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Notes

Evolution of water law and approach to the solution of water disputes in Peru

Evolución del derecho de aguas y aproximación a la solución de controversias hídricas en Perú

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Abstract

In this research, an analysis of the historical evolution of the water law of Peru is carried out and the results obtained by the National Court for the Resolution of Water Disputes of the National Water Authority during the period 2014-2020 are discussed. The institutions that manage and resolve disputes over the use of water have evolved. Since colonial times, written water regulations in Peru are abundant. Twelve years ago, Peru began an important change in the management of its water resources, creating in

2008 the National Water Authority and enacting the Water Resources Law in 2009. The latter contemplates a functionally independent body to resolve water disputes in the second and last administrative instance, it is the National Court for the Resolution of Water Disputes, whose performance is analyzed in this work. It is expected that the contribution will help improve the performance of the institution in the solution of water disputes, while increasing the culture of water as a wealth of knowledge achieved by research.

Keywords: TNRCH, water legislation, ANA, water law water disputes.

Resumen

En esta investigación se lleva a cabo un análisis de la evolución histórica del derecho de aguas de Perú y se discuten los resultados obtenidos por el Tribunal Nacional de Resolución de Controversias Hídricas (TNRCH) de la Autoridad Nacional del Agua (ANA) durante el periodo 2014-2020. En Perú, el derecho de aguas ha evolucionado desde los tiempos coloniales. En 2008 se inició un importante cambio en la gestión de los recursos hídricos, creando la ANA y promulgando la Ley de Recursos Hídricos en 2009; en esta última se contempla la creación del TNRCH, órgano colegiado que resuelve en segunda y última instancia administrativa. En este trabajo se dan los resultados de dicho órgano colegiado. Se espera que el aporte coadyuve a mejor el desempeño de la institución en la solución de las controversias hídricas incrementando la predictibilidad.

Palabras clave: TNRCH, legislación hídrica, ANA, controversias hídricas, derecho de agua.

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Introduction

The vision of norms as a mechanism that regulates the behavior of people is extensive in the case of water management and the solution of water disputes. Throughout history there have been significant events in the management and development of works for the use of water. Water has been a subject of systematic measurement and scientific study since the 17th century (Guevara-Pérez, 2012).

Since ancient times, water management has referred to agricultural management; that is, to irrigation, because that was the main use (Guevara-Pérez, 2015; Guevara-Pérez, 2016) and in that sense the Water Law has emerged. In Peru, the water regulations have been in force for many more years than the Constitutional Letters themselves: from 1898 to 2006 there were four Constitutions and only two Water Laws. Currently, water legislation refers to integrated and multisectoral management, due to the evolution of other user sectors, some of them highly prioritized (Guevara & De-la-Torre, 2019). In 2008, the National Water Authority (ANA) was created; in 2009 the Water Resources Law (LRH) was enacted and in 2010 its Regulations (RLRH) (República del Perú, 2010) were

approved. This law establishes that the ANA is a decentralized body attached to the Ministry of Agriculture and Irrigation, rector and leader of the National Water Resources Management System, articulator of state actions, driver of integrated management processes and conservation of the water quality, ecosystems and associated assets. The highest authority is the Board of Directors and below it in the institutional organization chart are the Head of ANA, the National Tribunal for the Resolution of Water Controversies (TNRCH), the General Management, five Line Directorates, Support offices (Administration, Programming and Budget, Legal Advice); and, as decentralized bodies, 14 Administrative Water Authorities (AAA), 72 Local Water Administrations (ALA) and Basin Water Resources Councils (CRHC). For the first time, Peruvian water legislation contemplates the creation of the TNRCH, a functionally independent and autonomous collegiate body to resolve water disputes at the national level in the second and last administrative instance (ANA, 2018; Gonzales-Barrón, 2021; Bocchio-Carbajal, 2022).

This paper analyzes the historical evolution of Peru's Water Law and the results obtained by the TNRCH, which will constitute tools to improve the performance of the National Water Authority.

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Literature review

Role of the Curaca in the Andean worldview. In the Andean worldview, nature is conceived as a living organism, highly sensitive, capable of responding generously to good treatment and ferociously in the face of aggression. The river is the axis of orientation, it defines the directions of the locations: up, down, left and right. People live, work and walk on the Andean slopes, in the coastal valleys and on the Amazon riverbanks. The river is a source of life, it energizes the towns and it is the guiding axis of the activity of the towns (Milla-Villena, 2008). The Curacas were the axis of the political system and transcended the formation and dispersion of the different Andean empires and the regional manors. They were the authority and those who had the capacity to ensure order and facilitate the functioning of the system. The importance of the Curaca is revealed in the management of resources, decentralization, perception, regulation, investment and distribution (Ramírez-Horton, 2000; Ramírez-Horton, 2002; Amat-y-León, 2012).

The Water Judges of Corongo. The Traditional System of Water Judges of Corongo is an organizational structure created by the inhabitants of that town in northern Peru, which manages the water supply and cultivates historical memory at the same time. The origins of this system go back to the pre-Inca period and its primary objective is to achieve an equitable and sustainable supply of water, as well as proper land management. Its highest authority is the water judge, who is responsible for the management of water resources based on three fundamental principles: solidarity, equity and respect for nature

(Ministerio de Cultura, 2015). The Inca culture would have implemented three norms of social coexistence: *ama sua* (don't be a thief); *ama quella* (do not be idle); and, *ama llulla* (don't be a liar) that would be in force, also in water management, until the beginning of the colonial era in the fifteenth century.

Tribunal de las Aguas de Valencia, Spain (Water Court of Valencia). The Tribunal de las Aguas de la Vega de Valencia is a Justice institution in charge of resolving conflicts arising from the use and exploitation of irrigation water between farmers of the Irrigation Communities of the ditches that are part of them. It meets every Thursday of the year (except holidays and those that go from Christmas to Kings) at the Puerta de los Apóstoles of the Cathedral of Valencia; it is of the intangible cultural type (Bonet-Navarro, 2014). According to Thomas Glick (Glick, 1967; Glick, 1968; Glick, 1970), the origin of the Tribunal de las Aguas would not be due to any king or caliph, but it would be an institution of very long evolution. It is likely that the step to convert from a meeting of *sequiers* (channels operators) into a Court as it is conceived today took place precisely in the same years in which Borrull defended his permanence in the Cortes of Cádiz, with the aim of adapting it to the jurisdiction of the State. Liberal (Pérez-García, 1989).

The Council of Good Men of Murcia, Spain. The Council of Good Men is a customary court in charge of resolving irrigation conflicts in the Huerta de Murcia, created in 1848, whose rules and authority are given by tradition and custom. In 2009 it was chosen, together with the Water Court of Valencia, as Intangible Cultural Heritage of Humanity by UNESCO. The judgments of the Council of Good Men are oral; usually a

notary public retrieves the declarations. The instance is chaired by the Mayor or his delegate with casting vote in case of a tie and who is responsible for carrying out the resolutions. It also has the power to fine members who do not attend meetings. The Council of Good Men is made up of five titular Members and five Attorneys. Its objective is to rule on and resolve the questions and demands regarding infractions determined in the ordinances of the garden. The Water Court of Valencia and the Council of Good Men have been recognized as customary courts by the Organic Law of the Judiciary of Spain.

Latin American Water Tribunal (TLA). Faced with environmental problems due to the misuse of natural resources, the TLA was established in 1998 and met for the first time in San José, Costa Rica in 2000. Initially, the actions of this court were circumscribed to the Central American isthmus; but after about twenty years this court began to hold Public Judgment Hearings at the Latin American level with cases from Mexico, Central America, Ecuador, Bolivia, Brazil and Chile (www.tragua.com). The decisions of the Court are not binding on the parties; it is only a court of Ethics in the management of water resources. The public hearings held by the TLA function as spaces for oral and public discussion and controversy, from which technically and scientifically based criteria and recommendations are generated.

National Tribunal for the Resolution of Water Controversies of Peru (TNRCH). The TNRCH was created by the LRH as a functionally independent and autonomous body to resolve water disputes. It is the Collegiate Body composed of five members that, at the national level, resolves in the second and last administrative instance the appeals filed

against the administrative acts of the decentralized bodies and line bodies of the ANA regarding the rights of use of water, sanctioning procedures for water infractions and associated assets, among others, with predictability, legal certainty and independent application of the law (Guevara-Pérez, E., & Aguilar, J. (2015). To fulfill its functions, the TNRCH is made up of a Technical Secretariat headed by a legal professional; analysts legal and technical; secretarial and administrative support; and technical support in archiving and digitization. The administrative resources are grouped into subjects and sub-subjects which are described in Table 1.

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Table 1. Subjects and sub-subjects in which the administrative resources introduced by users or administered have been grouped.

No.	Main subject	Secondary subject
1	Sanctioning administrative process (PAS)	1) Use or divert water without rights; 2) build or modify structures without authorization; 3) contaminate natural water sources; 4) carry out dumping and reuse of wastewater; 5) throw solid waste into bodies of water; 6) occupy or divert the channels and marginal strips; 7) change the use of water or the properties; 8) use water with higher flows or volumes; 9) transfer or assign the waters to third parties; 10) non-payment of financial remuneration or fees; 11) maintain the hydraulic infrastructure in poor condition; 12) prevent or hinder inspections; 13) not timely notice about the non-use of water; 14) subtract or impede the use of water; 15) damage, destroy or obstruct hydraulic works; 16) failure to give timely notice of the no use of water; 17) subtract or impede the use of water; 18) damage, obstruct or destroy hydraulic works; 19) others
2	Right to use surface water	1) License (ordinary procedure, regularization, formalization and modification; 2) permit; 3) authorization; 4) extinction and granting; 5) other
3	Right to use surface water	1) License (ordinary procedure, regularization, formalization and modification; 2) termination and granting; 3) ban; 4) other
4	Marginal strip	1) Delimitation; 2) occupation
5		Discharge authorization
6		Authorization of reuse
7	Economic regime	1) Economic remuneration; 2) fee
8		Hydraulic infrastructure
9	OUA	User Organization (OUA)
10	Inhibition	
11		Withdrawal or abandonment
12		Contestable dumping authorization
13	Other matters	

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Materials and methods

The investigation is carried out in two phases: 1) Analysis and evaluation of the historical evolution of the Water Law of Peru and; 2) Analysis and evaluation of the results obtained by the TNRCH during the 2014-2020 period.

For the first phase of the work, a methodology based on investigations of secondary sources was followed, compiling information on the historical development of legal law, water law and water legislation in Peru. A comparative analysis of the regulations and the solution of water disputes over time is carried out using information from academic works, scientific publications and other sources of information. In the second phase, the statistical information of the results obtained by the TNRCH of the ANA of Peru in seven years of operation (2014-2020) extracted from the ANA repository and the TNRCH database for the same period is processed.

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Discussion of the results

Analysis of the historical evolution of the Water Law of Peru

The right to water derives from the management of the resource and the management of the infrastructure for its use; its historical antecedents go back to the beginning of civilization. In Genesis, Anraphel, King of Shinar, contemporary of Abraham, is cited, and he is probably the same Hammurabi, sixth King of the 1st Dynasty of Babylon, who promulgated the so-called Code of Hammurabi, which dates from the year 2000 BC of whose content, the dependency on irrigation is deduced (Lara, 1982; Guevara-Pérez, 2015; Guevara-Pérez, 2016; Academia Play, 2018).

The ancient Chinese proverb *to rule the mountains is to rule the waters* reveals the general principle learned from these events: that upstream watershed management is necessary to control downstream flooding (Bennett, 1939; Chang, 2013). In China, well water has been used for more than 6000 years and hydraulic works for irrigation and flood control 3000 b.C. (Young, 1985; Wang, 1983; cited by Chang, 2013).

In the Middle East, the peoples of Assyria, Babylon, Egypt, and Israel began construction of water supply and drainage systems about 5 000 years ago. The oldest known dam was built in Egypt around 3000 b.C. to store drinking water and for irrigation (Boyer, 1964).

In Europe, the Romans built numerous aqueducts to provide water to the cities and industrial sites in their empire.

In the 13th century, Louis VI of France promulgated the Decree on Waters and Forests in 1215, considered the oldest written document in the West on the relationship between waters and forests Andréassian, 2004).

The first antecedents of legal systems date back to the time of the Romans and with regard to water, Roman Law is eminently liberal and private; however, the water separated from the source or natural course, either by container or by technical artifice, leads to the cessation of the legal regime of water, becoming a common and ordinary piece of furniture. The legalistic scheme of waters came to Latin America through Indian legislation, common during the viceroyalty, although, in the Peruvian case, the pre-Columbian normative system of water uses and customs remained in force during the 19th century. In general, there has been an evolution from the absolutist monarchy to the republican states with Constitutions and Civil Codes (Gonzales-Barrón, 2021; Biondi, 2003; Vergara, 1998; Novoa, 1979; Atienza & Ruiz, 2006).

Water law has gone through several stages. In the beginning, it was only a set of civil norms that regulated the water problem, in addition to rules that recognized its character as a common thing in the great rivers, which existed from Roman Law until the advent of Modern States. Then, the regulation was modified from the fifteenth to the nineteenth century, when the water of certain rivers was considered royal heritage, with the consequent payment of royalties by those who required its use. Subsequently, the regulations became part of Agrarian Law, considering that land and water make up the productive unit. Later, the Water Law gains autonomy, not only because the resource becomes public, totally or

almost totally, but because it is linked to agriculture and all productive activities; In addition, the relevance of the environmental and technical variable is increased. Consequently, water law becomes a legal discipline with a strong dose of autonomy and a large number of regulations. In this way, contemporary water law can be defined as the set of legal principles and rules that regulate the different legal relationships that arise around the proper planning and management of inland, surface or groundwater, in such a way that allows the sustainable use of the resource, in harmony with vital environmental, social and cultural purposes, conserving the hydrological cycle, ecosystems, water quality and associated goods. This condition requires that the water resource have the status of a public good (Gonzales-Barrón, 2021; Embid-Irujo, 2012).

According to Embid-Irujo (2007), contemporary water law is largely located within public law, and more specifically, administrative law. Basically it is domestic law. Its technical base is based on different areas: hydrology, geology, engineering, agronomy, climatology, geographic information systems and biometrics. It enjoys an important environmental base; it contemplates hydrological planning as a fundamental piece of the discipline covering all the waters that make up a natural cycle, and hydrological information for the purpose of knowing the water availability, the potential demand, the reality of the basin. It has very marked sociological roots; the use of water takes into account the users, their organizations and uses or customs, so it delegates to them a part of the operational management of water resources. It is dynamic by essence; the changes of circumstances in the hydric, environmental,

social, productive and technological variables, entails the need to constantly update, adapt or modify the regulations.

As for Peru, since the beginning of the colonial period, there have been regulations as particular as the texts written by specialists of the time, without legislative authority. These norms, specifically applied to coastal valleys, acquired the status of private-official regulation, first as uses, then as legislated law, which governed during the colony and lasted until the 20th century. Then there was a state-official regulation, with the Water Code of 1902 (CA), the General Water Law of 1969 (LGA) and the Water Resources Law of 2009 (LRH) and a multiplicity of regulations, directives and guidelines approved by technical bodies. Water law also underwent a radical transformation, in principle, considered part of civil law, with few administrative provisions, in which private property over water resources was partially recognized, until reaching opposing legislation, with a publicist criterion of waters, throughout the hydrological cycle and a single national authority (ANA) in charge of the integrated multisector management of water in harmony with its nature as a source of life, its economic, environmental and social value, finally enshrined in the Constitution itself through of Law 30588, of Constitutional Reform of 2017, whose Article 7-A indicates: "The State promotes the sustainable management of water, which is recognized as an essential natural resource and as such, constitutes a public good and heritage of the Nation. Its domain is inalienable and imprescriptible" (Gonzales-Barrón, 2021; Bocchio-Carbajal, 2022).

Pre-Hispanic era. The great pre-Inca cultures, Chavín (1000 b.C.), Mochica (900 a.C.), Chimú (1400 a.C.) and Nazca (1400 a.C.) stood out

in the management of water resources, having agriculture as their economic base. The Incas developed a specialized body of administrators and managers who worked alongside experts in hydraulic works, recruited from the preceding cultures. A population of about 10 million inhabitants was fed by the production of irrigated surfaces estimated at 750 thousand hectares on the coast and 350 thousand hectares in the mountains, which were made possible by the administration and conservation of its water resources (ANA, 2013).

The Peruvian water system in the Inca Eempire is associated with the Inca worldview. The importance of water in the economic, social, political and territorial organization of Inca Cusco is remarkable. Due to the association of land and water, the history of the management of water resources in Peru and its legislation are related to agriculture as the main economic activity in the general development of the country, and also include the history of the defense of human rights of water, under equal conditions for all its uses, which have been consolidated in recent years.

Colonial era. In 1532 the Spanish arrived and found a vast empire, with an immense geography and enormous natural resources. Then the first cities of Hispanic court were founded throughout the country: Piura, Jauja, Lima, Cuzco, Huamanga and Arequipa, and all of them set down the founding act in writing in the books of the nascent councils, having as a primary requirement for their establishment the existence of a place with abundant water sources. During the Spanish colonial period, the orientation of the economy towards mining exploitation, and the reduction of the population, caused the crisis of agriculture and, with it, that of the management of water resources. The first attempt to organize the

distribution of water was in 1558, when a book of water ordinances for the city of Lima was created (ANA 2013).

Given the seasonal hydrological regime with intense rains and prolonged periods of drought, different provisions were later issued for its good administration. In 1536, Emperor Carlos V ordered that:

> "(...) the same order that the Indians had had in the division and distribution of waters, be kept and practiced among the Spaniards in whom they had distributed the lands and that for this they intervene the same natives who had previously been in charge, with whose opinion they should be watered (...)".

In 1550, the Spanish crown appointed Water Judges to resolve conflicts in water matters (Guevara-Pérez, 2015; Gonzales-Barrón, 2021).

Viceroy Andrés Hurtado de Mendoza created the Private Water Court of the Royal Court of Lima (1556) and appointed a Water Judge (Lizarzaburu, 2018). Viceroy Toledo, after visiting the Rímac river valley, concluded that a more severe regulation was needed since the indigenous people continued to be the object of abuses in relation to water distribution; This is how, in 1577, he elaborated the Ordinances of Toledo, a very specific legal framework for the use of the resource and the water infrastructure: The ordinance on the distribution of waters from the Lima Valley. One of the aspects that was regularized with this measure was the

amount of water that should enter the houses and farms, as well as pointing out the responsibility that the owners had in the maintenance of the ditches.

In 1660, Antonio Saavedra y Leyva promulgated the Water Regulations for the Chicama, Moche and Virú valleys, which came into operation in 1660. The Lima Water Judge issued the Cerdán Regulations, published in 1793 (Guevara-Pérez, 2015).

There are no references to the administrative and judicial processes that resolved water disputes, apparently the councils were in charge of that.

Republican era. The laws given in the Colony continued to govern the use and distribution of water in the Republic. Eight decades later, the 1902 Water Code was passed, as a result of the modernization and expansion of coastal agriculture, the expansion of irrigation systems and the boom in agricultural products for export between 1890 and 1920 (sugar cane and cotton), since water was the fundamental and conditioning element for this accelerated agricultural development of the coast. This is how the Water Code was approved, clearly influenced by the Spanish Water Code of 1879, which some criticized and considered simply a copy of that Spanish regulation (Guevara-Pérez, 2015). The Code has a marked liberal bias and manages to recognize property rights over the water to the owners through whose land it runs; even more so, if the source originates in those properties. This Code allowed the consolidation and growth of farms, to the detriment of indigenous communities and small owners (Burga, 2019).

Due to the conflicts caused by the power that the landowners exercised over the small farmers or indigenous people, the government was forced to reform the Water Code and create a body with state officials made up of engineers or technicians in charge of monitoring the work around irrigation and avoid the abuses that were committed in the distribution of water to the detriment of the indigenous people. In 1911, the Department of Water and Agriculture was created in the Ministry of Public Works, and in that decade the Technical Commissions of Lambayeque, La Libertad, Lima and Ica were also created, headed by an administrator, an engineer or a technician, who directed the work around irrigation and water distribution (Guevara-Pérez, 2015). These commissions were in charge of settling water disputes.

The Political Constitution of Peru of 1933 was the first constitutional text that dealt with natural resources, establishing that they all belong to the State. That norm would have drastically modified the Water Code, if article 37 of the Constitution had not exempted, as an exception, the so-called acquired rights, an exception that allowed the Code to remain in force until the promulgation of the General Water Law (LGA) in 1969.

In 1969, the General Water Law (LGA) was enacted one month after the Agrarian Reform Law, repealing the 1902 Water Code. This law came to be a vindication of the state as owner of the water. It was conceived from the outset as a complementary norm of the reform process, as is clearly seen in article 1, by declaring that the waters without any exception are property of the State, and their domain is inalienable and imprescriptible. There is no private ownership of the waters or acquired rights over them, ignoring at the same time any acquired right over them.

During the term of the LGA, water disputes were resolved by the Irrigation District Technical Authorities (ATDR) and the Regional Offices of the Ministry of Agriculture.

Current water regulations of Peru (2022). 14 years ago, Peru initiated an important change in the management of water resources: first, in 2008, creating ANA as the institution in charge of management; then, in 2009 with the promulgation of the LRH (No. 29338) and, in 2010, approving the Regulation (RLRH) and creating the Basin Water Resources Councils (CRHC). For the first time in Peruvian legislation, a specific administrative process is contemplated to resolve water disputes, providing that the decentralized and line offices of the ANA are the first-instance investigating bodies; and, establishing in Article 22 of the LRH the creation of the TNRCH as a functionally independent body to resolve the controversies in the second and last administrative instance, coming into operation in 2014.

With the new legislation, there was a shift from a sectoral (agrarian) water management vision by irrigation district, to operating with a broad vision of integrated multisector management by basin.

The basic structure of the ANA is made up of the following bodies: Board of Directors; Leadership; TNRCH; support, advice and hotline bodies; decentralized bodies, called Administrative Water Authorities (AAA), Local Water Administrations (ALA) that depend on the AAA. LRH No. 29338 and its Regulations regulate the use of water and the management of water resources; including surface and subterranean water, continental, and the goods associated with it; it extends to maritime and atmospheric water where applicable. The LRH is structured

in 13 titles, 10 chapters, 4 subchapters and complementary provisions, based on three fundamental pillars, social, environmental and economic, and on the 11 principles indicated below (ANA, 2018; Gonzales-Barrón, 2021; Bocchio-Carbajal, 2022): 1) Sociocultural, economic and environmental assessment of water and integrated water management; 2) priority in access to water, for the satisfaction of primary needs; 3) participation of the population and water culture; 4) legal certainty, whether public or private or in co-participation; 5) respect for the uses of water by peasant communities and native communities; 6) sustainability; 7) decentralization of public water management and single authority; 8) precautionary principle, on the danger of serious or irreversible damage or extinction that threatens water sources; 9) efficiency and conservation; 10) participatory integrated management by hydrographic basin; and, 11) legal guardianship: protection, supervision and control.

Discussion of the results obtained by the TNRCH

Binding Precedents (VP). In the 2014-2020 period, the TNRCH has established 11 binding precedents to fill the regulatory gaps that have been found in the analysis of the files that give rise to the resolutions. Below is a summary indicating the number of the resolution and the subject that has been regulated:

1. Resolution No. 139-2014-ANA/TNRCH: The infractions on used water pouring are configured.

2. Resolution No. 170-2014-ANA/TNRCH: The permit for the use of water for wastewater is required.
3. Resolution No. 190-2014-ANA/TNRCH: The minimum data content that a Water Use Rights (license) must contain is established.
4. Resolution No. 405-2014-ANA/TNRCH: The RADA (register) has a declaratory nature of Water Use Rights.
5. Resolution No. 052-2015-ANA/TNRCH: For industrial users of an EPS. It is specified that they can use the reused water for the same purposes as their main activity.
6. Resolution No. 614-2015-ANA/TNRCH: The scope of productive use of water use is established.
7. Resolution No. 769-2015-ANA/TNRCH: The Notification of delimitation of the marginal belt is established.
8. Resolution No. 326-2017-ANA/TNRCH: The scope of Article 22 of the LRH is clarified in order to know the appeals for review.
9. Resolution No. 451-2017-ANA/TNRCH: It is established that there is no appropriate intervention by third parties after the administrative procedure has been resolved.
10. Resolution No. 727-2017-ANA/TNRCH: The TNRCH is declared incompetent to pronounce on issues of electoral processes of the Water User Organization.
11. Resolution No. 730-2017-ANA/TNRCH: It is established that the delimitation of Hydraulic Sectors is an ex officio activity and cannot be subject to challenge by users.

Four of the precedents have been developed during the year 2014; three during 2015 and the remaining four in 2017. No regulatory gaps have been detected in the files resolved in the years 2018 to 2021. This is because the subject of the files is repeated and in many cases, established precedents have already been used. Due to the fact that the precedents are of obligatory application, the related casuistry has decreased, increasing the predictability of the TNRCH.

Discussion of the results of the TNRCH. Table 2 presents the statistics of the resolved files and the corresponding resolutions issued by the TNRCH during the 2014-2020 period. The files that were already in the ANA files before 02-24-2014, the date established for the installation of the collegiate body, have been called "liabilities":

Table 2. Summary of the number of files that the TNRCH has received and resolved during the 2014-2020 period.

Year	Entering files	Solved files	Unsolved files
Liabilities	557		
2014	680	478	759
2015	537	853	443
2016	707	666	484
2017	1486	1163	807
2018	1646	2033	417
2019	1238	1452	203
2020	573	573	203
Total	**7424**	**7218**	**206**

On February 24, 2014, the date on which the TNRCH was installed and began its activities, there were 557 files (liabilities) in the files of the OAJ (Office of Legal Counsel); 680 new ones entered in 2014; 537 in 2015; 707 in the year 2016; 1,483 in 2017; 1,646 in 2018; 1,238 in 2019; and 573 in 2020; which makes a total of 7424 files. With the exception of the year 2020 affected by the COVID 19 pandemic, the number of administrative files that entered the TNRCH had a growing trend; Probably due to the fact that the level of predictability of the authority in the solution of the cases increased with the creation of the TNRCH as a collegiate body specifically oriented to the resolution of water disputes.

The solution of administrative files is expressed as resolutions issued by the TNRCH. In 2014, 478 were resolved; in 2015, 853; in 2016, 666; 1,163 in 2017; 2033 in 2018; 1,452 in 2019; and 573 in 2020, accumulating a total of 7,218 cases resolved during the 2014-2020 period. The resolution of administrative files (issuance of resolutions by the TNRCH) has not had the same trend as income. This can be attributed to the administrative and budgetary problems related to the adequacy of the physical spaces and the hiring of personnel with attractive incomes to cover the previously estimated human resource requirements and replace those who were resigning; there is also the fact of the lack of experience of the analysts and the complexity of the files.

Another factor that caused the increase in income from administrative files was the implementation of Supreme Decree 007-2015-MINAGRI, referring to the formalization and regularization of users who did not have Water Use Rights (DUA), especially in areas declared

closed, such as Tacna and Ica. Since its implementation, many files have been entered from AAA I; AAA II: and AAA III; It is highly probable that in all decentralized bodies there are still many requests related to this decree.

Sense of the decision in the Resolutions of the TNRCH

The TNRCH evaluates the administrative resources introduced against what the Court calls issued in the first instance and based on the evaluation decides whether or not to confirm the resolutions. This comparison is called here "meaning of the Court's resolutions". Table 3 presents the results obtained in this comparison process. The resolutions issued in the first instance that are confirmed in the second, are those that are declared not founded and inadmissible, items considered separately in Table 3. The decisions of the first instance that are not confirmed in the second, are declared as founded, null (nullities) and ex officio, also considered as separate items in Table 3.

Table 3. Meaning of the resolutions issued by the TNRCH during the 2014-2020 period.

Meaning of the resolutions		Amount	Total	Percentage (%)
Not confirmed	Founded	828	1 685	23.34
	Annulments and expirations ex officio	857		
Confirmed	Unfounded and confirmed	3 744	3 744	51.87
	Inappropriate	1 130	1 130	15.66
	Others	659	659	9.13
	Total	**7 218**	**7 218**	**100.00**

The figures given in Table 3 (round figures) indicate that almost 52 % of the cases have been declared not founded, confirming the decisions of the first instance; If, additionally, the 16 % of inadmissible and the 9 % of the item other are taken into account, practically 77 % of the resolutions have the same meaning in both instances. Most of the 23 % of the cases in which the meaning of the resolutions of the TNRCH do not coincide with that of the first instance, is due to procedural errors that lead to annulments or the lack of a due reason for the resolutions. Both the errors committed in the sanctioning procedures and the lack of motivation in the resolutions of first instance indicate that there is an institutional requirement for the training of officials at the ALA level for

the officials who carry out the visual inspections and prepare the technical reports for the instruction of the procedures, and at the level of the AAAs that prepare the legal reports and the resolutions of first instance.

Distribution of the number of resolutions issued by the TNRCH differentiated by origin. Period 2014-2020

Of the 14 Administrative Water Authorities (AAA) or administrative regions, five are located in the coastal region: I-Caplina-Ocoña; II-Chaparra-Chicha; III-Cañete-Fortaleza; IV-Huarmey-Chicama; and V-Jequetepeque-Zarumilla. The remaining nine comprise territories of the mountains and jungle regions: VI-Marañón; VII-Amazonas; VIII-Huallaga; IX-Ucayali; X-Mantaro; XI-Pampas-Apurimac; XII-Urubamba-Vilcanota; XIII-Madre de Dios; and XIV-Titicaca.

Table 4 shows the distribution of the number of resolutions resolved by the TNRCH during the seven years of operation, differentiated by administrative regions. 82.83% come from the five Administrative Authorities of the coast, in descending order: III, 26.1%; I, 23 %); II, 15.8 %; IV, 9 % and V, 8.7 %. The remaining 16 % come from the other nine AAAs. These results are due to the fact that these five decentralized bodies comprise the entire coastal region, where most of the water users are located and where agriculture mostly depends on irrigation. The capital region is located in the area of AAA III-Cañete-Fortaleza, in which SEDAPAL (drinking water and sewage service of Lima) operates, the largest EPS (Service Provider Company) in the country, from which comes a large amount of administrative resources dammed up for a long time.

Something similar happens with the AAAs I-Caplina-Ocoña and II-Chaparra-Chincha, regions from which the resources corresponding to the activities of formalization and regularization of water use rights come from within the framework of DS-007-2015, both from Tacna and Ica, respectively. Only 1.16 % (83 cases) come from the Line Directorates, which, due to their eminently normative nature, are not exposed to water disputes, or are less so in relation to matters, with the exception of the Directorate of Quality and Evaluation of Water Resources (DCERH) which is the one that grants discharge authorizations and issues the certification for environmental management instruments (IGA) of development projects.

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Table 4. Distribution of the number of resolutions issued differentiated by the AAA of origin. Period 2014-2020.

AAA*	2014	2015	2016	2017	2018	2019	2020	Total
III-Cañete-Fortaleza	224	385	164	157	533	337	88	1888
I-Caplina-Ocoña	73	147	139	397	494	298	113	1661
II-Chaparra-Chincha	51	63	117	235	348	244	84	1142
IV-Huarmey-Chicama	57	88	65	56	203	117	70	656
V-Jequetepeque-Zarumilla	21	61	48	79	175	190	58	632
Others: VI-XIV	45	93	121	223	267	251	156	1156
Line Organs	7	16	12	16	13	15	4	83
	478	853	666	1163	2033	1452	573	**7218**

These results indicate that, within the framework of the management of water resources in the country, it is necessary to strengthen the capacities of the AAAs of the coast, without neglecting in the least the other decentralized bodies.

As complementary information, Table 5 presents the results on the number of resolutions issued by the TNRCH for the remaining nine AAAs (previously grouped as others).

Table 5. Distribution of the number of resolutions issued by origin. Period 2014-2020.

AAA-Others	2014	2015	2016	2017	2018	2019	2020	Total
VII-Amazonas	1	2	1	4	5	3	0	**16**
VIII-Huallaga	17	21	32	48	38	63	18	**237**
XIII-Madre de Dios	2	0	2	5	4	9	4	**26**
X-Mantaro	5	10	22	34	47	46	31	**195**
VI-Marañón	3	15	14	29	67	48	36	**212**
XIV-Titicaca	7	5	24	21	44	26	9	**136**
IX-Ucayali	5	14	14	39	19	20	20	**131**
XII-Urubamba-Vilcanota	5	21	10	19	29	18	19	**121**
XI-Pampas-Apurímac	0	5	2	24	14	18	19	**82**
	45	**93**	**121**	**223**	**267**	**251**	**156**	**1 156**

As indicated, 16.02 % (1 166) of the resolved cases correspond to the remaining nine Water Administrations, whose results are shown in Table 5, in which it is observed that the highest percentage corresponds to the AAA VI-Marañón, with 2.94 %; the lowest is AAA VII-Amazonas, with 0.2 %; while AAA XIV-Titicaca (1.88 %), AAA IX-Ucayali (1.8 %) and AAA XII-Urubamba Vilcanota (1.68 %), remain average. The area of

influence of these nine AAAs is located in the inter-Andean region and in the Amazon, with little agricultural area under irrigation and therefore fewer users than in the coastal region, which results in less number of cases of water disputes, except in the case of population or energy use.

Distribution of the number of resolutions issued by the TNRCH differentiated by subject. Period 2014-2020

Other statistical information of interest for the management of water resources is related to the distribution of the number of resolutions issued by subject matter. Table 6 presents a summary of the resolutions issued by the TNRCH by themes or subjects (see Table 1) during the 2014-2020 period. To standardize the presentation of the results, the subjects are grouped into five items or major categories:

PAS: Sanctioning Administrative Procedure.

RE: Economic Remuneration.

DUA: Water Use Rights.

OUA: Organization of Water Users.

OM: Other Matters or cases not included in previous items.

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Table 6. Summary of the resolutions issued by the TNRCH by topics or matters during the 2014-2020 period.

	Resolutions issued by subject. Period 2014-2020									
Topic	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**Total**	**% of total**	**% accumulated**
PAS	160	222	275	417	853	531	244	2702	37.43	37.43
RE	195	334	48	15	176	142	7	917	12.70	50.14
DUA	80	176	245	621	861	493	179	2655	36.78	86.92
OUA	9	28	15	21	14	21	3	111	1.54	88.46
OM	34	93	83	89	129	265	140	833	11.54	100.00
Total	478	853	666	1 163	2 033	1 452	573	**7 218**	**100**	**100**

The figures given in Table 6 indicate that 74 % of the cases refer to two subjects, PAS and DUA; 13 % is related to RE and only 2 % is from OAU. The four categories comprise 88 % of the resolutions issued by the TNRCH. The remaining 12 % is grouped in the OM (other subjects) category. These results indicate that most of the water disputes are related to the violation of existing regulations on water resources (PAS) and lack of knowledge on the part of users about the requirements to become creditors of a water use right (DUA). In light of these results, the National Water Authority needs to expand and intensify its training programs for users. Likewise, it should establish a professional improvement program for the officials who are in charge of instructing the files of the sanctioning procedures. User training programs should be

based on adult teaching-learning techniques and those aimed at officials should be based on the professionalization of the public career.

Conclusions and recommendations

The work consists of an analysis of the historical evolution of the Water Law of Peru and a discussion of the results of the National Court for the Resolution of Water Controversies of the National Water Authority during the period 2014-2020.

Since the beginning of societies, water management referred mainly to agricultural management; that is, irrigation, because that was the main and sectorial operated use and in this sense the Water Law has emerged.

Throughout the colonial and republican history of Peru, the legislation on water administration; that is, the Water Law has been modified for different reasons, including conflicts between users, economic interests of individuals, changes in the government's political vision. Among the most outstanding legal provisions are: The Toledo Ordinances of 1577, the Water Code of 1902, the General Water Law No. 17752 of 1969, and the current Water Resources Law No. 29338. In this last law, enacted in March 2009, the creation of the National Tribunal for the Resolution of Water Controversies (TNRCH) is established, as a collegiate body of the National Water Authority, to resolve these disputes in the second and last administrative instance.

The actions of the TNRCH seek that the administrators and the general public recognize the ANA as a leading institution and highest regulatory technical authority for water resources and the National System for Resource Management.

Both the errors committed in the sanctioning procedures and the lack of motivation in the resolutions of first instance indicate that there is an institutional requirement for the training of officials at the ALA level for the officials who carry out the visual inspections and prepare the technical reports for the instruction of the procedures, and at the level of the AAAs that prepare the legal reports and the resolutions of first instance.

The results obtained in the investigation indicate that, within the framework of the management of water resources in the country, it is necessary to reinforce the capacities of the AAAs of the coast, without neglecting in the least the other decentralized bodies.

The results also indicate that most of the water disputes are related to the violation of existing regulations on water resources (PAS) and lack of knowledge on the part of users about the requirements to become creditors of a water use right (DUA). Training programs for users need to be expanded and intensified. Likewise, it is necessary to establish a professional improvement program for the officials who are in charge of instructing the files of the sanctioning procedures. User training programs must be based on teaching-learning techniques for adults and those aimed at officials must be based on the professionalization of the public career.

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