



Water Security: Joint Action by the Public Prosecutor's Office and the Participatory Citizens Forum of São Carlos, SP, Brazil

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Abstract This paper presents an experience in which a participatory methodology focused on water governance was applied in the municipality of São Carlos, SP, involving the Public Prosecutor's Office of the State of São Paulo (MPSP) and the Participatory Citizens' Forum (FCP) of São Carlos. The ethnographic and observational research followed the stages of participatory environmental diagnosis, public consultation, public hearings, and systematisation of community demands in response to a Civil Inquiry that investigated the contamination of the waters of the Monjolinho and Ribeirão do Feijão streams, which serve as sources of water for public supply. The water quality analysis showed critical levels of *Escherichia coli*, exceeding the quality standards established by Brazilian legislation, posing significant health and environmental risk. The integration of technical results with environmental democracy processes enabled local communities to better understand the problem and develop concrete proposals, prioritising infrastructure, inspection, environmental education, and the recovery of APPs. The study highlights the transformative potential of social participation combined with the actions of the Public Prosecutor's Office in resolving water conflicts and points to challenges for maintaining community engagement and replicating the methodology in other contexts.

Abstract (Português) Este artigo apresenta uma experiência de aplicação de metodologia participativa focada na governança da água no município de São Carlos, SP, com a participação do Ministério Público do Estado de São Paulo (MPSP) e do Fórum de Cidadãos Participantes (FCP) de São Carlos. A pesquisa etnográfica e observacional seguiu as etapas de diagnóstico ambiental participativo, consulta pública, audiências públicas e sistematização das demandas da comunidade em resposta a um Inquérito Civil que apurou a contaminação das águas dos córregos Monjolinho e Ribeirão do Feijão, fontes de abastecimento público. A análise da qualidade da água revelou níveis críticos de *Escherichia coli*, acima dos limites estabelecidos pela legislação brasileira, representando um risco significativo para a saúde e o meio ambiente. A integração dos resultados técnicos com os processos de democracia ambiental permitiu às comunidades locais compreenderem melhor o problema e desenvolverem propostas concretas, priorizando infraestrutura, fiscalização, educação ambiental e recuperação de áreas de proteção permanente (APP). O estudo destaca o potencial transformador da participação social combinada com as ações do Ministério Público na resolução de conflitos relacionados à água e aponta desafios para a manutenção do engajamento comunitário e a replicação da metodologia em outros contextos.

Keywords Participatory Governance • Water Security Conflicts • Citizen Engagement • Environmental Monitoring • Community-Based Management

1 INTRODUCTION

Since 2021, Centro de Estudos em Democracia Ambiental da Universidade Federal de São Carlos (CEDA-UFSCar) has focused its efforts on developing a participatory methodology that can achieve high levels of participation,¹ with goals of formulating and implementing public environmental policies, with an emphasis on water governance in the municipality of São Carlos, state of São Paulo. Its central proposal consists of expanding levels of social participation, going beyond merely informative or consultative practices, and promoting the effective inclusion of civil society in decision-making processes. This chapter builds on the conceptual framework introduced in Chapter 1 of this volume, which traces the evolution of justice from social to environmental, climate, and water justice perspectives.

During the methodology development, an agent or institution to facilitate the entire participatory process was identified as a need. This function was assigned by CEDA-UFSCar to the Public Prosecutor's Office of the State of São Paulo (MPSP), represented by the 7th Public Prosecutor of São Carlos, in accordance with the Natural Prosecutor principle. In consultation with the Public Prosecutor's Office, a practical case was identified where the new participatory method could be applied, namely Civil Inquiry MPE/SC No. 14.0714.0000477/2021-4-MA (SEI 29.0001.0029218. 2021-14), whose purpose is to determine the measures necessary to preserve the water collection areas in the Monjolinho and Ribeirão do Feijão streams.

Based on a public invitation, a group of voluntarily registered citizens was formed, called the "Participatory Citizens Forum" (FCP). Subsequently, the Public Prosecutor's Office expanded the mobilisation by extending the invitation to the municipal education network, involving educators, guardians, and students' family members.

¹ Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35, 216–224. DOI: <https://doi.org/10.1080/01944366908977225>; Pateman, C. (1992). *Participação e Teoria Democrática*. Paz e Terra: Rio de Janeiro; Souza, M. L. (2013). *Mudar a cidade: uma introdução crítica ao planejamento e à gestão urbana*. 6. ed. Bertrand Brasil: Rio de Janeiro.

The FCP resulted from the adaptation of the methodological proposal to local conditions, aiming to enable the implementation of participatory activities. Since then, the Forum has undergone a process of consolidation and transformation, evolving from a group of people interested in citizen participation to an autonomous socio-environmental movement, with the capacity for independent organisation and formulation of its own agendas, without losing connection with the activities provided for in the methodology under development.²

Justice, in this context, is understood as both an institutional and social process, in which legal enforcement mechanisms and community participation act in a complementary and interdependent manner. From an institutional perspective, justice manifests through the Public Prosecutor's Office's role in ensuring accountability, legality, and protection of collective rights. From a social perspective, it emerges through citizen engagement, deliberation, and co-production of solutions within the Participatory Citizens' Forum (FCP). This dual articulation embodies the principles of *environmental justice*, the equitable distribution of environmental benefits and burdens, and expands them toward *water justice*, where access to clean water, information, and participation become central elements of democratic governance.

In this sense, the objective of this article is to investigate a new way of resolving water conflicts, with the involvement of the Public Prosecutor's Office and the direct participation of civil society (São Carlos Participatory Citizens' Forum), within the principles of Environmental Democracy.

2 METHODOLOGY

The field research had an ethnographic approach, with an emphasis on observing public hearings, conceived as events narrated in their natural context.³ A non-participatory observation stance was adopted, with systematic recording of activities through field notes and recordings. Subsequently, the data collected were analysed in light of the hermeneutic-dialectical

² Oliveira, C.M., Moraes, T.V., Britto, M., Albuquerque, C., & Ribeiro, E.P.Q. (2024). Participação democrática ambiental: contribuição do Fórum de Cidadãos Participantes para mudança de modelo de audiências públicas. *Revista do Ministério Público do RS*, (96), 339–360.

³ Lecompte, M. D., Schensul, J. J. (1999). *Designing and conducting ethnographic research: An introduction*. Lanhan & Plymouth: AltaMira Press.

framework,⁴ seeking to understand the meanings attributed by the subjects and the dynamics of the social interactions observed.

3 THE CIVIL INQUIRY

Civil Inquiry (IC) No. 14.0714.0000477/2021-4-MA was initiated on the 11th of February 2021 by the Public Prosecutor's Office of the State of São Paulo (MPSP), with the purpose of determining measures necessary to preserve the areas surrounding the water supply sources of the São Carlos Autonomous Water and Sewage Service (SAAE-SC), located in the Monjolinho Stream and Ribeirão do Feijão.

The municipality's public water supply depends on two main sources: surface water collection (approximately 50%) from these two watercourses and groundwater collection (also about 50%) from 28 wells that exploit the Guarani Aquifer, which covers about 72% of the municipality's area.⁵ Surface water supplies about one-third of the local population, with estimated flows of 340 L/s in Ribeirão do Feijão and 160 L/s in Córrego do Monjolinho, the latter through the Espraiado Water Collection Station.

3.1 *Initial Analysis and Irregularities*

After the IC was established, parameters indicative of water contamination was detected, suggesting the occurrence of sewage spills into watercourses and their tributaries. Investigations revealed the need to replace sections of the sewage interceptor on the left bank of the Monjolinho Stream, upstream from the Espraiado station, as well as the main collector on the left bank of the Ponte de Tábua Stream. Illegal sewage connections were also identified in neighbourhoods close to critical areas between the São Rafael Stream and the Ponte de Tábua Stream, in addition to the degradation of Permanent Preservation Areas (APPs) in these regions.

The administrative entity linked to the city hall, responsible for basic sanitation services in the municipality of São Carlos, reported that it had

⁴ Minayo, M. C. S. (2002). *Hermenêutica-Dialética como Caminho do Pensamento Social*. In: MINAYO, M. C. S. (2002). *Caminhos do Pensamento: epistemologia e método*. 1 ed. Editora Fiocruz: Rio de Janeiro.

⁵ Perroni, J. C. A.; Wendland, E. C. (2008). Avaliação das condições de ocorrência e exploração do sistema Aquífero Guarani em São Carlos - SP. *Águas Subterrâneas*, 22(1). DOI: <https://doi.org/10.14295/ras.v22i1.8571>; Cetesb (Companhia Ambiental do Estado de São Paulo). (2025). *Águas subterrâneas: Aquífero Guarani*. Disponível em: https://www.cetesb.sp.gov.br/cetesb/qualidade_ambiental/agua/aguas_subterraneas/programa_de_monitoramento/consulta_por_aquiferos_monitorados/guarani. Acesso em 11 ago 2025.

carried out unblocking and cleaning actions in the sewage networks and committed to additional inspections in the rainwater galleries to identify irregularities. However, regarding the contamination found at the confluence of the Ponte de Tábua and Monjolinho streams, it was still necessary to replace the old collector in the section between the São Rafael and Ponte de Tábua streams.

3.2 *Preparation of the Participatory Environmental Diagnosis*

Based on a formal request from the MPSP for the formulation of five technical requirements,⁶ the Department of Environmental Sciences at UFSCar (DCam-UFSCar), with support from CEDA-UFSCar, prepared a document entitled *Participatory Environmental Diagnosis: water collection from Espiraiado (São Carlos/SP)*. Its preparation involved a specialised technical team, with the participation of citizens who are members of the FCP, which is the reason why it was called a participatory diagnosis. The report sought both to answer the ministerial questions and to point out the need for a new diagnosis. Based on data provided by SAAE-SC, an updated map of water sampling points was generated, as can be seen in Fig. 1.

To investigate the possibility of contamination by domestic effluents, a temporal analysis of the *Escherichia coli* parameter (a thermotolerant coliform found in the intestinal tract of warm-blooded animals, including humans) was performed, revealing critical levels of contamination.

Point 7 particularly stood out, with values exceeding 200,000 NMP/100mL in several measurements taken between 2023 and 2024. This value greatly exceeds the maximum limit of 1,000 NMP/100 mL established by CONAMA Resolution No. 357/2005 for Class 2 water bodies intended for public supply with conventional treatment and primary contact recreation.⁷

⁶ Questions from MPSP-SC: “1- Through analysis of the test reports prepared by SAAE, is it possible to delimit the areas where water contamination of the São Rafael and Ponte de Tábua streams is likely to occur? 2- Through on-site inspection, is it possible to detect sources of water contamination of the São Rafael and Ponte de Tábua streams, such as illegal sewage connections, cesspools, or leaks in the network? 3- If the answer to the previous question is yes, locate the sources of contamination found with geographical references and mark them on a map; 4- What is the state of the permanent preservation areas on the banks of the São Rafael and Ponte de Tábua streams, including the extra areas established in the APREM Municipal Law? 5- If the answer to the previous question is yes, locate with geographical references and mark on a map the APPs with vegetation deficits.”

⁷ Brasil. (2005). Conselho Nacional do Meio Ambiente (CONAMA). Resolução nº 357, de 17 de março de 2005. Dispõe sobre a classificação dos corpos de água e diretrizes

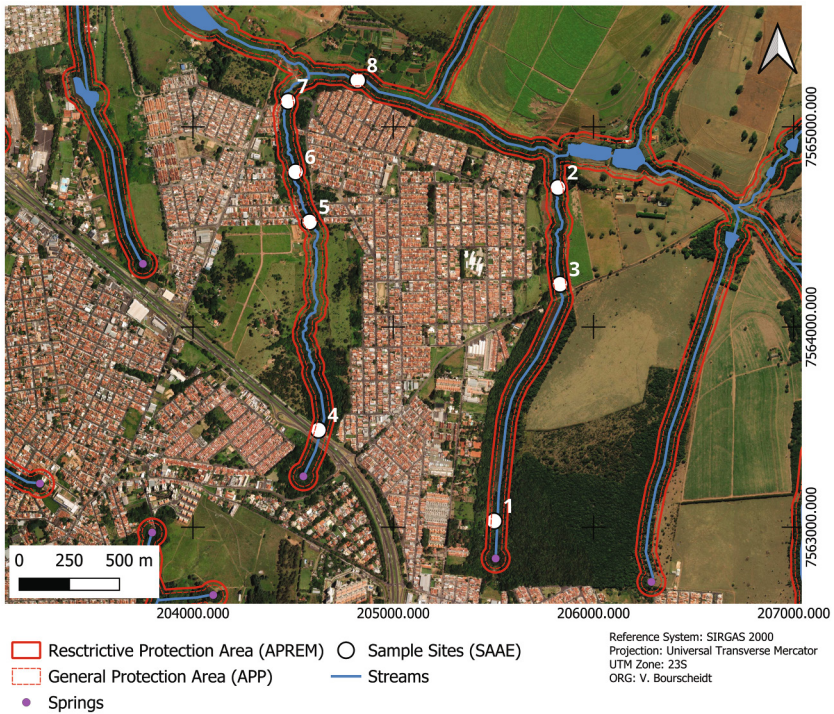


Fig. 1 Updated map showing the location of the collection points. Source: Participatory Environmental Diagnosis attached to IC MPE/SC No. 14.0714.0000477/2021-4-MA.

These results indicate a significant health risk for the population depending on surface water collection from the Monjolinho Stream and Ribeirão do Feijão, since the presence of raw sewage compromises water treatment for supply and favours the occurrence of waterborne diseases. From an environmental point of view, Oliveira et al.⁸ stated that compromised

ambientais para o seu enquadramento, bem como estabelece as condições e padrões de lançamento de efluentes. DOU: Brasília, DF. Available at: https://conama.mma.gov.br/?option=com_sisconama&task=arquivo.download&id=450.

⁸ From an environmental point of view, Oliveira et al. state that compromised quality leads to degradation of aquatic biota and non-compliance with the legal framework for water bodies, affecting the ecological balance of the surrounding Permanent Preservation Areas

quality leads to degradation of aquatic biota and non-compliance with the legal framework for water bodies, affecting the ecological balance of the surrounding Permanent Preservation Areas (APPs). Although it was not possible to visually identify clandestine connections during the inspections, the document recommended corrective measures, such as the recovery of APPs, maintenance and inspection of the sewage network, environmental education programs and incentives for properties to connect to the collection network.

The diagnosis also identified factors contributing to environmental degradation, such as irregular waste disposal, the presence of agricultural areas in APPs, poor quality riparian vegetation, and lack of vegetation cover in critical areas.

After receiving the participatory diagnosis, the MPSP implemented participatory instruments to resolve the water conflict, using public consultation and public hearings, one for listening and the other for feedback; in addition, the FCP contributed by holding a public meeting and preparing a Summary Document.

3.3 First Public Hearing: Social Consultation on Water Quality

Following up on the application of the participatory methodology, the MPSP, in partnership with CEDA-UFSCar and the São Carlos Regional Education Board, organised the first public hearing, held in person on August 21, 2024, at the Prof. Aduar Kemell Dibo State School, in the São Carlos VIII neighbourhood. The purpose of the hearing was to promote dialogue between the government and civil society on environmental problems in the vicinity of the Espraiado station and to hear suggestions from the population. Members of the FCP were actively present.

During the hearing, 87 people were registered, including residents, representatives of SAAE-SC, members of the Legislative Assembly, UFSCar professors, students, and Young Environmental Ambassadors. The opening panel included representatives from the organising institutions, who presented a summary of the Civil Inquiry and data on water pollution (see Figs. 2 and 3).

(APPs); Oliveira, C. M.; Amarante Jr., O. P.; Silva, A. C.; Sá, I. M. B. (2016). Responsabilidades jurídicas ambientais e estações de tratamento de esgotos: estudo de caso do município de Itirapina (SP). RBCIAMB, 40, 80–94. DOI: 10.5327/Z2176-9478201610414.



Figs. 2–3 Public hearing participants and the board of authorities. Photo credit: Photo by Moraes, T. V. (2024). Moraes, T. V. (2025). *Direito à água: contribuições para o acesso mais justo, equitativo e democrático à água*. Tese (Doutorado em Ciências Ambientais)—Universidade Federal de São Carlos: São Carlos. Available at: <https://repositorio.ufscar.br/handle/20.500.14289/21979>.

Despite the initial proposal to receive suggestions verbally, most participants asked questions and made general comments, and the proposed solutions were concentrated in the responses to the preliminary questionnaire (See Figs. 4 to 9).

3.4 *Questionnaire, Results, and Preparation of the FCP Summary Document*

Prior to the first hearing, the MPSP made a questionnaire available to the public (on the August 7, 2024) with open questions about the causes of water pollution and proposed solutions, accessible until the August 26,



Figs. 4–9 Participants asking questions and making comments. Photo credit: Photo by Moraes, T. V. (2024). Moraes, T. V. (2025). *Direito à água: contribuições para o acesso mais justo, equitativo e democrático à água. Tese (Doutorado em Ciências Ambientais)*—Universidade Federal de São Carlos: São Carlos. Available at: <https://repositorio.ufscar.br/handle/20.500.14289/21979>.

2024. The questionnaire received 472 responses, most of which came from residents of neighbourhoods located in the sub-basins of the Monjolinho, Ponte de Tábua and São Rafael streams (see Fig. 10), although residents from other neighbourhoods and visitors to the area also participated. The public consultation was added to the participatory diagnosis to identify environmental problems and solutions, both technical and those desired by the local community.

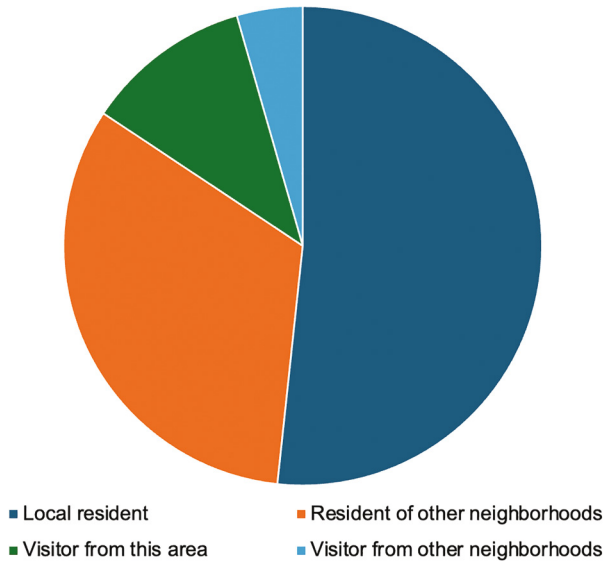


Fig. 10 Respondents to the MPSP questionnaire. Source: MPSP data. Graph image obtained from Google Forms data.

Regarding the causes of water pollution, respondents could select more than one option. Thus, 357 respondents indicated the irregular disposal of solid waste (rubbish) as the main cause, followed by problems in the sewage system (such as lack of maintenance and leaks), which received 286 responses, as shown in Fig. 11.

Regarding the solution, an open-ended question was formulated in which respondents could write their suggestions: “In your opinion, what should be done to reduce pollution and improve water quality in the Monjolinho, Ponte de Tábuas, and São Rafael streams?” The following main causes of pollution were identified: irregular disposal of solid waste (357 mentions) and problems in the sewage system (286 mentions). To systematise the suggestions received, CEDA-UFSCar proposed the preparation of a Summary Document, endorsed by the Participatory Citizens’ Forum (FCP). The suggestions were grouped into six themes: (i) Infrastructure—improvements to the sewage and drainage network; (ii) Enforcement—need for greater control and penalties; (iii) Environmental Education—awareness and consciousness-raising programs; (iv)

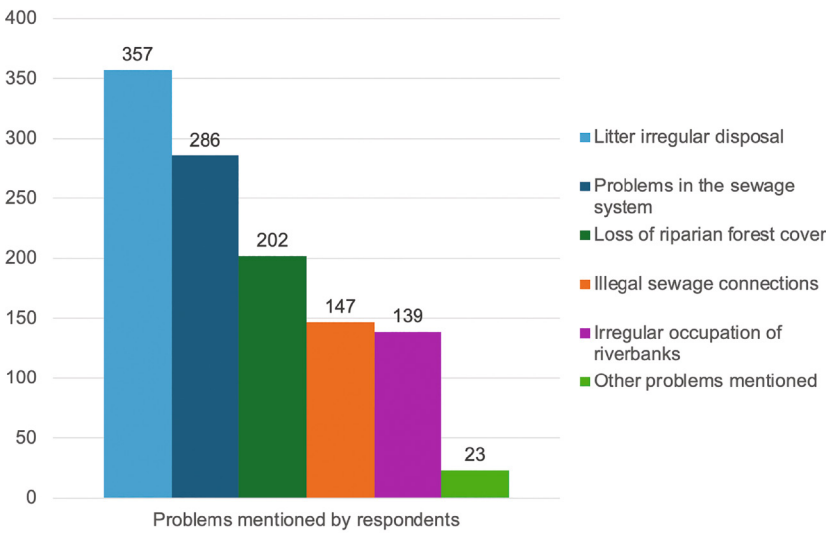


Fig. 11 Main causes of water pollution. Source: Data from MPSP. Graph image obtained from data extracted from Google Forms.

Waste—collection, cleaning, and proper disposal; (v) APP/Reforestation—restoration and protection of stream banks; (vi) Institutional—demands on the Municipal Executive Branch. Each theme obtained the number of proposed solutions/suggestions in the questionnaire presented in Table 1.

Once the list of suggested solutions was ready, a meeting was held (on September 25, 2024, at the MPSP building in São Carlos) by the FCP

Table 1 Number of proposed solutions by theme. Source: FCP Summary Document

Theme	Total of solutions/suggestions
Environmental Education	196
Infrastructure	113
Enforcement	80
Waste	69
Institutional	59
APP/Reforestation	52



Fig. 12 FCP post on social media showing the results of the vote on priority issues. Source: FCP Instagram profile.

to review and select the actions considered to be priorities. After systematisation, FCP members voted on the priorities for action (see Fig. 12). The order of priority was: (1) Infrastructure (11 votes), (2) Enforcement (9 votes), (3) Environmental Education, Waste and APP/Reforestation (7 votes each), and (4) Institutional (2 votes).

The Summary Document, resulting from the FCP meeting, was officially forwarded to the MPSP, which used it as a basis for dialogue with municipal authorities. In response, SAAE-SC initially committed to developing a project to replace the sewage collector between the São Rafael and Ponte de Tábua streams, in line with the chosen priority.

3.5 *Second Public Hearing: Presentation of Solutions*

The second public hearing was held on December 11, 2024, at the same location as the first—a public school located on the outskirts of the municipality. This time, the focus was on publicly presenting the actions planned to mitigate water contamination, in response to the demands collected at the previous hearing and systematised in the Summary Document. The event was convened and conducted by the MPSP, with the support of the Board of Education and CEDA-UFSCar (see Fig. 13).

The MPSP opened the hearing presenting a summary of the case and invited representatives from SAAE-SC and the municipal executive branch to speak. Although SAAE-SC had committed to developing a project to replace the sewage collector in the section between the São Rafael Stream



Fig. 13 Public hearing for feedback and responses. Photo credit: Photo by Moraes, T. V. (2024). Moraes, T. V. (2025). *Direito à água: contribuições para o acesso mais justo, equitativo e democrático à água*. Tese (Doutorado em Ciências Ambientais)—Universidade Federal de São Carlos: São Carlos. Available at: <https://repositorio.ufscar.br/handle/20.500.14289/21979>.

and the Ponte de Tábua Stream, it was reported that this replacement would no longer be carried out. In view of the end of the municipal election period and the announcement of a change in the presidency of SAAE-SC with the new administration, the MPSP emphasised that it would wait for the new positions to be filled in order to meet with the new presidency and reassess the process of replacement of the collector.

Also, during the hearing, the Municipal Executive Branch presented a project for the ecological restoration of the Permanent Preservation Areas (APPs) of the Monjolinho and Ponte de Tábua streams (see Fig. 14).

With the change in the presidency of SAAE-SC and following a request from the MPSP, local authorities reviewed their decision and confirmed the replacement of the interceptor and the main sewage collector, clarifying that the preparation of the executive and budgetary projects and environmental licensing are scheduled for 2025, while the request for financial resources should occur in 2026. As such, the MPSP will continue to monitor the case until its final resolution.



Fig. 14 Presentation of responses by the municipal government. Photo credit: Photo by Moraes, T. V. (2024). Moraes, T. V. (2025). *Direito à água: contribuições para o acesso mais justo, equitativo e democrático à água*. Tese (Doutorado em Ciências Ambientais)—Universidade Federal de São Carlos: São Carlos. Available at: <https://repositorio.ufscar.br/handle/20.500.14289/21979>.

4 DISCUSSIONS: POTENTIALITIES AND CHALLENGES IN THE CASE OF SÃO CARLOS/SP

The participatory methodology implemented in São Carlos/SP represents a local innovation by promoting community involvement in decision-making processes related to water management. The Public Prosecutor's Office of the State of São Paulo, through the São Carlos District Attorney's Office, initially acting as a facilitating institution, took on a leading role throughout the process. The Prosecutor's Office appropriated the methodology, significantly incorporating social/popular participation in its institutional procedures through participatory diagnosis, public consultation, public hearings, and FCP meetings.

Participation is strengthened by social mobilisation. Citizens and educators acted as co-producers of justice, transforming technical findings into actionable public policies. As Toro and Werneck state, "to mobilise is to summon the will to act in pursuit of a common purpose, under a shared interpretation and meaning," with the results being "decided and desired

by all.”⁹ It should also be noted that the definition of achievable objectives and goals is fundamental to stimulating this mobilisation, according to the National Water and Basic Sanitation Agency.¹⁰

In São Carlos, São Paulo, the use of this methodology sought to mobilise the population to reflect on environmental problems and actively participate in decisions, resulting in the creation of the Participatory Citizens’ Forum (FCP). However, there has been a significant reduction in engagement: in December 2022, there were approximately 83 people registered with the FCP; in 2024, around 10 people participated more actively and regularly.¹¹ This decline in participation points to one of the main challenges: demotivation and the weakening of mobilisation over time.

Several factors can discourage citizen participation. The literature highlights, in particular, frustration with the lack of concrete results. Scepticism about the possibility of effective change, the persistence of ineffective policies, and the feeling that the needs of the population are not being considered are elements often associated with disinterest.¹²

Notably, participation is also a process of collective learning: one learns to dialogue, listen, act as a group, and seek joint solutions.¹³ The concrete transformation of the local reality is a motivating factor that generates confidence in overcoming problems.¹⁴

⁹Toro, J. B.; Werneck, N. M. D. (1997). *Mobilização social: um modo de construir a democracia e a participação*. Ministério da Justiça: Brasília.

¹⁰National Water and Basic Sanitation Agency (2016). *Introdução à Gestão Participativa*. ANA: Brasília.

¹¹Gomes, H. M. (2024). *Democracia, meio ambiente e a (des)motivação para participar: uma etnografia da (des)motivação para participação política ambiental em São Carlos/SP*. Trabalho de Conclusão de Curso (Bacharelado em Gestão e Análise Ambiental) - Universidade Federal de São Carlos: São Carlos.

¹²Bento, S.; Brás, O. R. (2021). Technologies of participation in water plans in Portugal: what kind of science-society relationship are we talking about? *In*: DELICADO, A.; CRETIAZ VON ROTEN, F.; PRPIĆ, K. (eds.). *Communicating Science and Technology in Society*. Springer Cham, 137–159, ISBN: 978-3-030-52885-0. DOI: https://doi.org/10.1007/978-3-030-52885-0_8; Silva, J. A.; Borges, I. M. S.; Maciel, J. K. V. S.; Silva, V. F. (2022). Análise dos conflitos socioambientais em reservatório hídrico no município de Campina Grande/PB. *Nature and Conservation*, 15(1), 97–107. DOI: <https://sustenere.inf.br/index.php/nature/article/view/6990>.

¹³Toro, J. B.; Werneck, N. M. D. (1997). *Mobilização social: um modo de construir a democracia e a participação*. Ministério da Justiça: Brasília.

¹⁴In accordance Souza, L. L.; Sulzbacher, A. W. (2020). A situação das trabalhadoras rurais no acesso à água e energia no Médio Vale do Jequitinhonha (Minas Gerais). *Revista OKARA: Geografia em debate*, 14(2), 333–354. DOI: <https://doi.org/10.22478/ufpb.1982-3878.2020v14n2.54754>.

The quality of citizen participation also depends on strengthening communities and their access to information.¹⁵ In this sense, the methodology applied in São Carlos/SP included training participants, offering a course on democratic rights, and promoting transparency by making data from the Civil Inquiry available through the MPSP.

During the public hearings, the MPSP presented, in an accessible and detailed manner, the main problems related to water quality in the municipality, in addition to reporting the measures already implemented. This practice of prior qualification of the debate contributed to reducing knowledge disparities and power among participants, an aspect considered essential for effective governance.¹⁶

Another relevant challenge is to avoid an idealised view of partnerships between different social actors—the state, the market and civil society—as if they all operate under a logic of reciprocity, voluntarism, and solidarity.¹⁷ In the case of São Carlos/SP, the actions of the MPSP contribute to reducing these imbalances, since the actions are linked to a Civil Inquiry. This makes certain commitments mandatory, such as the actions of the SAAE-SC, which can be formalised through Conduct Adjustment Agreements (TAC) or taken to court in case of non-compliance.

¹⁵ as stated by Matos, F.; Silva, F. R.; Ckagnazarof, I. B.; Carrieri, A. P. (2022). As mulheres das águas: algumas reflexões sobre a participação feminina nos comitês de bacias hidrográficas no Brasil. *DELOS: Desarrollo Local Sostenible*, 13(37), 86–100. Available at: <https://ojs.revistadelos.com/ojs/index.php/delos/article/view/680>; and Ribeiro, W. C. (2009). Impasses da governança da água no Brasil. In: RIBEIRO, W. C. (org.) (2009). *Governança da água no Brasil: uma visão interdisciplinar*. Annablume: São Paulo, pp. 111–133.

¹⁶ in accordance with Empinotti, V. L.; Jacobi, P. R.; Fracalanza, A. P. (2016). Transparência e a governança das águas. *Estudos Avançados*, 30(88), 63–75. DOI: <https://doi.org/10.1590/S0103-40142016.30880006>; Lima, A. J. R.; Abrucio, F. L.; Silva, F. C. B. (2014). *Governança dos recursos hídricos: proposta de indicador para acompanhar sua implementação*. WWF - Brasil: FGV: São Paulo. Available at: <https://www.wwf.org.br/?42942/Governana-dos-Recursos-Hdricos-Proposta-de-indicadores-para-acompanhar-sua-implementao>; and Morais, E. A.; Carvalho, J. S. F.; Silva, J. I. A. O. (2021). Governança das águas na Bacia do Rio Paraíba - eixo leste do projeto de integração do rio São Francisco: conflitos de apropriação e uso das águas. In: SILVA, J. I. A. O. (org.) (2021). *Gestão e governança da água sob múltiplas visões e casos*. EDUEPB: Campina Grande, 131–147. Available at: https://www.feis.unesp.br/Home/Pos-Graduacao/profagua/gestao-e-governanca-da-agua_a_e-book.pdf.

¹⁷ Castro, J. E. (2007). Water governance in the twentieth-first Century. *Ambiente & Sociedade*, 10(2), 97–118. DOI: <https://doi.org/10.1590/S1414-753X2007000200007>. Available at: DOI: <https://doi.org/10.1590/S1414-753X2007000200007> Website: <https://www.scielo.br/j/asoc/a/gwKvL3Y8vGm685z797KdR9C/?lang=en>, last Access December 21, 2025.

Additionally, attention is necessary to the risks of empowerment disconnected from a transparent and supervisory political culture, which can favour the emergence of local elites and practices of co-optation and merely symbolic participation.¹⁸ Therefore, it is essential to understand that participation, being a learning process, also implies the transformation of political culture over time.

Participatory methodologies, such as the one developed in São Carlos/SP, favour this process of transformation. Public participation,¹⁹ is an ongoing practice and should be developed and improved based on experience. Therefore, guidelines and recommendations need to be based on experience (an inductive approach), then tested (a hypothetical-deductive approach) and, finally, presented with the necessary limitations and caveats to ensure consistency in the possible transfer of knowledge. In other words, guidelines for public participation, designed to sublimate a list of learning points from scattered case studies, need to be based on practice.²⁰

In the case of the Civil Inquiry analysed, the water problem mainly refers to the contamination of water by sewage in certain watercourses. It is worth noting that “to meet the basic needs of users, water must be accessible and meet quality standards.”²¹ When the methodology was applied to the theme of solid waste, participatory activities in São Carlos/SP resulted in greater verbal contribution from participants compared to hearings on water.²² This may indicate that the topic of waste is more tangible and closer to the daily lives of communities, while water issues still

¹⁸According to Soares, S. I. O. (2010). *Mediação de conflitos ambientais: um novo caminho para a governança da Água no Brasil?* Juruá: Curitiba.

¹⁹Rault, A. K.; P. J. Jeffrey; P. J. (2008). Deconstructing public participation in the Water Framework Directive: implementation and compliance with the letter or with the spirit of the law? *Water and Environment Journal*, 22(4), 241–249. DOI: <https://doi.org/10.1111/j.1747-6593.2008.00125.x>, p. 24.

²⁰as highlighted by Rault, A. K.; P. J. Jeffrey; P. J. (2008). Deconstructing public participation in the Water Framework Directive: implementation and compliance with the letter or with the spirit of the law? *Water and Environment Journal*, 22(4), 241–249. DOI: <https://doi.org/10.1111/j.1747-6593.2008.00125.x>, p. 245

²¹in agreement with Ribeiro, W. C.; Santos, C. L. S.; Silva, L. P. B. (2019). Conflito pela água, entre a escassez e a abundância: Marcos teóricos. *AMBIENTES: Revista de Geografia e Ecologia Política*, 1(2), 11–37, 2019. DOI: <https://doi.org/10.48075/amb.v1i2.23619>.

²²According to Oliveira, C.M., Moraes, T.V., Britto, M., Albuquerque, C., & Ribeiro, E.P.Q. (2024). Participação democrática ambiental: contribuição do Fórum de Cidadãos Participantes para mudança de modelo de audiências públicas. *Revista do Ministério Público do RS*, (96), 339–360.

lack information and public awareness. With the continuation of participatory practices, such differences can be better understood.

Finally, the importance of continuous evaluation of the participatory process should be highlighted. This evaluation can be incorporated into the method in São Carlos/SP through the maintenance and improvement of the participatory activities already proposed.

As for the possibility of replicating the methodology, Petrilli's study points out that its application in other contexts is feasible, provided that it is adapted to local specificities.²³

5 FINAL CONSIDERATIONS

From the perspective of water governance, public participation is directly linked to environmental democracy in different stages of the process, both in the preparation of an environmental diagnosis whose results reinforce the need for corrective actions, such as: replacement of sewage collectors and interceptors, inspection of illegal connections, recovery of APPs and maintenance of systematic water quality monitoring; as well as in the presentation of proposals for solutions to different problems.

This study observed the three pillars of environmental democracy: access to information, access to participation, and access to justice, since the Participatory Citizens' Forum (FCP) enabled the community to understand the risks and develop demands based on current environmental standards, strengthening dialogue with the Public Prosecutor's Office and the Municipal Executive Branch.

About the performance and effectiveness of both the Public Prosecutor's Office and the Participatory Citizens' Forum in resolving conflicts, the use of consultative questionnaires proved to be an auxiliary methodology in conflict resolution by enabling the social participation of a larger group of people, as well as the construction and presentation of solutions. The São Carlos experience thus contributes to the collective discussion proposed by this book, exemplifying how environmental democracy and participatory governance can be operationalised in water justice contexts.

Regarding the lack of adherence and motivation of forum participants, it is essential to promote the activities carried out by the group, as well as

²³ Petrilli, L. (2024). Democracia ambiental em Parauapebas-PA: mecanismos participativos para promoção de direitos de acesso em matéria ambiental. Tese (Doutorado em Ciências Ambientais) – Programa de Pós-Graduação em Ciências Ambientais, Universidade Federal de São Carlos: São Carlos.

to disseminate information about environmental quality, with the aim of attracting new members and developing social interest in participating in environmental issues in the municipality. In addition, the activities developed by CEDA and the Public Prosecutor's Office to integrate students, family members and education professionals should also be emphasised as methods to validate social participation and interest, as well as to encourage growing participation by new generations.

This chapter contributes to the collective reflection advanced throughout this book, illustrating how environmental democracy can be operationalised through participatory water governance. In dialogue with Chapter 1, which traces the historical evolution of justice from social to environmental and water dimensions, the São Carlos experience demonstrates that justice emerges not only from institutional enforcement but also from shared responsibility and co-produced knowledge. By integrating technical evidence, civic participation, and institutional accountability, the case highlights how local actions can shape broader transformations in the pursuit of environmental and water justice.

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