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The Human Right to Water in Mexico: Challenges and Opportunities

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ABSTRACT: This article analyses Mexico's 2012 constitutional guarantee of the human right to water and the new General Water Law that is required to implement it. Mexico has struggled to find consensus regarding a new law, but none has as yet been adopted. We examine three key questions regarding the 2012-2019 period: How is the human right to water defined in the Mexican context? What is the legal and institutional framework for implementing it? What are the opportunities and challenges involved in institutionalising it in light of the proposed water legislation? This research is based on a literature review, participation and observation at public forums, and in-depth interviews with key actors. Two principal legal proposals emerged in 2015, contrasting a technocratic approach with a socially inclusive one; neither was adopted but both remain relevant to the current discourse. The 2018 election re-energised social mobilisation around the right to water, and the government launched a new process for developing legal proposals. Using legal geography and political ecology as theoretical framings, we find that the new law creates opportunities for transforming access to water for marginalised communities, yet faces social, political and structural obstacles. Despite the challenges, the constitutional guarantee of the right to water is a positive foundation for democratising water governance in Mexico.

KEYWORDS: Human right to water, legal geography, political ecology, Mexico

INTRODUCTION

The 19th of April 2012 was an historic day for the human right to water in Mexico. Four women from the small town of Colonia Ampliación Tres de Mayo, in the municipality of Xochitepec, Morelos, near the resort city of Cuernavaca, won a legal victory when a federal tribunal of judges invoked the country's new constitutional reform – which guaranteed the human right to water – to require the municipality to provide the *colonia* (neighbourhood) of 100 low-income families with water service (Wilder and Ingram, 2016). This colonia is only one of the thousands across Mexico's uneven social landscape that live with

chronic water insecurity. Although Mexico has made significant strides in the last three decades in improving water service, about five million people do not have regular access to clean water and sanitation and there are major inequalities in access between the more affluent north and the low-income central and southern regions, and between urban and rural areas (with indigenous communities at a disadvantage generally).¹

The notable judicial victory of the four courageous women leaders in Morelos was an exceptional and heralded event; it called attention to the immense task of implementing Mexico's guarantee of the right to water, which was adopted in February 2012 as a reform of Article 4 of the Constitution. The reform was supposed to have been followed within one year by a General Water Law (GWL) to implement the human right to water, yet Mexico has been mired in a lack of consensus for eight years and no law has been adopted. The new law is to be a GWL of the nation, but is intended to govern water resources use and management at the state, regional and municipal levels, with social reverberations and consequences across these levels. Given Mexico's uneven economic development and heterogeneous cultural composition, the national law attempts to articulate a universal standard to be implemented across a diverse landscape. The new national law will not stand alone, but rather will occupy one place within a complex body of laws governing water use and management, including Article 115 of the Constitution which delegates water services specifically to the municipalities.

This article analyses Mexico's constitutional guarantee of the human right to water, whose meaning is not universal (Barlow, 2012; Sultana and Loftus, 2020). The constitutional reform (Article 4) provides only broad guidance for what is encompassed within the 'human right to water' – equitable and sustainable use and access, involvement of the three levels of government, and citizen participation (see Section 4, 'Antecedents', pages 6-7, for verbatim text) – without additional specifications. The legal requirement for a new GWL has given urgency to the need for broad agreement as to what constitutes the human right to water.² In 2015, two contrasting proposals gained broad public attention but were not adopted into law; one was a technocratic, neoliberal approach, at that time favoured by the powerful central water authority, the National Water Commission (CONAGUA); the other was a Citizens' Initiative (CI), a socially inclusive approach developed by activists, academics and civil society groups. Under the administration of Mexico's current president, a new process is underway to develop a consensus proposal. We examine the social and political discourse surrounding the reform and the law during the 2012-2019 period, exploring three key questions: How is the human right to water defined in the Mexican context? What is the legal and institutional framework for implementing it? What are the opportunities and challenges involved in institutionalising it in light of the proposed national water legislation?

This research is based on a comprehensive literature review, a review of the historical antecedents and current events around the constitutional guarantee, participation and/or observation at three public consultation forums (2019), and in-depth interviews with key actors in two distinct time frames (2015 and 2019). Using legal geography and political ecology framings, we find that the implementation of the human right to water faces two principal challenges in Mexico: 1) different sectors envision the human right to water in different ways based on broad constitutional language, leading to incompatible visions; and 2) the legal and institutional framework within which the human right to water is to be implemented is complex, fragmented and under-resourced, creating structural challenges to moving forward. Proposed water legislation that was criticised by a social coalition of civic, academic and environmental

¹ The National Water Commission (CONAGUA) reported that potable water service coverage in 2015 was at 92.5% overall (81.6% in rural areas) and that sewerage service coverage lags further behind, at 91.4% overall (74.2% in rural areas) (CONAGUA, 2016: 114). In 2016, the World Health Organization (WHO) and United Nations' International Emergency Children's fund (UNICEF) reported that 88% of Mexico's indigenous people have access to drinking water (compared to 94.5% nationally) and 72% of indigenous people have access to improved sanitation (compared to 84.5% nationally) (WHO/UNICEF 2016: 7).

² Meier et al. (2013) promote national water laws in many countries as a sound way to institutionalise constitutional guarantees to the right to water, but note that implementation may face barriers such as lack of political will, financial constraints, limited infrastructure and scarcity due to climate change.

sectors brought the fundamental differences in perspective into relief, underscoring the ethical and social importance of constitutional reform but highlighting the significant obstacles confronting the implementation of the human right to water in Mexico.

THEORETICAL FRAMING

Over the past two decades, scholarly interest in human rights and water justice has blossomed in the wake of the realisation that governance innovations such as integrated water resources management (IWRM) have failed to resolve intractable global water resources problems. Growing populations and industrial demands have contributed to what some deem a global water crisis, and in many regions of the world climate change is reducing the natural availability of water. Scholarship on the human right to water notes that while it creates institutional capacities, it is not a panacea for the resolution of water inequities. In fact, in the most critical reading it may perpetuate an individualistic, Western notion of rights, and may privilege the right of humans to water over that of non-humans and the environment (Sultana and Loftus, 2012, 2015; Bakker, 2012). As Sultana and Loftus (2015: 98) warn, "The right to water risks becoming an empty signifier" that is used by both progressives and conservatives, and which "does little to effect real change in water governance" (Sultana and Loftus, 2015: 98).

Despite the critiques, Sultana and Loftus (2020: 2) assert that the quest for a human right to water has proven to be a sustained, progressive struggle – at once discursive and grounded – in both the Global South and the Global North. They state that "[t]he right to water remains one of the several tools remaining within the armoury of those struggling for water justice". They contend that the focus now is on "future trajectories – intersectional and articulating ones" – of the right to water discourse, with new conceptions of water governance, water security and water justice (ibid). According to Zwarteveen and Boelens (2014: 151), water injustice is about "structural water scarcities caused by resource capture (...) and unequal access to water and decision-making spaces". Changes in water allocation via new rules, norms and laws give rise to "complex processes of political contestation, negotiation and struggle (...) around the water resources themselves, but also (...) about who has (or should have) the political authority and legitimacy to decide these questions" (ibid: 154). In this article, we train a lens squarely on these processes of political contestation, on the discourses about water injustice, and on the development of a particular law intended to embody the human right to water.

We draw on two theoretical framings to examine the human right to water in Mexico. Critical legal geographies of water hold that legal processes are dynamic and multifaceted, while political ecology explores the way in which social relations of power are shaped and mediated by the political economic structures governing water resources. We examine the human right to water as a legal and social construction by focusing on what the public debate and social mobilisation around a new GWL means for social and political power in Mexico.

Legal geographies of water and political ecology

Critical legal geography links the legal and the spatial, giving the legal sphere a grounding in social contexts and the spatial sphere a connection to the legal structures (Braverman et al., 2014). The physical world – including water resources – is invested with legal meaning, but those legal meanings are subject to interpretation and may be implicated in legal practices. Law and geography are co-constitutive of one another. An analysis of how, where and by whom power is used requires an "engagement with the legal arena" (Andrews and McCarthy, 2014: 7). Political ecology can be linked with legal geography to examine environmental conflicts (such as contested visions of the human right to water) through the lens of the legal structures that shape the dynamics of social power (Andrews and McCarthy, 2014).

Legal geography has received valuable, albeit limited, attention in the case of Mexico and its northern borderlands. Jepson (2012) employs legal geography to analyse how legal discourses changed the narratives of low-income colonias' access to water in southern Texas, ultimately denying the primarily

Mexican residents any formal standing to seek judicial redress. Azuela and Meneses-Reyes (2014) examine spatio-legal transformations in Mexico City between 1930 and 1950 that involved the constitution of a workplace for the urban poor and the regulation of land as a means for locating the poor. They explore how workplaces were shaped, developed and contested through different legal disputes in the post-revolutionary state.

Herrera and Post (2014) and Herrera (2017) analyse water management decentralisation resulting from 'modernisation' of water laws across the Global South (including Mexico); they find that, far from serving as reforms that 'insulated' decentralised water management from political intervention, the opposite occurred, exposing local water management to increased political pressure. In a study of eight cities in Mexico, elected officials were found to have used their decentralised authority to manipulate voters or punish enemies (Herrera, 2017). The work of Herrera and Post highlights the challenges of providing more equitable access to water after decentralisation reforms, especially in young democracies that are subject to influence by powerful politicians. In terms of the human right to water, Meehan (2020) examines the development of 'practical authority' among informal settlements lacking water in Mexico City; in the absence of a regulatory human rights law, a new constellation of tactics and strategies emerged to advance communities' struggle for water rights. Pacheco-Vega (2019, 2020), in an innovative intervention, examines the bottled water industry as a "commodification of a human right" through its distribution of bottled water to drought-stricken and distressed communities; he cites weak regulatory regimes that lead to the "supremacy" of bottled water consumption over networked distribution of potable water.

Political ecology enables a multiscale analysis of power dynamics which provides an understanding of how state power is enacted at national, regional and local scales. Political ecologists seek to understand and articulate the role of politics in environmental conflicts and are committed "to bringing about a better world through contesting the reproduction of socio-natural inequalities" (Loftus, 2009). In Mexico, a political ecology framework has been used to analyse environmental change and forest co-management, drought, climate change and smallholder livelihood adaptation (Klooster, 2000; Liverman, 1999; Eakin, 2006).

Critical political ecologies of water in Mexico have focused on water contamination due to toxic mine spills (Ibarra Barreras and Moreno Vázquez, 2017), indigenous rights to water (Moreno Vázquez, 2014), gender, mining and livelihoods impacts (Lutz-Ley and Buechler, 2020), water access in peri-urban environments (Díaz Caravantes and Wilder, 2014), irrigation politics and indigenous people (Banister, 2011), politics and governance of bottled water (Pacheco-Vega, 2015a, 2019), and changing national water laws and the impacts of these changes on campesino irrigators (Wilder and Romero-Lankao, 2006). A thread running through this work is an understanding of the hybrid nature of water as a co-constituted physical and social resource – variously called a 'hydrosocial' or 'socio-natural' resource – whose quality, accessibility and affordability are determined by biophysical and sociopolitical processes including laws and governance practices (Swyngedouw, 2004; Bakker, 2010; Linton, 2010; Perreault, 2014).

Employing legal geography and political ecology as critical approaches is useful to our task of unpacking the contested meanings of the human right to water in Mexico, where a new GWL is expected (and legally required) to articulate precisely how this human right will be operationalised. Through an analysis of the legal considerations and key actor perspectives on Mexico's proposed law, our study uses these frameworks to peel back the legal, institutional, social and political dimensions of the struggle to define the human right to water in Mexico.

THE HUMAN RIGHT TO WATER IN THE INTERNATIONAL SPHERE

Faced with evidence of the scarcity of, and competition over, water, the UN published General Observation No. 15, which established that "States parties have to adopt effective measures to realize, without discrimination, the right to water...". The document defined the human right to water in Article

2 as "the right of all to have sufficient, healthy, acceptable, accessible and equitable water for personal and domestic use" (UN, 2003).

In July 2010, the UN General Assembly (UN General Resolution 64/292) declared safe and clean drinking water and sanitation to be a human right, marking the first formal declaration by the UN on water and sanitation. In September of 2010, the UN Committee on Economic, Social, and Cultural Rights affirmed this right, making it equal to all other human rights and legally binding and enforceable in treaties (Martínez Austria and Hofwegen, 2006; Salman, 2014; Sultana and Loftus, 2012). Over a hundred countries, including South Africa (1996, 1997), Uruguay (2004), Bolivia (2009) and Slovenia (2016), have a constitutional recognition of the human right to water. A dynamic force in the constitutional adoption of the human right to water in Mexico was the widespread discussion that took place in the international water community, in which Mexican specialists and water authorities took a lead. The human right to water was central to the 4th World Water Forum in Mexico City in 2006, and one chapter of the forum's synthesis was dedicated to this topic (Martínez Austria and Hofwegen, 2006).³

Despite the international declaration of the human right to water, in practice it has proved an elusive goal. In South Africa, despite positive progress on the percentage of households that have accessible water service (96.6% in Cape Town), the reality on the ground indicates that access remains "uneven, contentious, and highly politicized", (Rodina, 2016: 64), particularly for marginalised informal settlements. Moreover, the right to sanitation remains highly contested due to ambiguity in the Constitution and in subsequent laws (Bond, 2020: 189), and thus sanitation coverage is lagging. Implementation of the human right to water in Uruguay, since its 2004 constitutional reform, follows a similar pattern of nearly universal access to safe drinking water co-existing with significant gaps in sanitation and sewerage system connections (de Albuquerque, 2012). Various studies have noted a disconnect between the recognition of the human right to water at the international or national level and on-the-ground practices and development outcomes. There is disagreement as to how the principle of the human right to water should be put into practice, especially in defining "an appropriate balance between efficiency and equity considerations" (Biswas and Tortajada, 2017: xi-xii). The stated principle of the human right to water is seen as being "ill-equipped to resolve conflicts among competing users of water resources or to sort out power differentials in society" (Gerlak and Wilder, 2012). Nevertheless, Peter Gleick, former president of the Pacific Institute and an internationally known advocate of the human right to water, argues that "it is a tool, it is a weapon to use to meet basic human needs for water, to help meet water challenges (...) and (...) a step in the right direction" (as cited in Showstack, 2011: 387).

ANTECEDENTS TO THE ADOPTION OF THE HUMAN RIGHT TO WATER IN MEXICO

For over 25 years, Mexico has sought to be at the leading edge of efficient water governance, embracing a neoliberal water management programme, but the persistent lack of universal coverage in Mexico illuminates the disjuncture between efficiency and equity goals. Historically, the Mexican state has maintained a consistent effort to provide water and sanitation services to its citizens (Martínez Austria and Vargas Hidalgo, 2017; Vargas Hidalgo and Martínez Austria, 2018); nevertheless, only in 2012 did this effort become formalised as a constitutional right.

Mexico's water rights underwent important modifications from the colonial period in 1821 into the 20th century; water resources during this era were still abundant relative to the population, and the primary concern was to increase their use.⁴ The first water governance milestone occurred in the 1917

³ The Mexican Institute of Water Technology (IMTA) published a popular guide to assist the public in understanding the human right to water (Domínguez Serrano and Flores Ramírez, 2016).

⁴ For this reason, with a vision of constructing a hydraulic infrastructure, ever more important institutions were created in the federal government, including the National Irrigation Commission of 1929, the Ministry of Hydraulic Resources in 1946, and the Ministry of Agriculture and Water Resources (SARH) in 1976.

Constitution, in which Article 27 established that "[o]wnership of the land and waters within the boundaries of the national territory is vested originally in the Nation". Then in 1934, the president modified the Law of Waters of 1917, recognising that "it is urgent to establish fast and practical systems so that the municipalities can carry out water extractions with which they attend the public and domestic services", and determining that the municipalities could access the waters as "use of the nation" in which cases, the water would be "assigned". In the first eight decades of the 20th century, drinking water and sanitation services were the work of villages, municipalities and states, supported by the federal government. The post-revolutionary period of the 1930s and 1940s focused on land redistribution to campesinos, but the land often was not paired with access to water and irrigation sufficient for production (Wolfe, 2017). To redress inequities, post-revolutionary administrations instituted irrigation policies that sought to prioritise campesino needs; however, Mexican jurisprudence of the time did not always guarantee water access to smallholder users (such as members of collective farms, known as *ejidatarios*), often favouring large-scale commercial farmers producing higher-value crops (ibid).⁵

With the creation of the National Water Commission (known as CONAGUA) in 1988, a focus on construction turned to one on management. With the 1983 adoption of revisions to Article 115 of the Constitution, provision of water and sanitation services, including the treatment of household wastewater, became the responsibility of municipal governments; this established that "the municipalities, with the cooperation of the State as necessary and as determined by the law, will have responsibility for the following public services: potable water and sanitation". In 1992, Mexico adopted a national water law (Ley de Aguas Nacionales, or LAN) that closely followed the market-based prescriptions of the World Bank's water policy. The LAN equated all uses and, for the first time, required municipalities to pay for water rights concessions. The LAN incorporated securitised water rights and privatisation elements associated with neoliberal treatments of water as an economic good.⁶ Social participation in water policy design and decision-making continued to be extremely limited under the LAN.⁷

But Article 115 also eventually posed a structural constraint on the fulfilment of the human right to water. In 2012, partly as a result of its participation in the UN system,⁸ the government reformed Article 4 of the Mexican Constitution (which addresses human rights) to stipulate the human right to water, and it assigned responsibility for its implementation to the federal government (CONAGUA). In the Official Record of the Federation (8 February 2012), the Decree added the human right to water to the list of Mexico's protected human rights, with the following text:

All persons have the right to the access, availability, and healthiness of water for personal and domestic consumption in a sufficient, healthy, acceptable, and equitable manner. The State guarantees this right and the law defines the foundations, supports, and modalities for the equitable and sustainable access and use

⁵ Mikael Wolfe (2017) recounts the history of the pro-revolutionary redistribution of irrigation water to *ejidatarios* (members of collective farms) in the Nazas basin of north-central Mexico during the administration of Lázaro Cárdenas (1934-1940). The redistribution continued with his successor, Manuel Ávila Camacho (1940-1946), in compliance with Article 75 of the National Property Water Law; however, under the administration of Miguel Alemán Valdéz (1946-1952), the Supreme Court struck down the regulation, "deciding that the law was unconstitutional and inequitable" (ibid: 180). Wolfe recounts how campesino agriculture suffered as a result of insufficient water in the years following.

⁶ Of the Ley de Aguas Nacionales (LAN), environmental law scholar Carmona Lara writes that "the Law is considered by some (...) to have an authoritarian and centralizing spirit that has impeded the establishment of watershed councils and participatory mechanisms" (Carmona Lara, 2012: 110).

⁷ For some perspectives on this, see Pineda Pablos and Parra Armenta's (2020) analysis of decentralisation and watershed councils in Mexico, and Barkin's (2010) analysis of official resistance to participation and the means of social exclusion in water governance in Mexico.

⁸ In particular, the International Covenant on Economic, Social, and Cultural Rights (ICESCR), the instrument of the UN's Universal Declaration of Human Rights which was approved by the General Assembly in 1966, and to which Mexico became an adherent in 1981 (Anglés Hernández, 2016).

of water resources, establishing the participation of the Federation, federal entities and municipalities, as well as the participation of the citizenry for the achievement of said objectives. (Congreso de la Unión, 2012)

Legislating the human right to water not only protects this right but also implies the need for the proactive participation of the state in providing drinking water and sanitation services. The element of active obligation was later incorporated into the constitutional text; this was not, however, without resistance on the part of local governments and service providers, who worried about the economic burden of fulfilling it. Yet Article 115, which was not modified in any way by the reform of Article 4, delegates water services and sanitation specifically to local municipalities; moreover, an Article 4 "Transitorio" decreed that "[t]he Congress of the Union, will have a period of 360 days to generate a new General Water Law". This new law, which was supposed to have been passed in 2014, is tasked with implementing the human right to water within Mexico's complex system of water management.

INSTITUTIONS FOR IMPLEMENTING MEXICO'S HUMAN RIGHT TO WATER

Mexico's water management institutions face an array of difficult challenges. Despite some optimistic trends,⁹ access to water is uneven – even for households with water hook-ups – due to *tandeo*, or intermittent water provision. Gaps in urban water and sanitation service have persisted despite decentralisation reforms (Pacheco-Vega, 2015b; Herrera and Post, 2014). Few Mexicans feel it is safe to drink the water from their taps,¹⁰ and 73% rely on bottled water for drinking needs, the highest per capita rate in the world (Pacheco-Vega, 2015a; Greene, 2018). Mexico is considered highly vulnerable to climate change (Nuckols, 2017: 64; Scott et al., 2013).¹¹ In tandem with the legal intricacies, institutional arrangements for manifesting the human right to water in Mexico are complicated, with a large number of institutions involved in different aspects (Figure 1). The principal institutions and their roles are listed in the following section.

National institutions

National Water Commission (CONAGUA): CONAGUA was established in 1989, during the same period as the human right to water was being put in place; this 'modernisation' of Mexico's water and agrarian laws was part of a broader economic opening and neoliberal shift that occurred in the process of joining the North American Free Trade Agreement (NAFTA). With such a large number of functions, carried out with a limited budget and staff, the operation of CONAGUA has become increasingly difficult. Water governance in Mexico today continues to bear the heavy imprint of its centralised control.

CONAGUA is a federal agency with broad areas of responsibility: the study and conservation of the hydrological cycle, management of water concessions for all uses, maintenance of water quality, regulation of water use, administration of the federal water infrastructure, conservation of rivers and emergency management, and investment in drinking water supply, sanitation and irrigation. There are 13 regional offices which are supposed to operate largely independently and report directly to the General Director of CONAGUA; however, in practice, autonomy is highly restricted and all major decisions are made in consultation with Mexico City headquarters. CONAGUA's 'local offices' are responsible for supervising state-level activities; officially they report only to the regional offices but, in fact, they usually also report to CONAGUA headquarters. Public participation in watershed councils and other participatory

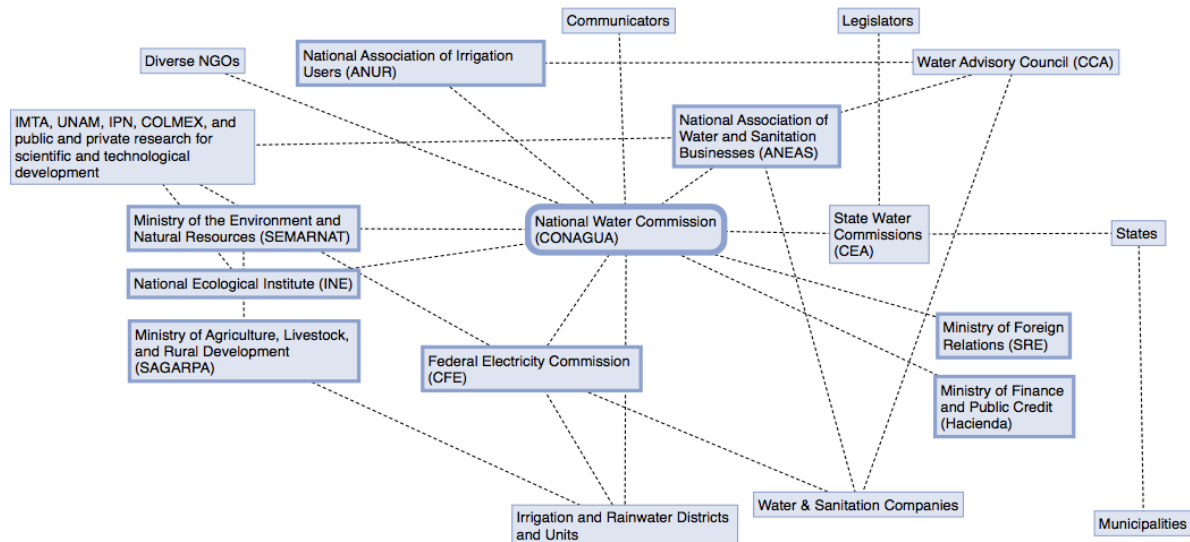
⁹ In 2013, Mexico reported that it had met Millennium Development Goal 7c, which called for reducing by half the number of people without sustainable access to improved water and sanitation services (INEGI, 2013: 29).

¹⁰ About 42.5% of Mexico's water bodies are polluted, with a BOD5 (Biochemical Oxygen Demand) of more than 3 (CONAGUA, 2016: 124), and only 52% of municipal wastewater is treated (Martínez-Austria et al., 2017).

¹¹ One international study ranked Mexico third of 184 countries in vulnerability to climate change and first in terms of vulnerability to desertification and water (Nuckols, 2017: 64).

bodies is required by the National Water Law, but has only mixed results.¹² Other federal agencies, including the Ministry of Environment and Natural Resources (SEMARNAT), the Ministry of the Economy, and the Ministry of Finance and Public Credit also have important, albeit indirect, management authority over water.

Figure 1. Basic institutional framework of water in Mexico.



Source: adapted from CONAGUA, 2012.

State and municipal institutions

State Water Commissions (CEAs): Every state has a CEA which is governed by state water laws, with specific content for each state. Its functions include regulation, coordination, advocacy and support to municipalities in the provision of water and sanitation. CEAs are involved in the setting of water tariffs, which in most states must be authorised by the state legislature. Its functions, however, are not clearly stated in the Constitution or in the LAN, and for this reason a General Water Law is deemed necessary. (In Mexican legal parlance, a GWL refers to a law that applies not only to the federation, but to all those involved in water management, including federal, state and municipal governments, water users and citizens.)

Municipalities: According to Article 115 of the Constitution, municipalities are responsible for drinking water, sewerage and water treatment services. In practice, they face incomplete and complex regulation; they are not free to set service fees and they are subject to political changes based on three-year mayoral terms which result in frequent changes of managers and priorities. Normally they provide the service through 'decentralised enterprises', which usually are municipal properties, generically known as drinking water utilities and wastewater organisms (El Organismo Operador de Agua Potable, Alcantarillado y Saneamiento, or OOPAS). According to the economic census by the National Institute of Statistics and Geography (Instituto Nacional de Estadística y Geografía, or INEGI), although they are required to serve all municipal residents, half of them only provide service to the urban areas of municipalities, neglecting

¹² The LAN of 1992 recognised the importance of public participation, such that each Watershed Organism (OC) was to have at least one 'Basin Council (BC)'. However, because of the size and diversity of the regional administrative water districts, the democratic representation of stakeholders is difficult to achieve, and they have functioned more as consultative bodies for state and municipal interests in the basin.

their outlying peri-urban and rural areas. There are more than 2500 OOAPAS in Mexico, most of them poorly staffed and with serious budgetary and technical shortcomings (INEGI, 2009).

Despite this complex arrangement, there are institutional gaps in the provision of water and sanitation services, including lack of regulation, lack of organised advocacy for the human right to water (currently citizens must go to court or to the National Commission of Human Rights), difficulty in setting proper tariffs, limited subsidies for low-income water users, and lack of clarity in the responsibilities of state governments. Another significant challenge is the lack of coordination between water authorities and stakeholders (Akhmouch, 2012; OECD, 2011).

THE KORENFELD LAW AND THE CITIZENS' INITIATIVE

In 2015, a controversial piece of draft legislation was introduced as a proposed new General Water Law (*Ley General del Agua*) based on a technocratic interpretation of the constitutional reform's mandate to institutionalise the human right to water. Informally known as the 'Korenfeld Law', it was approved in the Hydraulic Affairs Committee of Mexico's lower chamber but then 'frozen' by the senate on 9 March 2015 and never brought up for a vote by the full chamber. At the time, David Korenfeld, a member of the ruling Institutional Revolution Party (PRI), was the director of CONAGUA and the principal author of the legislation; however, soon after the bill was considered, Korenfeld was driven from his position after widely published photographs showed him and his family boarding a government-owned helicopter near their family home, an image that provoked public outrage.

Although the Korenfeld Law¹³ was reputed to be the signature legislation to inscribe the human right to water into law, the bill took a 'minimalist' approach to fulfilling the human right to water mandate, with only a single provision requiring a minimum of 50 litres per person per day (lpd), which is at the low end of the international standard.¹⁴ The remainder of the Korenfeld Law specifies that CONAGUA would be able "to grant full or partial concessions to operate, conserve, maintain, rehabilitate, modernize, or expand water infrastructure built by the federal government" (Adler, 2015). Concessions could be acquired by private service providers, which fed a public perception that the law would result in widespread privatisation and higher tariffs.

Due to the large and vocal public outcry against the Korenfeld proposal, on 9 March 2015 – one day before it was scheduled for a vote by the full chamber – PRI leadership suspended consideration of the proposal and it was thereafter considered frozen (Cervantes, 2017).

Citizens' Initiative (CI)

The proposed Korenfeld Law triggered an outpouring of protest by civil society groups and academics who viewed the proposal as an attempt to increase privatisation of water resources and management. A group of activist, indigenous, and academic organisations, working with the Commission on Hydraulic Resources, had earlier proposed its own 'Citizens' Initiative bill'; this alternative law was written as a set of guiding principles, with assistance from academics and researchers who formed a Water Network (*Red Temática del Agua*) funded by Mexico's Science and Technology Commission. The resulting proposed law was formally presented to Mexico's Chamber of Deputies on 12 February 2015 and to the Senate on 23 February 2015, with multi-party support in each case; however, no further action was taken on the CI bill at that time.

Beginning with the declaration that water should be regarded as a 'common good' and not a commodity, the CI, in contrast to the Korenfeld proposal, articulates an ample and inclusive approach

¹³ There were multiple versions of the Korenfeld proposal; later versions removed this reference to a specifically guaranteed 50 lpd.

¹⁴ The United Nations has established 50-100 lpd as the minimum quantity of water necessary to sustain human life.

that could be considered 'maximalist', in keeping with a broad understanding of water justice (Zwarteveen and Boelens, 2014). The parties "are committed to a National Agenda: water for ecosystems, water for everyone, water for food sovereignty: an end to contamination, an end to watershed and aquifer destruction, and [an end to] the vulnerability to floods and droughts due to bad management". The CI goes on to call for citizen and community participation, binding master plans, a social water comptroller's office to oversee water authorities, restoration of historical water rights to indigenous peoples, dismantling of the system of concessions for privatised management, prohibition of mining, fracking, and other dangerous uses, placement of drinking water and sanitation systems under public and community control to guarantee equitable access to water, reorganisation of the agricultural and irrigation water sectors to incorporate small-scale and communal producers, and prioritisation of the production of healthy foods for local and national consumption. Furthermore, the CI sought to establish a National Fund for the Human Right to Water and Sanitation in order to finance, among other things, community-generated water projects, especially in schools (Agua para Todos, 2018).

Table 1. Comparison of 2015's Proposals for the General Water Law.

General Water Law (Korenfeld proposal)	Citizens' Initiative ¹⁵
Guarantees 50 lpd (12 gallons)	Wants guarantee of 100 lpd (25 gallons)
Industrial use is prioritised over human use	Human consumption should be the top priority
Views water as an economic good and tradeable commodity	Views water as a human right and a common good
Allows for private sector, public and public-private provision of services	Rejects any privatisation of services; favours public, community-based, or public/community-based provision of services
Local governments should provide urban water service to 'legally constituted settlements'	Informal settlements also have a human right to water
Does not recognise collective or indigenous group water rights	Recognises collective or indigenous group water rights
Provides for professional technical staff and government agency oversight	Proposes creation of citizens' bodies for oversight of water management agencies

DISCOURSE AND DEVELOPMENTS, 2015-2019

Since the Korenfeld proposal was frozen in March 2015, there have been efforts to resurrect or recreate it under a new name;¹⁶ in the meantime, concern over the ongoing abrogation of the human right to water has continued. *Foreign Policy* reported, for example, that "[n]ew concessions [associated with the

¹⁵ This analysis is based on the 2015 version of the Citizens' Initiative (Agua para Todos, 2015). At the IV Congress of Agua para Todos in Zacatecas, 9 to 11 November 2018, a 160-page document which further developed the CI proposal for a GWL was presented for review and approval; this version was developed as a legal document with detailed provisions under each of its chapters and articles. Two relevant changes occurred under the López Obrador administration: first, in June 2019, a memorandum of agreement ('Convenio') was signed between CONAGUA and the National Institute of Indigenous Pueblos, to promote the extension of water and sanitation services to indigenous pueblos, and to Afro-Mexican and other highly-marginalized communities; and second, CONAGUA issued a public decree on 1 July 2019 guaranteeing that the minimum water quantity should be established at 100 lpd.

¹⁶ In November 2015, a subdirector of CONAGUA protested that although three years had passed since the adoption of Article 4, the required legislation to implement the human right to water had never passed; he said that parts of the bill could be 'rescued' (Enciso L., 2015a). The CONAGUA director stated that "CONAGUA is 100 percent technical" and that he "refused to enter into a political debate" with those who claimed that the proposed law promotes privatisation (Enciso L., 2015b).

Korenfeld proposal] may siphon away water from Mexican citizens, pollute the existing sources of water, and ultimately nullify the population's constitutional right to 'safe, acceptable, and affordable' water" (Adler, 2015). In November 2015, *Forbes* noted that "the new (Korenfeld) law enters in a contradiction, because it considers water as commodity, despite the fact it was introduced in the Constitution as a human right" (Schmidt et al., 2015).

On 12 May 2017, Léo Heller, special UN human water rights rapporteur, issued a report based on his 11-day visit to Mexico, during which he met with federal, state and local officials, civil society organisations, and members of communities (Tourliere, 2017). He called on the government to urgently expand affordable access to water and sanitation, particularly for indigenous and marginalised communities. He noted that although the government has made strides in expanding water and sanitation infrastructure, the reality is "sporadic supply and unreliable quality", leaving poor communities dependent on "costly or unsafe" water sources. Heller found that a significant portion of the populace does not have water services that meet Mexico's constitutional standards or the requirements of international human rights agreements; he concluded that "Mexico should rapidly enact an updated water law and close the gap between the Constitutional promises and reality" (UNOHCHR, 2017).

In January 2018, a PRI delegate, José Ignacio Pichardo Lechuga, presented a new bill nicknamed the *Ley Pichardo* (the Pichardo Law). It is seen as an 'amplified copy' of the Korenfeld proposal in that it would exceed even the Korenfeld protections of major economic interests; it would, for example, allow the private sector concessions to use water resources in perpetuity and would further increase domestic water tariffs. Seen as being designed to enable the PRI's 2014 energy reforms by facilitating hydraulic fracking, the Pichardo Law contained a series of "clearly privatizing articles (...) that violate human rights and are (...) opposed to guaranteeing water accessibility for all, particularly those of low income" (Aguirre, 2018). Like the Korenfeld Law, it placed great emphasis on private participation and very little on public and indigenous people's participation, and allowed that the water concessions could be renewed indefinitely. The Pichardo Law gained little traction and has not been processed for approval in the legislative branch.

On 1 July 2018, Andrés Manuel López Obrador from the leftist MORENA party was elected president in a landslide victory, garnering the highest percentage of votes of any candidate in modern Mexico's history. MORENA, unexpectedly, also swept a majority of congressional seats, delivering López Obrador majority control of both houses of congress. In 2015, López Obrador had called the proposed General Water Law 'corrupt' and his MORENA party came out in vocal opposition to the Korenfeld Law; since no new proposal is yet before the government, the administration has not, to our knowledge, taken a position on any of the recent proposals.

In January 2019, a new initiative, the Social Pact for Water in Mexico, was announced; its goal was the reignition of a national dialogue about the human right to water and the GWL. The Social Pact process was initiated by the Water Advisory Council (Consejo Consultivo del Agua), an important national advisory body to CONAGUA that receives support from transnational companies. Of four regional forums planned, forums were held in February and March 2019 in Pátzcuaro, Michoacán and Mexico City.

However, a different public consultation process set up by the government superseded the Social Pact process; the 64th Legislature, while considering some aspects of the previous proposals, decided to start from scratch on the process of creating a proposal for a GWL. A substantial part of the process was holding public forums that were initially intended to be regional but which, because of the great interest in the new law, were carried out in all states of the Republic. The process is led by the Chamber of Deputies Commission on Hydraulic Resources and is chaired by Feliciano Flores of the MORENA party. Thirty-three forums were held in all the states between May 17 and December 20, 2019; it is expected that a final document will be prepared that will be delivered to the commission's deputies.

A first draft of a GWL will be prepared by a group of experts, including practitioners, academics and legislative specialists; this group of experts is expected to take into account what is produced in the public

forums. It is hoped that, through following this process, the bill will be comprehensive and will have broader public support, and will more easily reach the consensus necessary for approval in the sessions of the Chamber in 2020. Finally, some groups and organisations have continued the process of designing and dialoguing about the new water law, generating four or five proposals that are being folded into the public consultation and formal legislative vetting process described above.

PERSPECTIVES FROM INTERVIEWS

In June 2015, two months after the proposed GWL was frozen, we conducted in-depth interviews with a small number of representatives of the public and private sectors and with academic and civil society leaders who had been centrally involved in crafting the Korenfeld proposal or the Citizens' Initiative. All interviewees were guaranteed anonymity so that they could speak openly about a politically sensitive ongoing issue. The interviews make clear the competing and apparently incompatible visions of the human right to water that are embodied in CONAGUA's Korenfeld Law and the CI.

Overall, the Korenfeld Law articulated a technocratic vision of the human right to water, wedded to a neoliberal agenda for efficiency and economic development. We had a lengthy interview with a senior CONAGUA official who was centrally involved in writing the Korenfeld proposal. What is notable in the CONAGUA official's perspective is that 1) it is bureaucratically savvy and focused intensely on how the laws delegate authority and responsibilities to various levels of government, and 2) it interprets the proposals made by the CI in their most extreme sense. The Korenfeld draft gives direct attention to the human right to water by requiring a minimum daily quantity of 50 lpd, the low end of the UN's standard minimum daily requirement of 50 to 100 lpd. If it had been approved, it would have been the first time an acceptable minimum quantity of water had been articulated in Mexican law. This was the only section of the proposal that was explicitly focused on the human right to water. But beyond giving this slight nod to the human right to water, CONAGUA's approach was focused on the constraints of the law that delegates authority over potable water services to the municipalities – "mean[ing] that the exercise of the human right to water is at the municipal level with the support, backing [and] co-responsibility" of the federal government. The CONAGUA official commented on the vastness, complexity and imbalanced natural water supply of Mexico in citing the difficulties of providing good water services to the country, noting that:

countries like Chile or Colombia also have national legislation [governing water] but (...) all the inhabitants of Chile could fit into the Federal District. There's a huge difference between what Chile is and what Mexico is (...). The distribution of water in Mexico is very complex and very different, for example we have zones that have more water than Canada and zones that have less water than Egypt, so that panorama makes one think that it is not logical to think that municipal water services can be regulated by a federal framework. We believe that the federal government should have a framework in which it participates in this goal but that fundamentally the states must establish the regulatory framework. This is what the law says in that respect, and I am personally convinced that there is not going to be a human right to water, even though the law says what it says, if sustainable water management agencies do not exist. If the [municipal provider] agency is not sustainable and cannot consistently offer an acceptable level of services, the human [right] is going to be a figment of the imagination (Interview with CONAGUA senior official, 8 June 2015).

Because Article 115 delegates provision of drinking water to the municipalities, this official sees CONAGUA's role as limited to oversight and regulation, yet notes that "after 35 years the panorama is sad because the [municipal] services are not good, [municipalities] don't provide good quality water, the operating agencies (*organismos*) are highly inefficient", and "there is no legal framework that requires the municipal water agencies to provide good services". Overall, the official believes that the capacity of the GWL to achieve a human right to water is very limited. The law is "just an instrument, a step on the path" and "the law doesn't cover everything, rather there are going to have to be regulations and local

[municipal] laws to regulate [the human right to water], in other words, the law is not the final culmination of anything [but] it is probably the principle of many things".

Asked about CONAGUA's perspective on the CI, the official stated that "we have a lot of problems because it has absurd things in it". The official cites the example of sections of the Korenfeld proposal which regulate aqueducts (*trasmases*) that convey water from one watershed to another distant watershed when the CI says there should be no aqueducts. "Good, then what we have to do is cut off water to Mexico City because it is all conveyed by aqueduct! We cannot establish these broad, general paradigms because we have such a diverse country". The official also rejected the notion of non-state actors – such as participatory municipal councils or citizens' oversight bodies – as both impractical and undesirable:

I don't doubt that those who came up with this did so with good intentions, but to suggest there should be a watershed council made up of only citizens and that these bodies would oversee the watershed's budget, when the council does not have any administrative organization, that is, they're proposing (...) total anarchy in water management (Interview with CONAGUA senior official, 8 June 2015).

The Citizens' Initiative (CI), on the opposite end of the ideological spectrum from the Korenfeld proposal, emerged from a coalition mobilised by the constitutional reform, which was unified by opposition to Korenfeld and by a shared vision of the right to water. Coordinated by the Coalition of Mexican Organizations for the Right to Water (COMDA), the CI is less a formal legislative proposal than a set of aspirational, guiding principles upon which a GWL should be grounded. Where CONAGUA is focused on the legal limitations and constrained roles of water management institutions, the CI does not dwell on the fine points of laws, management principles or individual water rights, but rather articulates a broad vision of the human right to water linked to an alternative development path for Mexico.

Despite CONAGUA's dismissive view of the CI, the social coalition, with key participation from Agua para Todos, is broad-based, sophisticated and knowledgeable about legislative processes for moving their agenda forward. In March 2015, the movement was very successful in motivating the congressional committee's decision to freeze the Korenfeld Law and ultimately preventing its adoption. A goal of the CI is to increase the transparency and accountability of public agencies by increasing the formal participation of citizens in water resources planning and in newly created citizens' oversight bodies. In an in-depth interview, a CI leader emphasised that they are committed to creating "good governance" and halting the destructive practices of neoliberal water governance under the LAN. As a CI leader said in an interview on 24 June 2015, "[t]here are those who say the CI is utopic. It *is* utopic, because we see an abyss and we are hitting the brakes. We are building citizens' capacity. We are constructing the good management of water".

Unlike the CONAGUA official who finds fault with the municipalities, the CI lays the blame for poor governance at the feet of CONAGUA. Creating new capacities among citizens is a sustained objective of the CI, and they are confident that the constitutional reform provides the legal grounding for a broader public role:

[T]he constitutional reform [Art. 4] says the citizenry has to be there in collaboration (...). [F]or us, the law was clear: we cannot keep allowing CONAGUA alone to decide everything, they've had 26 years to show they are capable and we cannot wait another 26 years (Interview with a CI leader, 24 June 2015).

Since 2012, the social coalition has had good experiences in their collaboration with CONAGUA mid-level managers and engineers on the development of their version of the law; they are described as people who are "sustaining the country" and are "incredibly valuable". According to a CI leader in a 24 June 2015 interview, however, management by CONAGUA has meant decades of "disasters", including over-exploited groundwater aquifers, increasing drought, desertification, and the sacrifice of water resources.

A water resources scholar who was involved in the deliberations around the proposals, in an interview on 24 June 2015, stated that "the solution is not to combine both proposals because they are so distinct";

and noted that both proposals have weaknesses that could be addressed in the next legislative round. The CI, for example, "does not have much about water management, integrated irrigation management (...) or financial systems or the economy of water". The scholar continued, "I'm not sure if it would be possible to implement [the CI] because it would require many constitutional modifications, so probably at a discursive level it is acceptable, it is a demand; I understand it perfectly as a confrontation to the vertical, unilateral and closed water authority". The scholar concluded that "it is necessary to have a total change in the administration of water, it's necessary because (...) we have a problem with ungovernability of water (...). But that also affects many interests".

One of the most contentious points of the two proposals was the question of who would provide the water services, which signalled the CI's concerns that Korenfeld would expand the role of the private sector via water concessions.

According to an environmental lawyer and NGO representative, in an interview on 8 June 2015, the two proposals are "polar opposites". The lawyer agreed in principle with some aspects of the CI, but indicated that the NGO believed that the citizens' oversight and inspection bodies were meant to be understood as political, not legal, demands. To make the changes legally, the lawyer felt, would require revising the Constitution, "and that is not going to happen", and added that "we cannot support [the proposal] if we know it is legally incorrect".

In 2019 we conducted a new round of interviews with a small number of key actors; we found a dawning sense of certainty that a new law would be brought forward and passed, and a sense of urgency that it be accomplished during the López Obrador administration.

This is the opportunity. For the first time. We have to review what happened in the aftermath of the legislative mandate [Article 4 reform] to create a GWL that would (...) change the objective conditions that exist in the LAN [existing neoliberal National Water Law] and the correlation with the forces expressed in that law. (...) [D]uring a few months of Felipe Calderón and all of the sexenio [administration] of Enrique Peña [Nieto] – they did not look favourably on a new general law (...). They approved the constitutional mandate to promote a legal instrument that (...) would permit enormous quantities of water to the energy sector, in particular for hydrocarbon extraction [fracking]. For this reason the people organized themselves and the majority of actors mobilized against the 'Korenfeld Law' and the Pichardo proposal, and (...) created the CI (...). Today we have a challenge before us, a government with enormous legitimacy, as least as expressed in the [electoral] urns (...). At the conceptual level, yes, there could be problems, but I see it more as an opportunity and a challenge. It is an unequalled opportunity because the forces are lined up with a legislative majority [of MORENA, the same party as Pres. López Obrador] (...). If we want to do it, it has to be in this legislature (Interview with a parliamentary consultant, 11 July 2019).

Responding to a question regarding whether there is a shared vision of the meaning of the human right to water in Mexico, most of the individuals interviewed responded that there was no such unity. Four years after the Korenfeld debacle, however, we found a clearer articulation of the conviction that the new law must respond to the human rights mandate:

The government's perspective (...) is a law based in human rights, not water rights. These are two distinct perspectives, one could be contained within the other, but not necessarily. Human right to water, to sanitation, and to a healthy environment, to health, to food. Let's say a series of associated rights (...) it's an integrated perspective (...) that also incorporates the ecosystem, as one of the guiding principles (Interview with a senior official, Mexican Institute of Water Technology, 12 July 2019).

Yes, there is a common agreement in the majority of sectors and interests that we legislate so as to guarantee this right, as established by the constitutional reform. That is why the Commission on Hydraulic Resources and Potable Water is carrying out statewide forums, so that those who are interested can participate and present proposals (Interview with a senior official, Commission on Hydraulic Resources, 16 July 2019).

Yet the same official – who is associated with the powerful Hydraulic Resources Commission, which will ultimately decide which proposals go forward – left open the possibility that elements of the Korenfeld

and Pichardo proposals and of the LAN would be incorporated into the new law, signalling that it could represent more of a compromise among competing interests than a wholehearted embrace of an 'integrated' human right to water:

We are going to review the MORENA initiatives, the CI, the Korenfeld proposal, the proposal of Congressman Pichardo (delivered in the Hydraulic Commission's state forum in Valle del Bravo), the results from the forums, in addition to [elements from] the National Water Law (LAN) and which could remain in the [new] law (Interview with a senior official, Commission on Hydraulic Resources, 16 July 2019).

In a 19 August 2019 interview, a former CONAGUA and state water official from Sonora seemed to feel that in the end the law would be a messy compromise. "The problem is there will be a chapter on human rights, and another one on the LAN (concessions), and the result will be a 300-page document that no one will be able to figure out".

DISCUSSION AND CONCLUSION

This analysis demonstrates that there is no universal consensus in Mexico on the meaning of the human right to water. The lack of a shared societal understanding of this essential concept complicates the task of embodying the human right to water in a single law, as mandated by the constitutional reform. In the amendment to Article 4, a transitory article established a period of 360 days for Congress to issue a new GWL. Eight years have passed since then and there have been several proposals for the new law; the three best known of these are the Korenfeld Law promoted by CONAGUA, the Pichardo Law, similar to Korenfeld, promoted by the then chairman of the Drinking Water and Sanitation Commission, and the CI proposed by a group of non-profit and indigenous organisations and academics. These proposals reflect opposing visions of the human right to water and distinct, seemingly incompatible, development paths. The Korenfeld and Pichardo proposals reflect the technocratic and neoliberal development agenda pursued since the late 1980s; the CI articulates an aspirational human rights agenda for universal and equitable access to water, with explicit focus on marginalised poor communities, healthy watersheds, and an expanded capacity for citizen participation. None of these have yet reached the necessary consensus for approval, probably because of the breadth of their scope (including the extension of human rights beyond access to water and sanitation), the possible perception of bias in their approach, or the simple lack of political will within earlier administrations. In Table 2, we compare the specifics of the three proposals; we assess the challenges and opportunities of each in terms of how effectively they address the goals of a new GWL as established through the constitutional reform: equitable and sustainable use of and access to water, involvement of three levels of government, and citizens' participation.

Our analysis of the legal geographies of the human right to water demonstrates resource and power imbalances between federal and local governments and between urban and rural constituencies. At the heart of many of the issues is the legal and institutional complexity, with Article 4 guaranteeing the human right to water (pointing to the need for improved drinking water services) and Article 115 delegating responsibility for drinking water entirely to municipalities, which are known to lack the technical expertise and financial resources to fix a broken and stressed water system. The freezing of the Korenfeld Law, however, demonstrated that the traditional power asymmetries between the state (represented by CONAGUA) and civil society (represented by the social coalition that unified in opposition to it) had begun to shift; this was enabled in large part by the constitutional reform.

The 2018 election of Andrés Manuel López Obrador appears to have opened up a new vista for the implementation of Mexico's human right to water; however, it is a vista into largely unknown territory. Although López Obrador's MORENA party opposed the Korenfeld Law and supported the CI, López Obrador himself is known to be a moderate pragmatist who is unlikely to favour a radical shift in the country's water policy and development programme.

Table 2. Challenges and opportunities of GWL proposals.

Goals for a new General Water Law (Constitutional Article 4)	Korenfeld/Pichardo proposals			Citizens' Initiative		
		<i>Technocratic/neoliberal</i>		<i>Socially inclusive/democratic</i>		
	Proposed change(s)	Challenges	Opportunities	Proposed change(s)	Challenges	Opportunities
Equitable access	Guarantee of 50 lpd Water services guaranteed for formal settlements only High priority on commercial agriculture and industry, including mining and fracking	Diversity of municipalities with differing capacities to implement the human right to water (e.g. size, resources, personnel) Increasing water service; delegating that authority to municipalities, not the federal government Full cost recovery basis but much water goes unaccounted for Contentious role of private sector No inclusion of water for irregular settlements	Increase water service to communities that lack it	Guarantee of 100 lpd Universal access, including irregular settlements, indigenous and rural communities Prohibition of a role for the private sector	How to pay for implementation, operations and maintenance Difficulty and expense of extending water services infrastructure across an uneven landscape Need for capacity-building in municipal water utilities and communities	Significant quality-of-life improvement for vulnerable sectors of the population
Sustainable use	Limited focus on ecosystem health, water for environment, etc.	Using water more sustainably could require reallocating water from agriculture/industry to human use/ecosystems	Little change from the status quo	Major focus on ecosystem health, clean water, and water for the environment	Challenge to the existing patterns of water allocation and concessions to industry	Improvements in ecosystem health, reduction in water-borne diseases and contamination, increased sustainability of green spaces, conservation of water resources for the future

Citizen participation	Envisions citizens' boards in advisory capacity to water authorities (status quo)	Citizens would exercise little authority in resource decision-making	Minimal involvement from citizens' advisory boards, public consultation forums	Enhanced (oversight) role for citizens	Would require legal modifications to enlarge the role of citizens in formal responsibilities currently delegated to government authorities	Expansion of citizens' authority in water policymaking which affects their lives and well-being
Involve all three levels of government	No major change proposed (status quo)	Potential contradiction in the law, since Article 115 delegates water service and sanitation to the municipalities, but Article 115 is not modified by Article 4. Municipalities are recognised as not having sufficient financial and technical resources to successfully implement the human right to water and sanitation; resources and technical abilities are centralised at the federal level	Little change from the status quo	Reduction of centralised, federal control of water authority and expansion of local control	Introduction of new forms of community co-management with government Scarce resources for building new capacities	Stronger role for municipalities
Overall	These proposals represent a minimalist approach to satisfying the HRW requirements that is focused narrowly on water access and continuing on a neoliberal development path. The major change proposed is the provision of some source of water service that guarantees the UN minimum of 50 lpd to formal communities (excluding vulnerable irregular settlements). These proposals envision a continued role for the private sector in water service provision and the assurance of water for mining, fracking and other industrial uses.			The Citizens' Initiative represents a maximalist approach to achieving the HRW requirements and guaranteeing water justice in Mexico. The proposal takes a broad view of the human right to water that includes increasing water access to 100 lpd and extending the guaranteed water access to irregular, rural and indigenous communities. It envisions a dramatic increase in citizen participation in water decision-making, resource investment and social oversight, and proposes new forms of public control to prohibit industrial projects that extract or use water resources. It prohibits private sector involvement in implementing the HRW changes, and represents a new development path that is focused on protecting communities and ecosystems.		

Source: Developed by authors.

Note: HRW = human right to water; lpd = litres per person per day.

It remains unclear what the forums or the expert group will yield. Because the emerging proposals have not been finalised, we cannot compare the alternatives here, or suggest with accuracy how they will be implemented; but the CI, as well as some version of the technocratic and neoliberal proposals (á la Korenfeld/Pichardo), are among the current alternatives. The path forward is uncertain, but it is difficult to envision a truly representative consensus emerging from this process rather than a law that is a narrow or messy compromise. The thorny problems of who will provide water services and who will pay for them are insufficiently addressed and remain among the most critical challenges. Some believe that a single GWL cannot achieve the human right to water and some suggest that a separate law on potable water and sanitation will be necessary.

Despite these contradictions, far from being an 'empty signifier', the constitutional guarantee to water has already proven to be an important and socially significant foundational principle. It has enabled a robust conversation to take place and allowed mobilisation to flourish around the implementation of this right; in a few cases it has been invoked by the courts to guarantee water access. In the process, the constitutional guarantee gives citizens the standing to challenge longstanding power imbalances.

There is a fresh momentum afoot in Mexico; it carries the hope that a new law will establish at least the fundamentals of the human right to water. Overall, the commitment to the right to water represented by the constitutional reform constitutes a solid base that gives the concept a firm and positive grounding, both in the law and in the discourse around improvement and democratisation of Mexico's water governance.

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