

Freshwater and Federal Public Policies in Brazil¹, 2016-2023: dismantling and reconstructing

Águas doces e políticas públicas federais, 2016-2023: desmonte e reconstrução

ABSTRACT

Water governance has been a subject of growing interest in the academic agenda since the 2000s: yet the Brazilian water governance system is still little analyzed. Water crises have multiplied in Brazil in the last two decades, magnified by climate change processes and governance shortcomings, calling for the attention of researchers and policymakers. This paper contributes to the existing literature on water governance by presenting a framework for analyzing water governance in Brazil, investigating recent changes in three Brazilian policies related to water governance, and exploring contributions from the international literature on policy dismantling as applicable to the Brazilian case. The approach adopted is qualitative and exploratory. From six relevant policy areas for water governance analysis - energy, environment (including climate change), water resource management, health, sanitation, and water security - we selected the policies on basic sanitation, water resource management, and environmental conservation for focus. The results show that processes of policy dismantling occurred in the three policy areas analyzed during the period 2016-2022, associated with the backslide of democracy, and point out some challenges and reccomendations for their reconstruction.

Keywords: Water governance, policy dismantling, water management, environmental policy, sanitation policy, Brazil.

A governança da água tem sido objeto de interesse crescente no meio acadêmico desde a década de 2000 - entretanto, o sistema de governança da água no Brasil ainda tem sido pouco anali-sado. Crises hídricas se multiplicaram no Brasil nas décadas mais recentes, potencializadas pelas mudanças climáticas e por equívocos de governança, clamando a atenção de pesquisadores e formuladores de políticas. Este trabalho contribui para a literatura por meio da apresentação de uma moldura analítica para o caso brasileiro, da investigação de mudanças recentes, explorando a aplicabilidade da literatura sobre desmonte de políticas ao campo da governança da água. A abordagem adotada identifica seis áreas de política chave para a governança da água - energia, meio ambiente (inclusive mudança climática), gestão de recursos hídricos, saúde, saneamento e segurança hídrica - destacando três para focalização (meio ambiente, saneamento e recursos hídricos). Os resultados mostram que ocorreram processos de desmonte nas três áreas estudadas, associados ao retrocesso democrático, apontando alguns desafios e recomendações para sua reconstrução.

Palavras-chave: governança da água, desmonte de política, gestão recursos hídricos, política ambiental, política de saneamento básico.

1 This article is a revised, extended and updated version of the Chapter 8, in Gomide, A. A.; Morais Sá E Silva, M. & Leopoldi, M. A. (Eds). Desmonte e reconfiguração de políticas públicas (2016-2022). Brasília: IPEA; INCT/PPED, 2023. The author thanks the anonymous reviewers for their suggestions for adjustments and revisions, which greatly contributed to the final text, and the support of the INCT/Public Policies, Strategies, and Development Project, with financial support from the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) process 465466/2014-1; Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) process 88887.136919/2017-00; and Fundação de Apoio à Pesquisa do Estado do Rio de Janeiro (FAPERJ) process E-26/010000082/2018."



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https://dx.doi.org/10.51861/ded.dmlvtss.2.014 Recebido em: 18 de fevereiro de 2023. Aprovado em: 11 de marco de 2023.

INTRODUCTION

Water crises have multiplied in Brazil over the last two decades, affecting both urban and rural areas across all macroregions, involving political and socioeconomic processes related to the allocation, access, and availability of freshwater. Indicators of the physical availability of water show a declining trend: over the last 30 years, approximately 16% of the surface water on the Brazilian territory disappeared – over 3 million hectares (MAPBIOMAS, 2021). Climate change has magnified all water-related challenges, altering the temporal availability and distribution of river flows, making rainfall patterns increasingly unpredictable and extreme events ever more frequent.

Diagnoses converge on governance failures, evidenced by governmental unpreparedness in both responding to water emergencies and disasters¹ and in developing a strategic approach to responding to the situation (EMPINOTTI et al., 2018; JACOBI et al., 2015; NAVES, 2015; QUINTSLR, 2018).

Water governance has been a thriving academic topic since the 2000s. From the perspective of policy dismantling, however, it remains an incipiently investigated subject - Milhorance (2022) and Neves (2023a) are two of the few works which tackle the issue. In an exploratory approach, this paper contributes to the existing literature by presenting a framework for analyzing water governance in Brazil, investigating recent changes in three Brazilian policies related to water governance, and exploring contributions from the international literature on policy dismantling as applicable to the Brazilian case. The first section presents the analytical references adopted, and the second presents the methodological tools. The third section synthesizes the development of the three policies analyzed - basic sanitation, water resources management, and environmental policy up to 2016. The fourth section discusses the main changes in the three policy areas. The fifth section summarizes the conclusions and suggestions for further development.

WATER GOVERNANCE AND POLICY DISMANTLING: ANALYTICAL REFERENCES

State action on water regulation and management encompass various public policies involving a complex network of local, regional, and central governments; agribusiness, smallholder farmers and urban industrial entrepreneurs; water resource users; civil society organizations; service providers; representatives of input supply chains and infrastructure: a myriad of State and non-State actors driven by manifold interests, values, and capacities for intervention.

Water governance constitutes a field of academic inquiry that has expanded rapidly over the last 20 years, investigating failures and reasons for success in

¹ Such as the tragedies in Mariana, Minas Gerais, 2015; Barcarena, Pará, 2017; and Brumadinho, Minas Gerais, 2019

freshwater management systems (PAHL-WOSTL, 2017, p. 2917). Edelenbos et al. (2013, p.3) define water governance as the modes of connection between organizations, actors, and institutions from different sectors and policies to address water-related problems and challenges.

Throughout the academic literature and government institutions, it has become consensual that the protection and management of freshwater resources depend on multilevel cooperation among the central government, subnational levels of government, and other stakeholders - suggesting the abandonment of hierarchical approaches in favor of bottom-up approaches explored in water governance literature. However, the debate is still ongoing.

In academic literature, policy dismantling is widely understood as a particular type of change defined as "cutting, reduction, diminution or complete removal of existing policies" (BAUER et al., 2012, p. v), which may involve "manipulating the capacities to implement and supervise them" / "the manipulation of implementation and supervisory capacities" (BAUER & KNILL, 2012, p. 35).

Among the various approaches and analytical categories, the taxonomy of dismantling strategies stands out, including active dismantling, dismantling by default, dismantling by symbolic action, and dismantling by arena-shifting (BAUER & KNILL, 2012). When analyzing water and air protection policies in the European Union, Steinebach and Knill (2017) add that regulatory inactivity may also be considered a dismantling strategy, comparable to a form of passive dismantling by default.

For measuring policy dismantling, the distinction between the density and intensity of changes has been widely used (Knill et al., 2011; Bauer; Knill, 2012), even though its strict applicability needs to be assessed on a case-by-case basis. Gravey and Jordan (2019) highlight that a drastic decrease in the number of new proposals, and increased public criticism of existing norms and procedures, do not always represent dismantling initiatives; they may indicate the maturity of a sector or a decline in political ambition.

Regarding the analysis of dismantling processes, Bauer and Knill (2012) emphasize the importance of considering only changes that impact the entire policy as a whole or one of its sectors.

Bauer and Knill (2014) propose analyzing change categories according to the policy outputs. On the other hand, the analytical model developed by Steinebach and Knill (2017) for environmental policy analysis considers three levels of analysis: agenda items, instruments, and policy settings. Gravey and Jordan (2016) treat dismantling as a relative concept measured through changes in the status quo: they keep in view that it is one of several possible policy directions, alongside expansion or mere continuity of the status quo.

Bauer and Becker (2020) and Bauer et al. (2021) emphasize the need to consider state capabilities for policy implementation, further exploring the research on

bureaucratic capture. The authors highlight strategies such as structure centralization, resource centralization, partisanship and its influence on personnel, norms, and regulations, and reduced accountability. The authors add, to these strategies, the "domestication of personnel" and the establishment of illiberal norms.

In the case of environmental policy, critical in water governance framework, bureaucracy plays a particularly relevant role in policy enforcement, its norms and instruments. The discretionary power of public authorities to control activities is a key characteristic of environmental legislation in Brazil. Azuela de la Cueva (2006, p. 70) reflects on the unavoidable indeterminacy of environmental norms, i.e., their inability to contain all requisite preconditions for enforcement, which he calls the "judicialization" of environmental issues. The author points out that several factors contribute to the indeterminacy of environmental law, including scientific uncertainties regarding environmental issues; the ever-changing nature of scientific knowledge; the presence of non-scientific elements in the process of establishing legal norms; and the different lines of thought for legal reasoning, in each case, as the norms are applied. This indeterminacy bestows crucial importance upon the role of regulations interpreting the provision of a superior norm into concrete situations, requiring parliamentary approval for their validity. It is then up to the bureaucracy to interpret and "fill in" the content of the norm to establish operational conditions for its enforcement in specific and singular circumstances. The environmental bureaucracy acts, although not exclusively, as a "co-participant" in the elaboration of norms, as a main responsible party for extending the creation process of norms to the very moment of their implementation.

The definition of dismantling, as formulated by Bauer et al. (2012), was the frame of reference adopted. The context and direction of the changes were considered. The analysis of the impact that these changes had on water governance focused on aspects of interactions among institutions and State and non-State actors.

METHODOLOGICAL REFERENCES

The approach adopted in the present research is qualitative and exploratory. We identified six relevant policy areas for water governance analysis: energy, environment (including climate change), water resource management, health, sanitation, and water security. From these, we selected the policies on basic sanitation, water resource management, and environmental conservation to focus their trajectory and changes from 2016 on. Only the federal government was considered, bearing in mind that, under the federative structure and constitutional attributions, subnational levels of government also operate in these areas.

Information was collected through a bibliographic review of international academic literature on policy dismantling, a normative summary of Brazilian environmental regulation, and a review of documents produced by government agencies and think tanks of civil society organizations on changes in Brazilian environmental policy.

The policies' trajectories were analyzed through the federal regulations established over the period 2016-2023, considering that regulations are representative of policy outputs. Constitution articles, complementary constitutional laws, ordinary laws, and administrative acts (decrees, ordinances, and resolutions) were examined. The regulations were classified as systemic regulations, which deal with the environment as an object of State protection, and sectoral regulations, which affect Federal environmental protection organizations, environmental components, activities that affect the environment, and environmental policy instruments. The systems and organizations considered in detail were the Cities Ministry (Ministério das Cidades), the National Secretariat for Environmental Sanitation (Secretaria Nacional de Saneamento Ambiental), the National Water Resources Policy (Política Nacional de Recursos Hídricos, PNRH) the National Water Resources Management System (SINGREH, Sistema Nacional de Gerenciamento de Recursos Hídricos), the National Environmental System (Sisnama, Sistema Nacional de Meio Ambiente), the Federal District Attorney (MPF, Ministério Público Federal), the Brazilian Institute of Environment and Renewable Natural Resources (Ibama, Instituto Brasileiro de Meio Ambiente e Recursos Renováveis), the Ministry of the Environment (MMA, Ministério do Meio Ambiente), and its agencies, in particular the Brazilian Forest Service (SFB, Serviço Florestal Brasileiro), the National Council for the Environment (CONAMA, Conselho Nacional de Meio Ambiente), the National Water Resources Council (CNRH, Conselho Nacional de Recursos Hídricos), the Deliberative Council of the National Environment Fund (FNMA, Fundo Nacional do Meio Ambiente), the Chico Mendes Institute for Biodiversity Conservation (ICMBio, Instituto Chico Mendes de Conservação da Biodiversidade), and the National Water Agency (ANA, Agência Nacional de Águas).

The regulations were manually sorted into three analytical profiles. The first are the constitutional and infra-constitutional provisions, considered structuralproviding the framework of Federal stewardship policy and governing institutional arrangements - and sectoral provisions. The second profile included regulations representing milestones in policy trajectory, whether advancing and consolidating a particular direction or representing a turning point, as per Gravey and Jordan (2016), who propose analyzing dismantling processes through inflections in policy trajectories (expansions, continuations, or contractions). In the third profile, changes were organized according to eight variables corresponding to structural characteristics in the environmental policy. These are: (i) policy principles and objectives, in particular the prohibition of retrogression; (ii) federal organizations, as indicators of the status of institutional arrangements; (iii) social participation and transparency instruments, as indicators of public participation and adequate information publication; (iv) status of the environmental bureaucracy, a sensitive variable when exercising environmental control and defining dismantling (Jordan et al., 2013); (v) implementation instruments, focusing on environmental control; (vi) legal instruments, (vii) policy financing, a variable here treated exploratorily and (viii) connection among policies and actors.

For the environmental policy, it was assumed in this study that the *environmental control* variable represents the ability to enforce environmental law simultaneously across all thematic areas. Thus, variations in environmental control were considered as variations affecting the field of environmental policy as a whole for the purpose of analyzing changes.

FRESHWATER FEDERAL PUBLIC POLICIES, 2016

The Brazilian Federal Constitution of 1988 (CF88) addresses freshwater in several chapters without providing a systematic treatment of the subject. An analysis of the provisions found in the CF88 allows us to discern the structuring elements of a constitutional ordering of water composed of eight approaches: water as a publicly-owned asset, the object of competencies distributed among federative entities; water as an environmental asset; water as an input for public activities and services; water as energy source[; water for human consumption; water as the object of public services; water security; and water as an object of individual and collective rights².

Water is a public asset³ under state protection, whereby multiple responsibilities are defined for this purpose. Surface freshwater is a resource under the domain of the federal government and of the individual states, the latter controlling underground waters. As a constitutive element of the environment, water is a diffuse-interest good and a common resource of the people, which must be protected for present use and that of future generations.

According to the distribution of competencies among the three government spheres, the federal government is exclusively responsible for regulating water use for energy and waterway transportation, establishing a water resource management system, and defining sanitation guidelines.

In addition to exercising residual competencies, the states are responsible for shared responsibility in metropolitan regions, urban agglomerations, and micro-regions in matters of common interest, including sanitation and protection of freshwater resources and springs.

Municipalities have jurisdiction over local services, including basic sanitation. The three spheres of government share the responsibility ('common material competencies') to engage in cooperative actions to protect water resources, public health, the environment, sanitation, and water resource management and use. Specifically, sanitation and control of drinking water are constitutional responsibilities under the public health sector.

² This constitutional framework was previously developed in Neves, 2018.

³ In this text, the terms "public asset" and "public domain" are used interchangeably, as per Granziera (2014, p. 67).

The provision of services pertaining to water is the responsibility of public power and may be carried out directly or through concessions or permits. The federal government is responsible for legislating on calamities and Civil Defense as it relates to water scarcity or excess. At the same time, the states are responsible for Civil Defense as it relates to the safeguarding of public health and overseeing and ensuring potable water for human consumption and productive activities.

These constitutional provisions enable a complex set of norms, institutional arrangements, policies, and their respective instruments, from various perspectives. These responsibilities enmesh society, the private sector, the Public Prosecutor's Office, and the three government branches, the executive, legislative, and judiciary, in a network of connections that define a complex, little-known field of action bridging the government and society. The federal policies analyzed below correspond to three constitutional approaches: access to drinking water (sanitation policy), water resources management and water as an environmental good.

Access to drinking water: sanitation policy

Sanitation policy was established in 2007 through Law 11445: the new federal policy, designed during the first Lula da Silva government, embarked on a trajectory of expansion after a long, contentious debate and two decades of federal inertia on basic sanitation.

This law brought several new elements to the field of basic sanitation, including a recognition of sanitation as a service composed of four components⁴, the principles of service provision (ensuring universal coverage, integral service, quality control of adequacy for public health, and environmental protection, coordination with urban and regional development and housing policies), accruing duties as service titleholders, including ensuring that the sanitation plan as per municipal ordinance defines requirements for service contracts, establishing regulation and social control, regulating regional service provision, overseeing adequacy of service contracts, and specifying service design requirements.

For the first time, clear guidelines had been established for federal policy, with a commitment to the universalization of access to basic sanitation in an integrated manner, aligned with environmental policies and water resources management. The responsibilities each agent played in service provision and policy implementation were defined within this framework (AGUIAR & HELLER, 2021). In this context, it is the federal government's responsibility to develop the policy, a National Basic Sanitation Plan (Plansab), and regional plans to guide local governmental action.

The organizational structure was created at the federal level during the first Lula Administration (2003-2006) when the Ministry of Cities was a key institution responsible for coordinating the policy through the National Secretariat for

⁴ Provision of drinking water, sanitation, solid waste management, and urban drainage.

Environmental Sanitation (SNSA). The Ministry of Cities directly supported municipalities with over 50,000 inhabitants, those belonging to Metropolitan Regions (RM) and Integrated Development Regions (RIDE), as well as those participating in consortia. Other ministries such as Health, Environment, National Integration, Social Development, and Labor also participated in policy implementation, defining standards for drinking water quality, addressing small municipalities and rural populations, revitalizing watersheds, and promoting proper solid waste and urban rainwater drainage management.

The central challenge was to reduce the then-prevailing deficit in sanitation coverage. Over a nine-year period, progress occurred as basic sanitation policy was implemented, as noted in the academic literature. To begin with, this was the first time a concept of basic sanitation as a social right was adopted to be attained through structural changes to the sector (Britto, 2019). The government developed a national plan and a regulatory framework (BRITTO, 2018), supported by regular funding, despite fluctuations after 2014 (BRITTO & RESENDE, 2017). Although published relatively late in 2013, the National Basic Sanitation Plan (Plansab), coordinated by the Ministry of Cities, defined three major programs: integrated basic sanitation, rural sanitation, and structural sanitation.

However, the approval of the new policy in 2007 was seen as a mere "truce" among competing interests⁵ revolving around the definition of service ownership and the role of the private sector. Implementing this policy was fraught with conflict.

The results achieved by 2016 had been underwhelming. According to Sousa and Gomes (2019), budget execution remained around 20%; utility water coverage advanced by less than 5% and sanitation by 10%. Academic and institutional reviews highlight operational problems, slow sector mobilization, remaining stagnant for decades (HELLER, 2020), a techno-bureaucratic approach, the persistence of patrimonialism (BORJA, 2014), a reductionist role for the federal government – disregarding the municipalities' and states' lack of technical and political capacities – where local sanitation policies are implemented (SOUSA & GOMES, 2019). Funding fluctuated and finally dried up in 2015 (HELLER, 2020) after ambiguous signaling from the federal government – at times exhibiting market-oriented logic in its commitments, at others holding sanitation as a social right aligned with PLANSAB (BRITTO, 2018) and weakness from the social movements (BORJA, 2014).

Water allocation: the water resources management policy

Water resources management comprises defining a strategy, planning, elaborating water policies, and promoting stakeholder engagement, especially coordinating, resolving conflicts, arbitrating, protecting, recovering, and developing water

 $^{5\,} The\, project\, was\, approved\, with\, 862\, amendments\, -\, most,\, according\, to\, Sousa\, and\, Costa\, (2016),\, asserting\, local\, and\, state-level\, interests.$

resources (Marques et al., 2022). This policy was elaborated under provisions as specified in the 1988 Constitution (CF88), in turn, inspired by the 1980s-onward international consensus on integrated water resource management: the water resources management framework was established in 1997. Aligned with a legal and institutional framework for environmental conservation, the 'Water Law' (Law 9433/1997) laid the foundation for a National Water Resources Policy (PNRH) and created a National Water Resources Management System (SINGREH) and a National Information System on Water Resources (SNIRH), later complemented by the national dam and embankment safety policy.

The PNRH guidelines comprise the systematic management of water resources, emphasizing intersectoral management and the integration of water resources management with environmental management; coordinating water resource planning with user sectors and regional, State, and national planning; integrating water resources management with land use management; and integrating watershed management with estuarine and coastal zone management.

The SINGREH (National Water Resources Management System) coordinates integrated water management, arbitrating conflicts in water use, executing the PNRH, planning and regulating use control, preserving and recovering water resources, and charging monetary costs for water resource use. It is composed of various organizations: Water Resources Councils (at the state and national levels), advisory, normative, and deliberative collegiate bodies; River basin Committees (CBHs), collegial instances for formulation and deliberation with the participation of government and users; State Secretariats and the Ministry of the Environment (MMA), government bodies responsible for policy formulation. The National Water Agency (ANA), an autarchy with administrative and financial autonomy under the MMA, is regulatory and executory. In addition to these entities, water resources management bodies of the three government levels and water agencies comprise the SINGREH.



It is the responsibility of the federal executive to implement the SINGREH, assign and grant water use rights for rivers under federal jurisdiction, regulate and oversee this usage, establish and manage a National Water Resources Information System, and integrated water resources management with environmental stewardship.

Until 2016, the trajectory of water management policy had been one of continuous expansion and capacity-building over two decades. At the federal level, the system was fully implemented through the organizations as follows. The National Water Resources Council (CNRH) is SINGREH's highest hierarchical instance, with a national advisory, normative, and deliberative collegiate body initially composed of representatives from water users, government, civil society organizations, and state council representatives. The Secretary for Water Resources and Urbanism (SRHU) in the MMA coordinates and implements the PNRH, providing administrative, technical, and financial support to the CNRH, integrates water resources management with environmental management, supports the formulation of policies and norms, defines implementation strategies, assesses and mitigates environmental vulnerabilities in urban areas, promotes sanitation and the revitalization of urban river basins, and formulates a National Policy to Combat Desertification. The MMA is responsible for coordinating the National Water Resources Plan. The National Water Agency (ANA) is responsible for implementing the PNRH and regulating water use in water bodies under federal jurisdiction, and in 2016 assumed executive responsibilities previously delegated to the CNRH collegiate body.

The main implementation instruments of water management policy are the National Water Resources Plans and state plans, river basin plans, water use rights permits, water use fees, registry of water users, oversight of water use, zoning, and classification of water bodies into different classes of use, and keeping a national water resources information system.

In 2016, the main challenges were integrating water and environmental management, improving the sanitation and water resources database, enhancing intersectoral, interinstitutional, and intergovernmental coordination and integration, promoting shared water and sanitation management approaches, stimulating and promoting investment in technologies and regulations for efficient water management, water reuse, and control of losses in water supply systems, industry, and agriculture; engaging municipalities, including providing training and technical and financial support for water and sanitation management, especially in disadvantaged municipalities, and promoting educational and communication actions for water and sanitation users (ANA, IPEA, UNDP, 2018).

Water protection and control of potentially-impacting activities: environmental policy

This is a policy area directly aligned with the constitutional provisions on the role of the State in environmental protection, and which had seen continuous expansion over three and a half decades.

Regarding freshwater specifically, the environmental policy protects water bodies, natural water production systems, and processes undergone by ecosystem services that provide freshwater. This entails controlling water quality, regulating activities that can pollute or degrade water bodies, promoting the recovery of ecosystems, and areas of water interest, and developing strategies and programs to address climate change.

The institutional foundations for environmental protection in Brazil were established in the early 20th century with laws such as the Water Code and the first Forestry Code. The first regulations on industrial pollution control are from 1960-1980. In the early 1980s, the foundations for protecting the environment as an object of State protection were established. In 1981, the National Environmental Policy (PNMA) was instituted, inaugurating a new field of public policy - the defense of transindividual rights – comprising the environment and water, recognized as diffuse-interest goods in 1985 and through a constitutional provision in 1988 (GRANZIERA, 2014; NEVES, 2016). The control of polluting and potentially degrading activities is carried out through a system that integrates inspection, registration, administrative sanctions, and licensing of potentially polluting activities. The National Council for the Environment (CONAMA) regulates policy instruments such as the licensing system for potentially polluting activities and the classification of freshwater.

During the 1990s and 2000s, environmental policy in Brazil was consolidated, and its agenda expanded. Global environmental issues such as climate change, biodiversity conservation, and desertification were integrated. Environmental offenses were regulated under the penal code (1998), and categories of specially protected areas were organized under a National System of Conservation Units (SNUC) in 2000. In the early 21st century, the arsenal of environmental policy instruments was further strengthened with the Cities' Statute (Law 10257/2001) and Plan for Protection and Control of Deforestation in the Amazon (PPCDAm). Forestry management of public lands was regulated through private concessions (2006). The provisions of international conventions which Brazil signed, such as climate and biodiversity conventions, were assimilated into law. Of particular interest to the safeguard of freshwaters, synergic policies include the defense of forests, control of deforestation, establishment of Conservation Units, protection of biomes -Cerrado, Atlantic Forest, and the Amazon - the National Policy on Climate Change (PNMC), biodiversity conservation policies, the environmental licensing system, and initiatives for the decontamination and revitalization of river basins.

With greater clarity starting from 2010 on, interests represented in Congress have systematically promoted destabilization of environmental law through reforms of environmental norms (NEVES, 2016). By 2016, the environmental framework is under pressure.

INFLECTIONS, 2016-2022

The beginning of this period was characterized by a political crisis that resulted in the impeachment of President Dilma Rousseff and the interim presidency of Vice-President Michel Temer, bringing changes to public policies – especially to redistributive policies and the administrative framework – and a new conservative agenda emerging from this period.

Sanitation Policy, 2016-2022: towards service privatization

From the beginning of the Temer administration, the new coalition implemented changes to sanitation policy, abolishing the structure for social participation and control of the national sanitation policy through the suppression of competencies of the Council of Cities and the National Conference of Cities' election of the collegiate members. In 2016, the Investment Partnerships Program (PPI) was established, and the proposal for the privatization of various state water & sewage companies gained traction. After a diagnostic process and agreement with the Federal Court of Audit (TCU) in December 2016, the federal government submitted a proposal to modify the sector with the justification of universalizing access to services, expanding public and private investments, under the argument that this would provide more efficiency, and quality (Britto, 2019). In 2018, a first attempt was made to increase private participation in service provision by issuing two Provisional Measures (MP), which expired before being voted on. The content of the MPs was reintroduced as a law bill, approved and sanctioned with vetoes in July 2020 as Law 14026/2020, presented as a new sector framework.

The new norm predominantly focuses on water and sanitation components, altering the regulatory frameworks for basic sanitation, public consortia, water resources management, and urban policy. In the concise formulation of Aguiar and Heller (2021), the main changes brought by the new norm may be summarized in two guidelines: the limitation of alternatives available to municipalities and the encouragement of private sector participation in water and sanitation service.

The possibilities for municipalities to act were reduced through a ban on contracts involving state-owned companies and the allocation of federal public funding becoming conditioned to the structuring of regionalized arrangements to be defined by the states. The competencies of the National Water Agency (ANA) were extended to sanitation. New criteria facilitated the entry of private service providers. The validity of contracts was now contingent on a demonstration of technical, economic, and financial viability of service provision, as well as the definition of goals and timelines for universal access, requiring a revision of existing contracts. 'Universal access' was redefined as reaching 99% of the population for water and 90% for sanitation.

On a different note, in 2021, the Brazilian Federal Senate unanimously approved Constitutional Amendment PEC 06/2021, which recognized access to drinking water as a fundamental right for Brazilians, advancing the process of incorporat-

ing the recognition of access to safe water and sanitation as a human right into the Brazilian legal and institutional framework. This right was enshrined in the international arena in June 2010 at a United Nations General Assembly, with Brazil voting in favor.

Water resource management 2016-2022: market solutions to conflicts and scarcity

During the 2016-2017 period, the National Water Agency (ANA) developed the Legacy Project, an agenda to overcome historical challenges in the sector based on the systematization of assessments conducted internally by the ANA. The project included proposals for improving the legal and institutional framework, developed through consultations and consensus-building within the sector. The agenda highlighted aspects such as coordination, action during water crises, improvement of the governance framework regarding decentralized, participatory, and integrated management, recognition of access to clean and safe water and sanitation as a universal human right, improvement of the composition of the National Water Resources Council (CNRH), financial sustainability of river basin organizations, instruments for sustainable management and ensuring multiple uses. One of the challenges emphasized in this agenda is the difficulty of intersectoral coordination, as pointed out by Pagnocceschi (2016): "(...) The lack of processes to induce this articulation, and the precariousness of governmental instances that could exercise prospective vision to guide sectoral policies, have caused worrying inefficiencies (...)."

In 2017, the Senate proposed changing the water resource management regime by creating a "water market" (PLS 495/2017), allowing water users with usage permits to freely negotiate their usage rights with other users within the same river basin.

In March 2018, the Legacy Project was launched at the World Water Forum held in Brasília. The following year, early measures taken by the Bolsonaro administration brought radical changes to the environmental dimension of water resource management and river basin committees within the SINGREH, disregarding the priorities and solutions outlined in the Legacy Project for policy improvement. All federal water resource management agencies under the Ministry of the Environment (MMA) were transferred to the Ministry of Regional Development (MDR), including the CNRH and ANA. In September 2019, the composition and responsibilities of the CNRH were curtailed by reducing the number of council members and eliminating funding for travel allowances for civil society representatives.

The scope of changes will be expanded by the end of 2021. The federal government, through the Ministry of Regional Development (MDR), sent a proposal to Congress in the form of bill PL 4546/2021 to create a national water infrastructure policy and organize water services, categories that did not exist until then. Without prior publication of its text or any discussion with participants and users of the

National System for Water Resources Management (SINGREH), the bill proposed substantial modifications to the national water resources policy. These include the creation of private markets for water use permits, mechanisms that privilege the private sector to run water management infrastructure (dams, pipelines, canals), and 'water services', the association of service providers to establish reference standards, the removal of River Basin Committees' authority to approve basin plans.

Environmental policy, 2016-2022: The deconstruction of environmental institutions⁶

From 2016 onwards, the destabilization of water governance announced at the beginning of the decade deepened through the reduction of federal spending on environmental control, the abandonment of the fight against deforestation, and attempts to dismantle the environmental licensing system. Two provisional measures aimed to reduce the size of protected areas (MPs 756 and 758), and a third (MP 759) sought to benefit land grabbing, in addition to initiatives to legalize resource exploitation and even mining on Indigenous Lands.

In January 2019, environmental policy dismantling became a major priority for the government, in line with campaign promises. Significant changes occurred in environmental regulation, including the following measures. The organizational structure was distorted, and other ministries incorporated several environmental bodies transferred from the MMA. In the Ministry of the Environment (MMA), were extinguished the secretariats responsible for climate change, water resources and water quality, environmental education, management of public forests, and water regulation system, including ANA and CNRH. In the Ministry of Foreign Affairs (MRE), the office responsible for climate policy was abolished. The Brazilian Forestry Service (SFB) and the Rural Environmental Registry (CAR) were transferred to the Ministry of Agriculture. The National Environment Council (CONAMA) suffered changes in its composition and size, reducing the number of civil society representatives. Since May 2020, all enforcement actions by IBAMA in the Amazon region started being coordinated, in practice bottlenecked, by the Ministry of Defense.

IBAMA, the federal environmental control agency, was practically paralyzed across the country in the first year of the new government as most state superintendencies were left vacant, as were management positions in MMA. Inspection teams from IBAMA and ICMBio were undermined. The remaining environmental

⁶ This section is based on an analysis developed for environmental policy, as presented in Neves (2023). Furthermore, it was elaborated with the support of academic literature, and civil society think tanks, which have done an extraordinary job monitoring environmental actions in the studied period, particularly the works of Araújo, 2020; Araujo and Herschman, 2021; Capelari, 2020; Greenpeace, Brazil (2022); Article 19; Imaflora and Socio-Environmental Institute (2021); Institute of Socioeconomic Studies - INESC, 2021; Greenpeace, Institute for Democracy and Sustainability, Society, Population, and Nature Institute (2020); Minc, C. et al., 2021; Observatório do Clima (2020, 2021, 2022); SOS Mata Atlântica; WWF Brazil (2021); Talanoa Institute, 2022; Observatório do Código Floresta and Institute for Amazon Environmental Research / IPAM, 2021.

[.] Decree 9.759 of 04/11/2019, reversed by the Supreme Court (STF) in 2022.

staff members suffered relentless, repeated harassment and intimidation. According to data from the Federal Controller-General, reports of systematic harassment increased by 380% in the last government. In 2022, a total of 183 public servants underwent disciplinary proceedings, compared to a mere 38 in 2018 (OBSER-VATÓRIO DO CLIMA, 2023, p. 33). Most managers appointed by the new administration lacked any technical qualification or experience in the field, a significant portion of these being military personnel.

Regarding civil society participation and transparency, in April 2019, a "mass revocation" of rules extinguished most federal committees – over half of the 22 national committees overseeing socio-environmental policies underwent severe restructuring or were abolished (IMAFLORA et al., 2021). In May, the National Commission on Biodiversity (CONABIO) and the Deliberative Council of the National Environmental Fund were restructured.

Information about programs and projects began being suppressed on the MMA website. In August, pressures began to stop the disclosure of environmental data, such as the deforestation rate index divulged by the National Institute for Space Research (INPE). Censorship was also imposed on IBAMA and ICMBio institutional communication. In 2020, the federal government started centralizing all environmental organ communications, and indices and processes stopped being divulged. This strategy uniting censorship, intimidation, and personal discrediting and mudslinging targeted key environmental administrators, civil society organizations, and the media.

During the 2019-2022 period, federal personnel and discretionary expenses were curtailed. In 2021 personnel expenses for environmental organs summed BRL 1.99 billion, 71% of the executed total (compared to 65% in 2019). Funding to organizations such as the Amazon Fund was paralyzed by the extinction of the Amazon Fund Steering Committee (COFA) and the Amazon Fund Technical Committee (CTFA) in April 2019. The management committee of the National Climate Change Fund was dissolved in the "mass revocation" of 2019.

In 2021, an alliance between the executive and the Speaker of Congress further potentiated bills imparting additional momentum to disruptive change. That year deregulation advanced on Permanent Preservation Areas (APPs) in urban areas, allowing municipal executives to dispose of APPs on riverbanks, hilltops, coastal dunes, and mangroves in urban areas⁷. Proposals were organized to legislate an Executive objective, the reformulation of the environmental licensing system - a key component of environmental oversight and enforcement.

In addition to these strategies, an unusual pattern of behavior by the federal executive emerged, characterized by conducting environmental affairs in blatant disregard for the constitutional principles of environmental protection. These initiatives may be grouped under three main aspects: the perverse exercise of

⁷ Law 14285/2021



environmental duty, encouragement of perverse behavior, and use of unfounded information to justify policy decisions. The first aspect, the perverse exercise of environmental duty, can be exemplified by the intentional reduction of inspection and oversight. The second aspect, encouraging perverse behavior, may be observed in repeated statements supporting the invasion of Indigenous Lands and mining in Protected Areas, discrediting environmental managers in their exercise of duty. The third aspect, the use of unfounded information, is illustrated by the initiatives to discredit institutions such as the National Institute for Space Research (INPE) and physicist Ricardo Galvão, its director (OBSERVATÓRIO DO CLIMA, 2020), and to promoting biased indicators to justify forest policy decisions (RAJÃO et al., 2021), undermines scientific consensus and discredits technicians and experts of internationally recognized expertise.

Some Executive and Legislative branches initiatives faced resistance: besides the civil society organizations and federal bureaucracy resistance initiatives, worthy of mention are a few votes and decisions by the Supreme Court (STF) throughout 2022. In April, the STF declared the granting of licenses by the simplified method unconstitutional. In July, the STF ruled in favor of Fundamental Precept Argument (ADPF) #708, forbidding the Climate Fund to remain withheld and mandating the federal government to restore its prompt disbursement. In November, the STF additionally ordered the government to reactivate the Amazon Fund, which had been withheld since 2019 (OBSERVATÓRIO DO CLIMA, 2023).

The shifts observed in the three policy areas during 2016-2022 are summarized in the Table below.

Summary of policy changes in Brazilian federal basic sanitation, environmental and water resources policies, 2016-2021, according to selected variables

Policies	Basic sanitation	Water resources	Environment
Variables			
Principles, objectives, priorities	Reduction of the goal of service universalization Decreased role of the public sector in funding and operating service provision. Decreased role of service holders (municipalities). Priority to the entry of private capital in the provision of services. Rupture of integration with urban policies	Abandonment of priorities identified in the Legacy Project dynamics. Proposed reformulation of the management model Rupture with policy guidelines Rupture of integration with the environmental area	Abandonment of the constitutional principles and objectives of the environmental policy, climate change policy and protection of biodiversity. Abandonment of federal policy principles, objectives and priorities.
Institutional arrangement and federal organizations	Extinction of the institutional arrangement adopted since 2007. Extinction of the body responsible for the policy (Ministry of Cities). Transfer of competence and the remaining bodies to the Regional Development area Centralization of management at the federal level	Transfer of federal agencies and competence to Regional Development Change in the profile of the National Water Resources Council Proposal to modify the institutional arrangement in favor of an infrastructure management approach, through the creation of new organizations, plans and competencies	Extinction of bodies responsible for climate change, forests, and administrative units responsible for combating deforestation and environmental education. Loss of powers and bodies responsible for water management (ANA and National Secretariat for Water Resources and Water Quality / SRHQ) and forest management, transferred to other ministries.
Policy instruments	Paralysis of <i>Plansab</i> monitoring and review Two types of service contracts were terminated Increased requirements for provision by state companies Reduction in implementation capacity of municipalities, including joint initiatives New centralizing instruments (regionalization)	Proposal for introduction of new systems (water infrastructure, water services) and new policy instruments managed by the private sector. Proposal for the retraction of the role of the public power in the management of water resources.	Paralysis of the environmental control system Abandonment of the deforestation control strategy and the deforestation inspection system. Paralysis of planning initiatives and creation of Protected Areas. Paralysis of funding mechanisms.

Summary of policy changes in Brazilian federal basic sanitation, environmental and water resources policies, 2016-2021, according to selected variables

Policies	Basic sanitation	Water resources	Environment
Instances of social participation	Participatory demobilization: extinction of the participatory collegiate (ConCidades)	Reduction of civil society participation in the CNRH Proposal to suppress attributions of the River Basin Committees	Reduction of civil society representation in CONAMA Extinction of several participatory collegiate bodies Intimidation and discrediting CSOs. Paralysis of cooperation with CSOs
Bureaucracy status	Transfer of bureaucracy to the Ministry of Regional Development and other federal agencies.	Transfer of bureaucracy to the Ministry of Regional Development	Destructuring of the environmental bureaucracy. Dismissals of command positions, subsequently left vacant Emptying of inspection teams Harassment and intimidation of remaining environmental officers. New managers appointed without technical qualifications and prior experience in the area
Funding	Abandonment of the funding model via public resources		Reduced federal spending on the environment Paralyzed funding funds for environmental policies
Transparency and social control	Withdrawn public access to documents from previous governments Inertia in implementation of social control systems	Proposal for new rule by the Executive sent directly to Congress without public participation Proposal for an association of service providers under a self- regulatory regime	Suppression of information on government websites Pressures for political interference in the disclosure of environmental information Censorship on institutional communication in the environmental area Centralization of communication by environmental agencies and processes made confidential Censorship, intimidation and discrediting of technical information
Connection between areas and actors	Extinction of the institutional connection with the environmental area and the joint implementation of actions. Extinction of connection with civil society.	Extinction of the institutional connection with the environmental area and the joint implementation of actions. Weakened relationships with user organizations and civil society	Extinction of the institutional instances for implementing actions together with other areas. Extinction at the political level of connections with civil society organizations Formally reducing the participation of civil society

Source: author's compilation

WATER GOVERNANCE IN BRAZIL, 2023: CONCLUSIONS, LESSONS LEARNED AND FURTHER RESEARCH

The research strove to understand to what extent the transformations that occurred in sanitation, water resources management, and environmental policy can be attributed to policy dismantling and what their consequences are for water governance in Brazil.

The study considered changes that had the potential to impact the entire policy field or significant sectors thereof. The results confirm that the three policy areas underwent a dismantling process during the studied period, a process halted by the victory of Luiz Inácio Lula da Silva in the presidential elections of October 2022 and his inauguration in January 2023.

According to the strategies' taxonomy proposed by Bauer et al. (2012), in the water resources area, the changes can be identified as a strategy for dismantling by arena-shifting, while in the sanitation and environmental areas, the methods are compatible with active dismantling – the explicit action of reducing, suspending, or extinguishing public policy instruments.

In the water resources management policy, the trajectory shift breaking away from policy until 2016 was announced by initiatives for bills putting the private sector in the control of water permits – and materialized by the placing of the institutional arrangement of water resource management under the purview of regional development area, severing it from longstanding ties with the environmental sector – as had stood for 25 years.

In the field of basic sanitation, the reform process implemented over the analyzed period is identifiable as an active dismantling strategy. This was evidenced by abandoning the concept of sanitation as a social right, whose provision is the responsibility of the State and whose operationalization is necessarily connected to urban and environmental policies. The short trajectory of this policy – less than a decade – was interrupted by the extinction of the 2003 institutional arrangement on urban policies and its reassignment to Regional Development. The suspension of monitoring, evaluation, and revision processes under the National Basic Sanitation Plan (Plansab), its main policy instrument; the priority given to the private sector for the operation of services; and the weakening of the responsible for the service, the municipalities, through restrictive measures such as regionalization under the responsibility of the states, underscore the decision for discontinuity and rupture with the previous approach.

In the environmental field, the changes were far more drastic. The trajectory of expansion and continuous consolidation that had prevailed for over three decades was interrupted. Policy principles and objectives were disregarded through the extinction or undermining of the critical instruments, strategies, and programs that embodied and gave substance to the constitutional provisions for environmental protection. The operation of core activities was rendered unfeasible - particularly

in Protected Areas – such as restoring degraded areas and environmental oversight. According to Instituto Talanoa (2022), there is an urgent need to modify 401 acts of the Federal Executive Power (2019–222), which must be repealed or revised to rebuild the Brazilian climate and environmental agenda.

The loss of administrative capabilities paralyzed activities. Aggravated by the issuance of norms of questionable validity, a strategy of harassment and intimidation of environmental personnel inhibited regulatory work by the remaining staff, significantly inhibiting enforcement⁸ and fighting environmental crime. The suspension of funding through the dissolution of decision-making bodies dismantled successful ongoing strategies that had prevailed for over a decade, including deforestation and climate change control, and biodiversity protection.

Considering the array of changes in these three areas, an initial exploration will reveal common characteristics in the three policies' trajectories: the authoritarian nature of the dismantling and a retreat in the State's role. The changes erode the democratic character of the three policy areas by restricting the participation of civil society in advisory boards, either through their outright extinction or by reducing the weight of civil society in the remaining instances, or by the absence of dialogue with civil society in shaping policy changes. Particularly the unprecedented strategies, provisionally characterized in this study as the perverse exercise of power-duty, warrants an in-depth analysis of its motivations, mechanisms, and effects. In the environmental policy area, civil society participation has been reduced through the federal executive's systematic disqualification rhetoric of civil organizations. Difficulties in accessing information – and the previous inertia in implementing social control mechanisms in the sanitation policy – have substantially reduced transparency and access to information across all three areas.

The second common factor in the direction of dismantling the three policy areas is the reduction of the State's role, either through encouraging private sector participation, reducing federal funding, and assigning responsibilities to the private sector or by the practical omission of the exercise of regulatory powers. In the areas of sanitation and environment, this shift is represented by concrete measures. In contrast, in water resources management, it is characterized by proposals authored by the executive and sent to Congress.

Regarding the impact of dismantling the three policy areas, two sets of effects need to be considered: those resulting from changes in each policy area and their administrative and political capabilities and those affecting the coordination among the three policies.

Indeed, the dismantling of the sanitation policy, as it prioritizes private operators, drastically reduced requisite State capabilities to address deficits, as pointed

⁸ As mentioned in the second section, the Brazilian environmental policy includes a wide range of instruments whose use is the responsibility of qualified public officials and managers to interpret and implement, exercising considerable discretionary power

out by Heller (2020), Britto (2021), and Sousa and Gomes (2019). No comparative studies have supported this hypothesis regarding the performance of different sanitation service providers. The private operation of water supply and sanitation creates an unfavorable context for reducing the deficit, as most of the deficit is concentrated in poor areas. It is unlikely that tariffs alone will ensure these operators' economic and financial balance, as increasing poverty further reduces the ability of vulnerable populations to pay. Finally, this period's policy aggravated the ongoing challenges by disregarding the role of subnational governments in implementing sanitation in precarious settlements. The likelihood of persistent deficit tends to exacerbate conflicts in water governance, resulting from decreased availability of water with minimum quality for activities such as domestic water supply, irrigation, aquaculture, and recreation.

The dismantling of the water resources sector has rendered governance initiatives that rely on cooperative actions within the environmental sector unviable and worsened the conditions for stakeholder participation.

The disorganization of the environmental control system resulted in an inability to control water pollution and other activities that degrade water-related areas and assets, deepening the degradation and overexploitation of water-related areas. The paralysis of funding mechanisms made it impossible to maintain strategies for revitalizing watersheds, rehabilitating degraded areas, protecting water sources, and also creating, implementing, and managing Conservation Units. The abandonment of climate policy destroyed the water governance system's capacity to respond, through adaptive measures, in the medium and long term.

Synergistic impacts on water governance pertain to the actors' capacities to connect and articulate among themselves, affecting horizontal relations (among sectors and organizations at the same level of government), vertical relations (between two government levels), among governments and civil society organizations, and water users. The shifts identified as comprising dismantling processes have disrupted this capacity for connectivity built over more than two decades throughout Brazil's water governance systems. Initiatives undertaken by the federal government during the Temer and Bolsonaro administrations disrupted strategies and instances of coordination among the three policy areas and, within each area, the capacity for connectivity among managers and stakeholders, as well as between national and subnational levels of government. The dissolution of the Cities' Council proved decisive in distancing stakeholders from the decision-making process. The transfer of water resource management agencies from MMA to MDR has extinguished coordination between water resource managers and environmental managers. The transfer of water resource management to MDR reinforced a mono-dimensional approach to water management as an infrastructure issue, moving away from approaches that consider water an environmental good to be protected, to which the population has a right to access. Finally, dismantling processes have significantly eroded its democratic and participatory mechanisms, essential for effective water governance.

The exploratory investigation was limited to identifying changes, their immediate effects, and the most evident interactions and synergies. Several aspects would need further research, among them new roles played by actors (legal operators, legislative branch actors, civil society associations, subnational governments), and the new scenario for water governance.

The presence of legal operators is increasingly important in the three policy cycles. The judicialization of policies interfering with freshwater changed the public policy process by including legal operators is interpreted as a result of the constitutionalization of rights and public policies, increased access to justice, and the institutional role of the Public Prosecutor's Office as established in CF88.

Legislative branch actors have gained prominence. With parliamentary support, it was possible to destabilize and change regulations enshrined in federal law, as with pesticide regulations. A coalition or caucus intent on environment dismantling has been structured in Congress, which will likely strive to influence water governance arrangements.

The environmental bureaucracy (in coalition with representatives of the scientific community and civil society organizations) played an invaluable role in resisting the dismantling. The resilience of the bureaucracy in certain areas, such as health and the environment, has already caught the attention of researchers studying dismantling policies, while in other areas, such as sanitation, the bureaucracy responsible for the Ministry of Cities "disappeared", transferred into other federal organizations with no duties related to sanitation. What are the possibilities and limits of the resilience observed in the environmental area?

It is essential to investigate the role of subnational governments in the dismantling process, in resistance thereof, and reconstruction. According to the federal structure and constitutional attributions, the actions of subnational governments are indispensable and certainly played an essential role in resisting the dismantling in at least a few of the areas of the environmental agenda (such as climate change).

The conducted analysis reveals a new scenario in water-related policies. The interruption of the dismantling process with the election of Luiz Inácio Lula da Silva announces promising possibilities for policy reconfiguration and capabilities reconstruction. For this, some tasks are indispensable.

The dismantling initiatives carried out on water governance and water assets have caused damage to the governance system and water assets. There are challenging effects that can extend beyond the timeframe during which the dismantling occurred. While some consequences are already clearly observable and easily quantifiable, it is necessary to quantify and qualify the overall impact for repair, accountability, and reconstruction. Regarding the latter, reconstruction does not mean recreating dismantled structures and links. New factors arising from the transformations during this period also need to be incorporated into the reconfigured institutional arrangements and capacities.

Damage will continue to occur while delinquent behavior remains; capacities and the ability to impose behavior under the environmental constitutional order are lacking. Implications for public policy arising from the unprecedented exercise of power duty in violation of the legal order deserve analysis. By intentionally transgressing the constitutional boundaries that underpin policy and attempting to delegitimize the environmental order –, governmental behavior – seems to have harmed the democratic regime itself, eroding the credibility of State action for the environment within the population. The erosion of credibility among the people and the chances of restoration of trust in the coercive power of norms and the rule of law merits thorough investigation into its effects, mechanisms, and perspectives.

The first hundred days under the new federal government have shown that the water agenda is not quite at the top of the government's current priorities and still faces some resistance. The coalition set on undermining environmental institutions refuses to accept the end of regression. The long-reaching influence of organized crime, and the intertwining of environmental policy with public security, demand a radical reformulation of control and enforcement practices. The pro-privatization coalition intends to keep the ground they have gained.

In the global context of multiple crises (climatic, environmental, and water supply emergencies), it is urgent to prioritize water governance on the new government's agenda to build the capacity to respond to multiple challenges as quickly as possible. Water governance requires measures in each policy area – especially environmental protection, water resource management, sanitation, climate, and water supply security – and measures to rebuild coordination across policy areas and between the State and society, promoting connectivity and cooperative arrangements.

Environmental policy priorities include preventing deforestation, protecting and restoring degraded water areas, and controlling water pollution. Strategies should entail the revocation of harmful administrative acts and the removal from the agenda of dismantling bills currently still under discussion in Congress; reconstruction of the regulatory framework; resumption of anti-deforestation policies, including rebuilding state capabilities for the various dimensions of command and control to fight criminal activities, including organized crime; strengthening of land regularization and defense of protected areas, restoration of funding sources, and promotion of new models to ensure the protection of standing forests.

In basic sanitation policy, priorities include reconnecting with the areas of environment and water resources, reviewing the legal framework and suspending decrees 14206/20 and 11445/07, strengthening the role of the State as responsible for ensuring access to water and sanitation as a human right, as proposed in PEC06/2021; reviewing the part of BNDES, PLANSAB, and law 14026/20, and emphasizing the value of sanitation in the context of climate adaptation measures.

In water resource management, it is essential to reconnect organizationally and politically with the environmental sector, reconstruct and strengthen collegial bodies such as Basin Councils and Committees, suspend Bill 4546/2021, and engage in a transparent and democratic debate on the priorities and challenges of water management as a public good.

References

AGÊNCIA NACIONAL DE ÁGUAS / ANA; Instituto de Pesquisa Econômica Aplicada / IPEA; Programa das Nações Unidas para o Desenvolvimento / PNUD; Centro Internacional de Políticas para o Crescimento Inclusivo. Diálogos sobre os Objetivos de Desenvolvimento Sustentável e os Desafios para a Gestão da Água e do Saneamento no Brasil. Documento apresentado no 80. Fórum Mundial da Água. Brasília, 18 a 23 março 2018

AGÊNCIA NACIONAL DE ÁGUAS / ANA. Projeto Legado. Propostas para aperfeiçoamento dos marcos constitucional, legal e infralegal da gestão de águas no Brasil - preparação para o 8º Fórum Mundial da Água. Documento base, versão Zero4, Brasília, DF, 2017

AGUIAR, A. M. & HELLER, L. Saneamento básico no Brasil: perspectivas e a saúde das cidades. *Textos para Discussão* n. 76. Rio de Janeiro: Fundação Oswaldo Cruz, 2017

ANDREU, V. Retrocessos na gestão das águas no Brasil. GGN 15/09/2019. Retrieved from https://jornalggn.com.br. Accessed: Apr. 2, 2023.

ARAÚJO, S. M. V. G. Environmental policy in the Bolsonaro government: the response of environmentalists in the legislative Arena. BPSR, v. 14, n. 2, 2020.

ARAUJO, S. M. V. G. & HERSCHMANN, S. O desmantelamento da política ambiental e seus reflexos na COP 26. 16 dezembro 2021. PEX Executives, Presidents and Cabinet Politics, 2021. Retrieved from https://pex-network.com/category/special-reports/special-report-series-bolsonaro-administration-the-disruptive-presidency-in-brazil/, accessed 01/05/2023

AZUELA de la CUEVA, A. Visionarios y pragmáticos: una aproximación sociológica al derecho ambiental. México: Fontamara: Instituto de Investigaciones Sociales: UNAM, 2006.

BAUER, M. W.; BECKER, S. Democratic backsliding, populism and public administration. Perspectives on Public Management and Governance, 2020, pp. 19-31

BAUER, M. W.; JORDAN, A.; GREEN-PEDERSEN, C. & HÉRITIER, A. Dismantling public policy: preferences, strategies and effects. Oxford: Oxford University Press, 2012.

BAUER, M. W. & KNILL, C. A conceptual framework for the comparative analysis of policy change - measurement, explanation and strategies of policy dismantling. Journal of Comparative *Policy Analysis: Research and Practice*, v. 16, n 1, 2014, pp. 28-44.

BAUER, M. W. & KNILL, C. Understanding policy dismantling: an analytical framework. In: Bauer, M. W.; Jordan, A.; Green-Pedersen, C.; Héritier, A. Dismantling public policy: preferences, strategies and effects. Oxford: Oxford University Press, 2012, pp. 30-45.

BAUER, M.W.; PETERS, B.G. & PIERRE, J. Pathways to administrative resilience: public bureaucracies rule by democratic backsliders as a transnational challenge. *Policy Analysis*, European University Institute, Issue 2001/03, 2021.

BORJA, P. C. Política pública de saneamento básico: uma análise da recente experiência brasileira. Saúde e Sociedade São Paulo, v. 23, 2014, pp. 432-447

BRASIL. Constituição da República Federativa do Brasil de 1988 promulgada em 5 de outubro de 1988.

BRASIL. Controladoria Geral da União. Portal de Transparência, 2022. Retrieved from: https://portaltransparencia.gov.br. Accessed: Apr. 2, 2023.

BRITTO, A. L. N. P. Direito humano à água e ao saneamento para a população vulnerável: elementos para pensar marcos legais e políticas públicas. In: Silva, J. I. A (org.). O problema da água e do saneamento. Algumas respostas. João Pessoa: EduEPB, 2021, p. 36-62.

BRITTO, A. L. N. P. Proposta de um novo marco regulatório para o saneamento: um retrocesso no caminho da universalização do acesso. Rio de Janeiro: Observatório das Metrópoles/ Instituto Nacional de Ciência e Tecnologia, 2019.

BRITTO, A. L. N. P. Estudo Proposições para acelerar o avanço da política pública de saneamento no Brasil: Tendências Atuais e visão dos agentes do setor. In: HELLER, L. (org.) Saneamento como política pública: um olhar a partir dos desafios do SUS. 2018. Futuros do Brasil - textos para debate. Centro de Estudos Estratégicos da FIOCRUZ, Ch. 2. Rio de Janeiro: Fiocruz, 2018.

BRITTO, A. L. N. P. & RESENDE, S.C. A política pública para os serviços urbanos de abastecimento de água e esgotamento sanitário no Brasil: financeirização, mercantilização e perspectivas de resistência. *Cadernos Metropolitanos*, São Paulo, v. 19, n. 39, 2017, pp. 557-581.

CAPELARI, M. G. M. et al. Mudança em larga escala da política ambiental: análise da realidade brasileira. Revista de Administração Pública 54 (6), 2020.

EDELENBOS, J.; BRESSERS, N.; SHOLTEN, N. (eds). Water governance as connective capacity. Surrey: Ashqate, 2013.

EMPINOTTI, V. L.; JACOBI, P. R. & FRACALANZA, A. P. Transparência e governança das águas. Estudos Avançados, v. 30, n. 88, 2016, pp. 63-75.

GOMIDE, A. A.; MORAIS SÁ e SILVA, M. & LEOPOLDI, M. A. (eds). Desmonte e reconfiguração de políticas públicas (2016-2022). Brasília: IPEA; INCT/PPED, 2023.

GRANZIERA, M. L. Direito das Águas - disciplina jurídica das águas doces. São Paulo: ed. Atlas, 2016

GRAVEY, V.; JORDAN, A. New policy dynamics in more uncertain times? In: Environmental policy in the EU - actors, institutions and processes. London: Routledge, 2019.

GREENPEACE. Principais ameaças de fragilização da legislação ambiental e fundiária em andamento no Congresso Nacional, 2022.

GREENPEACE BRASIL; Instituto de Estudos Socioeconômicos - INESC; Instituto Democracia e Sustentabilidade; Instituto Sociedade, População e Natureza; Instituto Socioambiental; Observatório do Clima; SOS Mata Atlântica; WWF Brasil. Principais problemas do Substitutivo ao Projeto de Lei nº 3.729/2004, de 06.05.2021: Lei Geral do Licenciamento Ambiental (Lei da Não-Licença e do Autolicenciamento), 2021.

HELLER, L.; MONTENEGRO, M. & SILVA, E. A. A nova lei de saneamento. Atiraram no público, acertaram o privado. Rio de Janeiro: ONDAS, 2020.

IMAFLORA; ISA; Artigo 19. Mapeamento dos retrocessos de transparência e participação social na política ambiental brasileiras - 2019 e 2020, 2021.

INSTITUTO de ESTUDOS SOCIOECONÔMICOS - INESC. A conta do desmonte - balanço do Orçamento Geral da União 2021. INESC: Brasília, 2022.

INSTITUTO de ESTUDOS SOCIOECONÔMICOS - INESC. Dando nome aos bois. Análise das medidas infralegais para o meio ambiente nos primeiros dois anos do Governo Bolsonaro, 2021.

INSTITUTO SOCIOAMBIENTAL. Projeto de Lei Geral do Licenciamento fará desmatamento explodir, diz análise do ISA e UFMG, 2021. Retrieved from: https://goo.by/oHJ5a. Accessed: Apr. 2, 2023.

INSTITUTO TALANOA. Reconstrução: 401 atos do Poder Executivo Federal (2019-2022) a serem revogados ou revisados para reconstituição da agenda climática e ambiental brasileira. Instituto Talanoa, Rio de Janeiro, Brasil, 2022.

INSTITUTO TALANOA. A política nacional de mudança do clima em 2020. Estado das metas, mercados e governança assumidos na Lei 12.187/2009. Rio de Janeiro, Brasil, 2021. Retrieved from https://www.institutotalanoa.org/documentos. Accessed: Apr 2 2023

JACOBI, P. R.; CIBIM, J. & LEÃO, R. S. Crise hídrica na Macrometrópole Paulista e respostas da sociedade civil. Estudos Avançados, n. 29, 2015, pp. 27-44

KNILL, C.; SCHULZE, K. & TOSUN, J. Measuring environmental policy change: conceptual alternatives and research implications. *Reihe Politikwissenschaft*, Political Science Series, 125, Wien: Institut für Hohere Studien / HIS, 2011.

MAPBIOMAS. A dinâmica da superfície de água do território brasileiro. Principais resultados do Mapeamento anual e mensal da superfície de água no Brasil entre 1985 até 2020, agosto 2021.

MARQUES, F.G.; JOHNSSON, R. F.; OLIVEIRA, P. P. F., MOLEJON, C., & BRAGA, C. F. C. Os serviços de gestão de recursos hídricos. Revista de Gestão de Água da América Latina, v. 19, 2022

MILHORANCE, C. Policy dismantling and democratic regression in Brazil under Bolsonaro: Coalition politics, ideas, and underlying discourses. *Review of Policy Research*, n. 39, vol, p. 752-770.

MINC, C. et al. (2021). Projeto de lei geral do não-licenciamento promove insegurança jurídica e ameaça agravar a crise econômica brasileira, 2022.

NAVES, R. Saneamento para todos: como universalizar serviços sustentáveis de água e esgoto no Brasil pós-pandemia. São Paulo: Palavra Livre, 2021.

NEVES, E. M. S. C. Environmental governance in Brazil: the local government's perspective. Revista de Economia Contemporânea, vol. 20, n. 3, 2016, p. 492-516.

NEVES, E. M. S. C. Quem cuida da água? Governança da água doce, moldura jurídico-institucional nacional, 2016. Aliança pela Água, 2018. Retrieved from https://goo.by/Av1ME. Acessed: Feb 2, 2022

NEVES, E. M. S. C. Mudança, desmonte de políticas e defesa do meio ambiente no Brasil. Sustentabilidade em Debate, v. 14, n.1, Brasília, 2023, p. 42-57.

NEVES, E. M. S. C. Águas doces e políticas púbicas federais. Chapter 6. In: Gomide, A. A.; Morais Sá e Silva, M.; Leopoldi, M. A. (eds). Desmonte e reconfiguração de políticas públicas (2016-2022). Brasília: IPEA; INCT/PPED, 2023(a), pp. 157-184.

OBSERVATÓRIO DO CLIMA. Nunca mais outra vez. 4 anos de desmonte ambiental sob Jair Bolsonaro, 2023.

OBSERVATÓRIO DO CLIMA. A conta chegou. O terceiro ano de destruição ambiental sob Jair Bolsonaro, 2022.

OBSERVATÓRIO DO CLIMA. Passando a boiada. O segundo ano de desmonte ambiental sob Jair Bolsonaro, 2021.

OBSERVATÓRIO DO CLIMA. Brasil, 1000 dias de destruição. Como Jair Bolsonaro se tornou o negacionista climático mais perigoso do mundo.

OBSERVATÓRIO DO CLIMA; SOS Mata Atlântica; Instituto Socioambiental (ISA); Greenpeace Brasil; Instituto Democracia e Sustentabilidade (IDS). A lei da não licença e do autolicenciamento: a extinção do Licenciamento ambiental, 2021.

OBSERVATÓRIO do Código Florestal; Instituto de Pesquisas sobre a Amazônia / IPAM. Código Florestal. Avaliação 2017/2020. 2021.

OVIEDO, A.; SOARES-FILHO, B. S.; ALMEIDA, A. & GUETTA, M. Nota técnica: análise dos impactos do projeto de lei geral do licenciamento ambiental sobre o desmatamento da Amazônia e as mudanças climáticas, 2021. Retrieved from https://goo.by/OhXaO. Accessed: Feb. 4 2023.

PAGNOCCHESCHI, B. Governabilidade e governança das águas no Brasil. In: Moura, A. M. M. (org). Governança ambiental no Brasil: Instituições, atores e políticas públicas. Ch. 7. Brasília: IPEA, 2016, pp. 175-199

PAHL-WOSTL, C. An evolutionary perspective on water governance: from understanding to transformation. Water Resources Management, n. 31, 2017, pp. 2917-2932

QUINTSLR, S. As duas faces da crise hídrica: escassez e despolitização do acesso à água na Região Metropolitana do Rio de Janeiro. Sustentabilidade em Debate, v. 9, n. 2, 2018, pp. 88-101

Ricupero, R. et al. Comunicado dos ex-ministros de meio ambiente. São Paulo, 2019.

SOUSA, A. C. A. & COSTA, N. R. Política de saneamento básico no Brasil: discussão de uma trajetória. *História, Ciências e Saúde -* Manguinhos. Rio de Janeiro, v. 23, n.3, 2016, pp. 615-634.

SOUSA, A. C. A. & GOMES, J. P. Desafios para o investimento público em saneamento no Brasil. Saúde em Debate, v. 43, n. especial 7, 2019

STEINEBACH, Y. & KNILL, C. Still an entrepreneur? The changing role of the European Commission in EU environmental policy-making. *Journal of European Public Policy*, v. 24, n. 3, 2017, pp. 429-446

