these challenges, this study proposes the concept of *fiqh sungai* (river fiqh) as an integrative framework connecting Islamic environmental jurisprudence, public policy implementation, and urban ecological governance. By operationalizing Islamic principles such as *maslahah*, *maqasid al-shariah*, and *harim al-nahar* within contemporary conservation practices, the river fiqh paradigm offers a culturally and religiously grounded model for sustainable environmental governance in Muslim societies. The study contributes theoretically to the development of Islamic environmental studies by bridging socio-legal analysis with Islamic ecological ethics, while practically emphasizing the importance of collaborative engagement among government institutions, religious authorities, educational institutions, and local communities in strengthening conservation awareness and collective ecological responsibility.

REFERENCES

- Absori, Aminuddin Mustaffa, Arief Budiono, Mohammad Indra Bangsawan, Rizka. "The Integration of Positive and Islamic Law in Contemporary Forest Conservation Policies Based on Sustainable Development: A Comparative Study of Indonesia and Malaysia." *MILRev: Metro Islamic Law Review*, ahead of print, 2026. <https://doi.org/10.32332/milrev.v5i1.13038>.

- Ahyar Gayo, E. N. Sihombing, Evi Djuniarti, Mohammad Habibi M. Z, Dinna Danaya LaOdde Malim, Ellen Luty Putri Nugrahani, Penny Naluria Utami, Syprianus Aristeus. "Marine Conservation In the Seafaring Tradition of Lhok Teunom Coastal, Aceh Jaya Regency, Aceh, Indonesia: An Analysis From the Perspective of Fiqh Al-Bi'ah." *Journal of Islamic Thought and Civilization*, ahead of print, 2025. <https://doi.org/10.32350/jitc.152.17>.
- Andi Zakaria, Ali Muddin Jailani, Rita Haironi. "Fiqh Ibadah Dan Lingkungan: Kajian Literatur Tentang Wudhu Dan Penghematan Air Dalam Perspektif Islam." *Al-Amin: Jurnal Ilmu Pendidikan Dan Sosial Humaniora*, ahead of print, 2024. <https://doi.org/10.53398/alamin.v2i1.368>.
- Chairunnisa. "REVIEW OF ISLAMIC LAW ON THE IMPLEMENTATION OF LAW NUMBER 32 OF 2009 CONCERNING PROTECTION AND ENVIRONMENTAL MANAGEMENT IN MAHAD AL-ZAYTUN." *The Journal Of Constitutional Law*, ahead of print, 2024. <https://doi.org/10.61341/el-siyasa/v2i1.015>.
- Delly Maulana, Fikri Habibi, Catur Nugroho, Roro Retno Wulan. "Developing Sustainable Waste Management in Urban Areas: Case Study of Municipal Government Policy Strategies in Banten Indonesia." *SAGE Open*, ahead of print, 2025. <https://doi.org/10.1177/21582440251378799>.
- Erlangga, Ade. "Water Conservation in an Islamic Perspective: Integrating Religious Values for Water Resources Conservation." *RADEN INTAN: Proceedings on Family and Humanity*, ahead of print, 2025. <https://doi.org/10.47352/3032-503x.77>.
- Fachruddin Majeri Mangunjaya, Gugah Praharawati. "Fatwas on Boosting Environmental Conservation in Indonesia." *Religions*, ahead of print, 2019. <https://doi.org/https://doi.org/10.3390/rel10100570>.
- Ferdy Herdiawan, Harmono Harmono, Andy Rachman, Azmi Faizah Nahri, Rio Ismail, Endang Sutrisno. "Legal Review of Urban River Conservation Policies from the Perspective of Ecological Balance." *Evolutionary Studies in Imaginative Culture*, ahead of print, 2024. <https://doi.org/10.70082/esiculture.vi.2397>.
- Gunawan, Ari. "Collaborative Governance in Urban Waste Management: Policy Evaluation of Malang City in the Post-Pandemic SDGs Era." *Pangripta*, ahead of print, 2025. <https://doi.org/10.58411/qbxhb898>.
- Hamdi, Fahmi, Tuti Hasanah, and Mohd Riandy. "Reconfiguring Islamic Authority in the Algorithmic Age through Digital Fatwas and Legitimacy Contestation in Indonesia." *Indonesian Journal of Digital Islamic Studies (IJDIS)* 1, no. 1 (2025): 1–10.
- Hamdi, Fahmi, Kamel Ladraa, Mounir Ben Jammour, Anwar Hafidzi, and Hamidi Ilhami. "Integrating Maqashid Al-Sharia, Fiqh al-Biah, and Islamic Ethics for Sustainable Water Management." *Al-Ahkam* 10, no. 1 (2025). <https://doi.org/10.22515/alakhkam.v10i1.11277>.
- Herawati Herawati, M. Rayhan, Lola Illona Elfani Kausar, Syamsul Arifin, Ilma Hudatil Atqiya. "Analysis of Leadership Model for Participation of River Guard in the River Waste

- Management System for Sustainable Healthy City in Banjarmasin South Kalimantan, Indonesia.” *International Journal of Law Environment and Natural Resources*, ahead of print, 2024. <https://doi.org/10.51749/injurlens.v4i1.91>.
- I. Sari, Trisni Utami. “Sustainability of Ecotourism at Mudal River: Evaluation of Environmental Conservation and Community Involvement.” *IOP Conference Series: Earth and Environment*, ahead of print, 2025. <https://doi.org/10.1088/1755-1315/1489/1/012048>.
- Jeanne E. McKay, Fazlun Khalid, Fachruddin Majeri Mangunjaya, Yoan Dinata, Stuart R. Harrop. “Practise What You Preach: A Faith-Based Approach to Conservation in Indonesia.” *Oryx*, ahead of print, 2013. <https://doi.org/https://doi.org/10.1017/s0030605313001087>.
- Latifah, Eny. “Fiqh Al-Bi’ah and the Concept of Green and Blue Economy for Achieving Sustainable Development in the Context of SDGs.” *Invest Journal of Sharia & Economic Law*, ahead of print, 2024. <https://doi.org/https://doi.org/10.21154/invest.v4i1.7732>.
- Lilik Muslikhatin, A. Supriyadi. “Sustainable Environmental Governance as the Implementation of State Defense Policy.” *Journal of Placemaking and Streetscape Design*, ahead of print, 2024. <https://doi.org/10.61511/jpstd.v2i1.2024.984>.
- Liza Diniarizky Putri, M. Nastain, Catur Nugroho, Abdul Malik. “Developing Ecological Piety in Pesantren: The Kyai’s Cognition and the Practice of Living Fiqh al-Bi’ah in Banten.” *IJTIHAD Jurnal Wacana Hukum Islam Dan Kemanusiaan*, ahead of print, 2024. <https://doi.org/https://doi.org/10.18326/ijtihad.v23i2.235-259>.
- M. M. Amiruddin, Asmaddy Haris, I. Haq, Haerul Anwar. “Reforming Fiqh Al-Bi’ah (Ecological Jurisprudence) Based on Islam Hadhari.” *International Journal of Law and Society*, ahead of print, 2024. <https://doi.org/10.59683/ijls.v3i3.99>.
- Mahyuni Mahyuni, M. Najeri Al Syahrin. “Sister City Cooperation Model In Wetland Environmental Governance: Case Study In Banjarmasin, South of Kalimantan.” *International Journal of Politic Public Policy and Environmental Issues*, ahead of print, 2021. <https://doi.org/https://doi.org/10.53622/ij3pei.v1i02.32>.
- Mallawi, Muhammad Natsir. “Evaluation of Public Policy Implementation in Natural Resource Management: A Case Study in Makassar City.” *The International Journal of Management*, ahead of print, 2025. <https://doi.org/10.61132/digitalinnovation.v2i2.317>.
- Muzainah, Gusti, Rasyid Rizani, and Abdul Karim. “Decolonizing Digital Islamic Studies Indonesian Epistemologies and the Reconfiguration of Knowledge in the Global South.” *Indonesian Journal of Digital Islamic Studies (IJDIS)* 1, no. 1 (2025): 25–33.
- P. Heriyati, Richel L. Lamadrid, Dahlia Darmayanti, Glory Aguzman. “Collaborative Program for River Conservation in Indonesia: Lessons from the Cisadane River for Sustainable Water Management and Partnerships.” *IOP Conference Series: Earth and Environment*, ahead of print, 2025. <https://doi.org/10.1088/1755-1315/1564/1/012128>.
- Putra, Suprio Jaya. “Green Economy in the Perspective of Maqasid Al-Shariah.” *Social Science Research Network*, ahead of print, 2026. <https://doi.org/10.2139/ssrn.6092726>.

- Rahman, A. "Analysis of Public Perception on the Implementation of Waste Management Policies in Major Indonesian Cities Based on Environmental Awareness and Social Participation." *Moccasin Journal De Public Perspective*, ahead of print, 2024. <https://doi.org/10.37899/mjdpp.v1i3.103>.
- Seff, Nadiyah, Muhammad Hidayat, Nurliana Nurliana, Tharekh Era Elraisly, and Maskur Rosyid. "Islamic Family Law and Women's Rights in Indonesia: Between Normativity, Reform, and Social Realities." *ASEAN Journal of Islamic Studies and Civilization (AJISC)* 2, no. 2 (2025): 237–56.
- Sheila Septiana Dewi, Eriisa Hanifah, Flourens Ainjellina Bunga P. ., Shabrina Shabrina. "The Role of Ecological Values in Fiqh Wudhu': An Effort to Maintain the Sustainability of Water Resources." *International Journal of Religion and Social Community*, ahead of print, 2024. <https://doi.org/10.30762/ijoresco.v2i1.3511>.
- Sukarni, S. "Gambut Muslim Community and Their Environmental Conservation; Intertwin among Fiqh, Economy, and Policy Factors." *AL-IHKAM: Jurnal Hukum & Pranata Sosial*, ahead of print, 2025. <https://doi.org/10.19105/al-lhkam.v19i2.14311>.
- Syafri Syafri, Sudarman Sudarman, B. Surya, Ridwan Ridwan, S. Bahri, E. S. Rasyidi. "Water Quality Pollution Control and Watershed Management Based on Community Participation in Maros City, South Sulawesi, Indonesia." *Sustainability*, ahead of print, 2020. <https://doi.org/10.3390/su122410260>.
- Thohir Luth, Ranitya Ganindha, Siti Rohmah, Nur Chanifah, Moh. Anas Kholish. "Coastal Ulama Ijtihād and Destructive Fishing Prevention in Indonesia." *AHKAM Jurnal Ilmu Syariah*, ahead of print, 2022. <https://doi.org/https://doi.org/10.15408/ajis.v22i2.28077>.
- Widodo, Luki Oka Prastio, N. A. Deliarnoor, R. Sumadinata, Novie Indrawati Sagita, Abdillah, Ana Fitriana Poerana. "Environmentalism with Indonesian National Army: Urban Revitalization of the Citarum River in Karawang Regency, Indonesia." *Cogent Social Sciences*, ahead of print, 2024. <https://doi.org/10.1080/23311886.2024.2354975>.
- Yenni Yuliza, E. Ridwan, Rudi Febriamansyah. "Sustainable Management of Urban River Ecosystem Services: A Systematic Literature Review on Community Engagement and Environmental Behavior in Indonesia." *Journal of Applied and Natural Science*, ahead of print, 2025. <https://doi.org/10.31018/jans.v17i3.6649>.