

‘The Rhine as One River’

Rhine Pollution and Multilevel Governance, 1950s to 1970s

DAAN SANDERS AND LIESBETH VAN DE GRIFT

87

Asked why and how cross-border environmental governance developed in Western Europe, the 1970s are generally considered a key decade. By taking the historical evolution of the international Rhine regime as a lens, we will argue that the post-war decades need to be taken into account to understand the major changes that took place from the 1970s onwards. In this article, we examine the large variety of state and non-state actors that became involved in the contestation around the issue of Rhine pollution from the 1950s until the late 1970s. Looking at how problem definitions and strategies changed over time, we answer the question whether enough common ground could be found among water supply companies, horticulturalists and environmental activists to build a coalition against polluting industries, and how the dynamics of their interaction may be described.

De jaren zeventig worden gezien als cruciale periode voor de ontwikkeling van grensoverschrijdend milieubeleid in West-Europa. Dit artikel over de historische ontwikkeling van het internationale Rijnregime toont aan dat een studie van de directe naoorlogse decennia van belang is om de grote veranderingen vanaf de jaren 1970 volledig te begrijpen. In onze bijdrage analyseren we een groot aantal statelijke en niet-statelijke actoren die betrokken waren in de politieke strijd tegen de vervuiling van de Rijn vanaf de jaren vijftig tot en met de jaren zeventig. Met een onderzoek naar veranderende probleemdefinities en strategieën doorheen de tijd gaan wij na of drinkwaterbedrijven, tuinbouwers en milieuactivisten voldoende met elkaar gemeen hadden om een coalitie tegen vervuilende industrieën te voeren en hoe de dynamiek van hun interactie beschreven kan worden.

Introduction¹

Rivers are systems determined by physical, social and ecosystem processes. Riparian environments, abundant with plant and animal life, serve humans for direct consumption, agricultural irrigation, transport, energy production, fishing, waste disposal and leisure. River water is a multi-user resource. Its management involves myriad and diverse actors, state and non-state alike, and the harmonisation of their interests: for instance between up- and downstream riparian states, and between economic development, ecological conservation and social needs.

The river Rhine is today governed by the International Commission for the Protection of the Rhine (ICPR), based on the Convention on the Protection of the Rhine, signed in 1999 by the Rhine states France, Germany, the Netherlands, Luxembourg and Switzerland, and the European Community. Its principal aim nowadays is sustainable development: ‘A healthy Rhine ecosystem and [the] considerate treatment of its resources are prerequisites for long-term stable economic and social development.’² With the Convention, which stipulates both precautionary and polluter-pays principles, signatories agreed to step up collaboration, implement monitoring programs, and initiate measures to reduce damage to the Rhine ecosystem.³ It has also served as an example for later EU water resources management frameworks.⁴ While pollution has remained a source of concern, the ICPR as a regulatory regime is generally considered to have contributed to the improvement of aquatic and ecosystem quality, as illustrated by the return of salmon to the river.⁵

1 Quote in title from Cornelis Biemond, in: RIWA Archive, Minutes 10th RIWA-meeting, October 1953. The authors would like to thank the participants in the workshop ‘Beyond missed opportunities: The history of sustainability’ and the anonymous reviewer for their feedback. Thanks go out in particular to Gerard Stroomberg, director of RIWA-Rijn, who gave access to the organisational archives, to José de Wit for sharing her work and insights and to Amanda Getty for copy-editing. This article is partly based on research commissioned by RIWA for the following article in their annual report: Daan Sanders, Liesbeth van de Grift and Joep Schenk, ‘Grensoverschrijdende samenwerking in het waterbeheer: de rol van de Rijncommissie Waterleidingbedrijven (RIWA), 1951-1960’ in: *Jaarrapport 2020 De Rijn* (Vereniging van Rivierwaterbedrijven 2021) 110-145. Quotes in

Dutch from archival sources have been translated to English by the authors.

2 This is stated by the ICPR on its homepage: <https://www.iksr.org/en/icpr/legal-basis/convention/sustainability> (Accessed 25 February 2022).

3 Convention on the Protection of the Rhine, Bern, 12 April 1999. https://www.iksr.org/fileadmin/user_upload/DKDM/Dokumente/Rechtliche_Basis/EN/legal_En_1999.pdf (Accessed 25 February 2022).

4 Marjolein van Eerd, *Back to Brussels. Reloading Implementation Experiences in Multi-level EU Water Governance* (Dissertation, Radboud University Nijmegen 2020) 102.

5 For an overview of historical evaluations and the recent Rhine regime, see Erik Mostert, ‘International co-operation on Rhine water quality 1945-2008: An example to follow?’, *Physics and Chemistry of the Earth* 34:3 (2009) 142-149. DOI: <https://doi.org/10.1016/j.pce.2008.06.007>.

Research in recent decades has traced the roots of Rhine cooperation and contestation back to the nineteenth century. Early examples of international deliberation and proto-governance of the Rhine's use for fishing and navigation emerged in the context of the post-Napoleonic order.⁶ The legal foundations for the current regulatory regime however were laid in the 1970s. In 1976, Rhine ministers signed three conventions against chloride, chemical, and thermal pollution respectively, prompted in no small part by a spill of the insecticide endosulfan into the river in 1969 – presumably by a West German chemical company – that had in turn mobilised activist groups.⁷ Of course, concern about river water quality was nothing new. As historian Nil Disco has shown, Dutch municipal water works had sounded alarms about the dismal state of the river as early as the 1930s.⁸ The ICPR was founded in 1950, amid post-war economic reconstruction, at the initiative of the Netherlands and Switzerland. In the decades that followed the Dutch government would use the ICPR to voice concerns about chemicals, chlorides, and organic waste flowing into the Netherlands from France and Germany. Additional actors, such as drinking water companies and horticulturalists, joined in with their own pleas to reduce pollution.⁹ Results of these early efforts were meagre, however, the ICPR yielded little more than an endless stream of reports.

How should this early phase be interpreted? Is the protection of the Rhine prior to 1970 simply a tragic tale of failure, perhaps of a dream before its time? In this article we seek to connect the early history of Rhine protection, in

See also Carel Dieperink, *Tussen zout en zalm: Lessen uit de ontwikkeling van het regime inzake de Rijnvervuiling* (Dissertation, Utrecht University 1997); Thomas Bernauer and Peter Moser, 'Reducing Pollution of the River Rhine: The Influence of International Cooperation', *The Journal of Environment & Development* 5:4 (1996) 389. The evaluation in the literature is not exclusively positive. For a relatively critical assessment, see for instance Mark Cioc, 'Europe's River: The Rhine as Prelude to Transnational Cooperation and the Common Market', in: Erika Marie Bsumek, David Kinkela and Mark Atwood Lawrence (eds.), *Nation-States and the Global Environment: New Approaches to International Environmental History* (Oxford University Press 2013) 25-42. DOI: <https://doi.org/10.1093/acprof:oso/9780199755356.003.0002>.

6 Joep Schenk, *The Rhine and European Security in the Long Nineteenth Century: Making Lifelines from Frontlines* (Routledge 2021). DOI: <https://doi.org/10.4324/9780429326660>. On other European

rivers: Joanne Yao, 'Conquest from Barbarism: The Danube Commission, International Order and the Control of Nature as a Standard of Civilization', *European Journal of International Relations* 25:2 (2019) 335-359. DOI: <https://doi.org/10.1177/1354066118768379>; Constantin Ardeleanu, *The European Commission of the Danube, 1856-1948: An Experiment in International Administration*. Balkan Studies Library 27 (Brill 2020). DOI: <https://doi.org/10.1163/9789004425965>.

7 For an introduction and overview of the diplomatic process behind the Rhine regime, see Mark Cioc, *The Rhine. An Eco-Biography, 1815-2000* (University of Washington Press 2002); Dieperink, *Tussen zout en zalm*.

8 Cornelis Disco, 'Accepting Father Rhine? Technological Fixes, Vigilance, and Transnational Lobbies as 'European' Strategies of Dutch Municipal Water Supplies 1900-1975', *Environment and History* 13:4 (2007) 395-396.

9 See also on this point Disco, 'Accepting Father Rhine'.



Two men throw dead fish with a dip net to the shore of the Rhine at Ehrenbreitstein on 24 June 1969. This massive fish die-off in the German Rhine caused by a spill of the insecticide endosulfan. The disaster was covered at length by the media and caused political and public outrage. Water supply companies downstream temporarily halted their water intake. (c) Picture Alliance/DPA/Bridgeman Images. DPA2266258.

which the 'early' or 'old' actors such as ministries, government institutes and drinking water organisations worked to improve the Rhine quality regime, with the later phase in the 1970s, when Rhine pollution became an issue of much broader public contestation. We will trace how and to what extent economic, social and environmental considerations influenced the advent of this later phase. Through this lens we will analyse the increased entanglement of governance levels, as well as the emergence of new public actors – most importantly environmental organisations and activists – and their interaction with traditional, older stakeholders, with a focus on the Netherlands. To what extent did water supply companies and governing agencies attune their advocacy efforts to the rise of new environmental discourse? Did newcomers to the scene build upon earlier efforts made by traditional stakeholders? And were 'old' and 'new' actors able to find common ground as a basis for collaboration, or did divergent world views, interests, and strategies stand in the way? The history of the governance of the Rhine is instructive to understand the ways in which transnational governing coalitions emerged during the 'age of interdependence' (see introduction to this special issue) and harnessed scientific expertise and planning to balance economic, social, and environmental concerns.¹⁰

The first part of the article will focus on the 1950s and 1960s, when Dutch governing agencies such as *Rijkswaterstaat* and water supply companies pushed research and policy measures with regard to the polluted Rhine to the top of agendas at international organisations such as the ICPR. We will then shift focus to the new environmental actors of the 1970s, who expanded the scope of public debate and built new action repertoires. The final part of the article will explore the interaction between all of these parties. The array of agencies, organisations and groups that inform this study has required research at the International Institute of Social History, the National Archives of the Netherlands, historical newspapers, and the internal records of RIWA, the association of Dutch river water companies, which provide insights into the shifting views and strategies of water supply companies in this particular case of environmental governance.

Laying the foundations

Post-war economic reconstruction brought the precipitous deterioration of Rhine water quality. The river had been in a bad state for some time, having already seen the disappearance of the salmon population. Following World War II, however, material and economic reconstruction were absolute priorities. Spurred by the Marshall Plan and a demographic boom, governments viewed hydrological projects mostly in terms of protecting against floods, supplying

10 Peter van Dam, 'The Age of Interdependence. Varieties of Sustainability in the Low Countries during the Twentieth Century', *BMGN – LCHR*

137:4 (2022). DOI: <https://doi.org/10.18352/bmgn-lchr.11687>.



▲
RIWA chairman and director of the Amsterdam municipal water company, Cornelis Biemond, drinks a glass of clean water during the celebration of the dune water pipe which existed for a hundred years on 8 December 1953. Photographer unknown. © National Archives, The Hague, (cco), Photo collection Elsevier, 2.24.05.02, 090-0667, <http://hdl.handle.net/10648/ae1ca302-dob4-102d-bcf8-003048976d84>.

water for industry and agriculture, and ensuring potable running water for households.¹¹ As industrialisation intensified in the 1950s, salt levels in the Rhine soon topped pre-war levels, among other growing industrial pollutants. New hazards made their appearance, including oil spills from ships, phenols, new chemical detergents, and potentially even the novel phenomenon radioactivity from nuclear facilities built in the Rhine basin.¹²

A clean Rhine was crucial to the Netherlands. It supplied the country's growing industry and agriculture (horticulture) with fresh water. Steady flows of freshwater were also needed to halt salinisation encroaching inland from the North Sea. Arguably the Rhine's most important use was as potable water. The country's most populous region – around Rotterdam, Amsterdam and The Hague, in the western part near the sea – had traditionally relied on dune water for its drinking supply, but the post-war industrial, agricultural and demographic boom inflated demand and water supply companies had to resort to extracting and filtering water from Rhine tributaries.¹³

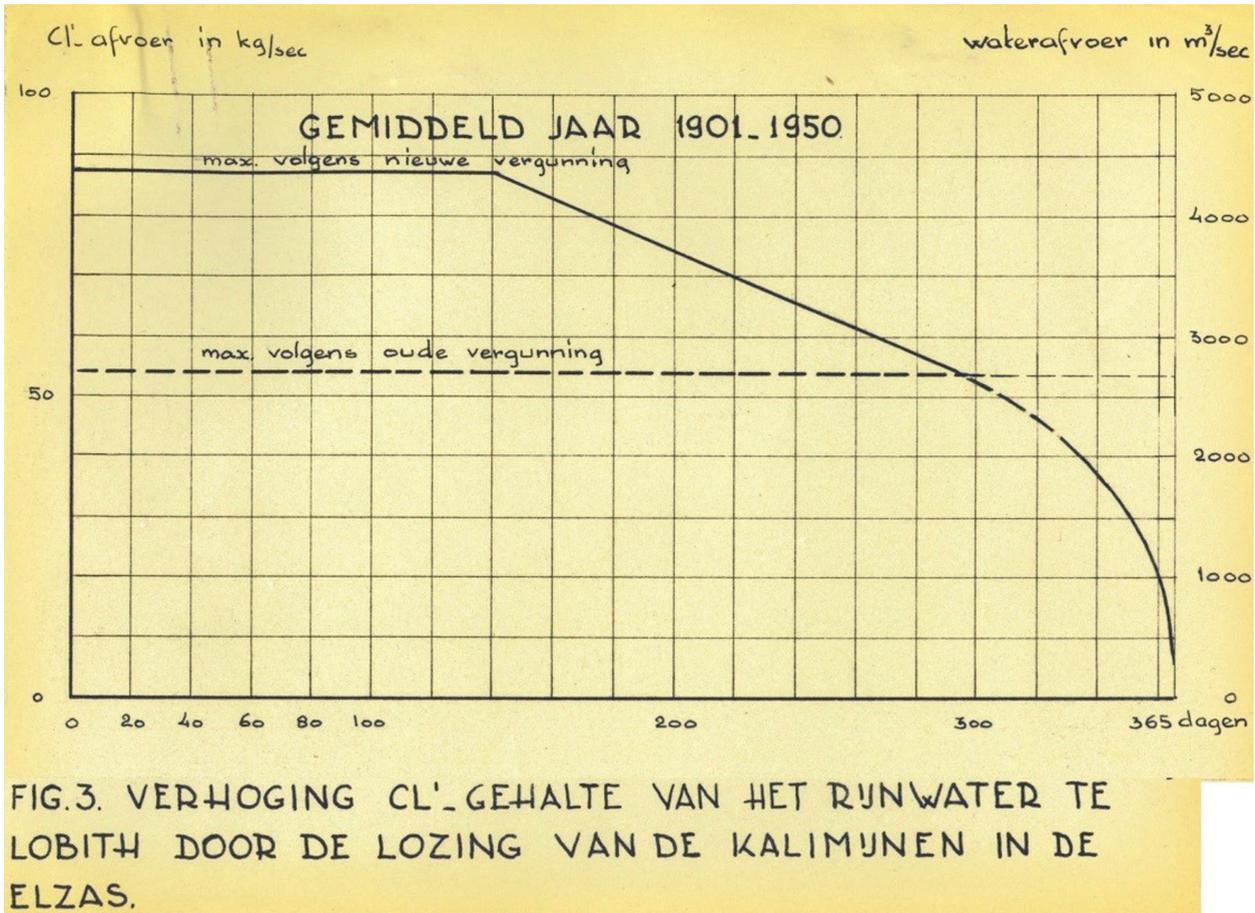
Government institutions and drinking water companies alike emphasised in alarming reports that the Rhine was more than a medium for transport and waste disposal. After the Dutch government put the river's deterioration on the agenda of the Central Commission for the Navigation of the Rhine in 1946, France, Germany, Luxembourg, the Netherlands and Switzerland founded the ICPR in 1948, which first convened in 1950. Though lacking a firm basis in international law prior to the Bern Convention in 1963, the ICPR became the main forum for Rhine states to conduct, compare and coordinate water quality research, discuss problems and

11 See for instance Erik Swyngedouw, *Liquid Power: Contested Hydro-Modernities in Twentieth-Century Spain* (The MIT Press 2015). DOI: <https://doi.org/10.7551/mitpress/9780262029032.001.0001>.

12 Dieperink, *Tussen zout en zalm*, particularly 119-121; Cioc, *The Rhine*, 176-177; Nil Disco, "'One Touch of Nature Makes the Whole World Kin': Ships, Fish, Phenol and the Rhine, 1815-2000", in: Nil Disco and Eda Kranakis (eds.), *Cosmopolitan Commons. Sharing Resources and Risks Across Borders* (The MIT Press 2013) 296-299; Disco 'Accepting Father Rhine', 397. RIWA reports and meetings also paint this picture. Among others in RIWA Archives, held at RIWA-Rijn in Nieuwegein (hereafter RIWA Archive), J. Kooijmans, 'De Samenstelling van het Rijnwater in 1954. Opgesteld voor de Rijncommissie', May 1955. On the pre-World War Two history of Rhine pollution, and Dutch activities to counter it: RIWA Archive, W. Krul,

'Voorgeschiedenis nationaal en internationaal overleg Rijn', April 1952.

13 Dieperink, *Tussen zout en zalm*, mainly 119-121; Disco, 'Accepting Father Rhine?', 386, 397-398, 404; for a perspective of the drinking water companies themselves, see M. Gast and F. Beemsterboer, '50 jaar RIWA: verleden, heden en toekomst', *H₂O* 35:3 (2002) 15. For a concise introduction to the early history of the drinking water supply in the Netherlands, see Johan Schot et al., *Techniek in Nederland in de twintigste eeuw. Deel 1. Techniek in ontwikkeling, waterstaat, kantoor en informatietechnologie* (Zutphen 1998) particularly for the perspective on water management and water technology; and see Johan Schot et al., *Techniek in Nederland in de twintigste eeuw. Deel 6. Stad, bouw, industriële productie* (Zutphen 2003) particularly for the



Study made by the head engineer of the Amsterdam municipal water company. It projects the raised chloride levels of Rhine water resulting from discharges by the Alsatian potash mines. The scenarios compare expected effects of the old and new discharge permits. (c) RIWA Archive, 'Nota Chloorlozing Kalimijnen Elzas II', [Memo Chlorine discharge by potash mines Alsace], 1956. © RIWA Archive, 1956.

collaborate on potential solutions.¹⁴ The ICPR was an example of technocratic internationalism, defined by Kaiser and Schot as the 'specific technocratic framing and practice of managing transnational and international relations.'¹⁵ As shown below, expert communities played a defining role at the ICPR, bolstered by a firm belief in the 'un-political' and 'technified' nature of their work.¹⁶ As we will see, it was in fact the deeply political nature of Rhine water governance that would prompt the Dutch government and RIWA to gradually look beyond the ICPR for effective solutions.

ICPR governments were far from unitary actors; policy-makers relied on the input from expert communities in the shaping of their standpoints and policies regarding the ICPR. In the Dutch case, the governmental organisation *Rijkswaterstaat* (the Directorate-General for Public Works and Water Management) acted as the primary representative to the ICPR. Other national institutes resorting under the Ministry of Social Affairs, such as the Pharmaceutical Inspection and the National Institutes for Public Health, for the Purification of Wastewater (RIZA), and for the Supply of Drinking Water (RID) also provided important input on the positions and policies of the Dutch government. The Ministry of Foreign Affairs was involved in all international deliberations as well. Experts from other ministries, such as agriculture and economic affairs, as well as semi-state organisations such as universities, and non-state private actors including industry lobbyists, fisheries and farmers, rounded out the technocratic landscape.¹⁷ Drinking water companies, difficult to classify in terms of their affiliation as shown below, were also influential actors in this community.

For the Dutch government, a polluted Rhine was problematic for two interconnected reasons. First, it framed Rhine pollution as a social problem as

perspective on urban architecture and water supplies.

- 14 Cioc, *The Rhine*, 177-178; Disco, 'Accepting Father Rhine?', 398.
- 15 Wolfram Kaiser and Johan Schot, *Writing the Rules for Europe: Experts, Cartels, and International Organizations*. Making Europe: Technology and Transformations, 1850-2000, 4 (Palgrave Macmillan 2014) 6.
- 16 Quotes cited in: Ibidem, 6-7. On the importance of scientific expertise and information, see also the article by Yves Segers on the manure problem in Belgium in this special issue. Segers, 'Brown Gold: Agronomists, Fertiliser Advice and Emerging Environmental Awareness in Belgium, 1970-1991', *BMGN - LCHR* 137:4 (2022). DOI: <https://doi.org/10.18352/BMGN-LCHR.11695>.

- 17 The director of the National Institute for Supply of Drinking Water (RID), Professor W. Krul, regularly outlined, analysed and constructively criticised this landscape, among others in Dutch National Archives, The Hague, (hereafter: NL-HaNA) Ministerie van Sociale Zaken en Volksgezondheid; Directie Volksgezondheid/Afdeling Milieuhygiëne en Stichting Vaste/Verwijdering Afvalstoffen, (hereafter vROM / Milieubeheer) number 2.15.5326 inv.nr. 2, W. Krul, Memorandum for Minister of Public Health, September 1959 (with responses from other higher public servants of the same ministry); NL-HaNA, vROM / Milieubeheer, 2.15.5326 inv.nr. 676, n.n. 'Verslag bespreking 'organisatie en voortgang van de basisplannen [drinkwatervoorziening]', November 1967. See also Disco, 'Accepting Father Rhine?', particularly 397.

it threatened access to good-quality drinking water and as such constituted a major public health risk.¹⁸ Second, Rhine pollution wreaked economic havoc on the country. Water supply companies feared high chloride levels were damaging pipeline infrastructure, forcing investment in monitoring and filtration systems. In agriculture, high chloride levels and other pollutants threatened to make Rhine water unusable even for irrigation, negatively influencing crop yields in the process.¹⁹

Alongside governmental actors, other stakeholders sought to use the ICPR to pursue their goals and interests, long before the recent term ‘multi-actor governance’, referring to the involvement of actors outside of the government, was coined. As non-profit public utilities, drinking water companies provided as many households as possible with clean water. Their relationship with local and national authorities was one of close cooperation and mutual dependence; they were in fact held accountable by these governmental bodies.²⁰ As such, they are perhaps best seen as semi-public actors. Next to the more general National Association of Dutch Drinking water companies (VEWIN), the municipal and provincial water companies that relied on the Rhine (based in Amsterdam, The Hague, Rotterdam and Noord-Holland) founded the Rhine Committee for Drinking Water Companies (RIWA) in 1951. RIWA was a platform for both research and lobbying, primarily to the Dutch government.²¹ As the association of Rhine-dependent water supply companies, RIWA had a natural interest in a clean river, and it consistently relied on ‘common interest’ rhetoric to link the social and economic dimensions of the problem: water quality and taste, access for industry and citizens, costs, and public health.²²

For RIWA, international coordination and cooperation was the only path forward to a clean Rhine, and as such it was an early advocate for cross-border protection measures. In 1953, RIWA chairman and director of the Amsterdam municipal water company Cornelis Biemond argued for viewing ‘the Rhine as *one* river, and to call for one governance regime in

18 For instance as described in NL-HaNA, VROM / Milieubeheer, 2.15.5326, inv.nr. 2, W. Krul, Note for Minister of Public Health, September 1959.

19 NL-HaNA, VROM / Milieubeheer, 2.15.5326, inv.nr. 476, Acting Secretary-General, letter regarding ‘Verontreiniging van de Rijn (zoutlozing door Franse kalimijnen)’ to State Secretary of Ministry of Social Affairs and Public Health (Geheim/Secret), November 1967.

20 On the history and character of Dutch drinking water companies, sometimes referred to as ‘waterworks,’ see also Disco, ‘Accepting Father Rhine?’; David Zetland and Bene Colenbrander, ‘Water Civilization: The Evolution of the Dutch

Drinking Water Sector’, *Water Economics and Policy* 4:3 (2018). DOI: <https://doi.org/10.1142/S2382624X18500121>.

21 RIWA Archive, Minutes 1st RIWA-meeting, June 1951; RIWA Archive, Minutes 22nd RIWA-meeting, January 1958. See also Disco, ‘Accepting Father Rhine?’, primarily 399; Dieperink, *Tussen zout en zalm*, 124.

22 This argumentation was also used by VEWIN. For instance in NL-HaNA, Vereniging van Waterbedrijven in Nederland (VEWIN), number 2.19.160, inv.nr. 256, VEWIN, Letter to Minister of Transport and Water Management, December 1959.

common interests', and he pushed for this model's active promotion in the Netherlands and abroad.²³ With Biemond's introduction of the 'polluter pays' and 'prevention' principles, he called upon both industry and governments to actively prevent spills, filter waste waters, invest in clean waste management systems, and to establish a European framework to coordinate these measures.²⁴ These principles would eventually find their way into the Rhine protection regime.

The early work of RIWA comprised collaborative research, the conducting of case studies, and the co-authoring of annual reports that provided important insights into water quality trends and made visible steadily rising chloride levels.²⁵ A novel hazard that drew RIWA's attention soon after its founding was radioactivity. Nuclear research projects in the greater Rhine area and specifically the West German government's plans to build nuclear plants were of grave concern to the water companies. RIWA thus pioneered the monitoring of radioactivity in the Rhine in the mid-1950s and reported on the risks of radioactive contamination.²⁶

RIWA's research helped the water supply companies better understand the challenges they faced. It was also a key tool in advocating for concrete measures to combat pollution, and RIWA's lobbying efforts were fueled by it. Through close contact with governing agencies, such as *Rijkswaterstaat*, RIWA sought to move the issue of Rhine pollution up national and international agendas. And successfully so, as the Dutch government employed measurement data, technical knowledge and to some extent the problem frames provided by RIWA in national and international contexts. Specifically, the Dutch delegation to the ICPR used these data to substantiate

23 RIWA Archive, Minutes 10th RIWA-meeting, October 1953. See also Dieperink, *Tussen zout en zalm*, 127.

24 For instance in Hannes Kopp, 'Holländer fordert europäisches Tennessee-Projekt', *Schleswig-Holsteinische Volks-Zeitung*, 19 February 1954, as found in RIWA Archive.

25 RIWA Archive, J. Kooijmans, 'De samenstelling van het Rijnwater in 1952. Opgesteld voor de Rijncommissie', [the composition of the Rhine water in 1952. Made for the Rhine Committee (RIWA)], October 1953. RIWA produced annual reports on Rhine water quality, allowing for a year-over-year comparison of chloride levels and many other pollutants. RIWA also investigated the chloride pollution, its origin and fluctuations, in more detail. For instance in: RIWA Archive, L. Huisman, 'Nota Chloorlozing Kalimijnen Alsace'

[Memo Chlorine discharge by potash mines Alsace], October 1955 and January 1956.

26 The novel and uncertain challenge of radioactivity was discussed in the first RIWA meetings; RIWA Archive, Minutes 1st RIWA-meeting, June 1951; RIWA Archive, Minutes 2nd RIWA-meeting, September 1951. RIWA studied the potential problem of radioactive pollution, how to detect and resolve it, using in part technical information from the United Kingdom and United States: RIWA Archive, F. van Haaren, 'Radio-activiteit. Rapport opgesteld voor de Rijncommissie', December 1951, second report March 1952. The Amsterdam and Rotterdam laboratories started testing in 1953, The Hague in 1956. Reported for instance in RIWA Archive, 'De samenstelling van het Rijnwater in 1956', June 1957.

calls for efforts to reduce chloride levels, and later to address the problem of radioactivity at the ICPR in 1955.²⁷ The association gave input – both requested and not – on ICPR proposals, while several of its experts served on ICPR research sub-committees established in 1960.²⁸

RIWA's involvement with the ICPR was a mixed blessing. While the examples above testify to the organisation's growing recognition and its successes at agenda-setting, it soon became clear to RIWA that research and lobbying alone yielded few concrete results. Negotiations within the ICPR have been described as 'formal, polite, and generally ineffective.'²⁹ The establishment of research committees evidenced the growing bureaucracy within the ICPR, and RIWA and many within the Dutch government viewed their creation as 'delaying tactics' from the French and West German delegations, as regulations were bound to hit these countries' industrial sectors the hardest.³⁰

Frustration with the lack of results ultimately led to a split between RIWA and *Rijkswaterstaat*. While the Dutch government continued to pin its hopes exclusively on the ICPR until its decision to break out of the framework

27 Many policy documents from the Dutch ministries mention RIWA data/research and problem perceptions. For instance in NL-HaNA, VROM / Milieubeheer, 2.15.5326, inv.nr. 676, Rijksinstituut voor Drinkwatervoorziening, 'Werkschema basisplannen drinkwatervoorziening', April 1966; NL-HaNA, VROM / Milieubeheer, 2.15.5326, inv.nr. 17, Rijksinstituut voor de Volksgezondheid, 'Bijdrage voor een memorandum ten behoeve van de Staatssecretaris in verband met diens bezoek aan Budapest september 1969', August 1969; NL-HaNA, VROM / Milieubeheer, 2.15.5326, inv.nr. 17, Rijksinstituut voor Drinkwatervoorziening, 'Memorandum inzake het gezamenlijk onderzoek Duitsland-Nederland van de Rijn, augustus 1969'. The Dutch raised the issue of radioactive contamination in the ICPR meeting of September 1955, to be found in NL-HaNA, Rijksinstituut voor Zuivering van Afvalwater (RIZA), number 2.16.131, inv.nr. 209, 'Internationale Commissie tot Bescherming van de Rijn tegen Verontreiniging. Zittingen van de Gedelegeerden te Straatsburg 14/17 september 1955', n.d.

28 On RIWA's feedback on ICPR proposals: RIWA Archive, Minutes 22nd RIWA-meeting, January 1958, where RIWA talked to the Dutch ICPR delegation about French and Dutch proposals for chloride discharge. Biemond had particular personal influence within the Dutch ICPR delegation, even after his retirement. For example, Biemond drafted with RIWA the maximum chloride norms that the Dutch ICPR-delegation proposed in the late 1960s: NL-HaNA, VROM / Milieubeheer, 2.15.5326 inv.nr. 527, n.n., 'punten uit de 24ste zitting der Internationale Commissie ter bescherming van de Rijn tegen verontreiniging', n.d. (approx. January 1968). On the sub-committees: RIWA Archives, Minutes 26th RIWA-meeting, March 1960; RIWA Archives, Minutes 27th RIWA-meeting, June 1960.

29 As summarised in Disco, 'Accepting Father Rhine?', 400. On the ICPR research and proceedings, and their perception as postponing real action, see Dieperink, *Tussen zout en zalm*, 165-167; see also Mostert, 'International Cooperation'.

30 Quote on delaying tactics ('vertragingsmanoeuvre') cited in: RIWA Archives, Minutes 26th RIWA-meeting, March 1960.

in 1972, RIWA concluded as early as 1960 that additional strategies were necessary. It thus sought to enhance transnational cooperation with partner organisations in the Rhine river states. RIWA's first attempts at cross-border collaboration dated back to the early 1950s when it initiated the exchange of expertise and test data with West German water supply companies.³¹ *Rijkswaterstaat* had responded with suspicion, fearful that this could undermine delicate diplomatic processes within ICPR, especially with the German and French delegations.³² To appease these concerns RIWA had promised to focus on the technical aspects of river pollution, while political dialogue remained the prerogative of *Rijkswaterstaat*.³³ But as frustrations about the ICPR grew, RIWA concluded that transnational cooperation – particularly with its recently founded West German counterpart the Working Group of Rhine Water Works (ARW) – was crucial to breaking the diplomatic deadlock.³⁴ RIWA Chair Biemond had been skeptical of this collaboration in the early post-war years, but RIWA specialists soon developed fruitful working relationships with their West German counterparts, and the 1960s saw a coordinated effort from drinking water companies in both countries to exert pressure on their respective governments and present comprehensive plans to reduce river pollution.³⁵ This network would be formalised with the founding of the International Association of Waterworks in the Rhine Basin (IAWR) in 1970.

When looking at 1950s and 1960s, a remarkable degree of alignment can be observed in the ways in which Dutch ministerial agencies, drinking water companies, and the experts they consulted perceived of the problem of river pollution and the interests that were at stake.³⁶ The limits of the

31 Reports of visits and correspondence with West German experts/counterparts are kept in the RIWA Archive, among others RIWA Archive, n.n., 'Rapport van de subcommissie 'Reuk en Smaak' van de met professor Holluta en Professor Sander gevoerde besprekingen', November/December 1955; RIWA Archive, E.L. Molt, 'Verslag van het bezoek van Professor Holluta 28 en 29-5-1956', June 1956. On the early transnational interaction of these subjects see also Dieperink, *Tussen zout en zalm*, 127-128.

32 RIWA Archive, Minutes 4th RIWA-meeting, March 1952. Further arguments were presented in RIWA Archive, Minutes 11th RIWA-meeting, December 1953. The *Rijkswaterstaat* director, Ir. G.B.R. de Graaff, was particularly careful not to offend the Germans and especially the French, since the Netherlands was so dependent on their goodwill.

33 RIWA Archive, Minutes 4th RIWA-meeting, March 1952.

34 RIWA Archive, Minutes 23rd RIWA meeting, October 1958.

35 RIWA Archive, Cornelis Biemond, letter to C. van der Veen on the founding of the IAWR, December 1975. RIWA Archive, Minutes 23rd RIWA-meeting, October 1958; RIWA Archive, Minutes 28th RIWA-Meeting, September 1960.

36 Of course, this is the general picture, but interests and problem perceptions were not always aligned. The Dutch government, particularly the Ministries of Economic and Foreign Affairs, was hesitant to adopt a confrontational policy against France and Germany to force them to stop the pollution, given the broader relations, mutual dependencies, and many other policy dossiers



▲
Dutch delegation represented by Norbert Schmelzer, Minister of Foreign Affairs (centre) and Louis Stuijt, Minister of Public Health (right) during the Rhine Ministers conference of 1972 in The Hague. © Photo taken by Hans Peters (Anefo), National Archives, The Hague, cco, Photo collection Anefo, 2.24.01.05, 925-9757, <http://hdl.handle.net/10648/abfaa2ae-dob4-102d-bcf8-003048976d84>.

technocratic internationalist approach became clear, however, when economic interests and West German and French delegations continued to obstruct effective measures. An environmental scandal, increased environmental awareness, and new activist groups in the 1970s would help to end this deadlock.

Stirring up the waters

The 1970s' 'shock of the global' brought surging oil prices and unemployment rates, and plummeting productivity to Europe. Publications such as Rachel Carson's *Silent Spring* (1962) and the Club of Rome's *The Limits to Growth* (1972), as well as environmental disasters like the 1967 Torrey Canyon oil spill made visible the destructive environmental effects of post-war industrialisation, motivating new forms of civic engagement and giving rise to the modern environmental movement. These shifts were reflected in the contestation that surrounded the Rhine and its pollution.

In the summer of 1969, a large spill of the insecticide endosulfan caused a massive fish die-off in the German section of the Rhine and forced water supply companies downstream to temporarily halt their water intake. The media covered the scandal at length, contributing significantly to public awareness of, and thus political attention to Rhine pollution.³⁷ The European Parliament, presenting itself as the people's advocate, drafted reports calling for European action.³⁸ As the director of the Amsterdam water supply company commented, '[t]he problem of the Rhine as a *sick river in Europe* thus

that required cooperation with these allies. RIWA for instance also clashed with parts of the scientific, industrial, and government communities over Dutch plans to build nuclear research (and potentially power) facilities on the Dutch Rhine tributary Waal, as Biemond feared this could lead to radioactive contamination and could 'seriously weaken the objections that the Netherlands could make to the placement of nuclear reactors in West Germany [on the Rhine]'. RIWA Archive, Cornelis Biemond, Letter to G.B.R. De Graaff of *Rijkswaterstaat*, October 1953; RIWA Archive, Cornelis Biemond, letter to Municipal head of Municipal Companies, December 1953 – quote from this document.

37 Dieperink, *Tussen zout en zalm*, 145-147; Disco, 'Accepting Father Rhine?', 401.

38 See Jan-Henrik Meyer, 'Green Activism: The European Parliament's Environmental Committee Promoting a European Environmental Policy in the 1970s', *Journal of European Integration History* 17:1 (2011) 73-85, particularly 78-80; Jan-Henrik Meyer, 'Responding to the European Public? Public Debates, Societal Actors and the Emergence of a European Environmental Policy', in: Christian Wenkel et al. (eds.), *The Environment and the European Public Sphere. Perceptions, Actors, Policies* (The White Horse Press 2020) 230-233. For an overview and timeline of the European-level legislation and involvement in environmental protection, particularly regarding the Rhine and water quality, see also Mostert 'International Cooperation', 145; Dieperink, *Tussen zout en zalm*; Bernauer and Moser, 'Reducing Pollution', 409-410.

became visible [to] everyone’, not just to those experts who had been ‘blowing the whistle’ for years.³⁹

The endosulfan scandal changed how both governing agencies and RIWA assessed the Rhine pollution problem. As we will see, this shift cannot be disentangled from the impact of new environmental actors, and the wave of environmentalist thinking that those actors both disseminated and thrived on, which we will address in the second part of this paragraph. For the sake of analytical clarity we will first treat these new environmental actors separately and then examine the dynamics of their interaction. The river poisoning incident was emblematic of a peak in new Rhine pollutants around 1970, including heavy metals, pesticides and other toxic chemicals. Increasingly the drinking water sector realised it had only partial knowledge of the chemical soup that was the Rhine, as novel toxic components could not always be reliably detected and filtered.⁴⁰ This sector and other agencies began to characterise the environmental problem as one of interrelationships between organisms and their physical surroundings and stressing the entangled nature of the problems at hand. One early example is a 1969 speech by State Secretary of Social Affairs and Public Health Roelof Kruisinga to the National Association of Dutch Drinking Water Companies (VEWIN). Referencing *Silent Spring*, Kruisinga warned that ‘the supplying of water is not only about contributing to economic growth or quantitative growth of wealth, but also (...) about qualitative wealth.’⁴¹ In 1971, RIWA Chair H. Bosch interpreted the problem of Rhine pollution as the result of an ‘imbalance between man and nature’, and framed RIWA’s historical advocacy for a cleaner Rhine as an early form of environmentalism.⁴²

The endosulfan scandal highlighted the ICPR’s impotence, and within the Dutch government the disaster exacerbated frustrations with international diplomacy that had been building up since the mid-1960s. Top civil servants considered ‘letting [the ICPR] die a silent death’ and switching

39 As quoted in Disco, ‘Accepting Father Rhine?’, 401.

40 Disco, ‘Accepting Father Rhine?’, most importantly 400-401; see also Dieperink, *Tussen zout en zalm*, 185-186.

41 NL-HaNA, VROM / Milieubeheer, 2.15.5326, inv.nr. 539, Speech State Secretary of Social Affairs and Public Health, R. Kruisinga to VEWIN ‘Een aantal aspecten van de organisatie en de reorganisatie van de openbare watervoorziening’ June 1969. More reflection on the influence of environmentalism in Dutch government agencies, see R.G. de Neve and Alex van Heezik, *Om het zuivere water*.

Rijksinstituut voor Integraal Zoetwaterbeheer en Afvalwaterbehandeling (RIZA), 1920-2005 (RWS RIZA 2006) 41-42, 103-105.

42 RIWA Archive, ‘Het Rijn-overleg. Voordracht ir [H.] Bosch’ [RIWA chair], December 1971. See also Maud Ramakers and Wim van Meurs, ‘Niederländische Proteste gegen Rheinversalzung durch elsässische Kalibergwerke’, in: Jörg Engelbrecht, Simone Frank, Ralf-Peter Fuchs and Christian Krumm (eds.), *Rhein-Maas. Geschichte, Sprache und Kultur*. Natur- und Umwelt an Maas, Rhein und Ruhr, 10 (Verlag tredition 2020) 114.

to more effective strategies.⁴³ The European Economic Community emerged in the early 1970s as a possible framework for action but Dutch officials feared this route would be slow, unpredictable and open-ended.⁴⁴ They opted instead to invite the other riparian governments to an ad-hoc Rhine Ministers Conference. Under pressure to at least show good intention, those governments acquiesced to attend in 1972, thereby setting out on a long and winding diplomatic road that would eventually lead to the establishment of the Rhine protection regime in 1976.⁴⁵

Against this backdrop, two new developments can be observed. First, the drinking water companies explored new strategies. RIWA further stepped up its transnational activities, definitively breaking its pact with *Rijkswaterstaat* to keep the technical distinct from the political. RIWA joined forces with West Germany's ARW and other drinking water companies to found the International Association of Waterworks in the Rhine Basin (IAWR), with its secretariat in Amsterdam and the director of the Amsterdam water company as its chair. IAWR became the main supplier of Rhine water quality reports, and offered a transnational platform for drinking water companies to formulate joint proposals for quality standards and anti-pollution measures. The IAWR lobbied at the ICPR, at the respective national governments, and at European institutions, as well as conducting public information campaigns. It also organised congresses where scientists, politicians, civil servants and water company experts discussed the challenges of Rhine pollution.⁴⁶ Well beyond the ICPR, the international exchange of knowledge about water pollution and hydrological concerns more broadly

43 NL-HaNA, Ministerie van Economische Zaken: Archiefbescheiden betreffende deelname aan (Rijks)Ministerraad, Onderraden en Ministeriële commissies (hereafter EZ / Ministerraad), 2.06.175, inv.nr. 2890, R.J.H. Patijn, 'Nota: De kwaliteit van het Rijnwater' to the Minister of Economic Affairs, November 1971.

44 NL-HaNA, EZ / Ministerraad, 2.06.175, inv.nr. 2890, R.J.H. Patijn, 'Nota: De kwaliteit van het Rijnwater'. The Dutch government voiced these arguments in public to parliamentarians, too, after those (primarily from the Dutch Labor Party (PvdA) and D66) had informed about the possibility of finding solutions through European fora: Handelingen Tweede Kamer, Vaststelling van hoofdstuk xv (Sociale Zaken en Volksgezondheid) 40ste vergadering - 3 February 1970, most importantly pages 1976, 1989;

Aanhangsel tot het Verslag van de Handelingen der Tweede Kamer zitting 1969-1970. Vragen van de heer Oele (P.v.d.A.) in verband met het onderzoek naar de verontreiniging van de Rijn. (Ingezonden 4 november 1969) en antwoorden Minister Bakker van Verkeer en Waterstaat, 925-926. Similar arguments were made in the following years in the (secret) Council of Ministers; for instance in NL-HaNA, VROM / Milieubeheer, 2.15.5326, inv.nr. 528, Ministerraadnotulen 12 November 1977.

45 See on this point Disco, 'One Touch', 299.

46 For instance NL-HaNA, RIZA, 2.16.131, inv.nr. 219, '4. Arbeitstagung der IAWR vom 16. bis 18. Oktober 1974 in Stuttgart', April 1974. See also Dieperink, *Tussen zout en zalm*, 155-156, 190-191. IAWR is often referred to by its German name *Internationale Arbeitsgemeinschaft der Wasserwerke im Rheineinzugsgebiet*.



Comité Rijnappèl organised a well-attended debate on the pollution of the Rhine at RAI in Amsterdam on 13 March 1976. The protest banner says: 'If the Rhine is rotten, not only fish will die'. Photo taken by Rob Mierenet. © National Archives, The Hague, (cco), Photo collection Anefo, 2.24.01.05, 928-4635, <http://hdl.handle.net/10648/ac7f2aec-dob4-102d-bcf8-003048976d84>.

increased dramatically in this period, as evidenced by UNESCO's International Hydrological Decade (1965-1975).⁴⁷

Second, the 'sick river Rhine' had become an issue that mobilised much larger segments of society; new actors entered the arena of Rhine governance. The endosulfan spill gave nascent activist groups unprecedented exposure and momentum, while also bringing the urgency of Rhine pollution to the attention of more established environmental organisations.⁴⁸ As opposed to the early actors, activists were highly critical public actors, targeting the government, political parties, European institutions and the broader public. Their action repertoire expanded to include mass rallies, information campaigns and legal action. During the inaugural Rhine Ministers Conference in 1972, the environmental organisation Milieudefensie (later to become the Dutch branch of Friends of the Earth) held a parallel meeting of French, German, Swiss and Dutch activist cohorts, resulting in the founding of the International Rhine Group (IRG).⁴⁹ Participants ranged from Aktie Strohalm, a socialist-inclined group based in Utrecht, to established and more moderate environmentalist organisations.⁵⁰ Within two years Stichting Reinwater (the Foundation for Clean Water, 1974) was founded by environmentalists, legal experts, civil servants and employees of drinking water companies. It built upon legal research from the drinking water companies and the Dutch government. Reinwater joined several Dutch horticulturalists who had suffered losses after irrigating with polluted Rhine water and took French potash mines to Dutch civil court for chloride dumping.⁵¹ This legal case would take decades to resolve; in the meantime it generated valuable publicity for the anti-pollution case.⁵²

47 Raymond L. Nace, 'The International Hydrological Decade', *Eos, Transactions, American Geophysical Union* 45:3 (1964) 413-421. DOI: <https://doi.org/10.1029/TR045i003p00413>.

48 An example of the coverage of protests is: n.n., 'Protest tegen vervuiling van natuur', *Trouw*, 30 June 1969; an early example of an environmentalist interpretation of the Rhine pollution and the endosulfan leak in the media is: n.n., 'Commentaar. Ons leefmilieu is in gevaar', *Het Parool*, 26 June 1969.

49 International Institute of Social History, Amsterdam (hereafter IISH), Archief Vereniging Milieudefensie (Amsterdam) inv.nr. 640, Vereniging Milieudefensie and Internationale Rijngroep, folder 'Rijnmiddag 24 oktober 1973, Nederlands Congrescentrum Den Haag', n.d. At the founding, it was agreed that the secretariat of the International Rhine Group platform would be run by Milieudefensie.

50 IISH, Archief Jan van Arkel, inv.nr.2,26, among others Aktie Strohalm, 'Grote Strohalm vergadering 7 juni 1978.'

51 NL-HaNA, VEWIN, 2.19.160, inv.nr. 263, VEWIN secretariat, letter to Secretary of RIWA and D. Lasonder (Provincial Water Company Noord-Holland) concerning 'Maatregelen met betrekking tot de Rijn', December 1969. Details on the founding, character and function of Stichting Reinwater can be found in José de Wit, *Schoon water, smaken verschillen* (MA thesis VU Amsterdam, unpublished, 2010), on this point particularly 34-36; see also Ramakers and Van Meurs, 'Niederländische Proteste', 110-111; Disco, 'One Touch', 302.

52 On the court cases, see Dieperink, *Tussen zout en zalm*, 228-230; the 'Rhine bulletins' of Stichting Reinwater in IISH ZK 54463 on Reinwater's own views on the legal proceedings, including the media exposure they generated.

The new environmentalists deployed novel rhetorical and conceptual tactics as well. The IRG introduced a more explicitly consumer-oriented narrative in their work by stressing food supply safety and the high cost of clean water that was effectively borne by consumers.⁵³ More significantly, the new groups highlighted the entangled nature of the issue of Rhine pollution and the dependency of humans on the natural environment. So, a more systemic and ecological perspective entered the Rhine discourse. Emotional appeals to the protection of nature included the IRG's reference to dead seals and birds and to a 'lifeless and poisonous river.'⁵⁴ Similarly Stichting Reinwater pointed to the detrimental effects of Rhine pollution on fish and the ocean, the 'mother of all life.'⁵⁵ For all its focus on 'progress', humankind was 'severing its ties with the very sources of human life itself', the IRG stated in 1973. Only a 'fundamentally different way of thinking' could protect nature, of which humankind was a part.⁵⁶ Additionally, Reinwater brought a legal dimension to public debates, highlighting upstream states' legal obligation to prevent the pollution of shared ecosystems alongside their moral one, and to halt activities that brought economic strain to downstream states.⁵⁷

Building coalitions

The dynamics of interaction between traditional stakeholders and new advocacy groups in the early 1970s was not without tension. A 'Rhine Afternoon' meeting organised by Milieudedefensie and the IRG in 1973 brought together Dutch government officials, drinking water companies, scientists and environmentalists.⁵⁸ A certain ambivalence prevailed. On the one hand, the Dutch government recognised activism could help pressure upstream states in international negotiations. On the other, critical activist groups could pose a threat to the government itself at home. As Minister of Social Affairs and Public Health Louis Stuijt lamented in 1971: '[T]he pollution of the Rhine is a rewarding subject for radical critiques on our society [...] [I]n general, on the subject of environmental pollution, we are increasingly confronted with a concerned public opinion [...] and parliament.'⁵⁹

53 IISH Milieudedefensie inv.nr. 640, 'Stellingen Internationale Rijngroep', October 1973.

54 Ibidem.

55 IISH ZK 54463, Stichting Reinwater, 'Riks voor de Rijn.' n.d., approximately 1976.

56 IISH Milieudedefensie inv.nr. 640, 'Stellingen Internationale Rijngroep', October 1973.

57 As highlighted for example in IISH ZK 54463, Stichting Reinwater, 'Rijnbulletin oktober 1975'.

58 IISH Milieudedefensie inv.nr. 640, Vereniging Milieudedefensie and Internationale Rijngroep, folder 'Rijnmiddag 24 oktober 1973, Nederlands Congressentrum Den Haag', n.d.

59 NL-HaNA, VROM / Milieubeheer, 2.15.5326 inv. nr. 52, L.B.J. Stuijt, Minister of Social Affairs and Public Health, letter to Minister Drees of Transport and Water Management regarding 'Rijnverontreiniging en milieuverontreiniging in algemeen', November 1971.

Indeed, political parties became increasingly involved in the issue of Rhine pollution as well.⁶⁰ Whereas partisan pressure on the government over economic and public health damage had existed since the 1960s, Dutch MPs raised the stakes significantly in the following decade.⁶¹ Progressive-left parties such as PPR and D66 intensified calls for the Dutch government to adopt a tougher stance with France in particular and force an international solution for the protection of the Rhine, supported by other parties in the process.⁶² Meanwhile the traditional technocratic actors and their action repertoires did not fade from relevance. On the contrary, activists-turned-plaintiffs often used data and technical expertise from RIWA and IAWR to argue their novel legal actions.⁶³ Concepts RIWA had pioneered decades earlier, including the 'polluter pays' principle and the importance of transboundary governance, were now being shared with audiences to which the drinking water companies previously did not have access.

Coalition building and the exploration of new strategies intensified after the ostensible failure of the diplomatic process in 1976. That year the Rhine Ministers Conferences had produced treaties on chloride, chemicals and thermal pollution, in which riparian states agreed to both ban and act to remedy the spills of dangerous compounds. France, it was decided, would store excess salts from its potash mines on site with financial support from the signatories. Ratification and implementation of the Chlorides Convention stalled, however.⁶⁴ What seemed like a breakthrough for Rhine water quality disappointed: although lower-level governments in several riparian regions, European institutions, and industries themselves took effective measures to decrease chemical and metal pollutants, the solution for excessive salt that many in the Netherlands in particular had hoped for failed to materialise.⁶⁵

In response, the drinking water companies and environmental activists stepped up their collaboration, with the former seeking more open

60 The endosulfan spill led to repeated, concerned debates in the Dutch parliament. Most importantly in: *Handelingen Tweede Kamer, 72ste vergadering*, 26 June 1969.

61 *Handelingen Tweede Kamer, Vaststelling van hoofdstuk xv (Sociale Zaken en Volksgezondheid) 40ste vergadering*, 3 February 1970.

62 *Handelingen Tweede Kamer, Vaststelling van hoofdstuk xv (Sociale Zaken en Volksgezondheid) 40ste vergadering*, 3 February 1970, particularly 1959-1961; *Handelingen Tweede Kamer, 1ste vergadering*, 3 September 1973, *Vaste Commissie voor Milieuhygiëne*.

63 Examples are manifold, including public information booklets made by a coalition of Dutch environmental and societal organisations on the (mis)use and pollution of (Rhine) water: IJSH Collectie gedrukt materiaal Willem Hoogendijk inv.nr. 218, 'Het waterboekje', 1976-1977, made with financial support of the Dutch Ministry of Public Health and Environment; Reinwater also frequently referred to RIWA data.

64 Cioc, *The Rhine*, 178-182; Disco, 'One Touch', 299-302.

65 See on this point particularly Disco, 'One Touch', 301.

public and financial support for campaigns and other actions.⁶⁶ Several major conservation organisations in the Netherlands came together in 1976 to form Comité Rijnappèl, including Waddenvereniging, Natuurmonumenten, Milieudefensie and Aktie Strohalm. Together they sought to mobilise public support and pressure national, international and European legislative bodies with media-ready actions such as a transnational bicycle ride along the polluted Rhine, for which the IAWR provided financial support and its president attended the kickoff in Chur, Switzerland.⁶⁷ Dutch environmental activist Jan Boom interpreted this involvement as a sign of genuine concern on the side of the IAWR.⁶⁸

The IAWR and RIWA also officially joined legal proceedings against the potash mines in Alsace. The coalition that sued the mining industry consisted of horticulturalists, environmental groups, legal experts and water works affiliates.⁶⁹ Tension emerged about the relative weight ascribed to different interests: economic motives (damages and compensation, the focus of the horticulturalists) came to dominate at court, and drinking water companies and Reinwater sought to counter this by broadening the coalition to include other interest groups.⁷⁰ For Reinwater in particular, the Alsace case was about more than halting pollution from the potash mines: it wanted to keep a broader public focus on the environment, public health, the common good and international justice.⁷¹ Reinwater also sought to harness the power of European law to the fullest. A court order forcing polluters to pay damages would result in a stream of new cases, incentivising polluters to take action. The European Court of Justice in Luxembourg's 1976 ruling that the Dutch civil court indeed held jurisdiction in the case was a victory for Reinwater in particular, a

66 See for instance Judith Klostermann, *The Social Construction of Sustainability in Dutch Water Companies* (Dissertation, Erasmus University Rotterdam 2003) 74-75, <http://hdl.handle.net/1765/1073>, where it is argued that the Dutch drinking water companies and environmentalists could clash, for instance, over water companies' plans to intensify the use of the dunes on the Dutch west coast for additional potable water filtration, arguably over-burdening the dunes and their ecosystems.

67 Documents in IISH, Van Arkel, inv.nr. 2,26, among others Aktie Strohalm, 'Grote Strohalm vergadering 7 juni 1978'; Ramakers and Van Meurs, 'Niederländische Proteste', most importantly 114.

68 Ramakers and Van Meurs, 'Niederländische Proteste', 114.

69 A view from RIWA and the drinking water sector in general is provided in Gast and Beemsterboer, '50 Jaar RIWA'.

70 Ramakers and Van Meurs, 'Niederländische Proteste', 112-113. An example from the media is: n.n, 'Zorgen om Rijn blijven bestaan', *De Volkskrant*, 15 October 1974, which reports on the legal proceedings and focuses on damages and drinking water. Environmental organisations and Landbouwschap joining the coalition: IISH ZK 54463, Stichting Reinwater, Rijnbulletin, 28 June 1976.

71 For example in IISH ZK 54463, Stichting Reinwater, 'Rijnbulletin' March 1976; IISH Milieudefensie inv.nr. 831, Stichting Reinwater, Draft letter to Minister of Public Health and Environment, June 1978.

triumph 'for every citizen in the European Community who is affected by transboundary water pollution, as much as by air or radioactive pollution. Now citizens can find a judge in their own state who has jurisdiction over polluters abroad.'⁷²

With progressive-left parties such as D66 at the helm, Dutch parliamentary leaders from across the political spectrum gradually threw their support behind the Rhine coalition's legal proceedings, and began deliberations with their German, French and Swiss counterparts to support the anti-pollution cause.⁷³ The Dutch government nonetheless maintained a somewhat ambivalent stance. Ministers and other high functionaries were at once sympathetic to the cause and its advocates; Reinwater even received a subsidy from the Ministry of Public Health and the Environment in 1979.⁷⁴ Both Reinwater and the Dutch government kept their distance, however. While The Hague was hesitant to proclaim official support for the activist group, Reinwater publicly stated it wished to remain independent from the government and international negotiations, emphasising that its legal campaign was a 'pure action of civic sense' (*zuivere burgerzin-aktie*).⁷⁵ At the same time, Reinwater recognised the mutual benefit at stake. Writing to the Minister of Public Health and the Environment in 1978, the group articulated its hopes that 'this civil action could support our Dutch negotiators at the conference table, to break through the current deadlock.'⁷⁶

72 IISH ZK 54463, Stichting Reinwater, 'Persbericht n.a.v. úitspraak EEG-gerechtshof te Luxemburg. Rijnproces', December 1976; Agnes Koerts, 'Úitspraak Europees Hof. Proces zoutlozing in Nederland', *De Volkskrant*, 1 December 1976. Similar statements in: IISH Milieudefensie inv.nr. 831, Stichting Reinwater, '11^{de} begunstigersbericht', December 1977.

73 n.n., 'Terlouw voldaan over Rijnconferentie. Werkgroep gaat parlementaire samenwerking voorbereiden', *Trouw*, 26 February 1977; the Dutch documentation on this interparliamentary initiative in: NL-HaNA, Tweede Kamer der Staten-Generaal, inv. 2.02.28, inv.nr. 7323.

74 IISH ZK 54463, Stichting Reinwater, 'Begunstigersbericht', 13 September 1979.

75 Minister of Public Health and Environment Irene Vorrink (PvdA) in the progressive Den Uyl government refused to unequivocally declare public support for Reinwater and the horticulturalists in their legal actions, stating that it would not be prudent to point to one

state as causing all the pollution and pointing to the delicacy of the Rhine governance process. n.n., 'Overleg over vuile Rijn lijkt weer opening te hebben', *Trouw*, 9 April 1975. But Minister Tjerk Westerterp (KVP, Christian Democrat) of Transport and Water Management did proclaim his 'sympathy' with the environmentalist protest against Rhine pollution in 1977, reported in: F.G. de Ruiter, 'Rijnfietzers zingen in Rotterdam hun ode aan een sober leven', *NRC Handelsblad*, 10 August 1977; also Koerts, 'Úitspraak Europees Hof'. Quote on 'civic sense' from IISH ZK 54463, Stichting Reinwater, Rijnbulletin, 28 June 1976.

76 IISH Milieudefensie inv.nr. 831, Stichting Reinwater, letter to Minister of Public Health and Environment, June 1978. Original Dutch: '(...) [dat] deze burgeractie voor onze Nederlandse onderhandelaars aan de conferentietafel een wezenlijke ruggesteun kan betekenen bij het moeizame streven om de huidige impasse (...) te doorbreken.'

The push for damages from the mines and against new mining discharge permits would drag on throughout the 1980s.⁷⁷ Meanwhile, in 1986, a fire at the Sandoz chemical plant in Switzerland caused a massive spill of toxins into the Rhine. While the endosulfan scandal had raised public awareness, this spill finally spurred governments into action. The resulting Rhine Action Plan and the implementation of stricter measures for industry was a long-awaited and much-desired breakthrough.⁷⁸ The watershed chloride treaty of 1991, which set a hard limit on chloride concentration and required the storage of excess salts on site, marked another significant victory for activists, and coincided roughly with the phasing out of work at the Alsatian potash mines.⁷⁹

Conclusion

In February 2020, the Rhine Ministerial Conference adopted its Rhine 2040 program, explicitly in alignment with the United Nations' 2030 Sustainable Development Goals (SDGs). As early as 1999 the Rhine Convention identified as its primary goal the 'sustainable development of the Rhine ecosystem.' The reconciliation of social, ecological and economic goals – in short, sustainable development – has been a leading principle driving the international Rhine regime in the past two decades.

Long before adopting the term, however, a diverse cast of actors conceived of the fight against Rhine pollution precisely as the confluence of economic, social and environmental goals. Horticulturalists fought pollution because of damage to their land, crops and equipment. Water supply companies were concerned about the rising costs of water filtration and access to clean and safe source water. Nature conservationists and environmental activists raised alarms about the threat to public health, and about the loss of life and the disappearance of species from the river. Meanwhile, the Dutch government sought to reduce pollution through international negotiations with upstream states that were generally unmotivated to curb their industries.

The 1970s marked a key decade not because a significant breakthrough was achieved and a regulatory regime established; this would not happen until the 1980s and the Sandoz disaster. The 1970s were pivotal in that they saw the emergence of an advocacy coalition that could effectively draw public attention, pressure international negotiations, and pursue the legal route

77 For RIWA's own view on this process, see Gast and Beemsterboer, '50 jaar RIWA.' See for more information among others Mostert, 'International Cooperation', 145.

78 Cioc, *The Rhine*, 182-185; Disco, 'One Touch', 303-304. For the drinking water sector/RIWA's

perspective: Gast and Beemsterboer, '50 Jaar RIWA'.

79 For RIWA's and the drinking water sector's view on this process, see Gast and Beemsterboer, '50 jaar RIWA'. See for more information: Mostert, 'International Cooperation', 145.

to fight pollution. The diversity of this movement was remarkable: political activist groups, legal experts, farmers and water utility directors united behind the shared goal of a clean Rhine. This highlights the importance for activists to link their actions to the interests of other stakeholders in order to create momentum and impact, as also discussed in Peter van Dam and Amber Striekwold's article on the alternative food movement in this special issue.⁸⁰ Superficial tensions aside, their complementarity and the mutual benefit they gained from collaboration was clear. Environmental groups could raise public awareness and mobilise citizens in ways that water supply companies could not, and the research, expertise and legal advice generated by RIWA in the previous decades laid significant groundwork for public campaigns and legal action in the 1970s. Without taking into account the 1950s and 1960s, this cannot be fully understood.

The 1970s were further transformational in the European Economic Community's capacity as an arena for contestation and as a framework for international cooperation in environmental policy. The Rhine's transboundary nature and pollution's disregard for national borders necessitated an international solution, as RIWA Chair Biemond predicted in 1954. The European Parliament's adoption of the Rhine pollution report in response to citizens' concerns, and the coalition's use of the European Court of Justice as a policy venue, an institutional site where the portrayal of problems and solutions takes place, are illustrative, as is the use of the Rhine Action Plan's implementation experience in the development of the EU Water Framework Directive in later years.⁸¹ What this article shows very clearly is how regional, national and international levels of governance became increasingly entangled over the issue of Rhine pollution and, moreover, how actors learned to move across them.

Today the Netherlands is not on track to meet EU water quality standards, and Dutch drinking water companies continue to raise alarms about freshwater availability and the quality of ground and surface waters, both major supply sources.⁸² The challenge of reconciling disparate economic, social and environmental goals has not diminished over the years, although,

80 Peter van Dam and Amber Striekwold, 'Small is Unsustainable? Alternative Food Movement in the Low Countries, 1969-1990', *BMGN - LCHR* 137:4 (2022). DOI: <https://doi.org/https://doi.org/10.18352/BMGN-LCHR.11688>.

81 Frank R. Baumgartner and Bryan D. Jones, *Agendas and Instability in American Politics* (The University of Chicago Press 1993) 32; Van Eerd, *Back to Brussels*, 102.

82 Marcel aan de Brugh and Rick Wassens, 'Een volgende crisis dient zich aan: de kwaliteit van Nederlandse wateren is slecht en verbetert

nauwelijks', *NRC*, 24 July 2022 (<https://www.nrc.nl/nieuws/2022/07/24/na-de-stikstofcrisis-volgt-straks-ook-de-waterkwaliteitscrisis-a4137254>, Accessed 26 July 2022); VEWIN, 'Zorgen kwaliteit en beschikbaarheid drinkwaterbronnen steeds groter', 22 March 2022, (https://www.vewin.nl/nieuws/paginas/Zorgen_kwaliteit_en_beschikbaarheid_drinkwaterbronnen_steesd_groter_1254.aspx?source=%2Fnieuws%2FPaginas%2Fdefault.aspx, Accessed 26 July 2022).

as this article shows, experience and insights have been gained. The question today must be whether a similar coalition around Rhine interests will emerge in the near future – yet the urgency of climate change, increasingly severe droughts and the Dutch ‘nitrogen crisis’ all seem to exacerbate rather than minimise polarisation. But increasing public awareness that the impacts of environmental degradation affect everyone can in fact provide a basis for successful collaboration, as this case study has shown.

Daan Theodorus Sanders holds a Master in history and is a security researcher. He specialises in the international history of the twentieth century. He is particularly interested in the Cold War and the history of nuclear (non)proliferation, and has recently published an article on the Dutch involvement in NATO’s nuclear deterrence in Europe during the early decades of the Cold War: Daan Sanders and Jan Hoffenaar, ‘Going Nuclear, but How? The Netherlands Army and Tactical Nuclear Warfare in Europe, 1953-1968’, *International Journal of Military History and Historiography* 42:2 (2021) 378-412, DOI: <https://doi.org/10.1163/24683302-bja10019>. He conducted the research for this article on Rhine governance in his position as junior researcher at Utrecht University. E-mail: daan.sanders4@gmail.com.

Liesbeth van de Grift is Professor of International History and the Environment at Utrecht University. She specialises in the history of interest representation through the lens of environmental governance. Van de Grift leads the nwo Vidi project ‘Consumers on the March: Civic Activism and Political Representation in Europe, 1960s to 1990s’, which studies the role of (public) interest groups and bottom-up mobilisation in the history of European governance. Recent publications include ‘Representing European Society: The Rise of New Representative Claims in 1970s European Politics’, *Archiv für Sozialgeschichte* 58 (2018) 263-278; with Wim van Meurs, ‘Europeanizing Biodiversity: International Organizations as Environmental Actors’, in: Anna-Katharina Wöbse and Patrick Kupper (eds.), *Greening Europe: Environmental Protection in the Long Twentieth Century - A Handbook* (De Gruyter 2021) 419-446. E-mail: l.vandegrift@uu.nl.