



The Concretization of Environmental Justice: Case of the Santiago River in the Municipalities of El Salto and Juanacatlán¹

The Realization of Environmental Justice: Case of the Santiago River in the Municipalities of El Salto and Juanacatlán.

DOI: 10.32870/sincronia.axxv.n80. 30b21

Elizabeth Leticia Souza Mosqueda

Department of Private Law. University of Guadalajara. (MEXICO)
CE: ceding@hotmail.com / ORCID ID: 0000-0003-4775-9025

Martin Moreno Reynaga

Postgraduate in Law. University of Guadalajara (MEXICO)
CE: a.j.moreno.r@hotmail.com / ORCID ID: 0000-0002-9548-3273

Angelica Jesus Ceceña Altamirano

Public law. University of Guadalajara (Mexico)
CE: lexangelica@gmail.com / ORCID ID: 0000-0003-3175-5302

Cynthia Ramirez Ramirez

CE: lepg.cynthia.rmz@hotmail.com / ORCID ID: 0000-0001-5175-5970

Daland Alexis Franco Vazquez

Lawyer. University of Guadalajara (MEXICO).
CE: daland.franco@gmail.com / ORCID ID: 0000-0003-0715-9797

This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)

Received: 31/03/2021

Revision date: 30/04/2021

Accepted: 11/05/2021

¹ This article is the result of the research project entitled: "The Environmental Justice: case of the Santiago River in the Municipalities of El Salto and Juanacatlán". It is the product of the collegiate research work that synthesizes the experience of the actions in linking the academic bodies UDG-CA-267 and UDG-CA-785.



SUMMARY

This research work develops the problem of the application of the legal framework of the right to water for its protection and reparation as well as to the environment since it is closely related to the first right mentioned, when there is an affectation. For this we study the case of the Santiago River, one of the most important bodies of water in Mexico and with greater length, for this reason, when talking about Santiago River we will refer to the body of water located in the municipalities of Juanacatlán and the Salto of the State of Jalisco, which, for a long time was contaminated by pouring various types of substances, without measures being taken to reduce this activity to date. This is done with the study of the national and international legal framework in the matter, to later develop the circumstances in which they caused the damage to the River, and like these, encouraged the various authorities to issue resolutions trying to repair the damage. Despite the existence of such determinations, they are not sufficient for the protection of this right, so in the end we propose the creation of an environmental justice court that is capable of solving this type of problem.

Keywords: Rio Santiago, right to water, environmental justice.

ABSTRACT

This research work develops the problem of the application of the legal framework of the right to water for its protection and reparation as well as to the environment, since this is closely related to the first mentioned right, when there is an affectation. For this, we study the case of the Santiago River, one of the most important bodies of water in Mexico and with the longest length. For this reason, when we talk about the Santiago River we will refer to the body of water located in the municipalities of Juanacatlán and Salto del State of Jalisco, which, for a long time, was contaminated by dumping various types of substances, without measures being taken to reduce said activity to date. This is done with the study of the national and international legal framework on the matter, to later develop the circumstances in which they caused the damage to the River, and like these, they encouraged the various authorities to issue resolutions trying to repair the damage. Despite the existence of such determinations, they are not sufficient for the protection of this right, so in the end we propose the creation of an environmental court that is capable of solving these types of problems.

Keywords: Rio Santiago, right to water, environmental justice. Keywords: Rio Santiago, right to water, environmental justice.



Introduction

The deterioration of the environment is a constant that is increasingly aggravated in the world environment, which affects the State of Jalisco because it is one of the most important water bodies in the country, which turns out to be one of the most contaminated by toxic substances by heavy metals and synthetic compounds of high volatility in recent decades. There are several actors in this problem: laws, the economy, companies and society in general; this has led to the search for a solution, focusing on a high-risk area located in the municipalities of Salto and Juanacatlán. This circumstance led to the issuance of a recommendation by the State Human Rights Commission which did not solve the problem. This generates as a general objective in this article, to demonstrate the ineffectiveness of the current legislation, as well as of the non-binding bodies and the evaluation of their issued documents, due to the lack of a court in charge of imparting environmental justice. With regard to the specific objectives, it is necessary to establish the need for the creation of a full-fledged judicial body with coercive capacity, which would summarise and expeditious for the importance of the cases that will be submitted to its jurisdiction, as well as the evolution of the development of its processes. The need for sentences that can protect and repair any violation of the right to water and sanitation while violating the environment, to prevent more cases similar to the one observed in El Santo Y Juanacatlán.

I. Study on the national legal framework for the human right to water.

In recent years, the environment and water have become very important in knowable activities, including law. This caused the Mexican State to become aware of the need to protect these assets, through a series of modifications in the legal systems for the recognition of the right to water as a human right, imposing the obligations to promote, respect, protect and guarantee it, the State's charge for its preservation and imposing the duty to understand the new paradigm.

This was part of the process of the materialization of our Magna Carta, because from the recognition of human rights the way in which the State acts was renewed, and the way in which the



authorities must conduct themselves in attention to the new rights they acquired to satisfy the enjoyment of these within the various facets of people, both individually and collectively.

This right was recognized in article 4 of the Political Constitution of the United Mexican States (2021), specifying that people who inhabit or transit through the country will enjoy the right to access water for its disposal and sanitation. In the process of constitutional reform, these principles ceased to be a set of good intentions that established a purpose to be realized by the State, but became enforceable rights from which conditions must be created for their progressive satisfaction.

In the same way, when our constitution considers that human rights treaties have the same hierarchy as the Magna Carta (Political Constitution of the United Mexican States, 2021, art. 1), their protection was recognized by the American Convention on Human Rights (1969) in its article 26, which establishes the mandate for States to achieve the satisfaction of social rights – a group to which the right to water belongs – in a progressive manner. On the other hand, given the need for an international legal framework that would broadly regulate these rights, the Additional Protocol to the American Convention on Human Rights in the Field of Economic, Social and Cultural Rights "Protocol of San Salvador" (1999) was elaborated, where this right is protected in Article 11 through the protection of the right to a healthy environment, reinforcing the duty of the state to implement mechanisms with which this right is gradually satisfied, but that in each one, such access improves.

To develop them, it is important to understand the relationship they have with the economic chapter of the same document, since it establishes the duty of the State on planning, which, within articles 25 and 26 (Political Constitution of the United Mexican States, 2021) imposes a strong burden on development under the principle of sustainability, pointing out the duty to carry out development in a rational and planned manner, ensuring that natural resources – including water – can be used by people to meet their needs and that they are sufficient for future generations.

Given the new paradigm of the constitution, the simple recognition of the right to water for its protection is insufficient, so it was necessary to develop the content of each right in a law that serves as a guarantee for its satisfaction. This caused the General Law of Ecological Balance and Environmental Protection (2018) to be understood as the guarantee mechanism from its last reform,



noting that it regulates those provisions related to the environment. Therefore, its purpose is the sustainable development of the environment, as well as the preservation and restoration of the ecological balance. Given this, the objectives of this law are:

1. Guarantee the right of everyone to live in a healthy environment;
2. Define environmental policy concepts;
3. Establish the basis for the proper use of natural resources;
4. Prevent and control water, air and soil pollution;
5. Develop collaboration mechanisms between government, private and social sector, as well as other entities with an interest in environmental matters;
6. Establish those that allow the development of institutions, authorities and other related sectors, create organizational structures for the defense of rights and compliance with obligations provided for in this standard (art. 1°).

With this begins the development of the substantive content of our fundamental document, clarifying the various obligations that the Mexican State must fulfill for the greatest protection of the right, linking its content to all orders of government due to its generality, so that each authority, within the scope of its competences, must comply with what is established in it before the generality that radiates the scope of its decisions.

However, this represents a challenge for the State of Jalisco, especially because it modifies its way of acting, going from a passive entity to an active one constrained to take those measures necessary for its adequate compliance, considering that they are part of the planning.

To facilitate this objective, the law begins to delimit its obligations, noting that a specific measure is the prevention and contamination of water. Therefore, the General Law of Ecological Balance and Environmental Protection (2018) stipulates five criteria that allow the State to meet this objective, which are:

1. The protection of the country's ecosystems;
2. The prevention of pollution through the intervention of the State-Society in any of the forms and places in which the water is located;



3. Design sustainable productive activities;
4. Develop programs for wastewater treatment in urban areas and
5. Design strategies that allow the constant participation of society (art. 22 BIS).

Given this, the legislator took these principles to develop the system in which the authorities observed for the ministering of water, elaborating the bases of a system of administration coordinated between the three levels of government. Therefore, article 117 of the General Law of Ecological Balance and Environmental Protection (2018) states that the administration is in charge of the federation, with the active participation of the federative entities and municipalities, urging a direct application of state legislation. This administration reinforces the treatment of wastewater produced by the drainage and sewerage system, delegating the responsibility of monitoring that the discharges are made with the appropriate controls. On the other hand, it establishes sanctions in case the above is not done in accordance with the law. Finally, it imposes the duty to make a record of these.

In this sense, the same regulations specify that the federation, the Federative Entities, the Municipalities and Mexico City may work in coordination to preserve and restore the ecological balance and aquifer bodies in the country, based on activities that under their respective jurisdiction they will have to implement, being able to apply other ordinances for the national environmental policy and participation of society in the matter.

Such is the case of the National Waters Law (2020), which, in accordance with its article 1, is another law that guarantees this human right. The objective of this legal system is to regulate the exploitation, use or exploitation of national waters, their control and distribution, as well as the preservation of quantity and quality to achieve their sustainable integral development. This specifies that any type of water resource that is in subsoil, surface and seas, will be regulated by this law, also specifies in article 2 that it will seek to preserve at all times the good state of the same.

Among the various measures of care and preservation of natural water resources, for the promotion of sustainable development, article 1 of the National Waters Law (2020) regulates the use,



exploitation, care and maintenance of water bodies by assignees and concessionaires. In the same way, article 17 of that same law specifies it is not necessary to have the appointment by any authority of assignee or concessionaire, but that any person can make use of water resources in rivers, causes or hydrological basin, as long as they do not affect natural currents or generate pollution within them under certain conditions, as a way to protect the right to access to water, establishing conditions that allow its preservation.

That is why it does not distinguish between natural or legal persons; public, private or social sector to exercise this right. The law provides for the participation of anyone in water committees and advisory councils; it seeks to establish a team that is intimately linked to the natural resource, allowing all those who have knowledge related to the management and preservation of water in various matters to participate.

On the other hand, as a law whose purpose is the development and protection of this human right, the sanctions that the corresponding authority will impose on those who commit an act considered harmful to the object of this law were established in article 119 of the National Waters Law in its Tenth Title (2020). In total, there are 24 sanctions, of which the following stand out:

1. Permanently, intermittently or fortuitously discharge wastewater in contravention of the provisions of this Law into receiving bodies that are national assets, including marine waters, as well as when they infiltrate land that is national property or other land when it may contaminate the subsoil or aquifer.
2. Omit the implementation of facilities that prevent the impact on the environment or the rights of people
3. Not to install, not to conserve, not to repair or not to replace, the necessary devices for the registration or measurement of the quantity and quality of the waters, in the terms established by this Law, its regulations and other applicable provisions, or to modify or alter the facilities and equipment to measure the volumes of water exploited, used or used, without corresponding permission, including those that in the exercise of their powers have been installed by "the Water Authority".



4. Exploit, use or take advantage of national waters without the respective title, when required under the terms of this Law.
5. Throw or deposit any contaminant, in contravention of legal provisions, in any type of aquifer body;
6. Failure to comply with the obligations set forth in the concession, assignment or discharge permit titles.
7. Cause considerable environmental damage or that generate imbalances, in terms of water resources in accordance with the provisions on the matter.

In this way, all types of residual discharges, whether in basins, rivers, marine waters, water currents among other water landfills will be sanctioned when they transgress the Official Mexican Standards or the conditions of discharges for industrial, municipal, agricultural origin or also those that contain pesticides, toxic substances, waste and waste.

In those areas that are in danger and ecological deterioration due to pollution or another way in which a disturbing agent acts, or in case the areas are at risk because the danger is imminent in the face of an accelerated process of degradation the natural resources, causing the affectations to cause an irreversible environmental impact, the federation must declare an ecological restoration zone with previous studies that justify it.

However, it is important to note that the legal framework for the protection of the right to the environment and water is affected in the Santiago River basin, since the State gives primacy to the economic activity of the inhabitants of the area, which causes ecological deterioration due to the abuse of the main natural resource that is used in any human activity: The water. First, this is because it allows supply to be affected to favor industries in their activities; the second problem lies in the pollution caused to the aquifer by industrial waste, either directly or indirectly, because the waters, when polluted and follow their natural course, propagate these to those aquifer bodies with which it connects.

In this sense, we must consider that the development plans are not homologated with the principles indicated, in addition to there being a parsimony in the application of sanctions, the



problems begin in the fulfillment of respecting, protecting and guaranteeing this right, causing injuries to the legal sphere of people in a systematic way, since the transgression of this right causes the violation of others, for the omissions of the state in not taking sufficient actions to protect it.

II. Study on the international legal framework for the human right to water.

Despite the existence of a broad legal framework for the protection of the right to water and its aspects in national law, there is another equally broad one in international law, which protects it by considering it an important element of the environment, and which fostered a broad debate on its necessity. To this end, the principles of environmental law broadly protect the right to water, indicating the duty of the Mexican State to develop the content of each one. Therefore, it is important to understand which are the main international documents that protect this right and its development, which created an international guide to protection.

We will begin with the amendment to the study of environmental law on June 16, 1972, on the occasion of the proclamation of the Stockholm Declaration on the Human Environment. This document establishes the general principles of international law for the environment, which were accepted by the members of the United Nations, which must be respected and observed as a base framework by each of the signatory countries.

In this document, principles with their own wording and unique objectives were established in a general way, declaring that the human being is the one who transforms the environment as a result of the activities he performs, modifying the previous paradigm where it was provided that nature was the one who shaped the morality and intellectual development of man.

From the above, changes were initiated to include environmental law in the various legal laws, understanding the place it now had in the environment, so, based on Eschenhagen (2006) we can list these elements as follows:

1. He became aware and agreed for the first time that natural resources are limited;
2. World Earth or Environment Day was established;
3. The United Nations Environment Programme was established;



4. It is necessary that one of the environmental problems is the pre-eminence of economic policy without legal limits;
5. It points out the great relevance of pollution and its negative effects on discharges of toxic waste into the environment;
6. Future planning is established for the use, enjoyment and enjoyment of natural resources for new generations;
7. Citizen participation is promoted through education as a measure of prevention and ecological control;
8. It is proposed to distribute environmental responsibility in coordination for joint activities (pp. 41 - 45).

In this sense, it is important to consider that in the Stockholm Declaration (1972) it was pointed out that the natural and artificial space is inescapable and maintaining a constant interaction by economic activity, so maintaining adequate control of both is a priority for development, since one depends on the other, before the indispensable development to be able to offer well-being and quality of life (proclamation I).

Although several decades have passed since the Stockholm Declaration, the fact stands out that, despite being the first international document of environmental law, it provides sufficient principles for the understanding and improvement of environmental law. Now, from the beginning of the meetings specific objectives were established, but the inert problems to humanity incite scientific evolution quickly, which impacts economic practices and this, that climate change accelerates.

This led to the continuation of international work in this area, in an effort of constant adaptation and updating, causing that in June 1992 in the city of Rio de Janeiro, Brazil, a document was prepared where the main objective of cooperation between nations, private entities and civil society was established. The union of the two entities seeks to have a broader and more effective action to achieve the goals.



The Rio Declaration – as it is commonly called – contains 27 general principles of international acceptance and is based on the Stockholm Declaration of 1972. The general principles of rio promote a peculiar model for structuring environmental standards, with which it is sought to boost the strength of protection in the laws of countries (United Nations Organization, 1992, principle 11), given the urgency of implementing an international guide that would mark the path towards environmental protection, containing political elements, Economic and human rights were becoming increasingly important. For this reason this document reinforces the principles of the Stockholm Declaration, expanding the paradigm of environmental protection:

While the Rio Declaration itself is a non-binding instrument, its principles are of great importance in the development and implementation of environmental policy and law, both domestically and internationally. In addition, some of its principles reflect norms contained in international customary law or in standards established in international treaties (Orellan, 2014, P. 11).

It modified the understanding of international environmental law, since its elaboration meets a new demand in nations by designing the direction that political and economic decisions should take, which is the conservation of natural resources, since the activity of man begins to cause irreversible repercussions, such as the degradation of water caused by pollution.

As Püschel and Urrutia (2011, pp. 01 - 02) say, the rio declaration reflects a consensus of trade among the most developed countries of the 1992 era for environmental protection, the package of 27 principles refreshes the interest of operating with standards based on human rights and sustainable development. Demonstrating that states had become aware of the rapid deterioration occurring in the environment and the increase in its impact.

Despite the new environmental approaches and not the new paradigms to be resolved, it is emphasized that no relevant improvements were obtained and basically the same thing happened as in the Johannesburg meeting in 2002. These meetings still had an intention to improve, but did not have effective results.



The Johannesburg Declaration, also known as the World Summit for Sustainable Development, was a meeting organized in June 2002 in which there was a large participation of senior institutional leaders, heads of State, business leaders, representatives of civil organizations and other stakeholders in environmental matters (United Nations, 2002, pp. 01 - 03).

Environmental matters, having several actors, makes it difficult to arrive at a generalized idea with general principles accepted by them. Proof of this is that for a large part of the attendees, the results of Johannesburg were insufficient in the face of the inability to reach more beneficial agreements through negotiation, of the challenges that were presented and of which solutions should be sought in common participation, they never found a way to their realization (La Vina, Hoff, and De rose, 2002, p. ii)

With the impetus to provide greater protection or to be able to implement effective mechanisms for the protection of the environment, they cause the meetings of the representatives of various States to be insufficient, as happened at the World Summit for Sustainable Development where aspects already discussed in previous meetings were taken up. However, an attempt was made to provide continuity to the work carried out this time, those good environmental intentions remained a dead letter since such solid agreements with a real impact on the environment were not reached (Eschenhagen, 2006 p. 54).

The mass means of production, as well as the global trade that developed in recent decades, changed our perception of the world and with them the modification of our social and environmental environment. This motivated one of the most debated issues at the World Summit for Sustainable Development, which was the fact that globalization gave rise to new forms of production being intertwined with other variables such as the flow of money, cheap labor and mainly to low regulation or very flexible environmental regulations. This led large corporations to take advantage of these factors and implement large-scale commercial productions with ecological sacrifice (Eschenhagen, 2006, p. 56). The priority was not the environment, but a strong economy based on a utilitarian perception of the environment, acquiring value in proportion to what it can contribute to the economy.



The problems at the Johannesburg conference show the complexity of reaching effective agreements, as mentioned in the previous lines, since the goodwill of States is not enough. These impediments were as follows:

1. Absence of strong, operational and feasible agreements;
2. Ideas devoid of innovation to help the environment;
3. No collaboration between governments;
4. Globalization was not treated with the required seriousness;
5. Wasted political opportunities (La Vina, Hoff, and De rose, 2002, pp. 02 - 04).

On the other hand, in this conference I highlight the following: The recognition of the relevance of the business sector and its role in the environment;

1. The call for accountability of the business sector;
2. Reaffirmation of the principle of access to information;
3. Ethical principles for the business sector are incorporated;
4. The decoupling of economic growth with environmental degradation is sought (La vina, Hoff, and De rose, 2002 p. 07; United Nations, 2002, para. 48).

Several of the external reasons that influenced the Johannesburg declaration were that it was simply carried out in a period of high commercial and social tension, detracting from what was stipulated in Stockholm and Rio de Janeiro. This inconsistency is observed since sustainable development takes on greater relevance than the environment, the first cannot exist without the second or at least a balance between the two is presumed.

From the Stockholm Declaration to Johannesburg, the United Nations Environment Programme – a programme created by the United Nations – is responsible for monitoring and evaluating the various countries and their contexts with environmental performance indices, as well as presenting interesting results and recommendations in its various projects. As far as Mexico is concerned, according to data from Yale University (2018, p. vii) it is ranked number 72 in the world ranking for the care of the environment and its protection of the environment, while regionally it is



number 8 in all of Latin America. Which shows the deficiencies within the environmental matter in our country.

Subsequently, in the city of Rio de Janeiro in 2012, one of the most important world meetings on the planet was held again. It addressed issues of ecological impact and economic interests. This meeting is called Rio+20, which consists of recounting the results and making it visible from various scenarios through which the summit of the earth has passed.

The regrouping of State leaders, institutions and other interest groups was aimed at producing new results and avoiding falling into bad administrative habits that have affected the achievement and goals of the Millennium Development Goals; the importance of establishing and updating the bases for sustainable development is pointed out, since the resources day by day are scarcer and the population grows increasing the rates of poverty and famine, it is necessary to act and think about our future (United Nations Organization, 2012, pp. 10 – 13).

A proposed solution is to invest in clean energy infrastructure, such as wind farms, cities with solar panels and especially in methods of conservation and management of water resources to avoid desertification, to reduce the environmental impact generated by the production of fossil fuels.

These documents develop an international apparatus different from the inter-American one, since they are inscribed in the universal system of international law, establishing the bases of an autonomous right to the rest, while the other is based on the human rights system, which is incorporated into our legal system through the block of constitutionality. On the other hand, the foundations of international environmental law arise from these, serving as a parameter for its protection – including the right to water – so they serve as a framework for state action.

Under these assumptions, which make up the legal framework protecting the right to water as well as its impact on the healthy environment, by which the principles of the right to the environment are developed, then the case of the Santiago River in Jalisco will be analyzed in particular, under the circumstances that occur on the banks of the municipalities of El Salto and Juanacatlán, being a region where this right was not protected, showing the consequences of its violation.



III. Case study: failure to protect the human right to water

The right to water and its protection is the subject of a wide debate in view of the de facto and legal conditions that influence the qualification of its satisfaction. A case where we observe the difficulties it faces, visible in Jalisco given the circumstances in which it finds itself, is the Santiago River. To understand the importance of this problem, it is essential to analyze the development of industrial activity in the municipalities of El Salto and Juanacatlán in which one of the most important industrial corridors of Jalisco is located, added to its proximity to the body of water in question, causing serious deterioration and causing damage to the environment.

According to the information of the national statistical directory of economic units of the National Institute of Statistics and Geography, the municipality of El Salto has 6,772 economic units as of April 2019 and its distribution by sectors reveals a predominance of economic units dedicated to trade, these being 47.33% of the total of companies in the municipality. Within the region, El Salto ranks 6th out of 12 in terms of concentration of companies and position 9th in the state.

Likewise, El Salto has seen a growth in the number of workers registered with the Mexican Social Security Institute, which translates into an increase in its economic groups. For December 2018, the Mexican Social Security Institute reported a total of 51,528 insured workers, representing 16,183 more workers than in December 2012 and 1,199 more than the immediately previous year.

According to the records of the Mexican Social Security Institute, the economic group that has the most workers registered within the municipality of El Salto, is the Manufacture of metal products, except machinery and equipment, which in 2018 registered a total of 7,986 workers, concentrating 15.50% of the total insured workers in the municipality. This group registered an increase of 2,168 workers compared to 2012.

The second economic group with the most insured workers is the Construction, reconstruction and assembly of transport equipment and its parts, which for 2018 registered 5,605 insured workers representing 10.88% of the total insured workers at that date. From 2012 to 2018 this economic group increased by 1,267 workers.



Considering the environmental index, which includes aspects such as solid waste generation, deforestation, aquifer exploitation, forest cover, protected natural areas, among others, El Salto is located in 104th place in this index at the state level, which indicates a Very Low development of the environment compared to the rest of the municipalities of the entity, and the twelfth position in the Central region.

In the Municipal Environmental Index, 2013, it stands out that El Salto is located in an untapped aquifer, on which a total of 32,214 inhabited private homes are registered, of which 82.24% have water availability within the house or land and 96.92% have drainage connected to the public network, septic tank or others (Institute of Statistical and Geographic Information, 2019, 30).

According to the information of the national statistical directory of economic units of the National Institute of Statistics and Geography, the municipality of Juanacatlán has 510 economic units as of November 2017 and its distribution by sectors reveals a predominance of economic units dedicated to services, these being 49.8% of the total of companies in the municipality.

On the other hand, the municipality of Juanacatlán has seen various fluctuations in the number of workers registered with the Mexican Social Security Institute. For December 2017, the IMSS reported a total of 1,209 insured workers, representing 492 more workers than in December 2013.

According to the records of the Mexican Institute of Social Security, the economic group that has the most workers registered within the municipality of Juanacatlán, is the manufacture and assembly of machinery, equipment, devices and accessories and electrical, electronic articles and their parts, which in 2017 registered a total of 503 workers concentrating 41.6% of the total insured workers in the municipality. This group recorded an increase of 304 workers in the 2013 – 2017 comparison.

The second economic group with the most insured workers is professional and technical services, which in 2017 registered 192 insured workers representing 15.9% of the total number of insured workers at that date. From 2013 to 2017 this group had an increase of 100 workers. On the other hand, the municipal environmental index, 2013, highlights that in Juanacatlán it has a non-



overexploited aquifer, on which a total of 3,221 inhabited private homes are registered, of which 83.51% have water availability within the house or land and 96.74% have drainage connected to the public network, septic tank or others.

The Municipality has a coverage of 20.5% of forests, 20.5% of forests and 54.7% destined to agriculture. In the last 25 years the municipality has recovered 2.22 km² of surface with natural vegetation and presents 7.27% of the surface with risk of erosion. In territorial ecological planning, 25.94% of its territory is under environmental conservation policies (Institute of Statistical and Geographic Information, 2018, p. 26).

In terms of municipal solid waste, the municipality participates with 0.17% of the state total, equivalent to 12,755 tons generated per day (Institute of Statistical and Geographic Information, 2018, p. 28). That is why Juanacatlán is located in 103rd place at the state level of the environmental index, which indicates a low development of the environment compared to the rest of the municipalities of the entity, and the second position in the Central region.

Now, we can realize the difficulty for the satisfaction of the right to water from the factual and legal conditions of the present case, since about 100 thousand inhabitants of El Salto and Juanacatlán are in an environment of pollution and evident deterioration, where the 370 industries and surrounding towns discharge their wastewater into the Santiago River channel which is currently in the 4th place of the most contaminated in Mexico (Enciso, 2004).

This is because the industrial corridor that is located in this area, starts from the south of Tlaquepaque and runs throughout the municipality giving rise to environmental damage, to this are added the channels that are intercepted by the discharge infrastructure of Guadalajara and Zapopan. However, it is in the area of the Ahogado dam where most industrial plants discharge their waste. In addition, only 50 per cent of companies have waste treatment technology, and of these, only 50 per cent use such technology, which increases environmental damage (Enciso, 2004, para. 7).

That is why, according to González and the Ministry of the Environment and Natural Resources (2010, para. 3; 2016, pp. 58 - 59), the general panorama of the Santiago River of pollution is strongly rooted in chemical and fecal contamination. Since 2009, its poor water quality has increased; this is



because 1500 companies dump their waste into the water streams of the river and added to this the large amount of fecal water makes the river concentrate 1,000 more likely number of bacteria in 100 ml of water, exceeding the limits allowed by law. Eventually water cannot be consumed by living beings or used for recreation or productive activities, so the right of access to water is diminished in its satisfaction.

IV. Application of the environmental legal system to the case of the Santiago River.

As noted in the previous section, the two municipalities analyzed in this article are of great relevance to understand the problem regarding the protection of the right to water and the environment. For this reason, the study was developed with special emphasis, considering that it is one of the aquatic bodies in Mexico that causes the most damage to its population, as well as to the environment.

Derived from the circumstances of the Santiago River, these led to various measures in the face of the constant transgression of the healthy environment and the right to water, which sought to stop environmental deterioration and human rights violations. Therefore, various recommendations were issued to solve the effects they cause to the environment, and limit the right to water.

The first one that we will focus on because of its importance consists of Recommendation 009/2009, issued by the State Human Rights Commission of the State of Jalisco. This was issued as a result of the excessive pollution that can be found in the Santiago River, for a flagrant and evident violation of human rights, where the transgression of the right to water, which in turn violated the environment, causing a deterioration in the right to health, causing severe effects on the inhabitants of the regions near the river.

This was caused by pollution, which is visible to the naked eye by the color of the water, the excessive foam generated and the bad odors emitted, mainly affecting the municipalities of Juanacatlán and El Salto. This results in an obvious violation of the rights enshrined in Article 4 of the Political Constitution of the United Mexican States (2021), which states:

Article 4. [...]



[...].

Everyone has the right to health protection. The Law shall define the bases and modalities for access to health services and shall establish the concurrence of the Federation and the federative entities in matters of general health, in accordance with the provisions of section XVI of article 73 of this Constitution.

[...].

Everyone has the right to a healthy environment for their development and well-being. The State shall guarantee respect for this right. Environmental damage and deterioration will generate liability for whoever causes it in terms of the provisions of the law.

[...]

Everyone has the right to access, dispose of and sanitation of water for personal and domestic consumption in a sufficient, healthy, acceptable and affordable manner. The State shall guarantee this right and the law shall define the bases, supports and modalities for the equitable and sustainable access and use of water resources, establishing the participation of the Federation, the federative entities and the municipalities, as well as the participation of the citizens for the achievement of these purposes.

Therefore, the resolution highlights the part addressed to the Executive of the State of Jalisco, in which it was requested to comply with 100 points to reverse the environmental impact caused; the municipalities of Guadalajara, Zapopan, Tlaquepaque, Tonalá, Tlajomulco de Zúñiga, El Salto, Juanacatlán, Ixtlahuacán de los Membrillos, Chapala, Poncitlán, Ocotlán, Tototlán, Atotonilco el Alto and Arandas, were recommended to comply with 68 points each to reverse the impact and implement measures that allow the satisfaction of these rights; agencies such as the State Water Commission were advised to comply with 13 points; and the Intermunicipal System for Drinking Water and Sewerage Services, with 24 points. Regarding the municipalities – around the object of our research – it is relevant to mention that 68 recommendations were issued for the municipality of Santo, which it accepted in their entirety, reporting an advance of 13 of them representing 19.11% of



progress. For its part, Juanacatlán is in the same situation with the same data as its neighboring municipality El Salto. (Jalisco State Human Rights Commission, 2009, pp. 237 – 265)

In these recommendations we can observe how the non-jurisdictional authority protecting human rights, concretizes the duties framed in the national and international legal system to provide a solution to the constant violation of the human right to water, the healthy environment and health, which are linked because the violation of one implies the transgression of others, due to the principle of indivisibility enshrined in the parameter of Mexican constitutionality.

One such measure is democratic governance for water management. Through this measure, the principles of protection of environmental and water law were concretized, specifying the need to increase and strengthen the spaces for effective social participation, such as implementing clear mechanisms to listen to citizens, and that their opinion be considered in the definition of public policies developed for the best use of water. The above is true by developing the following:

1. Access to environmental information;
2. Access to environmental justice;
3. Access to public participation;
4. Accountability.

Another measure that concretizes the commitment to strengthen substantive democracy is the preparation of calls where civil society and the academic and scientific community, as well as specialists are invited to analyze and determine the appropriate and convenient actions to solve the serious problems of pollution and its effects among the population of the localities established on the margins of the basins of El Ahogado and Alto Santiago (El Salto, 2018, p. 4).

This develops, at the same time, another principle of environmental law, which is the active participation of society in the elaboration of public policies to preserve the environment and water, such as allowing the active participation of people in the solution of problems in this matter, understanding that these rights impose on states to collaborate with people because they are a right of diffuse and collective interest.



With the intention of prosecuting state activities against acts to the detriment of water, it was recommended to initiate administrative procedures aimed at revoking licenses, those to cancel construction permits and certificates of habitability, which intend to be located on the banks of the Santiago River, particularly schools and turns for which pollution represents a special risk to health, and refrain from authorizing subdivisions and the installation of companies without having environmental impact studies and without foreseeing that said turns or population centers stop pouring their untreated waters (El Salto, 2018, p. 5).

Under these indications, a characteristic of these social rights is reinforced, which consists of the active participation of the state. This means that it can no longer be an absentee participant, where protection consists in refraining from intervening in the activities of individuals, but that it is in charge of carrying out the necessary actions to create conditions that allow the satisfaction of these rights. Therefore, it is urged to exercise the powers to revoke those acts that imply a risk to people in the face of the constant contamination of the Santiago River.

An example of these duties that imply a positive burden for the state, it was recommended that municipalities should consider in their income laws, fines or sanctions to polluting industries and not depend solely on the Federal Law of Rights, which only provides for fines for non-compliance with two parameters of water quality (Chemical Oxygen Demand and Total Suspended Solids).

Thus, through the measures issued to update the content of the treaties that make up the legal framework for the protection of the right to water and the environment, they help on the one hand the action that must be carried out by the authorities for the greater fulfillment of their substantive duties, and on the other, before the problem that prevails in the Santiago River, begin with measures that allow the compensation of the environment, and repair any damage that was caused to all rights.

However, these measures did not serve as a model to direct the action of the authorities, who were unwilling to take action to repair the damage caused by the breach of their obligations, an example of this is that despite the fact that the state executive was asked to comply with 100 points, only 43 were accepted, of which only 37% progress has been reported. It is also important to mention



that both El Salto and Juanacatlán have an advance of 19.11% this more than a decade after the recommendation was issued. As a result, the Inter-American Commission on Human Rights issued resolution 07/2020 (2020), as the situation of the river worsened.

Among these measures, those issued by the Jalisco State Human Rights Commission are reiterated in a reduced manner, which consists of the following:

- a) Adopt the necessary measures to preserve the life, personal integrity and health of the inhabitants of the areas up to 5 kilometers of the Santiago River in the municipalities of Juanacatlán and El Salto, as well as the inhabitants of the towns of San Pedro Itzicán, Agua Caliente, Chalpicote and Mezcala in the municipality of Poncitlán, State of Jalisco, indicated in the request. In particular, that the State adopt the pertinent measures to provide a specialized medical diagnosis for the beneficiaries, taking into account the alleged contamination, also providing them with adequate medical care in conditions of availability, accessibility, acceptability and quality, in accordance with applicable international standards (Inter-American Court of Human Rights, 2020, p. 10).

This measure re-concretizes the principles of the right to the environment and the right to water, indicating the actions that the state must take to achieve an optimal level of protection of these rights. In addition, given the constant evolution of the pollution of the damage to the Santiago River due to the constant contamination of its flow, these measures tend to reinforce the duty of reparation of the rights violated in the face of the omissions of implementing measures for their adequate satisfaction.

However, we can observe how those documents of difficult application given the generality of their content, were developed by both the local and international protective authority. Legally, it is demonstrated that the development of the content of such a legal framework is possible, even when determining the actions that the authorities must take. However, it is the beginning of a process far from being completed, because these principles have not yet materialized by the authorities that are obliged to do so. Therefore, the issue must be studied in due course, based on what the state does to comply with these measures where each ordinance was concretized, or where appropriate,



the condemnation it receives in the face of the constant omission of taking actions to respect and repair the right to a healthy environment and water.

V. The need to implement an environmental justice system.

Despite the existence of a non-jurisdictional body for the protection of the rights to water and the environment as human rights and an international human rights justice system, both mechanisms are not full to protect the right to water, since the former does not have coercive powers to enforce its determinations, and the second analyzes it from the perspective of human rights, implying that the actions that pollute are perpetuated as long as they do not represent an impact on human rights.

Derived from the problem caused to the Santiago River, it is necessary to establish an environmental justice system in charge of the Judicial Power of the State of Jalisco. This claim has two supports: one of a theoretical nature and the other of a legal nature.

The first of them attends to the theory of guaranteeism, since it proposes that the development of the law needs a jurisdictional instance for the protection of rights, and with it its full realization. Ferrajoli (2010), specifies that these are obligations assumed by states to implement the necessary mechanisms to sanction illegal acts or invalid acts that violate subjective rights (p. 64). One of the proposals is that any content of law is incomplete when there is no instance before which a violation can be claimed, and the other, that the State – Jalisco does not exempt itself from this responsibility – must develop as a constrained subject to promote, respect, protect and guarantee rights.

Reinforcing the theoretical application, on June 25, 1998, the Aarhus Convention was concluded, where the duty to guarantee access to justice in environmental matters was indicated in the international agreement. Article 1 sets out as its objective the obligation to guarantee access to environmental justice. The intention to reinforce this obligation is to reinforce the principles decreed in the Stockholm Declaration, the Rio Declaration on Environment and Development, and the rest of



the international treaties seeking that their content and the laws emanating from the reception of them in the countries, materialize in the face of the growing deterioration of water.

The State of Jalisco lacks a structure that allows the exercise of environmental justice, limiting itself to knowledge of this matter through the issuance of administrative acts when companies merit a fine for violating the content of the environmental legal framework. Based on Article 9.1. of the Aarhus Convention (1998), in order to comply with access to environmental justice, the following must be done:

Article 9. Access to justice

1. Each Party shall ensure, within the framework of its domestic law, that any person who considers that his or her request for information under Article 4 has not been met, has been unlawfully rejected, in whole or in part, has not received a sufficient response, or that, moreover, he or she has not received the treatment provided for in the provisions of that Article, have the possibility of lodging an appeal with a judicial body or with another independent and impartial body established by law.

In the event that a Party provides for such a remedy before a judicial body, it shall ensure that the person concerned also has access to a rapid procedure established by law that is free of charge or not very onerous, with a view to the re-examination of the application by a public authority or its examination by an independent and impartial body other than a judicial body. Final decisions taken pursuant to this paragraph 1 shall be binding on the public authority in possession of the information. The reasons for them shall be indicated in writing, at least where access to information is refused under this paragraph.

The determinations of the Judiciary are not decisive for the protection and reparation of the impact on water. One of the reasons is the nature of the Jalisco State Human Rights Commission, whose recommendations are not binding, granting the power to the authority responsible for accepting it or not, partially or totally. At the same time, the decisions that emanate from the Court of Administrative Justice derived from an administrative act, only judge its legality, but lack a power to order a specific action to repair the damage caused, or sanction the infringer of the rule.



Therefore, environmental justice must fall on a judicial body that can demand compliance with its determinations in a coercive manner, for the realization of the environmental legal framework designed with Mexican laws for its protection and international treaties that are incorporated by tutelas a human right, eliminating the discretion of compliance that currently exists.

For this, it is necessary to expand the powers of the Judicial Power of the State of Jalisco. The original competence to hear disputes in the different matters of law lies with the Supreme Court of the State of Jalisco (Political Constitution of the Free and Sovereign State of Jalisco, 2020, art. 62 fr. I). Under the principle of subjection to the law, all authorities can only do what is allowed to them. Therefore, the Judicial Power represented by the Supreme Court of Justice of the State of Jalisco, only hears controversies of the criminal, civil, family and commercial order. The first change consists of the inclusion of environmental disputes to give it the power to issue deliberations on the matter.

The next change would consist of the modification to the Organic Law of the Judicial Power of the State of Jalisco (2020). Through this, it will be possible to elaborate the organizational structure with which the Judicial Power delimits the competences of each organ in order to guarantee access to prompt and expeditious environmental justice.

The first of these is article 23 of the Organic Law of the Judicial Power of the State of Jalisco (2020). This article determines the powers of the Plenary of the Supreme Court of the State of Jalisco that, in a similar way, include those indicated in article 56 section I of the Political Constitution of the State of Jalisco. To give it the ability to regulate the function within the court, its faculty and that it hears this matter must be expanded.

Subsequently, it is necessary to elaborate an article 49 Bis in the law, with which a chamber is established to deal with environmental matters. Recalling that our legal system is a guarantor, a body must be established to review the decisions of the judicial authority that they issue. This is intended to protect the principle of legality that governs any act, so that resolutions do not violate the legal framework.

Finally, it is essential to incorporate section VI into article 101 of the Organic Law of the Judicial Power of the State of Jalisco (2020). This article delimits the jurisdiction of each court that makes up



the Judicial Power of the State of Jalisco. This imposes the duty to implement environmental courts that represent access to environmental justice. Rights and exceptions will be exercised before them; evidence will be released; pleadings will be made for sentencing, where each party can be called to trial, developing the principles of the Aarhus Convention.

With this, environmental justice may be established, in harmony with the principles of effective judicial protection, guaranteeing the right to appeal rulings in a higher instance (Political Constitution of the United Mexican States, 2021, art. 17). The content of the convention, with the content of our Magna Carta, would allow the optimal development of a mechanism with which the right to water and the scope it has with the right to the environment are effectively protected and anyone who transgresses the legal framework that protects it is punished.

Conclusions

Efforts to protect the right to water and sanitation, as well as its relationship with a healthy environment in the State of Jalisco are insufficient, because they cannot promote, respect, protect and guarantee it, as can be seen from the case of the Santiago River, as well as the people who were affected by the contact with it. This is due to the primacy of economic activities caused by the promotion of economic development, encouraging the authorities obliged to exercise it to issue a series of recommendations of a non-binding nature. Therefore, the necessary actions must be undertaken to implement an environmental justice system, which allows the development and protection of the human right to water and sanitation, as well as the reparation and coercion of any violation of it, developing the principles of international environmental law in our State, which was assumed to be a guarantor in the new paradigm of contemporary law.

References

Chamber of Deputies. (2018). *General Law of Ecological Balance and Environmental Protection*. Retrieved from: http://www.diputados.gob.mx/LeyesBiblio/pdf/148_180121.pdf



- Chamber of Deputies. (2020). *National Waters Law*. Retrieved from: http://www.diputados.gob.mx/LeyesBiblio/pdf/16_060120.pdf
- Chamber of Deputies. (2021). *Political Constitution of the United Mexican States*. Retrieved from: http://www.diputados.gob.mx/LeyesBiblio/pdf/1_110321.pdf
- State Human Rights Commission of the State of Jalisco. *Recommendation 001/2009*. Retrieved from: <http://cedhj.org.mx/recomendaciones/emitidas/2009/rec0901.pdf>
- Inter-American Commission on Human Rights. (2020). *Resolution 07/2020*. Retrieved from: <https://www.oas.org/es/cidh/prensa/comunicados/2020/MC70819.pdf>
- Congress of the State of Jalisco. (2020). *Political Constitution of the Free and Sovereign State of Jalisco*. Retrieved from: <https://congresoweb.congreso.jalisco.gob.mx/BibliotecaVirtual/busquedasleyes/Listado.cfm#Codigo>
- Congress of the State of Jalisco. (2020). *Organic Law of the Judicial Power of the State of Jalisco*. Retrieved from: <https://congresoweb.congreso.jalisco.gob.mx/BibliotecaVirtual/busquedasleyes/Listado.cfm#Leyes>
- Enciso, A. (2004). Impune pollution covers El Salto, Jalisco. *The Day*. Jalisco, Mexico.
- Eschenhagen, M. (2006). *International environmental summits and environmental education*. Oasis 2006-07, No. 12, Center for Research and Special Projects. Colombia. Pp. 39-76.
- Ferrajoli, L. (2010). *Democracy and law*. Spain: Trotta.
- González, M. (2010). They carry out business censuses in El Salto. University of Guadalajara. Mexico.
- Institute of Statistical and Geographic Information of Jalisco. (2019). *Juanacatlán: Municipal diagnosis May 2018*. Retrieved from: <https://iieg.gob.mx/contenido/Municipios/Juanacatlan.pdf>
- Institute of Statistical and Geographic Information of Jalisco. (2019). *El Salto: Municipal diagnosis March 2019*. Retrieved from: <https://iieg.gob.mx/ns/wp-content/uploads/2019/06/El-Salto.pdf>



- The Jump. (2018). *Minutes of the second ordinary session of the building commission on Human Rights*. Retrieved from <https://elsalto.gob.mx/portal-api/public/transparencia/docs/1563295834166.docx>
- La Vina, A., Hoff, G. & De rose, A. (2002). *Johannesburg's successes and failures: a history of many summits*. World Resources Institute. s, l.
- Marcos A. Orellana (2014) *Typology of instruments of international environmental public law*. United Nations publication
- Organization of American States. (1969). *American Convention on Human Rights*. Retrieved from: https://www.oas.org/dil/esp/tratados_b-32_convencion_americana_sobre_derechos_humanos.htm
- Organization of American States. (1999). *Additional Protocol to the American Convention on Human Rights in the Field of Economic, Social and Cultural Rights "Protocol of San Salvador"*. Retrieved from: <https://www.oas.org/juridico/spanish/tratados/a-52.html>
- United Nations Organization. (1972). *Stockholm Declaration on the Human Environment*. Retrieved from: <http://www.upv.es/contenidos/CAMUNISO/info/U0579218.pdf>
- United Nations Organization. (2002). *Johannesburg Declaration on Sustainable Development*. Retrieved from: <http://appweb.cndh.org.mx/derechoagua/archivos/contenido/CPEUM/E4.pdf>
- United Nations Organization. (1992). *Declaration of the River on Environment and Development*. Retrieved from: <https://www.un.org/spanish/esa/sustdev/agenda21/riodeclaration.htm>
- United Nations Organization. (1998). *Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*. Retrieved from: https://www.oas.org/es/sla/ddi/docs/acceso_informacion_desarrollos_convenio_aahrus.pdf



- United Nations Organization. (2012). *Rio+20: United Nations Conference on Sustainable Development*. Retrieved from:
<https://www.un.org/sustainabledevelopment/es/development-agenda/>
- Püschel, L. & Urrutia, O. (2011). *Principles of International Environmental Law*. Pontifical Catholic University of Valparaiso. Chile.
- Secretary of the Environment and Natural Resources. (2016) . *Comprehensive management program of the Santiago-Guadalajara riverbasin*. National Autonomous University of Mexico, Michoacán campus. Michoacan, Mexico.
- Yale University. (2018). Environmental performance index. Yale Center for Environmental Law & Policy. United States of America.