ACCESS TO WATER AND SANITATION: Analysis of the Mexican legal framework from a human rights perspective

WaterLex Legal Country Mapping: Mexico
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Water and sanitation are key to sustainable development and human well-being. Water is vital for life and required to realise many human rights, such as the rights to water, sanitation, food or health. The human rights to water and sanitation (HRWS) were recognised by the international community through resolutions and conventions both at international and regional level. In 2015, a specific goal on water was also adopted within the Agenda 2030 on Sustainable Development. The Sustainable Development Goal 6 (SDG 6) addresses issues related to drinking water, sanitation, wastewater, integrated water resources management (IWRM) and ecosystems in addition to containing a specific target on participation of local communities and articulating aspects of the human rights to water and sanitation.

The adoption of the Sustainable Development Agenda means that a multitude of actions will be needed to reach the goals by 2030 and one of the key challenges will be implementation. To achieve this, it is clear that the creation of an enabling environment is needed for the realisation of the objectives. This equally applies to the progressive realisation of the HRWS. One of the key components that characterise such environment is the national legal framework, since adequate regulation can contribute to the realisation of human rights but also SDGs, while conversely, gaps in the national framework can hinder it.

The present analysis was conducted with the aim of demonstrating how the current national legal framework in Mexico reflects the normative content of the HRWS and related human rights principles, and how those rights are protected. The study provides baseline information to support governance and legal reforms, prepare targeted capacity-building activities and support other aspects of WaterLex’s work in the country.

Mexico’s water governance framework

The water governance framework of Mexico spans multiple levels of government: federal, regional, state, and municipal. The National Constitution confirms water as a national asset over which the Federal Executive maintains authority. This authority includes instituting regulatory provisions as a means of maintaining control over the extraction of groundwater. As part of the Executive, various Ministries exercise activities in relation to management of national water resources. However, it is the Ministry of Environment and Natural Resources (SEMARNAT) which has the chief mandate. Pursuant to the National Water Law, the National Water Commission (CONAGUA), an independent unit of SEMARNAT, has an extensive range of duties inclusive of ensuring security and sustainability of Mexico’s water resources, managing water rights and development of hydrologic infrastructure.

CONAGUA operates at both the national and regional level. CONAGUA’s Basin Agencies (Organismos de Cuenca), which are prescribed by the National Water Law, oversee 13 administrative units at the regional level. These Basin Agencies carry-out administrative duties such as management and control of various permits and deeds concerning water rights, as well as devising and implementing water policy.

In line with the approach to decentralise water management and have increased input from the local levels, Basin Councils (Consejos de Cuenca), also having their establishment per the National Water Law, serve as a conduit to have expanded participation in matters of water administration, infrastructure development, improved water services, sustainability, and the promotion of the socio-economic / environmental value of water in civil society. The Basin Councils’ organisation
has a diverse composition with a view to having representation from all levels of government, users, citizens and non-governmental organisations.

State and municipal governments have an essential role within Mexico’s water governance framework. In our review of three States (Chiapas, Jalisco, Mexico), it was found that each has its own State water law which stipulate its local water governance framework, including entities such as State Water Commissions and Technical Committees. Municipalities in Mexico are certainly principal actors in water governance as pursuant to the National Constitution the provision of drinking water, sanitation, wastewater treatment and disposal services falls under their responsibility; normally through water utilities.

The National Water Law is federal legislation which regulates all water resources in Mexico and as mentioned above, establishes water governing entities and their roles and responsibilities. While it confirms CONAGUA as the authority in formulating national water policy, it also establishes 22 principles that serve as a guide for application and interpretation of its provisions and the National Water Program. Additional federal legislation addresses various aspects of water resources management and supply, covering tariff setting for use, quality of supply, and environmental matters to name a few.

International commitments with respect to the human rights to water and sanitation

Mexico has ratified an important number of treaties which contain explicit or implicit provisions on access to water and sanitation services as human rights. The State has acceded namely to the International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the Convention on the Rights of the Child (CRC) and most of the International Labour Organization’s (ILO) conventions that contain articles on access to water and sanitation in work places. The State has furthermore ratified the Optional Protocols to the International Covenant on Civil and Political Rights (ICCPR) and to CEDAW but not to the ICESCR. Mexico has also not acceded to the United Nations (UN) Economic Commission for Europe (ECE) Aarhus Convention that addresses participation, access to information and justice in environmental matters, nor the Water Convention, both of which are now open for ratification for non-ECE Member States.

At the regional level, Mexico has ratified key instruments that contain human rights closely related to access to water and sanitation. However, at the time of writing, the State has not acceded to the Inter-American Convention on Protecting the Human Rights of Older Persons, that recently entered into force, neither to the Inter-American Convention Against All Forms of Discrimination and Intolerance, nor to the Inter-American Convention Against Racism, Racial Discrimination and Related Forms of Intolerance (not yet in force), which refer explicitly to access to water and sanitation.

In Mexico, treaties that are compliant with the Constitution are part of the supreme law of the Union. According to the Constitution, everyone is entitled to the human rights granted by the Constitution and by the international treaties to which Mexico is a party. The country’s international commitments arising from bilateral and multilateral treaties therefore form part of the national legal framework and Courts may refer to those instruments in their judgments. All authorities, in their areas of competence, are also obliged to promote, respect, protect and guarantee human rights, in accordance with the principles of universality, interdependence, indivisibility and progressiveness. As a consequence, the Constitution requires the State to prevent, investigate, penalise and rectify violations to human rights, according to the law. Mexico has committed to the realisation of the human rights to water and sanitation through international and regional treaties.
The human rights to water and sanitation in the national legal framework

Mexico’s obligations with respect to water and sanitation also apply to the human rights to water and sanitation as these can be found in the National Constitution. The supreme law establishes the right of every person to water, mentioning also sanitation (saneamiento de agua), for personal and domestic consumption, in a sufficient, healthy, acceptable and affordable way, and clarifies that provision of drinking water, sanitation, wastewater treatment and disposal services is the responsibility of the municipalities. The National Water Law has not been amended to reflect the inclusion of the human right to water in the Constitution. Nevertheless various federal and state legal documents either address aspects characterising the human rights to water and sanitation or touch upon these rights.

The analysed state legislation of Mexico, Chiapas and Jalisco incorporates the human rights to water and sanitation to different extents. The Constitutions of the all three States grant the right to water and some refer also to access to sanitation. In the State of Mexico, the Water Law asserts that water should incorporate current applicable norms to guarantee the human right to water. The Chiapas Water Law also recalls aspects of the right to water, by stating that water and sanitation public services are to be provided in conditions ensuring their continuity, regularity, quality and coverage, in order to satisfy user’s needs and the protection of the environment. Sanitation and water as human rights are further referred to in the objectives of the Jalisco State Water Law.

Availability of water and sanitation as articulated in the national legislation

Different aspects characterising the availability criterion of the human rights to water and sanitation are found in the federal legislation. These concern generally provisions on responsibilities for water and sanitation services, but also the prioritisation of water use for domestic purposes and sufficiency of water supplied. The Constitution explicitly refers to these elements, in establishing the responsibility for the provision of drinking water and sanitation to municipalities, and in stating that everyone has the right to water for domestic and personal consumption, in a sufficient way. The federal legal framework does not further elaborate guidance on a minimum quantity of water that should be available for personal or domestic uses for everyone, bearing in mind the specific needs of certain groups of people. However, the Federal Water Law not only clearly prioritises water use for domestic purposes but also for public urban use and also in situations of emergency, extreme shortage or overexploitation. It appears nevertheless that the definition of public urban use focuses on the method of water provision and does not necessarily marginalise rural areas. The sole prioritisation of domestic and urban public uses of water, without considering or prioritising rural areas could leave behind marginalised people. The federal water law also forbids those involved in water supply to abolish the provision of drinking water and drainage services for inhabited buildings, except in cases determined by applicable general provisions, many of which are found in state legislation.

Although the Jalisco and Chiapas legislation contains an explicit right to water and sanitation services delivered in a continuous manner, both States prohibit suspension/abolishment of services, except in certain cases including non-payment for services. Also in the State of Mexico restriction of services for non-payment is possible. In Chiapas, however, suspensions cannot represent risk to public health, and must be mandated by authorities. They are also not authorised for institutions providing health or care services where the suspension would cause serious risk to public health. Interestingly, in Jalisco, a minimum of 50 litres of water per day per person is to be provided by the municipality and service operators, even in case of non-
payment. Moreover, in case of reduced supply, affected users have the right to demand provision of water for domestic uses. As for the State of Mexico, the Health Regulation sets out minimum provision of water for human consumption divided in categories of use, which is at least 150 litres per person each day in a home or lodging. With respect to sanitation and sewerage systems, there are also some obligations to connect to the service or to have a sceptic tank in some States. There exist therefore clear differences with respect to the minimum amount of water that should be available for each person for personal and domestic uses and the federal framework does not provide exhaustive standards or guidelines for the States to ensure homogenous conditions throughout the country.

Concerning availability of water and sanitation on other premises, various requirements can be found in legislation at the federal level, namely with respect to work places and prisons. The legislation also contains important provisions addressing sanitary needs for women in detention centres. At state level the Chiapas and Jalisco laws contain similar provisions with respect to water supply in markets, hairdressers, gas stations, etc. but the criteria themselves differ. Some require sufficient pressure, others soap, hygienic conditions, or continuity of supply. As for the State of Mexico, various provisions also exist with regard to drinking water and sanitation in various establishments.

The legislation analysed, both at federal and state level, generally did not provide specific indication on physical accessibility of water and sanitation services nor on distance to water points or facilities in places where no service is available directly on premises. The exception to this is the legislation of the State of Mexico which addresses access to facilities in different establishments for persons with limited capacities and the federal law on the protection of consumers’ rights.

### Quality and acceptability of drinking water and sanitation services

The Mexican federal legal framework contains important obligations in relation to quality of drinking water, which are further referred to in the legislation of the States of Mexico, Jalisco and Chiapas.

Health organs at federal and state level bear important responsibilities with respect to drinking water quality. For example, periodic analyses are an explicit requirement arising from the State legislation for COPRISEM (State of Mexico), Chiapas Health Secretariat and different actors involved in water supply and sanitation services in Jalisco. At the federal level, the Ministry of Health is required to issue official quality standards, which have been established through Official Mexican Standards. Service providers, in their turn, have clear obligations to provide or guarantee the quality of the water supplied in conformity with the established norms, and in Chiapas and Jalisco, users even have a right to demand quality of the services provided, which is not explicitly found in the legislation of the State of Mexico.

The state level legislation contains other obligations related to positive impact on the quality of water sources, such as the obligation to have sewerage systems or alternative means of wastewater treatment such as septic tanks; the establishment of protection zones or water reserves with prohibited activities to ensure the protection of sources for drinking water; and the requirement to ensure sufficient distance between wells for water supply and contaminating plants or areas. The legal framework of two of the three States studied also refer to household water treatment and storage through varied provisions.

In general, the provision on water quality is nevertheless consistent throughout the three States studied which have clear guidance from the federal level in terms of standards that must applied. However, disparities can arise because the frameworks are not uniform in other
aspects, such as requirements in terms of distance between wells and potential contaminants, or applicable standards for the infrastructure, but also the right attributed to users in demanding quality of water and sanitation services.

The acceptability criterion of the HRWS is referred to in only a few articles of the legislation reviewed. These concern mainly separation of sanitation facilities according to gender, namely in specific places in Chiapas and Jalisco, such as gas stations, and indication on the colour, odour and taste characteristics of drinking water in Jalisco (only). The federal Constitution could be nevertheless understood as referring to the acceptability criterion in that it mentions the right of access to water in an acceptable manner.

Affordability of drinking water and sanitation services

Elements that characterise the affordability criterion of the human rights to water and sanitation can be found throughout the legal framework analysed to different extents. At the federal level, affordability of water is explicitly articulated in the Constitution, but this is not the case for the water-related federal legislation. Nevertheless, the fees and duties for water use and extraction, which are dealt with by federal laws, can have an impact on the cost of water services for end users because the fees can vary depending the type of use of the water obtained, the availability of water, and the National Consumer Price Index according to which those fees are updated.

State laws contain further important provisions that play a role in the affordability of water and sanitation service delivery, and different approaches exist in the legislation of Mexico State, Jalisco and Chiapas in relation to the various aspects characterising water affordability; from tariff setting formulas to positive measures for socio-economically vulnerable populations.

Both the Chiapas and Jalisco water laws require the tariff structure or formula for the calculation of tariffs to take into account the different social strata, and in Chiapas, the tariff structure must also explicitly take into account the capacity to pay of the different strata of users with the aim of allowing the establishment of equity criteria in the service costs. Importantly, in Chiapas, the State Water Institute is mandated with the responsibility to verify the correct application of the formula for setting and approving tariffs. Similar requirements and functions are however not articulated in the Jalisco and Mexico State laws analysed, which demonstrates the heterogenous legal setting for tariff structures with regard to affordability of services for users.

Nevertheless, the Mexico State legislation articulates aspects of the affordability criterion of the HRWS, namely with the possibility to apply special tariffs for users unable to pay for the services. Mechanisms are established under the Jalisco laws to support different users with the payment for services, but these are broader in municipal laws.

The laws of the three States also do not address equally requirements concerning restrictions or suspension of water and sanitation services for non-payment. The type of measures vary from partial restriction to suspension of services. Notably, depending on the State, users who face suspension of services for non-payment may be entitled to a minimum of daily water supply for domestic purposes. Certain procedures must also be followed in case of non-payment, but these are not the same in each State. For example, in Chiapas and Mexico State the measure for non-payment can be taken after two or more unpaid bills, whereas in Jalisco this is not specified. Importantly, in the former two States, non-payment notifications to users are required with Chiapas law explicitly indicating the right to a hearing. In Jalisco, no such procedural measures are included in the law, but a minimum supply of water must be ensured for domestic needs in case of non-payment. Municipal laws, however, can enshrine more detailed procedures, which demonstrates the possible disparities throughout the country.
Human rights principles applicable to the HRWS

Non-discrimination as a human rights principle

The federal legal framework prohibits any form of discrimination, also generally in the provision of services, and requires federal authorities to implement measures that contribute to prevent discriminatory practices with the support of the National Council for the Prevention of Discrimination. Moreover, elements of the principle of non-discrimination, specifically with regard to water issues, are mostly related to the water policy, but the state legislation complements the law at national level and contains important provisions on this principle.

Examples of these provisions include ensuring access to facilities and services on a non-discriminatory basis, in the State of Mexico, and poverty reduction policy which prioritises the elimination of discrimination of access to water services on the basis of income and social status. The States’ water laws however do not explicitly require water service providers to deliver water on a non-discriminatory basis, nor the authorities to adopt specific programs that ensure access to water and sanitation to everyone. Nevertheless, the analysed legislation cites different positive measures to make water economically accessible for different groups of people. Indigenous peoples’ rights are also reinforced throughout the legislation while references to gender or gender needs are only occasionally mentioned. With regard to children and teenagers, the federal and state legislation highlights that federal, state and local authorities have the competence to guarantee access to potable water for children and teenagers.

Access to water-related information

Generally, the right to access information, without discrimination, is explicitly found in the Constitution of Mexico and federal legislation, as a right which includes the right to request, research, disseminate, seek and receive information. All public information can be requested from individuals through various means, and there is an obligation from the different authorities to allow access to the information they hold and to provide it in a simple language for any person and, as far as possible, seek its accessibility and translation into indigenous languages. The generation, publication and delivery of information is to be accessible, reliable, verifiable, truthful and timely.

Specifically in relation to water and sanitation, the federal framework addresses information and education on water as a natural resource, whereas state laws capture information on services for users to a greater extent. This varies across the States, with the establishment of a water information system to separate requirements to publish information on tariffs, restriction areas or notification prior to suspension of services. It is also important that clear mechanisms ensure that users are promptly informed about all issues that may affect them, such as alteration in service supply or water quality that could affect the users’ health.

Ensuring participation as a human rights principle

The principle of participation is reflected throughout the legal framework analysed in relation to water resources management as well as water and sanitation services. With regard to the latter, the States’ law namely foresee representation of users, or private and social sectors in various water-related bodies. Mechanisms are also to be established through programmes, but they are not directly established in the laws analysed. In addition, the federal and state level legislation does not enshrine specific clauses on public participation at all levels of decision-making nor obligations to take due account of the shared concerns, needs or comments by users.

Accountability to support the realisation of the human rights to water and sanitation

In Mexico, accountability and oversight mechanisms exist at federal and state level. Other than the Federal Consumer Protection
Office and the National Council for the Prevention of Discrimination, both of which have mandates that can play a role in ensuring access to water and sanitation, individuals may also file complaints also with the Mexican National Human Rights Commission. This institution is mandated with key powers in terms of protection and promotion of human rights and is accordingly accredited with the highest status in terms of the Paris Principles relating to the Status of National Institutions.

Specifically on water, CONAGUA has important monitoring functions and the National Water Law refers to the Federal Environmental Protection Agency regarding complaints on damage to environment. As for water and sanitation services, state legislation offers additional mechanisms. Interestingly, in the State of Mexico, the water authorities are involved in evaluating the water program and the functions of the authorities, using indicators that are approved by the water council. In Chiapas, the State Water Institute holds important functions although without a general and comprehensive regulatory mandate. Important rights are also attributed to users under the Chiapas legislation, enabling them to denounce actions that infringe upon their rights. These are not the same according to the Mexico State legislation but users nevertheless have the right to communicate claims to service providers on errors in billing documents. Establishing an independent regulator with a comprehensive mandate could ensure uniform monitoring across all states.

Sustainability of water use and infrastructures

The principle of sustainability can be addressed through various angles. The federal legal framework contains clauses mostly on sustainable use of water resources with certain mechanisms set in place, such as protection zones that can positively impact water quality and availability. Nevertheless, standards that aim to avoid drinking water loss in distribution systems are also issued by CONAGUA, though most can be found in state legislation. For instance, CONAGUA established obligations for service providers and users to repair leaks and maintain water facilities to prevent leakages and wastage. Sustainability is also addressed in state legislation through financial policy principles that seek service provision through efficient billing and collection with the goal to generate sufficient economic resources to ensure cost recovery and funds to upkeep infrastructure; thereby reducing water loss through leaks.

Conclusion

A majority of the legal requirements related to the human rights to water and sanitation are included in state legislation rather than the federal legal framework. As a consequence, clear differences exist across the three States analysed. The disparities are even more accentuated when looking at municipal laws which, as demonstrated with examples from municipalities in the State of Jalisco, are built on the State laws but contain additional rights or obligations which ultimately impact the HRWS. State level and municipal legislation therefore plays a significant role in the realisation of those human rights, with some guidance from the federal legal framework. A reform of the national water law reflecting the amendment on the right to water in the Constitution could provide a more uniform framework for state level legislation.

The normative content of the right to sanitation, though mentioned in relation to the right to water in the Constitution, is contained in fewer articles in the legal framework, in comparison with the right to water. It can be noted that at the international level, the United Nations General Assembly adopted a Resolution discussing the right to sanitation as a separate human right only in 2015, whereas the amendment enshrining the right to water in the Mexican Constitution dates from 2012.
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<td>CEDAW</td>
<td>Convention on the Elimination of All Forms of Discrimination against Women</td>
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<tr>
<td>CESCR</td>
<td>Committee on Economic, Social and Cultural Rights</td>
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<tr>
<td>CNDH</td>
<td>Mexico National Human Rights Commission (Comisión Nacional de los Derechos Humanos México)</td>
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<td>CONAFOR</td>
<td>National Forestry Commission (Comisión Nacional Forestal)</td>
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<td>CONAGUA</td>
<td>National Water Commission (Comisión Nacional del Agua)</td>
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<tr>
<td>COTAS</td>
<td>Aquifer/Groundwater Technical Committees (Comités Técnicos de Aguas del Subsuelo o Subterráneas)</td>
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<td>CRC</td>
<td>Convention on the Rights of the Child</td>
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<td>ECE</td>
<td>(UN) Economic Commission for Europe</td>
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<td>GANHRI</td>
<td>Global Alliance of National Human Right Institutions</td>
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<tr>
<td>HAR</td>
<td>Hydrological-administrative Regions</td>
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<td>HRWS</td>
<td>Human rights to water and sanitation</td>
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<td>HWTS</td>
<td>Household Water Treatment and Storage</td>
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<tr>
<td>ICC</td>
<td>International Coordinating Committee of National Institutions for the Promotion and Protection of Human Rights</td>
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<td>ICCPR</td>
<td>International Covenant on Civil and Political Rights</td>
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<td>ICESCR</td>
<td>International Covenant on Economic, Social and Cultural Rights</td>
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<tr>
<td>ILO</td>
<td>International Labour Organization</td>
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<tr>
<td>IWRM</td>
<td>Integrated water resources management</td>
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<td>MoH</td>
<td>Ministry of Health, also SALUD</td>
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<tr>
<td>NCPI</td>
<td>National Consumer Price Index (Indice Nacional de Precios al Consumidor)</td>
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<td>NGO</td>
<td>Non-governmental organisation</td>
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<td>NOM</td>
<td>Official Mexican Standards (Normas Oficial Mexicana)</td>
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<td>OAS</td>
<td>Organization of American States</td>
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<td>PROFEPÁ</td>
<td>Federal Environmental Protection Agency (Procuraduría Federal de Protección al Ambiente)</td>
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<td>PROFECO</td>
<td>Federal Consumer Protection Office (Procuraduría Federal del Consumidor)</td>
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<td>REPDA</td>
<td>Public Register of Water Rights (Registro Público de Derechos de Agua)</td>
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<td>SAGARPA</td>
<td>Ministry of Agriculture, Livestock, Rural Development, Fisheries and Nutrition (Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación)</td>
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<td>SALUD</td>
<td>Ministry of Health (Secretaría de Salud)</td>
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<td>SCT</td>
<td>Ministry of Communications and Transportation (Secretaría de Comunicaciones y Transportes)</td>
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<td>SDG(s)</td>
<td>Sustainable Development Goal(s)</td>
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<td>SEDATU</td>
<td>Ministry of Agrarian, Territorial and Urban Development (Secretaría de Desarrollo Agrario, Territorial y Urbano)</td>
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<td>SEMAR</td>
<td>Navy (Secretaría de Marina)</td>
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<td>SENER</td>
<td>Ministry of Energy (Secretaría de Energía)</td>
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<td>SIAPA</td>
<td>Inter-municipal Drinking Water and Sewage Services System (Sistema Intermunicipal de los Servicios Agua Potable y Alcantarillado)</td>
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<td>SHCP</td>
<td>Ministry of Finance and Public Credit (Secretaría de Hacienda y Crédito Público)</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<td>UNICEF</td>
<td>United Nations International Children's Emergency Fund</td>
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<td>WHO</td>
<td>World Health Organization</td>
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INTRODUCTION

Water and sanitation are key to sustainable development and human well-being. Water is vital for life and required to realise many human rights, such as the rights to food or health. In 2015, a specific goal on water was adopted within the Agenda 2030 on Sustainable Development. The Sustainable Development Goal 6 (SDG 6) addresses issues related to drinking water, sanitation, wastewater, integrated water resources management (IWRM) and ecosystems. SDG 6 also contains a specific target on strengthening the participation of local communities and articulates aspects of the human rights to water and sanitation (HRWS). HRWS were also recognised by the international community through resolutions and conventions both at international and regional level. Along with the majority of other States, Mexico is party to many human rights treaties that include explicitly or implicitly provisions on access to drinking water and sanitation. However, according to the WHO/UNICEF Joint Monitoring Programme, while 96% of the population use improved water sources, 15% of the population still lacks access to improved sanitation facilities. Moreover, more than 70% of Mexico’s water bodies are affected by contamination, and many cities are experiencing overexploitation of renewable groundwater and overuse of environmental flows.

In this context, the present research that was conducted within WaterLex’s broader Country Mappings seeks to report the main water-related legal framework regulating water resources management in Mexico and demonstrate how it reflects the normative content of the human rights to water and sanitation and related human rights principles. WaterLex Country Mappings involve a unique combination of phases, the first of which is a preliminary landscape desk review of the current national water governance framework. Legal desk reviews are subsequently combined with policy reviews and field missions undertaken by WaterLex experts and partners to assess the degree of implementation of the legal and policy frameworks. Such research projects are particularly needed in light of the adoption of the 17 Sustainable Development Goals, including SDG 6 on water. The adoption of the Sustainable Development Agenda means that a multitude of actions will be needed to reach the goals by 2030 and one of the key challenges will be implementation. To achieve this, it is clear that the creation of an enabling environment is needed for the realisation of the objectives. One of the key components that characterise such environment is the national framework, since adequate national governance will contribute to the realisation of SDGs, while conversely, gaps in the national framework can hinder it.

Against this backdrop, the present report offers an understanding of the water governance framework in Mexico (Part A), including chapters on the national water system (Chapter 1) and on the national law on water resources management (Chapter 2), addressing issues such as water use and concessions as well as other relevant national laws applicable to water and sanitation, before informing on the national legal framework specific to access to water and sanitation (Part B). This part informs on Mexico’s international and regional commitments in relation to access to water and sanitation (Chapter 3) and more specifically the HRWS and their implementation at national level, addressing the normative content of those rights (Chapter 4) and how related human rights principles are reflected in the legislation (Chapter 5). The scope of the study is limited to the federal legislation, with concrete examples from the federated States of Mexico, Jalisco and Chiapas complementing the information.

The report is designed for different stakeholders working in the water sector and on human rights. It can be used by national actors and international actors, whether civil society organisations, parliamentarians, practitioners or United Nations (UN) agencies.
Methods
This study was carried out in two distinct phases: (1) Identification and gathering of international and national instruments relevant for the research (2) Identification of relevant provisions for access to water and sanitation and water resources management, guided by strategic questions from the WaterLex Legal Methodology.

The study analyses main laws that related to water and sanitation, including health and the environment. When appropriate, other laws were also considered, such as those addressing access to information, rights of children, etc. The complete list of analysed laws can be found in the list of references at the end of this report.

To complement the information on the federal legal framework of Mexico, the study included research on the legislation in three federated States, focusing primarily on the States of Mexico and Chiapas with additional examples from Jalisco when relevant. The States were chosen according to their particular socio-economic and environmental characteristics. The State of Mexico is the most densely populated state and includes municipalities which form part of the Greater Mexico City Metropolitan Area. The review of Jalisco gives insight into a state that includes Mexico’s second largest metropolitan area, the city of Guadalajara, and a significant industrial zone which hosts multiple Fortune 500 companies. Chiapas, Mexico’s southernmost state, which shares a border with Guatemala, has one of the largest indigenous populations in the country.

The executive summary provides a concise synopsis of the study’s findings. The structure of the present report enables the reader to easily refer to the table of contents to select a chapter of choice to reference for detailed information. Each sub-chapter addressing the normative content of the HRWS and related human rights principles contains all relevant information found at the federal level and at the state level, which is followed by an analysis of the findings and concluding remarks.

Disclaimer
- The research on the national legal framework analyses only main water and sanitation related laws at the federal level with examples from three selected States;
- The present report does not seek to provide a complete analysis of all existing laws, decrees, by-laws or other legal instruments issued by the federal or state legislatures of Mexico. However, some examples were used from non-water related legislation as supplementary information (e.g. protection of consumers’ rights);
- It should be noted that the review did not include all legislation that could affect all groups of people separately, such as laws pertaining particularly to schools (for children’s rights), although it sought to highlight provisions from the main federal and state laws on those groups (e.g. laws on children’s rights or the rights of indigenous peoples). Similarly, the report discusses access to water and sanitation on premises other than at home, but a review of all legislation which could include information on water and sanitation facilities fell outside the scope of this study. Therefore, only information arising from the main water-related legislation was considered.
PART A – WATER GOVERNANCE FRAMEWORK IN MEXICO

1. National Water System

The water governance framework of Mexico is comprised of both international and national obligations. National water policy is ultimately set at the federal level. Nonetheless, regional actors, particularly in river basins, play a major role in water governance by providing support on water policy, grants of access, infrastructure, usage and conservation. State and municipal governments also have specific regulations related to the provision of water and sanitation services, with the responsibility to provide drinking water and sanitation services being attributed to municipalities.

1.1. Federal

Mexico is a Federation composed of 31 States and another federal entity, Mexico City, previously known as the Federal District (Distrito Federal). In terms of governing law, the Political Constitution of the United States of Mexico (hereinafter “Political Constitution of Mexico”, “Constitution of Mexico”, “Constitution”) is supreme. The Federal Executive power is vested in the President. The Executive maintains the power of authority and administration of national water. It may issue standards and

*Figure 1. Map of Mexican States*

executive decrees concerning the management of national water resources. The Constitution confirms that all water in the territory of Mexico (seas, lakes, rivers, groundwater, etc.) is a national asset controlled by the State. Only rights of access and use of water are conveyed.

The Constitution gives Congress the power to enact legislation concerning national water resources. The preeminent legislation concerning water in Mexico at the federal level is the National Water Law (Ley de Aguas Nacionales). The National Water Law stipulates that the Ministry of Environment and Natural Resources (Secretaría de Medio Ambiente y Recursos Naturales – SEMARNAT) shall advise the Federal Executive as to Mexico’s water policy and propose laws and regulations related to the water sector. This Ministry in its authority executes Official Mexican Standards (Normas Oficiales Mexicanas – NOM) which address subject matters such as the permissible limits of contaminants in residual wastewater in national waters and property and the limits permissible of contaminants for residual treated water which is used in public services.

The Ministry of Health (SALUD or MoH) is the authority responsible for monitoring the quality of drinking water and sets the standards by which the water quality should be evaluated. It also sets the norms for good practices for production and sale of purified water, as well as the health requirements for public and private water supply systems for human consumption and use.

The Ministry of Finance and Public Credit (SHCP) sets the federal funding allocation for the water sector and thus must coordinate with other agencies in relation to funding and implementation of water programmes/projects. Other ministries that are involved in water and sanitation governance are the Ministry of Social Development (SEDESOL), Communications and Transportation (SCT), the Navy (SEMAR), the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Nutrition (SAGARPA) and the Ministry of Agrarian, Territorial and Urban Development (SEDATU). Interministerial commissions, such as the Inter-ministerial Commission for the Attention of Droughts, may be created to address specific matters or situations.

1.1.1. The National Water Commission – CONAGUA

The National Water Law also outlines the mandate of the National Water Commission (Comisión Nacional del Agua - CONAGUA), an independent unit of SEMARNAT. CONAGUA’s mandate is far reaching to cover the management of water rights and policy, inclusive of guaranteeing security and sustainability of Mexico’s water resources. Its mission statement declares that the agency is to manage and preserve the nation’s water resources and its inherent public goods in order to achieve a sustainable use of these resources, with the co-responsibility of the tiers of government and society-at-large.

CONAGUA manages the use of Mexico’s water resources, as well as wastewater discharges, by granting concession deeds and discharge permits which are recorded in the Public Registry of Water Rights (Registro Público de Derechos de Agua – REPDA). According to the National Water Law, CONAGUA should encourage the development of drinking water and sewerage systems; as well as sanitation, water treatment and reuse systems. Urban and rural public services for drinking water, sewage, sanitation and reuse shall also be promoted and supported by CONAGUA. This activity shall be in coordination with state governments and through the states and municipalities. Likewise, CONAGUA shall promote the efficient use of water and its conservation in all phases of the hydrological cycle, and promote the development of a culture that contemplates water as a vital, limited resource, with high economic value. In reference to user participation in water management, CONAGUA shall promote and support the organisation of water users at the national level, and rely on what is conducive in state governments, to carry out the same at the state and municipal levels, to
improve water management, and encourage broad, informed participation with the capacity to make decisions and commitments, in terms of law.\textsuperscript{17}

Some of CONAGUA’s additional vast responsibilities as specified in the National Water Law include\textsuperscript{18}:

\begin{itemize}
  \item[i.] Serve as the Authority regarding the quantity and quality of water and its management in the country and exercise accordingly to the Law;
  \item[ii.] Develop special programs of inter-basin interregional nature in matters of national waters;
  \item[iii.] Address issues, strategic projects and national security matters in water projects;
  \item[iv.] Program, study, build, operate, preserve and maintain federal hydraulic works directly or through contracts or grants with third parties;
  \item[v.] Regulate the irrigation services in different districts and the irrigation units on national territory;
  \item[vi.] Establish national priorities regarding the administration and management of national waters;
  \item[vii.] Enter agreements with foreign entities or institutions and related agencies for assistance and technical cooperation, exchange of information and exchange of specialised human resources;
  \item[viii.] Promote the efficient use of water and its conservation in all phases of the hydrological cycle, and promote the development of a culture that contemplates water as a vital, limited resource, with high economic value; and
  \item[ix.] Perform regularly at the national level studies on the economic and financial evaluation of water supply source, location and type of use, in accordance with the arrangements made by the Authority in the matter.
\end{itemize}

CONAGUA’s organisation operates at two levels: national and regional. The institution is led by a General Director and Technical Council (\textit{Consejo Técnico}). The Technical Council is independent of the Executive Director and the head of the Ministry of Environment and Natural Resources shall preside over the Council. Representatives from other ministries of the executive: Treasury and Public Credit; Social Development; Energy; Economy; Health, Agriculture, Livestock and Rural Development; Fishing and Nutrition, including The Mexican Institute of Water Technology and the National Forestry Commission will also serve on the Council. The Council, among other powers, has the power to approve and evaluate the programs of CONAGUA. \textsuperscript{19}
1.2. Regional

Mexico has organised its catchments into 37 hydrological regions which have then been grouped into 13 administrative units known as Hydrological-Administrative Regions (Regiones Hidrológica-Administrativas – HARs). CONAGUA’s regional operations emanate from the HARs wherein multiple municipalities and states may be included in one HAR. Each of the 13 regional HARs are administered by basin agencies (Organismos de Cuenca).

Figure 2. Hydrological-Administrative Regions and States

<table>
<thead>
<tr>
<th>Hydrological-administrative region</th>
<th>States</th>
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<tr>
<td>I Península de Baja California</td>
<td>01</td>
<td>Aguascalientes</td>
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<td>II Noroeste</td>
<td>02</td>
<td>Baja California</td>
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<td>III Pacífico Norte</td>
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<td>Boja California Sur</td>
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<td>IV Balsas</td>
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<td>Campeche</td>
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<td>V Pacífico Sur</td>
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<td>VI Río Bravo</td>
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<td>VII Cuencas Centrales del Norte</td>
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<td>Chiapas</td>
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<td>VIII Lerma-Santiago-Pacifico</td>
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<td>X Golfo Centro</td>
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<td>XI Frontera Sur</td>
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<td>XII Península de Yucatán</td>
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<td>Guerrero</td>
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<td>XIII Aguas del Valle de México</td>
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<td>Zacatecas</td>
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Source: CONAGUA, Statistics on Water in Mexico (Estadísticas del Agua en México), 2016, p. 214

1.2.1. Basin Agencies (Organismos de Cuenca)

As prescribed by the National Water Law, Basin Agencies are specialised technical, administrative units which have their own legal personality operating in conformity of guidelines issued by CONAGUA. Key responsibilities for the Organismos include formulating and executing regional water policy for CONAGUA. They also grant concession or allocation deeds, as well as wastewater discharge permits. Organismos manage the REPDA where the deeds, discharge permits and subsequent modifications of these granted water rights are recorded. Additionally, the Organismos are to support, sanction and regulate water works infrastructure while also controlling water quality...
in their relevant HARs. Updating and monitoring compliance of regional water programs also forms part of the Organismos’ mandate. Another important part of the Organismos’ role is to coordinate and promote water conservation with state governments, citizen organisations, Non-Governmental Organisations (NGOs), user associations and individual water users.  

Each Basin Agency will have an advisory board that will have representatives as appointed by the heads of Ministries of SEMARNAT, SAGARPA, SEDESOL, SHCP, Energy (SENER), Economy (SE), SALUD, and the National Forestry Commission (Comisión Nacional Forestal – CONAFOR). Representatives from the states and the municipalities of the relevant region are also an active part of the body with a vote.

There are twenty Local Offices (Direcciones Locales) that are also part of the regional organisational framework that implement policies, programs, and strategies of CONAUGA in the relevant state jurisdiction. These offices operate in the states where Basin Agency headquarters are absent.

1.2.2. Water Advisory Board (Consejo Consultivo del Agua)

Working at the regional level, the Water Advisory Board (Consejo Consultivo del Agua), established by the National Water Law, is an autonomous entity composed of individuals from the private and social sector who are well versed in the subject of water and its management. At the request of the Federal Executive, the Advisory Board may advise, recommend, analyse and evaluate the national priority or strategic problems related to the exploitation, use, and the renewal of water resources, including international conventions. In addition, it may carry out its own the recommendations, analysis and evaluations as it deems appropriate in relation to integrated water resources management.

1.2.3. Basin Councils (Consejos de Cuenca)

Pursuant to the National Water Law, CONAGUA shall establish Basin Councils (Consejos de Cuenca) that are fully integrated and comprised of diverse representation from federal, state, municipal authorities and civil society. The creation of Basin Councils is a concerted effort to have public participation with all categories of users represented to provide input and institute an integrated management of water resources. The Water Law precisely states that the Basin Councils are not subordinate to CONAGUA or the Basin Agencies. Rather, the Basin Councils shall be vehicles to facilitate cooperation among relevant actors in the water sector while serving as advisors for improved water administration, development of water infrastructure, improved water services, resource preservation of the basin, and the promotion of the socio-economic / environmental value of water in civil society. The Basin Councils propose the order of priority for water uses which is ultimately set for approval by CONAGUA. In all cases of use, domestic and urban public will have priority over other uses of water. This is discussed further below in Chapter 4.

As at 2016 of June there were 26 Basin Councils in Mexico. The Basin Councils’ organisational composition should include representatives from varied federal government ministries (Environment, Finance, Health, etc.), state and municipal representatives, users, citizens and non-governmental organisations. State and municipal representatives should makeup no more than 35% of the body, while users, inclusive of citizens and NGOs, should comprise at a minimum 50% of the Basin Councils. In this context, agencies which provide water and sanitation services are considered consumers and form part of the user category.

From an organisational governance perspective, each Basin Council shall have no less than 4 governing branches to carry-out its functions: The General Assembly of Users (Assemblea General de Usarios), Executive Committee (Comité Directivo), Operation and Oversight Commission (Comision de Operación y Vigilancia), and Operational Management (Gerencia Operativa).
Executive Committee is headed by a President and a Technical Secretary. Generally, the General Director of the relevant regional Basin Agency will serve as the Secretary.

Operational Management will address internal technical, administrative tasks and have legal capacity to execute its function.

Operations and Oversight Commission will have a technical working group responsible for monitoring and evaluating the performance of the Basin Council. Specific working groups and other specialised bodies are also possible to aid the Basin Council to fulfil its purpose.  

General Assembly Speakers are elected serving in the Assembly and represent water users of diverse categories: agriculture, domestic, public works, industrial to name a few. Civil society is also represented with organisations from different sectors: ecological, forestry, indigenous rights, academic, etc. A President and a Secretary of Proceedings are also elected by members of the Assembly. The Assembly will confer regarding the strategies, priorities, and policies for the short, medium, and long term of the concerned water basin. Through the designated Assembly representatives, the recommendations of the Basin Councils are channelled to the Basin Agencies.

The Basin Council is subdivided into auxiliary organs which generally act for a specific basin area: Comisiones de Cuenca (Sub-Basin Commissions), Comités de Cuenca (Micro Basin Committees), and Comités Técnicos de Aguas del Subsualo o Subterráneos (Aquifer/Groundwater Technical Committees – COTAS). There are multiple organs in one Basin Council. For example in the Basin Council of Valle de México which covers 3 states and Mexico City, there are 18 User Committees (urban public, agriculture, industrial, livestock, aquaculture, services) and 8 Sector Committees (forestry, business, academic) across the Council.

1.3. State and municipal

Each state in Mexico has an independent State Water Commission. Generally, each water commission has the following responsibilities:

   i. Development of projects and actions in the context of regional water programs that comply to each state;
   ii. Implementation of decentralised programs; and
   iii. Support the maintenance of the systems to potable water and sanitation in rural areas and the Infrastructure operations that include or benefit more than one municipality, among others.

Normally, the provision of drinking water, sanitation, wastewater treatment and disposal services is the responsibility of the municipalities, normally through water utilities. Part B of this report elaborates on this.
References

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4 Political Constitution of the United States of Mexico (Constitución Política de los Estados Unidos Mexicanos), as amended February 2017, Diario Oficial de la Federación [D.O.], 5 February 1917, Art 133. [Political Constitution of Mexico]
6 Political Constitution of Mexico, Art. 27.
7 Political Constitution of Mexico, Art. 73(XXIX)(3o).
8 See National Water Law.
9 National Water law, Art. 8.
13 National Water Law, Art. 9.
15 National Water Law, Art. 9 XIII and XIV.
16 National Water Law, Art. 9.
17 National Water Law, Art. 9 XIX.
18 National Water Law, Art. 9.
19 National Water Law, Arts. 10, 11.
23 National Water Law, Art. 12 BIS 2.
25 CONAGUA, Statistics on Water in Mexico, 2015, p. 22.
27 National Water Law, Art. 13, chapter IV.
29 CONAGUA official Website available at http://www.gob.mx/conagua/documentos/consejos-de-cuenca.
30 National Water Law, Art. 13 BIS.
32 National Water Law, Arts. 13 BIS 1 and 13 BIS 2(VI).
33 National Water Law, Art. 13 BIS 1 (D).
35 Political Constitution of Mexico, Art. 115 (III)(a).

2.1. Water law at federal level

Water is a natural resource regulated by various national laws in Mexico. Pursuant to the Political Constitution of Mexico, water is a public resource owned by the Nation, who has the authority to transfer rights of use to individuals. Water is also mentioned in the first Chapter of the Constitution that addresses human rights and guarantees: Every person has the right of access, provision and “drainage”/“sanitation” of water (saneamiento de agua) for personal and domestic consumption in a sufficient, safe (salubre), acceptable and affordable mean. This right is guaranteed by the State and is discussed more in detail under Part B – Legal Framework Pertaining to the Human Rights to Water and Sanitation.

The National Water Law is federal legislation which regulates all water resources in Mexico. Enacted 1 December 1992, the law was substantially amended 30 April 2004, with the last amendments taking place 24 March 2016. A new national water bill was introduced in congress in 2015 but faced opposition in its negotiation and was never passed. Many civil society organisations argued the bill privatises water services which would lead to a negative impact for citizens and the environment. All encompassing, the current National Water Law delineates the authority and administration of national water, national water policy and programs, rights of exploitation and use, environmental protection and enforcement measures.

2.2. National policy

The National Water Program (Programa Nacional Hídrico) is defined as the “guiding document integrating water basin plans at the national level, which defines the availability, use and exploitation of the resource, as well as strategies, priorities and policies, to achieve the balance of sustainable regional development and advancement in integrated management of water resources.” CONAGUA is charged with the responsibility to integrate, formulate and propose the National Water Program to the President, including updating and monitoring compliance.

According to the National Water Law, CONAGUA shall also formulate the national water policy and via SERMARNAT, provide the proposal of said policy to the President as head of the Federal Executive. The Water Law establishes 22 principles that underpin the national water policy and serve as a guide for application and interpretation of the Water Law and National Water Program. River basins are positioned at the heart of this policy and serve as a key component in the quest of the 2004 amendments of the Water Law to decentralise national water resources management. As such, national policy aims to generate integrated water resource management with direct action and participation by local actors at the basin level.

Nonetheless, it is also stipulated as a policy principle that the Federal Executive should provide support to states and municipalities for the creation and improvement of competent bodies to be responsible for the management of national waters under their administration. Furthermore, the necessary tools to ensure proper water quality for drinking and maintenance of public health should form part of this support from the Federal Executive. Moreover, policy principles address access to information, education and participation, which are discussed more in depth below, under Chapter 5.

With respect to categories for use of water, the principles specify that domestic and urban public use will have preference over other designated uses for water. Water conservation and restoration with
a view to avoiding practices harmful to the environment also serve as a policy principle. Additionally, economic incentives for efficient and clean water use is counted as a principle for national policy.

The principles also encompass doctrine such as ‘el agua paga el agua’ (water pays for water) or ‘usuario-pagador’ (user pays) which upholds the philosophy that the management of water resources and its exploitation should generate finances which meet the costs to carryout its inherent purpose. Moreover, under the principle ‘quien contamina paga’ (polluter pays), persons responsible for contamination of water resources shall be held accountable in accordance with the law.

The Law further identifies the following eight elements as part of the fundamental instruments of the water policy:

1. Water planning; includes the local, state, hydrological basin, hydrological-administrative and national regions;
2. The system of concessions and allocations referring to the rights for exploitation, use or exploitation of water, for the use of the national goods in accordance with the provisions of Article 113 as well as the permits for unloading and construction;
3. The management of national waters, to streamline water needs, and contribute to the improvement of the water economy and finance and its management;
4. The collection of rights caused by the exploitation, use or exploitation, discharge and protection of water;
5. The participation of the organisations of the society and of the users, and their co-responsibility in the development of specific activities;
6. Prevention, conciliation, arbitration, mitigation and conflict resolution in water matters and their management;
7. Social supports for marginalised rural and urban communities to access water and sanitation, and
8. The National System of Information on quantity, quality, uses and conservation of water.

2.3. Other laws affecting water resources management and/or supply and sanitation

In addition to the National Water Law, it should be recalled that other federal laws impact on water resources management, water supply and sanitation. Standards and executive decrees may be issued by the Federal Executive as well as federal ministries and agencies. Other laws, regulations, decrees and decisions may be issued by local authorities as well.

For instance, the General Law of National Assets (Ley General de Bienes Nacionales) naturally addresses water which is identified as a national asset in the Constitution. Further the Federal Planning Law (Ley de Planeación) establishes the legal framework followed by the Federal Executive in relation to issuing national development plans and sectorial programmes, inclusive of those dealing with water. The Federal Law on Duties (Ley Federal de Derechos) as legislated by Congress stipulates the rates of charge for water usage under concessions, allocations or permits granted by the Federal Government. Fees for drinking water supply are discussed below, in Chapter 4.3.

Mexico also has a body of environmental codes which address varied aspects of water. The 1988 General Law on Ecological Balance and Environmental Protection (Ley general de Equilibrio Ecológico y la Protección al Ambiente) includes provisions on water sustainability and pollution prevention. Additional environmental laws include the General Law for the Integral Prevention and Management of Waste (Ley general para la Prevención y Gestión Integral de los Residuos) concerned with
contamination of bodies of water from waste, the General Wildlife Law (Ley General de Vida Silvestre), and the Sustainable Forestry Development Law (Ley General de Desarrollo Forestal Sustentable) among others.

The General Health Law (Ley General de Salud) has several provisions related to water ranging from water treatment for human use and consumption to the treatment of wastewater. This law also defines penalties (imprisonment and monetary fine) for actions causing risks to health from contamination of bodies of water intended for human consumption.

2.4. Water use and concessions

The National Water Law outlines the rules and conditions for the use and extraction of national water. The Federal Executive holds the authority to grant concessions or assignments for surface and ground water use and generally this authority is ultimately exercised through Basin Agencies. In some cases, CONAGUA will directly provide the concession. This same allocation system is also followed for wastewater discharges.

In line with the Constitutional provision on access to water, the Water Law states that obtaining a permit or concession is not required for surface water extracted manually for domestic use, nor is it a requisite for sea water, except if extracted for desalination purposes. Groundwater in unregulated areas may be extracted without a concession, inclusive of means through artificial works. Domestic use has been defined in the Water Law as: “the application of national water for the personal use of people and the home, irrigation of their gardens and ornamental trees, including the trough of domestic animals that does not constitute a lucrative activity”. Extraction and use of water for domestic purposes must not deviate the water from its channel or cause an alteration in water quality or a significant decrease in water flow, under the terms of the applicable regulation.

The Basin Agencies and Councils will propose the priority of use to CONAGUA in relation to granting concessions. In any case, domestic and urban public use will have priority over other uses. This is discussed further below.

Water concessions are granted subject to defined terms including a term validity of no less than 5 years and no more than 30 years. The term may be extended by application 6 months prior to the lapse of term. To determine whether an allocation or concession can be granted for an aquifer or watershed, the annual average of available water must be measured. New allocations will only be granted where there is an additional volume of water that may be extracted without compromising the annual average of water available. Additional factors considered with respect to the term of duration, include conditions of the water source, preferential uses in the region and the expectation of growth of such uses, social benefits and resources invested in the activities that will require the related water supply.

Water is a national asset, and therefore in principle its use is not linked to ownership of land. However, when applying for a water concession, an applicant must provide evidence of ownership or legal possession of the land where the groundwater will be extracted and of the areas that will be benefitted by use of the water. Applications for water concessions must minimally identify: 1) name and address of the applicant 2) hydrological basin, aquifer, hydrological region, municipality and locality of which the application concerns 3) point of extraction 4) volume of the extraction and consumption required 5) initial use of the water 6) point of discharge of wastewater with quantity and quality 7) works to be carried out or the characteristics of the existing works for their extraction and exploitation, as well as the respective ones for their discharge, including treatment of the wastewater.
and the process methods for the reuse and restoration of the water resource, including economic and environmental costs 8) duration of the concession.

The costs for acquiring water concessions is set by the Federal Law on Duties. In 2016 the fee for an allocation or concession was $3,535 pesos which includes the registration of the right. The discharge of waste water into a receiving body was set at a cost of $4,842 pesos in 2016. In addition to the charges to acquire the right, fees are payable for the actual water used. Water is paid according to the availability of the water body, with a preferential rate for municipalities or providers of water supply, electricity generation, aquaculture, public recreational centres, and livestock. In contrast, there are also circumstances in which the extraction of water will not generate charges.

All concession titles, their modification and transfers are recorded in the Public Registry of Water Rights. Article 35 of the Water Law establishes that the transfer of a groundwater concession, in regulated areas, may be done in conjunction with the transfer of the property; although it is also possible to transfer land and the concession separately. Where the land is transferred without the concession, the related well must be closed. There are special rules regarding water for agriculture use, and especially in the case of water assigned to irrigation units or districts. Special rules also apply to ejidos (agrarian communal property) that are benefitted by the water granted under the concession; in this case, the water rights will be tied to ownership of the land.

2.5. Monitoring and controls of water concessions

Pursuant to its constitutional power, the Federal Executive has the authority to institute regulatory provisions as a means of maintaining control over the extraction of groundwater. The National Water Law addresses such provisions specifically and indicates that in the name of national, regional, or local order the Federal Executive may establish regulated zones, restriction zones (zonas de veda), as well as declare water reserve zones.

Regulated zones may stipulate the volumes of extraction, types of use and discharge authorised, limits to the rights of permit holders, and other special provisions which are necessary in the name of public interest. Reserve zones are designated areas in which water use is either partially or totally limited for domestic and public-urban use, power generation for public service, or guaranteeing minimal flows for ecological protection, including the conservation of vital ecosystems. Moreover, CONAGUA through its Basin Agencies and in consultation with Basin Council users may decide to temporarily limit volumes of water available for emergency situations and extreme shortages.

CONAGUA is responsible for verifying water concession compliance with applicable terms and conditions. It may also impose penalties when those are not complied with. Water concessions may be suspended and revoked in specific cases. Suspensions may be ordered in cases when discharges of wastewater may affect supply of drinking water or human health, when requested by the Federal Environmental Protection Agency (Procuraduría Federal de Protección al Ambiente – PROFEPA) or CONAGUA. It is unclear from the Water Law whether periodic inspections must be carried out as part of efforts to detect the need for such action. Moreover, the Federal Executive may terminate concession rights for reasons of public convenience and necessity. Provision of compensation to the affected parties is also required under law.
References

16 Political Constitution of Mexico, Art. 27.
17 Political Constitution of Mexico, Art. 4.
18 Political Constitution of Mexico, Art. 4.
20 National Water Law, Art. 3(XLI).
21 National Water Law, Art. 9(I).
22 National Water Law, Art. 9(I).
33 Federal Planning Law (Ley de Planeación), 1983. [Federal Planning Law]
35 General Law on Ecological Balance and Environmental Protection (Ley General de Equilibrio Ecológico y la Protección al Ambiente), 1988, last amended 24 January 2017, see Arts. 117 to 133. [General Law on Ecological Balance and Environmental Protection]
37 General Health Law, Art. 457.
38 National Water Law, Art. 16.
40 National Water Law, Art. 20.
41 National Water Law, Art. 4.
42 National Water Law, Art. 17.
43 National Water Law, Art. 18.
44 National Water Law, Art. 3 (LVII).
45 National Water Law, Art. 17.
46 National Water Law, Art. 18.
47 National Water Law, Art. 3 (LVIII).
48 National Water Law, Art. 17.
49 National Water Law, Art. 22 paragraph 3.
51 National Water Law, Art. 22.
53 National Water Law, Art. 23.
54 Federal Law on Duties, Art. 192.
55 Federal Law on Duties, Art. 222.
56 Federal Law on Duties, Art. 224.
58 National Water Law, Art. 29 BIS 2.
59 National Water Law, Art. 6, sections IV and V.
3. The Human Rights to Water and Sanitation and Mexico’s International Commitments

In Mexico, treaties that are compliant with the Constitution are part of the Supreme law of the Union, together with the Laws of the Congress of the Union. This suggests a supremacy of the Constitution, followed closely by international treaties and domestic law. Furthermore, article 1 of the Constitution states that everyone shall be entitled to the human rights granted by the Constitution and by the international treaties to which Mexico is a party. The article also declares that human rights rules will be interpreted in accordance with the Constitution and the relevant international treaties, working in favour of providing the greatest protection. The President of Mexico has the power and right to make and execute international treaties. The country’s international commitments arising from bilateral and multilateral treaties form part of the national legal framework and Courts may refer to those instruments in their judgments. Importantly, all authorities, in their areas of competence, are obliged to:

promote, respect, protect and guarantee human rights, in accordance with the principles of universality, interdependence, indivisibility and progressiveness. As a consequence, the State must prevent, investigate, penalise and rectify violations to human rights, according to the law.

Mexico has acceded to various treaties which relate to water and sanitation, namely the International Covenant on Economic, Social and Cultural Rights (ICESCR), but also the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Convention on the Rights of the Child (CRC). Mexico has furthermore ratified the Optional Protocols to the International Covenant on Civil and Political Rights (ICCPR) and to CEDAW but not to ICESCR. Annex 1 provides an overview of the main instruments with Mexico’s signature and accession dates, which is partly reproduced in Table 1.

Table 1. Accession by Mexico to international and regional treaties related to the HRWS

<table>
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<th>Instruments</th>
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<td>Convention on the Elimination of All Forms of Racial Discrimination (1965)</td>
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<tr>
<td>International Covenant on Civil and Political Rights (1966)</td>
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<tr>
<td>Optional Protocol to the International Covenant on Civil and Political Rights (1966)</td>
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<tr>
<td>International Covenant on Economic, Social and Cultural Rights (1966)</td>
<td>✓</td>
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<tr>
<td>Convention on the Elimination of All Forms of Discrimination against Women (1979)</td>
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At the regional level, Mexico has not ratified nor signed those instruments that explicitly mention access to water and sanitation,\(^1\) but the State is a party to key instruments that contain human rights closely related to water and sanitation. For example, the case law of the Inter-American Court on Human Rights has referred to access to water and sanitation as key elements for the realisation of explicitly recognised human rights, such as the right to life, enclosed in article 4 of the American Convention on Human Rights – ratified by Mexico in 1981. For example, in the case of the Xákmok Kásek Indigenous Communities v. Paraguay, the Court held that under the right to life, states are obliged to ensure the creation of the necessary conditions to prevent violations of this right and prevent agents from endangering it.\(^5\) In assessing the measures taken by the State to comply with its obligations to guarantee the right to life, the Court analysed the alleged violation of the right by looking among others at access to and quality of water.\(^6\) In the judgement, the Court states that the measures taken by the State have not been sufficient to provide the members of the Community with water in sufficient quantity and of adequate quality, and this has exposed them to risks and disease.\(^7\)

Looking at access to water, food, health and education, the Court found that the State “has not provided the basic services to protect the right to a decent life of a specific group on individuals in these conditions of special, real and immediate risk, and this constitutes a violation of article 4(1) of

\(^1\) Member States of the OAS have adopted a new Convention in 2015 on protecting the human rights of older persons, which has entered into force in January 2017. The Convention refers to water in its article on the rights of older persons receiving health care (Art. 12) and to access to both water and sanitation in article 25 on the right to a healthy environment. In addition, under the Inter-American Convention Against Racism, Racial Discrimination and Related Forms of Intolerance (2013), States Parties undertake among others to eliminate discrimination, including the restriction or limitation of the right of every person, to access and sustainably use water, natural resources, ecosystems, biodiversity, and ecological services that are part of each state’s natural heritage, protected by the relevant international instruments and their own national laws.” (Art. 4, xiv). A similar provision is enshrined in the Inter-American Convention Against All Forms of Discrimination and Intolerance.
the Convention, in relation to article 1(1) thereof, to the detriment of all the members of the Xákmok Kásek community”.

A similar linkage between the right to life under the American Convention on Human Rights and access to drinking water and sanitation can be found in other judgments, such as in the case of the Sawhoyamaska Indigenous Community v. Paraguay (merits, reparation and costs). The Court has also addressed access to water in the context of other rights, namely the right to humane treatment enshrined in article 5 of the American Convention on Human Rights. For example, in the case Vélez Loor v. Panama, the Court considered that

"supply of drinking water within a prison constitutes a serious failure by the State in its duty to guarantee the rights of those held in its custody, given that the circumstances of incarceration prevent detainees from satisfying their own personal basic needs by themselves, even though these needs, such as access to sufficient and safe water, are essential for a dignified life."

The Inter-American Commission on Human Rights has also stressed the close linkages between the right to water and the right to health in a report on the human rights situation in Venezuela.

In addition to the American Convention on Human Rights, other regional documents relate to access to water and sanitation. In the Social Charter of the Americas, a non-binding instrument adopted by the Organization of American States (OAS) assembly in 2012, Member States have recognised

"that water is fundamental for life and central to socioeconomic development and environmental sustainability and that non-discriminatory access by the population to safe drinking water and sanitation services, in the framework of national laws and policies, contributes to the objective of combating poverty."

It further reads that "Member States, in keeping with their national realities, undertake to continue working to ensure access to safe drinking water and sanitation services for present and future generations." The Social Charter was adopted by acclamation by the General Assembly and Foreign Minister of Mexico, called the adopted text “a positive symbol”.

The General Assembly has furthermore adopted two other resolutions that highlight the importance of water in the region. Resolution AG/RES. 2349 on water health and human rights, adopted in June 2007, recognises that access to safe drinking water should be provided in accordance with the principles of non-discrimination, equality, justice, solidarity, equity, and sustainability. The General Assembly also resolves among others:

- To recognize and emphasize that water is essential to the life and health of all human rights and that access to safe drinking water and basic sanitation is indispensable for a life with human dignity. [...]

- To urge member States to develop government policies that envisage the participation of civil society in water resources management and in planning options for improving their drinking-water and sanitation services, with respect for the rule of law, bearing in mind, among other considerations, the needs of urban, rural, and Indigenous communities, facilitating to that end access to specialized know-how and information on integrated water resources management in a democratic, transparent, and equitable manner.

The General Assembly subsequently adopted Resolution AG/RES. 2760 on “the human right to safe drinking water and sanitation” in 2012.
References

82 Political Constitution of Mexico, Art. 133.
83 Political Constitution of Mexico, Art. 89 (x).
84 Political Constitution of Mexico, Art. 1.
4. The Normative Content of the Human Rights to Water and Sanitation in Mexican Law

The federal legal framework of Mexico enshrines the human right to water with reference to sanitation in the Constitution, which establishes that every person has the right to access water for personal and domestic consumption, in a sufficient, healthy, acceptable and affordable way. The right is not explicitly repeated in the National Water Law, but various federal legal documents either address aspects characterising the HRWS or touch upon these rights. The sub-chapters below on the criteria of the HRWS, explain how the normative content of those rights is reflected in various laws at federal and state level.

The analysed state legislation of Mexico, Chiapas and Jalisco also incorporates the human rights to water and sanitation to different extents. In the State of Mexico, article 18 of the State Constitution entitles every person the right to the access and disposal of water which is sufficient, affordable, and safe for personal consumption and domestic use. In recognition of the 2012 National Constitutional amendment of article 4, the State Water Law, enacted in January 2013, affirms the right to water at the forefront asserting that water should be provided in a universal manner and incorporate current applicable norms to guarantee the human right to water. Water authorities shall undertake policies, strategies, and actions which establish a culture of water that permits the exercise of the human right to water without waste. Moreover, according to the State of Mexico’s Constitution, all authorities, within the scope of their competences, are obliged to promote, respect, protect and guarantee human rights in accordance with the principles of universality, interdependence, indivisibility and progressiveness. Consequently, the State must prevent, investigate, punish and repair human rights violations, under the terms established by law. To fortify within the State the value of human rights principles, protections and obligations as per the Federal/State Constitutional mandates as well as International Treaties, the State of Mexico enacted in December 2016 the Mexico State Human Rights Program Law (Ley del Programa de Derechos Humanos del Estado de México). Therein it is confirmed that human rights as recognised under law shall be guaranteed for all persons living or transiting within the State. Accordingly, public servants and civil servants at all levels of government must possess knowledge of international standards of human rights and use them in the formulation of their objectives and actions for the full exercise of human rights in the State of Mexico.

In the State of Chiapas, the human right to water is also explicitly referred to, although not together with the right to sanitation. Under the Chiapas State Political Constitution (hereinafter “Chiapas Constitution”), the State is to promote policies aiming to guarantee the right of every person to access water for personal and domestic consumption in a sufficient, safe and salubrious way in order not to jeopardise health, and the law is to establish mechanisms to this effect. Chapter 6 on combatting poverty, also states that public policies will prioritise guaranteeing access to drinking water, sanitation and basic services. The Chiapas Water Law further recalls aspects of the right to water included in the Federal and State Constitutions, by stating that water and sanitation public services are to be provided in conditions ensuring their continuity, regularity, quality and coverage, in order to satisfy users’ needs and the protection of the environment.

In the State of Jalisco, a provision similar to the one on the HRWS in the federal Constitution is articulated in the State Constitution. The latter affirms that

\[
\text{every person has the right to the sustainable and equal use and access, disposition and sanitation regarding water for personal and domestic use in a sufficient,}
\]
Sanitation and water as human rights are further referred to in the objectives of the Jalisco State Water Law, one of which is to “establish the principles and regulations for the integrated management of water resources in the State, in order to promote and realise the right to drinking water and sanitation as an essential human right for the full enjoyment of life and all human rights”.

4.1. Availability and accessibility of water supply and sanitation services

The human rights to water as enshrined in the Constitution of Mexico, explicitly articulate aspects of the normative content of the HRWS, including the availability and accessibility criteria, with words such as “right to access and use of water”, for “personal and domestic consumption”, in a “sufficient” way, or “sanitation” (saneamiento). In addition, these are referred to by various legal documents at federal and state level, as discussed below.

In terms of provision of water and sanitation services, as mentioned earlier, the federal legal framework establishes that in Mexico, provision of drinking water, sanitation, wastewater treatment and disposal services is the responsibility of the municipalities, normally through water utilities. This is also recalled by the state legal framework of Mexico, Chiapas and Jalisco. However, when municipalities are not able to deliver drinking water and sewage services, total or partially, or when accorded, CONAGUA will be entitled to grant assignments of such services to para municipal or para state organs, or concessions for such services, to ejidos and similar entities or to companies. In the case that municipalities grant these concessions, water allocations will still be made from CONAGUA to the municipalities.

At state level, according to the Water Law of the State of Mexico, municipalities are responsible for provision of water services and are expected to deliver services covered in the State Water Law with economic and technical self-sufficiency. An independent household water connection with the infrastructure necessary for the discharge of waste water must be installed in each individual property, whether it be domestic dwelling(s), or a commercial, industrial and/or service establishment. A contract should be executed for the provision of water and sewerage services; except in the case of drinking water for an owner with a private well (legally authorised for extraction).

As for Chiapas, the law establishes that municipalities are in charge of providing public services to all the human settlements within their jurisdiction through Operating Organs (Organismos Operadores); Inter-municipal Operating Organs; “patronatos”; touristic, industrial and other development activity authorised by the State government; and the private and social sectors with the corresponding municipal concession or agreement. In relation to these dispositions, Operating Organs are in charge of providing drinking water and sewage services, including sanitation, in rural and urban areas to which the municipality corresponds, and are enabled to be assisted or complemented by the other aforementioned entities.

In compliance with the federal legal framework, the Jalisco State Water Law also states that the municipalities are in charge of providing services related to drinking water, sewerage, treatment and disposal of wastewater. These may be provided directly or through a municipal or inter-municipal

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6 Patronatos are moral persons composed by citizens of a same community, which have the objective to provide drinking water and sewage services, according to the agreement with the municipal or State authorities. Chiapas Water Law, Art. 3 XIX.
Operating Organs. The State and municipal governments coordinate through the State System for Water, a set of instruments and facilities, for all matters regarding use and services related to water. Furthermore, in Chiapas, all the localities must have a sewage system for water treatment and disposal from homes, according to applicable laws. A similar obligation does not exist for drinking water, although the Water Law gives the possibility to owners or holders of building titles and activities to contract water services where they are available. However, alternative water sources are addressed by the Chiapas Water Law, which provides Operating Organs and the State Water Institute with the responsibility to promote rainwater collection and storage in urban and rural areas as an alternative resource by developing orientation programs for its use.

4.1.1. Priority for domestic uses
The National Water Law explicitly prioritises domestic and public urban uses over any other use, and sets the following order of priority of water uses for the concession and allocation of water exploitation or use, under normal conditions: (1) Domestic, (2) Public urban, (3) Livestock, (4) Agriculture, (5) Environmental use, (6) Generation of electricity for public use, (7) Industrial, (8) Aquaculture, (9) Generation of electricity for private use, (10) Cleaning and flooding of land, (11) Tourism, recreation and therapeutic, (12) Multiple use, (13) Others. The term “domestic uses” is defined by the law as follows: the utilization of national water for personal and domestic use, garden and decorative trees irrigation, including water related to domestic animals that do not represent a lucrative activity in the terms of article 115 of the Mexican Constitution.

4.1.2. Quantity of water and continuous supply
Although the Constitution of Mexico states that everyone has right to water for personal and domestic consumption in a sufficient way, the federal legislation does not provide further guidance on a minimum quantity of water that should be available for personal or domestic uses for everyone, bearing in mind the specific needs of certain groups of people. The section on permits and water restriction areas as established in the National Water Law discusses some measures that may affect entities providing water services, and impacting ultimately drinking water users, but these

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ii CESCR General Comment n° 15 clarifies that water supply for each person must be sufficient and continuous for personal and domestic uses. In addition, it highlights the fact that some individuals may also require additional water due to health, climate, or work conditions. UN CESCR, General Comment No. 15, para 12.
provisions do not directly regulate drinking water services. Nevertheless, it is worth recalling that according to the National Water Law, in situations of emergency, extreme shortage, or overexploitation, the Commission has the mandate to take the necessary measures to guarantee the supply of urban domestic and public use. Moreover, the persons involved in water supply may not abolish the provision of potable water and drainage services for inhabited buildings, except in cases determined by applicable general provisions. The state level legislation contains additional provisions on suspension of services, as discussed below in this section.

Concerning quantity of water in the State of Mexico, the health regulation sets out minimum provision of water for human consumption divided in categories of use. In reference to minimum availability for use in homes and lodging the amount indicated is at least 150 litres per person each day. Public bathrooms are also regulated and among other stipulations, they shall have sanitary water apparatuses for human consumption which are accessible, sufficient and strategically distributed.

Urban development planning should take into account drinking water, sewerage, drainage, treatment and disposal of waste water and solid waste among other things. Limited availability of water shall also be a factor in urban planning policies. All new construction should provide basic drinking water and wastewater disposal services. The health regulation also requires buildings to have interior facilities for drinking water, with a bathroom, sink and toilet. They will also have sanitation spaces and fixtures of low water consumption, in sufficient number for the intended uses and in accordance with the Official Mexican Standards.

A drinking water service operator may restrict or suspend service, without penalty; when there is a shortage of water in the sources of supply; it is necessary to do some repair or maintenance of the hydraulic infrastructure; or upon a justified request from the user. With respect to a user’s request to suspend or restrict drinking water service, said request must be submitted in writing to the service provider, who will make a decision within ten business days. If granted, the service provider will make the restriction or suspension within a period of no more than five working days. Nonetheless, any alteration to the hydraulic infrastructure or the user’s home which impedes the supply of drinking water to the property in question is prohibited. Restrictions of water supply for non-payment are also possible and discussed in the section on affordability.

As mentioned above, the Chiapas Water Law states that public services are delivered in conditions ensuring continuity, regularity and in a way that the needs of users are ensured, among others. In addition to this, public service provision model contracts, signed between users and service providers, must comply with certain requirements in order to ensure that public services are provided in competitive conditions ensuring their continuity, regularity, quality, coverage and efficiency. Furthermore, properties with buildings intended for housing, offices, businesses, or similar uses, must have adequate drinking water and sanitation facilities, authorised by the Operating Organ.

Furthermore, persons involved in drinking water supply services are not authorised to suspend public services unless the authority mandates it, in the cases determined by applicable legal dispositions, with a previous notification to users, and as long as the suspension does not represent a risk to public health. The Chiapas Health Law also sets a prohibition to suspend the drinking water service in institutions in charge of providing care or health services to populations, for which the suspension would pose a serious risk to health.

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iv National Water Law, Art. 9 L. The article further states that “when the decision on CONAGUA may affect the rights of concessionaires and national water concessionaires, the Commission is to agree with the interested parties on the corresponding measures, in accordance with the Water Law and regulations.”
The Chiapas Water Law states that an infraction is committed when people who are obliged to request drinking water services and the necessary facilities for the corresponding discharge, do not comply with this obligation within the deadlines established by law.\textsuperscript{150} Moreover, municipalities can revoke concessions in the cases that concessionaires interrupt, total or partially, public services provisions, without any justified reason.\textsuperscript{151}

In addition to these dispositions, state laws foresee cases where water supply restrictions can be applied. In cases of predictable or confirmed water scarcity situations, the Operating Organ may grant restriction for rainwater harvesting in the affected zones and during the lapse of time it considers necessary, after notifying users through media.\textsuperscript{152} Furthermore, when water discharges affect or are inclined to affect water sources, the Ministry of Environment and Natural History, along with local health authorities will request, before the corresponding authority or the competent Water Operating Organs, the revocation of the permit or authorisation, or in the given case, the suspension of water supply from the affected source, as well as implementing restauration, mitigation or compensation measures in relation to the incident.\textsuperscript{153} In addition to these water restrictions, water suspensions for non-payment are included in the Chiapas legislation, as discussed below in Sub-chapter 4.3 on Affordability.

In Jalisco, the State and municipalities are to coordinate to ensure a \textit{continuous} service of water supply, and wastewater treatment and disposal services.\textsuperscript{154} Moreover, the Jalisco Health Law states that the bodies, entities and persons involved in water supply may not abolish the provision of drinking water and drainage services for inhabited buildings, except in cases determined by applicable legal provisions.\textsuperscript{x} The municipalities and service operators are in fact obliged to enable the inhabitants access to drinking water in a permanent, regular, continuous and uniform way, to meet their vital and sanitary needs for domestic use, even in the case of non-covered debts for services rendered, assuring the supply of water of 50 litres per inhabitant per day.\textsuperscript{vi} In the same terms, the municipality of Zapotlán sets this obligation to its Operating Organ.\textsuperscript{vii} Also, at the municipal level, the SIAPA Law\textsuperscript{viii} considers as one of the guiding principles for the provision of water related services, the continuity and regularity of the services of water supply and sanitation.\textsuperscript{156}

Furthermore, the State Water Law establishes that in times of water scarcity, whether verified (\textit{comprobada}) or predictable, the provider of services may agree with the municipality on the reduction of the supply and on how long such reduction will last.\textsuperscript{157} On this matter, the State water programming is to specify the priorities and the possible temporary limitations to the existing rights...

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\textsuperscript{x} Jalisco Health Law, Art. 33. It should be noted that the Regulation to the Jalisco Health Law on the Matter of Health Engineering contains provisions that prohibits in all cases (\textit{Por ningún concepto}) suspension of water and sanitation services for inhabited buildings. These would however contradict those of the Health Law as well as the Water Law and its Regulation, and can be therefore understood as inapplicable. All former provisions that contradict the Water Law are derogated and the provisions of regulations may not prevail over the laws. Jalisco Water Law, Transitory Second; Regulation to the Jalisco Health Law on the Matter of Health Engineering (\textit{Reglamento de la Ley Estatal Salud en Materia de Ingeniería Sanitaria}), 1988, Art. 12. [Regulation to Health Law on the Matter of Health Engineering]

\textsuperscript{vi} Jalisco Water Law, Art. 83. It should be noted that article 30 of the Regulation to the Jalisco Health Law on the Matter of Health Engineering, contains provisions which establish the minimum drinking water supply for human consumption at 150 litres per day per person for “rooms” and “habitation” and at 50 litres per day per person for the industry and commerce. In light of footnote v above, it would be difficult to argue a right to 150 litres of water per day per person in all cases, given the provisions of the Water Law and Regulation.

\textsuperscript{vii} Inter-municipal Drinking Water and Sewage Services System (\textit{Sistema Intermunicipal de los Servicios Agua Potable y Alcantarillado – SIAPA}) is the operating organ of the State Government in the municipalities of the Guadalajara metropolitan area, in place through a coordination agreement for a more efficient water, sewage and sanitation public services. Jalisco Law on the Inter-municipal Drinking Water and Sewage Services System (\textit{Ley que crea el Organismo Público Descentralizado del Poder Ejecutivo denominado Sistema Intermunicipal de los Servicios de Agua Potable y Alcantarillado}), 2013, Art 2. [Jalisco Law on SIAPA]
in order for the State to face situations such as emergencies, extreme scarcity or overexploitation. In cases where the water supply will be reduced, the information must be published through the official means of the municipality where the decrease is applied and be publicised through the means of communication available in the area, at least ten days before the date on which the measure is to commence. In addition, affected users have the right to demand from authorities free provision of water (dotación gratuita), only for domestic uses, by means of mobile water tanks or any other manner, to safeguard at all times the right to access water for domestic uses. The alternative supply must take into account geographical, road, accessibility and equity criteria determined by the State Water System. In the case of lack of payment, service may also be suspended as discussed under the section on affordability below, but the legal framework establishes a safeguard to ensure that the affected people obtain 50 litres of drinking water per day for domestic uses.

4.1.3. Availability of water and sanitation on other premises under federal and state legislation

In addition to availability of drinking water at home, it is important to ensure that water outlets and sanitation facilities are available on other premises where people spend considerable amount of time. At the federal level, the legal framework of Mexico touches upon this to a certain extent. For example, under the General Health Law, the health, education and labour authorities in their respective areas of competence are to support and promote actions related to access to drinking water and sanitary means of disposal of excreta. This is further addressed by other documents. For example, in relation to buildings, premises, facilities and areas in work centres, whether temporary or permanent, employers are required to make drinking water outlets and disposable cups or drinking fountains available to workers. Also, for field workers (agricultural, farming, forestry etc.), the employer must provide clean water and sanitation in the place where the activities are being carried out.

As for education centres, a NOM on the promotion of health in schools also emphasises the importance of safe drinking water and sanitation in schools and information around health determinants in this setting.

It is also worth recalling that all individuals are entitled to the human rights granted by the Constitution and the international treaties signed by Mexico and they shall not be restricted or suspended, except for the cases and under the conditions established by the Constitution. The human rights to water and sanitation would therefore also apply to individuals in prisons and detention centres, especially since according to the Constitution, the prison system must also be organised on the basis of respect for human rights. The National Penal Execution Law (Ley Nacional de Ejecución Penal), further establishes that persons deprived of their liberty will receive a sufficient, safe, acceptable and permanent supply of water for personal consumption and care, including adequate articles for daily hygienic needs. The Penitentiary Authority is obliged to provide such services in good quality to all those persons deprived of their liberty who require them and adapt to their needs, under the criteria of reasonableness and non-discrimination. It must also provide all supplies (suministros) to the penitentiary population free of charge. The term Suministros is understood as including drinking water and articles for daily hygienic needs. In addition, women deprived of their liberty have the

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viii Defined as "The place or places, such as buildings, premises, facilities and areas, where activities of exploitation, exploitation, production, marketing, transportation and storage or provision of services are carried out, in which persons are engaged in a working relationship". Federal Regulation on Occupational Safety and Health (Reglamento Federal de Seguridad y Salud en el Trabajo), 2014, Art. 3 IV. [Federal Regulation on Occupational Safety and Health]
right to adequate facilities and the necessary articles for a dignified and safe stay; the priority being articles necessary to meet “the specific hygiene needs related to their gender.”

At state level, the Mexico State authorities in health, education, and labour in their respective areas of competency will support and take actions concerning access to and availability of drinking water and sanitary means of excreta disposal. In establishments such as offices, shops, recreation and service centres where users, employees and workers attend, there should be one toilet for every 20 people or per 10 of each sex. Similarly, facilities should be installed for the service of persons with limited capacities, in accordance with the corresponding technical standard. Further, water fountains must have drinking water as defined by the relevant standards.

The Chiapas Health Law sets directives or obligations on the presence of water and sanitation facilities in different buildings and infrastructures. Municipalities, as managers of markets, are obliged to provide drinking water to establishments and businesses, public toilets and sanitation facilities and drainage of sewage and wastewater. Tinaguis will include within their premises sanitation services and water installations to guarantee health and hygiene. Businesses or facilities aimed to provide perishable or non-perishable food within markets are obliged, among others, to have drinking water. Flea markets must have as a minimum infrastructure, drinking water and wastewater sewerage and treatment. Hairdresser and aesthetic care salons and massage rooms have the obligation to have drinking water and sanitation facilities with a sink, running water, trash receptacle with a cover, towels and soap for staff members and clients. Additionally, to start the construction, reconstruction, reform or general refurbishment (total or partial), of graveyards, crematoriums, funeral parlours, flea markets, anti-rabies and wildlife control centres or meeting and entertainment centres, a works initiation notification attaching the project details on water and sanitation facilities, among others, must be presented to the water authority.

In Jalisco, when the intended use of a building or premises is public, there must be potable water and public health services available, which must meet specified requirements. In addition, regulations to the Health Law contain articles on the availability of water outlets and sanitation facilities in different places. For example, markets must have sanitation facilities and drinking water of quality meeting established standards and sufficient pressure to satisfy the needs of those places. The same applies to public festivals (festividades populares) in relation to drinking water services, while a stricter provision concerns sanitation facilities which must also be in good hygienic conditions, with among others, soap, running water and toilet paper. Similar provisions exist namely for detention and rehabilitation centres, and gas stations, the latter being also required to have separate toilet facilities according to gender, as well as uninterrupted water and sewerage services and a sceptic tank if in rural areas where no sewerage services are available.

### 4.1.4. Analysis and concluding remarks

With regards to availability of water and sanitation, the state legal framework follows the national legislation in establishing the responsibilities for drinking water supply and sanitation services. Prioritisation of use of water for domestic purposes is clearly enshrined in the federal legal framework and some state laws recall such priority as well. Furthermore, based on the Constitution of Mexico, and those of the three States analysed, it is clear that water and sanitation services should be provided in a sufficient manner. However, the quantity of water that should be provided at a minimum for everyone is heterogenous, with either no reference to a minimum quantity (e.g. Chiapas), to a reference from 50 litres (e.g. Jalisco) to one of 150 litres per person per day in the State of Mexico. It

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*A “tianguis” is an open-air market or bazaar that is traditionally held on certain market days in a town or city neighbourhood in Mexico and Central America.*
is also unclear how the needs of the different users (i.e. people who need more water due to their age, health or working conditions) are taken into account in such figures and also in the case of water shortage or suspension of services. Regarding sanitation, the States of Mexico and Chiapas set obligations to put in place municipal sewage systems or independent sewage connexions in individual dwellings, but this is not the case in the State of Jalisco.

In addition to the explicit right to water and sanitation services delivered in a continuous manner, the Chiapas and Jalisco State legislation includes continuity of services as an obligation for service providers in Jalisco and a condition through which public services are delivered in Chiapas. Unless otherwise authorised by law, in both Jalisco and Chiapas suspension and abolishment, respectively, of water and sanitation services is not allowed, except in case of non-payment for services, for example. In Chiapas, however, suspensions cannot risk public health, and require a mandate from the authority. They are also not authorised for institutions providing health or care services, where the suspension would pose a serious risk to health. Interestingly, in Jalisco, a minimum of 50 litres of water per day per person is to be provided by the municipality and service operators in case of suspension of services for non-payment, and in the State of Mexico, only partial restriction is foreseen, which guarantees a certain amount of water even in case of suspension for non-payment. In light of these differences, the federal framework does not provide exhaustive standards or guidelines for the States to ensure homogenous conditions throughout the country, which would ensure that a sufficient amount of drinking water is available for each person.

Similarly with respect to availability of water and sanitation services on other premises, there are various requirements at the federal and state level. Pursuant to the federal legislation, it is a requirement for the employer to ensure availability of drinking water in work places, and also sanitation services for field workers. Water and sanitation are also required in prisons and important provisions address sanitary needs for women. At state level similar provisions exist in the Chiapas and Jalisco laws with respect to water supply in markets, hairdressers, gas stations, etc. but the criteria themselves differ. Some require sufficient pressure, other soap, hygienic conditions, or no interruption of supply. In Mexico State, the law specifies the number of toilets per people in various establishments.

Finally, the legislation analysed did not generally provide specific indication on physical accessibility of water and sanitation services nor on distance to water points or sanitation facilities in places where these are not available directly on premises. Reference could be found in relation to access to facilities in establishments such as offices, shops, recreation and services centres, for persons with limited capacities, under the legislation of the State of Mexico, and in relation to children with disabilities, discussed below in the section addressing the principle of non-discrimination.

4.2. Water quality and safety, and acceptability

4.2.1. Water quality, water safety and acceptability at federal level

In Mexico, the Ministry of Health (MoH) is the responsible authority for establishing standards and monitoring activities in relation to the protection of human health from risks related to environmental conditions. Under this framework, the MoH is in charge of issuing official quality standards related to drinking water. Accordingly, it has issued multiple Official Mexican Standards that address the quality of water for use and human consumption. For example, NOM-127-SSA1-1994 addresses water for human use and consumption covering the permissible limits of elements and chemicals for water quality and appropriate treatments for safe drinking water. The sanitary criteria for wastewater treatment, discharge, and use is also elaborated within NOM-127. NOM-127 is applicable to both
public and private water supply systems, as well as to any person or entity that distributes water for drinking purposes.\textsuperscript{193}

While NOM-127 makes no explicit reference to use of international standards as a guideline for its own national standards (section 7 actually establishes that it is not equivalent to any international standard), the World Health Organization (WHO) Guidelines for Drinking-water Quality were minimally used as a consultation source as it is cited in the bibliography section of NOM-127.\textsuperscript{194} Another standard issued by the MoH covers the monitoring and evaluation of water quality control for use and human consumption distributed by public supply systems.\textsuperscript{195}

Furthermore, the National Water Law confirms CONAGUA as the authority on quality and quantity of water resources and their management in the national territory.\textsuperscript{196} States and municipalities receive funds from CONAGUA for projects aimed at improving quality and availability of water supply and sanitation services.\textsuperscript{197} In addition, CONAGUA has also issued a few standards that can affect quality of drinking water and sanitation, mainly in relation to sustainability. These are addressed below under the Sub-chapter 5.5 on “Sustainability”. CONAGUA is also in charge of monitoring, in coordination with other competent authorities, that water supplied for human consumption complies with the corresponding Mexican Official Standards.\textsuperscript{198}

Another official standard establishes specification and test methods for prefabricated septic tanks for the preliminary treatment of domestic wastewater to ensure their reliability and assist to preserve water resources and the environment.\textsuperscript{199} The standard noted that in areas where hydraulic sewer systems are not economically feasible, it is necessary to install individual evacuation and treatment units to avoid contamination of drinking water sources, whether surface or underground.\textsuperscript{200}

Finally, in addition to mentioning the right to water in a “safe” manner, article 4 of the Constitution also enshrines the term “acceptable” (aceitable) in characterising the right of access and provision of water for personal and domestic consumption.\textsuperscript{201}

\subsection*{4.2.2. Quality, safety and acceptability of drinking water and sanitation in the State of Mexico}

At state level, the Secretary of Health of the State of Mexico, shall exercise regulation, control and promotion of health in the area of drinking water supply and sewerage.\textsuperscript{202} The Commission for the Protection Against Sanitary Risks (\textit{La Comisión para la Protección contra Riesgos Sanitarios del Estado de México} – COPRISEM) will carry out periodic analyses of the drinking quality of water, in accordance with Mexican Official Standards.\textsuperscript{203} COPRISEM is also responsible for approving projects for drinking supply.\textsuperscript{204} Furthermore, human settlements (localidades) of the State must have systems for the rapid and hygienic drainage of their waste, preferably through the use of sewage or septic tanks. In any case, it is prohibited to discharge waste or liquids contained in the drainage into rivers, streams, aqueducts, streams or channels with water intended for human consumption.\textsuperscript{205}

For provision of domestic and public water supply, drinking water shall always be used. Such supply which is potentially a risk to human health with respect to their chemical and microbiological composition will not be considered as sources of supply for domestic use.\textsuperscript{206} Also, water intended for human consumption must be carried in closed conduits which are constructed of materials that maintain the quality of the water to be distributed.\textsuperscript{207}

Service providers must guarantee the quality of water supplied by ensuring that such water is treated in conformity with the applicable Official Mexican Standard.\textsuperscript{208} In the case of nonconformity, service providers will be sanctioned in accordance with the Law on Responsibilities of Public Service Providers of the State and Municipalities (\textit{Ley Responsabilidades de los Servidores Públicos del Estado y...})
Users are also required to wash and disinfect water tanks as dictated by the corresponding standard.210

Regarding waste water, where discharge poses a threat or has actually negatively affected drinking water supply or public health, the municipality or if appropriate, the operator, shall void the permissible activity, revoke the permit and/or issue penalties.211

Per the State Health Regulation, all sources of drinking water shall have a defined protection zone in conformity with the corresponding state technical norm.4 In such zone, activity involving agriculture, livestock, industry, etc. is prohibited which may cause change in the sanitary conditions of the water source.212

4.2.3. Quality, safety and acceptability of drinking water and sanitation in the State of Chiapas

The promotion and execution of necessary measures to protect the quality of national or state waters allocated to municipalities and service providers is declared of public interest.213 In relation to this, the Ministry of Environment and Natural History, along with health authorities, will issue technical regulations to establish environmental measures for the management of protected water zones including supply sources serving the population, and will promote the establishment of water reserves for human consumption.214 The Chiapas Water Law also sets the obligation for concessionaires to comply with its general dispositions and with the rules on water safety, and environmental balance or protection.215

Notably, public services are to be delivered in conditions ensuring quality.216 Municipal Operating Organs are in charge of coordinating with the corresponding federal authorities to ensure the water allocated for domestic uses comply with the corresponding Official Mexican Standards on quality.217

In accordance with these obligations, water users and the social and private sectors also have the right to demand that service providers deliver such services according to the established quality levels.218

Some safety measures to protect health are also directed to water provision and sewage. These measures include keeping wells at a reasonable distance from contaminating sanitation or waste storage facilities in accordance to the corresponding technical norms for populations without a drinking water system (in relation with self-water supply measures explained below); and forbidding piped untreated wastewater discharge on the ground or into water bodies intended as a supply for human consumption.219

The State Water Institute is the organ in charge, in coordination with Inter-municipal or Municipal Operating Organs, for monitoring that water provided for human consumption, complies with official quality standards and that treated or untreated wastewater is used in compliance with the corresponding water quality standards.220 Furthermore, the Ministry of Environment and Natural History is responsible for preventing, monitoring and ensuring pollution elimination from State waters, as well as national waters allocated to the State;221 whereas the Chiapas Health Secretariat, is in charge of monitoring quality of drinking water and analysing periodically the quality of water allocated for human consumption.222 To this effect, the Secretariat performs periodic quality analysis of drinking water,223 but it also monitors health requirements with respect to public toilets and restrooms.224 The State Environmental Authorities are to monitor the compliance of black and wastewater treatment.225

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4 Mexico State Health Regulation, Art. 184, (Technical norms are administrative provisions of a general nature consisting of technical regulations, guidelines, characteristics and requirements applicable to a product, process, installation, establishment, system, activity, service or method of production or operation. Administrative Code of the State of Mexico, Art. 1.31)
Municipalities are entitled to take the necessary actions to prevent, obstruct or close the possibility to discharge wastewater in sewage networks, in collaboration with the competent environmental authorities, when such discharges do not comply with the applicable ecological balance and environmental protection legislation, or Official Mexican Standards.\textsuperscript{226}

The Chiapas State Water Law also regulates self-provided drinking water quality. Non-profit organisations are entitled to realise the necessary works and actions for drinking water and sanitation self-supply, according to the applicable water quality rules, and under the terms and conditions of the Regulation of the Chiapas Water Law.\textsuperscript{227}

Finally, the Chiapas Water Law states that public services will be provided under conditions ensuring the satisfaction of the user’s needs.\textsuperscript{228} This can imply that public services must be provided in an acceptable way for the users, to ensure the satisfaction of users’ needs. The Chiapas Health Law also sets the necessary elements that sanitation facilities will include in certain places. Public restrooms and toilets will provide at least, running water services, sinks and toilets according to the stated sex, body cleaning supplies, paper towels or any other drying systems and trash receptacles with a cover.\textsuperscript{229} Furthermore, gas stations will include restrooms separated by sexes, with an available shower in the optimal conditions for its use, as well as with hygiene supplies, and with a sanitary sewage connection to an urban network or a septic tank.\textsuperscript{230} Such provisions can contribute to ensuring the acceptability of water and sanitation facilities.

4.2.4. Quality, safety and acceptability in the State of Jalisco

The Official Mexican Standard NOM-127-SSA1-1994 identified from the federal framework is assimilated by the local laws in Jalisco, as evidenced in the definition of drinking water under the Jalisco State Water Act. Drinking water is water “which does not contain undesirable pollutants, whether chemicals of infectious agents, that may be ingested or used for domestic purposes without negative impacts on health and that fulfils the requirements established by NOM-127-SSA1-1994 and other provisions and standards.”\textsuperscript{231} The municipal authorities are responsible with the Decentralised Operating Organs for the quality of the drinking water supplied, so that it complies with the established official standards.\textsuperscript{232} Notably, users of public services have the right to demand quality of the provision of services.\textsuperscript{233}

It is also relevant to note that the state and municipal governments are required to coordinate to ensure service, supply, distribution of drinking water as well as treatment and disposal of wastewater for the population.\textsuperscript{234} Projects for the supply of drinking water and wastewater treatment plants must be submitted to the consideration and approval of the Jalisco Health Secretariat for the analysis of the quality of the drinking water provided to the population and the analysis of the residual water that would be discharged at the stage of its final disposal.\textsuperscript{235} Furthermore, such projects’ implementation must be directed and approved by the corresponding state and municipal authorities, in coordination with the Operating Organs or drinking water and sewage systems, that can supervise the construction’s compliance with the Mexican Official Standards and other necessary requirements.\textsuperscript{236}

Municipal authorities, inter-municipal or state systems, as well as water services, sewage treatment and wastewater disposal Operating Organs, are to perform periodic analysis of water to check the drinking conditions of water allocated for human consumption.\textsuperscript{237} In cases where no drinking water system exists, water from wells or cisterns intended for human consumption must be located at a reasonable distance from restrooms, sewerage systems, hotbeds, landfills and wastewater treatment or other contaminating plants.\textsuperscript{238} According to the Regulation to the Jalisco Health Law on the Matter of Drinking Water and Sewerage, the entities in charge of water supply are directly responsible to ensure it is potable at all times.\textsuperscript{239} This Regulation also requires every source of drinking water supply
to have a well-defined protection zone, within which any agricultural, livestock, industrial, or any other type of farm, that may cause changes in the sanitary and hydrological conditions of the source, are prohibited.\textsuperscript{240} It also lays down specific drinking water quality standards, in addition to establishing that drinking water is to have no odour and be of an pleasant (\textit{agradable}) taste.\textsuperscript{241} On the acceptability criterion, some provisions also concern separate toilets according to gender in some places, as highlighted earlier.\textsuperscript{242} Interestingly, the document also contains a provision that affects drinking water storage, requiring that the collection of water destined to be consumed without previous treatment be protected in a way that guarantees the conservation of its “drinking” (potable) properties.\textsuperscript{243}

Concerning wastewater and sanitation, all population centres must have fast and hygienic wastewater drainage systems, preferably through a sewage system, as well as plants treating such wastewater before their final disposition or discharge.\textsuperscript{244} Municipal authorities or municipal, inter-municipal or state systems, as well as water services, sewage treatment and wastewater disposal Operating Organs, are to monitor the quality of treated waters allocated to other uses. The Jalisco Health Secretariat supervises this process according to the applicable regulations, the Official Mexican Standards and the technical criteria and guidelines that have been issued.\textsuperscript{245} Where no sewage systems and wastewater treatment plants exist, while such infrastructures are being built or introduced, municipal authorities are to authorise the construction of sceptic tanks in accordance with the Official Mexican Standards, after performing a supporting technical study and supervising the works.\textsuperscript{246}

Finally, it is noteworthy that wastewater, provided it does not qualify as hazardous, is considered as special management waste and therefore regulated by the Jalisco State Waste Management Law. The law includes sludge from wastewater treatment as a special management waste, which must be managed as any other special management waste, by authorised service providers for their transportation and disposal.\textsuperscript{247}

\textbf{4.2.5. Analysis and concluding remarks on water quality and safety, and acceptability}

\textit{Quality and safety}

The Constitution of Mexico grants to everyone the right of access and provision to water for personal and domestic consumption in a safe (\textit{salubre}) and acceptable manner; a right that is also reflected in the federal and state level legislation.

Federal laws provide an important setting for drinking water quality in requiring the Ministry of Health to issue official water quality standards. These have been established through NOMs to which the state laws make direct (e.g. Jalisco Water Law) or implicit reference (e.g. State of Mexico and Chiapas). In addition, in contrast with other criteria characterising the HRWS, it is already established at the federal level that standards for drinking water quality must be complied with by all entities distributing water services.

Service providers in all three States discussed above have a clear obligation to provide or guarantee the quality of the water supplied in conformity with the established official norms. In the State of Mexico, additional obligations related to the infrastructure contribute to ensuring quality of the drinking water supplied, such as the obligation to provide water in closed circuits made of material maintaining the quality of the water distributed. In the States of Chiapas and Jalisco, users even have a right to demand quality of the services provided, whereas an equivalent provision is not found in the analysed legal framework of the State of Mexico.

The state level legislation contains other obligations related to positive impact on the quality of water sources, such as the obligation to have sewerage systems or alternative means of wastewater...
treatment such as septic tanks; the establishment of protection zones or water reserves with prohibited activities to ensure the protection of sources for drinking water; and also the requirement to ensure sufficient distance between wells for water supply and contaminating plants or areas in Chiapas and Jalisco, and the State of Mexico.

In light of the framework analysed, it can be further noted that health organs at federal and state level bear important responsibilities with respect to drinking water quality. In addition to those responsibilities attributed by the federal legal framework to the federal Ministry of Health, the state laws from all three States studied grant diverse drinking water quality-related responsibilities to different health institutions, such as State Ministry of Health, Health Institute or Health Commission. Periodic analyses are an explicit requirement arising from the state legislation for COPRISEM (State of Mexico), Chiapas Health Secretariat and different actors involved in water supply and sanitation services in Jalisco. Monitoring functions are also established in the laws and vary depending on the States.

Finally, the Jalisco and Mexico state legal frameworks refer to household water treatment and storage (HWTS). The former requires protection of water collected for consumption, whereas the latter obliges users to wash and disinfect water tanks. In Chiapas, however, no similar reference was found. Such provisions are important because they can contribute to ensuring that water is acceptable for the intended use.

In general, the provision on water quality is consistent throughout the three States studied which have clear guidance from the federal level in terms of standards that must be applied. However, disparities can arise because the frameworks are not uniform in other aspects, such as requirements in terms of distance between wells and potential contaminants, or HWTS, but also the right attributed to users in demanding quality of water and sanitation services.

Acceptability
On acceptability of water and sanitation services, only few provisions, other than those on HRWS, exist in the national and state legislation. Those concern mainly separation of sanitation facilities according to gender, namely in specific places in Chiapas and Jalisco, such as gas stations, and in other types of establishments in the State of Mexico. Interestingly, the Mexico legislation also includes a provision for ensuring access to persons with limited capacities in those places. Indication on the colour, odour and taste characteristics of drinking water is also in the legislation of Jalisco but no similar provision was found in the legislation of the States of Mexico and Chiapas. The federal Constitution could be nevertheless understood as referring to the acceptability criterion in that it mentions the right of access to water in an acceptable manner.

4.3. Affordability of water and sanitation services in Mexico

4.3.1. Affordability at the federal level
In line with the human right to water, article 4 of the Mexican Constitution explicitly says that the State shall guarantee every person the right of access to obtain a supply of water for personal and domestic use. The article specifies that such supply shall be “...clean, acceptable, and affordable.”

The National Water Law sets out parameters for the federal fees to be charged for the use and enjoyment of water resources. The fees should be designed so that they: i) consider the demand, by encouraging the efficient use of water, the rationalization of the consumption and, where relevant, cease activities that involve an excessive demand; ii) make the necessary adjustments based on variable costs; and iii) recuperate federal investments by contributions that shall not be less than the
capital cost or than the compliance of the financial obligations that are incurred due to the concession.\textsuperscript{249} Basin agencies are responsible for submitting recommendations for the amounts to be charged for water tariffs, including fees concerning drinking water, which are ultimately approved by the Federal Tax Authority and Congress.\textsuperscript{250}

Fees for water which is being obtained directly from a national body of water by means of a water concession title (in the case of industry, agriculture, large developments, etc.) are regulated by the Federal Law on Duties. This law not only establishes the fees for concession titles for water exploitation, but also for the actual use and enjoyment of national waters, regardless if a concession or allocation deed has been granted.\textsuperscript{251} The fees that are published in the Federal Law on Duties are to be updated annually as of the 1\textsuperscript{st} January each year.\textsuperscript{252} Such fees, like all which fall under the Federal Law on Duties, are generally updated based on a calculation taking into account the National Consumer Price Index (\textit{Indice Nacional de Precios al Consumidor} – NCPI).\textsuperscript{253} Those applicable to water resources are assessed by availability,\textsuperscript{xi} the basin or aquifer in which the extraction is carried out, and by types of use (drinking, water industry, agriculture, recreations centres, hydropower generation, etc.).\textsuperscript{254} As detailed in the National Water Law, the price of water fees are in part driven by the policy aim that water management should produce sufficient financial resources for costs to be recovered – water pays for water.\textsuperscript{255} Generally, the tariff costs are higher where there is less availability.\textsuperscript{256} Different fees apply when the consumption of water is more than 300 litres/day/inhabitant,\textsuperscript{257} and certain exemptions also exist, such as in the case of use of waters for drinking water in rural communities with a population equal to or less than 2,500, or for agricultural activities for the purpose of meeting domestic needs of “natural persons”.\textsuperscript{258} An exception also applies to uses by entities that provide non-profit medical services, social service or free school education for the benefit of rural populations of up to 2,500 inhabitants.\textsuperscript{259} Fees are also charged for the wastewater discharges and are levied based on the volume of the discharge, the load of the pollutants, and depending on the activity generating the discharge. The type of waste and the body of water receiving the waste is also taken into account to calculate the tariff.\textsuperscript{260}

Drinking water and sewage services supplied by the municipality to private citizens are regulated by local laws.\textsuperscript{261} Tariffs for drinking water are enacted independently by each municipality based upon the corresponding state’s legislation. Therefore, approval of such tariffs will vary by state, with some approved by local state congress and others being approved by the specified authority of the municipality’s drinking water utility or State Water Commission,\textsuperscript{262} as demonstrated in the review of state legislation.

The tariffs for drinking water typically include fixed costs, charges based on the volume used, and charges for the sewerage/wastewater treatment which is generally calculated as a percentage of the water supply costs. Some water pricing schedules have subsidizing mechanisms in place wherein users in tenuous economic conditions pay less than those better off economically.\textsuperscript{263}

Disconnection from water supply and sanitation services for non-payment is regulated by local laws and regulations. Notwithstanding the aforementioned, given the absence of any explicit mention of the assurance of affordable access to drinking water services in the National Water Law, amendments would be necessary to reflect the affordability criterion of the human rights to water and sanitation as articulated in the Constitution and Mexico’s international commitments.

\textsuperscript{xi} Federal Law on Duties, Art. 223. As of 2014, 4 availability zones, each for ground water and surface water, were established for the purpose of charging fees for the use of water. The zones are divided in terms of available water with “1” being the lowest and “4” having the highest availability. Each municipality has been categorised under one of the 4 zones. See CONAGUA, \textit{Statistics on Water in Mexico}, 2015, p. 153 (prior to 2014 9 zones of availability existed for purpose of charging).
4.3.2.  Affordability of water and sanitation services in the State of Mexico

The State Water Law highlights as one of its principles the respect for the human right to water, which includes meeting the water needs of citizens to achieve their welfare, particularly those living in a situation of socio-economic marginalisation.\(^{264}\)

State water policy also encompasses certain finance principles which emphasise the value of water and acknowledge that water services must be quantified and paid. Also, a culture of financial sustainability should be adhered to, developing raised awareness among users of water service costs and the obligation to pay for such service.\(^{265}\) Fees for water services shall be charged in accordance with the provisions of the State’s Finance Code.\(^{266}\)

The State Water Law sets out obligations for the users of water. Of the several obligations identified, one must pay the tariffs for services provided as per the home meter or the flat rate that has been previously agreed.\(^{267}\) Likewise, the user has the right to pay a fixed rate where the service provider does not conduct a reading of the meter with the frequency as previously determined.\(^{268}\)

Failure to pay for the service in the terms established by law will generate fines and surcharges per the applicable regulations.\(^{269}\) Water supply may also be restricted for lack of payment. The restriction is 75% of the supply where 2 or more payment periods, duly notified, have been missed. Service will resume upon payment of the charges in arrears and any costs which resulted from the implementation of the restriction.\(^{270}\) The restriction or suspension of the drinking water service does not exempt the user from the payment of the outstanding fees.\(^{271}\)

Urban developers are to provide free services for the supply of drinking water and drainage to the purchasers of houses of authorised developments, until the developer submits to the corresponding municipality the infrastructure, urbanization and urban equipment established in the Authorization.\(^{272}\)

The Finance Code confirms that with respect to drinking water, programs may be enacted by governing councils of a municipal nature in support of regularisation of outstanding fiscal obligations through subsidies or forgiveness.\(^{273}\) Also only 50% of the relevant fee for water service is applied in the case of rural areas which have local water systems, a population of less than 1,000 inhabitants and that do not have meters.\(^{274}\) Operating Organs can also organise special tariffs or payment arrangements to meet the needs for users proven to be in financial difficulty.\(^{275}\)

4.3.3.  Affordability of water and sanitation services in the State of Chiapas

In Chiapas, it is confirmed to be of public interest to establish, maintain and develop a state drinking water and sewage system that includes, among others, an efficient and equitable integrated financial system for providing water, sewage and sanitation services at the state and municipal levels.\(^{276}\)

With respect to affordability regulations, the Municipal Operating Organs are crucial as they have extensive functions related to water tariffs. They are in charge of performing the necessary studies to establish appropriate tariffs collected for service provision using as a basis the formula set by the State Water Institute; establishing tariffs for drinking water services, sewage, water treatment, sludge management, as well as requesting or collecting them; ordering and executing service suspension or restriction for service non-payment under the terms of the law; setting and authorising tariffs for public services for drinking water, distribution, potabilization, supply or transport, made by private persons in the terms of the law.\(^{277}\)

Tariffs are to foster the access of low income populations to public services, considering the capacity to pay of the different strata of users. Among others, tariffs also aim to foster the municipalities’ or service providers’ self-reliance, and the rationalisation of consumption, which are addressed in depth
under the Sustainability Section. Tariffs are to be determined and actualised by the service provider according to the established formula using parameters to calculate the average balance tariffs, which may cover operation and maintenance costs. These tariffs may be actualised according to the electricity costs, and the National Consumer Price Index. Furthermore, service providers must set tariff structures that consider the socioeconomic level and kind, or the payment capacity of the different user strata in a way it allows the establishment of equity criteria in the service costs. This structure must be designed such that it generates the same income that the average balance tariffs would provide. Concessions can be revoked by municipalities where a concessionaire is a repeat offender for applying tariffs higher than those from the formula established by Law.

The State Water Institute is the tariff monitoring organ. It verifies the correct application of aforementioned formula, and approves the average tariffs, as well as the consistency between the average balance tariffs and tariff structures. Furthermore, Operating Organs may request the State Water Institute to conduct technical and financial studies that would justify a tariff rise that could not exceed the National Consumer Price Index. While performing such studies the Institute must take into account the views and demands of users and the basis set by law. Once the tariffs are approved, the Institute orders their publication in the official journal and in the most important media of the municipality.

With respect to tariff payment, the Chiapas Water Law sets an obligation to all public, social or private sector users to pay for public services provided to them. This payment must be made in a reasonable deadline as set in the service bill and in the indicated offices. After this deadline, the payment will incur surcharges that are determined in the corresponding municipal or state tax code. If this obligation is not respected, Operating Organs, trusts (Patronatos), or service providers are entitled to suspend services when: A) two or more bills are not paid, B) a connection authorisation to the official network does not exist, C) water is used for a different purpose than the one which has been contracted. These suspensions will be made, after notifying the user, with a written notice, and respecting his right to a hearing. However, these restrictions are not permissible for care services or public education buildings. In case of non-payment, the owner of a property will be responsible for the debts generated for public services provided to this property, before the service provider.

4.3.4. Affordability of water and sanitation services in Jalisco State

In Jalisco, pursuant to the State Water Law, municipalities propose tariffs to the State Congress which is ultimately responsible for their approval. The content that the structure of the tariffs for services must include is detailed in the law and consists of at least: guidelines for determining minimum and maximum prices for domestic use; the definition of price for the population with the least resources or minimum consumption; and the proportional increase of the same to promote the efficient use of water, to those that use more than the minimum required; mechanisms for the determination of costs and tariffs in response to efficiencies according to the type of population, system and municipality, to standardise the tariff structures with gradually greater efficiencies and accessibility to the municipalities of the State.

Importantly, the law establishes that the formula for calculating tariffs must be applied such that resulting tariffs consider different social strata and the diverse uses identified in the regions. In addition, other aspects related to affordability of services are articulated in the State Water Law and the Regulations. For example, while the municipalities or operating agencies can temporarily
restrict their services due to late payments,\textsuperscript{xii} or even terminate an agreement and reconsider delivery of services,\textsuperscript{xiii} these entities are nevertheless obliged to ensure a minimum supply of water for domestic needs. Indeed, under the State Water Law, they are required to enable the inhabitants access to drinking water in a permanent, regular, continuous and uniform manner, in order to meet their vital and sanitary needs for domestic use, even in the case of non-covered debts for services rendered assuring the supply of water of 50 litres per inhabitant per day.\textsuperscript{293} For the purposes of this article, the Water Regulation further specifies that municipalities and Operating Organs, shall enable domestic users, whose drinking water supply is suspended for non-payment, to obtain up to 50 litres of water per day per person, at the facilities determined by the municipality or Operator Organism, to meet the individuals’ vital and health needs.\textsuperscript{294} It is noteworthy that the State Water Law and Regulation do not establish procedures for termination or suspensions of services, contrary to certain municipal laws in Jalisco, as detailed below.

Furthermore, the competent authorities may also reduce the costs of services for marginalised and low income people. The following conditions are established for general users (usuarios particulares), should the authorities decide to grant such benefits:

\begin{enumerate}
\item Whoever receives them is aware of the payment;
\item A maximum allocation should be set according to the type of user and number of inhabitants of the property, the maximum limit being twenty-one cubic meters per month. In case of a greater consumption, the surplus must be paid the same as all those who do not enjoy the subsidy;
\item That the user requests it in writing before the city council. If approved, the municipality will notify in writing the origin of the subsidy to the operating agency;
\item The subsidy will only apply to one land per user [...].\textsuperscript{295}
\end{enumerate}

In the local legislation of certain municipalities, additional provisions exist that contribute towards the affordability of water and sanitation services. In Guadalajara, for example, a discounted rate exists for users that fall within the description of poverty indicated by the law:

\begin{enumerate}
\item That the property that receives the water supply and sanitation services is located in an area that has an income lower than 0.68 minimum salary per capita, pursuant to a 2010 census;
\item That the property does not have a swimming pool;
\item Only for domestic use;
\item That the property’s water outlet has a meter;
\item Consumption is less than 21 cubic meters per month.\textsuperscript{296}
\end{enumerate}

A special tariff is also mentioned for widows, retirees, disabled persons or those 60 years or older.\textsuperscript{297}

Similarly, in Zapotlán, subsidies are set for socially beneficous institutions, and for low income or vulnerable users, such as people over 60 years old, disabled persons, retirees and widows, for them to pay services delivered to them. Such subsidies will be made available to them where the user is the

\textsuperscript{xii} Regulation to the Jalisco Water Law, Art. 107. This must be also stipulated in the contracts of adherence to the service and in the corresponding municipal regulations, in accordance with the provisions of article 91, section IX of the Jalisco Water Law. The latter also states that users of water supply and sanitation services must establish an agreement with the municipality or operating organs which will contain, among others, causes for termination of the agreement or restriction of the services.

\textsuperscript{xiii} Jalisco Water Law, Art. 93, states that persons who use the water supply and sanitation services without an agreement nor paying fees for the services, will be considered obliged as per model of agreement used by municipality or operating organs and may be requested to proceed with the regularization of their condition, or otherwise termination of the agreement and services will be considered.
owner of the building and resides in it; the user does not owe any service payment; the user presents
the documents that accredit them as possible beneficiary; their monthly consumption does not go
beyond 10 cubic meters; and a socioeconomic study is performed. 298 A preferential tariff for public
institutions, orphanages, and charitable organisations is also provided in certain municipalities, such
as Guadalajara. 299

In Zapotlán, the local laws also establish that in cases of lack of payment (for more than two periods)
in favour of the Operating Organs, prior to the suspension of the water supply service or cancellation
of wastewater discharges, the organism will notify users, indicating motive of the debt, date in which
the fees had to be paid, explanation of the amounts to pay, deadline to cover the debt at the offices
of the organism (15 days since notification), and others that may be derived from the nature of the
debt. Article 175 establishes that for domestic/residential use, users who have service suspended, due
to lack of payment, may go to the premises determined by the Operating Organs for a supply of up to
50 litres per person per day, which will be transported to the residence of the user by his own
means. 300

4.3.5. Analysis and concluding remarks

Elements that characterise the affordability criterion of the human rights to water and sanitation can
be found throughout the legal framework analysed but to different extents. At the federal level,
affordability of water is explicitly articulated in the Constitution, but not in the water-related federal
legislation. However, the fees or duties for water use and extraction, which are regulated by the
federal legislation, can have an impact on the cost of water services for end users because the fees
can vary depending on the type of use of the water obtained, the availability of water, but also the
NCPI according to which those fees are updated. This inter-relation with the cost of water services is
even more explicit in the Federal Law on Duties in the establishment of exceptions or different fees in
the case of water for drinking purposes in rural communities, daily consumption of water per person,
or the entity using the water in rural areas (e.g. social services vs. commercial).

State laws contain important provisions that play a role in the affordability of water and sanitation
service delivery. For example, they regulate disconnections, suspension or restriction of services for
non-payment, services affordability, etc. In all three States analysed, different approaches exist in
relation to the various aspects characterising water affordability, from tariff setting formulas to
positive measures to socio-economically vulnerable population.

Whereas the Water Law of the State of Mexico does not include any requirements for the use of a
formula for tariff setting or tariff structure, both the Chiapas and Jalisco water laws require the tariff
structure or formula for the calculation of tariffs to take into account the different social strata. In
Chiapas, the tariff structure set by service providers must also explicitly take into account the capacity
to pay of the different strata of users with the aim of allowing the establishment of equity criteria in
the service costs. Notably, in Chiapas, the State Water Institute is attributed with the role of verifying
the correct application of the formula for tariffs setting and approving tariffs. Similar requirements
and functions are however not articulated in the Jalisco and Mexico State laws analysed, which
demonstrates the heterogenous legal setting for tariff structures with regard specifically to
affordability of services for users. Adequate formulas for tariff setting that take into account the
capacity to pay of users is important for the realisation of the rights to water and sanitation for all.

Nevertheless, the Mexico State Water Law articulates at least one aspect of the affordability criterion
of the HRWS, namely in recalling that the human right to water includes meeting the water needs of
citizens to achieve their welfare, particulate those living in a situation of socio-economic
marginalisation. Tariffs in certain rural areas are also cheaper and Operating Organs can apply special
tariffs for users unable to pay for the services. In Jalisco, mechanisms are established to support different users with the payment for services. For example, costs may be reduced for marginalised and low income people. At local level, these mechanisms are even broader, with municipal legislation establishing discounted rates for specific groups of people (e.g. retirees, low-income, etc.). A review of all municipal water-related laws would inform on whether such provisions exist in all municipalities. Additional guidelines in the state or federal laws could ensure better uniformity across the States and country.

This is the case also for procedures and requirements that concern restrictions or suspension of water and sanitation services for non-payment. The review of the three States demonstrates that such measures are allowed in case of non-payment for water and sanitation services but the conditions and safeguard measures to ensure minimum water supply differ. The type of measures varies from a 75% restriction in the State of Mexico, to suspension of services in Chiapas and restriction in Jalisco with a 50 litres per day per person minimum supply also in case of suspension of services for non-payment. Certain procedures must also be followed in all three States in case of non-payment. For example, in Chiapas and Mexico the measure for non-payment can be taken after two or more unpaid bills, whereas in Jalisco this is not specified. Notably, in the former two States due notification to users is required and Chiapas law even explicitly recalls the right to a hearing. In Jalisco, no such procedural measures are included in the law, but a minimum supply of water must be ensured for domestic needs in case of non-payment. Municipal laws, however, can enshrine more detailed procedures, as demonstrated with the case of Zapotlán where the content of the notification to users is also laid down.
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5. Human Rights Principles in Relation to Water and Sanitation in Mexican Law

5.1. The principle of non-discrimination

5.1.1. The principle of non-discrimination in federal and state law

In Mexico, any form of discrimination, based on ethnic or national origin, gender, age, disabilities, social status, medical conditions, religion, opinions, sexual orientation, marital status, or any other form, which violates the human dignity or seeks to annul or diminish the rights and freedoms of the people, is prohibited.301

The Federal Law to Prevent and Eliminate Discrimination (Ley Federal para Prevenir y Eliminar la Discriminación) further includes within the list of discriminatory acts, those that limit access to a public service, restrict access to public information, implement or execute public policies, programs or actions that have a disadvantaging impact on the person’s rights or that limit or deny the granting of concessions or permits for the use of natural resources once all legal requisites are fulfilled, although not referring specifically to water or sanitation.302 Pursuant to this law, the federal authorities are obliged to implement measures that contribute to diminish discriminatory acts. A National Council for the Prevention of Discrimination is created by this law, to provide assistance to the federal authorities in the implementation of measures to prevent discrimination; it has mainly an advisory role, although it can sanction public officials who engage in discriminatory practices.303 Discrimination by suppliers of goods, services and products is also prohibited under the Law on the Protection of Consumers (Ley Federal de Protección al Consumidor), and providers are obliged to provide facilities or have the necessary devices so that people with disabilities can use the goods or services they offer.304

More specifically regarding access to drinking water and sanitation and the water-related legislation at federal level, elements of the non-discrimination principle can be found mainly in relation to the water policy. For example, the National Water Law lists special attention to the needs of the marginalised and economically disadvantaged population as one of the principles that underpin the National Water Policy.305 Social support for marginalised rural and urban communities to access water and sanitation is also identified as a basic instrument of the water policy.306 However, as discussed earlier,307 priority for public urban uses, although including domestic uses, may leave other groups behind, especially those in rural areas. From the definition of “public urban uses” and “domestic uses” it can be argued that these include rural areas where there is human settlement. This is however unclear and the opposite interpretation could lead to a lack of positive measures for those groups that require special attention.

State legislation complements the law at national level and contains important provision on the principle of non-discrimination. The Preamble of the Mexico State Water Law recalls the human right to water and its various aspects as affirmed by the UN CESCR, highlighting among others that it implies to ensure access to facilities and services on a non-discriminatory basis. The preamble informs further that against this backdrop, the law aims to incorporate norms tending to guarantee the people’s right to access a minimum essential quantity of water, on a non-discriminatory basis.308 In Chiapas, non-discrimination in water and sanitation services is enhanced in the State Constitution, which indicates that the State will promote policies aiming to guarantee the right of every person to the access and full disposition of water for personal and domestic consumption, [...] in equality and non-discriminatory conditions.309 The Chiapas Constitution also declares that the State will establish policies aimed to eliminate extreme poverty, raising the human development index and the quality of...
life of its inhabitants, prioritising the promotion of equality between all people, the guarantee of access to drinking water, and the improvement of infrastructure in marginal human settlements. Through these dispositions in the Constitution aiming to reduce poverty through policy, the State is prioritising the elimination of the discrimination to access water services on the basis of income and social status. In relation to this, the Chiapas Water Law sets different measures to make water economically accessible to persons meeting some vulnerability criteria, that are further discussed in the Sub-chapter 4.3. addressing the affordability criterion.

The State Water Laws of both Mexico and Chiapas do not explicitly require water service providers to deliver water on a non-discriminatory basis, or the authorities to adopt specific programs that ensure access to water and sanitation to everyone. However, different provisions relate to the principle of non-discrimination. In the State of Mexico, the State water policy is based namely on the principle of respecting the human right to water, which highlights also “those living in a situation of socio-economic marginalisation”. The basic instrument of the policy should also consist of specific programs for marginalised rural and urban communities to ensure their access to the services established by the Water Law.

Similarly, the Chiapas Water Law mandates the Chiapas State Water Institute to set policies, strategies objectives, programs and standards leading to the fair water use and distribution amongst the different communities of the State. Furthermore, municipalities oversee the provision of public services in all the human settlements within their jurisdiction. With respect to water provision in rural areas, the Chiapas Water Law puts in a central role the social and private sectors. As a matter of fact, when public services are delivered directly by municipalities, they will be in charge of promoting the participation of the social and private sectors in delivering public services, focusing especially in rural areas. Indigenous people’s rights, gender and ethnic equality are also fostered in the Chiapas State legislation. Community Water Committees are in charge of setting policies and guidelines within their jurisdiction and to approve internal regulations, under a gender and ethnic perspective. Furthermore, such Committee will be integrated of men and women with equal rights and responsibilities. In relation to the Water Culture, the Chiapas State Water Institute is entitled to provide trainings on gender and water, using methodologies considering the State’s cultural diversity, and to issue diffusion materials with gender and ethnic focus, promoting water maintenance and sustainable use. Moreover, the Chiapas State Water Institute must establish mechanisms incorporating a gender and ethnic perspective, among other aspects, in order to promote this water culture.

Water and sanitation as human rights for children
In relation to specific groups of people, the General Law on the Rights of Children and Teenagers (Ley General de los Derechos de Niñas, Niños y Adolescentes) establishes that to protect the rights of children and teenagers, federal and local authorities will coordinate to promote the consumption of potable water, and that both federal and local authorities have the competence to guarantee that children and teenagers have access to drinking water.

In the State of Mexico, state and municipal authorities have the obligation to guarantee girls, boys, and adolescents access to water for their consumption and hygienic needs. As part of the right to the protection of health and social security, the state and municipal authorities are responsible to ensure children and adolescents with disabilities social inclusion and implement measures that facilitate universal accessibility.

Similarly, in Chiapas, state and local authorities have different attributions by law with respect to child protection and their access to drinking water. State authorities will adopt special protection measures
for the rights of children in vulnerable, internal displacement, migration, stateless, gender, sexual orientation, religious beliefs and cultural practices related situations, among others, that would limit the exercise of their rights. One such measure is providing them with indispensable goods and services, such as drinking water. State and municipal authorities have the duty to implement and coordinate the necessary programs and actions, to, among others, combat acute and chronic malnutrition, excess weight and obesity, as well as alimentary disorders, by determining healthy alimentary habits such as the access to safe and clean drinking water. Furthermore, it is a concurrent attribution for state and municipal authorities to guarantee that children have access to drinking water for consumption and hygiene.

Indigenous peoples’ rights and water

The legislation on indigenous peoples is extensive, beginning with the national Constitution, which prohibits any discrimination but which also lays down several articles on the rights of indigenous communities and promotion of equal opportunities. For example, to eliminate discriminatory practices against indigenous peoples, the Federation, the Federal District, the States and the local councils are required to establish the necessary institutions and policies to guarantee indigenous people’s rights and comprehensive development of indigenous communities. In order to eliminate the disparities affecting indigenous towns and communities and among others improve their quality of life, the three levels of government and the Indigenous communities must coordinate and local governments shall equitably determine the budget that is to be directly managed by the indigenous communities for specific goals. This attention to indigenous peoples has to be reflected in the forecast of national budgets. Authorities are also obliged to enforce an effective access to health services and to improve the living conditions of indigenous communities through policies that e.g. enable the access to financing for housing construction and home improvements and that extend the coverage of basic social services.

In terms of participation by indigenous communities, policies and institutions that are established by the authorities must be designed and operated together with indigenous people. Among others, they also must be consulted and participate in the definition of federal programs that directly affect the development of their peoples and communities.

It is also worth mentioning that the General Law of the Linguistic Rights for the Indigenous Peoples (Ley General de Derechos Linguisticos de los Pueblos Indigenas), establishes that all indigenous languages are “valid” like Spanish, and can be used for all public procedures and to fully access services and public information. Similarly, the people who are part of indigenous communities are entitled to be provided with a free translator or interpreter for their complaints filed with the National Human Rights Commission.

At state level, while there is not explicit mention of access to water in the Law of Indigenous Rights and Culture in the State of Mexico, the law confirms indigenous peoples and communities are the legitimate owners of the lands that make up their territory, as well as preferential beneficiaries in the exploitation of natural resources in accordance with article 27 of the Federal Constitution and other laws on the matter. To that end, projects that impact natural resources in indigenous people’s territory, should be agreed with the community. When a dispute arises between the inhabitants of two or more indigenous communities or among the members of these communities in relation to the exploitation of natural resources, the State will seek and promote resolution with the participation of competent authorities.

Furthermore, members of indigenous communities are entitled to the right to health. Women’s rights to health as well as bilingual education and training in support of activities that support their
full development is particularly noted in the law.\textsuperscript{340} Also, the State of Mexico guarantees the individual rights of indigenous girls and boys to life, physical and mental integrity, freedom, security of persons, education and health.\textsuperscript{341} And, as prescribed by law, a representative for indigenous people forms part of the Council of the State Commission on Human Rights.\textsuperscript{342}

In Chiapas, in addition to the provisions on ethnic equality detailed above, article 7 of the State Constitution establishes that the State is to promote the efficient exercise rights of indigenous peoples, to use and enjoy natural resources, among others, in accordance with the Federal Political Constitution and the laws that develop it. Furthermore, the State, with the participation of indigenous communities, will instruct the necessary plans and programs to promote their socioeconomic development under a gender equality perspective.

Additionally, the Constitution states that in any public or judicial trial where one of the parties is indigenous, its culture, uses, customs and tradition will be considered. Indigenous people will have the right to be provided with a translator and a defender that speak their language and know their culture.\textsuperscript{343} The Chiapas Law on Indigenous Rights and Culture also affirms that in state or municipal projects which may affect indigenous communities’ natural resources, the concerned ejidal, communal or traditional authorities must have an opportunity to be heard on the matter.\textsuperscript{344} It further mentions that the State and the municipalities will strive to prevent the establishment of industries emitting toxic wastes, or substances susceptible to pollute or deteriorate natural resources in lands occupied by indigenous communities.\textsuperscript{345}

5.1.2. Analysis and concluding remarks

In terms of law in Mexico at the federal and state levels, the general principal of non-discrimination is definitively supported. With respect to the HRWS specifically, there indeed are provisions which support policy for the provision of water to marginalised persons (economically, geographically, culturally), although these provisions are primarily articulated as principles rather than explicit mechanisms, notwithstanding those studied in relation to the affordability criterion.

Children and adolescents are guaranteed access to water for their consumption and hygienic needs in both Chiapas and Mexico States by precise obligations in law. In contrast, except for the Mexico State Water Law Chapeau referencing CESCR’s confirmation that no threat to personal security should exist particularly for women and girls obtaining water, there is an absence of the mention of women and girls in the specific articles of the Water Law and Regulations. In this instance, Chiapas provides a useful example of inclusion of gender equality with respect to water and sanitation in legislative framework. Thus, it would be beneficial to ensure that the distinctive circumstances of women and girls with respect to access to water and sanitation are not overlooked given their priority within the HRWS framework and the global 2030 Sustainable Development Agenda.

5.2. Access to information on water and sanitation

5.2.1. Access to information in the federal legal framework

At the Mexican federal level, there are different legal provisions that relate to access to information generally but also more specifically to information related to water and sanitation.

The Constitution establishes that the right to information is guaranteed by the State and that every person is entitled to free access to timely information.\textsuperscript{346} The General and Federal Laws on Transparency and Access to Public Information further clarify that the human right to access information includes requesting, researching, disseminating, seeking and receiving information.\textsuperscript{347} The
Constitution also establishes various principles and a basis according to which the federation and the States are required to act. Among others, every person shall have free access to public information.\textsuperscript{348} In addition to clarifying the content of the right to access information, the General Law on Transparency and Access to Public Information also establishes that this right is held by everyone without discrimination.\textsuperscript{349} All public information can be requested from individuals through various means,\textsuperscript{350} and there is an obligation for the different institutions to allow access to the information they hold. This applies to information held by authority, entity, body and agency of the Executive, Legislative and Judicial Branches, autonomous bodies, political parties, trusts and public funds, as well as any natural or moral person, or union that receives and exercises public resources or acts of authority in the federal, state and municipal entities.\textsuperscript{351} It is also important to mention that according to the same law, the government shall guarantee the effective access to the information held by these actors.\textsuperscript{352} They must seek to provide the information in a simple language for any person and, as far as possible, seek its accessibility and translation into indigenous languages. The generation, publication and delivery of information is to be accessible, reliable, verifiable, truthful and timely. Only information specifically classified as reserved temporarily due to public interest or national security or classified as confidential can be restricted.\textsuperscript{353} It can be noted that the authorities, within the scope of their respective competencies, are to guarantee the right of children and adolescents to seek, receive and impart information.\textsuperscript{354} Regarding fees to obtain information held by public authorities, if producing documents has any cost, they should be paid prior to them being delivered and cannot be above the sum of (i) the cost of the materials used in the production of the information; (ii) the shipping cost; and (iii) the payment of the certification of the documents, when required.\textsuperscript{355} The information must be delivered without cost when it consists of no more than 20 pages and an exception can be made as to the payment of producing the documents and the shipment given the socioeconomic circumstances of the applicant.\textsuperscript{356}

**Water-related information**

There are specific clauses on water-related information that can be found in the federal legal framework. These arise mainly from the National Water Law, in the context of establishing the different powers and responsibilities of actors. For example, CONAGUA at national level and the Basin Agencies (Organismos de Cuenca), within their territory, are responsible for improving and permanently disseminating knowledge about water in the hydrological cycle, water supply and demand, water and soil inventories, uses and users and relevant information related to water and its management, with the support it deems necessary from other federal, state and municipal actors, as well as users of water, social organisations and individuals.\textsuperscript{357} Furthermore, the water policy principles denote that society and its institutions, at all levels of government, shall have the right to comprehensive information concerning water availability, quality, and infrastructure as necessary to implement water resource management.\textsuperscript{358} Noting that the participation of an informed society is the basis for successful water resource management, another principle advises environmental education is essential, particularly in the realm of water. \textsuperscript{359}

\textsuperscript{348} General Law on Transparency and Access to Public Information, Art. 23. The Constitution also states that “all information in custody of any authority, entity or organ of the Executive, Legislative and Judicial Powers, autonomous organisms, political parties, public funds or any person or group, such as unions, entitled with public funds or that can exercise authority at the federal, State or municipal level is public”. Political Constitution of Mexico, Art. 6. A. I.
matter, one of the functions of the Mexican Institute of Water Technology\textsuperscript{iv} is to promote a water education and culture that will create in the society awareness that water is a limited resource, which requires to take care in terms of quantity and quality, as well as of its sustainable use and the mitigation of its undesirable effects.\textsuperscript{360}

5.2.2. Access to water-related information at state level

In the State of Mexico the State water policy shall among other things, follow a principle wherein citizens have the right to the timely and reliable information about water needs, inclusive of their availability, quantity and quality, as well as information related to the hydrological cycle, uses and users, hydraulic infrastructure and the requirements to achieve integral water management.\textsuperscript{361}

Pursuant to the State Water Law, the Secretary of Infrastructure shall institute a water system of information.\textsuperscript{362} This system shall include information related to water services in the State, inclusive of information concerning tariffs and other contributions applicable to the services provided by the State Water Commission, the State Technical Water Commission, the municipalities and the Operating Agencies.\textsuperscript{363} Further the water information system should classify the applicable information and develop adequate consultation mechanisms that allow the user to have access to information in a timely manner.\textsuperscript{364}

Users are entitled to be informed regarding the services covered in the State Water Law.\textsuperscript{365} Further, they have the right to review documents issued by service providers where the rate information is included and may assert a claim concerning errors in such documents.\textsuperscript{366}

Access to information is included in the Chiapas Water Law as a right of the users. Specifically, users have the right to receive information on public services, in a sufficiently detailed manner for the exercise of their rights; to be informed of programmed public services interruptions and; to know the tariff regime and to receive the corresponding bills, as well as claiming the mistakes appearing on them.\textsuperscript{367} Accordingly, these rights also generate some obligations or requirements for service providers in Chiapas. When public services are established in places where they were not available previously, stakeholders will be informed through publication in the Official Journal of the State and in the newspaper with the widest circulation in the town. Any other mass media can be also used in order for stakeholders to learn the existence of such public services.\textsuperscript{368} Moreover, when restriction areas are established due to water scarcity, Operating Organs must notify users through media.\textsuperscript{369} As for information on tariffs, once approved, the Water Institute orders their publication in the official journal and in the most important media of the municipality.\textsuperscript{370} The Institute is in charge of operating and maintaining the State’s information system on drinking water and sanitation services.\textsuperscript{371}

Finally, public institutions also have the responsibility to promote water related good practices. Specifically, health, educational and labour authorities of the State will promote and support within their scope, actions related to drinking water, excreta elimination sanitation measures and health basic infrastructures access, as well as to a favourable environment, among others.\textsuperscript{372} Similarly, the Ministry of Environment and Natural History oversees promoting and supporting basic sanitation.\textsuperscript{373}

5.2.3. Analysis and concluding remarks

The right to access information is explicitly found in the Constitution of Mexico and federal legislation, as a right which includes the right to request, research, disseminate, seek and receive information. Specifically in relation to water and sanitation, the different responsibilities that are established in the

\textsuperscript{iv} The Mexican Institute of Water Technology (IMTA) Its role is to conduct research, develop, adapt and transfer technology, provide technological services and prepare qualified human resources for the management, conservation and rehabilitation of water and its environment, in order to contribute to sustainable development. National Water Law, Art. 14 Bis 3.

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National Water Law also relate to information, but mostly generally on water, water resources and water management rather than on information for users of water and sanitation services. These are captured to a greater extent in state legislation.

Considering the sub-chapters above, the Chiapas law establishes not only a right of users to obtain information on service provisions, including tariffs and interruptions, but also an obligation for different actors to provide specific information on tariffs, new services, or restriction areas. Similar provisions can be also found in the Jalisco Water Law, which establishes the right of users to receive information on public services, including on tariffs and suspensions, and to a certain extent in Mexico, where users hold a right to be informed on the services covered by the Water Law. The legislation in that State also refers to timely and reliable information on water as a principle of the water policy, and establishes a water system of information which does include information on tariffs and other contributions applicable to services provided by different actors, such as operating agencies. This could therefore include information on suspension of services or similarly valuable information for users.

5.3. Participation as a human right principle in Mexico

5.3.1. Participation in the federal legal framework

As part of the State’s guarantee of the right of access to water, article 4 of the Constitution confirms that the State will guarantee such right and the law will define the bases, subsidies and modality for the equitable and sustainable access and use of the freshwater resources, establishing the participation of the Federation, local governments and municipalities, as well as the participation of the citizens for the achievement of such purposes.

Indeed, the National Water Law has various provisions which establish public participation in relation to water resources. For instance, as part of its mandate, CONAGUA shall encourage active and free participation of users and society. The Basin Councils and their various sub-committees form an integral part of executing this objective to involve users and civil society in integrated water resource management. Recalling from Part A – Water Governance Framework in Mexico, Basin Councils are composed of representatives from all three levels of government (national, state, local), water users of varied sectors and civil society. Together these actors should collectively promote and facilitate the participation of society in planning, decision-making, implementation, evaluation and monitoring of national water policy, which is guided by principles related to drinking water as discussed throughout this document. Also, they shall be organised according to the rules set by CONAGUA, which determine actions and procedures necessary to promote the participation of those actors in drafting, evaluating and updating water programs of the corresponding basin.

Other laws also contain provisions on public participation on more general water-related issues. For example, under the General Law on Ecological Balance and Environmental Protection, the federal environmental sector is called upon to promote the co-responsible participation of society in the planning, execution, evaluation and monitoring of the environmental and natural resources policy. To this effect, the Ministry of Environment and Natural Resources, within the scope of the National System for Democratic Planning (Sistema Nacional de Planeación Democrática), is to call upon various actors, including indigenous peoples, educational institutions and non-profit social organisations to express their opinion and proposals. The Ministry is also required to involve different actors, including “social organisations”, in the area of environmental policy consultation and participation bodies. Also, as mentioned earlier, there are various provisions at the federal level requiring or encouraging participation and consultation of indigenous peoples in decision-making, adoption of
Finally, the General Law on the Rights of Children and Teenagers, establishes that the federal and municipal governments, as well as the territorial authorities of the Federal District, are obliged to dispose and implement the mechanisms that guarantee the permanent and active participation of children and adolescents in the decisions that are made in the family, school, social, community or any other in which they are developed.

5.3.2. Participation in the legal framework of the State of Mexico

In the State of Mexico, the water policy counts among its principles the informed and responsible participation of people to serve as a basis for integrated water management, sustainable water management and promotion of water culture. The Secretary of Infrastructure should promote the participation of the social and private sectors in the provision of water related services. Part of the State Technical Water Commission’s duties entails designing communication and outreach policies to encourage citizen participation in the subject of water, inclusive of water programs and activities. Further to support the goal of citizen participation, the State Water Program should include a definition of mechanisms to ensure the participation of all sectors of the population in solving short- and long-term problems in the planning, decision-making, implementation, evaluation and monitoring phases. Finally, the process of updating the aforementioned State Human Rights Program should be inclusive, progressive and multidisciplinary and guarantee the broad participation of civil society organisations, academics institutions, and public entities.

5.3.3. Participation in the legal framework of the State of Chiapas

In Chiapas, ensuring participation is a responsibility of municipal Operating Organs, that are in charge of organising and orienting users for their participation in the system, and developing education and training programs for their staff. Consequently, social and private sectors and users have the right to create committees for the construction, conservation, maintenance, rehabilitation and operation of public service systems. Furthermore, when public services are directly delivered by municipalities, they will be in charge of promoting the participation of the social and private sectors in delivering public services, focusing especially in rural areas. A specific chapter on the participation of private and social actors in water and sanitation services establishes that private and social sectors can participate through contracts or concessions in:

- the provision of public services;
- administration, operation, construction and maintenance of systems intended for the provision of public services;
- execution of water works and projects related to public services, including financing;
- wastewater collection, evaluation and wastewater, and management of sludge;
- water piping, potabilization, supply, distribution and transportation services, provided to the public; and
- other activities that relate to the Operating Organs and the Water Institute.

Participation is also promoted within institutions delivering public services, through organs representing users and organisations. Operating Organs will have an advisory council, as a collegiate organ that will support it to achieve its objectives. The Advisory Council must include the principal representative organisations of the social and private sectors and of drinking water and sewage users of the municipality. The Advisory Council will have as its objective to include users in the Operation Organs operations, by formulating observations and recommendations for its efficient and profitable functioning; and to be aware of tariffs and their modifications, as well as to formulate propositions, observations and suggestions on them.
Finally, the State Water Institute is to annually attribute budget to human resources necessary to promote citizen participation in water culture.394

5.3.4. Analysis and concluding remark

References to active participation of users and society in water management can be found in both the federal law and the laws of the States reviewed for the present analysis. The National Water Law’s institution of a decentralised water governance model through Basin Councils, composed of representatives of diverse users, explicitly prescribes for active and free participation of users and society in planning, decision making, evaluation and monitoring of national water policy. This inclusion is a key component in fulfilling the rights to water and sanitation from a water resources management point of view.

Having greater contribution to water policy from diverse populations at the local level via Basin Councils sets a foundation for participation in developing laws, regulations and policy. It will be important that such participation which is prescribed by law is meaningful such that the input is genuinely considered from the beginning of any planning or law enactment and feedback provided respectively. Following this course, the State of Mexico’s water regulation stipulates that the Water Program should incorporate a definition of mechanisms to ensure wide participation of the population in problem-solving at various stages. It is noted that such mechanisms are not directly established in the laws analysed, although representation of private and social actors in certain water-related bodies is foreseen (e.g. Advisory councils of the Chiapas Operating Organs). In Chiapas these actors can also create committees for public services systems. Such articulation of mechanisms should also be implemented at the federal level addressing comprehensive matters in the provision of water and sanitation services.

A running theme throughout the federal and state water laws is the emphasis on the cultivation of a “water culture” among the nation’s citizens. This effort is also a positive stepping stone in garnering public participation through a raised awareness. Heightened awareness fosters a since of involvement and responsibility among the public and enhances the chance for their increased participation in issues shaping the realisation of the human rights to water and sanitation.

5.4. Accountability

5.4.1. Overview of accountability mechanisms

The Constitution of Mexico establishes various principles and a basis according to which the federation and the States are required to act. Among others, it requires obligated parties to record and keep their documents in updated administrative files, and disclose, through electronic media, the complete and updated information about the use of public resources and their management indexes so that the information allows accountability procedures regarding the fulfilment of their objectives and the results of their performance [...].395

Such clause is directly related to the principle of accountability although it is not specific to water and sanitation services. With respect to judicial procedures to ensure accountability, the Constitution guarantees that resolutions will be issued in a prompt, complete and impartial way and that court services will be free, forbidding judicial fees.396 All people also have the right to enjoy justice before the courts, which are required to issue their rulings in a prompt, complete and impartial manner.397 Federal and local laws shall provide the necessary means to guarantee the independence of the courts and the full enforcement of their rulings.398
The Federal Law on Public Defenders requires public defenders and legal advisors to monitor the respect of human rights and guarantees of their clients. This includes supporting the corresponding amparo trial [special trial for the constitutional protection of human rights], as well as any other legal defence means, when they understand these rights to have been violated.399

In terms of mechanisms that exist outside of the water-related framework addressed below, the National Council for the Prevention of Discrimination can sanction public officials who incur in discriminatory practices,400 and the Federal Consumer Protection Office (Procuraduría Federal del Consumidor – PROFECO) can receive complaints from individuals on consumers' rights.401 PROFECO is a decentralised body of social service with legal personality and its own property, in charge of promoting and protecting consumers' rights and seeking equity and legal security in the relations between suppliers and consumers.

Water and environment-related infractions

Federal level

In case of controversies related to water, the National Water Law provides the Federal Environmental Protection Agency with different functions, such as presenting claims and imposing sanctions of its competence; filling and resolving administrative proceedings of its competency; imposing technical corrective and security measures; promoting compensation or reparation measures for water-related environmental damage to ecosystems; requesting the withdrawal of discharge permits; etc.402 When the commission of a crime is suspected, CONAGUA files a complaint before the public prosecutor.403 Furthermore, any person, social group, citizen or non-governmental organisations can have recourse to the popular denunciation recourse established under the General Law on Ecological Balance and Environmental Protection, when acts that produce or may produce harm or imbalance to water resources are committed.404

Denunciations may be unanimous and may be filed with municipalities when there is no representation of PROFEPA in the locality.405 The General Law on Ecological Balance establishes requirements that have to be followed by PROFEPA, namely with regard to notification to the complainant, investigations, and collaboration with other institutions.406 Notably, when a popular complaint does not imply violations of environmental regulations, or does not affect matters of public order and social interest, PROFEPA may subject it to a conciliation procedure. In any case, the parties involved should be heard.407

The Agency can also initiate actions when it is aware of violations of administrative or penal legislation.408 Where investigation indicates that federal, state or municipal authorities participated in the facts, actions or omissions reviewed, it will issue the necessary recommendations in order to promote adequate actions. The recommendations, although public and “autonomous”, are not binding.409 Without prejudice to any criminal or administrative sanctions that may be imposed, those

Judicial system in Mexico

The judicial power of the United Mexican States is vested in a Supreme Court of Justice (the highest constitution Court of the country), an Electoral Court, collegiate circuit courts, unitary circuit courts and the district courts (Political Constitution of Mexico, Art. 94). Article 116 of the Constitution further establishes that the power of each state shall be divided into the executive, legislative and judicial branch. Each state constitution establishes the courts which exercise the local judicial power.

According to article 1 of the Constitution all the authorities, within their competencies are obliged to promote, respect protect and guarantee human rights with conformity to the universality, interdependence, indivisibility, and progressive implementation. Therefore, the State should prevent, investigate, sanction and repair human rights violations in the terms established in the Law.

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contaminating or deteriorating the environment or affecting natural resources or biodiversity, will be held responsible and obliged to repair the damages caused, in accordance with the civil legislation.\textsuperscript{410}

Furthermore, the National Water Law gives to different organs of the federal water system, functions to monitor or to ensure the fulfilment of water dispositions and policies. According to this Law, CONAGUA has among others the functions to: monitor the implementation of the National Water Program; to conciliate or act as arbitrator, under the request of users, in order to prevent, mitigate or resolve water related conflicts; and to monitor the implementation and respect of the National Water Law.\textsuperscript{411} CONAGUA, as the water authority, is also in charge of promoting, executing and operating monitoring systems for the preservation, conservation and improvement the water quality of basins and aquifers, according to Official Mexican Standards; monitoring and establishing the wastewater discharge conditions; and keeping observation, in coordination with the competent authorities that the water supplied for human consumption complies with the corresponding Official Mexican Standards.\textsuperscript{412} Finally, CONAGUA will, at the federal level, inspect or oversee that wastewater is discharged according to the law, and this monitoring can be the basis for the competent Federal Public Administration to apply sanctions according to the law.\textsuperscript{413} Other functions are attributed to Basin Councils, but are related more to water resources management.\textsuperscript{414}

Against the acts or definitive resolutions of CONAGUA, a revision appeal can be presented to the Commission’s Director General, within 15 working days, to nullify, modify or confirm the challenged resolution.\textsuperscript{415} Also, decisions issued by administrative authorities ending an administrative procedure or closing a case, will initiate a contentious-administrative trial before administrative courts.\textsuperscript{416}

Local authorities are responsible to inspect, monitor and oversee that domestic or public urban wastewater not discharged in a sewerage or sanitation system is made according to the Official Mexican Standards.\textsuperscript{417}

Federal laws set forth sanctions and penalties for infractions or crimes against water and environmental rules. Concerning infractions and crimes with respect to drinking water, it is relevant to highlight the infractions of: discharging wastewaters in national receipting bodies or in areas when the aquifers can be contaminated; providing national waters for human consumption that are not in line with the corresponding quality standards; and damaging considerably the environment or creating disequilibrium in water resources.\textsuperscript{418} CONAGUA will sanction administratively these sanctions with fines, and additionally close temporarily or definitively, totally or partially, the wells, works or extraction of waters.\textsuperscript{419}

\textbf{State of Mexico}

At state level, generally, under the terms of the Mexico State Water Regulation, the State water authorities (Secretary of Water and Public Works, State Water Council, State Water Commission, State Technical Water Commission)\textsuperscript{420} will carry out an evaluation of the State Water Program and program and functions of the authorities, e.g. the assessment of the processes associated with the provision of services, disinfection, chlorination, treatment of waste water, final disposal of the resulting products, discharge conditions and reuse of treated water.\textsuperscript{421} Indicators approved by the State Water Council will be used as a basis for the evaluation process which relates to the degree of compliance with the Water Program goals.\textsuperscript{422}

The entities or persons in charge of the water supplies shall always be directly responsible for the drinking quality of water, as well as for the application of any measures issued by the Institute of Health of the State of Mexico, in accordance with respective regulations.\textsuperscript{423} Also, the user has the right
to review the documents service providers issue where there is a tariff established for services provided, and may assert a claim concerning errors in such documents.\textsuperscript{424}

In addition, with respect to the State Human Rights Program, it shall be evaluable and measurable to ascertain the scope, results, achievements and deficiencies generated by the application and execution thereof.\textsuperscript{425}

**Chiapas**

In Chiapas, the Constitution requires the State and its municipalities to repair damages caused by human rights violations.\textsuperscript{426} This would include measures affecting at least drinking water as well as sanitation because, as mentioned above, access to water is articulated in the Constitution as a right.\textsuperscript{427}

Specifically, when municipalities provide water public services directly, they will be in charge of sanctioning infractions committed and resolving appeals and other challenges against their acts or resolutions.\textsuperscript{428} The infractions that service providers or contractor may commit are: refusing to contract public services without justification; applying excessive tariffs; not delivering public services according to applicable quality levels; interrupting totally or partially public services provision without justification; in the case of concessionaires or contractors, not complying with the public service systems conservation and maintenance obligation; and any other violation of the Chiapas Water Law or its Regulation.\textsuperscript{429}

Users and the social and private sectors have the right to:

- bring before the competent authorities contracts celebrated between users and service providers, in the cases of non-compliance with the same, in order to request their compliance;
- file reconsideration appeals against acts and resolutions of municipalities; and
- denounce to the municipality any action or omission of third parties that may affect their rights.\textsuperscript{430}

When users do not agree with the competent authority, they may also undertake administrative procedures.\textsuperscript{431} Other means of complaint are facilitated for conflict resolution. For example, contracts between the Chiapas Water Institute, Operating Organs or municipalities and the social or private sectors for public services provision, must include consultation and conflict resolution, including arbitration.\textsuperscript{432} In addition to this, when the State Environmental Law, or its regulations are violated, the Environmental Prosecutor or the corresponding municipality may impose the corresponding administrative sanction to offenders, according to the circumstances or nature of the facts, and respecting their right of a previous hearing.\textsuperscript{433}

Sanctions for offences and infractions are determined by State Laws. The Chiapas Environmental Law sanctions behaviours not complying with drinking water saving measures with a fine;\textsuperscript{434} and those not complying with water treatment and reuse with a higher fine.\textsuperscript{435} Furthermore, the Chiapas Water Law sanctions the infractions of its dispositions mentioned above with fines that vary according to the nature of the facts.\textsuperscript{436} Sanctions of the Chiapas Water Law may be applied notwithstanding the civil or criminal responsibility or the rescission or revocation that may arise from the facts.\textsuperscript{437}

As highlighted earlier, the Chiapas Political Constitution states that in any public or judicial trial where one of the parties is indigenous, its culture, uses, customs and tradition will be considered. Indigenous people will have the right to be provided with a translator and a defender that speak their language and know their culture.\textsuperscript{438}

Finally, it can be noted that the State Water Institute established under the Water law is an institution with its own legal personality and administrative, budget, technical management, operation and
execution autonomy. It is the rector of the State’s actions, programmes and projects on water, with a role namely in budgeting, tariff setting and planning, although not with an explicit general regulatory or oversight function.\textsuperscript{439}

5.4.2. National human rights institution(s)

Mexico’s National Human Rights Commission (Comisión Nacional de Derechos Humanos) was founded in 1990 by a presidential decree as a decentralised body of the Secretary of Government.\textsuperscript{440} Through Constitutional reforms, the Human Rights Commission, now called the Comisión Nacional de los Derechos Humanos México (CNDH), became an autonomous constitutional body, with managerial autonomy, a legal personality and endowed with its own patrimony.\textsuperscript{441} The CNDH is a national human rights institution (NHRI) accredited with the “A” status\textsuperscript{xvi} by the Sub-Committee on Accreditation of the Global Alliance of National Human Right Institutions (GANHRI), formally known as the International Coordinating Committee of National Institutions for the Promotion and Protection of Human Rights (ICC).

\begin{quote}
\textbf{Re-accreditation of the Comisión Nacional de los Derechos Humanos}

CNDH’s last application for re-accreditation was considered in November 2016 by the Sub-Committee on Accreditation. In its final report of the November session, the Sub-Committee issued several recommendations to the CNDH. Among others, it encouraged the institution to review its processes to ensure that its current methods of operations do not result in a failure to address systemic human rights violations, given the substantial decrease of the number of complaints of human rights violations received. The Sub-Committee also recalled that in order to address the Paris Principles requirement for a stable mandate, the enabling law of an NHRI must contain an independent and objective dismissal process. Currently, the precise procedure for dismissal is not clear according to the Sub-Committee, including who can initiate the dismissal process and whether a hearing is held. It also noted that the CNDH’s role as National Preventive Mechanism has not been formalised to date. Where an NHRI has been designated as the NPM, and specifically where this designation provides for additional powers to enter, monitor, investigate and report on places of detention that go beyond the powers of the NHRI already available in the enabling law, a more clearly defined legal mandate is required. This specific legislative mandate assists in ensuring that the NHRI is able to undertake its role effectively and free from interference.

GANHRI, Report and Recommendations of the Session of the Sub-Committee on Accreditation, Geneva 14-18 November 2016.
\end{quote}

Under the Mexican Constitution, the CNDH and other “human rights organs” established by state legislatures are established to protect the human rights that are recognised by the Mexican legal system,\textsuperscript{442} therefore including economic, social and cultural rights.\textsuperscript{443}

The human rights agencies receive all complaints against administrative actions or omissions committed against human rights by any public office or employee, except for the officials working for the federal judicial branch. Article 102 B of the Constitution further establishes that the agencies shall issue public non-binding recommendations and file accusations and complaints with the appropriate authorities. Although the recommendations are not compulsory, the authorities are obliged to respond to the recommendations issued by the agencies. In cases where they do not accept or enforce the recommendations, the authorities are required to justify this and make their refusal public. The authorities may also be called to appear before the Senate or the Permanent Commission to explain

\textsuperscript{xvi} “A” status national human rights institutions are in full compliance with the Paris Principles according to the GANHRI accreditation. The Paris Principles are international benchmarks against which national human rights institutions can be accredited by the Global Alliance. For more information, see GANHRI, About us: Accreditation, http://nhri.ohchr.org/EN/AboutUs/ICCAccreditation/Pages/default.aspx.
the reasons of their refusal. At federal level, this article is further developed by the Law on the National Human Rights Commission (Ley de la Comisión Nacional de los Derechos Humanos).

Moreover, the Constitution empowers the CNDH to investigate serious violations of human rights when it considers to do so or at the request of the President of the Republic, the Senate, the House of Representatives, Governor, the Head of the Federal District Government, or a State Congress.

Unconstitutionality lawsuits directed to raise a contradiction between a general regulation and the constitution “shall be also initiated by the National Human Rights Commission, against federal or state laws or laws enacted by the Federal District Government; as well as law against international treaties which hamper the human rights system established in the Constitution and in the international treaties ratified by Mexico”.

The Law on the National Human Rights Commission further clarifies the objective of the CNDH, which is to protect, observe, promote, study, and disseminate the human rights protected by the Mexican legal system. The Law lays down the National Commission’s various powers, including promoting the observance of human rights in Mexico, receiving complaints, suggesting changes of legislative provisions and administrative practices for better protection of human rights, and investigating alleged violations of human rights. It is also relevant to mention that the National Commission also has the power to seek conciliation between the complainants and the accused authorities as well as the immediate resolution of a given conflict when its nature allows it.

Complaints

Any person may submit a complaint, either directly or through a representative, within one year from the start of the alleged actions, although certain exceptions can apply. NGOs may also denounce before the CNDH alleged human rights violations with respect to persons who do not have the capacity to submit their complaints directly.

Furthermore, the National Commission has the power to decide about the unconformities related to the recommendations, agreements or omissions made by equivalent organs at the federal level, the refusal from authorities to accept its recommendations, or the insufficient compliance with the latter.

When admitted, a complaint is transmitted to the authorities pointed as responsible, which are then requested to provide a report on the acts or omissions that are attributed to them in the complaint. This authority is immediately contacted in order to try to reach a settlement within the interest of the parties involved. If a satisfactory solution is reached, the National Commission will record it and will

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xvii Investigations concern acts or omissions of federal administrative authorities; and when private individuals or any other social agent commit illicit acts under the acceptance or agreement of public officials or authorities, or when the latter refuse unjustifiably to exercise the functions that correspond to them legally in relation with such illicit acts, particularly when related to conducts affecting people’s physical integrity.
close the file, which can be nevertheless opened again when the complainants or the victims report to the National Commission that the agreement was not implemented after 90 days.

The CNDH may request competent authorities to take the necessary interim measures to prevent the irreparable consummation of the alleged human rights violations, or the creation of a damage for the victims, that can hardly be compensated.\textsuperscript{453}

The draft recommendation by the CNDH contains the appropriate measures for the effective restitution of the fundamental rights of the victims, and when appropriate, for damage reparation.\textsuperscript{454} Although recommendations are non-binding, once the authority or the public servant concerned receive it, they are required to inform whether they accept it or not. When applicable, they have to deliver the corresponding evidences that prove that they have implemented the recommendation.\textsuperscript{455}

On the other hand, when recommendations are not accepted or implemented, the Commission requests the authority/civil servant to explain and publish its refusal. When the explanation is insufficient and the civil servant’s refusal is maintained, the Commission is entitled to report to the Prosecutor’s office or administration that corresponds to the civil servants involved.\textsuperscript{456}

No appeal against the definitive resolutions, agreements or recommendations of the National Commission is possible.\textsuperscript{457}

\textbf{Unconformities by local human rights organs}

In line with article 102 B of the Constitution, the CNDH may also proceed with complaints concerning the omission or inaction of a local human rights organ during the handling of a complaint on an alleged human rights violation, provided that such omission has caused serious harm to the complainant.\textsuperscript{xviii} When the complaint is admissible, the Commission requests from the local human rights commission a report on the case.\textsuperscript{458} The Commission subsequently decides on the complaint and issues a recommendation directed to the local organ requesting it to rectify the omissions or inactivity it has committed, or it declares the unconformity unfounded. When applicable, the local human rights organ must also inform on its acceptance and implementation of the recommendation.\textsuperscript{459}

A person may also file an appeal challenging the final resolutions taken by a local human rights organ, the content of a recommendation issued by a local human rights organ, when in the complainant’s opinion, the latter does not attempt to make due reparations for the violation reported, or for the poor or unsatisfactory compliance of the authority with a recommendation issued by the local human rights agency. Based on its findings, the Commission may decide to:

\begin{itemize}
  \item [a)] Confirm the definitive resolution of the local human rights organ.
  \item [b)] Modify the same recommendation, in which case I will issue a specific Recommendation to the local organ.
  \item [c)] Declare that the implementation of the recommendation of the corresponding State Organ is sufficient.
\end{itemize}

\textsuperscript{xviii} When a local organ proves it is following-up adequately the claim or the complaint, the appeal will be rejected. Law on the National Human Rights Commission, Art. 55.
d) Declare the insufficiency of compliance with the recommendation issued by the local human rights organ by the local authority to which it was directed. In this case, the National Commission will draft a recommendation directed to that authority, which must inform on the acceptance and implementation of the latter.460

5.4.3. Analysis and concluding remarks

At federal level, there are important attributions to CONAGUA with respect to monitoring of implementation of water program, but also as an arbitrator for water-related conflicts, in addition to its joint monitoring functions with respect to drinking water quality.461 Conversely, it is also important that the Agency’s acts and resolutions causing harm to individuals can be appealed. This would add credibility to the argument that there is at least some mechanism of accountability in place at the federal level in relation to the premiere water authority.

With respect to environmental matters, PROFEP A is mandated to receive complaints and initiate investigations also on water-related issues, where damage to the environment is made. These concern environmental issues as such and not specifically water and sanitation services. However, it is noteworthy that recommendations on issues with respect to acts and omissions by public authorities are not binding, which can impact the effectiveness of PROFEP A, as they lack true mechanisms to hold the accused perpetrators accountable.

Other mechanisms that are not specific to water and sanitation services are the National Council for the Prevention of Discrimination, which is an important mechanism to hold public officials accountable, through its power to sanction discriminatory practices, as well as PROFECO, which may receive complaints on consumers’ rights, and the Mexican National Human Rights Commission. Individuals can file complaints concerning alleged violations of their human rights to water and sanitation with the NHRC, an institution accredited with the “A” status by GANHRI, or its state organs. The NHRC holds important status with respect to the promotion of human rights but also in investigating and solving complaints from individuals, reviewing laws that hamper human rights, and facilitating conflict resolution through conciliation. However, resolutions of this institution are also not binding, although measures can be taken when authorities do not accept them.

Additional oversight and complaint mechanisms are established at state level. In the State of Mexico, for example, water authorities are involved in evaluating the Water Program and the functions of the authorities, with indicators that are approved by the Water Council. In Chiapas, the State Water Institute also holds essential functions, although without a general and comprehensive regulatory mandate. Its diverse monitoring functions and oversight attributions deal with various institutions.

Important rights are also attributed to users under the Chiapas legislation, enabling them to denounce actions that infringe upon their rights. These are not the same under the Mexico State legislation but users nevertheless have the right to communicate claims to service providers on errors in billing documents.

To strengthen and complement the existing accountability measures in place throughout the water governance framework, an independent regulator with a comprehensive mandate would be valuable to ensure uniform monitoring and accountability across the States.

5.5. Sustainability: water use and services

5.5.1. Sustainable water use at federal level

The Mexican federal legal framework contains different clauses that seek to ensure sustainable use of water resources and protect the environment. With time, these can contribute to preserving sufficient
water of quality both for present and future generations. The Constitution, for example, makes references to sustainable development in addition to establishing a right to live in a healthy environment for the development and well-being of everyone. Article 27 is also of importance as it foresees the right of the Nation to regulate the use of natural resources which are susceptible of appropriation “in order to make an equitable distribution of public wealth, to conserve them, to achieve a balanced development of the country and to improve the living conditions of rural and urban population.” Consequently,

appropriate measures shall be issued to organise human settlements and to define adequate provisions, reserves, uses and allocations of land, water and forest. Such measures shall seek to perform public works and, planning and regulating the creation, maintenance improvement and growth of population centres; preserving and restoring environmental balance; dividing rural estates; setting the collective exploitation and organisation of ejidos and communities; developing small rural properties; promoting of agriculture, livestock farming, forestry and other economic activities in rural areas; and avoiding the destruction of natural elements and damages against property to the detriment of society.

Laws specific to the environment further address the principle of sustainability in relation to use and extraction of water resources as well as supply of drinking water. The General Environmental Law specifically states that the criteria for the sustainable use of water and aquatic ecosystems will be considered in the operation and administration of drinking water and sewage systems that serve population centres and industries. According to the same law, the preservation and sustainable use of water along with aquatic ecosystems is the responsibility of its users, including those who carry out works or activities that affect these resources.

More generally in relation to water resources, one of the purposes of the Mexico National Water Law is to preserve the quantity and quality of national water to achieve sustainable development. In this context, “sustainable development” is defined as a process that can be evaluated through criteria and indicators of water, economic, social and environmental nature, which tend to improve the quality of life and productivity of people, based on the necessary measures for the preservation of hydrological balance, the use and protection of water resources, so as not to compromise the satisfaction of the water needs of future generations. (emphasis added)

The responsibilities of the various actors empowered with specific functions under the Water Law refer to the need to ensure the sustainable use of national waters. Moreover, the National Water Policy is guided by various principles related to the sustainability of water resources, namely:

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xix Unofficial translation, the original reads: La nación tendrá en todo tiempo el derecho de imponer a la propiedad privada las modalidades que dicte el interés público, así como el de regular, en beneficio social, el aprovechamiento de los elementos naturales susceptibles de apropiación, con objeto de hacer una distribución equitativa de la riqueza pública, cuidar de su conservación, lograr el desarrollo equilibrado del país y el mejoramiento de las condiciones de vida de la población rural y urbana. En consecuencia, se dictarán las medidas necesarias para ordenar los asentamientos humanos y establecer adecuadas provisiones, usos, reservas y destinos de tierras, aguas y bosques, a efecto de ejecutar obras públicas y de planear y regular la fundación, conservación, mejoramiento y crecimiento de los centros de población; para preservar y restaurar el equilibrio ecológico; para el fraccionamiento de los latifundios; para disponer, en los términos de la ley reglamentaria, la organización y explotación colectiva de los ejidos y comunidades; para el desarrollo de la pequeña propiedad rural; para el fomento de la agricultura, de la ganadería, de la silvicultura y de las demás actividades económicas en el medio rural, y para evitar la destrucción de los elementos naturales y los daños que la propiedad pueda sufrir en perjuicio de la sociedad. Political Constitution of Mexico, Art. 27.
I. Water is a federal, vital, vulnerable and finite public good with social, economic and environmental value. Its preservation in quantity and quality and sustainability is a fundamental task of the State and Society, as well as a priority and issue of national security;

II. The integrated management of water resources by hydrological basin is the basis of national water policy; […]

VII. The Federal Executive will ensure that water concessions and allocations are based on the effective availability of the resource in the corresponding hydrological regions and hydrological basins, and implement mechanisms to maintain or re-establish the hydrological balance in the country’s hydrological basins and that of the ecosystems vital to water; […]

IX. The conservation, preservation, protection and restoration of water in quantity and quality is a matter of national security, therefore, non-sustainable use and adverse ecological effects should be avoided; […]

XII. The utilization of the water must be carried out with efficiency and its reuse and recirculation should be promoted […]

As mentioned in a previous Chapter, regulated or closed zones, water reserves or disaster areas can be established specifically for protecting water resources. Such zones regulate the possible extraction and use of, as well as discharge, in water resources.

In situations of emergency, extreme shortage, or overexploitation, CONAGUA has the mandate to take the necessary measures to guarantee the supply of urban domestic and public use.\(^{470}\) When its decision may affect the rights of concessionaires and national water concessionaires, the Commission is to agree with the interested parties on the corresponding measures, in accordance with the National Water Law and regulations. In any case, the Federal Executive, through the Water Authority, has the power to deny the concession, assignment or discharge permit for cause of public or social interest.\(^{471}\)

Notwithstanding the aforementioned special measures, concessionaires always have the obligation to comply with general dispositions and rules on water safety, ecological balance and environmental protection.\(^{472}\) Assignees, on their side, have the duty to guarantee water quality according to Official Mexican Standards; discharge wastewater in appropriate recipient bodies after treatment, according to Official Mexican Standards, and seek their reuse; and assume the economic and environmental costs of the pollution caused by their discharges, and assume their responsibility for the environmental harm caused.\(^{473}\)

The Mexican Criminal Code sets forth penalties for various crimes that may cause risks or damages to natural resources including dumping substances into national water bodies that may affect water quality or the environment (the sanction is aggravated if these activities are performed in a protected natural area).\(^{474}\) Apart from these sanctions, environmental damages caused by discharging wastewater must be repaired by whoever caused it.\(^{475}\)

In addition to elements that are linked to the environment, the principle of sustainability also underpins economic and social dimensions, ensuring sufficient expenditure in operation and maintenance of the systems.\(^{476}\) This can relate among others to obligations that ensure that the infrastructure is well maintained and built, with no leakages. On this, CONAGUA has issued a few standards that can affect quality of drinking water and sanitation. For example, NOM-001-CONAGUA-2011 establishes minimum performance specifications concerning long term water tightness characteristics for products that integrate drinking water systems and sewage systems. This standard is applicable for manufacturers and persons responsible for design, construction, operation and
maintenance of drinking water and sewerage systems.\textsuperscript{477} Noting that 38\% of drinking water is lost in distribution systems, the aim of this standard is to prevent such loss and avoid contamination of aquifers.\textsuperscript{478}

Finally, it can be noted that the Ministry of Economy (\textit{Secretaría de Economía}) enacted a Mexican Standard providing a methodology for assessing tariffs for public drinking water, drainage, and sewerage services.\textsuperscript{479} The standard was approved in relation to the 2007-2012 national water program which confirmed the significance of water operators to implement systems of measurement, billing and collection to cover operation costs and generate sufficient resources to upkeep infrastructure. The objective of the standard is to evaluate rates to ensure the sustainability of water and the efficient financial and operational viability of public service provision.\textsuperscript{480}

### 5.5.2. Sustainable water and sanitation services in the State of Mexico

At federated level, the State of Mexico is committed through the current water law to establishing a water culture among its citizens that maintains sustainable water management at its core. The State Technical Water Commission is the coordinator of state technical standards (\textit{normas técnicas estatales}) which among other actions, shall establish the criteria and procedures that seek to protect and improve water resources and promote their preservation, to ensure their sustainable use for the provision of services and their relationship with the environment.\textsuperscript{481}

The State Water Policy includes the principle of financial sustainability concerning water service costs wherein there should be an efficient payment collection by service providers and user awareness of associated costs and their obligation to pay for services.\textsuperscript{482} With respect to water users and the general population, water authorities should institute programs that promote water culture and its sustainable management while also invoking a continuous process of awareness of its value inclusive of costs of drinking water, drainage and sewage services.\textsuperscript{483}

In general terms of environmental sustainability, the State Executive through the relevant executive agency, will promote the creation of the Fund for Environmental Projects with the social, private and public sectors and with the Advisory Council for Biodiversity and Sustainable Development.\textsuperscript{484}

Preservation of water is contemplated through the requirement that service providers make timely repair of leaks in distribution networks and lines under their authority.\textsuperscript{485} Users also have obligations with respect to protection of water resources as they must give notice to the corresponding water authority of illegal appropriation and discharge, leakage, and contamination of bodies of water, and other events of which it is aware, that may affect the rendering of services and / or the sustainability of the water resources of the State.\textsuperscript{486}

Indigenous communities and the State through the Ministry of Environment will agree the actions necessary to protect natural resources and maintain ecological balance which is compatible with the self-determination of the communities for the preservation and use of natural resources.\textsuperscript{487}

### 5.5.3. Sustainable water and sanitation services in the State of Chiapas

With respect to water and sanitation infrastructure sustainability, the Chiapas Environmental Law sets that the criteria for rational water use inclusive of: the operation and management of drinking water and sewage systems, serving population centres and industries; state programs for human and home development; the design and location of residential buildings among others.\textsuperscript{488} The Chiapas Water Law puts users in a central role to ensure sustainability. Users of State waters and of drinking water, sanitation and sewage public services must conserve and maintain in an optimal status their water facilities in order to prevent leakages and water wastage, as well as contribute to prevent resource contamination.\textsuperscript{489} Furthermore, in relation to users’ monitoring role, natural and legal persons are
entitled to inform the Operating Organs on water leakages or on any other circumstance affecting the adequate functioning of drinking water and sewage systems, including sanitation, and are entitled to ask for a convenient explanation of the corrective actions that have been adopted in the terms of the Chiapas Water Law and its Regulation.\textsuperscript{490} Additionally, users will ensure that the water they use, will not contaminate the water in service facilities.\textsuperscript{491} Tax benefits are also promoted for equipment that saves, treats, reutilises water and prevents its contamination.\textsuperscript{492} Further, obligations are established with regard to litres of water for sanitation facilities and drains in new constructions. The latter obligations are monitored by the municipalities.\textsuperscript{493} Moreover, tariffs charged in connection to water and sanitation services are to provide financial self-sufficiency of the public service providers.\textsuperscript{494}

Additional provisions are contained in the Chiapas Water Law with respect to ensuring sustainable use of water resources. The Water Institute, for example, is in charge of promoting efficient use and preservation of water, as well as the creation of a culture of water as a scarce and vital resource, in addition to promoting programmes for water use efficiency.\textsuperscript{495} Similarly, Operating Organs are to do the necessary to detect and repair leakages\textsuperscript{496} and are responsible for the promotion of rational use of drinking water. Under chapter VI, the Water Law also attributes the responsibility to Operating Organs that are in charge of water and sanitation services, to monitor the compliance of the dispositions of the Title Five,\textsuperscript{497} which includes Chapter VI on integrated water management and water use efficiency. This chapter contains among others a provision requiring the Secretariat and the Operating Organs to carry out actions that promote more efficient use and reuse of water.\textsuperscript{498}

5.5.4. Analysis and concluding remarks

Sustainability as a principle of the human rights to water and sanitation is articulated in the federal and state law in relation to ensuring sustainable use of water resources (environmental sustainability) and with regard to ensuring sustainability of infrastructure of water and sanitation services (infrastructure/service sustainability). At the federal level, most provisions concern sustainable development, right to healthy environment, and sustainability as a principle in water resources management and use and in the water policy. Mechanisms that can be highlighted from the federal framework that can contribute to the implementation of the sustainability principle are protection zones which can positively impact availability and quality of water sources used for drinking water purposes, as well as standards issued by CONAGUA to avoid drinking water loss in distribution systems. Important obligations and rights are also laid down for assignees and permit holders, together with penalties for certain actions which may affect water sources.

In addition, there are significant provisions in state laws that contribute to ensuring sustainability of both infrastructure and water resources for drinking water. The legislation of the States of Mexico and Chiapas contains obligations for service providers and users with respect to repairing leaks in distribution networks (service providers’ obligation) and maintenance of water facilities to prevent leakages and wastage (users’ obligation). These are however not the same in each state. For example, in the State of Mexico the users have a strict obligation to inform the water authority on events that may affect sustainability of water resources, whereas in Chiapas, a similar provision exists but provides instead the users with a right to inform the Operating Organs and obtain explanation on actions taken.

Finally, sufficient financial resources are foreseen in some state laws, through principles that aim to maintain an efficient and equitable integrated financial system and tariffs that aim to foster the municipalities’ or service providers’ self-reliance, including costs of operation, maintenance, etc. As seen in the section on affordability, a significant role is given to the State Water Institute in Chiapas, which verifies the consistency between average balance tariffs and tariff structures. Tariffs are also to provide financial self-sufficiency of the public service providers.\textsuperscript{499} Similarly, in Jalisco, the Water Law
is explicit in calling for the tariff structure to ensure the sustainability of public services, and that the Operators are to meet the costs of the operation, maintenance and administration; rehabilitation and upgrading of existing infrastructure; amortization of investments made; financial expenses of the liabilities; and the necessary investments for the expansion of infrastructure. Financial sustainability is also addressed by the Mexico State Water Law, but it is articulated as a principle rather than explicit characteristics of the water financial system. Nonetheless, having a multidimensional articulation of water sustainability (conservation of use, protection, fiscal proficiency, etc.) in both the federal and state legal framework is indeed favourable to achieving its realisation.
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103 Federal Law to Prevent and Eliminate Discrimination, Art. 16.
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107 See sub-section, 4.1.1.
108 Mexico State Water Law, Exposición de Motivos.
109 Chiapas Constitution, Art.9.
110 Chiapas Constitution, Arts. 11 and 12 III, V, VI.
111 Mexico State Water Law, Art. 11.
112 Mexico State Water Law, Art. 12.
113 Chiapas Water Law, Art.6 II.
114 Chiapas Water Law, Art. 17 and 23 V.
115 Chiapas Water Law, Art. 23 XV.
116 Committee composed of citizens chosen by an assembly, that is in charge of providing drinking water, sewage and sanitation services, within a community. Regulation to the Chiapas State Water Law (Reglamento de la Ley de Aguas para el Estado de Chiapas), 2012, Art. 33. [Regulation to the Chiapas Water Law]
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118 Regulation to the Chiapas Water Law, Art. 35.
119 Regulation to the Chiapas Water Law, Art. 66 IV and V.
120 Regulation to the Chiapas Water Law, Art. 68.
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125 Chiapas Children’s Rights Law, Art. 56 X.
126 Chiapas Children’s Rights Law, Art. 12B XXIV.
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128 Political Constitution of Mexico, Art. 2 B.
129 Political Constitution of Mexico, Art. 2 B.
130 Federal Budget Law, Art. 41.
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132 Political Constitution of Mexico, Art. 2 B.
133 Federal Planning Law, Art. 20.
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139 Mexico State Law on Indigenous Peoples’ Rights, Art. 38.
140 Mexico State Law on Indigenous Peoples’ Rights, Art. 73.
141 Mexico State Law on Indigenous Peoples’ Rights, Art. 74.
143 Chiapas Constitution, Art. 7.
145 Chiapas Law on Indigenous Rights and Culture, Art. 64.
146 Political Constitution of Mexico, Art. 6.
148 Political Constitution of Mexico, Art. 6 A.I.
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150 General Law on Transparency and Access to Public Information, Art. 122.
151 General Law on Transparency and Access to Public Information, Art. 6.
153 Political Constitution of Mexico, Art. 6 A. I.
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162 Mexico State Water Law, Art. 102.
163 Mexico State Water Law, Art. 103(IX).
164 Mexico State Water Law, Art. 103(XIII).
165 Mexico State Water Law, Art. 45(VIII).
166 Mexico State Water Law, Art. 45(V).
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168 Chiapas Water Law, Art. 132.
169 Chiapas Water Law, Art. 163. On restriction areas during water scarcity, see Section 4.1.3. above.
170 Chiapas Water Law, Art. 170. On tariffs, see Sub-chapter 4.3. above.
171 Chiapas Water Law, Art. 6 XII.
172 Chiapas Health Law, Art. 51.
173 Chiapas Health Law, Art. 92.
174 Jalisco Water Law, Art. 90 IV.
175 Political Constitution of Mexico, Art. 4.
176 National Water Law, Art. 9 XIX and Chapter 5.
177 National Water Law, Art 14 BIS.
178 Regulation to the National Water Law, Art. 16 II.
Chiapas Environmental Law, Art. 238.
Chiapas Environmental Law, Art. 239.
Chiapas Environmental Law, Art. 240.
Chiapas Water Law, Art. 199.
Chiapas Water Law, Art. 200.
Chiapas Constitution, Art. 7.
Chiapas Water Law, Arts. 5-6.
Political Constitution of Mexico, Art. 102 B.
Political Constitution of Mexico, Art. 102 B.
It is important to note that they do not have jurisdiction over electoral and jurisdictional matters.
Political Constitution of Mexico, Art. 102 B.
Political Constitution of Mexico, Art. 105 - lII(g)); Law on the National Human Rights Commission, Art. 15.
Law on the National Human Rights Commission, Art. 2.
Law on the National Human Rights Commission, Art. 6 I, II, VI, VII, VIII.
Law on the National Human Rights Commission, Art. 25.
Law on the National Human Rights Commission, Art. 6 IV-V.
Law on the National Human Rights Commission, Art. 34.
Law on the National Human Rights Commission, Art. 36.
Law on the National Human Rights Commission, Art. 44.
Law on the National Human Rights Commission, Art. 46.
Law on the National Human Rights Commission, Art. 46.
Law on the National Human Rights Commission, Art. 47.
Law on the National Human Rights Commission, Art. 58.
Law on the National Human Rights Commission, Art. 59.
Law on the National Human Rights Commission, Art. 66.
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Political Constitution of Mexico, Art. 4.
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General Law on Ecological Balance and Environmental Protection, Art. 88.
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National Water Law, Art. 3 XXI.
See e.g. National Water Law, Arts. 13 BIS 3 I and XVII; 14 BIS 1.
National Water Law, Art. 14 BIS.
National Water Law, Art. 9 L.
National Water Law, Art. 29 BIS 5 IX.
National Water Law, Art. 29 VI.
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485. Mexico State Water Law, Art. 69 (V).
486. Mexico State Water Law, Art. 44.
488. Chiapas Environmental Law, Art. 177 III, IV, V.
489. Chiapas Water Law, Art. 123.
491. Chiapas Water Law, Art. 150.
492. Chiapas Environmental Law, Art. 76 VIII.
495. Chiapas Water Law, Art. 6 IV, VII.
496. Chiapas Water Law, Art. 124.
500. Jalisco Water Law, Art. 95 I.
501. Jalisco Water Law, Art. 101 BIS.
CONCLUSION

A coherent and comprehensive enabling environment is key for the realisation of the human rights to water and sanitation, and legal frameworks can contribute to it with an important role. Through an analysis of the water-related legislation of Mexico, this report sought to demonstrate how the HRWS are articulated in the national and state laws in the country. Part A of the report has provided important information on the water governance setting in Mexico, highlighting the different roles and responsibilities pertaining to water and sanitation established at federal level with information on water resources use and concessions, whereas Part B illustrated how the normative content of the HRWS and the related human rights principles are reflected in the national legal framework. The examples from three States, Chiapas, Jalisco and Mexico, contributed mainly to this second part of the study as they enabled the comparison between federal and state legislation with respect to water and sanitation services. Part B also highlighted Mexico’s accession to international and regional treaties, with the aim of demonstrating the applicable international and regional framework regarding Mexico’s commitments to the HRWS.

The present study demonstrated that whereas Constitutional provisions on the right to water are reproduced similarly in state legal frameworks, the federal legislation covers more extensively water as a natural resource and the coordination of the water system, while state legal frameworks further address different aspects of drinking water and sanitation services. Thereby the state legislation also reflects more exhaustively different elements of the HRWS, both with respect to its normative content and human rights principles, as discussed respectively in Chapter 4 and 5.

Both systems rely on a propitious institution for their focus. The federal framework sets forward CONAGUA as a central institution for the water system, and the state frameworks lean on municipalities as crucial organs for public service provision. Health and environment bodies also hold important mandates. Despite the existence of some similarities between the analysed States, the regulation of drinking water supply and sanitation services differs. Whether they concern restriction of water services, minimum amount of water, tariff setting or dispositions on human rights principles, these differences in the state laws, as well as municipals laws can in their turn affect the realisation of the HRWS across the country. Finally, the right to sanitation is not emphasised to the same extent as the right to water throughout the legal framework, its normative content being addressed by fewer articles.

As a complement to this legal country mapping, additional research on the rules governing institutions would shed further light on the legal requirements in education, health care or other institutions where water and sanitation are fundamental. Policy and institutional mapping, as well as a field study could further broaden the understanding on the implementation of the HRWS and applicable legal requirements. Finally, it remains to be seen how the expected reform of the National Water Law will articulate the HRWS to the necessary extent such that it will come into conformity with the Constitutional amendment which has explicitly enshrined the right to water, referring also to sanitation (saneamiento de agua).
ANNEX 1: Tables of treaties

Table 1. International instruments

<table>
<thead>
<tr>
<th>Instruments and relevant declarations</th>
<th>Signature</th>
<th>Ratification/accession</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convention on the Elimination of All Forms of Racial Discrimination (1965) Declaration: 15 March 2002 The United Mexican States recognizes as duly binding the competence of the Committee on the Elimination of Racial Discrimination, established by article 8 of the International Convention on the Elimination of All Forms of Racial Discrimination, adopted by the United Nations General Assembly in its resolution 2106 (XX) of 21 December 1965 and opened for signature on 7 March 1966. The United Mexican States declares, pursuant to article 14 of the Convention, that it recognizes the competence of the Committee to receive and consider communications from individuals or groups of individuals within its jurisdiction claiming to be victims of a violation by that State of any of the rights stipulated in the Convention. [...]</td>
<td>Nov. 1, 1966</td>
<td>Feb 20, 1975</td>
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Declaration: 15 March 2002 The United Mexican States recognizes as duly binding the competence of the Committee against Torture, established by article 17 of the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, adopted by the United Nations General Assembly on 10 December 1984. Pursuant to Article 22 of the Convention, the United Mexican States declares that it recognizes the competence of the Committee to receive and consider communications from or on behalf of individuals subject to its jurisdiction who claim to be victims of a violation by a State Party of the provisions of the Convention.
<table>
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<tr>
<td>Optional Protocol to the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (2002)</td>
<td>Sep. 23, 2003</td>
<td>Apr. 11, 2005</td>
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<td>Protocol Additional (I) to the Geneva Conventions relating to the Protection of Victims of International Armed Conflict (1977)</td>
<td>March 3, 1983</td>
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<tr>
<td>Protocol Additional (II) to the Geneva Conventions relating to the Protection of Victims of Non-International Armed Conflicts (1977)</td>
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<td>Convention on Wetlands of International Importance Especially as Waterflow Habitat (Ramsar) (1971)</td>
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<td>July 4, 1986</td>
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Table 2. Most relevant ILO conventions – *Up-to-date instruments only*

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<tr>
<th>Instruments</th>
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<tbody>
<tr>
<td>ILO Forced Labour Convention, No. 29 (1930)</td>
<td>May 12, 1934</td>
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<tr>
<td>ILO Plantations Convention, No. 110 (1958)</td>
<td>June 20, 1960</td>
</tr>
<tr>
<td>ILO Hygiene (Commerce and Offices) Convention, No. 120 (1964)</td>
<td>June 18, 1968</td>
</tr>
<tr>
<td>ILO Occupational Safety and Health (Dock Work) Convention, No. 152 (1979)</td>
<td>February 10, 1982</td>
</tr>
<tr>
<td>ILO Health Protection and Medical Care (Seafarers) Convention, No. 164 (1987)</td>
<td>October 5, 1990</td>
</tr>
<tr>
<td>ILO Safety and Health in Mines Convention, No. 176 (1995)</td>
<td>X</td>
</tr>
<tr>
<td>ILO Safety and Health in Agriculture Convention, No. 184 (2001)</td>
<td>X</td>
</tr>
<tr>
<td>ILO Work in Fishing Convention, No. 188 (2007)</td>
<td>X</td>
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Table 3. Instruments open for ratification and accession in the Americas

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<tr>
<th>Instruments and relevant declarations</th>
<th>Signature</th>
<th>Ratification</th>
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<tr>
<td>Declaration: The United States of Mexico recognizes as binding ipso facto the adjudicatory jurisdiction of the Inter-American Court of Human Rights on matters relating to the interpretation or application of the American Convention on Human Rights, in accordance with article 62.1 of the same, with the exception of cases derived from application of article 33 of the Political Constitution of the United States of Mexico […]</td>
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<tr>
<td>Inter-American Convention Against All Forms of Discrimination and Intolerance (2013) – Not yet in force</td>
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<td>Inter-American Convention Against Racism, Racial Discrimination and Related Forms of Intolerance (2013) – Not yet in force</td>
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</table>
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NOM-001-SEMARNAT-1996.
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OAS, The Human Right to Safe Drinking Water and Sanitation, AG/RES. 2760 (XLII-O/12).
State level legal documents

State of Mexico


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Health Regulation of the State of Mexico (Reglamento de Salud de Estado del México), 2002.

Chiapas

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Regulation to the Chiapas State Water Law (Reglamento de la Ley de Aguas para el Estado de Chiapas), 2012.


Jalisco


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