

PROTECTING THE RIGHT TO ENVIRONMENT: THE ROLES OF JUDICIAL COMMISSIONS AND SPECIAL MASTERS

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SUMMARY

This Article addresses the pressing need for six “green states”—New York, Hawaii, Illinois, Massachusetts, Montana, and Pennsylvania—to adopt quasi-judicial mechanisms for enforcement of their constitutional right to environment. It analyzes the challenges and limitations of traditional litigation in enforcing this right, and compares the special master system in the United States with environmental judicial commissions in Pakistan. It advocates for an expanded role of special masters in environmental litigation with diverse functions, including investigation, mediation, environmental monitoring, technical and scientific advisory, public participation, and consensus-building among different stakeholders, to ensure comprehensive and effective environmental protection. It argues that courts in these green states could pioneer this approach, setting a precedent for other jurisdictions internationally and ultimately strengthening environmental protection globally.

The right to a clean, healthy, and sustainable environment (the “right to environment”) is recognized in its various forms as a fundamental human right across the globe. In 2022, the United Nations General Assembly adopted this right and obliged its Member countries to recognize and protect it.¹ In the United States, six states—New York, Hawaii, Illinois, Massachusetts, Montana, and Pennsylvania (the “green states”)—have already recognized this right in their state constitutions.²

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1. G.A. Res. 76/300, U.N. Doc. A/RES/76/300 (July 28, 2022) (“the human right to a clean, healthy and sustainable environment”).
2. N.Y. CONST. art. I, §19 (in force since 2022) (“right to clean air and water, and a healthful environment”); HAW. CONST. art. XI, §9 (granting “the right to a clean and healthful environment”); ILL. CONST. art. XI, §2 (granting “the right to a healthful environment”); MASS. CONST. art. XCVII (granting “the right to clean air and water, freedom from excessive and un-

However, the right to environment is not self-executing without an effective legal remedy for its enforcement. The maxim “where there is a right, there is a remedy” underscores the necessity for practical remedies to enforce this right. Further, the complexity of modern environmental issues demands multifaceted and innovative remedies that extend beyond traditional litigation and incorporate strategic and globally recognized methods for effective protection of this right. In that context, this Article identifies environmental judicial commissions (EJCs or commissions) as a unique remedy for enforcing the right to environment, recommends adapting this approach in common-law countries and the U.S. green states, and compares it to U.S. courts’ existing system of special masters.

Globally, two primary models of these commissions have emerged, shaped by the legal traditions and governance structures of different regions. In one version in common-law countries, “public inquiry commissions” are established by either the executive or legislative branch of government to address complex environmental issues. For example, in 1974, the government of Canada appointed

necessary noise, and the natural, scenic, historic, and esthetic qualities of their environment”); MONT. CONST. art. II, §3 (granting “the right to a clean and healthful environment and the rights of pursuing life’s basic necessities”); PA. CONST. art. I, §27 (granting “a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment”).

Justice Thomas R. Berger as commissioner in the Mackenzie Valley Pipeline Inquiry to consider environmental, social, and economic impacts of the proposed gas pipeline.³ In another instance, in 2009, Canada's governor general in council established the Commission of Inquiry and designated a judge of the Supreme Court of British Columbia, Honorable Bruce I. Cohen, as sole Commissioner to conduct an inquiry into the decline of sockeye salmon in the Fraser River.⁴ And the United Kingdom government appointed Honorable Justice Kenneth Parker as head of the Windscale Inquiry in 1977 to conduct a local inquiry into the environmental impacts of a plant for reprocessing irradiated oxide nuclear fuels.⁵

In the second model, EJs are appointed by judges during ongoing complex litigation concerning the right to environment. Although this practice is observable in both India and Pakistan, the Supreme Court and high courts in Pakistan have innovatively utilized these commissions for diverse functions, including investigation, mediation, environmental monitoring, technical and scientific advising, public participation, and consensus-building among different stakeholders. This Article recommends adopting this approach in common-law countries and the U.S. green states as a strategic response in complex litigation for protection and enforcement of the right to environment and in achieving sustainable environmental outcomes.

There are three primary challenges associated with traditional environmental litigation in the context of enforcing the right to environment. First, given that these rights belong to the public, many people and stakeholders may be unable to participate due to the high cost and lengthy process associated with environmental litigation. Second, as judges are often presented with difficult questions of balancing economic and environmental interests, judicial expertise about environmental matters may be limited and an expert or technical assistance is often required. Third, courts often focus on legal, technical, and financial aspects of the case rather than prioritizing the protection of the environment as a fundamental right; as a result, some stakeholders or environmentalists may disagree with the decisions because the outcomes may not fully address the environmental concerns at the heart of the dispute.

This Article argues that courts in common-law countries and the U.S. green states must anticipate these issues and adopt an innovative and structured approach for resolving complex litigation concerning the right to environment. EJs have demonstrated three key benefits that could address the challenges faced by traditional litiga-

tion. First, EJs have provided technical, scientific, investigative, monitoring, and advisory functions in a variety of public interest litigation, such as claims related to nuisance, water conservation, air protection, waste management, endangered species conservation, and environmental management. Second, some EJs have organized hearings to ensure public participation in ongoing environmental disputes without the barriers of expensive and lengthy litigation. Third, EJs are used as a mechanism to engage and build cooperation and consensus among various stakeholders—including the public, government departments, nongovernmental organizations (NGOs), legal and environmental experts, and scientists—in collaborative efforts. With these functions and benefits, EJs represent a multifaceted and strategic response to the evolving demands of environmental dispute resolution.

Some functions and judicial practices of EJs are already present in the special master system in the United States. U.S. courts appoint individuals as special masters to manage complex disputes that are not exclusively confined to environmental issues. Although appointment of special masters in environmental matters is rare in the green states, their use presents an intriguing counterpart and parallel to the first function of EJs. Special masters play a pivotal role in conducting evidentiary proceedings, managing complex environmental litigation, facilitating settlements, and ensuring compliance with court orders and environmental laws in complex disputes. However, special masters have not been appointed to build cooperation and consensus among different stakeholders or ensure public participation.

As environmental crises and litigation become more complex and persistent, the significance of quasi-judicial bodies like EJs and special masters becomes increasingly paramount. These bodies offer valuable lessons and a unique strategy for resolving environmental disputes worldwide. However, despite their critical role in complex litigation and potential as a significant tool in right to environment litigation, there is a notable deficiency in academic literature on both EJs and special masters, and there is no literature comparing both these approaches and discussing their role in enforcement of the right to environment.

A few scholars have examined the Boston Harbor cleanup litigation, emphasizing the innovative judicial approach of a special master that facilitated the judicial process with technical expertise and prompted legislative and executive actions.⁶ Stuart P. Feldman also advocates for this approach in complex environmental disputes and discusses the role of special masters in enforcing environmental laws post-judgment.⁷ Robert H. Freilich provides an overview of his experiences as a special master in managing a complex case involving hazardous waste, highlighting the efficiency of having environmental expertise to guide the

3. See Government of Canada Publications, *The Report of the Mackenzie Valley Pipeline Inquiry*, https://publications.gc.ca/collections/collection_2015/bcp-pco/CP32-25-1977-1-eng.pdf (last visited Nov. 8, 2024).

4. See National Library of Canada, *Commission of Inquiry Into the Decline of the Sockeye Salmon in the Fraser River*, <https://epe.lac-bac.gc.ca/100/206/301/pco-bcp/commissions/cohen/cohen2012-eng/cohen2012-eng.htm> (last visited Oct. 17, 2024).

5. KENNETH PARKER, THE WINDSCALE INQUIRY: REPORT BY THE HON. MR. JUSTICE PARKER, PRESENTED TO THE SECRETARY OF STATE FOR THE ENVIRONMENT ON 26 JANUARY 1978 (1978), <https://archive.org/details/windscaleinquiry0002grea/page/n1/mode/2up> (Justice Parker recommended to grant permission for such plant under specific conditions).

6. Charles M. Haar, *Boston Harbor: A Case Study*, 19 BOS. COLL. ENV'T AFFS. L. REV. 641 (1992).

7. Stuart P. Feldman, *Curbing the Recalcitrant Polluter: Post-Decree Judicial Agents in Environmental Litigation*, 18 BOS. COLL. ENV'T AFFS. L. REV. 809 (1991).

judicial process.⁸ And Jonathan Zasloff critiques proposals for establishing specialized environmental courts in the United States, and recommends utilizing special masters to handle the technical complexities of environmental cases and to maintain general judicial oversight.⁹ However, the academic community has yet to comprehensively explore the use of special masters for environmental protection.

In Pakistan, while Dr. Parvez Hassan has made significant contributions by describing the importance of EJC's and reflecting on his own experiences within these commissions, there is a notable gap in the literature when he was not involved.¹⁰ This gap hinders a comprehensive understanding of how EJC's function within the Pakistani legal framework, their effectiveness, and their influence on right to environment litigation. Moreover, the scarcity of external and comparative research on EJC's limits adoption of this innovative approach by other jurisdictions and their long-term efficacy in addressing environmental disputes globally. There is a clear need for more diverse perspectives that could provide a deeper and nuanced understanding of the functions and impacts of EJC's' role in environmental protection, as well as their potential applicability in other legal systems.

This Article seeks to bridge these gaps by discussing the potential of both quasi-judicial bodies—EJC's and special masters—to protect the right to environment. Both of these models exemplify distinct but complementary facets of quasi-judicial intervention in environmental disputes. Through a comprehensive analysis that spans from their historical inception to potential future applications, the Article not only encourages judges globally to adopt these approaches, but also encourages a global dialogue on the integration and optimization of quasi-judicial mechanisms in environmental litigation, and a deeper understanding of the strategic role these bodies can play in enforcing the right to environment.

The Article is structured in five parts. The first provides a foundational overview of the functioning and success of EJC's in Pakistan, categorizing them based on their objectives to show they have contributed to every aspect of environmental protection. It provides a brief description of their membership, powers, recommendations, and influence, demonstrates the effectiveness of EJC's in addressing complex environmental litigation involving the right to environment, and illustrates how they have effectively

protected the right to environment through public participation and stakeholder cooperation and consensus.

The second part explores existing judicial practices in the United States that align with the principles of EJC's, and shows how elements of the EJC model are already present in the U.S. special master system. It discusses five categories of special masters appointed by courts in the United States: to conduct evidentiary proceedings, manage procedural aspects of the case before its trial, facilitate settlements between the disputing parties, ensure compliance with the judgment, and monitor environmental compliance of a specific project. This analysis underscores the relevance and adaptability of EJC's in the United States through the special master system.

The third part provides a comprehensive comparison between EJC's in Pakistan and special masters in the United States on six key points: the nature of litigation for which they are appointed, the judicial powers for their appointment, the composition of their membership, their workings and powers, their compensation and expenses, and their recommendations and role in environmental protection and litigation. This analysis provides insights into the operational dynamics of both models within their respective legal frameworks for addressing, managing, and resolving complex environmental litigation.

The fourth part analyzes existing litigation in New York involving the right to environment, and describes the challenges of such traditional litigation. It further examines one pending lawsuit as a case study to explore the potential of utilizing special masters for its resolution. It discusses how the benefits of the EJC model can be adapted and implemented in the United States, and how the special master system can be improved for protection of the right to environment in the green states and common-law countries. By outlining a clear path for this approach in the case study, the part demonstrates how the green states can enhance judicial enforcement of the right to environment. Part V concludes.

I. EJC's in Pakistan

The Supreme Court and the high courts of Pakistan are vested with original jurisdiction to protect and enforce fundamental rights of citizens, which notably include a judicially recognized right to environment derived from the constitutional rights to life and dignity.¹¹ Beyond these wide discretionary powers, the Pakistani Supreme Court is also empowered to initiate *suo motu* actions on issues of public importance without requiring a formal complaint and to pass necessary orders for doing “complete justice.”¹²

In this legal framework, public interest litigation has become a prevalent practice in Pakistan, enabling any individual to directly approach these superior courts for enforcement of fundamental rights. These public interest litigations often encompass enforcement or violation of the

8. Robert H. Freilich, *Editor's Comment: The Use of a Special Master in Complex Environmental Litigation*, 29 URB. LAW. 1 (1997), <https://www.jstor.org/stable/27895043>.

9. Jonathan Zasloff, *W(h)ither Environmental Justice?*, 66 UCLA L. REV. DIS-COURSE 178 (2019).

10. See PARVEZ HASSAN, *RESOLVING ENVIRONMENTAL DISPUTES IN PAKISTAN: THE ROLE OF JUDICIAL COMMISSIONS* (Pakistan Law House 2018), *available at* <https://library.lums.edu.pk/dr-parvez-hassan-publications>; Parvez Hassan, *Judicial Commissions and Climate Justice in Pakistan*, Presentation at Asia Pacific Judicial Colloquium on Climate Change (Feb. 26-27, 2018), https://iucn.org/sites/default/files/content/documents/2018/parvez_hassan_judicial_commissions_and_climate_justice_in_pakistan.pdf; Parvez Hassan, *Judicial Commission on Climate Change in Pakistan*, 20th APCEL Anniversary Conference Panel on Climate Change Adaptation, <https://law1.a.nus.edu.sg/apcel/ccca/4.%20JudicialCommissiononClimateChangeinPakistan.pdf>.

11. PAKISTAN CONST. arts. 199, 184(3).

12. *Id.* arts. 184(3), 187.

right to environment. The Pakistani courts have developed dense jurisprudence, and have been progressive and innovative in interpretation and enforcement of the right to environment in the country.¹³

In public interest environmental litigation in Pakistan, the appointment of EJs has emerged as a customary judicial practice and accepted norm for resolving complex litigation relating to the right to environment. Before proceeding further, it is essential to briefly lay out the framework of these commissions:

(1) EJs are appointed by the Supreme Court and the high courts of Pakistan in public interest litigation that significantly affects the environment of any area or the broader right to environment. These commissions address a variety of environmental issues, including protection of health, water conservation, air protection, waste management, endangered species conservation, and environmental management.

(2) The membership of these commissions varies significantly, ranging from a one-member commission to a panel of up to 30 members. Generally, the courts appoint an environmental lawyer, judge, or consulting firm as chairperson of the commission, and sometimes other members as well. The commission is often granted the authority to co-opt additional members based on their expertise and experience. These appointments are mostly made with the consent of the parties involved, or at least without their objection, before issuing any final order in a pending case. This procedure ensures that the commission is adequately equipped with the necessary expertise to address complex environmental issues effectively.

(3) EJs are empowered to physically inspect environmentally degraded areas; verify facts; examine the technical, scientific, and legal bases of projects; mediate complex environmental disputes; or review the legal framework related to environmental issues in a specific project, city, province, or the country.

(4) These commissions engage in a variety of roles, including investigation, adjudication, monitoring, public participation, interdisciplinary cooperation, and advisory services. They provide a strategic and multifaceted response to the evolving demands of environmental governance and serve as a mechanism to build consensus among diverse stakeholders—government departments, environmental advocates, NGOs, technical experts, scientists, academia, and media—in collaborative efforts to address and resolve environmental disputes under judicial oversight.

(5) These commissions submit reports to the courts with their recommendations, which are sub-

sequently considered and integrated in judgments for implementation. In certain cases, the courts also appoint follow-up commissions to implement or monitor these judicial recommendations.

EJs represent an innovative quasi-judicial mechanism designed to address and resolve environmental disputes with an approach that is both inclusive and efficacious. They represent a pioneering effort to blend judicial oversight with stakeholder engagement and consensus-building for protection of the right to environment. This comprehensive approach has led to notable environmental successes from local projects to national initiatives. EJs have profoundly guided and directed the national, provincial, and local authorities on numerous environmental issues in Pakistan, and have notably protected the right to environment by shaping Pakistani environmental legal frameworks and practices.

This part explores the evolution and classifications of EJs, highlighting their critical role in environmental governance of Pakistan. It will briefly discuss the scope, membership, and impacts of these commissions.

A. Evolution of EJs

The Supreme Court and high courts in Pakistan have appointed a total of 13 EJs to address a variety of environmental issues across Pakistan. Among these, the Pakistani Supreme Court has appointed five, the Lahore High Court has appointed seven, and the Islamabad High Court has appointed only one EJC. Notably, there are no reports for the appointment of EJs by the Sindh, Baluchistan, and Peshawar High Courts in Pakistan.

The evolution of EJs has unfolded into three different phases, each marked by variations in territorial jurisdiction and capacity of EJs. The initial phase spans from 1991 to 1994, when three EJs were constituted with a narrow scope to protect the health and surrounding environment of those neighboring specific hazardous projects. These were investigative commissions, with their membership ranging from one to five members.

In this first phase, the Lahore High Court appointed Dr. Parvez Hassan as a single-member commission in Pakistan in 1991 to examine the environmental impacts of asphalt and stone-crushing plants in a residential area. In this commission, Dr. Hassan sought assistance from scientific and technical experts of credible repute and experience without express powers in the appointment order. Subsequently, in 1994, the Pakistani Supreme Court appointed Dr. Hassan as chairman of another commission to inspect and suggest measures to prevent pollution of a stream and reservoir supplying water to a residential area.

In the third commission during this phase, the Pakistani Supreme Court appointed a private consultancy firm, along with the chief physicist [physician] of a renowned hospital, as the commission to study the technicalities and adverse impacts of a grid station. Notably, Dr. Hassan was the counsel for the petitioner in this case, which turned out to be the first landmark environmental judgment in the

13. Hassan, *Judicial Commissions and Climate Justice in Pakistan*, *supra* note 10.

country declaring the right to environment as part of the constitutional right to life and dignity.¹⁴

In the second phase, the Lahore High Court again appointed Dr. Hassan as chairman of two EJs in 2003. These commissions had extended territorial jurisdiction to two citywide issues of air pollution and waste management. Further, they had increased membership with 16 members in the air pollution commission and 11 in the waste management commission. These commissions also had investigative functions, but began influencing legislation and regulations at the city level.

The third phase started in 2011 and witnessed a significant expansion in the number, membership, roles, and territorial jurisdiction of EJs. During this period, the courts constituted a total of eight EJs, including a mediation committee and a follow-up implementation commission. The membership in one of the commissions was increased to 30 members, facilitating broader stakeholder involvement and consensus-building. Similarly, the territorial jurisdiction and scope of EJs were further extended to entire provinces and even the country. This period reflects a transition from purely investigative functions to roles that include mediation, consensus-building, environmental compliance, and policy formulation and implementation.

One of the fundamental reasons for the success of the EJC system in Pakistan can be attributed to Dr. Hassan, who has developed credibility in this system with his leadership, experience, impartiality, professionalism, and ethics. Dr. Hassan has never restricted membership of EJs to anyone wishing to participate in the work of the commissions, and has taken all measures to include and ensure participation of all stakeholders in EJs. He has been able to draw the attention of experts from the public and private sectors, universities, academia, the legislature, and the media to the judicial work of the courts for protection of the right to environment in Pakistan.

Another significant contributor is Justice Syed Mansoor Ali Shah, whose belief in and support of the EJC system has been instrumental in bringing credibility to it. Notably, in the two commissions appointed during the second phase in 2003, he was the petitioner in one of the public interest environmental lawsuits and the coordinator in both EJs. In the third phase, as the Chief Justice of the Lahore High Court, Justice Shah appointed Dr. Hassan as chairman in three commissions for implementation of climate change laws, protection of endangered species, and formulation of a smog policy.

The collaborative efforts of Dr. Hassan and Justice Shah extended the use of similar commissions to address other public interest issues. For instance, as the Chief Justice of the Lahore High Court in December 2017, Justice Shah appointed Dr. Hassan as chairman of the Childcare Commission to address educational, health, mental, transport,

and social requirements of children with special needs and to develop their independent complaint redress system.¹⁵

B. Classification of EJs

EJs can be classified into six categories based on their role and contributions in specific areas of environmental protection. These areas include health and safety protection, water conservation, air protection, waste management, endangered species conservation, and environmental management. To facilitate a detailed understanding, this section provides an overview of the scope, composition, functions, and role of each of the 13 EJs in the six categories.

1. Health and Safety Commissions

The first two EJs were particularly constituted with a narrow scope to protect human health and the surrounding environment from the adverse effects of specific hazardous projects. Both commissions had investigative, technical, scientific, and advisory functions.

In 1991, the Lahore High Court appointed Dr. Hassan as a single-member commission to examine if the workings of asphalt and stone-crushing plants were polluting the environment of a nearby residential area and to suggest to the court the measures to be adopted (the Asphalt Plant Commission).¹⁶ Dr. Hassan sought technical assistance from the chief scientific officer of the Pakistan Council of Scientific and Industrial Research, Dr. Muhammad Hanif, because of his relevant experience on environmental issues.¹⁷

This commission reported that the continued operations of these plants were inconsistent with the right to environment of the people in adjoining residential areas because of the obnoxious fumes and potential health hazards. The commission recommended removing and relocating the plants to areas where there is no danger to the environment.¹⁸ This recommendation led the Lahore Development Authority to remove these asphalt plants from the affected area.¹⁹

Following this example, in 1994, the Supreme Court of Pakistan appointed a private consultancy organization, National Engineering Services Pakistan, as a commission to study the scheme, planning, device, and techniques of a grid station, to examine its likely adverse effects on the health of nearby residents, and to suggest variations in its plan for minimizing these dangers (the Grid Station

14. Zia v. WAPDA, (1994) PLD (SC) 693.

15. Order of the Lahore High Court dated December 22, 2017, Mehdi v. Government of Punjab, Writ Petition No. 107273/2017.

16. Order of the Lahore High Court dated October 15, 1991, United Welfare Ass'n Lahore v. Lahore Dev. Auth., (1991) Writ Petition No. 9297/1991 (LHC).

17. Report of Dr. Hassan dated November 23, 1991, United Welfare Ass'n v. Lahore Dev. Auth., Writ Petition No. 9297/1991 [hereinafter Dr. Hassan 1991 Report]. Dr. Hassan requested to accompany him on all visits to the site.

18. Dr. Hassan 1991 Report, *supra* note 17.

19. Orders of the Lahore High Court dated December 22, 1991, and September 16, 1997.

Commission).²⁰ Later, the chief physicist of Shaikh Zayed Hospital Lahore, Dr. Areesha Zaman, was also appointed to this commission.²¹

The report of this commission focused on the health effects from exposure to electric and magnetic fields. It not only evaluated the technical aspects of the project, but also recommended certain exposure limits.²² The judgment in this case turned out to be a landmark environmental success in which the Supreme Court of Pakistan extended the scope of constitutional rights to life and liberty to include the right to environment.

2. Water Conservation Commissions

Four commissions were constituted for preserving clean water across Pakistan, including three commissions by the Supreme Court of Pakistan and one commission by the Lahore High Court.

In 1994, the Supreme Court authorized a five-member commission to inspect the water quality of a stream and reservoir supplying water to the Khewra area, to ensure that the water is not polluted by the debris, carbonized material, and water spilled out from mines, and to suggest measures to prevent such pollution (the Khewra Commission).²³ The commission submitted its report to the Supreme Court, with recommendations to immediately stop all mining activities affecting the water quality in an area of 1,842.15 acres demarcated by the Khewra Commission; to close all mines with mouths draining into water channels or to operate them from a different direction with approval; to lay pipelines to ensure the quality of drinking water; to construct a separate channel for carrying liquid effluents discharged from the mines; to ensure compliance with the National Environmental Quality Standards of the mines; to monitor implementation of the treatment and improvement program every two years; and to undertake an environmental impact assessment (EIA) of the activities in the area.²⁴ The Supreme Court incorporated the recommendations of the Khewra Commission as part of its binding judgment, and directed the lease holders of the mines to comply with the recommendations.²⁵

Subsequently, in 2015, the Supreme Court appointed an environmental advocate, Ahmad Rafay Alam, as a follow-up commission, with a mandate to visit Khewra and investigate the implementation of directives issued by the Khewra

Commission (the Khewra Follow-Up Commission).²⁶ This commission identified both the progress and shortcomings in implementation of the recommendations, and highlighted remaining environmental concerns and remedial measures. Among the commission's key recommendations was to carry out a complete physical, chemical, and biological testing of water sources to address the contamination, to implement a policy for mitigating the adverse environmental effects of mining and the decline in drinking water quality, and to carry out EIAs of all mining and other activities.²⁷ Based on the recommendations of this commission, the Supreme Court directed government officials to eliminate the remaining adverse environmental effects of mining.²⁸

In 2016, the Supreme Court directed the Sindh High Court to nominate a serving judge as a commission to address the challenges related to clean water supply and sanitation in Sindh province (the Sindh Water and Sanitation Commission).²⁹ Justice Muhammad Iqbal Kalhoro was appointed to lead this commission.³⁰ For improving water conditions, the commission recommended the following:

- Acquisition of new sources of water supply for Karachi
- Cessation of unchecked urbanization in major cities
- Replacement of faulty water supply lines to reduce water contamination
- Introduction of a modern system for monitoring water distribution
- Installation of official water hydrants within a specific radius to avoid spillover from the tankers
- Monitoring of drinking water quality
- Ban on construction of high-rise buildings until the water shortage is resolved
- Ensurance of representation of civil society in decisionmaking
- Introduction of a single-window system and authority for water-related issues
- Treatment of industrial toxic effluent released into water bodies or the sea
- Stoppage of oil-spillover from ships to protect marine life

20. *Zia v. WAPDA*, PLD 1994 SC 693, para. 16.

21. Order of the Supreme Court dated April 26, 1994, *Zia v. WAPDA*.

22. Report of the Commission dated June 15, 1994, *Zia v. WAPDA*.

23. General Sec'y, W. Pak. Salt Miners Labour Union (CBA) Khewra v. Director, Indus. & Min. Dev., Punjab, (1994) SCMR 2061, para. 6. Report of Khewra Commission dated November 1996, paras. 1, 2. The Khewra Commission had five members, including Dr. Hassan as its chairman, Dr. Tariq Banuri (an environmentalist), the director of the Industries and Mineral Development, Lahore, a member of the Pakistan Medical and Dental Council, and a unanimously co-opted member, Dr. Muhammad Hanif.

24. Report of the Khewra Commission dated November 1996, Salt Miners Labour Union (CBA) Khewra v. Director, Indus. & Min. Dev., Punjab.

25. Order dated September 8, 2002, passed in *Salt Miners Labour Union v. Director, Industries and Mineral Development, Punjab*.

26. Order dated April 7, 2015, in *Inayat v. Director, Industries & Mineral Development, Punjab Lahore*.

27. Report of the Commission dated June 6, 2015, appointed by the Supreme Court of Pakistan.

28. Order dated October 1, 2015, in *Inayat v. Director Industries & Mineral Development, Punjab Lahore*.

29. Order of the Supreme Court dated December 27, 2016, *Usto v. Government of Sindh* (2017), SCMR 732, para. 3.

30. *Usto*, (2017) SCMR 732, para. 4.

- Addressing the subjects of safe potable water, sanitation, and a healthy environment
- Implementation of drainage in an environmentally safe manner without polluting water supplies³¹

For improving sanitation conditions, the Sindh Water and Sanitation Commission recommended immediately establishing landfill and dumping sites, ensuring disposal of hospital waste in a prescribed manner, investigating financial corruption incurred for the water supply and sanitation system, settling outstanding invoices of civic bodies by the government, monitoring growth of housing societies, reviewing the overlapping functions of government departments concerning water supply and sanitation, strengthening the Sindh Environmental Protection Agency to the district level, and instituting a system of strict accountability and monitoring in these sectors.³²

In 2018, the Lahore High Court directed the Chief Secretary Punjab, the administrative head of the government, to constitute Water Reservation Committee Punjab to generally take measures to preserve drinking water, review aquifer charges, treat wastewater, and ensure protection of water bodies from industrial effluent (the Punjab Water Commission).³³ The commission was also required to advise the chief secretary and the Punjab government after collecting relevant information.³⁴ These committees were required to submit reports to both the Chief Secretary and the Lahore High Court.³⁵ To facilitate this, the court empowered the Chief Secretary to form committees under the secretaries of government departments. The Chief Secretary constituted 11 committees and assigned them duties to preserve drinkable water.³⁶

In 2019, Justice (retired) Ali Akbar Qureshi presented a report as chairman of the Punjab Water Commission and made several recommendations to different departments for water management in the region.³⁷ Among its key recommendations, the commission suggested methods of water conservation and identified the shortcomings requiring immediate action. It required public and private authorities to introduce a jet-washing system at vehicle service stations, create public awareness of the importance of groundwater, construct water reservoir tanks, and reuse ablution water for plants. The commission also recom-

mended that the mobile police in Lahore, Dolphin Force, impose fines for the illegal use of water around the city.³⁸

While all of these commissions had investigative, technical, and advisory functions, the Khewra Follow-Up Commission also had a monitoring function, and the Khewra Commission built cooperation and consensus among the government representatives, technical experts, and environmental advocates to preserve the water quality of a stream and reservoir supplying water to the Khewra region.

3. Air Protection Commissions

The Lahore High Court has appointed Dr. Hassan as chairman of two commissions for protection of air quality. Both commissions had investigative, technical, and advisory functions, and they built cooperation and consensus among their diverse members.

In 2003, the Lahore High Court authorized a 16-member commission to identify the practicable solutions for monitoring and controlling vehicular air pollution in Lahore (the Lahore Clean Air Commission).³⁹ The commission had members from provincial and local government, environmental advocates, technical experts, and university professors. After 10 months of consulting various stakeholders and relying on international experiences with air pollution, the commission recommended adopting health-based ambient air quality standards in line with World Health Organization standards, collecting data on air quality for monitoring, bringing all pollutants within standards, adopting European emission standards for vehicles, and introducing cleaner fuels. In addition, the commission recommended several measures for buses, wagons, rickshaws, and motorcycles, and for monitoring, capacity-building, and awareness-raising.⁴⁰ Thereafter, the court adopted all recommendations of this commission and appointed a five-member standing body, including Dr. Hassan and Justice Shah.⁴¹

Thereafter, in 2017, Justice Shah, as then-Chief Justice of the Lahore High Court, constituted a 13-member commission to identify root causes of the smog across Punjab, formulate a holistic smog policy, and prescribe a preventive plan to protect the life and health of the people of Punjab (the Punjab Smog Commission).⁴² The commission had diverse membership comprising the deputy attorney general of Pakistan, the director of the World Wide Fund for Nature, provincial and local government representatives, environmental advocates, technical experts, and university

31. *Usto*, (2017) SCMR 732, para. 4 (Recommendations 1 to 36).

32. *Id.* (Recommendations 37 to 49).

33. Order dated September 29, 2018, *Haider v. Government of Punjab*, Writ Petition No. 231266/2018, para. 2(v).

34. *Id.*

35. *Id.*

36. Order dated December 20, 2018, para. 2, in *Haider v. Government of Punjab*.

37. In this regard, it made several recommendations to the Industry Department, Irrigation Department, Auqaf Department, Water and Sanitation Agency, Lahore Development Authority, Parks and Horticulture Authority, Environment Protection Department, Registrar of Co-operative Societies, Cantonment Boards, Defence Housing Authority, and Metropolitan Corporation.

38. Report dated March 20, 2019, *Haider v. Government of Punjab*, Writ Petition No. 231266/2018.

39. Order dated July 24, 2003, *Shah v. Government of Punjab*, Writ Petition No. 6927 of 1997, para. 3.

40. Report of the Commission in May 2005.

41. *Shah v. Government of Punjab*, (2007) PLD (Lahore) 403, para. 15-A (comprising Dr. Hassan, Justice Shah, the district coordination officer of Lahore, the director of the World Wide Fund for Nature (WWF), and Nihal Asghar, SEAL, Lahore).

42. *Iqbal v. Federation of Pakistan*, Writ Petition No. 34789/2016.

professors.⁴³ The commission made a total of 17 recommendations, including to stop burning rice stubble, to shut down all brick kilns during the winter season each year, to adopt appropriate technologies that reduce harmful emissions, to give a grace period to steel rerolling facilities to convert to cleaner technologies, to implement prohibition of burning of municipal waste and urban biomass, to adopt and implement the Punjab Clean Air Action Plan, to improve the public health system, and to ensure public-private collaboration to address this environmental challenge.

4. Waste Management Commission

In 2003, the Lahore High Court appointed Dr. Hassan as chairman of an 11-member committee to examine if the existing dumping grounds in Lahore were suitable for landfill projects, to examine their EIA reports, to suggest alternate sites for waste disposal, and to recommend appropriate legislation or regulations on waste management and related issues (the Lahore Waste Management Commission).⁴⁴ The membership of this commission included Justice Shah as the coordinator, three members from relevant government departments, four university professors, a doctor from Shalamar Hospital, and a member of the provincial assembly.⁴⁵

This committee recommended several measures to improve waste management practices in Lahore, including installing a proper composting plant, recycling facility, and sanitary landfill at the existing disposal area; covering the dumping area with soil and turning it into a park by planting greenery; disposing of hospital waste separately; preparing an action plan for treatment of industrial effluent, domestic wastewater, and the sewage pond adjacent to the disposal area; and identifying more sites and conducting their EIAs for handling the municipal waste of Lahore.⁴⁶

The Lahore High Court included the recommendations of the Lahore Waste Management Commission in its judgment, and declared the proposed composting fertilizer plant at the dumping area a reasonable and feasible option to remove environmental hazards from the area.⁴⁷ Further, the court also observed the need of the Punjab government to acquire land in other places to establish waste disposal plants.⁴⁸ Accordingly, this commission had investigative, technical, and advisory functions, and it built cooperation and consensus among its diverse members.

5. Environmental Management Commissions

The Supreme Court, the Lahore High Court, and the Islamabad High Court have each constituted EJC's for

environmental management of specific areas in Pakistan and appointed Dr. Hassan as chairman of these commissions. The commissions had investigative, technical, and advisory functions, and they built cooperation and consensus among their diverse members.

In 2011, the Supreme Court took *suo motu* notice of trees being cut across the Lahore Canal Road for its widening, and appointed Dr. Hassan as a mediator to intervene between the petitioner and government, after their consent, for finding a “viable solution” for the critical issues (the Lahore Canal Road Mediation Committee).⁴⁹ After consulting with counsels of the parties, Dr. Hassan enlisted nine other members with relevant expertise, including a member of the National Assembly, the commissioner of Lahore Division, an urban planning expert, two university professors, three representatives of international organizations, and an environmental advocate as secretary of the committee.⁵⁰

The committee recommended to declare the Lahore canal a heritage urban park, to reengineer the junctions and underpasses along the road, to implement traffic management programs, and to treat the Lahore canal in a holistic manner. It also made other recommendations with respect to noise pollution, ecosystem preservation, water quality cleanup and improvement, people-centric planning, communal life restoration, public participation, and limited widening of the canal road.⁵¹

On the recommendation of the commission, the Supreme Court declared the canal road and its surrounding greenbelt as “public trust” to be treated as a heritage urban park, and directed the Punjab government to pass a law and implement all directions of the commission with minimum damage to the greenbelt. The Court also directed that every tree cut down be replaced by four trees, that the cleanliness of the canal be ensured, and that litter and pollutant discharge into the canal be criminalized.⁵²

In 2015, the Lahore High Court constituted a commission for effective implementation of the National Climate Change Policy (2012) and the Framework for Implementation of Climate Change Policy (2014-2030) (the Climate Change Commission).⁵³ The commission consisted of 30 members, including 13 representatives of the federal government, nine representatives of the Punjab government, three environmental advocates, four representatives from international and private organizations, and a member from the media.⁵⁴ The commission made several recom-

43. Order dated July 24, 2003, *Shah v. Government of Punjab*, Writ Petition No. 6927 of 1997, para. 1.

44. Order of the Court dated February 25, 2003, *City Dist. Gov't v. Yousaf*, Intra Court Appeal No. 798 of 2002, para. 2.

45. *Id.*

46. Report of the Committee dated March 18, 2004.

47. *Yousaf*, ICA No. 798 of 2002, paras. 14, 18.

48. *Id.* para. 20.

49. Order dated February 14, 2011, in *Suo Motu Case No. 25 of 2009*, *In the matter of Cutting of Trees for Canal Widening Project, Lahore*.

50. Report dated May 14, 2011, of the Lahore Canal Road Mediation Committee.

51. *Id.*

52. In the matter of Cutting of Trees for Canal Widening Project, Lahore, (2011) SCMR 1743, para. 60.

53. Order dated September 14, 2015, *Leghari v. Federation of Pakistan*, Writ Petition No. 25501/2015.

54. The secretaries or heads of different federal ministries and departments: 10 secretaries of different provincial ministries and departments, including the Ministry of Climate Change (Arif Ahmed Khan), Ministry of Water and Power (Mohammad Younus Dagher), Ministry of Finance (Dr. Waqar Masood Khan), Ministry of Planning, Development, and Reform (Yousaf

mendations with respect to climate change coordination and monitoring, financial allocations, capacity-building, improved infrastructure, glacial melting, water storage capacity, agriculture, energy, food security, public awareness, protection of ecologically sensitive habitats and species, research, and the role of local governments.⁵⁵ Thereafter, the court adopted all recommendations of the commission in its order.⁵⁶

In 2015, the Islamabad High Court constituted a 13-member commission to investigate and make recommendations to prevent further environmental destruction and degradation in Pakistan's capital, Islamabad (the Islamabad Environmental Commission).⁵⁷ The membership of this commission included three representatives of the federal government, a member of the National Assembly, two representatives from the local government, two environmental advocates, a technical expert, three representatives of international organizations in Pakistan, and a representative of a media group. This commission also invited the Karachi urban planner, the vice chancellor of the Pakistan Institute of Medical Sciences, and the chairman of the Sustainable Development Policy Institute as "special invitees" to its meetings for assistance.⁵⁸

The Islamabad Environmental Commission made priority recommendations for immediate action in several critical areas, including to ensure safeguards against encroachments to Islamabad's master plan, to comply with EIA law, to develop landfill sites, to build capacity for environmental compliance, to prohibit adverse environmental effects, to prevent violation of environmental laws, to develop a waste management system by housing societies, and to allocate financial resources appropriately. The commission also made other recommendations concerning clean drinking water; solid, hospital, and industrial waste management; air pollution management; public participation; coordination between environmental agencies; mass transit planning; restructuring the development authority; and public education.⁵⁹ As recommended by this commission, the Islamabad High Court constituted an implementation committee to oversee implementation of the recommendations of this commission.

6. Endangered Species Conservation Commission

In 2017, Justice Shah, the then-Chief Justice of the Lahore High Court, constituted a 12-member commission to carry out field surveys to assess whether hunting of an endangered species, houbara bustards, is a sustainable activity in Punjab, and empowered it to make recommendations for the protection and conservation of houbara bustards (the Houbara Bustard Commission).⁶⁰ This commission was chaired by Dr. Hassan and had two representatives from the Punjab government, five environmental advocates, two university professors, and three members of international environmental organizations.⁶¹ The author was secretary of this commission.

The commission conducted a survey of Rahim Yar Khan, Rajanpur-Rojhan, and Thal areas to assess the population of the houbara bustards in Punjab, and also held public hearings to reach out to representatives and members of the civil society of the area. The commission reported that it is not in a position to conclude whether the hunting of houbara bustards in Punjab is sustainable or not. It recommended that if two successive surveys of the same areas are carried out, the commission would be in a better position to formulate a hunting policy and to establish the reliability of the data. Accordingly, this commission had investigative, technical, and advisory functions, and it built cooperation and consensus among its diverse members. Unlike any other EJC's, this commission also allowed public participation to ensure protection of the right to environment.

II. Special Masters in the United States

Tracing the evolution of "special masters" within the United States reveals their origins in equity courts, which had the discretion and "inherent power" to appoint them for cases involving remedies other than monetary damages, such as injunctions and specific performance. Initially, the role of special masters was confined to performing "clerical functions." However, by the late 19th century, their role expanded to include recording evidence and making recommendations to expedite complex litigation matters.⁶²

Over the years, the appointment of special masters in the United States has been declared an interesting experiment in multiparty litigation,⁶³ an efficient and expeditious method of resolving complex environmental litigation,⁶⁴ the most creative and innovative dispute-resolver,⁶⁵ and an innovative use of limited judicial resources.⁶⁶

Although the appointment of special masters is not restricted to environmental matters, U.S. courts have

Naseem Khokhar), Irrigation Department (Capt. (retired) Saif Anjum), Agriculture Department (Muhammad Sheheryar Sultan), Food Department (Dr. Pervez Ahmed Khan), Forest Department (Capt. (retired) Jahanzeb Khan), Health Department (Jawwad Rafique Malik), and Environment Protection Department (Iqbal Muhammad Chauhan). In addition, directors general, chairmen, or chief executive officers of various government departments or private organizations were also appointed, including the National Disaster Management Authority (Maj. Gen. Asghar Nawaz), Provincial Disaster Management Authority (Ali Anan Qamar), United Nations—Ministry of Foreign Affairs (Asim Iftikhar Ahmed), and WWF-Pakistan (Hammad Naqi Khan). See Order dated September 14, 2015, *Leghari v. Federation of Pakistan*, Writ Petition No. 25501/2015; Report of the Climate Change Commission dated January 16, 2016.

55. Report of the Climate Change Commission dated January 16, 2016.

56. Order dated January 18, 2016.

57. Order dated February 20, 2015, *Shakeel v. CDA*, Writ Petition No. 1276/2011 (IHC), para. 4.

58. Report of Islamabad Environmental Commission dated October 19, 2015.

59. *Id.*

60. Order, *Sadiq v. Government of Pakistan*, Writ Petition No. 32 of 2014.

61. *Id.*

62. Feldman, *supra* note 7.

63. Freilich, *supra* note 8.

64. *Id.*

65. David B. Keller, *The Court-Appointed Special Masters: Dispute-Resolvers?*, CONSENSUS, Jan. 1998 (on file with author).

66. Kenneth R. Feinberg, *Creative Use of ADR: The Court-Appointed Special Settlement Master*, 59 ALB. L. REV. 881 (1996).

called upon special masters in complex environmental litigation to remedy the public endangerment often posed by environmental hazards, including pretrial case management, fact-finding, and the development of equitable remedies both before and after liability has been established.⁶⁷ The necessity of their appointment is determined on a case-by-case basis, considering the facts and circumstances of a case.⁶⁸ In several actions to compel defendants to clean up hazardous waste sites, judges have justified the appointment of a special master on the basis of imminent public endangerment and the need for speedy resolution of such a problem in every aspect of litigation. They are given front-line responsibility to implement environmental relief.⁶⁹

The appointment of special masters in the United States has evolved in five categories. First, the U.S. Supreme Court has appointed special masters to oversee the motion practice, discovery, and evidence in various interstate disputes. This type will be referred to as “evidentiary masters” in this Article. Second, U.S. district courts have appointed special masters to manage procedural aspects of a legal case to enhance efficiency and mitigate delays. This type is referred to as “pretrial management masters.”

Third, U.S. district courts have appointed special masters to facilitate negotiations and settlement between disputing parties, with the aim of reaching an amicable settlement without the need of a trial. These are referred to as “settlement masters.” Fourth, district courts appoint special masters to ensure compliance with the judgment of the court, referred herein as “judgment compliance masters.” Last, district courts also appoint special masters to monitor compliance with a project, referred to as “environmental compliance masters” in this Article.

A. Evidentiary Masters

The U.S. Supreme Court holds original jurisdiction to decide disputes or controversies between two or more U.S. states.⁷⁰ In exercise of this jurisdiction, it regularly appoints special masters from among eminent lawyers, law professors, and sitting judges based on their expertise and integrity. These special masters are primarily tasked with directing the course of proceedings, managing the timeline and procedures for legal submissions, summoning witnesses, issuing subpoenas, conducting evidentiary hearings, recording evidence, and submitting comprehensive reports with their recommendations to the Court.

The appointment of special masters is widely recognized as a key strategy by the Court for resolving cases under its original jurisdiction. Between 1989 and November 2017, the Court appointed special masters in 18 different cases to resolve interstate conflicts.⁷¹ These cases encompass four main categories: seven cases are related to equitable appor-

tionment of water or water rights disputes between different states; another seven cases are related to state boundary, title, or jurisdictional issues between the states; two cases are related to breach of interstate agreements; and another two cases involve economic disputes between states.

For instance, in a notable case over equitable apportionment of the waters of the Apalachicola-Chattahoochee-Flint River Basin, *Florida v. Georgia*, Florida claimed that Georgia’s water use was causing harm to Florida’s ecology and economy and reducing flows in the Apalachicola River.⁷² The Court appointed a renowned senior litigation attorney, Ralph I. Lancaster, as a special master to direct the course of proceedings and submit reports to resolve the dispute between the two states.⁷³ He was empowered to set the time and conditions for the filing of additional pleadings, to direct subsequent proceedings, to summon witnesses, to issue subpoenas, to take or call for evidence, and to submit reports.⁷⁴ Further, the Court also authorized him to conduct evidentiary hearings and exercise the power of the Court to record evidence.⁷⁵

As the special master, Lancaster oversaw motions practice and discovery, held evidentiary hearings, resolved various discovery disputes, and held regular status conferences.⁷⁶ He also urged the parties to promote the public interest by reaching a negotiated settlement of the “complex and expensive proceeding.”⁷⁷ He concluded in his report that Florida had not proven with “clear and convincing evidence” that any additional streamflow in the Flint River resulting from a cap on Georgia’s water use would provide a material benefit to Florida, and recommended that the Court deny Florida’s request for relief.⁷⁸ However, after examining the report, the Court concluded that the special master had applied an incorrect legal standard⁷⁹ and too-strict redressability standards.⁸⁰

Thereafter, the Court discharged Lancaster from his duties and appointed a U.S. circuit judge, the Honorable Paul J. Kelly Jr., as special master, with authority to set the time and conditions for the filing of additional pleadings, to direct subsequent proceedings, to summon witnesses, to issue subpoenas, and to take evidence.⁸¹ Judge Kelly made extensive and specific factual findings on issues referred by the Court, and also recommended the Court find that

67. Feldman, *supra* note 7.

68. *Id.*

69. *Id.*

70. U.S. CONST. art. III, §2.

71. U.S. Supreme Court, *Special Master Reports*, <https://www.supremecourt.gov/specmastrpt/specmastrpt.aspx> (last visited Oct. 17, 2024).

72. No. 142, slip op. (U.S. Apr. 1, 2021), https://www.supremecourt.gov/opinions/20pdf/22o142_m648.pdf.

73. Report of the Special Master at 3, *Florida v. Georgia*, No. 142 (Feb. 14, 2017) [hereinafter 2017 Report]; Order Appointing Ralph Lancaster Special Master, *Florida v. Georgia*, No. 142 (Nov. 19, 2014) [hereinafter Order Appointing Special Master]. Information on Lancaster is available at Pierce Atwood LLP, *In Memoriam Ralph I. Lancaster Jr.*, <https://www.pierceatwood.com/memoriam-ralph-i-lancaster-jr> (last visited Oct. 17, 2024).

74. Order Appointing Special Master, *supra* note 73.

75. William Droze et al., *Special Master Appointed in Florida v. Georgia “Water Wars” and New ACT Lawsuits*, MONDAQ (Jan. 12, 2015), <https://www.mondaq.com/unitedstates/environmental-law/365822/special-master-appointed-in-florida-v-georgia-water-wars-and-new-act-lawsuits>.

76. 2017 Report, *supra* note 73, at 3, 20.

77. *Id.* at 20.

78. *Id.* at 70.

79. *Florida v. Georgia*, 138 S. Ct. 2502, 2508, 48 ELR 20107 (2018).

80. *Id.* at 2516.

81. Order Appointing Judge Paul J. Kelly Jr. as Special Master, *Florida v. Georgia*, No. 142 (Aug. 9, 2018).

Florida failed to prove by clear and convincing evidence that Georgia's alleged overconsumption caused serious harm either to Florida's oyster fisheries or to its river wild-life and plant life.⁸²

When Florida filed exceptions to the report of the special master, the Court conducted an independent review of the record and overruled Florida's exceptions. The Court reached the same conclusion that while the precise causes of the bay's oyster collapse remained a subject of scientific debate, the evidence established that increased salinity and predation contributed to the collapse of Florida's fisheries, not that Georgia's overconsumption caused the increased salinity and predation.

The Court has also appointed Lancaster as special master in two other cases for determining boundary, title, and jurisdictional issues. He was appointed special master in *New Jersey v. Delaware*,⁸³ which concerned exclusive jurisdiction over wharves and improvements extending from the New Jersey shore into the Delaware River; and in *Virginia v. Maryland*,⁸⁴ a dispute over location of the boundary between the states, jurisdiction over fisheries in the Potomac River, and the right to construct improvements connected to the Virginia shore of the Potomac.

Similarly, in a case concerning breach of an agreement apportioning the waters of the Republican River Basin, *Kansas v. Nebraska*,⁸⁵ the Court appointed Circuit Judge William J. Kayatta Jr. as special master, with instructions to direct the course of proceedings, take evidence, and submit reports as deemed appropriate.⁸⁶ In addition, in *Delaware v. New York*,⁸⁷ where Delaware was claiming dividends, interest, and other distributions on securities held by brokers incorporated in Delaware, the Court appointed a law professor at the University of Virginia, Thomas H. Jackson, as the special master.⁸⁸

The appointments of special masters by the Court from 1989 to November 2017 have played a crucial role in the procedural and substantive handling of complex interstate disputes. Notably, these disputes, while complex and multifaceted, do not specifically fall under the category of environmental disputes, nor do the reports of special masters directly pertain to environmental protection. These special masters focus on legal and evidentiary aspects, rather than environmental protection, and are different from Pakistani EJC's.

In contrast to the broad mandate of evidentiary masters, Pakistani EJC's are exclusively focused on environmental issues, such as addressing environmental degradation, enforcing environmental laws, and promoting conservation efforts. They reflect a targeted approach toward environmental protection and sustainability. This difference highlights the specialized judicial processes in the United States for resolving interstate disputes through detailed evidentiary analysis, in contrast to Pakistan's unique judicial approach of directly addressing environmental concerns through EJC's.

B. Pretrial Management Masters

In the United States, courts have strategically appointed special masters for pretrial management in environmental cases to streamline the complex proceedings. For instance, in *Biechele v. Norfolk Western Railway Co.*,⁸⁹ involving a class action suit for injunction and damages because of an alleged nuisance from coal storage and shipping facilities, the district court held that appointment of a special master from the local residents is the "only practical means" to work out the "procedures for filing and processing the damage claims" and to reduce "the number of claims which will have to be heard upon the evidence."⁹⁰

Similarly, in *United States v. Conservation Chemical Co.*,⁹¹ a suit implicating public health and environmental issues and requesting an injunction and a court-ordered cleanup of a chemical and hazardous waste disposal site, the district court authorized Robert H. Freilich as the special master to supervise the pretrial management, to hold a hearing on claims for inclusion in an injunctive relief order, and to report and recommend on issues involved in the request for injunctive relief.⁹² The district court held that "public interest" in "prompt resolution" of a "complicated case" constituted "exceptional circumstances" justifying reference to the special master.

Further, the court emphasized that the number of parties, nature and volume of evidence, serious and immediate threat to public health with apparent evidentiary support, time required for complete and uninterrupted hearings, and complexity of issues and evidence warranted appointment of a special master. However, in its appeal in *In re United States*,⁹³ the U.S. Court of Appeals for the Sixth Circuit vacated the part of the reference authorizing the special master to "hear argument on, and recommend reso-

82. Report of the Special Master, *Florida v. Georgia*, No. 142 (Dec. 11, 2019).

83. No. 134, 38 ELR 20080 (U.S. Mar. 31, 2008).

84. No. 129, 34 ELR 20005 (U.S. Dec. 9, 2003).

85. No. 126, 44 ELR 20040 (U.S. Feb. 24, 2015).

86. Report of the Special Master, *Kansas v. Nebraska*, No. 126 (Jan. 13, 2014); Final Report of the Special Master With Certificate of Adoption of RRCA Groundwater Model, *Kansas v. Nebraska*, No. 126 (Sept. 17, 2003); Second Report of the Special Master (Subject: Final Settlement Stipulation), *Kansas v. Nebraska*, No. 126 (Apr. 16, 2003); First Report of the Special Master (Subject: Nebraska's Motion to Dismiss), *Kansas v. Nebraska*, No. 126 (Jan. 28, 2000).

87. No. 111 (U.S. Mar. 30, 1993).

88. Report and Recommended Disposition of Motions With Respect to Complaints, *Delaware v. New York*, No. 111 (Mar. 15, 1994); Report of the Special Master, *Delaware v. New York*, No. 111 (Jan. 28, 1992); Report of the Special Master on Motions to Intervene, *Delaware v. New York*, No. 111 (Sept. 13, 1989).

89. 309 F. Supp. 354 (N.D. Ohio 1969).

90. *Id.* at 359. With respect to claims that cannot be stipulated as to amount, those claimants whose recovery does not exceed the sum of \$100 shall have to pay the fees of the special master for conducting the hearing upon their claims, together with the other costs of the hearing.

91. 106 F.R.D. 210 (W.D. Mo. 1985).

92. Dr. Freilich is the Hulen Professor of Law in Urban Affairs at the University of Missouri School of Law, specializing in land use and environmental and public law issues, holding five degrees (A.B., University of Chicago; J.D., Yale Law School; M.I.A., LL.M., and J.S.D. from Columbia University). He is the editor of the *Urban Lawyer*, the national quarterly journal on urban law of the American Bar Association, and the author of five books as well as numerous articles in the field.

93. 816 F.2d 1083 (6th Cir. 1987).

lution of, dispositive motions,” because the case did not “manifest [] exceptional conditions justifying the reference of dispositive motions to the special master.”⁹⁴

Conversely, Pakistani EJs serve a distinct role. EJs are established to directly address environmental issues, ranging from pollution to environmental conservation efforts. Unlike the U.S. system, where pretrial management masters are appointed primarily for procedural efficiency and case-specific resolution in environmental litigation, EJs possess a broader mandate, encompassing not only dispute resolution, but also environmental protection and policy implementation as responsibilities beyond individual cases.

C. Settlement Masters

District courts in the United States have also appointed special masters for their expertise to facilitate settlements and mediations between the parties to avoid lengthy trials and provide a forum for discussion between the parties for settlement. For instance, in *In re Joint Eastern & Southern Districts Asbestos Litigation*,⁹⁵ the U.S. District Courts for the Southern and Eastern Districts of New York and the New York State Supreme Court jointly appointed a distinguished lawyer, Kenneth R. Feinberg, to act as a settlement master-referee to mediate cases involving asbestos exposure at the Brooklyn Navy Yard and to avoid the necessity of extended trials.⁹⁶ The special master was directed to attempt to settle the cases in four months. Further, the courts held that the role of special master is to “assist the parties and the courts in promptly settling these cases,” and “[i]f the settlement process was not successful, all parties retain the right to a jury trial.”⁹⁷

Similarly, in *Cronin v. Browner*,⁹⁸ involving a citizen suit seeking to compel the U.S. Environmental Protection Agency to issue regulations regarding cooling water intake structures, the district court held that the need to produce such regulations in compliance with a consent judgment was the exceptional condition warranting appointment of a special master if the parties were unable to agree on a schedule for final action. The court allowed the parties to agree on deadlines concerning promulgation of such regulations; failing which, the court intended to appoint a special master for enforcement of the consent decree and settlement of the deadlines for the promulgation of the regulations.⁹⁹

The court acknowledged that appointing a special master is rare and an exception rather than the rule, upon showing some exceptional conditions. The court relied on *La Buy v. Howes Leather Co.*¹⁰⁰ to state that “[c]ourt congestion, delay, and complexity of issues are generally not considered exceptional conditions.”¹⁰¹ Further, it held that “there is considerable room for appointing special masters when the purpose of the master is to enforce a judicial decree”¹⁰² because given his time availability and expertise, the special master would be in a better position to perform necessary monitoring to ensure compliance with the consent decree.¹⁰³

There is a potentially similar example in Pakistan. As discussed in the environmental management commissions section, the Pakistani Supreme Court appointed the Lahore Canal Road Mediation Committee in a case involving the cutting of trees across the Lahore Canal Road to intervene between the petitioner and government to find a viable solution for the critical issues raised.¹⁰⁴

This commission not only mediated the dispute between the parties, but also built a consensus among its members for technical aspects of the canal widening project as well as to balance developmental needs with environmental conservation.¹⁰⁵

Comparatively, the U.S. use of special masters for settlement and mediation in environmental litigation seeks to facilitate negotiations and manage procedural aspects efficiently. While both the settlement masters and the Lahore Canal Road Mediation Committee aim to resolve environmental disputes effectively, the latter approach underlines a broader and more integrated method, focusing on environmental protection and policy implementation. Unlike U.S. settlement masters, who are primarily concerned with legal procedural efficiency and dispute resolution, the Lahore Canal Road Mediation Committee exemplifies a multidisciplinary and collaborative effort toward environmental protection, indicating a shift from mere procedural facilitators to a broader and policy-driven engagement in environmental issues.

94. *Id.* at 1091, 1092.

95. 737 F. Supp. 735 (S.D.N.Y. 1990), 129 F.R.D. 434 (E.D.N.Y. 1990).

96. Feinberg is one of the nation’s leading experts in mediation and alternative dispute resolution. He has administered numerous high-profile compensation programs, having served as special master of the September 11th Victim Compensation Fund, TARP Executive Compensation, and the Agent Orange Victim Compensation Program. See Kenneth R. Feinberg, Esq., curriculum vitae made available by the New York State—Federal Judicial Council at <https://nys-fjc.ca2.uscourts.gov/programs/5-7-19%20-%20Bios.pdf>.

97. *Joint E. & S. Dists. Asbestos Litig.*, 737 F. Supp. at 741.

98. 90 F. Supp. 2d 364, 30 ELR 20475 (S.D.N.Y. 2000).

99. “[H]e has no conflicts that would affect his service to the court. He has over 25 years of experience in environmental law, with considerable exposure to matters concerning the Clean Water Act and other federal and state environmental statutes.” *Cronin*, 90 F. Supp. 2d at 377.

100. 352 U.S. 249, 259 (1957).

101. *Cronin*, 90 F. Supp. 2d at 377.

102. *Id.*

103. See *New York State Ass’n for Retarded Children, Inc. v. Carey*, 706 F.2d 956, 962-65 (2d Cir. 1983) (upholding decision by the district court appointing a special master to monitor the state government’s compliance with a consent decree designed to protect the constitutional rights of residents at an institution for the mentally disabled); *United States v. Suquamish Indian Tribe*, 901 F.2d 772, 774-75 (9th Cir. 1990) (upholding decision by the district court to appoint a special master to determine a question of fishing rights); *National Org. for the Reform of Marijuana Laws v. Mullen*, 828 F.2d 536, 542 (9th Cir. 1987) (finding that the danger of federal and state governments failing to comply with a court injunction in a campaign against marijuana planting constituted an “exceptional condition” justifying referral to a special master).

104. Order dated February 14, 2011, in *Suo Motu Case No. 25 of 2009, In the matter of Cutting of Trees for Canal Widening Project, Lahore*.

105. In the matter of Cutting of Trees for Canal Widening Project, Lahore, (2011) SCMR 1743, para. 60.

D. Judgment Compliance Masters

The U.S. district courts have used the appointment of special masters to enforce and monitor compliance with court judgments. For instance, as discussed above, the special master in *Cronin v. Browner* was to be appointed to enforce compliance with the consent decree. Similarly, in *Sierra Club v. Army Corps of Engineers*, which involved a challenge to environmental approval of a Hudson River landfill for highway construction, the district court appointed a special master to deal with problems in compliance with the judgments in a timely fashion, minimize the risk of another round of lengthy litigation, and make every effort to deal promptly with any problems in compliance with the court's orders.¹⁰⁶

However, the U.S. Court of Appeals for the Second Circuit vacated this appointment to oversee the preparation of a supplemental environmental impact statement (EIS)¹⁰⁷ because of the special master's "considerable control" over the jurisdiction of the administrative agencies and its mandate of a highly intrusive nature. The court held that there must be extremely compelling or most extraordinary circumstances to justify judicial control of administrative agency proceedings, and cautioned against courts imposing their own procedures upon agencies. It further highlighted the power of the courts to only review whether proper procedures were followed and whether a reasoned record for a decision was created.¹⁰⁸ This case underscores the judicial restraint exercised by judgment compliance masters in overseeing agency actions to ensure procedural propriety and adherence to a reasoned decisionmaking process.

In contrast, as discussed in the water conservation commissions section, the Pakistani Supreme Court appointed an environmental advocate, Alam, as a commission, with a mandate to visit the Khewra area to ascertain and verify if its directions concerning the Khewra Commission were complied with.¹⁰⁹ The Khewra Follow-Up Commission identified progress in the area on the recommendations of the Khewra Commission, and also highlighted certain shortcomings in their implementation as well as the remaining hazardous environmental aspects and remedial measures.¹¹⁰ Based on the recommendations of this commission, the Supreme Court directed government officials to preclude and eliminate the remaining hazardous and adverse environmental effects.¹¹¹ This commission represents a direct approach to verifying compliance with environmental directives of the court.

The comparison reveals a nuanced difference in how judicial systems in the United States and Pakistan employ

these mechanisms to ensure compliance with environmental judgments. The United States has shown judicial restraint in the appointment of special masters to enforce environmental judgments, reflecting a cautious approach toward overseeing administrative agency actions to preserve procedural integrity. However, the Pakistani use of the Khewra Follow-Up Commission signifies a more direct and investigative approach, emphasizing on-the-ground assessment and policy recommendations to ensure environmental protection. This distinction highlights the United States' focus on procedural oversight and judicial restraint versus Pakistan's emphasis on comprehensive evaluation and policy-oriented solutions for environmental governance.

E. Environmental Compliance Masters

U.S. district courts also appoint special masters to oversee the environmental compliance of a specific project. For instance, in *Morales Feliciano v. Hernandez Colon*,¹¹² after prison officials had not entered into a contract within the time specified by the court, the district court appointed an engineer, Jorge A. Pierluisi-Díaz, as special master to negotiate and execute the contract to perform certain evaluations and prepare an environmental plan for a prison.¹¹³ The court held that Pierluisi-Díaz was exceptionally well-qualified to perform the services required of the special master in connection with negotiation and execution of a contract for the evaluation of plumbing, electrical, and major structural deficiencies and for the development of plans of corrective action required by the environmental plan.

Like an engineer in the *Hernandez Colon* case, the Pakistani Supreme Court has also appointed a private engineering consultancy organization, National Engineering Services Pakistan, as the Grid Station Commission to study the scheme, planning, device, and techniques of a grid station, to examine its likely hazardous or adverse effects on health of the residents, and to suggest variations in its plan for minimizing these dangers.¹¹⁴

In *Interfaith Community Org. v. Honeywell International, Inc.*,¹¹⁵ an NGO brought an action against the chemical manufacturer and owners of a contaminated site in New Jersey, seeking declaratory and injunctive relief mandating the cleanup of environmental contamination of the site. The court held that appointment of a special master was appropriate to oversee all aspects of the remediation and to ensure timely compliance with a remediation schedule. The court further held that exceptional conditions existed because (1) without those, studies and testing would continue, no remediation would occur, and the dangerous condition would continue to exist; (2) the defendant failed to provide permanent remedy for contamination for more than 20 years; and (3) it allowed the property to remain a risk to human health and the envi-

106. Opinion of August 4, 1982.

107. *Sierra Club v. U.S. Army Corps of Eng'rs*, 701 F.2d 1011, 13 ELR 20326 (2d Cir. 1983).

108. *Id.*

109. Order dated April 7, 2015, in *Inayat v. Director Industries & Mineral Development, Punjab Lahore*.

110. Report of the Commission dated June 6, 2015, appointed by the Supreme Court of Pakistan.

111. Order dated October 1, 2015, in *Inayat v. Director Industries & Mineral Development, Punjab Lahore*.

112. 771 F. Supp. 11 (D.P.R. 1991).

113. FED. R. CIV. P. 70.

114. Order of the Supreme Court dated April 26, 1994.

115. 263 F. Supp. 2d 796 (D.N.J. 2003).

ronment. The court concluded that due to the extensive nature of the required cleanup and defendants' "continued recalcitrance in effectuating an appropriate cleanup," the appointment was appropriate.¹¹⁶

This is the most relevant category for comparison with the Pakistani EJs, many of which are project-centric to clean up pollution, as discussed in the previous part. These commissions have been established to address a wide range of environmental issues, from pollution to conservation, often through project-centric investigations. For example, commissions have been appointed to evaluate environmental impacts of industrial plants, assess water quality concerns, and develop strategies for air pollution control and water conservation. These EJs engage in comprehensive field surveys, review environmental impacts, and formulate policies for environmental governance.

For appointing special masters to oversee the compliance of a specific project, district courts have relied on the inaction or omission of the parties to complete such project or contract in an effective and timely manner, which otherwise was a risk to human health and the environment. The courts have acknowledged that dangerous conditions will continue to exist without such appointment, because the defendants have failed to provide permanent remedies for such pollution for a considerable period of time (more than 20 years).

Both the U.S. system of appointing special masters and the Pakistani EJs aim to enforce environmental compliance and address specific environmental challenges. However, the U.S. approach tends to focus on enforcing compliance with court orders and remediation plans within the context of litigation, involving small-scale negotiation and contract execution to meet specific environmental standards. In contrast, Pakistani EJs undertake broader investigative and policy-formulating roles, engaging in extensive fieldwork to assess environmental conditions, recommend sustainable practices, and influence policy and legislation for environmental protection. This distinction highlights the United States' litigation-oriented approach to environmental compliance versus Pakistan's comprehensive policy-driven strategy for environmental governance and sustainable development.

III. Comparative Analysis

To compare EJs in Pakistan with special masters in the United States, this part identifies six key areas: the nature of litigation for which they are appointed, the courts' authority to appoint them, their membership composition, their operational powers, the costs associated with their activities, and their roles and recommendations for environmental protection. By discussing each of these areas, this part provides a comparative overview of how these judicial entities function and influence the environmental legal landscapes of their respective countries.

116. *Id.* at 874.

A. Nature of Environmental Litigation

In examining the nature of environmental litigation involving EJs in Pakistan and special masters in the United States, both countries exhibit distinct approaches influenced by their unique legal cultures and judicial systems.

In Pakistan, EJs are appointed in public interest environmental litigation, which enables citizens to directly approach the superior courts under their original jurisdiction against actions or inactions of the government that harm the environment or to enforce the judicially recognized right to environment. In these cases, the courts generally grant permanent or temporary injunctions and direct the government to take specific actions, rather than engaging in the calculation of damages. This approach enables EJs to exert a proactive influence in shaping environmental laws and policies and to address broader environmental issues concerning a project, city, province, or the country. This underscores EJs' active role in environmental governance, emphasizing remedial action over punitive measures and focusing on systemic changes rather than individual compensation.

In contrast, U.S. courts appoint special masters in various types of environmental litigation, including citizen suits, class action lawsuits, and interstate disputes. In a citizen suit, individuals or groups bring lawsuits to enforce environmental laws, often seeking specific relief such as temporary or permanent injunctions and damages. This approach is primarily focused on ensuring compliance with the existing environmental regulations, rather than enforcing the right to environment or influencing environmental laws and policies like the Pakistani approach. An example of a citizen suit where the court intended to appoint a special master is *Cronin v. Browner*,¹¹⁷ and an example of a citizen suit where the court denied appointment of a special master is *Environment Texas Citizen Lobby, Inc. v. ExxonMobil Corp.*¹¹⁸

On the other hand, class action lawsuits, often encompassing environmental claims, bring together individuals with similar grievances under a collective claim. These cases can become exceedingly complex and often require the appointment of special masters due to the legal and procedural challenges and complexity of managing large groups of plaintiffs and extensive evidence, as seen in *Biechele v. Norfolk Western Railway Co.*¹¹⁹

Additionally, as discussed in the previous part, the U.S. Supreme Court appoints special masters in interstate disputes that require detailed factual determinations and expert management over extended periods. These appointments are particularly prevalent in cases involving equitable

117. 90 F. Supp. 2d 364, 30 ELR 20475 (S.D.N.Y. 2000).

118. 66 F. Supp. 3d 875, 914 para. 57, 44 ELR 20277 (S.D. Tex. 2014). In appeal of this case, the appellate court affirmed the findings of the district court concerning the appointment of a special master, but remanded the case to the district court for other reasons. In the subsequent judgment in *Environment Texas Citizen Lobby v. ExxonMobil Corp.*, No. CV H-10-4969, 2017 WL 2331679, at *82-83 (S.D. Tex. Apr. 26, 2017), the district court reincorporated prior findings to deny the appointment of a special master.

119. 309 F. Supp. 354 (N.D. Ohio 1969).

apportionment of water or water rights disputes between different states, or related to state boundary, title, or jurisdictional issues between the states, which often involve ecological considerations. However, these disputes, while complex and multifaceted, do not specifically fall under the category of environmental disputes, nor do the reports of special masters directly pertain to environmental protection. These special masters focus on legal and evidentiary aspects rather than environmental protection, and are different from Pakistani EJs.

The relief claimed in each system reflects differences. In the United States, special masters typically result in narrow and compliance-focused decisions that enforce specific regulatory standards, while EJs in Pakistan can result in wide-ranging judicial orders that mandate significant changes in government policy and practices. This contrast highlights the more expansive role of judicial intervention in Pakistan compared to the more restrained and regulatory-focused approach seen in U.S. environmental litigation. These frameworks demonstrate how legal systems adapt to the societal and constitutional contexts within which they operate, offering tailored approaches to addressing environmental issues through the courts.

B. Powers of Courts for Appointment

The second point of comparison between EJs in Pakistan and special masters in the United States concerns powers of the courts regarding their appointments. In the United States, Rule 53 of the Federal Rules of Civil Procedure has codified the powers of federal courts concerning the appointment, authority, orders, reports, and recommendations of special masters. It marked a significant turn in the judicial practices of the U.S. federal courts and renewed their interest in appointment of special masters.¹²⁰ Rule 53 authorizes a federal court to appoint a special master in three circumstances.

First, a special master may be appointed with mutual consent of the parties to carry out agreed-upon duties.¹²¹ Second, a federal court may appoint a special master to conduct trial proceedings and to make or recommend “findings of fact” on issues to be decided without a jury. However, this second type of appointment must be made in “exceptional conditions” or to perform an accounting, or to resolve a “difficult computation of damages.”¹²² Notably, Rule 53 does not define what constitutes “exceptional conditions” warranting appointment of a special master.¹²³ Third, a federal judge is empowered to appoint a special master to “address pretrial and post trial matters that cannot be effectively and timely addressed by an available district judge or magistrate.”¹²⁴

Comparatively, in Pakistan, §75 of the Code of Civil Procedure (1908) (CPC) empowers the high courts to

issue a commission to examine any person, make a local investigation, examine accounts, or make a partition of a property.¹²⁵ The high courts are also authorized to prescribe conditions and limitations of these commissions and may appoint any person(s) as the court thinks fit for such purposes.¹²⁶

Similarly, Order XXXII of the Supreme Court Rules (1980) (SCR) provides procedural requirements concerning the appointment of commissions by the Pakistani Supreme Court to examine witnesses, conduct local investigations, and examine accounts.¹²⁷ The Supreme Court is empowered to issue the commissions upon application for the issue of such commission and after issuing notice to all parties,¹²⁸ and may admit or refuse in evidence any question disallowed by the commissioner.¹²⁹ These Supreme Court commissions are empowered to exercise powers under the Evidence Act, 1872, to decide questions concerning admissibility of evidence and witnesses.¹³⁰ Further, any party aggrieved by the decision of the commissioner refusing to admit documentary evidence has a remedy to apply to the Supreme Court within 14 days of the date of the submission of the report, to set aside the decision or to issue necessary directions to the commissioner.¹³¹

Strictly speaking, the commissions discussed in the previous paragraph are distinct from EJs because these commissions are appointed in civil suits and for the above-mentioned specific purposes only. However, the Pakistani courts have often expressly extended the jurisdiction of EJs to exercise powers under the above-mentioned provisions of the CPC or the SCR. The Lahore High Court has specifically empowered three EJs, including the Houbara Bustard Commission, the Smog Commission, and the Climate Change Commission, to exercise powers under CPC Order XXVI to achieve their objectives. On the other hand, in the Sindh Water and Sanitation Commission, the Supreme Court has directed the Sindh High Court to nominate a serving judge as the commission in terms of SCR Order XXXII. This EJ was also empowered to exercise all the powers of a high court judge, including the powers conferred under the CPC.¹³²

The United States restricts the appointment of special masters to the consent of the parties, exceptional conditions to make findings of facts, or pretrial and post-trial matters that cannot be effectively and timely addressed by a district judge or magistrate. On the other hand, Pakistan restricts the appointment of commissions to examine any

125. CPC §75. However, CPC Order XXVI limits the appointments of these commissions to civil suits, which are different from the public interest environmental litigation in which EJs are generally appointed.

126. CPC Order XXVI, rr. 3, 9, 11, 13.

127. SCR Order XXXII, Rule 1 extends the applicability of CPC Order XXVI to the commissions established by the Supreme Court, except its Rules 13 and 14 (re commissions for partition of immovable property), and 19, 20, 21, and 22 (re commissions issued at the instance of foreign tribunals).

128. SCR Order XXXII, r. 2.

129. *Id.* r. 4.

130. *Id.* r. 3.

131. *Id.* r. 6.

132. Order of the Supreme Court dated December 27, 2016, *Usto v. Government of Sindh*, (2017) SCMR 732, para. 3.

120. Feldman, *supra* note 7.

121. FED. R. CIV. P. 53(a)(1)(A).

122. *Id.* 53(a)(1)(B).

123. Feldman, *supra* note 7.

124. FED. R. CIV. P. 53(a)(1)(C).

person, make a local investigation, or examine accounts. These limitations introduce two points of comparison regarding appointment powers in both countries, including the role of parties' consent and the extent of judicial discretion in these appointments.

1. Parties' Consent for Appointment

In the United States, a special master may be appointed with mutual consent of the parties to carry out agreed-upon duties.¹³³ Even in cases where consent is not required, the courts are required to give notice and opportunity of hearing to the parties.¹³⁴ This process is designed to ensure transparency and protect the parties' rights, reflecting a structured approach to incorporating both judicial efficiency and participatory rights into the legal process.

In contrast, Pakistani laws do not have a similar statutory requirement specifically mandating the consent of parties for the appointment of commissions. However, as a standard judicial practice, EJsCs have either been appointed in agreement, after consultation, or with consent of the parties, or alternatively, the parties have never raised any objection to the constitution, findings, or reports of EJsCs. In particular, four commissions were constituted with express consent of the parties, including the Grid Station Commission, the Lahore Clean Air Commission, the Lahore Canal Road Mediation Committee,¹³⁵ and the Sindh Water and Sanitation Commission. In other commissions, the absence of objections from the parties to the membership, terms of reference, workings, recommendations, and reports of the commissions indicates a de facto acceptance of their roles and decisions.

However, notable exceptions occur, such as in the Lahore Canal Road Mediation Commission, whereby two specific objections were raised after submission of the report. The first objection concerned the solutions recommended by the committee, but the alternate solution suggested by the petitioner was turned down by the Pakistani Supreme Court in the absence of any cogent material against the recommendation of such committee.¹³⁶ The second objection was that two members of the committee were affiliated with the provincial government, which was found to be "too general and vague to shake their credibility" and that of the report.¹³⁷ It was also held that the report of this committee cannot be challenged particularly when the petitioner has agreed to 95% of the recommendations.¹³⁸

This comparison highlights that while both countries value the principle of consent and involve parties in the appointment process, the United States has formal procedural requirements to ensure consent and involvement of parties for the appointment of special masters, whereas

Pakistan relies more on established judicial practices and the substantive acceptance of involved parties.

2. Discretion for Appointment

In the United States, while Rule 53 grants federal courts discretion to appoint special masters in specific circumstances, judicial precedents have shaped the criteria for exercising such discretion. In the 1957 antitrust matter *La Buy v. Howes Leather Co.*,¹³⁹ where a special master was appointed on the basis of calendar congestion, complexity of issues, and lengthy trial time, the Supreme Court restricted the broad application of this discretion and cautioned against abdication of judicial functions and the rights of parties to court trials. The Court established that calendar congestion and length of time do not offer exceptional conditions for reference to a special master, and that the complexity of issues of fact and law is not justification for reference to a master, but rather a compelling reason for trial before a regular experienced judge. It further held that the detailed accounting to determine damages may be referred to a special master after the court has determined the overall liability, and when the circumstances indicate that the use of a court's time is not warranted in receiving the proof and making the tabulation.

Relying upon this landmark judgment, U.S. courts have refused appointment of special masters in various environmental matters. A notable example is *Sierra Club v. Army Corps of Engineers*,¹⁴⁰ where the Second Circuit reversed a district court's order to appoint a special master for overseeing the preparation of a supplemental EIS in the Hudson River landfill project. The court reasoned that such an appointment was highly intrusive in nature because the special master was given "considerable control" over the jurisdiction of administrative agencies.¹⁴¹ It reiterated the principles that reference to a special master should be an exception rather than a rule, and that the courts may not control or impose their own procedural preferences on federal agencies¹⁴² except in the "most extraordinary circumstances."¹⁴³ It highlighted that the court's role was to only review whether appropriate procedures were followed and a reasoned decisionmaking record was established. Further, the court reaffirmed that the duration of con-

133. FED. R. CIV. P. 53(a)(1)(A).

134. *Id.* 53(b)(1).

135. Order dated February 14, 2011, in *Suo Motu Case No. 25 of 2009, In the matter of Cutting of Trees for Canal Widening Project, Lahore*.

136. In the matter of Cutting of Trees for Canal Widening Project, Lahore, (2011) SCMR 1743, para. 43.

137. *Id.* para. 45.

138. *Id.* para. 47.

139. 352 U.S. 249 (1957).

140. 701 F.2d 1011, 13 ELR 20326 (2d Cir. 1983).

141. The special master was given the authority to, inter alia, require the Federal Highway Administration and the U.S. Army Corps of Engineers to submit detailed plans for their preparation of a supplemental EIS, and was given the power to review those plans and the agencies' actions, summon officials to testify under oath, compel the production of documents and the answering of interrogatories under oath, compel the submission of compliance reports, make initial findings of compliance or noncompliance with the court's orders, and report findings and make recommendations to the court.

142. *Sierra Club*, 701 F.2d 1011 (relying on *Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519, 542-49, 8 ELR 20288 (1978); *Federal Power Comm'n v. Transcontinental Gas Pipe Line Corp.*, 423 U.S. 326, 333 (1976); *Federal Commc'ns Comm'n v. Pottsville Broad. Co.*, 309 U.S. 134 (1940)).

143. *Id.* (relying on *Federal Commc'ns Comm'n v. Schreiber*, 381 U.S. 279, 290 (1965), quoting from *Pottsville Broad. Co.*, 309 U.S. at 143).

struction and litigation was an inadequate basis for such an extraordinary remedy of appointing a special master.¹⁴⁴

In another case, *In re United States*,¹⁴⁵ concerning recovery of cleanup costs incurred at a hazardous waste site, the Sixth Circuit concluded that the action did not manifest an “exceptional condition” justifying delegation of “dispositive motions” to a special master. The court held that “interest in a quick resolution of the case is simply an alternative way of asserting calendar congestion and the possibility of a lengthy trial as exceptional conditions justifying the reference.”¹⁴⁶ Relying on the *La Buy* case, the court believed the reference to a special master is as likely to delay as to expedite the case. Further, it established that the complexity of the extraordinary pretrial management required in the case with more than 250 parties did not justify appointment of a special master because the legal issues were the same regardless of the parties. The Sixth Circuit, therefore, vacated the part of the order of reference that authorized the special master to hear argument on, and recommend resolution of, dispositive motions.

Similarly, in *Environment Texas Citizen Lobby, Inc. v. ExxonMobil Corp.*,¹⁴⁷ concerning appointment of a special master to monitor compliance related to an injunction involving air emissions, the district court denied appointment of a special master and held that the plaintiffs did not show by credible evidence that a special master could do a better job at reducing emissions than the existing work force. These decisions underscore the U.S. judiciary’s cautious approach toward appointing special masters.

In contrast, the situation in Pakistan with EJCs reflects a different judicial approach. Although specific cases where appointments were denied are not extensively reported, the overall use of EJCs indicates a broader application of judicial discretion under the courts’ original jurisdiction to enforce fundamental rights, including the right to environment. EJCs are typically appointed in matters of public importance or welfare, suggesting a more flexible application of discretion based on the public interest rather than stringent exceptional conditions.

U.S. courts have consistently applied a rigorous standard requiring demonstrable exceptional circumstances for the appointment of special masters, particularly in environmental cases. This approach stands in contrast to Pakistani courts, which appear to utilize their discretionary powers more broadly in the public interest and for environmental protection in achieving prompt, effective, and cooperative resolutions based on consensus of all the stakeholders without the stringent application of “exceptional conditions.” This comparison underlines a fundamental differ-

ence in how judicial discretion related to environmental governance is perceived and exercised in the two countries, with the United States adopting a more conservative and restricted approach and Pakistan tending toward a more expansive and public welfare-oriented application.

C. Membership Composition

As discussed in the previous part, U.S. courts appoint a single judge or a distinguished lawyer as a special master depending upon the nature of the dispute and relevant expertise of the person. However, in Pakistan, the membership of EJCs varies significantly, ranging from a one-member commission to a panel of up to 30 members.

There are two patterns of EJCs. First, the court may appoint a single-member commission or a multimember commission. In both types of commissions, the court empowers them to enlist additional members based on their expertise and experience. In a single-member commission, the courts have appointed an environmental advocate, a judge, a consultancy firm, and even an executive authority (Chief Secretary) as a commission. For instance, in the Khewra Follow-Up Commission, an environmental advocate, Alam, was a one-member commission.¹⁴⁸ In the Sindh Water and Sanitation Commission, the Supreme Court had directed the Sindh High Court to nominate a serving judge as the commission in terms of SCR Order XXXII.¹⁴⁹ Therefore, Justice Kalhor was appointed as the commission in this matter.¹⁵⁰

In the Grid Station Commission, a private consultancy organization, National Engineering Services Pakistan, was appointed as a commission, but later on, a chief physicist of a renowned hospital in Lahore was also appointed.¹⁵¹ In the Punjab Water Commission, the Lahore High Court empowered the Chief Secretary Punjab, who is administrative head of the government, to issue certain directives to the departments and to form committees under the secretaries of the concerned departments. These committees were required to submit reports to the Chief Secretary and to the Lahore High Court.¹⁵² The Chief Secretary constituted 11 committees and assigned them duties to save and preserve drinkable water.¹⁵³

In the rest of the nine commissions, the courts have appointed Dr. Hassan as a sole member or as part of a multimember commission.¹⁵⁴ However, he never served

144. *Id.*

145. 816 F.2d 1083 (6th Cir. 1987).

146. *Id.* at 1089.

147. 66 F. Supp. 3d 875, 914 para. 57, 44 ELR 20277 (S.D. Tex. 2014). In appeal of this case, the appellate court affirmed the findings of the district court concerning the appointment of a special master, but remanded the case to the district court for other reasons. In the subsequent judgment in *Environment Texas Citizen Lobby v. ExxonMobil Corp.*, No. CV H-10-4969, 2017 WL 2331679, at *82-83 (S.D. Tex. Apr. 26, 2017), the district court reincorporated prior findings to deny the appointment of a special master.

148. Alam was secretary in some EJCs.

149. Order of the Supreme Court dated December 27, 2016, *Usto v. Government of Sindh*, (2017) SCMR 732, para. 3.

150. *Usto v. Government of Sindh*, (2017) SCMR 732, para. 4.

151. Order of the Supreme Court dated April 26, 1994.

152. Order dated September 29, 2018, *Haider v. Government of Punjab*, Writ Petition No. 231266/2018.

153. Order dated December 20, 2018, para. 2, in *Haider v. Government of Punjab*.

154. Dr. Hassan has chaired nine EJCs, including two EJCs of the Supreme Court (Khewra Commission and the Lahore Canal Road Mediation Committee), and seven EJCs of the high courts (the Asphalt Plants Commission, the Lahore Waste Management Commission, the Lahore Clean Air Commission, the Climate Change Commission, the Houbara Bustard Commission, the Smog Commission, and the Islamabad Environmental Commission).

on a commission alone. The court either appointed other members with him or he co-opted other members. For instance, in the Asphalt Plant Commission, Dr. Hassan was appointed as a single member, but he sought technical assistance from Dr. Hanif¹⁵⁵ because of their previous experiences working together on many environmental causes in the country. This was, however, done without any express powers to co-opt other members in the appointment order of this EJC.¹⁵⁶

In addition, the Lahore Canal Road Mediation Committee also had Dr. Hassan as the mediator, but he co-opted nine other members for this EJC based on the relevance of their backgrounds and after consulting with counsels of the parties,¹⁵⁷ including a member of the National Assembly, the commissioner of Lahore Division, an urban planning expert, two professors from different universities, and three representatives of international organizations, and an environmental advocate as secretary of the committee.

On the other hand, in a multimember commission, the court generally appoints an environmental lawyer as chairperson of the EJC and its other members from the federal or provincial assemblies, local governments, environmental authorities, environmental advocates, technical or scientific experts, subject matter experts, university professors, members of NGOs, and representatives of media groups. For instance, the Khewra Commission was appointed as a five-member commission, with Dr. Hassan as its chairman, two professionals with environmental experience, the director of Industries and Mineral Development Lahore, and a member of the Pakistan Medical and Dental Council.¹⁵⁸

Although the courts have been careful in the selection of these EJC members, they often empower EJCs to co-opt other members based on their experiences and expertise. The advantage of such power is that EJCs can find and add any other relevant experts or stakeholders who were not included by the courts in the original membership and whose presence is essential to solve such environmental problems for technical, scientific, or other reasons. The Grid Station Commission, Khewra Follow-Up Commission, Sindh Water and Sanitation Commission, Lahore Waste Management Commission, and Punjab Water Commission did not co-opt any members. However, the Asphalt Plant Commission, Khewra Commission, Lahore Canal Road Mediation Committee, Lahore Clean Air Commission, Smog Commission, Climate Change Commission, Houbara Bustard Commission, and Islamabad Environmental Commission co-opted some members.

155. Chief scientific officer and officer in charge, Environmental Research and Pollution Control Section of the Pakistan Council of Scientific and Industrial Research.

156. Order of Lahore High Court dated October 15, 1991, *United Welfare Ass'n v. Lahore Dev. Auth.*, Writ Petition No. 9297/1991. Dr. Hassan requested to accompany him on all visits to the site (Dr. Hassan 1991 Report, *supra* note 17).

157. Report dated May 14, 2011, of the Lahore Canal Road Mediation Committee.

158. General Sec'y, W. Pak. Salt Miners Labour Union (CBA) Khewra, *Jehlum v. Director, Indus. & Min. Dev., Punjab*, (1994) SCMR 2061, para. 6; Report of the Commission dated November 1996, para. 2.

D. Functions, Workings, and Powers

In Pakistan, EJCs are empowered to physically inspect environmentally degraded areas, verify facts, examine the technical, scientific, and legal bases of projects, mediate complex environmental disputes, and review the legal framework related to environmental issues in a specific project, province, or the country. These commissions engage in a variety of roles, including investigation, adjudication, monitoring, public participation, interdisciplinary cooperation, and advisory services. They provide a strategic and multifaceted response to the evolving demands of environmental governance and serve as a mechanism to build consensus among diverse stakeholders—government departments, NGOs, legal experts, and scientists—in collaborative efforts to address and resolve environmental disputes under judicial oversight.

The courts generally leave it to the discretion of EJCs to determine their procedures for working toward their objectives. EJCs, which have Dr. Hassan and Alam as chairpersons, have determined their procedures. EJCs organized and held meetings under their respective chairpersons, and some of them also visited the pollution sites or areas within their jurisdictions to better understand the issues or to make local investigations under directions of the courts. During this process, EJCs hear the perspectives of different stakeholders, experts, and other concerned officials to arrive at a consensus for making recommendations to the courts.

In two EJCs, the Asphalt Plant Commission and the Sindh Water and Sanitation Commission, the courts have specifically ordered the commissions to probe into or verify the allegations made by the petitioners. Several EJCs have also conducted site visits, including the Asphalt Plant Commission, the Khewra Commission, the Khewra Follow-Up Commission, the Smog Commission, the Lahore Waste Management Committee, the Houbara Bustard Commission, and the Lahore Canal Road Mediation Committee.

On the other hand, the Islamabad Environmental Commission and the Houbara Bustard Commission are the only EJCs that requested comments from the public and also held public hearings. They also complied with several comments and suggestions from the public. The Houbara Bustard Commission has also reviewed and replied to a letter written by the director general of Wildlife and Parks, Punjab, about visits of Arab dignitaries to Pakistan for hunting of endangered species. Similarly, any member who has approached the chair or EJC has always been invited to participate in the proceedings of such EJC.

The Supreme Court directed the Sindh Water and Sanitation Commission to work with all such powers conferred on it by the Supreme Court, as the issues in these proceedings have direct impacts on the life and health of the public of Sindh. This EJC was specifically empowered to pass orders as a high court judge whenever it is necessary in the public interest for achieving the objectives for which it was constituted. The Supreme Court held that the powers of this EJC cannot be impugned by procedural technicalities, and its orders, which are binding on federal and provincial

authorities, cannot be appealed, reversed, or reviewed by any forum except by such court.¹⁵⁹

All these EJsCs, except the Punjab Water Commission, have performed their tasks in an orderly and timely manner. For the Punjab Water Commission, the Chief Secretary Punjab appointed 11 committees, none of which submitted a report to the Lahore High Court, in violation of a direction to file a report with the high court within 15 days. Therefore, the Chief Secretary and heads of all 11 committees were directed to appear before the Lahore High Court.¹⁶⁰ At a later stage, it was also noted in the order of the high court that the committees were required to file a report every 15 days to the court, and while reports were submitted at the initial stage, subsequently none were submitted. The Assistant Advocate General Punjab was, therefore, directed to approach the Chief Secretary Punjab for compliance with this order.¹⁶¹

One of the fundamental differences in the workings of special masters and EJsCs is that special masters have mostly been assigned managerial or administrative duties concerning environmental disputes. Their roles have never been to look at environmental problems from the lens of the right to environment; rather, they have mostly allowed the courts to resolve the disputes within the shortest possible time through their technical assistance. Although EJsCs have also resolved disputes within shortest possible times, they have served a more fundamental role. EJsCs have provided a remedy for enforcement of the right to a clean and healthy environment for the citizens of Pakistan. The reason for the lack of such authority of special masters is simply that the U.S. Constitution or the courts have not recognized the right to environment like Pakistan has.

EJsCs recommend ways to improve the environment, while special masters manage technical aspects such as evidence in the case. Nevertheless, akin to their Pakistani counterparts, special masters serve as investigative or quasi-judicial authorities during their terms of appointment, which may vary from months to years.¹⁶² They are appointed to assist the courts to determine facts and to arrive at a conclusion in complex litigation, and can provide or address judicial limitations, shortcomings of the traditional adjudicatory system, and problems confronting parties and counsel.¹⁶³

The master is, generally, empowered to regulate all proceedings, take all appropriate measures to perform the assigned duties fairly and efficiently, and exercise the court's power to compel, take, and record evidence.¹⁶⁴ The master is also empowered to impose any noncontempt sanction on a party,¹⁶⁵ and to recommend a contempt sanction against

a party and sanctions against a nonparty.¹⁶⁶ The master is required to file its orders and reports and serve their copies to each party.¹⁶⁷

In the *Hernandez Colon* case, the district court designated the duties and powers to a special master under Federal Rule of Civil Procedure 53(c), and directed that “the special master shall be provided access to all facilities, records, and personnel of the Administration of Corrections to the extent such access is necessary to accomplish the objectives of this order.”¹⁶⁸ The court required cooperation of defendants with the special master and further required them to assist the special master in connection with his duties.

Similarly, in three EJsCs, including the Houbara Bustard Commission, the Smog Commission, and the Climate Change Commission, the Lahore High Court has specifically directed the concerned ministries and departments to render full assistance to such EJC in respect of their terms of reference and also empowered them to approach the high court to seek appropriate orders for facilitation of their work.

E. Expenses

Another difference in both approaches is that the members of EJsCs work pro bono and do not receive any compensation for their time and work. On the other hand, the special masters' compensation is fixed by courts in the United States.

Although the Pakistani courts may order payment of a reasonable amount as the “expenses” of the commission to be paid by the party at whose instance or for whose benefit the commission is constituted,¹⁶⁹ all EJsCs in Pakistan and their members have worked pro bono with some logistical support from the relevant governmental authorities. Even all of the private-sector persons in these EJsCs have not received or claimed any professional or other fees.

However, in some EJsCs, the necessary secretarial expenses have been borne by relevant government departments. For example, the Supreme Court has directed the Sindh government to bear expenses of the Sindh Water and Sanitation Commission; the Lahore High Court directed the Punjab Forestry, Wildlife, and Fisheries Department to bear the secretarial or field expenses of the Houbara Bustard Commission; and also directed the Ministry of Climate Change to bear secretarial expenses in the Climate Change Commission.

F. Roles and Recommendations

In the United States, the courts must give parties notice and an opportunity to be heard while acting on a special master's order, report, or recommendations, and accordingly may receive evidence, and may adopt, modify, reject,

159. *Usto v. Government of Sindh*, (2017) SCMR 732, para. 51.

160. Order dated November 26, 2018, in *Haider v. Government of Punjab*.

161. Order dated December 20, 2018, para. 2, in *Haider v. Government of Punjab*.

162. Keller, *supra* note 65.

163. Freilich, *supra* note 8.

164. FED. R. CIV. P. 53(c)(1).

165. Provided by Federal Rule of Civil Procedure 37 (Failure to Make Disclosures or to Cooperate in Discovery; Sanctions) and Rule 45 (Subpoena).

166. *Id.* 53(c)(2).

167. *Id.* 53(d), (e).

168. *Morales Feliciano v. Hernandez Colon*, 771 F. Supp. 11, 14 (D.P.R. 1991).

169. CPC Order XXVI, r. 15.

reverse, or resubmit to the master with instructions.¹⁷⁰ The parties may generally file objections or a motion to adopt or modify the master's order, report, or recommendations within 21 days unless the court sets a different time frame.¹⁷¹ The court must decide *de novo* all objections to findings of fact made or recommended by a master¹⁷² or to conclusions of law made or recommended by a master,¹⁷³ and may set aside a master's ruling on a procedural matter only for abuse of discretion.¹⁷⁴

In the *Conservation Chemical Co.* case, the district court established:

[C]arefully defined delegation of authority to master did not deprive district court of essential attributes of its judicial power including that the court had power to terminate master's authority, parties were afforded opportunity to object, respond, or comment on any recommendation filed by master, court was required to review independently all recommendations filed by master, court retained authority to adopt, modify or reject any recommendation, court planned to hold hearing following filing of report on issues so that it could determine whether to adopt, modify, or reject the report, receive further evidence or recommit it with instructions, and master's recommended conclusions of law were subject to a rigorous standard of review as well as his conclusions of mixed fact and law.¹⁷⁵

The court has a duty to review the special master's report and to make a final determination of all issues.

Under Rule 53(e)(2), which provides that

in "an action to be tried without a jury the Court shall accept the Master's findings of fact unless clearly erroneous." . . . [W]hen the findings are based . . . "on documentary evidence, stipulated facts, or other nondemeanor testimony, the secondary inferences and conclusions of the Master from these sources are not entitled to controlling weight and are subject to greater scrutiny because [the] Court is equally capable of making such deductions."¹⁷⁶

The addition of the Rule 53(e) command that, in nonjury actions, a master's findings must be accepted unless "clearly erroneous" raised the relative weight of a master's report and narrowed the scope of acceptable judicial delegations of power. In effect, the master's report became no longer simply advisory, and judicial scrutiny of the report was reduced to appellate-type review.¹⁷⁷

170. FED. R. CIV. P. 53(f)(1).

171. *Id.* 53(f)(2).

172. Unless the parties, with the court's approval, stipulate that

(A) the findings will be reviewed for clear error; or

(B) the findings of a master appointed under Rule 53(a)(1)(A)

or (C) will be final.

Id. 53(f)(3).

173. *Id.* 53(f)(4).

174. *Id.* 53(f)(5).

175. 106 F.R.D. 210, note 29 (W.D. Mo. 1985).

176. *United States v. Conservation Chem. Co.*, 106 F.R.D. 210, 232 (W.D. Mo. 1985).

177. Feldman, *supra* note 7.

On the other hand, Pakistani courts have always followed the recommendations of EJC's and ordered the concerned officials to enforce the same in letter and spirit. In some cases, the courts have also constituted a follow-up commission to monitor the implementation of these directions. The Khewra Follow-Up Commission is one example. In other cases, the courts have established certain bodies to enforce their recommendations. The Sindh Water and Sanitation Commission constituted a task force for this purpose on March 14, 2017.

EJC's have played a significant role in developing and enforcing environmental laws in Pakistan, and have contributed to these laws more than any executive authority in the country. EJC's are a very promising remedy to resolve complex environmental disputes because of their reliance on the progressive practices of building public-private partnership, cooperation, and consensus among all stakeholders to such disputes. EJC's have allowed these stakeholders to conduct open meetings, dialogues, and discussions in an informal manner and to avoid the lengthy, contentious, and adversarial proceedings or trials in the courts. In addition, the EJC system has endorsed the use of science, technology, and technical advice from experts in the relevant field for assistance of the courts without any procedural constraints, and has also presented remarkable lessons for environmentalists around the globe.¹⁷⁸

The credibility of EJC's developed over the past 30 years is the only reason that enables the courts—as well as the parties and the stakeholders to a complex environmental dispute—to trust the workings of EJC's. While parties and stakeholders have shown confidence in EJC's, the courts have always adopted all the recommendations of each EJC, and as already discussed, have often appointed follow-up EJC's, implementation committees, or standing bodies to ensure enforcement of these recommendations. For example, the courts have adopted this practice in the Clean Air Commission, the Islamabad Environmental Commission, and the Climate Change Commission.

EJC's have regularly been empowered to exercise jurisdiction on matters that either fall under the competence of the executive authorities or policy domain of the legislature. If we look at the powers of EPAs, as discussed earlier, they are generally authorized to conduct inquiries into environmental issues, either of their own accord or upon complaint from any person or organisation; to require any person to furnish any relevant information or data; to make requests for foreign assistance with the approval of the federal government; to recommend the adoption of financial and fiscal programs, schemes, or measures for achieving environmental objectives and goals; and to provide or arrange financial assistance for projects designed to facilitate the discharge of its functions.

In addition, EPAs are also authorized to enter and inspect any land, building, premises, vehicle or vessel, or other place where an environmental offense is being or has

178. Hassan, *Judicial Commissions and Climate Justice in Pakistan*, *supra* note 10.

been committed; to take samples or confiscate any materials, products, articles, or substances, or of the effluents, wastes, or air pollutants being discharged or emitted; to arrange for testing and analysis of the samples at a certified laboratory; and to establish the National/Provincial Environmental Coordination Committees for ensuring inter-provincial coordination in environmental policies. These powers have also been exercised by EJs.

IV. Potential of Special Masters in Environmental Rights Litigation in New York

This part analyzes the existing right to environment litigation in a U.S. green state, New York, and examines one case study to explore the potential of utilizing this quasi-judicial approach of special masters in environmental litigation.

A. Environmental Right Litigation and Challenges in New York State

Since the adoption of the green amendment, 12 cases have been filed in New York to protect the right to environment: six in 2022, four in 2023, and two in 2024.¹⁷⁹ These cases involve diverse challenges to governmental and corporate actions that are in violation of the right to environment. Among these, only three cases are fully concluded, four cases are pending in appeals before the appellate divisions, four are pending in the Supreme Courts of New York State, and one was recently dismissed and could be challenged on appeal.

Among the 12 cases, the following three cases have been fully resolved:

(1) In a case challenging approvals for the Interstate 81 Viaduct Project on numerous grounds, including inadequate environmental review and selection of an alternative that would cause unmitigated adverse environmental impacts and violate the right to environment, the Onondaga County Supreme Court required a supplemental EIS addressing several deficiencies, including the lack of specific air quality analysis, specific analysis on impact to water resources, and future traffic projections.¹⁸⁰ Subsequently, on appeal, the appellate court modified the judgment and dismissed the petition.¹⁸¹

(2) In a petition challenging a solid waste management permit on numerous grounds, including failure to consider effects of the permit on the right

to environment and to address management of leachate containing per- and polyfluoroalkyl substances (PFAS), the Tompkins County Supreme Court dismissed the petition because the recovery facility was not yet operating and there was no evidence of PFAS in the wastewater.¹⁸² The court further held that even if it was assumed that PFAS would be released into the lake, the type of harm that would allegedly be suffered by petitioners was not sufficient to confer standing, as “generalized claims of harm” are insufficient for standing purposes.¹⁸³

(3) In a class action complaint, plaintiffs sought to compel the resumption of fluoridation in Buffalo’s water supply and the establishment of free dental clinics to all Buffalo residents, and claimed damages.¹⁸⁴ However, the case was discontinued on January 24, 2024, marking its resolution without judicial intervention.¹⁸⁵

The following four cases are pending in appeals:

(1) In a challenge to a solid waste facility permit allegedly violating the right to environment, the Monroe County Supreme Court denied the motion to dismiss on the majority of causes of action, including the motion to dismiss the green amendment claim.¹⁸⁶ This order is currently under appeal.

(2) In a lawsuit against the operation of a landfill allegedly violating the right to environment, the Monroe County Supreme Court dismissed claims against New York City and the waste management company, and denied New York State’s motion to dismiss.¹⁸⁷ This order is also currently under appeal.

(3) In tort claims against an operator of a hazardous waste incineration facility allegedly violating the right to environment, the Albany County Supreme Court granted the application of Pace Environmental Litigation Clinic, on behalf of neighbors and a nonprofit group, for leave to intervene in the action and denied a motion to dismiss the third cause of action seeking declaratory judgment against the Department of Environmental Conservation that permitting the Norlite facility to operate in a manner that results in fugitive dust emissions violated

179. The Elisabeth Haub School of Law at Pace University maintains an online repository of cases involving the environmental rights in New York, available at <https://nygreen.pace.edu> (last visited Oct. 17, 2024).

180. Court Decision and Order dated February 14, 2023, Renew 81 for All v. New York State Dep’t of Transp., 204 N.Y.S.3d 666 (N.Y. App. Div. 2024) (Index No. 007925/2022).

181. Renew 81 for All v. New York State Dep’t of Transp., 204 N.Y.S.3d 666 (N.Y. App. Div. 2024).

182. *Seneca Lake Guardian v. New York State Dep’t of Env’t Conservation*, Index No. EF2022-0533 (N.Y. Sup. Ct. Apr. 19, 2023).

183. The court relied on *Schulz v. Warren County Board of Supervisors*, 206 A.D.2d 672, 674 (N.Y. App. Div. 1994), *denied*, 85 N.Y.2d 805 (N.Y. 1995); *accord* *Clean Water Advocates of N.Y., Inc. v. New York State Dep’t of Env’t Conservation*, 103 A.D.3d 1006, 1008-09 (N.Y. App. Div. 2013). None of these cases are related to or involve environmental rights.

184. Complaint, *Abdullahi v. City of Buffalo*, Index No. 801476/2023 (N.Y. Sup. Ct. filed Jan. 30, 2023).

185. Notice of Discontinuance dated January 24, 2024, *Abdullahi*, Index No. 801476/2023.

186. Decision and Order Granting and Denying Defendants’ Motion to Dismiss, *Fresh Air for the Eastside, Inc. v. State*, Index No. E2021008617 (N.Y. Sup. Ct. Dec. 7, 2022).

187. Decision and Order, *Fresh Air for the Eastside, Inc. v. State*, Index No. E2022000699 (N.Y. Sup. Ct. Dec. 20, 2022).

the right to environment and an injunction against Norlite from operating the facility.¹⁸⁸ This order is currently under appeal.

(4) In a challenge to approvals for the Two Bridges Project based on inadequate environmental review, failure to mitigate adverse environmental impacts, and violation of the right to environment, the New York County Supreme Court dismissed the complaint and held that the green amendment “cannot be used to bring challenges that were already unsuccessful and where the challenge is time-barred.”¹⁸⁹ This order is also currently under appeal.

Further, the following four cases are pending in New York State claiming violations of the right to environment:

(1) In August 2023, residents of Sleepy Hollow challenged an action of the Greene County Industrial Development Authority to provide financial support for the Flint Mine Solar project before the Greene County Supreme Court on numerous grounds, including failure to consider its impacts on the right to environment.¹⁹⁰

(2) In September 2023, Friends of Fort Greene Park challenged an action of the New York City Park Department to issue a negative declaration of environmental significance for the Fort Greene Park Infrastructure Reconstruction Project before the New York County Supreme Court on numerous grounds, including failure to consider impacts of the project on the right to environment.¹⁹¹

(3) In January 2024, residents of Owasco challenged determination of the Department of Health before the Albany County Supreme Court on the basis that the department lacks authority to promulgate regulations for protection of drinking water supplies from nutrient pollution. They sought an injunction to prevent the department from promulgating its new Watershed Rules and Regulations without agreement from the suppliers of water or without considering their impacts on the right to environment.¹⁹²

(4) In May 2024, residents of Port Washington North brought an action before the Nassau County Supreme Court to stop their village from selling 7.45

acres of forested park area to a private developer who plans to build a residential community on the land.¹⁹³

Last, on October 31, 2024, the Erie County Supreme Court dismissed an action brought by the state attorney general alleging that PepsiCo’s single-use plastic packaging creates a public nuisance and violates the right to environment due to its significant contribution to plastic pollution in the Buffalo River.¹⁹⁴ The action claimed that PepsiCo failed to warn the public or consumers of its potential to contribute to plastic pollution found in waterways and did not warn about its dangers. The court dismissed the complaint, stating as follows:

While I can think of no reasonable person who does not believe in the imperatives of recycling and being better stewards of our environment, this does not give rise to phantom assertions of liability that do nothing to solve the problem that exists. This is a purely legislative or executive function to ameliorate and the judicial system should not be burdened with predatory lawsuits that seek to impose punishment while searching for a crime. Plaintiff’s proposed use of the judicial system to punish select purported offenders for what she believes to be a righteous cause risks transforming the judiciary into an arm of the legislature, or at the very least a passive partner in expanding duties that strain the bedrock of well-established law for policy purposes.¹⁹⁵

In these cases, while the courts navigate complex issues of standing, sufficiency of evidence, speculative nature of environmental harm, and the difficulty of proving direct causation, they are also obliged to interpret the intersection of traditional environmental law with newly articulated constitutional rights. Accordingly, the judges may face significant challenges for enforcing the right to environment in the United States. First, given that these rights belong to the public, many people and stakeholders may desire but still be unable to participate in judicial decisions about their the right to environment due to the high cost and lengthy process associated with environmental litigation.

Second, as the judges are often presented with difficult questions of balancing the economic and environmental interests, judicial expertise about environmental matters may be limited and an expert or technical assistance is often required in complex environmental disputes. Third, the courts often focus on the legal, technical, and financial aspects of the case rather than prioritizing the protection of the environment and the right to environment. As a result, some stakeholders or environmentalists may disagree with the judicial decisions because the outcomes may not fully address the environmental concerns at the heart of the dispute. These challenges highlight the need for supplementary mechanisms to traditional litigation

188. Decision and Order, *State v. Norlite, LLC*, Index No. 907689-22 (N.Y. Sup. Ct. Mar. 6, 2024).

189. *Marte v. City of New York*, Index No. 159068/2022, at 9 (N.Y. Sup. Ct. Apr. 17, 2023).

190. *Association of Prop. Owners of Sleepy Hollow Lake, Inc. v. Greene Cnty. Indus. Dev. Agency*, Index No. EF2023-573 (N.Y. Sup. Ct. filed Aug. 11, 2023).

191. *Friends of Fort Greene Park, Inc. v. New York City Parks & Recreation Dep’t*, Index No. 159628/2023 (N.Y. Sup. Ct. filed Sept. 29, 2023).

192. *City of Auburn v. McDonald*, Index No. 904609-24 (N.Y. Sup. Ct. filed Jan. 5, 2024).

193. *Neighbors for a True Oasis v. Village of Port Washington N.*, Index No. 609509/2024 (N.Y. Sup. Ct. filed May 30, 2024).

194. Memorandum Decision, *State v. PepsiCo, Inc.*, Index No. 814682/2023 (N.Y. Sup. Ct. Oct. 31, 2024).

195. *Id.*

to ensure the effective enforcement and protection of the right to environment.

B. *Potential of Special Masters in Resolving Environmental Rights Litigation*

Given these inherent complexities and challenges, appointment of special masters could offer more specialized and efficient resolution mechanisms in some of these right to environment litigations. This quasi-judicial approach could serve three primary purposes. First, it could provide focused technical, scientific, investigative, monitoring, and advisory functions in complex right to environment litigation. Second, it could ensure public participation by organizing public hearings in ongoing environmental disputes without involving the public in the barriers of expensive and lengthy litigation. Third, it could facilitate cooperation and consensus among various stakeholders—including the public, business groups, government departments, NGOs, and legal and environmental experts—in collaborative efforts to address and resolve environmental disputes. With these functions and benefits, special masters could represent a multifaceted and strategic response to the evolving demands of environmental dispute resolution, which is greatly needed in right to environment litigation in the United States.

A prime example for utilizing this approach could have been the case brought by New York Attorney General Letitia James, alleging that PepsiCo's single-use plastic packaging creates a public nuisance and violates the right to environment due to its significant contribution to plastic pollution in the Buffalo River.¹⁹⁶ In the complaint, the attorney general referred to a survey of all types of waste collection in 2022 at 13 sites along the river and its tributaries, concluding that nearly three-quarters (73%) of the 2,621 pieces of identifiable brand waste collected were plastic, and PepsiCo's packaging far exceeded any other waste sources.¹⁹⁷ The attorney general listed the top 10 contributors of plastic waste in the river, including PepsiCo (17.1%); McDonald's (5.7%); Hershey Co. (4.2%); international restaurant brands such as Burger King, Tim Hortons, Popeyes, and Firehouse Subs (3.9%); Mars, Inc. (3.8%); Coca-Cola (3.1%); Sazerac Co., which produces alcoholic beverages and owns various other brands (3.1%); 7-Eleven (2.2%); BlueTriton Brands, which produces bottled water (2.2%); and Kellogg Co. (2.1%).¹⁹⁸ The lawsuit, however, requested declaratory and injunctive relief and damages only against PepsiCo.

The attorney general's strategy was flawed in focusing exclusively on PepsiCo while other companies were also significant contributors to the river's pollution. This narrow targeting raised concerns about selective enforcement, called into question the fairness and effectiveness of the

litigation, and failed to address the broader and systemic nature of waste pollution. Moreover, the pollution issue was not solely attributable to corporate actions of PepsiCo and other contributors, but was also potentially exacerbated by public behavior and governmental actions and inactions in waste management and environmental regulations.

By not involving all key stakeholders, the litigation was limited in scope and potential effectiveness. It undermined the goal of comprehensive environmental protection and failed to address the systemic nature of the environmental harm. A more comprehensive approach would have considered multiple significant contributors to plastic pollution, the public, and government bodies to enforce the green amendment, which concerns the overall quality of the environment rather than the actions of individual companies in isolation.

The court's decision to dismiss the complaint emphasized the importance of maintaining judicial restraint and upholding the traditional roles of government branches. It articulates a concern about overstepping judicial boundaries, warning against transforming the judiciary into a "passive partner" in policy development. The court dismissed this action on the ground that it sought to impose liability on PepsiCo based on "phantom assertions" that, in the court's view, did not constitute a valid legal claim but instead represented a predatory use of the judicial system to address a problem better suited to legislative or regulatory solutions. The court thus missed an opportunity to address urgent environmental concerns in a manner that could have had real-world impacts, to develop comprehensive solutions that address systemic and complex environmental issues, and to create a model for future environmental dispute resolution.

This right to environment litigation could potentially benefit from appointing a special master to address several challenges, especially given the pressing need for action in environmental matters where legislative and executive responses are often insufficient or slow. First, a comprehensive strategy from the attorney general to address the environmental issue and resolve the problem, combined with a judicial willingness to interpret and enforce environmental laws by seeking expertise and after hearing from all the stakeholders who could be affected by the decision—including the above 10 producers, the public, NGOs, and government bodies—could have justified the intent of the green amendment and provided a more holistic and strategic solution. This collaborative approach would ensure participation, cooperation, and consensus of all stakeholders, establish appropriate liability, and develop a sustainable model for addressing this complex issue.

Second, the public, whose rights are under challenge, is entitled to an opportunity to be heard, and many individuals and NGOs may want to participate without enduring lengthy and costly litigation. For instance, in the case pending on appeal, *State v. Norlite*, brought against an operator of a hazardous waste incineration facility, the Pace Environmental Litigation Clinic has expended significant resources to intervene for protection of the right to environment. Allowing public input and suggestions without

196. *Id.*

197. Complaint paras. 48, 49, *PepsiCo, Inc.*, Index No. 814682/2023.

198. *Id.* para. 49.

necessitating full legal intervention could streamline participation and enhance the judicial process.

Third, the judge may need investigative, monitoring, technical, scientific, and environmental expertise and assistance to navigate the complex issues involved in such litigation. A special master could provide this expertise, ensuring informed and effective decisionmaking. All these challenges underscore the need for innovative quasi-judicial approaches to environmental dispute resolution and justify appointment of a special master. An experienced environmental lawyer and professor as a special master, with appropriate terms of referral, could have enforced the green amendment in this case by building stakeholder cooperation and consensus, organizing hearings for public participation, and providing investigative, monitoring, technical, scientific, and environmental expertise to the court. This approach could have comprehensively addressed this complex environmental issue and served as a model for other jurisdictions with similar environmental issues.

V. Conclusion

The right to environment is a fundamental human right that is increasingly being recognized worldwide. This quasi-judicial approach, EJC's and special masters, offers a promising path forward for enforcement of this right and for resolving complex environmental litigation. It provides three key benefits that could address the challenges faced by traditional litigation.

First, it provides technical, scientific, investigative, monitoring, and advisory functions in environmental

litigation. This allows for informed and effective decisionmaking by judges that accounts for complexities of environmental science. Second, it can ensure public participation in ongoing environmental disputes. This ensures that affected communities and stakeholders have a voice in the resolution process without the barriers of expensive and lengthy litigation. Finally, this approach provides a mechanism to engage and build consensus and cooperation among various stakeholders—including the public, government departments, NGOs, legal and environmental experts, and scientists—in collaborative efforts to protect the environment.

With these functions and benefits, this approach represents a multifaceted and strategic response to the evolving demands of environmental dispute resolution. It emphasizes the necessity of practical measures to ensure that this right is not just theoretical but comprehensively protected in practice.

As environmental challenges continue to grow in scale and complexity, embracing innovative solutions like EJC's and specialized masters will become increasingly crucial. Such mechanisms will ensure more efficient, inclusive, and expert- and community-driven resolution of environmental disputes, particularly in cases involving large-scale industrial pollution, natural resource disputes, and infrastructure projects with significant environmental impacts. The green states in the United States could pioneer this approach, setting a precedent for other jurisdictions and ultimately strengthening environmental protection and upholding the fundamental right to environment globally.