# VIRTUALITIES OF THE ENVIRONMENTAL INFORMATION IN THE CONTEXT OF THE HYDROGRAPHIC BASIN COMMITTEES IN RIO GRANDE DO SUL, BRAZIL<sup>1</sup>

Luciana Turatti<sup>\*</sup> Jane Márcia Mazzarino<sup>\*\*</sup>

**Abstract:** The advancement of the media opens the perspective for citizen participation and the full exercise of the right to information. This prerogative, however, depends on the implementation of legal premises regarding such rights expressed in the Federal Constitution of 1988 and the laws that followed it. The internet allows the Hydrographic Basin Committees to be the protagonists of the implementation of the right to information, to encourage the citizen participation in public debate on the water issue. This study analyzes the information provided about water by the hydrographic basin committees of the Rio Grande do Sul in the virtual media, to discuss how their communication practices fulfill the legal requirements of the right to information. The study is descriptive and analytical, quantitative and qualitative, with bibliographic and documental base. The sample included 25 hydrographic basin committees of Rio Grande do Sul, where three categories were analyzed: access, offered information and social networks.

Keywords: Right to information; Hydrographic basin committees; Virtual media.

## **1** Introduction

It is peaceful to understand that access to information on environmental issues contributes to sustainable development and effective public participation in environmental governance processes. However, despite the disclosure of knowledge about the instruments that have been trying to ensure such a right over the past decades, it is clear that in the daily lives of public agencies, this prerogative still needs to be implemented.

The recognition of the right to information at the national level was fully ensured with the promulgation of the Federal Constitution of 1988, which expressly internalized this precept as a fundamental right (BRASIL, [2019]). In the environmental context, it was no different, since several documents, of an international and national character, impose the duty to inform the environmental agencies, including the Hydrographic Basin Committees.

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<sup>\*</sup>Professor of the Law Course and the *Stricto Sensu* Post-Graduate Programs in Environment and Development (PPGAD) and the Program in Sustainable Environmental Systems (PPGSAS). E-mail: <u>lucianat@univates.br</u>. ORCID iD: <u>http://orcid.org/0000-0002-6684-1422</u>

<sup>\*\*</sup>Professor of the communication course and the *Stricto Sensu* Post-Graduate Programs in Environment and Development (PPGAD). E-mail: janemazzarino@univates.br. ORCID iD: <u>https://orcid.org/0000-0002-6051-5116</u>

This article analyzes how the 25 Hydrographic Basin Committees of Rio Grande do Sul (RS) have used these prerogatives to inform the population through the virtual environment, to discuss how their communicative practices meet the legal assumptions of the right to information. The choice of these channels is due to the ease of access to the environment by the researchers, without ignoring the existence of other ways of disseminating the information produced by them, such as radio, newspapers and others. In addition, because their use is provided for in the legislation.

For this purpose, at first, there is a discussion about the international and national legal instruments that provide the right / duty to inform, since the committees, as representatives of water users, and the water parliament, are charged with the duty to observe such regulations. The presentation of the method follows and the analysis and discussion of the results are presented next.

## 2 Environmental Information as a Right

In 1992, when preparing the Rio Declaration, during the United Nations Conference on Environment and Development, known as Eco 92, the countries present at the event established in principle 10 of the aforementioned Declaration that:

The best way to address environmental issues is to ensure participation, at the appropriate level, by all concerned citizens. At the national level, each individual will have adequate access to environmental information available to public authorities, including information about hazardous materials and activities in their communities, as well as the opportunity to participate in decision-making processes. States will facilitate and encourage popular awareness and participation, making information available to all. (ORGANIZAÇÃO DAS NAÇÕES UNIDAS, 1992)

As a way of achieving this, in 1998<sup>2</sup>, several European countries within the framework of the Economic Commission for Europe of the United Nations (UN), adopted the Aarhus Convention, on "Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters." The convention went into effect in January 2001.

Although this is not applied to Brazil, it serves as an ethical reference for the establishment of forms of international cooperation aimed at protecting the environment, since it proposes to ensure access to information for all citizens and, in particular, participation in decision-making, as it demonstrates concern not only in terms of ensuring access to documents held by public agencies, but also imposes a duty on the government to disseminate information. In this context, the State assumes the responsibility of organizing, processing and keeping

<sup>&</sup>lt;sup>2</sup>On the Fourth Ministerial Conference "Environment for Europe".

information up to date, under the risk of, on the contrary, jeopardizing the participation of society and limiting the exercise of citizenship.

The Convention is also important for defining what environmental information is. According to its text, art. 2, item 3, is any information presented in written, visual, oral, electronic or other form on:

a) the state of elements of the environment, such as air and atmosphere, water, soil, land, places of landscape and natural interest, biological diversity and its components, including genetically modified organisms and interaction between these elements;

b) factors, such as substances, energy, noise and radiation and activities or measures, including administrative measures, environmental agreements, policies, legislation, plans and programs that affect or are likely to affect the elements of the environment referred to in point "a", as well as cost-benefit analyses and other economic analyses and assumptions used in the environmental decision-making process;

c) the state of human health and safety, the living conditions of individuals, places of cultural interest and built structures, insofar as these elements are or may be affected by the state of the elements of the environment or, through these elements, for the factors, activities or measures referred to in point "b" (COMISSÃO ECONÓMICA DAS NAÇÕES UNIDAS PARA A EUROPA, 2003, p. 9-10).

The concept presented, although comprehensive, is capable of fixing for the Government the contours and limits of the duty to inform in the environmental area. In the Brazilian scenario, in 2003 Law No. 10,650 was published, which provides for public access to data and information existing in the agencies and entities that are part of the National Environment System – SISNAMA. (BRASIL, 2003)

In its article 2, the law provides that the agencies and entities of the Government, direct, indirect and foundational, members of SISNAMA, are obliged to allow public access to documents, files and administrative processes dealing with environmental matters and to provide all environmental information that is in its custody, in written, visual, audible or electronic medium, establishing a period of 30 days for the public agency to manifest (BRASIL, 2003). As it turns out, the law does not place access to information as a possibility, but as an obligation of environmental agencies.

Reinforcing the policy of access to information, on November 18, 2011, Law No. 12,527<sup>3</sup> que is published, which regulates access to information provided for in item XXXIII of art. 5, in item II of Paragraph 3 of art. 37 and Paragraph 2 of art. 216 of the Federal Constitution, providing for the procedures that must be observed by the agencies and entities of the Government as a way to ensure such right (BRASIL, 2011).

<sup>&</sup>lt;sup>3</sup> The law was regulated by Federal Decree No. 7,724 of 2012, which establishes the procedures for guaranteeing access to information and for the classification of information under restricted access, subject to the degree and term of confidentiality. (BRASIL, 2011)

This law rescues republican purposes and principles, given that, if properly applied, it is able to ensure greater transparency in public processes and, consequently, involve citizens when making decisions about public policies.

Throughout its text, more specifically in Article 6, I, the law provides that it is the responsibility of the agencies and entities of the Government to ensure the transparent management of information, providing wide access to it and its disclosure. In view of this, it is the task of the Government to identify the mechanisms that reach the most diverse social groups to make this article effective.

In another passage of its text, the law states that the procedures provided for therein, aimed at the realization of the fundamental right of access to information, must be carried out with the observance of some guidelines, among which the following stand out: I - observance of advertising as a general precept and secrecy as an exception; II - disclosure of information of public interest, regardless of requests.

In other words, the current rule points in the sense that the information must be made public, regardless of citizens' requirements and the exception is situations involving confidentiality, as is still the case with national security. In addition, disclosure must be carried out in easily accessible places (art. 8), produced by the agency itself or in custody.

Regarding this last determination, it should be borne in mind that this implies the duty to disseminate information preferably supported by public agencies or credible institutions and agencies, therefore, news and other information from untrustworthy sources are ignored, since the information disclosed must ensure the formation of safe thinking by citizens willing to participate in the deliberation processes.

Basin committees, being considered state agencies, must comply with such obligations, bearing in mind that the mere disclosure of information, for example, from the mass media, places the committees in the condition of mere transmitters, which legitimize the media without discuss it or bring it closer to local realities, disregarding the fact that it is at the local level that the main actions of citizens will be triggered.

As a way of meeting the prerogatives imposed by law, the legislation provides for the use of the internet. In the second paragraph of Article 8, it establishes that public agencies and entities must use all legitimate means and instruments at their disposal, with mandatory disclosure on official websites of the World Wide Web (internet).

This proposal is very similar to the current forms of management, where the use of Information Technologies, called Electronic Government, aims to "regenerate and improve the services provided to the population and stimulate the interaction and discussion of local problems", further expanding the transparency of public processes (CAVALCANTI; DAMASCENO; SOUZA NETO, 2013, p. 113).

Prior access to information is able to reduce the number of consultations with public agencies by citizens, thereby saving time and resources for administration, in addition to ensuring that citizens, when calling for participation in decision-making processes, be provided with the necessary information to be able to participate in deliberative processes.

When establishing the mandatory disclosure of environmental information, Article 2 of Law No. 10,650 provides for the topics that it considered to be of most relevance and, therefore, priority when choosing the disclosure guidelines. Are they:

I - quality of the environment; II - policies, plans and programs that potentially have an environmental impact; III - results of monitoring and auditing in pollution control systems and potentially polluting activities, as well as plans and actions for the recovery of degraded areas; IV - accidents, environmental risk or emergency situations; V - emissions of liquid and gaseous effluents, and production of solid waste; VI - toxic and dangerous substances; VII - biological diversity; VIII - genetically modified organisms. (BRASIL, 2003)

Such a list is not exhaustive, and it is still up to the public agent to decide on the other matters to be disclosed, based on the purpose of allowing citizen participation.

What is certain, as Dowbor says, is that the situation is paradoxical, as there has never been access to as much information technology as today, and there has never been such confusion. "Databases, networks, portals, websites, online conferences, distance education, discussion groups, broadband connections, geoprocessing, remote sensing, widespread access to telephony, - all indicate an authentic explosion of technical capabilities of survey, organization and distribution of information." (DOWBOR, 2003, p. 3). The purposes of the State and public entities must, therefore, focus on the organization of information based on local realities and the practical needs of social actors as a way of allowing the expansion of participatory democracy and overcoming the paradigm of silence adopted by the State over the last century (GERALDES; REIS, 2012).

Geraldes and Reis (2012) criticize the Brazilian State, stating that it has not developed the habit of producing and sharing information with the whole society because historically, culturally, it dialogues with a group of society, with a class that uses exclusive information as an extra privilege. Knowing about a state action in advance can mean access to resources, getting ahead in a race whose winners are already defined in advance.

As Sarlet and Fensterseifer (2018, p. 443) refer, access to information is seen as a powerful "mechanism for equalizing legal relations" while allowing citizens, whether individually or collectively, to "claim, on a more egalitarian level, respect for their fundamental right to the environment".

The role of informing is part of the functions of the State, and not of the market, even though today, with the spread of social networks, society itself is also producing relevant information. It should also be mentioned that in the supra-state plan, signed by representatives of Latin America and the Caribbean, including Brazil, in San José de Costa Rica, was signed on March 4, 2018, it is a regional agreement with a binding character of paramount importance for implementation of Principle 10 of the Rio de Janeiro Declaration on Environment and Development. The Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, or simply, the Escazu Agreement, as it became known, has the objective of protecting rights of access to information, to public participation and to justice on environmental issues.

Bearing in mind the importance that this right has reached in contemporary society, which has made unlimited use of virtual information mechanisms, and knowing the need to increase the transparency of public processes, as a way of allowing a more responsible participation by the citizens. Thus, it is questioned how the 25 Hydrographic Basin Committees of Rio Grande do Sul have made use of their internet channels, including social networks, to involve the population in achieving their purposes of managing a common good, water resources , ensuring equal access?

### 3 Method

O The study is exploratory, descriptive and analytical, quanti-qualitative with a bibliographic and documentary basis. The documentary sample is not probabilistic, due to its typicality and accessibility. The analyzed documents are publications in the virtual media of the 25 Hydrographic Basin Committees of Rio Grande do Sul: Apuaê Inhandava, Alto Jacuí, Baixo Jacuí, Butuí – Icamaquã, Piratinim, Caí, Camaquã, Gravataí, Guaíba, Ibicuí, Ijuí, Lagoa Mirim São Gonçalo, Litoral Médio, Mampituba, Pardo, Passo Fundo, Rio Negro, Rio Várzea, Santa Maria, Sinos, Taquari-Antas, Tramandaí, Turvo (Santa Rosa Santo Cristo), Quaraí and Vacacaí.

The option for the website of the committees on the internet to the detriment of other means of communication is justified by the increase in the number of accesses over the last decade, with this tool becoming one of the main channels of communication for the public, in general.

It started with an exploratory study on information offered by the 25 committees in Rio Grande do Sul, in 2013. At the end of this step, 14 of the committees that did not have official pages or did not carry out periodic updates throughout the year were eliminated. In the second step of analysis, only the 11 committees that presented the periodic updates were included.

Having defined the *corpus* of the research, the communication tools available on the internet pages used by these organizations for social communication were identified. From there, the analyses were carried out: first exploratory, then descriptive.

The units were grouped into categories, which emerged from the identification of the set of units organized by similarity. Based on them, "the structure for understanding and explaining the investigated phenomena" was constructed (MORAES, 2007, p. 91).

Three categories make up the analyses: Access (subcategories: visual aspects and updating); Information (subcategories: available institutional information, published news themes, images); Networks (subcategories: use and relationship in social networks, integration with other agencies). The analyses refer to the two collection steps, so they vary in terms of the sample of committees included in each subcategory.

In the next section, the results are presented by categories and their subcategories, using tables when necessary for their better understanding. Then, the data is discussed, with its crossing with the theoretical framework.

## 4 Analyses

## 4.1 Access Category

a) Visibility and accessibility of the website

This analysis was carried out in the 19 committees that maintain the website, updated or not, and the website of the committees that promoted periodic updates throughout the year was considered updated. Regarding visibility, three situations were found: very good in 10 of the analyzed sites, good or reasonable in eight and poor in one site. Very good visibility was considered when the supply of information explored the aesthetics of images, offered maps, had an image gallery, presented moving images, adapted images to the texts available, used different font sizes (title, texts, links) and explored the contrast of colors on the website.

Good or reasonable visibility was considered when the offer of images was non-existent or, when they occupied a large part of the page, as well as when the font size was considered good or excessively large, without, however, exploring diversity, and even when there was a reasonable contrast between colors. Poor was considered just a website because it offers little content, terrible color contrast, even making reading difficult, as well as a small font in the text. Therefore, 18 of the 19 sites analyzed showed an aesthetic concern when implementing the right to information in virtual media.

As for accessibility, 16 of the 19 sites were considered to be of good accessibility because they offer well-distributed content, to facilitate the user's viewing, as well as a map of the available links. Sites with poor information, confusing, with data that are difficult to view or that forced a download to access the data, with excessive links that directed to other pages (without having the content on the committee's page) were considered poor accessibility, or with access links that didn't work, not redirecting to other pages. b) Website and Facebook update

Regarding the website, of the 25 committees analyzed, seven did not inform the posting dates, and in one of them, it was noticed that the update was daily or weekly. Eight of the 25 were out of date, with no posts for at least a month. Four had updated posts in the month of collection. And six had no website, but made information available on the website of the Secretariat of the Environment or the State Foundation for Environmental Protection Henrique Luiz Roessler - RS (FEPAM).

Regarding Facebook, only seven demonstrated using this tool keeping it updated with posts, with the exception of the Taquari Antas Committee, which had the date of the last post four months before data collection.

Only three updated both the website and Facebook: Ibicuí, Pardo and Passo Fundo. Six updated one or the other: Sinos, Vacacaí, Caí, Santa Maria and Tramandaí. And one did not update Facebook and its website had been without posts for more than a month, despite being the only one that maintained press relations (Taquari-Antas). Regarding the latter, it is still worth mentioning that the updating of the data occurred only with the use of own information, not using posts from other sites, as the most updated committees do.

Did not update or did not have information in any of the two tools 16 committees out of 25: Alto Jacuí, Baixo Jacuí, Apuaê Inhandava, Guaíba, Rio Negro, Rio Várzea, Litoral Médio, Gravataí, Turvo Santa Rosa Santo Cristo, Quaraí, Ijuí, Butuí -Icamaquã, Piratinim, Camaquã, Lagoa Mirim São Gonçalo and Mampituba.

Situation	Committee		
Update website Update Facebook	Ibicuí, Pardo, Passo Fundo		
Update website Does not have Facebook	Sinos, Vacacaí		
Does not update website Update Facebook	Caí, Santa Maria, Tramandaí		
Website with little update Does not update Facebook	Taquari Antas		
Did not report date of postings on the site, but showed little update OR Website with little update Does not have Facebook	Camaquã, Alto Jacuí, Baixo Jacu Apuaê Inhandava, Guaíba, Piratinim, Rio Negro, Rio Várze Litoral Médio		
Does not update website Does not have Facebook	Gravataí		
Link from the Environment Secretariat or Fepam of the RS directed to general information about the Committee and the Basin.	Turvo, Santa Rosa, Santo Cristo, Quaraí, Ijuí, Butuí-Icamaquã, Piratinim, Camaquã, Lagoa Mirim São Gonçalo, Mampituba		

Source: The authors.

Table 1 shows that only 4 committees updated the website and 7 updated Facebook throughout each month, which indicates that information to citizens through internet tools is not prioritized by the others. This is in a scenario where the committees work with a low budget and the internet makes it possible to inform without costs and geographic limits, constituting a direct channel between committees and citizens, with no access limit.

## 4.2 Information Category

## a) Institutional information

Regarding the institutional information available on the website, the 11 committees that presented the most recent updates for analysis were selected. There were three categories of information available: profile, related to activities and techniques.

Profile information included information about what it is and how to participate in the committee, regulation, history, photographs, committee hymn, address and contacts, names of committee members, testimonials, partnerships, links to partner organizations, news, interviews.

The activities refer to the agenda, meeting dates, minutes, attendance control, official letters and summons, deliberations.

While the technical information presents data on legislation, basin plan, water studies, articles, environmental education tips, projects, basin map, grants, tariffs and weather forecast.

The most frequent information was about the agenda, address, contacts, minutes, dates of meetings, testimonies, regulations, partnerships and legislation, thus demonstrating that there is a mixture of the three categories.

On Facebook, the posts of the seven committees that maintain this tool are characterized as more superficial and economical in relation to the site: they inform about their activities, journalistic or technical information. There are posts related to registration to participate in the committee, disclosure of events and courses, messages, management actions such as the construction of the water pact, campaigns, institutional photographs, participation in commercial media, commemorations of the committee's anniversary, launch of publication of atlas of the waters of the basin, ordinary and extraordinary, technical, election meetings and public hearings.

## b) Number of news published and topics

As can be seen in Table 2 below, in order, Santa Maria, Pardo and Tramandaí are the ones that publish the largest amount of content. Camaquã and Rio Negro are the least published. The others publish in average.

Of the 25 committees pf the RS, 14 do not have periodic publications in the media available on the internet. Of the 11 who use them, four committees favor the use of a website, four prefer Facebook, and one prefers the blog and two do not privilege the use of these media in

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their social communication. Therefore, of the nine that favor the use of these media, all make use of one predominantly, and not more than one.

Committee / media	Site	Blog	Facebook	Twitter	Total	Observations	
Taquari Antas	19	0	7	0	26	Privileges website	
Sinos	19	0	0	0	19	Privileges website	
Tramandaí	0	37	18	0	55	Privileges blog, passing on information from different sources, mainly media, without producing it	
Caí	1	0	34	0	35	Privileges Facebook	
Camaquã	6	0	0	0	6	Does not privilege these media	
Ibicuí	12	0	28	0	40	Privileges Facebook	
Alto Jacuí	23	0	0	0	23	Privileges website	
Pardo	6	0	49	0	55	Privileges Facebook	
Passo Fundo	18	0	4	0	22	Privileges website	
Rio Negro	7	0	0	0	7	Does not privilege these media	
Santa Maria	6	0	56	0	62	Privileges Facebook	

Table 2 - Number of news published by the Committee in different media in 2013

Source: The authors.

Table 3 shows the main themes of the published news.

Table 3 – Themes of the news published on the websites and blog
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Committee / Category	Number of news	Category Events	Category Disclosure
Taquari Antas	19	7 Encounter, meeting	12 Audience, basin plan, election, thematic commission, flood study, pig farming problem, energy, committee anniversary, study
Sinos	19	7 Meeting, basin plan, seminar, celebration, party, environment week	12 Water classification, floods, study, scarcity, rumors, inscriptions, basin plan, magazines and books, dam, project

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Sul, Brazil

Tramandaí	37	7	30
(blog)		Meeting, forum, exhibition, workshop	Agreement, leisure, sanitation, river, term of conduct, crimes, depollution, corruption, recovery, monitoring, legislation, licensing, investment station, elections, interviews, energy, projects, decision, public agencies, event letter
Caí	1		1 Institutional
Camaquã	6	6 Meeting	Institutional
Ibicuí	12	2 Meeting, workshop	10 Monitoring, water, conservation unit, committee activities, work partnerships, standing ferry, irrigation
Alto Jacuí	23	8 Course, prize, meeting, project, participation in event	15 Report, water classification, study, proposals, approved budget, future goals, public hearing, provision of equipment, monitoring, inspection, registration, dams
Pardo	6	3 Water week, lecture, meeting	3 Technical visit, partnership
Passo Fundo	18	3 Assembly, Agenda 21, awards, meeting	15 Project, campaign, recycling, report, river cleaning, water classification, public hearing, agro-toxins pollution
Rio Negro	7		7 Water study, project, map, information system, monitoring
Santa Maria	6		6 Basin plan, gate, dams, working group

As can be seen, those who do not favor the site or blog use Facebook primarily. It should be noted that Tramandaí uses the strategy of publishing news originally posted on other sites, in addition to posting various news on the same topic from different sources. Most of them refer to issues of the basin, with title and link, generally from media sources. The aforementioned committee does not produce news, but functions as a means of accessing a database on the subject to internet users, which shows concern with the duty to inform. However, the indiscriminate use of this system results in an unequivocal difficulty in understanding, in addition to feeling the lack of contextualization of information in relation to the place with its own news.

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Committee / Category	Number of news	Category Events	Category Disclosure
Taquari Antas	7	5	2
1		Meeting	Research, course
Sinos	0		
Tramandaí	18	8	10
		Lecture, basin meeting, meeting,	Launching of atlases, photos, courses, project enrollments, water privatization,
		assembly	droughts and floods, water uses
Caí	34	10	24
		Induction of elected representatives, lecture, meetings, forums, celebration	Environmental education, media space, committee hours, Christmas message, alert, committee role, study, enrollment, members, courses, flood, rain, road block, sanitation plan
Camaquã	0		
Ibicuí	28	12	16
		Meeting, ecological race, water week, committee meeting, forums	Standing ferry, sewage, direct planting, landmark of Rio Grande do Sul waters, flood, project, workshop, public hearing, images, committee phones
Alto Jacuí	0		
Pardo	49	24	22
		Expedition, meeting, committee meeting, lecture, committee event, seminar	Plenary call disclosure, message, telemetr network installation, commission creation elections, images, poetry, photo exhibition course, interview, project, management, communication
Passo Fundo	4	1	3
		Meeting	Photo, recycling
Rio Negro	0		
Santa Maria	56	42	14 Documents, preservation, world water day delivery of office, message, water and development, image, protocol signature, committee commitments in Brasilia, grant training, poetry, sanitation plan

Of the 11 committees, six published some news on the basin plan, framing or public hearings in 2013, namely: Taquari-Antas, Sinos, Alto Jacuí, Passo Fundo, Santa Maria and Ibicuí.

In general, those who used the internet media did so to communicate committee events or events related to the water issue, and publicize environmental education actions, studies, projects, water problems, monitoring carried out, floods, legislation, institutional messages and courses.

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Committee / Category	Total of news	Category Events	Category Disclosure	
Taquari Antas	26	12	14	
Sinos	19	7	12	
Tramandaí	55	15	40	
Caí	35	10	25	
Camaquã	6	6	0	
Ibicuí	40	14	26 15 28	
Alto Jacuí	23	8		
Pardo	55	27		
Passo Fundo	22	4	18	
Rio Negro	7	0	7	
Santa Maria	62	42	20	
Total	350	145	205	

Table 5 - Sum of news published on the website / blog and Facebook

Source: The authors.

Of the total news published by the 11 committees, 145 referred to events promoted by the committees themselves or by partners working on the theme of water. Another 205 news focused on the disclosure of topics already mentioned in Tables 3 and 4.

Of the 350 news published by the 11 committees, 212 of them, that is, 66% of the total were mediatized by four committees: Tramandaí, Ibicuí, Pardo and Santa Maria. The other seven committees together published only one third, which shows an imbalance in the amount of publications made between the committees.

Table 5 shows a great variation in the use of these media by the different committees: the one that least published reported six times, while the one that most used these media tools published 62 news in 2013. Even the one that published the most, reported in average one fact per week. This demonstrates the low use of media communication tools by RS basin committees. It is also necessary to consider that 14 of them were not included in this study because they do not use the media available on the internet. These committees may, however, be making use of traditional media: local and regional radio, newspaper and television.

## c) Images

As for the category of images, Taquari Antas publishes more, but focuses on the category Internal Event, meetings (22 out of 29). Sinos, on the other hand, diversifies images between categories, while Tramandaí does not produce information, it only transfers it from other sites. Rio Negro, Santa Maria, Camaquã and Caí publish few images and within only one category. The rest publish few images and diversify between categories. The use of photographs by those who favor the website is more diverse. The greatest use of photographs is related to the disclosure of internal and external events (meetings, lectures, ecological and monitoring actions) and illustrations (institutional and for the disclosure of events).

In addition, the disclosure of images on Facebook by those who favor this medium falls predominantly in the categories internal event (meetings, forums, visits, courses and elections) and illustrations (messages, invitations, campaigns, events, replication of news published in newspapers).

Committee / Category	Internal Event	External Event	Illustration	Ecological Situation	Institutional	Total 2013
Taquari Antas	22	0	0	6	1	29
Sinos	9	2	5	1	0	17
Tramandaí	3	4	16	6	0	29
Caí	4	6	9	14	0	33
Camaquã	8	0	0	0	0	8
Ibicuí	15	4	11	8	0	38
Alto Jacuí	3	0	2	2	1	8
Pardo	84	2	12	0	0	98
Passo Fundo	5	2	3	2	0	12
Rio Negro	0	0	0	5	0	5
Santa Maria	33	0	17	0	1	51
Total	186	20	75	44	3	328

Table 6 - Sum of images published in the website and blog and Facebook news

Source: The authors.

In general, the committees do not publish institutional photographs in the analyzed media. The most published image type is Internal Events: 56%. Three committees mostly publish this type of image: Pardo, followed by Santa Maria and Taquari Antas. In second place are Illustrations with 22.8%, a kind of image widely used by the Santa Maria, Tramandaí, Pardo and Ibicuí committees. Then there are the images of Ecological Situations 13.4%, little published by the committees in general, but widely used by the Caí committee, where it appears as the main published image.

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Committee / Category	Total of news	Total of images 2013	
Taquari Antas	26	29	
Sinos	19	17	
Tramandaí	55	29	
Caí	35	33	
Camaquã	6	8	
Ibicuí	40	38	
Alto Jacuí	23	8	
Pardo	55	98	
Passo Fundo	22	12	
Rio Negro	7	5	
Santa Maria	62	51	
Total	350	328	

Table 7 – Quantification of news and images by committee

Source: The authors.

The 350 news published by the 11 committees were accompanied by 328 images, therefore, one image per news, on average. It appears that this average changes for Tramandaí, Alto Jacuí and Passo Fundo, which published more news (55, 23, 22 respectively) accompanied by fewer images (29, 8, 12 respectively). The Committee of Pardo favored the use of images in relation to the publication of news (98 images in 55 news items).

#### 4.3 Networks Category

a) Use and relationship on social networks

Regarding facebook, as already stated, only seven use this tool. In 2013, their posts ranged from four (Passo Fundo) to 56 (Santa Maria), and the two committees that post the most (Santa Maria and Pardo), do it only once a week, on average. Caí and Ibicuí post once every two weeks, on average. Tramandaí once every three weeks. Passo Fundo and Taquari Antas posted on average once every two or three months.

The themes of the posts vary in five categories: floods and droughts, disclosure of actions and institutional events, tips for environmental education, water monitoring and management.

When disclosing meetings, they refer to ordinary or extraordinary meetings of the committees, of a technical nature, to define elections, public hearings and to discuss the basin management plan.

The relationship on social networks between the seven committees that use Facebook is very low, with a maximum of nine likes. Shares range from zero to four per news. Comments range from zero to one per news item.

## b) Integration with other agencies

The sites provided links to other agencies. When they did, the most frequent links were to the National Water Agency (ANA), the Rio Grande do Sul Environment Secretariat (SEMA), the State Foundation for Environmental Protection Henrique Luiz Roessler - RS (FEPAM) and Ministry of the Environment (MMA). Other agencies that had links on the committees' website, but with less frequency were: Hydrographic Basin Management Committees of Passo Fundo River (CBHPF), Municipal City Hall of Passo Fundo (PMPF), Association of Users of the Arroio Duro Irrigation Perimeter (AUD), National Rural Housing Program (PNHR), Information, Citizenship, Environment (ICA), Irrigation Master Plan in the Context of Multiple Water Uses for Rio Grande do Sul (PIUMA/RS), Portal of the National Meeting of Hydrographic Basin Committees (ENCOB), Brazil Network of Basin Organisms (REBOB), Federal University of Pampa (UNIPAMPA), Association of Water Users of the Santa Maria River Basin (AUSM), University of Caxias do Sul (UCS), University of Vale do Taquari (Univates), Hydrographic Basin Committees (CBH), Spring Maquiné Action (ONG ANAMA), Chico Mendes Institute for Biodiversity Conservation (ICMBIO), Public Ministry of the State of Rio Grande do Sul (MPRS), Alberto Pasqualini Refinery (REFAP), Petróleo Brasileiro S.A (PETROBRAS), National Forum of Hydrographic Basins, State Water Resources System (SNRH), State Environmental Code, Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA), water resources legislation and the Pro-Guaíba (Rio Grande do Sul State Government program for promote the socio-environmental development of the Guaíba Hydrographic Region). They also offer a link to their own facebook.

Therefore, the agencies legitimized by the water information committees are predominantly official agencies and related to the committees, followed by universities, NGOs and companies.

## **5** Discussion of results

The role attributed to Hydrographic Basin Committees through water legislation presupposes that they assume the condition of water parliaments, thus ensuring that decisionmaking processes are democratic, which, consequently, imposes the exercise of the right to information, since the increase in participation is directly related to the transparency of its actions.

However, the data presented, in summary, point out that of the 25 committees of the RS, only 19 had a website, with visibility considered very good in 10 of them. As for the update, only

four had updated in the month of collection. It was found that 16 of the 25 committees did not update or did not have information in either tool. And 14 did not keep periodic publications in the media available on the internet. Of the 11 committees, six published some news about the basin plan, framework or public hearings in the period analyzed. The use of internet media was characterized by communication about events, disclosure of environmental education actions, studies, projects, water problems, monitoring, floods, legislation, institutional messages and courses. Therefore, it is shown that virtual media were not disseminated among the committees and, also, among those who used them, their use was not strategic.

Still, whoever used them, did not always update them frequently, to inform the population and arouse interest in this topic of citizenship. There was also a centralization of publications in four committees, since of the 350 news 212 (or 66%) were published by 11 of them and another seven committees together published only one third of the total. The relationship on social networks between the seven committees that used facebook was very low. It is evident, therefore, that in addition to little media information, little dialogue was generated.

Poma and Gravante (2013, p. 143) refer that participatory water management is not possible "without a democratic communication policy, based on dialogue, shared construction of citizenship and public commitment". In this sense, they assert that the legal obligation to publish and allow public access to information does not, by itself, guarantee participation. Information must be permeated by communication processes that address social changes through "the integration of public information and communication systems, as well as technological resources and popular cultures, in local community action and management socializing expression resources and group and collective identification between social networks".

The analysis of the information disseminated by the committees of the Rio Grande do Sul through their internet communication channels has emerged elements related to access, information provision and use of social networks that guide this discussion. It is about the relationship of the information offered with the right to information, the institutional duty to inform, the relevance of publications, the reflections on citizenship processes and for participation in committees.

As previously seen, Law No. 12.527, which deals with access to information, imposes the duty to inform the public agencies of the direct and indirect administration, – included here, the Hydrographic Basin Committees, since, according to their creation Decrees, these are understood as agencies of State – which involves the production of information from the activities developed by them, of which the population wants to be informed.

In this sense, it can be seen that in the scope of RS, only 11 Committees have tried to ensure the fulfillment of this right, through virtual spaces, since, 14 do not use the internet to disseminate information or still fail to update it.

Of the committees that use the websites and Facebook to inform, many are limited to reproducing information promoted by other media, such as the commercial media, to the detriment of that produced by them and related to the activities carried out, which also contradicts the proposal of the law.

The Law is also clear in favoring the transfer of certain information, as referred to in Art. 2 of Law No. 10,650, with the administrations of the committees taking such care, in the sense of not only disseminating information of an institutional nature or, still, reproducing matters conveyed by commercial media. This, however, imposes a necessary review of the ways of managing information by the committees, which have shown to be conservative and not very seductive of the citizens for their participation in the committees.

It can be maintained that, when proposing such a duty to public agencies, both the Brazilian Constitution of 1988 and the information laws, aimed to implement a way of expanding citizen participation in decision-making processes, since political participation in the public sphere is conditioned to the preparation of citizens, which necessarily involves the exercise of the right to information.

In this sense, if the objective of informing is to expand participation, rather than disseminating information with an institutional character (such as agendas, addresses, contacts, dates of meetings, regulations, legislation and others), it is up to the Committees to take a new look at what to disclose, focused on the real needs of society and the demands of the place, allowing an identification by the citizen and, consequently, a greater involvement with the water issue.

Euler and Heldt (2018) in a study related to the information processes established in the Water Framework Directive, stated that the simple prediction of the right to information in the normative texts, even if considered a normative evolution, it is not able by itself to guarantee dialogue with the affected communities, given that the texts often denote a unidirectional information, providing for its simple sharing.

The realization of the exercise of the right to information requires the provision of possibilities for citizens to understand the complexity of fundamental water issues, so that they feel actively empowered (emancipated, capable of overcoming political domination and social dependence), to conquer the position of informed and participative actors in the committees, which is ultimately the guarantee of universal access to water suitable for human consumption.

As Gentilli (2012, p. 6) argues, "Information is a prerogative for citizens to have full conditions to make their choices. It relates to freedom of expression. It is the way in which freedom of expression and manifestation is currently manifested in the context of the State of law".

Understood as a right, information does not have an aim in itself, but a greater purpose, related to "the ability to facilitate the citizen's access to other declared rights", such as the right to

access drinking water. In a society that calls itself democratic, the expansion of citizenship through access to other rights cannot be a mere promise (GENTILLI, 2012, p. 6).

As the World Information Report of the United Nations Educational, Scientific and Cultural Organization (UNESCO) informs, "there is a big difference between having a right and being able to exercise it. Uninformed people are often deprived of their rights because they lack the power to exercise them. Access to information is a right we have, like access to justice, and should be guaranteed free of charge like other public services." (ORGANIZAÇÃO DAS NAÇÕES UNIDAS PARA A EDUCAÇÃO, A CIÊNCIA E A CULTURA, 1997, p. 282).

By exercising the prerogative imposed by law, public agencies contribute to a more active performance, consequently removing the position of opinion makers from the tutelage of market forces.

The making of choices and the free development of personality will only be ensured in a community with knowledge of plans, projects, policies and actions that can "compromise its life projects, or a plurality of existential, cultural, social and economically differentiated projects", without forgetting the strong and close connection of this right with the principles of human dignity (art. 1, III, of the FC / 1988) and the prevalence of human rights (art. 4, II, of the FC / 1988), contemplated in the Brazilian constitutional order as fundamental precepts of every citizen (MAZZUOLI; AYALA, 2012, p. 297-328).

The duty to ensure the right to information also involves other premises. Among these, the need for the use of language and texts accessible to the public, in general, is highlighted, avoiding the technical language, which must be translated to the point of allowing the understanding of the citizens to be informed.

Interministerial Ordinance No. 140 of March 16, 2006, which regulates the disclosure of data and information by the agencies and entities of the Federal Public Administration, through the world wide web - internet, can contribute to such prerogatives, especially with regard to results of the present study, because as mentioned, the use of simple and clear language with the support of images is not part of the disclosure dynamics of most Committees of RS. Articles 16, 17, 18 and 20 of the Ordinance provide that information must be presented in a simple and objective manner, using intuitive navigation resources for any citizen, without requiring specific computer skills. Regarding the technical content, the ordinance mentions that it should be preceded, whenever possible, by an introductory text and, accompanied by explanatory notes, in the form of screen tips and also reinforces the need for the pages to contain a glossary with the definitions, in language accessible to the citizen, of all the technical terms used in the presentation of the information (BRASIL, 2006).

As stated by Dowbor (2003, p. 2), society needs organized information that allows the informed action of the citizen, the company, the civil servant, the civil society organization,

otherwise it will succumb to the flood of sensationalist and interested information that disorient more than they inform.

Faced with a universe full of possibilities that the internet represents, making subjects such as those that permeate the daily practices of Basin Committees attractive and worthy of attention may, at present, constitute one of the greatest challenges for building the virtuality of environmental information, after all, as stated by Castells (2009), the use of horizontal communication networks to disseminate messages enhances political and cultural changes, since such a mechanism allows the autonomous production of information. The author points out the shift from public space to the virtual realm, which, even though it is larger and more interactive throughout history, is being disputed.

The potential for transforming these means is neglected by hydrographic basin committees when they demonstrate the pattern shown in the analyses. Precisely when virtual media enable autonomy in information management. Castells (2009) proposes to social actors to reaffirm the right to mass self-communication by doing their own communication management. This is because people form their ideas of things from the information that comes to them through communication networks, the source of most citizens, he says.

The simple transfer of information related to water, in a disjointed, decontextualized way and little depth in its complexity, does not meet what is considered the duty of the committees. An example of how information can contribute to the management of water resources is the current water crisis faced by the state of São Paulo. Rationing systems were organized at the last minute, which meant that many families were left without water. It turns out that the scarcity was announced, but not propagated. Data from the National Water Agency showed, even in early 2014, that the water balance in southeastern Brazil could compromise access to water. The state of Rio Grande do Sul also faces such a threat. In an article published in a large circulation newspaper in the state, reporting on a study by the National Water Agency, it was reported that the water balance of the RS is the second worst in the country (CIGANA, 2014).

How have the Committees of the RS worked with this information? Have the discussions on their internet pages contributed to a reflective positioning by citizens? How do they define the guidelines to be served by the committees in the internet spaces? Is the information connected with the other agencies? What criteria have guided the construction of the virtuality of environmental information? What is the distance that separates the committees from society?

Still regarding the disclosure mechanisms used, it is clear that those that adopt the social network called Facebook, demonstrate superficiality in the treatment of issues, which, however, may be a characteristic of such an instrument. However, the use of images and links make it possible to deepen the approach by sending to different sources, thus allowing the citizen to position himself before the news. A tool proliferates among different social profile.

Regarding the use of social networks, it is necessary to recognize that the possibility of any citizen interacting on the Committee's web page is also a way of democratizing the media, as it allows citizens to position themselves as producers of information. However, it was observed that the relationship is almost null on the Facebook of the committees.

It is also clear from the choices made by the investigated committees that the option for what to inform follows the logic of what the committees consider important to inform due to an endogenous need and not based on listening to society, which affects the absence of the population and of many representatives that take place and deliberate at committee meetings.

In this sense, the opening of communication channels to citizens, through spaces for comments, online participation, contact with members, may suggest an expansion in the processes of monitoring management and the progress of more efficient public policies and, above all, in a participatory and inclusive way.

In view of the demonstration of the low use of communication mechanisms in the virtual environment for the provision of information, since, as previously seen, only 11 Committees comply with the provisions of the legislation and partially, other questions arise. What is the legitimacy of the committees to decide on water resources, when they place themselves as a democratic and participatory space, but do not democratize information to attract participative and informed citizens to their meetings? How does the non-strategic use of own media affect the decisions made? Is it a carelessness or a strategic action to keep decisions about water use in the hands of a few, often perpetuating inequalities in access and commitment to market segments?

These and several other questions remain unanswered when the ways of reporting in the virtual environment used by the Committees of the RS are analyzed: Who is it intended to reach by informing how the data pointed out? Does the information conveyed, of an essentially institutional character, effectively allow the expansion of participation? Is the profile of the population that today accesses virtual information channels consistent with what is disclosed in these spaces by the committees? Are the different audience profiles covered? What drives committees' use of internet tools? To what extent is the concentration of information reflected in the concentration of power in the committees? How is information management carried out within the committees? Are the committees aware of the legal premises established regarding the committees' obligation to inform citizens? What do committees understand by reporting? How to offer a systemic look through the provision of information to manage water as is necessary for National Water Resources Plans?

Finally, when the study leaves so many questions, it indicates the need for further studies and also the perception that the investigated scenario shows that emancipated participation still stands as a promise for the future, given that in addition to the necessary overcoming of the difficulties related to the duty of informing, it is necessary to adapt these means that also consider cultural differences between recipients of information. Only from this turn will the country be able to counter criticisms about the information system, such as those presented by Geraldes and Reis (2012) in the sense that, throughout history, public agencies have failed to constitute a dialogue with the whole society when sharing information.

It is necessary to consider that this scenario also points to an undeniable reality: Brazil still lives the need to unleash public policies aimed at the realization of fundamental rights, especially social rights, so that, after basic needs are met, citizens can exercise their right to participate, without being subject to pressure from organized interest groups or even from the economic and intellectual elite.

In a context marked by the disclosure of information in a disorderly and complex manner, access to the right to information marks the re-entry of individuals and the community into the environmental political game. Sarlet and Fensterseifer (2018, p. 437) reiterate the importance of access to environmental information for the consolidation of ecological participatory democracy and classify this prerogative as a fundamental right relevant to constitutionally provided environmental protection. As the authors point out, "only the citizen who is duly informed and aware of the reality and the environmental problem is capable of acting in a qualified manner in the political process, giving rise to the autonomy and self-determination of his participatory political condition".

## **6** Final notes

The ways in which the Committees present themselves today go against the most elementary precepts of a conception of citizenship that is contemporaneously adequate. The idea of man being a social being, with rights and duties, goes beyond reality in the discussion on a theme that affects everyone.

The time is right for the disclosure of information, given that the Committees of the RSs are in full preparation of the so-called Basin Plans, which have the general objective of making water supply and demand compatible, in quantity and quality, for all points of the hydrographic basin. The information contained in these Plans are highly relevant tools for shaping public policies related to water and, therefore, cannot remain on the margins of society.

Finally, in view of the foregoing, it appears that the role of the Committees must be expanded when it comes to the implementation of the right to information. They must bear in mind that the correct use of their websites must be able to encourage the responsible participation of their members, aiming at building a society, not only "for me, or for mine", but for everyone, as this is the historic commitment that binds each Brazilian citizen, not only in relation to their peers, but also in relation to future generations.

Society needs permanent feedback instances, which necessarily guarantee access to information, since the risk of anti-democratic practices is permanent, due to the exhaustion of the

mobilizing forces of popular participation, due to "self-interest", selfishness and individualism, which, because they belong to humans, also permeates the management of committees.

Among so many, this is another challenge that is imposed on the present generation, which can only be effectively faced if it is possible to take consistent steps towards recognizing in the other someone who, even different, is the same as the one who is looking, and not a stranger to be protected from. Once this is overcome, each citizen becomes a zealous protector of water as a common good, not only because without this good his life becomes unfeasible, but also because the protection of water was entrusted to him by all the others, including those who still did not take the first steps in the most fantastic experience, which is human existence.

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