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The National Water Agency (ANA) mission is to implement and coordinate the shared and integrated management of water resources and to regulate access to water, promoting its sustainable use to the benefit of today's and future generations.

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Xingu River Rui Faquini / ANA Image Bank -



**ANA Headquarters in Brasilia** Raylton Alves / ANA Image Bank

# National Water Agency (ANA)

## www.ana.gov.br

The National Water Agency (ANA) is legally liable for implementing the National Water Resources Management System (SINGREH), created to ensure the sustainable use of our rivers and lakes for the current and future generations.

This implies regulating the use of water according to the mechanisms established by Law No. 9433, of 1997, amongst which the following stand out: the granting of rights to the use of water resources aimed at disciplining the use of water bodies, in relation to the collection of water and discharging of effluents; inspection, to assure that the grants are licenses effectively respected and not mere notarial formalisms, and The charge for use of the water, to assure that the water bodies are used with parsimony, in addition to making possible the generation of the necessary financial resources to recover and conserve rivers and lakes. These three mechanisms have being implemented in an articulated manner in each river basin, which requires harmony between the ANA and the water managing bodies and entities of the State Governments, as Brazilian rivers are under the domain of both the Federal Government and the States.

However, the regulation scope of the ANA reaches other management tools, also relevant to the effective performance of the SINGREH and represents the grounds for the good water management in the Country. In this regard, the Agency carries out actions of Management Support, Monitoring and Planning of Water Resources, in addition to offering Information for improvement of the performance of the water resources management agencies and of the sectors that use these resources.

Water resources plans, for example, allow diagnosing and guiding specific actions for water transfer to different users. Furthermore, it identifies constraints and opportunities for development of productive activities that use water as basic input.

ANA further stimulates the creation of river basin committees, particularly in rivers under the Federal Government's domain, which, in turn, promote the articulation of civil society representatives, water users, and public authorities, to build an agenda based on the protection of these basins, and harmonized with the sustainable development opportunities in their areas. Likewise, it promotes a set of programs and projects destined to the spreading of practices related to the use of the water resources, cleaning-up of water basins, and the dissemination of periodic information on the condition of the Brazilian water basins, among others.

In short, the ANA reconciles implementing skills related to the National Water Resources Policy and SINGREH, in addition to exercising the role of regulatory agency and good practices inducing agent in regard to water use.

# National Policy of Water Resources (PNRH)

Law No. 9433, also known as the "Water Law", came into force in 1997, establishing the National Policy of Water Resources (known as PNRH) and creating the National Water Resources Management System (known as SINGREH) and the National Water Agency (ANA). Considered to be innovative for producing a decentralized and participative management style, the Water Law is based upon six foundations:

- ♦ Water is a collective asset;
- Water is a limited natural resource endowed with economic value;
- In situations of water resources scarcity, priority of use will be given to human consumption and quenching animal thirst;
- Management of water resources should always provide for their multiple uses;

• A river basin is the territorial unit of implementation of the National Policy of Water Resources and of action of the National Water Resources Management System;

• Water resources management should be decentralized and count with the participation of the government, users and communities.

In order to ensure the rational management and sustainable use of water resources, Law No. 9433/1997 established the following management instruments:

- Plans for Water Resources
- The framework of water bodies in classes, according to the compelling uses
- The granting of rights to the use of water resources
- The charge for use of the water
- The System of Information on Water Resources

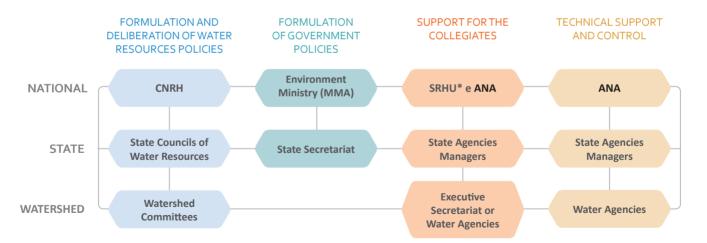
Based on such foundations and management instruments, ANA aims to make sure that different water usages are complementary, with one use not hindering another, also considering the need to prevent critical water-related events.



## National System of Water Resources Management (SINGREH)

Sensitive to the multiple demands on water resources and conflicts that could be generated or enhanced concerning the issue of water, the Federal Constitution of 1988 provided for the organization of the National System of Water Resources Management (SINGREH). It is a set of legal and administrative mechanisms; the System is designed to coordinate the integrated water resources management and to implement, in a participative way, the National Policy of Water Resources - established by the Water Law (Law no. 9.433 / 1997).

They integrate SINGREH: the National Council of Water Resources (CNRH); the National Water Agency (ANA); the state councils of water resources; the watershed committees; federal, state and municipal institutions responsible for water resources management and water agencies. Next, check the organization of the National System of Water Resources Management and the state systems.



\*Water Resources Secretariat and Urban Environment of the Environment Ministry.



## Granting of Rights to the Use of Water Resources

This instrument aims to ensure quantitative and qualitative control of water use and the effective exercise of rights of acess to water resources. ANA grants, through authorization, the right to use water resources in water bodies under federal jurisdiction, as well as issues preventive grants. ANA has also the responsibility of issuing the reserve water availability for hydroelectric purposes and its subsequent conversion into granting of rights to the use of water resources.

The following uses are not subject to granting of rights to the use of water resources, but their registration in CNARH are mandatory:

I - cleaning and conservation banks, including dredging, provided that they do not alter the system, the quantity or quality of water in the water body;

II - works crossing bodies of water that do not affect the quantity, quality or water regime, whose registration certificate must be accompanied by the Port Authority as to compatibility issues with navigation, and

III - uses to capture maximum instantaneous flow rates below 1.0 L/s, when don't exist other decision of the National Council of Water Resources (CNRH).

## Water Availability Reserve Declaration (DRDH)

The hydropower plants with installed capacity exceeding 1MW are subject to Water Availability Reserve Declaration (DRDH), issued by ANA, in the case of rivers of the Union domain, and by Brazilian state administration, in the case of Brazilian states domain rivers.

The Declaration is issued in favor of the National Electric Energy Agency (ANEEL) prior to the concession or authorization of the potential of the hydropower use - the purpose is to reserve the availability of the amount of water required for hydropower use. After the concession or authorization of the use of hydropower potential, DRDH is converted into water use right in favor of the hydropower plant owner.

Irrigation in Itaipulândia Zig Koch / ANA Image Bank







**Iraí River Dam** Zig Koch / ANA Image Bank

## Water Infrastructure Works Sustainability Certificate (CERTOH)

The Water Infrastructure Works Sustainability Certificate (CERTOH) is issued by ANA for construction of water infrastructure works for raw water storage or adduction, implanted of funded (all or part of it) with financial resources from Federal Government, whose values are equal or higher than R\$ 10 million.

In the analysis of water infrastructure works, the Agency observes the sustainability criteria, in operational and hydric perspectives, which means that the implantation of the water infrastructure works contribute to increase the water availability in the watershed, and the continuity of water infrastructure operation must be assured.

## National System of Water Resources Users Registry (CNARH)

The National System of Water Resources Users Registry (CNARH) constitutes one of the stages of the regularization process for resources, surface or underground water use, it thus demands for use in a particular watershed can be known in details. Therefor, the registration is the first step in the process of regularization of uses and can be performed directly on the System CNARH (http://cnarh.ana.gov.br).

The Registry is supplied by the water user or during the registration gathering process. Some of the main water resources management instruments such as grants and supervision are based on this registry. CNARH is also very important for framing water bodies in categories of use and for planning.

#### Public Services of Irrigation

ANA has the job to regulate and inspect Federal water resources, irrigation utilities under concession and the raw water supply. ANA is also responsible for creating regulations for the provision of such services, as well as setting efficiency standards and for the establishment of tariff, when applicable, and management and auditing their concession agreements.

Considering this assignment, ANA should regulate the new Federal Governments projects of Public Private Partnership (PPP) that deal with irrigation utilities projects. The Agency will also regulate the São Francisco Inter Basin Water Transfer Project (PISF), which is a development of water infrastructure consisting of two main Canals (North and East) and aims to integrate the São Francisco river basins to the semi-arid temporary rivers.



#### **Reservoirs** Operation

In order to fulfill its mission of safeguarding the multiple uses of water, as well as planning and promoting actions to prevent and mitigate the effects of droughts and floods, the National Water Agency proposes the operational conditions of reservoirs by public and private agents.

Every day, ANA monitors and analyzes the situation of the main reservoirs, observing their operational conditions and their operational restrictions, such as the maximum flow that can be released by a reservoir and the water storage levels.

ANA also produces daily, fortnightly and monthly Newsletters that report information and analysis of the situation of such reservoirs. Whenever it is necessary, special reports are published. Among the Newsletters available on the Agency's web site, the highlights are: São Francisco river, Paraíba do Sul river Hydraulic System, Cantareira System, National Interconnected System and the main Northeastern reservoirs.

## Dam Safety

The attributions of the Agency were later amended in 2010 (Law No. 12.334/2010, article 21) and a new three duties were established: to organize the National Dam Safety Information System (SNISB), to promote coordination among regulatory state agencies of dams and to coordinate the elaboration of the Report on Dam Safety and submit it annually to the National Council of Water Resources (CNRH).

#### Supervision

Supervision carried out by ANA comprehends three types of activities: supervision of water use; of dams safety ;and of federal public services grant for raw water adduction for irrigation scheme, which aims to ensure multiple water uses, in accordance with the conditions laid down in the act of water use grant. With a mainly preventive regime, the inspection goal is to guide water users on legal requirements and procedures for the settlement in order to prevent unlawful acts. However, supervision can also be repressive by imposing sanctions according to the law.



## SUPPORT TO WATER RESOURCES MANAGEMENT

#### The charge for use of water resources

Provided in the Water Law, the charge for the use of water resources was established with three objectives: to encourage the rational use of water, give the user an indication of its real value and obtain financial resources for the financing of the programs and interventions included in the Water Resources Plans. Since 2001, together with managers and state committees of watersheds, ANA develops initiatives to implement the charge in Brazil.

The collected funds are passed on in full by ANA the respective entities which delegates the water agency functions to be applied in water-environment improvements, in accordance with the plans of multi-annual implementation approved by the respective committees. The resources have made initiatives possible for the recovery of watershed areas such as, for example, the drafting and implementation of studies, plans and projects of basic sanitation, erosion control, restoration of degraded areas and environmental education.

#### Groundwater

In order to promote an integrated management of groundwater and surface water, ANA has a wide agenda of initiatives on these issue, according to the National Program of Groundwater (PNAS-PNRH), involving the extension of the national hydro-geological knowledge, the promotion of the application of National Policy of Water Resources in groundwater, from support to shared management of interstate and cross-border aquifers, as well as training specific technique.

#### Training in Water Resources

ANA develops initiatives in favor of training and awareness of Brazilian society in relation to water resources. The target audience is very varied: manager agents of bodies of water resources, members and watershed bodies leaders, users of water resources, opinion makers and young people. It also participates in the training of managing agents in several countries that ANA has international cooperation with.

#### Support to the Watershed Committees

One of the most important objectives of ANA is stimulating and providing support initiatives aimed at the creation of state bodies managers of water resources, watershed committees and water agencies. With this in mind, the present study aims to strengthen the implementation of the National Policy of Water Resources in a shared way, decentralized and participatory, in answer to the precepts of the Water Law.

The watershed committees constitute the basis of the National System of Water Resources Management (SINGREH), being a concrete example of democratic management. Public Authority representatives, civil society organizations and water users make up these associations. The creation of a committee is subject to approval by resolution of the National Council of Water Resources (CNRH), being subsequently released by Presidential Decree.

Watershed committee meeting Raylton Alves / ANA Image Bank





**Xingu River** Rui Faquini / ANA Image Bank

# PLANNING

### Water Resources Plans

It is the role of ANA, in partnership with public and private entities and agencies members of the National System of Water Resources Management (SINGREH), to elaborate planning studies, which include the water resources plans and the necessary guidelines for the application of financial resources of the Union in works and services of regularization of water bodies regularization, water allocation and distribution and water pollution control.

The water resources plans are strategic plans which aim to specify and guide the implementation of the National Policy and the management of water. The horizon of the planning is compatible with the period of implementation of the planned programs and projects. ANA has participated in the process of construction and revision of the National Plan of Water Resources, coordinated by the Department of Water Resources and the Urban Environment of the Ministry of the Environment (SRHU/MMA), and supervises its implementation.

In addition, the Agency coordinates or supports the drawing up of Water Resources Plans for the watersheds of rivers which belong to the Union (such as the São Francisco river; Verde Grande river; Paraíba do Sul river; Piracicaba, Capivari and Jundiaí rivers (PCJ watershade); Tocantins and Araguaia rivers; effluents at the right margin of Amazonas river; Paranaíba river; and Piranha-Açu river). This watersheds area correspond to 51% of the national territory with a popolation of 54 million.



## Atlas Brazil - Urban Water Supply

Atlas Brazil - Urban Water Supply, coordinated by the National Water Agency, consolidates a diagnostic work and planning in the areas of water resources and sanitation in Brazil, with a focus on urban water supply security.

All the water sources and production systems of Brazilian urban area were assessed and the necessary main works and actions of management to meet the demands by 2025 were listed. In addition, there are targeted actions of sewage collections and necessary treatment for the protection of water quality in the watersheds.

## Atlas of Vulnerability to Floods

Within its mission of preventing extreme events, ANA produced the Flood Vulnerability Atlas, which mapped the occurance and impacts associated to gradual floods in Brazilian main rivers. The Flood Vulnerability Atlas includes standardized information with national coverage about flood risk, which may assist the formulation of initiatives and public policies for preventing and mitigating negative impacts of these phenomena.



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# MONITORING

#### National Hydro-meteorological Network

It is made up by a set of stations distributed throughout strategic points nationwide, the National Hydro-meteorological Network is intended for collecting river data (level and flow of rivers, for example) and rainfall statistics (rainfall), subsidizing the decisions-making of water resources managers. With the collected data, information is generated which serve as subsidies to studies and projects that require the knowledge of water availabilities and of hydraulic potential of Brazilian watersheds.

Such data and information are strategic for decision-making by public managers for the mitigation of harmful effects of critical hydrological events (such as floods and droughts) and for the electrical industries (such as in the inventory of energy potential and operational management), transport (waterways and construction of bridges), agriculture (mainly in irrigation), as well as for other urban and industrial sectors. The hydro-meteorological information network under the responsibility of ANA currently has more than 4.5 thousand hydro-meteorological stations in operation. Some of them have telemetry, which makes it possible to track, in a short span of time, the data of rainfall and the level of the rivers in places of greatest interest for water resources management.

### National Program of Water Quality Evaluation (PNQA)

The National Program of Water Quality Evaluation (PNQA), developed by the National Water Agency, aims to increase the knowledge about the quality of surface water resources in Brazil, in order to guide the elaboration of public policies for the recovery of environmental quality in water bodies such as inland rivers and reservoirs, thus contributing to the sustainable management of water resources.

The construction of a National Network of Water Quality Monitoring is in progress to be operated by the states with the coordination of ANA. In addition, the Program provides training, quality improvement of laboratories carrying out analysis of water, evaluation and periodic dissemination of the results obtained with the monitoring and standardization of parameters and procedures.



### Situation Room and Monitoring of Critical Events

ANA Situation Room monitors the hydrological trends throughout the national territory, using the analysis of rainfall evolution and levels and flows variation in major rivers and reservoirs. The water forecast and the climate prediction are also considered in order to prevent or minimize the effects of extreme hydrologic events. This task is carried out under the National Water Resources Management System, in cooperation with the central body of the National Civil Water Resources Management System, in cooperation with the central body of the System and in support to the states and municipalities.

ANA Situation Room acts as a management center for critical situations and subsidizes the Board of Directors decision-making. It focuses in monitoring prioritized hydrographic basins, reservoirs systems existing hydrologic warning systems and declarations of Emergency Condition or Public Disaster.

In line with the principle of decentralized water resources management and in order to achieve greater integration, articulation and range of monitoring and prediction of critical hydrological events, ANA has been supporting, since 2011, the implementation of Situation Rooms in every Brazilian federative units, all of them linked to ANA monitoring center in Brasília.

ANA supports some of the Brazilian Hydrologic Warning Systems in compliance with its legal duties to plan and promote prevention and mitigation of droughts and flood. In addition to the existing warning systems, the Situation Room also issues announcements when a critical hydrologic event is detected (both flood and drought) in any monitored river or reservoir. This communication happens through reports, issued by the Situation Room with the frequency the event requires.

Ruler to measure the levels of rivers Cláudia Dianni / ANA Image Bank





Water Treatment in Curitiba Zig Koch / ANA Image Bank

## PROGRAMS AND PROJECTS

## Consolidation Program of the National Pact for Water Management (PROGESTÃO)

In a political and administrative articulation effort to support the implementation of the National Policy of Water Resources, ANA offers federation states the possibility of voluntarily joining the Consolidation Program of the National Pact for Water Management (Progestão), which grants funds to improve state water resource management.

The program relays up to five installments of R\$750 thousand per state, after confirmation of targets achieved, fixed by the federal and state governments, and approved by the respective Water Resources State Council. Examples of Progestãostimulated actions are: improvement of monitoring network, construction of database on water availability or concession of grants, basin studies and plans, training or charge for use of the water, and others.

## Program for the Development of the Water Sector (INTERÁGUAS)

The Program for the Development of the Water Sector (INTERÁGUAS) is an effort of Brazil to attempt to pursue a better articulation and coordination of initiatives of the sector. In other words, to create an environment where the areas involved with the use of water may articulate and plan their actions in a rational and integrated way in order to contribute for the strengthening of planning and management in the sector, especially underdeveloped regions.

### Water Producer Program

The Water Producer Program has as its main objective the environmental regeneration of watersheds with the payment for environmental services for conservation actions concerning water and soil in rural environment. With different institutional arrangements, the Water Producer provides technical assistance and encourages the adoption of practices that generate positive impacts on the quantitative and qualitative supply of water coming to the cities.

## River Basin Clean-up Program (PRODES)

The Program of Watersheds Depollution (PRODES) aims to reduce the levels of pollution by domestic sewage in Brazilian watersheds, improving the quality of water, in particular those which pose serious problems of water pollution caused by the disposal of sewage without treatment.

Prodes stimulates public service providers of sanitation to invest in deployment, expansion and operation of sewage treatment plants (ETE), by means of a contract. It does not finance directly works or equipment, nor does it carry out any payment to the service provider prior to the start of operation of ETE. The supplier is only paid after the start of the operation of the plants, in reason of the targets for reduction of pollution reached in sewage treatment.

## International Cooperation Program

Water resource management cooperation has gained growing importance on the country's international relations sphere. Brazil is internationally known for its progress in water-related policy implementation in the national scenario, and for its performance in international debates related to water management and integration with aspects of socioeconomic development and environmental protection.

ANA promotes and aims to provide feedback to the experience accumulated in the country by actions including technical assistance, training and exchange of good practices with countries and bodies, established by treaties of which Brazil is a signatory. Such actions favor cooperation with neighboring countries as well as Latin American and Portuguese-speaking countries of Africa and Asia. On the regional sphere, actions are developed in articulation with international bodies and agencies partnered with Brazil. In its international actions, ANA always counts with the support of the Brazilian Cooperation Agency of the Ministry of Foreign Relations (ABC/MRE).





#### State of Water Resources in Brazil - Report

The National Council of Water Resources assigned to ANA the responsibility for drawing up the State of Water Resources in Brazil – Report systematically and periodically. The publication is designed to be an instrument for the evaluation of the degree of implementation of the National Plan for Water Resources (PNRH) and the National Policy of Water Resources and to guide the revisions and updates of PNRH. The material is published with quadrennial periodicity (Report) and annual (Yearbooks).

The Report presents an overview of the past four years in the water resources sector and reveals the situation of water resources and its management throughout the country. The Yearbooks are intended for providing updated information in the Report of the the interval between their edits and has as their objective to evaluate the changes relating to the previous year. The first version of the Report was released in 2009.

#### National Water Resources Information System (SNIRH)

The National System of Water Resources Information (SNIRH) is one of the management instruments of the National Policy on Water Resources. This instrument is intended to: gather, give consistency, share data and information aboot the qualitative and quantitative status of water resources in Brazil, permanently update de information on the availability and demanda of water resources, in addition to cprovide inputs for the elaboration of Water Resorces Plans

In order to achieve these purposes, SNIRH comprises computer subsystems, integrated database, computer infrastructure, integrational plataform and human and organizational resources. The National Water Agency, in compliance with the principles, purposes and guidelines of the National Policy of Water Resources, is responsable for organizing, implementing and managing the SNIRH.



Since 2006 the National Water Agency promotes the ANA Award every two years. The goal of the award is to recognize Brazilian initiatives that stand out for the excellence of its contribution to the management and sustainable use of water resources, promoting the fight against pollution and waste. Caixa Econômica Federal bank is the sole sponsor since the first edition.

Projects from all over the country have already participated in the ANA Award representing various sectors, such as: business, Government, media, non-governmental organizations, watershed bodies, among others. For further information on the projects that were once finalists and winners of all the Award editions, access the Bank of Projects website on http://premio.ana.gov.br. The goal of the page is to disseminate good practices so that they can all be replicated throughout Brazil.

The winners of each category receive the ANA Award Trophy, a piece that was exclusively created by the Italian glazier Mario Seguso for the Award.





Public Hearings audienciapublica.ana.gov.br	The main goal of the public hearings carried out by ANA is to collect subsidies and information from the society for substances in analysis, as well as offering to the interested parties the chance of submitting its claims, opinions and suggestions which are related to the subject in question. The procedures for hearings, throughout their execution, can rely on the realization of public sessions in person or not.
Virtual Library www.ana.gov.br/bibliotecavirtual	It is intended for knowledge construction and sharing, and aims at storing, retrieving and disseminating information of the Union water resources area.
ANA Image Bank www.ana.gov.br/bibliotecavirtual/ imagens/default.asp	ANA Image Bank contains images about all activities of the Agency and about all main Brazilian river basins. The material is available for free to all the interested parties, who, respecting the ANA rights of property and the politics of image use, can use them for the most diverse purposes, except for commercialization.
Hidroweb System hidroweb.ana.gov.br	The Hidroweb System offers meteorological data related to rain, the levels of the rivers, the daily average flows, water quality, suspended sediments, transverse profiles of the rivers and the liquid disposal measurement summaries.
SNIRH www.ana.gov.br/portalsnirh	SNIRH's site contains the following content: information about the National Water Resources Information System (SNIRH); documents drawn up in the project's scope; articles on the system and the management of water resources; news about the SNIRH development, etc.
Telemetry www.ana.gov.br/telemetria	The hydro-meteorological data (level, rain and flow) are received in real time by network automatic transmission data of telemetry stations.
CNARH cnarh.ana.gov.br	With this tool, each of the users can voluntarily fill out data relating to the use of water, in addition to checking and correcting information on-line whenever the use is changed.
General Protocol srv-anacad.ana.gov.br/proton/protocolo.asp	All citizens can see and monitor, at any time, the procedures and documents filed in the Agency.
Granting Application www2.ana.gov.br/Paginas/servicos/ outorgaefiscalizacao/agilize.aspx	ANA offers on Internet all the services that are required to regulate the use of water: from its registration to the issuing of granting rights for water resources use.



f	ANA's Facebook page ( <b>www.facebook.com/anagovbr</b> ) contains news published on the institution's site (www.ana.gov. br), videos and photos from its Image Bank, tips for the rational use of water, a glossary of water resources terms, tips on services and campaigns.	Facebook www.facebook.com/anagovbr
B	ANA's profile on Twitter ( <b>www.twitter.com/anagovbr</b> ) contains news published on the institution's site, videos and photos from its Image Bank, tips for the rational use of water, a glossary of water resources terms, tips on services and campaigns. It also retweets water-related topics posted by profiles followed by ANA, as well as promotional actions with its followers.	Twitter www.twitter.com/anagovbr
You Tube	ANA's YouTube ( <b>www.youtube.com/anagovbr</b> ) channel has a library containing institutional videos and animations about the Agency and water resources, videos sent in by participants in contests, interviews and news reports. The videos are separated into themes such as: campaigns, sanitation, water quality, management, monitoring of rivers, etc.	YouTube www.youtube.com/anagovbr
	The National Water Agency offers a Contact Us service on its site ( <b>www.ana.gov.br</b> ) where it answers queries from citizens. So the institution has compiled a list of responses to most frequently asked questions, including different issues under its competence, and also issues that go beyond its attributions. In case the query is not answered at a first moment, users can send a request for access to information, as provided by the Access to Information Law (LAI).	Contact Us http://www2.ana.gov.br/ Paginas/EN/Contact.aspx
	In order to comply with the Access to Information Law (Law no. 12527 of November 18th, 2011), the National Water Agency offers the Citizens Information System (SIC), through which the population may submit requests for access to information relating to ANA, using an e-form.	Citizens Information System (SIC) http://www2.ana.gov.br/Paginas/ acessoainformacao/sic.aspx



