

INFORMATION ABOUT THE WATER CRISIS IN SÃO PAULO OFFERED BY THE WATERSHED COMMITTEES

JANE M. MAZZARINO¹, LUCIANA TURATTI²
SABRINA T. PETTER³, DENISE B. SCHEIBE⁴
RODRIGO M. MARQUES⁵

Introduction⁶

Brazilian waters are not located where the people are; and supply issues arise from this situation. According to the National Water Agency (ANA), the total water available in Brazil is 91,300 m³ and mean outflow is 180,000 m³/s. However, the distribution of surface water resources throughout national territory is disproportionate to population distribution: “*enquanto nas bacias junto ao Oceano Atlântico, que concentram 45,5% da população total, estão disponíveis apenas 2,7% dos recursos hídricos do país, na região Norte, onde vivem apenas cerca de 5% da população brasileira, estes recursos são abundantes (aproximadamente 81%) [...]*” (ANA, 2014, p. 30).⁷

In addition, a gradual decrease in relative rainfall rates has been observed since 2002 in some regions of the country - the monthly historic mean has been dropping considering data monitored since 1930. This hampers the provision of water for public supply, especially in the Brazilian semiarid and in well-populated metropolitan areas with high water demand, such as São Paulo and Rio de Janeiro (ANA, 2014b). However, ANA emphasizes that the causes for the water crisis cannot be limited to rainfall rates, “*pois outros fatores relacionados à gestão da demanda e à garantia da oferta são importantes para agravar ou atenuar sua ocorrência [...]*” (ANA, 2014, p. 5).⁸

1. Doutora em Ciências da Comunicação, professora e pesquisadora da Universidade do Vale do Taquari (Univates), e mail janemazzarino@univates.br Orcid <https://orcid.org/0000-0002-6051-5116>

2. Doutora em Direito, professora e pesquisadora da Universidade do Vale do Taquari (Univates), e mail lucianat@univates.br Orcid <https://orcid.org/0000-0002-6684-1422>

3. Graduada em Relações Internacionais, Universidade do Vale do Taquari (Univates) e mail sabrina.petter@universo.univates.br

4. Graduanda em Psicologia, Universidade do Vale do Taquari (Univates), e mail denise.scheibe@univates.br

5. Graduado em História, mestrando em Ambiente e Desenvolvimento, Universidade do Vale do Taquari (Univates) e mail rodrigomarques93@gmail.com

6. This study is supported by the National Council for the Scientific and Technological Development (CNPq).

7. “while only 2.7% of water resources in the country are available in watersheds near the Atlantic Ocean, which concentrate 45.5% of the total population, in the Northern region, where only approximately 5% of the Brazilian population lives, these resources are abundant (approximately 81%)” (free translation)

8. “as other factors related to managing demand and ensuring supply are important in escalating or mitigating its occurrence” (free translation)

According to the document “A água como um bem e o saneamento básico na RMSP” (Water as an asset and basic sanitation in RMSP), São Paulo houses 1.6% of the total water portion available in Brazil, whereas approximately 22% of the population resides in this state. The United Nations (UN) classifies water availability lower than 1,500 m³ a year as critical. In Brazil, mean water availability reaches 35,000 m³ (per inhabitant-year), but in São Paulo these indices are 2,209 m³ per inhabitant-year. In the Metropolitan Region of São Paulo (RMSP), as in other Brazilian metropolitan areas, the situation falls into the “critical” category. RMSP imports over half of the water it consumes from water sources in the region (Billings, Guarapiranga, and Alto Tietê Systems). Due to scarcity (both qualitative and quantitative), water has increasingly been thought of as having “economic value” and not as a free asset (CONSULTORIA TÉCNICA, 2011).

According to the Agronomic Institute of Campinas (IAC), January 2015 has been the driest month in 125 years of monitoring of the area of the Cantareira System (major water “supplier” to the RMSP). This scenario, combined with the removal of water to supply the population and the above-average hot weather (observed during summer), has led to a continuous drop in the reservoirs that comprise the System.

Aside from low water availability, its low quality, and population growth, there has been an increase in consumption *per capita* over the last years (MARTIRANI; PERES, 2016), and these are the primary reasons that “caused” the water scarcity experienced in the largest metropolis of Latin America. The water crisis in the state of São Paulo between 2013 and 2015 was considered one of the greatest in its history, also because it affected several sectors, which led to a wide media coverage, both mainstream (mass media) and alternative, since this topic reverberated through social media.⁹

The bulk of news on the water situation in São Paulo goes from the half of 2013 onwards, when the use of the technical reserve (void volume) starts to be mentioned. There was a gradual increase in the volume of news referring to the crisis throughout 2014. The different media addressed the fact that some public administrators denied that there was a crisis; disputes resulting from the city mayor’s stand against the state governor’s; opinions on the use of reservoirs, replacement, and transpositions; weather monitoring; comparisons and relationships between SP and RJ; accountability of Sabesp and ANA, among other topics.

The state government *blamed* the weather (lack of rains) for the water crisis, while the Federal Government held Sabesp accountable, which in turn (and together with the state government) transferred the blame mostly to the federal Government and ANA. In other words, there were fingers pointed and faultfinding between governmental spheres frequently pervaded by party disputes. Rationing, the low quality of the water, and the high price paid for its supply created controversy in social media and in mainstream media. Therefore, the topic gradually took over discussions not only by people from São Paulo, but also from the Brazilian society as a whole, mostly in the second half of 2014.

9. The report by the Basic Sanitation Company of the State of São Paulo (Sabesp) indicates that: “In January 2015, the mean affluent inflow into the Cantareira System was 40% lower than in January 2014, and only 13% of the mean flow for the month” (SABESP, 2015, p. 13 – free translation).

In face of this scenario, the issue is: how did groups that are expected to provide information concerning such a situation, as is the case of Watershed Committees, tackle the water crisis in São Paulo? This defining issue has driven the quanti-qualitative research of news published in the websites of Watershed Committees that manage the Cantareira System (Committees of Alto Tietê and Piracicaba, Capivari, and Jundiá -PCJ) and of the Brazilian Network of Watershed Organisms (Rebob - Rede Brasil de Organismos de Bacias Hidrográficas).

Watershed Committees in the Water Resource Managing System

Among the agencies that comprise the National Water Resources Management System, the Watershed Committees are the ones responsible for complying with the provisions pursuant to clause VI of art. 1 of the National Policy of Water Resources Act (PNRH), Law n° 9.433 of 1994, which establishes the foundations of the Policy, and that sets forth that the management of water resources must be decentralized and have the participation of Public Authority, users, and communities (BRASIL, 1997).

According to Jacobi (2012, p. 74), the Committees minimize risks of private companies taking over the public apparatus, through self-interests, “*e ampliam as possibilidades de se articularem interesses territoriais e necessidades técnicas, num processo aberto a negociações,*” which must be pervaded by changes in the organizational capacity of civil society segments.¹⁰

Committees are guided by resolutions of the National and State Water Resources Councils, as well as by internal regulations approved by the members. The competencies of National Watershed Committees, among others set forth by article 38 of PNRH, are to foster debate on issues related to water resources and articulate the action of intervening entities, as well as to arbitrate, in first administrative authority, conflicts related to water resources.

The Committees have existed in Brazil since 1988. Their diversified and democratic composition enables all sectors of society that are stakeholders of river basin water to have representation and decision-making power over its management (ANA, 2010, digital text). This is the case of representatives of public authorities (city, state, and federal), of the civil society, and water users (irrigation sectors, human supply, electric energy, leisure, tourism, and fishery). Any citizen can participate in the meetings, and has the right to speak yet not to vote, which is restricted to members. Thus, Committees are understood to represent the basis of participative and integrated management of waters, and legally have a deliberative nature.

It is in this stance that enforcing the right to information rises as essential, since an effective participation is strongly related to access to information, which allows for having a critical view on problems related to water.

The right to information had already been provided for in the Declaration of Human Rights of 1948. On the other hand, the right to environmental information is

10. “and broaden the possibilities of articulating territorial interests and technical needs, in a process open to negotiations” (free translation)

ensured by the Treaty on Environmental Education for Sustainable Societies and Global Responsibility, in the Earth Charter and Agenda 21, documents derived from debates held in the United Nations Conference on the Environment and Development or in Rio 1992.

In the Brazilian legislation, the right to have access to environmental information is ensured by Law nº 6938/1981, which establishes the National Environmental Policy; by the Federal Constitution (BRASIL, 1988); by the National Policy of Water Resources, Law nº 9.433/1997 (BRASIL, 1997); by the National Policy of Environmental Education, Law nº 9.795/1999; by Law nº 10.650/2003, which provides for the public access to existing data and information in agencies and entities that are part of the National Environmental System – Sisnama (BRASIL, 2003); and by Law nº 12.527, which governs access to information provided for in paragraph XXXIII of art. 5, in paragraph II of § 3 of art. 37, and in § 2 of art. 216 of the Federal Constitution (BRASIL, 2011).

The regulatory instruments mentioned above unassailably show that access to information is effectively regulated, which consequently leads directly to the development of mechanisms that allow for its implementation, a task with which the Committees must contribute.

The Academy also acknowledges that information is a duty of the State and an inalienable fundamental right for decision-making. Therefore, since the Watershed Committees are State agencies, it is their responsibility to offer high amount of high-quality information to citizens – whether they are members or not of the Committees – so that they might participate in the public debate on water topics (GRANZIERA, 2011; OLIVEIRA, 2010; GENTILLI, 2005; MACHADO, 2011).

However, Jacobi, Cibim & Souza (2015), observing the action of the State Government of São Paulo in face of the water crisis, identified that its stand was the opposite of what was expected for water governance, since the government produced a technical and centralizing speech, driving the population and society away from the debate. The authors sustain that public participation in decision-making processes derive from transparency and access to information for those involved, in order to engage the population and foster cooperation to tackle the problem.

A qualified or emancipated participation in the public communication process, which integrates the demands of all society groups involved in the issues at debate, depends on information. Information is crucial for creating new meanings for governance processes, which assume the engagement of actors with goals and interests at stake, and implies a commitment with effective participation rather than representative or bureaucratic participation.

When proposing his theory of speech, Habermas (2003) mentions that emancipation derives from understanding and communication processes. He shows that they gain great relevance in government decisions linked to rights and law, as well as for the democratic shaping of opinion and will.

Public opinion interferes with decisions of power when it becomes communicative power through an argumentative speech, thus becoming emancipated, and from this derives the political liberation of human beings who thus assume their condition as citizens. Baumgarten (1998) reinforces that the power of argument would anticipate an

ideal form of communication and life, driven by justice, freedom, and truth. Sampaio (1999) explains that Habermas's political thought is focused on the emancipation of society through the ideological character of language towards a non-coerced communication, which is open to all participants.

It is undeniable that access to information adds dynamism to social participation and to governance processes, which in turn continuously feed the public communication chain. Therefore, the more elaborate governance processes are, the more qualified information and participation processes among those involved in the network of relationships tend to be.

For Jacobi & Sinisgalli (2012, digital text), environmental governance represents "*exercício deliberado e contínuo de desenvolvimento de práticas cujo foco analítico está na noção de poder social que media as relações entre Estado, Sociedade Civil, os mercados e o meio ambiente,*"¹¹ in which decision-makers and non-decision-makers are involved around a common goal: in this case, the preservation of water resources. It is thus understood that environmental governance occurs when society shares the management of common good, which depends on the realization of communication processes.

For Mazzarino (2012), when access to environmental information with an interpretative slant is circulated in mass media, in private organizations, public organizations, and organizations of the civil society, it maximizes the construction of public opinion on socio-environmental topics and topics of socio-environmental communicational capital. His hypothesis is that, since socio-environmental topics affect all citizens, their visibility might encourage the sharing of values, the perception of interdependence among beings and of belonging to the world, as well as the engagement in groups that share the goal of improving socio-environmental conditions. The author assumes the notion by Matos (2009, 28) of a communication capital, defined as ([...] *o potencial intersubjetivo de intercompreensão e negociação recíproca de entendimentos e pontos de vista diante de uma situação que exija a ação coordenada para a solução de impasses e problemas - MATOS, 2009, 28*).¹²

Thus, it is considered relevant when checking how the Watershed Committees have given visibility to the water crisis in São Paulo. How did the information put in circulation, from their media, converge with what is provided for in legal documents, documents of the organized civil society, or proposed by theorists?

Method

This study is exploratory, descriptive, and analytical. Its approach is quantitative-qualitative, and it is based on bibliographical and document research. Sampling is not probabilistic, due to typicality and accessibility, including news published on websites of the Watershed Committees that manage the Cantareira System. Piracicaba, Capivari, and Jundiaí (PCJ), Alto Tietê, and the Brazilian Network of Watershed Organisms (Rebob).

11. "a deliberate and continuous exercise of development of practices whose analytical focus lies on the notion of civil power that mediates the relationships between State, Civil Society, markets, and the environment" (free translation)

12. "[...] the intersubjective potential of intercomprehension and reciprocal negotiation of understanding and standpoints in face of a situation that requires coordinated action for the solution of bottlenecks and issues" (free translation)

Rebob, although not directly implicated in the crisis investigated, comprises the collective of Watershed Committees, a socio-environmental organization focused on the topic of water resources, well known in the scope of Watershed Committees and in events of the area. It is a non-profit organization established as a Civil Association, formed by associations and consortiums of municipalities, associations of users, Watershed Committees, and other water organisms.

News published in 2014 on the websites of the three organization was collected by using keywords in the search '*crise Cantareira*' (crisis in Cantareira) and '*crise da água*' (water crisis), and the use of the term '*Cantareira*' separately also led to the same results.

The quantitative treatment of the news collected emphasized a disparity in publications, with a total of 11 publications from Rebob, 5 from CBH-PCJ, and 1510 from CBH-Alto Tietê (Chart 1).

Chart 1 - Number of news items published by month in 2014.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Rebob	2	1	4	0	1	0	0	0	1	0	2	0	11
PCJ	0	2	0	0	0	1	0	0	1	0	1	0	5
Alto Tietê*	28	157	278	148	128	90	172	214	113	88	37	57	1510

Source: Ownelaboration.

The large dissemination of information by CBH-Alto Tietê results from the fact that it uses the strategy of establishing a database of what has been published by other media (newspapers, magazines, TV channels, radio broadcasters), and overall, only four news items were produced by the Committee itself. Therefore, in the 1510 offers by CBH-Alto Tietê, the sources of the news were also identified. In their own publications, the three organizations used text analysis, which was conducted based on a thorough reading of the publications, with special focus on the elements that emerged: number of publications, sources, accountability, information pattern (MORAES, 2007).

Discussion of results

Before beginning the discussion of results, it is important to remind that Watershed Committees have the duty to inform in order to ensure that decision-making processes are conducted democratically, since information is an unavoidable and essential means for social participation. Using a quanti-qualitative analysis, aspects that question the role of Watershed Committees involved in the water crisis in São Paulo are investigated with regard to this duty provided for both in legislation and in guiding documents built by the organized civil society.

Number of publications

CBH-Alto Tietê builds its midiatization process of the water crisis in São Paulo by using the strategy of transferring news from other organizations, most of which are national commercial media headquartered in São Paulo, but also broadcasted in small newspapers and city hall publications. The transfer of 1,510 news items derived from 196 media was observed throughout 2014. Data indicate that CBH-Alto Tietê provides visibility to a variety of sources, both mainstream and independent media, legitimizing them, since the choice of reposting news from other media is a way of validating the discourse in these sources.

Overall, 32 media have six or more news items fully replicated by the Committee throughout 2014. Of those, one is a *blog* of civil society and another one is a city hall *website*. The 30 remaining media are commercial and/or mass media. Together, these 32 media total 1,320 of the publications on the Committee's *website*, which equals 87% of publications and an average reposting of 41 news items per medium. They are distributed in Chart 2.

Chart 2 - Distribution of news broadcasted from other media through the website of the Alto Tietê Committee in 2014.

Medium	Quantity
O Estadão	299
Folha de São Paulo	237
Jornal DCI	129
Correio Popular	100
Valor Econômico Newspaper	92
Diário do Grande ABC	56
Agora São Paulo Newspaper	50
G1	47
O Globo	34
O Diário Newspaper	28
O Vale Newspaper	16
Brasil Econômico	23
Diário do Comércio	16
ABCD Maior	15
Exame	16
Isto é	13
Agência Estado	12
Portal R7	12
Reuters Agency	14
Diário de Suzano Newspaper	13
Mogi News Newspaper	11

Agência Brasil	10
Jornal do Comércio	9
SOS Rios Blog	9
Veja Website	9
Época	8
Diário de São Paulo Newspaper	9
Todo Dia Campinas Newspaper	8
Rede Brasil Atual	7
iG Portal	6
UOL Portal	6
Cidade Embu das Artes Website	6
Others (164 media)	190
Total	1510

Source: Own elaboration.

In the category ‘Others’ are included 164 media that total 190 news reposted by the website throughout the year, which equals an average of 1.2 news broadcasted by each one of these media. Among these are portals, the *website* of Alto Tietê Committee, newspapers, portals, city halls, programs of large national and international open TV networks, radios, local and regional media.

The rationale was marked by the reproduction of publications on *blogs* and Facebook from Press media, city hall media, federal public agencies, as well as from private individuals and non-governmental organizations, from the Presidency of the Republic, from political parties, from the Official Gazette, from watershed agencies, from unions, and the Congress. Alto Tietê was responsible for only four news items of its own production. However, it reposted 6 news items from the governmental website Cidade Embu das Artes, municipality of which the Committee Chairman is mayor. On the other hand, CBH-Alto Tietê did not publish any news from PCJ Committee on its website, and the two Committees are linked to the Cantareira System. Therefore, there is no agenda-setting process between them.

Of the total news, 12 terms were observed to prevail in the news headings or in the subheadings by frequency of publications, based on the analysis of headlines: ‘Sabesp’ was mentioned 404 times (most of them, referring to bad management), ‘level’ (of water, low) was mentioned 175 times, ‘rationing’ was mentioned 141 times (generally, as a possibility), ‘void volume’ was mentioned 138 times, ‘Alckmin’ 130 times (either criticizing the Governor of São Paulo or indicating his denying that there was a crisis situation), ‘Alto-Tietê’ appeared 118 times (with mentions to the chairman Chico Brito, who is mayor of Embu das Artes), ‘Committee’ appeared 99 times, ‘drought’, 80 times

(considered continuous), (proposal of) ‘actions’ appeared 75 times, ‘waste’, ‘loss’ or ‘risk of water shortage’ were mentioned 53 times, ‘PCJ’ was mentioned 36 times, and (lack of) ‘planning’ appeared 13 times.

Alto Tietê Committee was observed to act as a diversified database, thus allowing readers to take a stand with a minimum of opinion-like interference. By not favoring one specific medium over others, it allowed readers the access to plural information.

PCJ published only 5 news items throughout the year, distributed between February, June, September, and November. Its publications are therefore sparse, since it did not publish any news-related information on the crisis in 8 months. The images used by the PCJ Committee, in their majority, were about the Cantareira System, on maps, and campaigns, such as “2014 drought operation”.

Rebob published 11 news items in 2014 on São Paulo’s water problem, and seven of them were published in the first quarter. Therefore, the worsening of the crisis in the second half of the year did not generate more news in media spaces of this organization. Rebob was observed to also maintain the method of disseminating news on the water crisis based on reports published by other organizations, thus setting its agenda primarily from websites of the PCJ Consortium, as well as ANA, Estado de São Paulo newspaper, and the non-governmental organization WWF. CBH-Alto Tietê has no agenda-setting process with Rebob.

PCJ Consortium is an intermunicipal consortium of the Piracicaba, Capivari, and Jundiaí watersheds, comprised of municipalities and companies that aim to recover water sources in its area of influence. The Piracicaba, Capivari, and Jundiaí Watershed Agency is the one that manages water resources, raising recourses by charging for the use of water. Therefore, when the Consortium is the source, aside from news published from the CBH-PCJ website, there are also news from the websites www.agua.org.br and www.agenciapcj.org.br.

Regarding sources

Regarding news sources, PCJ is guided essentially by the chairpersons of the Committees, and by Advisory Services for the Management of Cantareira System (Gtag Cantareira)¹³, which betrays a personalist discourse. Such situation poses a threat even to the representativity present in the Committees, as it is not clear if the ideas in the reports are manifestations derived from collective discussions of the Committee or if they only represent the managers.

CBH-PCJ legitimization as a source arises both in their publications and in Rebob’s. Rebob was observed no to make use of CBH-Alto Tietê in its publications, although it includes other sources, such as state and federal agencies, mainstream media, and media from non-governmental organizations, PCJ Consortium, Public Ministry, universities, Sabesp, as well as undefined sources.

13. Gtag-Cantareira assists the management of water storage in the Cantareira System in an unfavorable hydrological period.

By reposting information of so many media, CBH-Alto Tietê legitimizes all sources they used, either mainstream or alternative, excluding, however, the other Committees involved in the crisis. The four items replicated by CBH-Alto Tietê made it evident that sources always belong to the Committee, centralized on its chairman (municipal manager), although they included the vice-president (industry category) and the executive secretary (state manager).

The three organizations adhered to a news offer pattern that is centralized on themselves as sources and not quite open to plurality of dimensions. Additionally, they did not provide the perspective from the different actors involved in the problem.

Regarding accountability

The crisis was addressed by CBH-PCJ as resulting primarily from climate changes, which shows a view of the water issue that lacks complexity although it proposes solutions that suggest other people's accountability: citizens, managers, Committees.

On the other hand, Rebob strongly criticizes Sabesp when addressing the responsibility for the crisis, attributed to the lack of suitable management of the problem and to the fact that the water supply in São Paulo largely depends on the Cantareira System. The government of São Paulo is also held accountable for historical mistakes involving the lack of investments in the use of other reservoirs. Additionally, population growth and the lack of rains were considered causes of this crisis.

The news produced by Alto Tietê tend to inform about provisions of the Committee on measures to tackle the water situation, holding the different sectors accountable: city, state, and federal managers and agencies, the society represented by the Committees, and consumers. Analyzing the headings and sub-headings of the news it reposts, it becomes evident that responsibility is almost exclusively attributed to Sabesp and/or the government of São Paulo. The majority of the reports reposted claimed Sabesp's poor management. Therefore, the Committee seems to have assumed a contradictory role in its offer of news about the water crisis, as it reported information that accused Sabesp and the state government while its own news proposed planning and management alternatives that included all sectors, including the Committee itself. The crisis was predominantly framed as something that belonged to the present, which requested proposals for its resolution, among which are information, participation, oversight, and sanctioning.

The three organizations particularly blame the state government for the crisis, but also other actors, which is the case of consumers and users, as well as natural causes.

Mediatization pattern by the Committees of the water crisis

According to legal prerogatives, the participation of citizens in the debates on public topics goes through access to information. In the foreground, it is the responsibility of the public power, i.e. governmental organization, which is the case of Watershed Committees, to diffuse environmentally related information. State agencies must organize, gather, process, and update information, as well as provide them in a user-friendly version

and in different formats, media, and languages, ensuring more transparency to public processes in order to maximize the inclusion of citizens in decision-making processes. These duties must be complied with regardless of requests and the exception is when confidentiality is involved and in national security-related cases. Internet is a medium to be favored, given its accessible characteristics which has increasingly been facilitated in contemporary society.

In the three cases analyzed, the duty to inform about the water crisis with transparency was not ensured. According to what is set forth in Law n° 12.527 (BRASIL, 2011), which deals with access to information, the duty to inform pertains to public agencies of direct and indirect administration. Therefore, this includes Watershed Committees, since they are considered state bodies according to their creation decrees. This legal assumption includes the production of information on activities that must be disclosed to the population.

Regarding the content and quality of the news that is broadcasted by the Committees, the guidelines contained in Art. 2 of Law 10.650 (BRASIL, 2003), which provides for public access to existing data and information in bodies and entities which are members of SISNAMA, set forth that the agencies that act in the environmental scope ought to be careful not to diffuse only institutional information but otherwise reproduce reports broadcasted by commercial media. Compliance with such standards is undoubtedly related to a necessary review of how the Committees manage information as they proved to encourage poorly active participation in the debate on the water topic.

Information is essential for citizens to exercise their freedom: of thought, of expression, and of non-coerced participation. However, the substantiation of democratic freedoms struggles in the growing complexity of contemporary society among which is the non-fulfilled promise of circulation of information in enough amount and with interpretative quality, which offers citizens the possibility of expressing themselves critically in the debate regarding public topics.

Society needs informative instances that broaden participation, that do more than just disclose data produced by institutions that are not directly involved in the issue and which have their own sources to validate. In this sense, it is relevant to consider the conclusions reached by some studies on the rationale of mass media in their coverage of environmental topics: issues related to the need for citizens to take a stand are practically ignored; the possibilities of impact and the expectation of selling news with the publication of dramatic facts have determined the choice of agenda, rather than news-worthy criteria related to relevance, proximity, and human interest (MAZZARINO e FLORES, 2013a; MIGUEL, 2012); the recipient is placed as a spectator and not as an actor in face of the broadcasted occurrences (MAZZARINO e FLORES, 2013b); it lacks a systemic and contextualized approach, focusing on a major conflict instead of an analytical, plural, non-binary approach (COSTA, 2009; MAZZARINO, 2015; MIGUEL, 2012); official and specialized sources are privileged, as are those that represent international non-governmental organizations, and many times there is only one version reported by the sources, as well as lack of space for common citizens who do not have scientific knowledge. (MIGUEL, 2012; LOOSE & PERUZZOLO, 2008; COSTA, 2009).

Specifically regarding how the water crisis in São Paulo was framed in mass media, Martirani & Peres (2016) identified that it favored a process of perception that the responsibility for the crisis lay on climatic events, exempting social actors. In the agenda-setting process, large social media preferred “episodic” framing, which prioritized weather forecasts and the monitoring of the level in the reservoirs of the Cantareira System.

In face of these facts, it is important to give thought to the reflexes of reposting information from mainstream media by a Watershed Committee, since this practice conveys the idea that the approach and positioning of the medium is endorsed, and it favors the replication of media discourses. Therefore, the option for reposting information from mass media enables a mediatic action that pluralizes media sources. On the other hand, it legitimizes their practices if not combined with an interpretation by the Committee on how to approach the environmental issue.

Conclusions

The water crisis in São Paulo has exposed an information crisis among the Committees of São Paulo. We contend that it is the Committees' responsibility to seize their roles, among which is that of being an agent of environmental information, emancipating from a bureaucratic role to assume their essential collective roles in determining the course of water issues, an increasingly complex topic, due to its different uses, and which faces the challenge of privatization by large corporations.

The choice for providing little information derived from themselves, a non-emancipated role assumed by the Committees in this study, expressed in their media behavior throughout the water crisis in São Paulo in 2014 exposes a frailty that reaches life and that hampers their role in building processes of water governance.

According to Zsögön (2005), the goal of governance is long-lasting economic, social, and institutional development, with balance among actors from the government, civil society, and the market. In the case of water management, it refers to the ability of systems to provide services to several social groups, which requires the building of social agreements, consensus regarding public policies, integrated management of waters, and implementation of policies considering their challenges (flaws in the system, in the State, and in the market). According to Liszt & Bredariol (2006), governance would help overcome the government's legitimacy crisis and help achieve collective goals of public interest, focused on the common good.

According to the report on the context of Latin America and the Caribbean, a governability crisis in water management might derive from how roles and competencies of the government, users, and civil society are exercised, which are associated to how Watershed Committees act (endogenous factors), on one hand, and from the economic situation and institutions in the country, from the population's culture and education, from the credibility of the public apparatus, of income and ability of the population to fulfill their commitments (exogenous factors) on the other (DOUROJEANNI & JOURAVLEV, 2001).

Schulz et. al. (2016) alert that reforms to the Government and the creation of new institutional arrangements regarding political decision-making processes, if not enforcers of democracy, cannot be seen as new forms of governance, since governance assumes a model that generates inclusion and empowerment.¹⁴ They emphasize that care must be taken for governance not to represent only a conservative modernization of government apparatus. Criticism, frequently present in discussions regarding environmental governance and water governance, is related with the fact that these governances, when approached through a normative stand, contain a highly simplistic and, many times, even utilitarian standpoint focused essentially on expected results and potential advantages.

Schulz et. al. (2016) emphasize that in water governance processes agreements must be guided by well-defined rules of participation, especially in a society as the Brazilian society, marked by asymmetries and inequality, and where there is a risk that government actors meet the needs of stakeholders who suit them better. Governance is supported by the idea that all stakeholders must participate in water management.

Bearing in mind that governance goals proposed by the Organization for Economic Cooperation and Development (OCDE) - efficacy, efficiency, and ability to generate trust and engagement-, Akhmouch & Correia (2016) attempt to solve the major challenges of water, based on a combination of *bottom up* and *top-down* processes, which are responsible for fostering government-society relationships. Bureaucracy and unnecessary costs might drive actors away from the solution of water problems to be tackled, they alert.

In order to meet the requirements for the realization of water governance, it is the Committees responsibility to engage citizens in the water issue, which includes taking a fresh perspective on themselves and on what and how to inform. This is still a great challenge, as emphasized in this study.

The midiatization pattern of information on the water crisis in São Paulo by the Watershed Committees does not deliver the right to information, which requires the understanding of the complexity of this issue so that both Committees and citizens are empowered, thus overcoming political dominance.

Understood as a right, information is not an end in itself but serves the purpose of facilitating access to the other rights, e.g. the right of having access to drinkable water. Thus, when reposting information related to water in an inarticulate, out-of-context, and superficial manner, the Committees do not meet what is set forth as their duty to inform.

When analyzing information processes provided for in the Water Framework Directive, Euler & Heldt (2018) point out that despite the provision in normative texts for information to be considered an important prerequisite for empowerment, care must be given not to have one-way information, or in other words, a sharing process with no significant dialog and without the influence of the affected communities.

Latinopoulos et. al. (2018) defend that in situations where environmental knowledge is restricted, the use of campaigns aiming at delivering public information can help people with their choices. General information or yet public campaigns with a private stance play an essential role in the quality of what is perceived by the population, as well

14. The authors' proposal is based on the paper by Swyngedouw, E., 2005. Governance innovation and the citizen: the Janus face of governance-beyond-the-state. *Urban Studies* vol. 42(11), pp. 1991–2006.

as on the related risks and on the importance of minimizing them. The authors assume that those who have more information tend to be less affected by the campaigns. Based on Asilsoya & Oktayb (2018), one might think that in the case of campaigns that highlight ecocentric and anthropocentric values, these tend to influence attitudes and awareness of environmental issues, thus affecting environmental behavior.

In face of a universe full of possibilities in the so-called information society, the Internet provides space for producing contextualized and interpretative contents on the water issue, aside from the possibility of delivering them in an attractive manner, which might pose, currently, not only as one of the greatest challenges but also a great opportunity for empowered media practices by the Committees.

According to Castells (2009), using horizontal media to diffuse messages increases the potential for political and cultural changes, since the production of autonomous information becomes feasible. In a study on the appropriation of the Internet by social movements, Castells (2009, p. 423) observed that “[...] Mediante una mezcla de organizaciones de base, activismo orientado a los médios y redes de Internet, la acción ecologista há ido tomando cuerpo em todo el mundo de distintas formas y ha adquirido uma mayor influencia pública.”

The Committees must learn from social movements, so that, instead of replicating mass media discourses, they start to face the fact that these media have been the major source of information for citizens over decades. Appropriations and uses of media for mobilizations challenges information control, and might change power relations in the scope of communication, says Castells. Therefore, they might enhance environmental and water governance processes through access to information and empowered participation based on media actions by Watershed Committees.

In light of these reflections, our questions emerge as a suggestion for further studies about how Committees attempt to exercise their right to information: Which criteria have driven the definition of agendas disclosed by the Committees? Which strategies are required to inform considering cultural differences among the recipients of information? How can the different Watershed Committees build information networks to feed one another in their duty to inform? How to shorten the distance that separates the Committees from society?

References

AKHMOUCH, Aziza. CORREIA, Francisco Nunes. The 12 OECD principles on water-governance e When science meets policy. *Utilities Policy* 43 (2016) 14-20. Disponível em: <<https://www.sciencedirect.com/science/article/pii/S0957178715300886>>, Acesso em: 23 mai. 2018.

ANA - Agência Nacional de Águas. **Comitês de Bacia Hidrográfica**. Disponível em: <www.cbh.gov.br>. Acesso em: 24 jul. 2010.

_____. **Conjuntura dos recursos hídricos no Brasil: Informe 2014**, Brasília, 105 p., 2014.

_____. **Conjuntura dos recursos hídricos no Brasil: Informe 2014 - Encarte especial sobre a crise hídrica**, Brasília, 30 p., 2014b.

ASILSOYA, Buket. OKTAYB, Derya. Exploring environmental behaviour as the major determinant of ecological citizenship. **Sustainable Cities and Society** 39 (2018) 765–771, 2018. Disponível em: < <https://www.sciencedirect.com/science/article/pii/S2210670717304675>>. Acesso em: 28 mai. 2018

BAUMGARTEN, Maíra. Habermas e a emancipação: rumo à democracia discursiva? **Cadernos de Sociologia**. n. 10, p. 137-178. Porto Alegre: PPGS, 1998.

BRASIL. **Constituição da República Federativa do Brasil**, 1988. Disponível em: <http://www.planalto.gov.br/ccivil_03/Constituicao/Constituicao.htm>. Acesso em: 18 dez. 2015.

_____. **Decreto-lei nº 9.433**, de 08 de janeiro de 1997. Institui a Política Nacional de Recursos Hídricos, cria o Sistema Nacional de Gerenciamento de Recursos Hídricos... Disponível em: <http://www.planalto.gov.br/ccivil_03/leis/L9433.htm>. Acesso em: 30 jan. 2017.

_____. **Decreto-lei nº 10.650**, de 16 de abril de 2003. Dispõe sobre o acesso público aos dados e informações existentes nos órgãos e entidades integrantes do Sisnama. Disponível em: <http://www.planalto.gov.br/ccivil_03/Leis/2003/L10.650.htm>. Acesso em: 30 jan. 2017.

CASTELLS, Manuel. **Comunicación y poder**. Madrid: Alianza Editorial. 2009.

CONSULTORIA TÉCNICA. **Consultoria Técnica de Economia e Orçamento da Câmara Municipal de São Paulo**. A água como um bem e o saneamento básico na RMSP, São Paulo, 2011. Disponível em: <<http://www2.camara.sp.gov.br/CTEO/Boletins/Estudo-Agua.pdf>>. Acesso em: 16 jan. 2015.

COSTA, Luciana Miranda. A imprensa e os Desmatamentos na Amazônia: quem são as fontes do discurso jornalístico. In: XXXII CONGRESSO BRASILEIRO DE CIÊNCIAS DA COMUNICAÇÃO, **Anais**. Curitiba: Universidade Positivo, 2009. Disponível em: <<http://www.portcom.intercom.org.br/navegacaoDetalhe.php?option=trabalho&id=36605>>. Acesso em: 15 abr. 2013.

DOUROJEANNI, Axel; JOURAVLEV, Andrei. **Crisis de gobernabilidad em la gestión del agua: desafios que enfrenta la implementación de las recomendaciones contenidas en el capítulo 18 del Programa 21**. Nações Unidas, n. 35, CEPAL, 2001.

EULER, Johannes; HELDT, Sonja. From information to participation and self-organization: Visions for European river basin management. **Science of the Total Environment** 621 (2018) 905–914, 2018. Disponível em: < <https://www.sciencedirect.com/science/article/pii/S0048969717331303>>, Acesso em: 23 mai. 2018

GENTILLI, Victor. **Democracia de massas: jornalismo e cidadania: estudo sobre as sociedades contemporâneas e o direito dos cidadãos à informação**. Porto Alegre: EDI-PUCRS, 2005.

- GRANZIERA, Maria Luiza Machado. **Direito ambiental**. São Paulo: Atlas, 2011.
- HABERMAS, Jürgen. **Direito e Democracia: entre facticidade e validade**. Rio de Janeiro: Tempo Brasileiro, 2003.
- JACOBI, Pedro Roberto. Desafios à governança e participação popular no Brasil. In: RIBEIRO, Wagner Costa (Org.). **Governança da Ordem Ambiental Internacional e Inclusão Social**. São Paulo: Annablume, 2012.
- JACOBI, P. R.; CIBIM, J. C.; SOUZA, A. N. Crise da água na Região Metropolitana de São Paulo – 2013- 2015. **Geosp – Espaço e Tempo** (Online), v. 19, n. 3, p. 422-444, mês. 2016. ISSN 2179-0892. Disponível em: URL: <http://www.revistas.usp.br/geosp/article/view/104114> DOI: <http://dx.doi.org/10.11606/issn.2179-0892.geosp.2015.104114>.
- JACOBI, Pedro R. SINISGALLI, Paulo A. de A. Governança ambiental e economia verde. **Ciênc. saúde coletiva**, vol.17, nº. 6. Rio de Janeiro June 2012. Disponível em: <http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232012000600011>. Acesso em: 23 mai. 2018.
- LATINOPOULOS, Dionysis. MENTIS, Charalampos. KOSTAS, Bithas. The impact of a public information campaign on preferences for marine environmental protection. The case of plastic waste. **Marine Pollution Bulletin** 131 (2018) 151–162, 2018. Disponível em: <<https://www.sciencedirect.com/science/article/pii/S0025326X18302248>>, Acesso em: 23 mai. 2018.
- LOOSE, Eloísa Beling; PERUZZOLO, Adair Caetano. Como o Meio Ambiente é tematizado no Discurso Jornalístico da Folha de S. Paulo. In: XXXI CONGRESSO BRASILEIRO DE CIÊNCIAS DA COMUNICAÇÃO, 2008, Natal. **Anais...** Natal: UFRN, 2008. Disponível em: <<http://www.intercom.org.br/papers/nacionais/2008/resumos/R3-0018-1.pdf>>. Acesso em: 15 abr. 2013.
- MACHADO, Paulo Afonso Leme. **Direito Ambiental Brasileiro**. São Paulo: Malheiros, 2011.
- MARTIRANI, Laura Alves; PERES, Isabela Kojin. Crise hídrica em São Paulo: cobertura jornalística, percepção pública e o direito à informação. **Ambiente e Sociedade**, v. 19, n. 1, jan./mar. 2016.
- MATOS, Heloíza. **Capital social e comunicação: interfaces e articulações**. São Paulo: Summus, 2009.
- MAZZARINO, Jane Marcia. Das matrizes contraditórias do jornalismo ambiental a um novo critério de noticiabilidade: o interesse cidadão comunitário. **Revista Comunicação Midiática** (Online), v. 10, p. 167, 2015.
- _____. O campo jornalístico e a construção do capital comunicacional socioambiental. **Revista de Ciências Ambientais**, v. 6, p. 81-94, 2012.
- MAZZARINO, Jane Marcia; FLÔRES, Vinicius dos Santos. Jornalismo ambiental: tema, gênero e fontes na abordagem dos recursos hídricos nos jornais Correio do Povo e Zero

Hora. In: 2º ENCONTRO INTERDISCIPLINAR DE COMUNICAÇÃO AMBIENTAL (EICA), 2013a, Aracaju. **Anais...** Aracaju: UFS, 2013. Disponível em: <<https://drive.google.com/file/d/0BzW6LK0JNLVsNE9KSWxpMFFOWHc/edit>>. Acesso em: 7 fev. 2017.

_____. Enquadramentos sociosemióticos em notícias sobre enchentes: a construção de vínculos com o receptor. **Em Questão**, v. 19, p. 283-319, 2013b.

MIGUEL, Katarini. Os paradigmas da imprensa na cobertura das políticas ambientais. **Revista Brasileira de Ciências da Comunicação**, v. 35, n. 1, jan./jun. 2012.

MORAES, Roque. Mergulhos discursivos. In: GALIAZZI, Maria do Carmo; FREITAS, José Vicente de (Orgs.). **Metodologias emergentes de pesquisa em educação ambiental**. Ijuí: Editora Unijuí, 2007.

OLIVEIRA, Fabiano Melo Gonçalves de. **Difusos e coletivos: direito ambiental**. São Paulo: Editora Revista dos Tribunais, 2010.

ONU - Organização das Nações Unidas. **Declaração Universal dos Direitos Humanos**, 1948. Disponível em: <<http://www.onu.org.br/img/2014/09/DUDH.pdf>>. Acesso em: 7 de fev. 2017.

SABESP - Companhia de Saneamento Básico do Estado de São Paulo. **Relatório de Sustentabilidade**, São Paulo, Brasil, 2015. Disponível em: <http://site.sabesp.com.br/uploads/file/sociedade_meioamb/rs_2014.pdf>. Acesso em: 17 jan. 2017.

SAMPAIO, Tania Maria Marinho. A emancipação política em Habermas. **Síntese - Rev. de Filosofia**, Belo Horizonte, 1999, v. 26, n. 85.

SCHULZ, Christopher. MARTIN-ORTEGA, Julia. GLENK, Klaus. IORIS, Antonio A. R. The Value Base of Water Governance: A Multi-Disciplinary Perspective. **Ecological Economics** 131 (2017) 241–249. Disponível em: <<https://www.sciencedirect.com/science/article/pii/S0921800915303967>>. Acesso em: 29 maio 2018.

VIEIRA, Liszt; BREDARIOL, Celso. **Cidadania e Política Ambiental**. RJ: Ed. Record, 2006.

ZSÖGÖN, Silvia Jaquenod. **Derecho Ambiental: La gobernanza de las aguas**. Editorial Dykinson. Madrid, 2005.

Submitted on: 21/09/2017

Accepted on: 06/04/2019

<http://dx.doi.org/10.1590/1809-4422asoc20170210r1vu2019L2AO>

2019;22:e02101

Original Article

INFORMATION ABOUT THE WATER CRISIS IN SÃO PAULO OFFERED BY THE WATERSHED COMMITTEES

Abstract: The water crisis in São Paulo between 2013 and 2015 was considered one of the greatest in the history of the state, and it was widely covered by the Media. The issue is how groups that are expected to provide information (as they are considered Government bodies, such as the case of the Watershed Committee) tackled the water crisis in São Paulo. This defining issue has driven this quanti-qualitative research on news published in the websites of Watershed Committees that manage the Cantareira System (Committees of Alto Tietê and Piracicaba, Capivari, and Jundiá -PCJ) and the Brazilian Network of Watershed Organisms (Rebob - Rede Brasil de Organismos de Bacias Hidrográficas).

Key words: environmental communication, water crisis, watersheds.

Resumen: La crisis del agua en São Paulo, entre los años 2013 y 2015, fue considerada una de las mayores de su historia, habiendo recibido amplia cobertura de los medios. Se plantea ¿ cómo los Comités de Cuencas Hidrográficas, que son grupos sociales que tienen el deber de informar por ser considerados órganos de Estado, abordan la crisis hídrica de São Paulo? Esta cuestión orientadora movió la investigación cuantitativa de las noticias transmitidas en los sitios de los Comités de Cuencas que gestionan el Sistema Cantareira (Comités Alto Tietê y Piracicaba, Capivari y Jundiá -PCJ) y de la Red Brasil de Organismos de Cuencas Hidrográficas (Rebob).

Palabras clave: comunicación ambiental, crisis del agua, cuencas hidrográficas.

Resumo: A crise da água em São Paulo, entre os anos de 2013 e 2015, foi considerada uma das maiores de sua história, tendo recebido ampla cobertura das mídias. Problematisa-se como grupos sociais que tem o dever de informar por serem considerados órgãos de Estado, como é o caso dos Comitês de Bacias Hidrográficas, abordam a crise hídrica de São Paulo? Esta questão norteadora moveu a pesquisa quanti-qualitativa das notícias veiculadas nos sites dos Comitês de Bacias que gerenciam o Sistema Cantareira (Comitês Alto Tietê e Piracicaba, Capivari e Jundiá -PCJ) e da Rede Brasil de Organismos de Bacias Hidrográficas (Rebob).

Palavras-chave: comunicação ambiental, crise da água, bacias hidrográficas.
