

# CONQUERING | WATER | FLOWS

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The Legacy of Spanish Occupation that Shaped a Thirsty  
Future for the Endorheic Basin of Mexico

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Conquering Water Flows  
The Legacy of Spanish Occupation that Shaped a Thirsty Future  
for Mexico City

Final Research Report

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**Image 1** | Aerial view of the Tláhuac-Xico Lake, formerly known as Chalco Lake in the Basin of Mexico  
Source: By Author



Introduction.

Location



Map 1 | Basin of Mexico - Pre-Hispanic Period  
Source: By author based on “Reconstructive Plan of the Region of Tenochtitlan at the Beginning of the Conquest” by Luis Gonzalez Aparicio

Introduction.

“Water is the memory of the Valley of Mexico. Where once lakes ran, now avenues run, but the water never disappears completely; it hides under the stones and returns in every storm, as if the land itself reminds us that it still belongs to the water. Everything we do here is marked by the echo of those ancient mirrors of water, which still reflect, silently, our history.”

-Elena Poniatowska-

Water has been an essential energetic resource for the growth of human settlements throughout time. The relationship with water served as the central guiding axis for the birth and growth of civilization in the endorheic basin, from the first human settlers until the fall of Tenochtitlan, the capital of the former Mexica Empire. Based on this guiding principle, the Aztec cosmovision of the built environment was, therefore, closely embedded to its surrounding nature. Aztec cultural beliefs were translated into complex urban waterworks that served as ecosystem services for the cities in the basin, consolidating the foundations of hydraulic societies. Through the practice of a meticulous anthro-ecological interlaced relationship, and by taking advantage of its adaptive properties, the region headed towards a socio-ecological dynamic equilibrium.

After the Aztec territory was conquered by the Spaniards in 1521a.D., the value systems which had previously guided the region were supplanted by those introduced by the newcomers. This cultural transition implied a paradigm shift in values and practices, which concluded in a shift in the understanding of the territory’s natural basin with respect to the built environment. Since the Spaniard’s re-foundation of Tenochtitlan as Mexico City, pre-Hispanic water values were banished

through a materialized series of draining infrastructure projects to catalyze the plans for cultural change. The endorheic basin of Mexico was then reconceptualized as a dry valley. The ancient water values were overrun, while those implanted during the Spanish occupation remained, and persist to this day.

Nowadays, Mexico City, with a population of over 20 million people, is suffering from an existential paradox from a never-ending need to manage its natural and unitary man-made water cycles. Following the systematic imposition of values during colonial times, there is a direct relationship between the diminishing role of ancestral water practices and the growing dislocation between natural and human systems. Since then, anthropogenic practices have sought to conquer the basin’s ecological cycles with an “extractive centralized state-centered systematic approach”. Through the continued reliance on this approach, and despite several infrastructural projects throughout the last decades, Mexico City is still suffering a significant generalized shortage of water, as well as repeated seasonal flash flooding. The basin of Mexico is witnessing a daily confrontation between ecological and social cycles that are, consequentially, degrading both the natural and built environment.

Keywords:  
Aztec, hydric cycles, cosmology, cultural synchrony, territorial palimpsest



How does water flow? Where does water move?

Considering water as a generator of spatial morphology, it is indispensable to begin this work with the analysis on water behaviours in the built environment. Historically, a large part of European cities have been located next to a body of fresh water, either a river or a lake. By taking into account the a-priori properties of this element, water has been characterized by the constant linear flow of movement, from arrival to departure in a defined space (diagram 1 & 2). European cities adapted to their adjacent water bodies and took advantage of it by using its flows within the urban fabric for transportation and as a cleaning system (Illich, 1985). This process stands out as a guiding axis in the productive systems of the European city.

Following the same water precepts, there are territories where water, supported by ecological processes, manifest themselves into circular flows. This concept turns out to be an antithesis to the European perception of water from the 15th century, before the discovery of the American continent. An endorheic basin, for example, manifests water in complex and fragile systems, generating a microclimate in itself (diagram 3). In a basin without a direct flow, water enters through precipitation and run-off from the surrounding mountains; and is released through processes of absorption, evapotranspiration and infiltration of water into subway aquifers. The result of these stages is consolidated in water cycles, where the relationship

between water and ecosystems within the basin is strengthened and dependant on each other. Thus, in the Basin of Mexico, water flows from the peaks of the mountains such as the emblematic Popocatepetl, the Tepozteco, or the Ajusco in the form of snow to its foothills. Through run-offs calmed by the foliage of the forests, it gets transported to the base of the basin, where the water - historically converted into five shallow lakes - infiltrates in the aquifer mantle and evaporates to restart the cycle. The lakes of Chalco, Xochimilco, Texcoco, Xaltocan, and Zumpango not only constituted the most vital components of the Basin of Mexico’s natural systems, but also served as key indicators of the proper functioning of its hydrological cycles.

“The endorheic dynamics of the enclosed basin were both a blessing, due to its extraordinary productivity and biodiversity, and a curse, due to its proclivity to seasonal flooding to its inhabitants”(Díaz Alva, 2022). The endorheic basin of Mexico, an attractive territory for the consolidation of life, laid the foundational roots for a concept of flows different from those preconceived by the European city. Since the first human settlers, each culture had to learn that in order to establish in this territory.

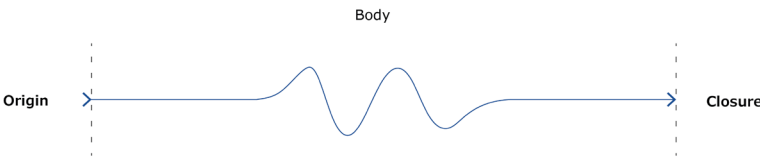


Diagram 1 | Representation of River Flows  
Source: By Author

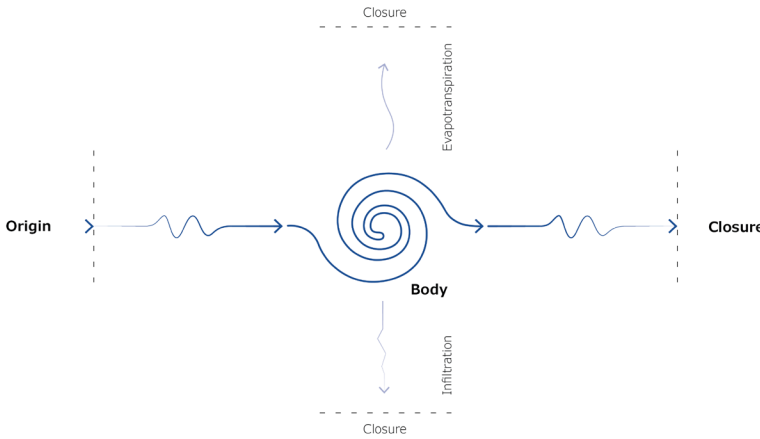


Diagram 2 | Representation of Lake Flows  
Source: By Author

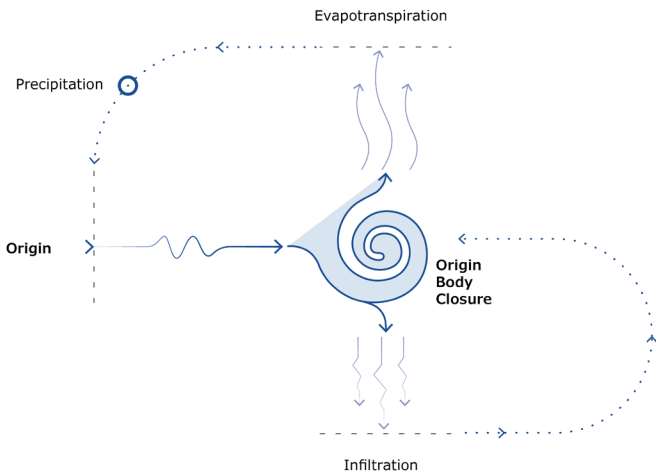
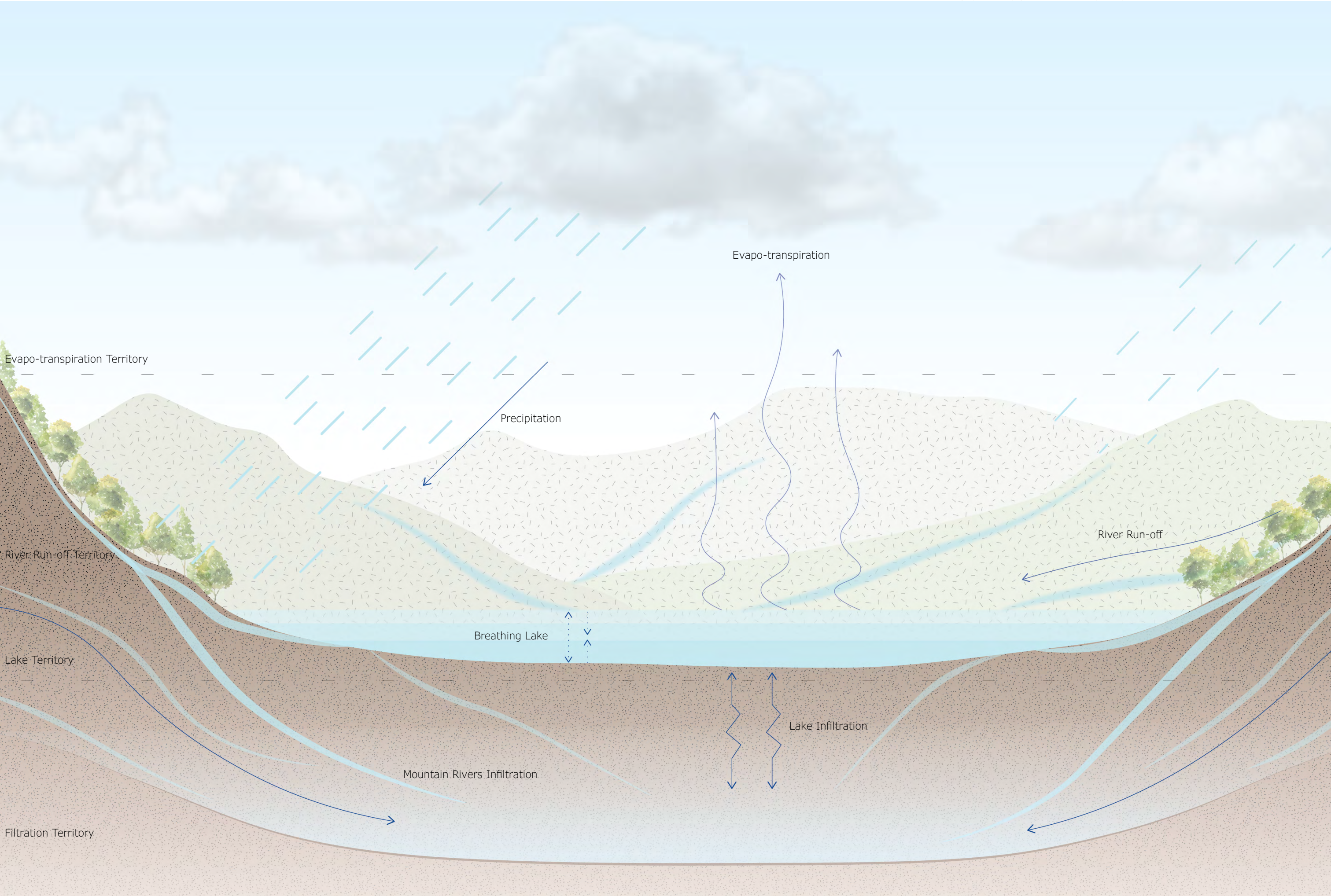


Diagram 3 | Representation of Endorheic Basin Flows  
Source: By Author





**Diagram 4** | Representation of Hydric Cycles in the Basin of Mexico - A Microecosystem  
Source: By Author



Clash of Cosmologies



Diagram 5.1 | Clash of Aztec and Spanish Cosmologies  
Source: By Author

Human occupation of the Basin of Mexico dates back thousands of years. Contemporary to the great Mexica Empire, known for its capital city, Tenochtitlan, six other peoples, the Xochimilcas, Chalcas, Tepanecas, Acolhuas, Tlahuicas and Tlaxcaltecas, divided the lands surrounding the five lakes of the basin. It should be noted that these cultures maintained the common trait of their origin: they all travelled from a mythical region called Aztlán (Boturini Codex). Although the Mexica Empire has been the most relevant in textbooks, in this research the term “Aztec” will be addressed as the set of shared cosmological practices and beliefs from these seven peoples.

Prior to the discovery of the American continent by the former Kingdoms of Castilla and Aragon, newly consolidated as the Kingdom of Spain, the Aztecs maintained common traits in terms of their understanding of the territory. An example of this can be found in the construction of their cities, the ontology of these cultures along with their *raison d’être* was based on the production of urban fabric through the use of water. This was appreciated not only for its proximity to this element, but also for the intricate and sophisticated way of producing the built environment from and by the water resource. Aztec cosmology understood the universe as a layered, sacred structure governed by cyclical time and divine forces present in natural elements. Mountains, rivers, and particularly lakes were seen not only as material resources but as living deities or *teotl*, whose flows and rhythms demanded ritual respect and ecological harmony. The city was a microcosm, built in correspondence with celestial and terrestrial alignments, and its success

Problematisation.

depended on maintaining balance with these sacred forces (Mundy, 2015). Their practices and values allowed for a sustainable way of life in the lakes, despite the alteration of the natural environment from hydraulic engineering projects such as dams and calzadas or highways to control its flows (Torres-Alves, 2020). These social and material structures also achieved to embrace a cosmology inextricably laced to their mystical beliefs (Díaz Alva, 2022) that integrated society with the natural environment. The proximity of the Aztecs to the lake entities represented a value system which led to the ecological cycles of the basin shaping the social and economic practices of the cities around and between them.

After the conquest of the city of Tenochtitlan along with other populated areas in the basin by the Kingdom of Spain, a new paradigm emerged in the region. The cultural fusion in between the newcomers and the Aztec culture of the basin provoked the establishment of a new way of understanding the territory. Spanish cosmology, heavily influenced by Christian theology and the Enlightenment’s linear view of time, positioned nature as a creation to be subdued, measured, and controlled in the service of human progress and divine will (Pagden, 1982). This clashed fundamentally with the Aztec reverence for cyclical balance and sacred ecology. Although the Spaniards learned to adapt to certain native ways, the Aztec water cosmology suffered a debacle, while Spanish cosmology emerged and laid the foundations of what it could be considered as its present cosmology. This multifaceted clash took place in different domains, one by one leading to the gradual abandonment of pre-Hispanic water culture.



Clash of Representation of Space - Production of Space

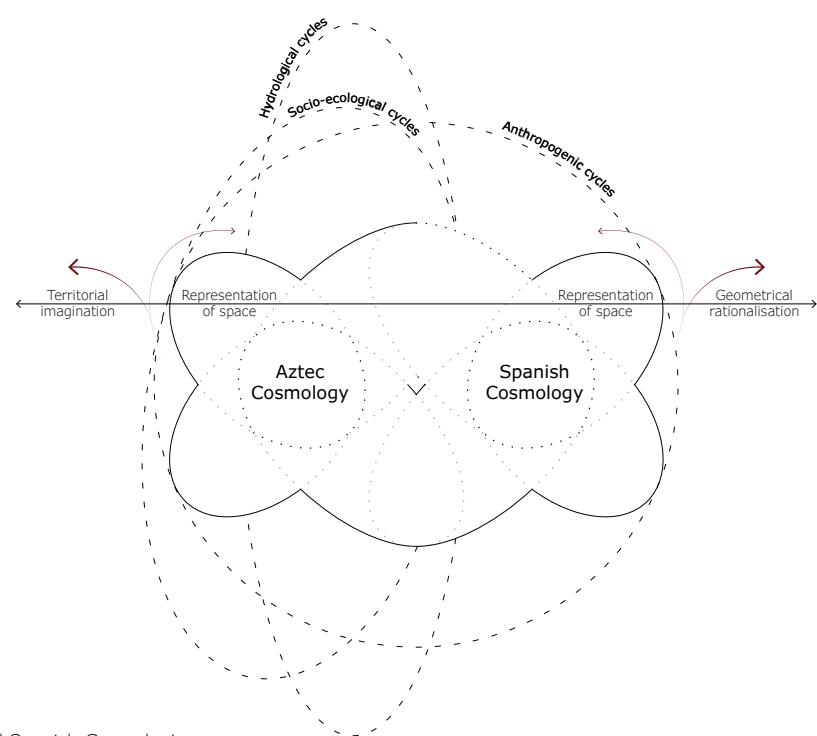


Diagram 5.2 | Clash of Aztec and Spanish Cosmologies  
Source: By Author

Lived spaces carry meanings shaped by the people who inhabit them, and these meanings influence how both urban and natural landscapes are perceived and represented. In this way, places become more than just physical locations—they are imbued with significance. Just as spaces and places emerge through ongoing social and environmental interactions, maps likewise document and express the importance of these relationships over time (Díaz Alva, 2022). The detailed abstraction through which each population passes, and which could be encompassed by the term culture, defines both the starting point and the next step of territorial modifications. Cultural priorities, therefore, are intertwined in a system of spatial representations, with cartography being its instrument for defining space and territory. Just as the territory undergoes changes over time, the ways of representing it also change, due to the cultural priorities established. Cartography, is a constantly changing tool that takes an active role in the cycle of perception-representation-modification of space.

During the pre-Hispanic times in the Basin of Mexico, cartographic representation served as a catalyst for territorial imagination and mythology within their cosmovision. Colour, symbol, and spatial relationships served as prioritized elements that encompassed all representational focus. Aztec cartography, therefore, had the authority to produce narratives in which territorial control and spatial delimitation was blurred and moved to the background. Maps, then, were imbued with meaning that allowed for an understanding

of the location of space and, more prominently, the meaning of place within the Aztec cosmovision.

Although in the sixteenth century the Spanish possessed their own representational culture, this also faded in time, along with that of the Aztecs (Díaz Alva, 2022). At the same time that the process of conquest was taking place in the Basin of Mexico, the Spaniards gradually suffered a loss of representational practice, a fact that also permeated in the territories of the New World. Therefore, the occupation of the basin defined a *pointe clé* in terms of its perception, symbolism and territorial representation.

The transformation of mapping is evident by tracing the various representations of the territory through time, from the Nuremberg map in 1524, through the Santa Cruz Uppsala map in 1550 and the valley of Tenochtitlan map by George F. Cram in 1869, to contemporary satellite mapping, the shift in representation shows the drastic spatial homogenization which was occurring throughout every corner of the world. The imported Spanish economical structures replaced the ethnic symbology into a spatial rationalization whose priority resided on the division of land and defining cartographical lines. Geometric rationalization led to a static mode of living within the territory living of the territory, with a clear delineation of territorial ownership, as well as a strong control of the social cycles within the city, where dynamic flows were relegated through the removal of the space necessary for them.



Image 2 | Map of Tenochtitlan (fragment)  
Source: Mendoza Codex  
1541 a.D.



Image 3 | Map of Mexico City (fragment)  
Source: Map of Santa Cruz/Uppsala  
1550 a.D.

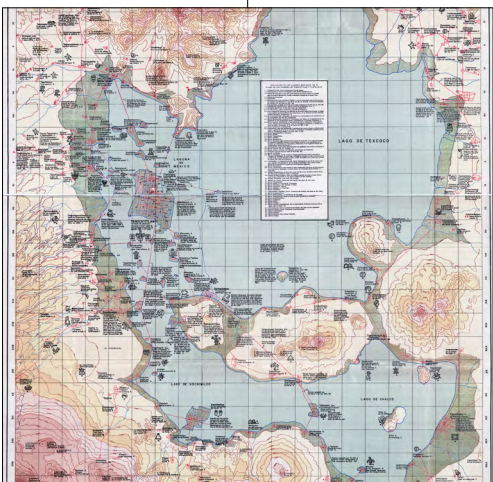


Image 4 | Reconstruction of Tenochtitlan (fragment)  
Source: Gonzalez Aparicio  
1968 a.D.

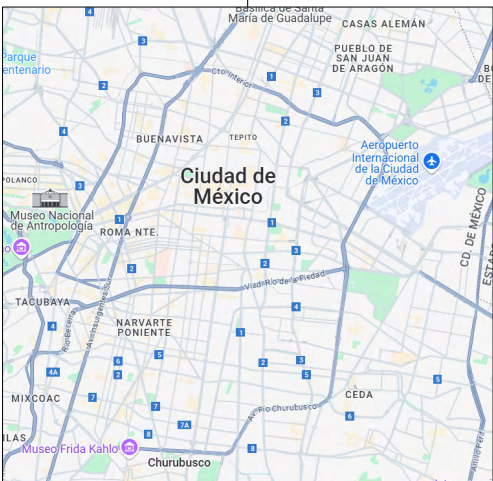


Image 5 | Map of Mexico City (fragment)  
Source: Google Maps  
2025 a.D.



Clash of Practices - From the Imaginary to the Spatial Dimension

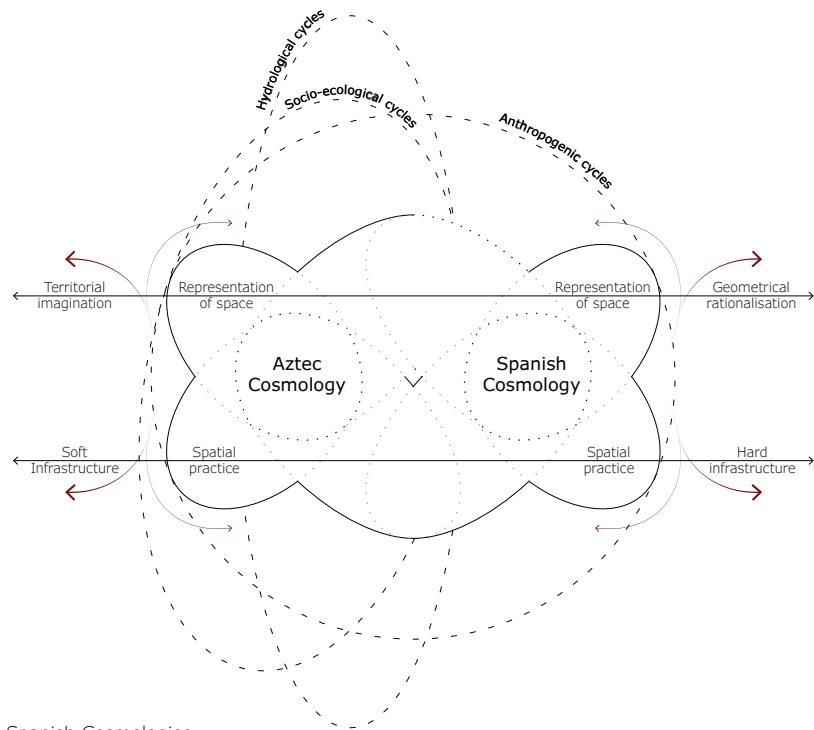


Diagram 5.3 | Clash of Aztec and Spanish Cosmologies  
Source: By Author

In Tenochtitlan, as well as in every city within the basin of Mexico, the productive activities of their populations were closely related to the water energy resource of the lakes. From the moment the basin was occupied by these cultures, it underwent a process of adaptation in which it was crucial to understand its movements and flows of water. The lakes, as the most present element in daily life, were therefore considered as a main axial principle for their cosmology. The figure of the lakes had such a priority in Aztec cosmology that, due to their natural phenomena of movement, they were perceived as sacred living beings. The bodies of water in the basin, as physical manifestations in a

specific presence were considered as deities or *teotl* (Mundy, 2015). However, the lakes were the response to a complex system of water flows, where the cyclical breathing of the lakes was directly related to other water displacements.

The cities surrounding and situated within the lake were interlaced with an extensive network of water canals that not only softened the boundaries of the urban fabric to its natural surroundings, but also facilitated access and transportation throughout the settlements. A key urban feature that exemplified the success of this aquatic soft-infrastructure was the



Image 6 | Tlatelolco tianguis  
Source: Field Museum of Natural History, Chicago, USA  
2010

*tianguis* or *tianquistli*: A vast market space assembled weekly for the exchange and sale of a wide variety of goods, ranging from food to crafted items (Argueta, 2016). The *tianguis* thus embodied the culmination of aquatic transportation networks that extended into the heart of each city within the five lakes of the Basin of Mexico. These networks enabled a vibrant system of cultural and commercial exchange connecting city-states such as Tenochtitlan, Texcoco, Chalco, and Xochimilco, among others (Villegas, 2010). The urban significance of the *tianguis* was so great that, according to Hernán Cortés in his Cartas de Relación, the Mexico-Tlatelolco *tianguis* was twice the size of the main square in Salamanca, then the second largest city in Spain, and drew as many as 60,000 people daily. The *tianguis* also served as a direct reflection of the ecological and territorial dynamics shaped by water cycles, revealing seasonal changes through the shifting availability of plant and animal species. The presence or absence of these products in the markets was closely tied to the seasonality of organisms, their life cycles, migration patterns, and periods of abundance or scarcity across different regions, making the *tianguis* a living expression of the natural rhythms of the territory (Argueta, 2016).

The Aztecs, having embedded the lakes in their conception of the city, formulated a series of practices that not only respected the water flows of the basin, but also used them as producers for its growth. Among the most remarkable of these soft infrastructures were the *chinampas* (Torres-Alves, 2020): Floating agricultural plots constructed through the layering of mud and reed dredged from the lakebed, often anchored by trees like *Salix bonplandiana* and *Taxodium mucronatum* to secure them to the lake floor (Bobbink, 2022). These *chinampas*, which were especially concentrated in the Xochimilco-Chalco city-states, transformed shallow lake areas into highly productive farmland, enabling the cultivation of corn, beans, squash, capsicum, and flowers. The Aztecs would first prepare floating nurseries and later transplant young plants onto fixed *chinampas*, thereby ensuring a year-round agricultural cycle (Conan, 2007).

Notably, the design of these islands, with narrow widths



Image 7.1 and 7.2 | Representations of Water Practices in the Pre-Hispanic Era  
Source: Mendoza Codex, pp.60 (fragment)  
1541 a.D.

and a grid system of canals, allowed for efficient irrigation through the absorption of water directly from the lake, making rainwater unnecessary and contributing to a predominantly fertile environment (Conan, 2007). Over time, this practice enabled not just agricultural abundance but also supported urban expansion, as *chinampas* allowed for territorial enlargement in the shallow parts of the basin, effectively integrating agriculture and urbanism in a hybridized land-water management system (Bobbink, 2022). Therefore, city-states such as Tenochtitlan found their way of growing through the *chinampa* system, which allowed their citizens to acquire land from the shallow lakes. In this way, pre-Hispanic cultures maintained a socio-ecological equilibrium in the endorheic basin of Mexico, preserving a balance between human needs and environmental limits in spite of the constant population growth of its cities. Referring to the Doughnut Theory, these practices helped sustain a “safe and just space” where the energetic practices within the social realm did not dominate those of the environment.

Even today, remnants of this system survive, particularly in the southern zones of Mexico City like Xochimilco and Chalco, where traditional *chinampa* horticulture coexists with urban sprawl, greenhouse floriculture, and tourism-related activities (Bobbink, 2022). However, modern shifts to mechanized farming have brought environmental degradation, including soil salinization and the need for chemical inputs, highlighting both the fragility and the resilience of this ancient system (Conan, 2007).

Yet, the deeply integrated socio-ecological model established by the Aztecs did not endure the arrival of Spanish forces. With the conquest came not only military and political upheaval but a fundamental epistemological rupture: the dismissal of the lake system as a living, sacred framework. Where the *chinampa* model exemplified a delicate symbiosis between human settlement and ecological rhythms, the Spanish introduced a worldview that sought to dominate and redefine the landscape through rigid, extractive interventions. The shift from soft to hard infrastructures marked the beginning of a sustained disruption of the basin’s hydrological and cosmological order.



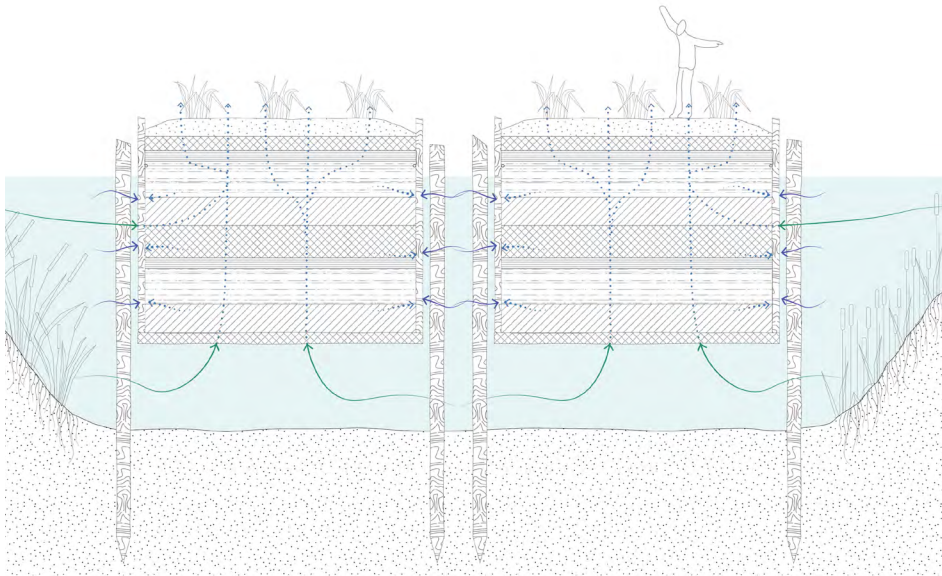
Image 7.1 and 7.2 | Representations of Water Practices in the Pre-Hispanic Era  
Source: Mendoza Codex, pp.60 (fragment)  
1541 a.D.



Problematisation.

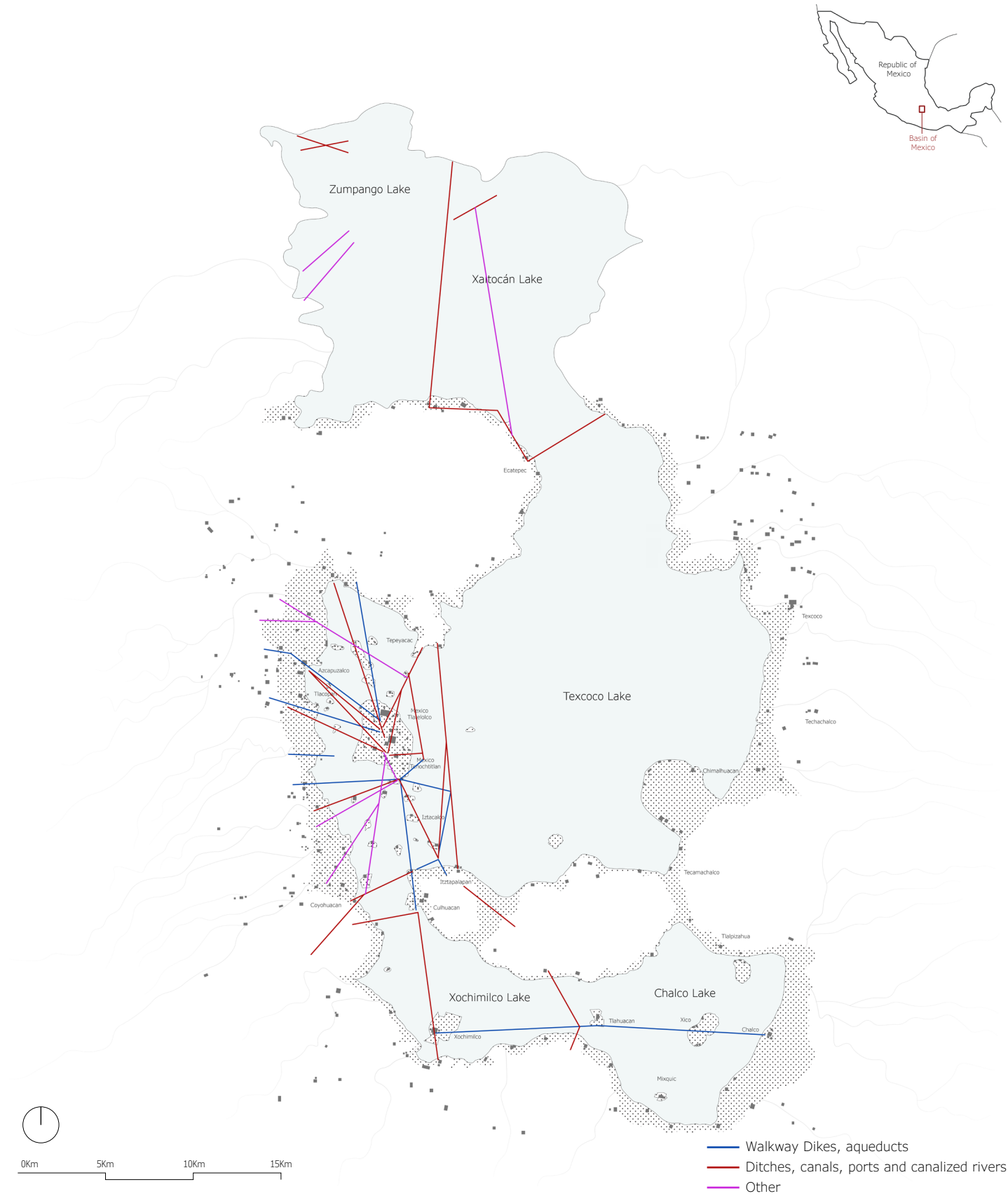
The Spaniards, on the other hand, not only did not possess the water management practices to coexist in the ecosystem of the basin, but also did not maintain a cosmological relationship with it. During Tenochtitlan’s siege, the Spaniards, aware of the relevance of water flows to keep the city alive, destroyed all infrastructure linked to its management and the city’s water practices. As a consequence, the peoples living in the basin experienced a novel socio-ecological imbalance, which has only increased as time has gone by and up to the present day. The newly founded Mexico City, perched on an island around Lake Texcoco, became a target

against the water cycles, causing severe flooding. Since the conquest in 1521 and during the rest of the 16th century, Mexico City suffered severe flooding due to the inability to rebuild the Aztec soft infrastructure systems. It was then that in 1607 when the cosmology shift was materialized after the construction of the Tajo de Nochistongo in Huehuetoca, whose purpose focused on draining the lake of Zumpango, one of the five lakes from the basin. This was only the first of a series of hard infrastructure projects planned to drain the 5 lakes of the basin and, consequently, to dismantle the cosmological *teotl* lakes.



**Top Image 8 |** *Chinampa* in Xochimilco in 1908 (fragment)  
Source: Eugenio Espino Barrios  
**Bottom Diagram 6 |** *Chinampa* Water Logic  
Source: By Author based on “*Chinampas* Agriculture and Settlement Patterns” by Inge Bobbink

Problematisation.



**Map 2 |** Aztec Hydric Infrastructure  
Source: By author based on “Hydraulic Structures in Mexico City” by Gina Alexandra



## Problematization.



## Problematization.





Clash of Territories - The (Un)changeable

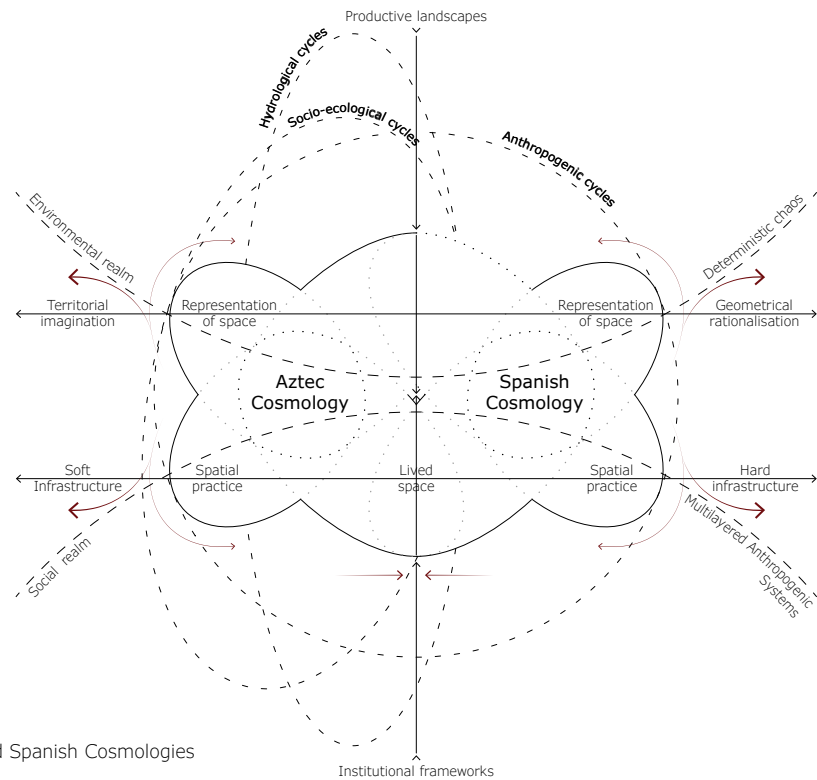


Diagram 5.4 | Clash of Aztec and Spanish Cosmologies  
Source: By Author

The clash of cultures was latent since the arrival of the Spaniards to the later named American continent. Although great differences were evident in between these cultures, from the foods eaten, to the clothing worn and religious rituals, it is an irrevocable fact that both cosmologies were dragged to coexist in the same space and time. Even though, after the conquest, monuments and palaces were reformed to the Spanish *forme d'être*, the practices and aquatic transportation networks in the pre-Hispanic cities of the basin endured through a transformation of their uses and values. The lived spaces in the urban fabric remained on the premise that, although the cosmologies merged in some cases and in others clashed, the territory did not change (Mundy, 2015). The lakes, the rugged topography of the basin and the water cycles remained existent, placing the newly arrived cosmology in a defensive state against the productive landscapes and institutional frameworks lived every day by the Aztecs.

Concepts not included within the dominant cosmological framework, which in this case is represented as the post-conquest Spanish worldview, were translated into un-lived or unreadable spaces, especially those shaped by the Aztec water cosmology. These included ritual sites, canal networks with the *tianguis* nodes, *chinampa* fields that had previously held both symbolic and functional value within pre-Hispanic territories (Mundy, 2015; Pagden, 1982). These spaces then became either abandoned or spaces which changed value priorities, producing new practices that adapted to the new economic and social system being built by

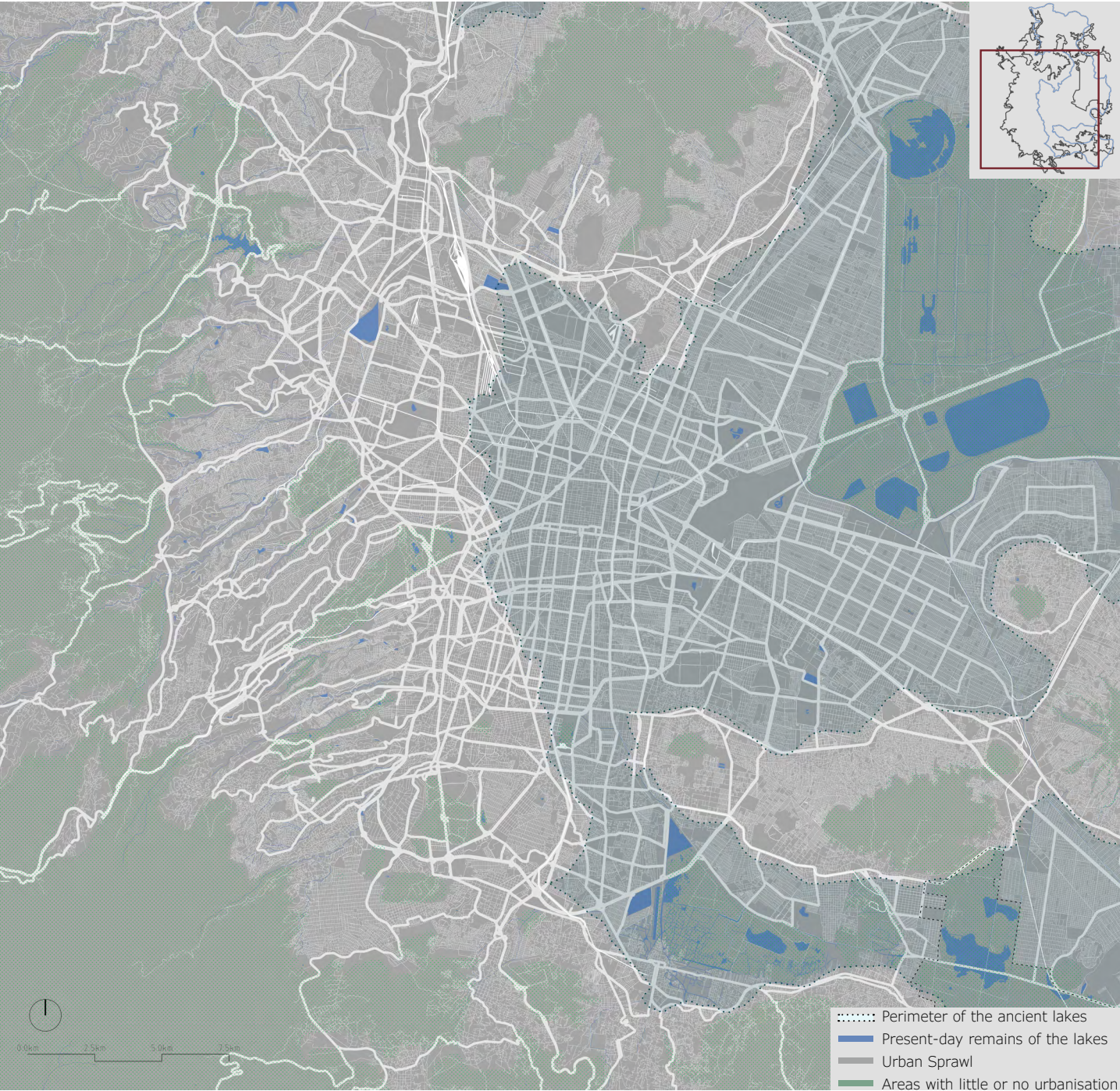
the merge of the two cultures.

This reconfiguration occurred within the tension between the social and environmental realms. The social realm refers to the sphere of human action, including economic systems, governance structures, and the spatial practices of daily life (Lefebvre, 1991). It is characterized by its capacity for adaptation and reconstruction based on anthropogenic needs and intentions. In contrast, the environmental realm includes the ecological processes and natural cycles—such as hydrology, biodiversity, and climate systems—that work as self-organization and nonlinear feedback dynamics, where order arises from complexity without centralized control (Capra, 1996; Condorelli, 2016). The territory whose pre-Hispanic practices were linked to ecological cycles mutated in a process of imbalance where the social realm was superimposed against the environmental realm, as if these two were considered rivals or opposites. Thus, while the city is not only a collection of people or buildings, but also a set of daily practices that constitute the social space (Mundy, 2015), these practices have repercussions on both the social and environmental realms.

Gradually, since the Spanish occupation, followed by the demographic explosion that Mexico City experienced in the 20th century, the territory of the basin was modified, as well as its space-producing cosmology. Today, the consequences of this dislocation can be seen in the five dried-up lakes, the forests consumed by urbanization and the slopes of

some mountains converted into quarries. Although the water cycles have been irremediably affected by these contemporary practices, the present cosmology

constantly embraces the detachment from the ecology of the basin, locating the term water as an menace that must be replaced by land.



Map 5 | Overlap between the current Mexico City Urban Sprawl and the Former Lakes  
Source: By Author based on INEGI mapping system

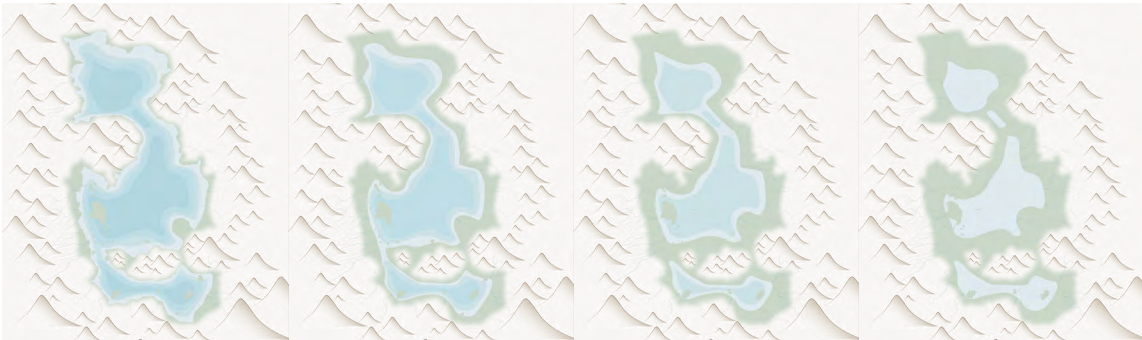


Diagram 7 | Image Breathing Lakes, Hydromorphological Movements through Hidric Cycles  
Source: By Author



Hypothesis.

Socio-Environmental Adaptation through Cultural Synchrony

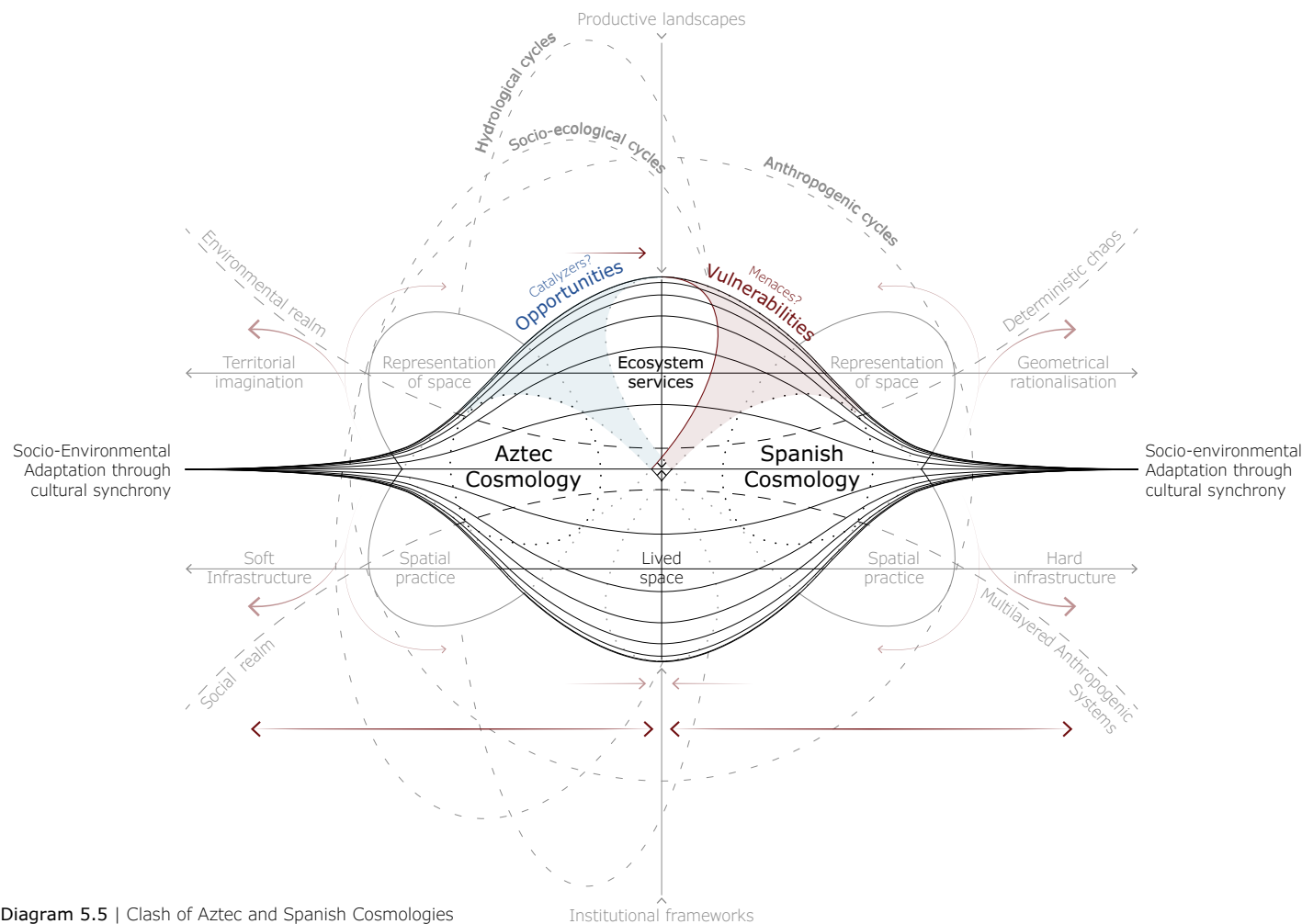


Diagram 5.5 | Clash of Aztec and Spanish Cosmologies  
Source: By Author

As time goes by, social fabrics change and evolve. The complex social system that emerged after the Spanish conquest maintains its practices and values, which are present in the current urban fabric of Mexico City. It is worth noting that today's society has inherited the ontological territorial perception supported during the Spanish occupation, this being profoundly removed from the flows and movements of water. Contemporary cultural premises reflect the profound rupture between the environmental realm and the social realm, affecting the ecology of the watershed, and as a consequence of this rupture, more than 500 years ago, the lakes have been drained. Although the Spaniards promoted the conscious practice of altering the lakes, affecting the Aztec cosmological baggage, it can be assumed that they themselves were victims of their ignorance of the territorial ecology within the basin of Mexico and the generalized simplification of spatial representation.

The alteration of the ecology has led to increasingly risky water cycles, which consequently potentialize water-related natural disasters. The current perception

of threat against water has promoted greater separation between anthropogenic and ecological cycles. Despite the fact that Mexico City possesses one of the largest water management systems in the world, a direct relationship can be correlated between centralized hard infrastructure water management projects carried out during the 20th and 21st century and the increasingly vulnerable urban space (Perló Cohen, 2009). Although there have been megalithic engineering efforts for controlling water flows in the capital of Mexico, all of them have failed. This failure stems from a profound misunderstanding of the territory, and from the negligence toward the water flows that emanate from an endorheic basin, which has resulted in the establishment of infrastructure concepts whose application is inefficient for the city and inadequate for its land.

Currently, the majority of Mexico City's water comes from three main sources: the Cutzamala System, the Lerma System, and deep aquifer pumping within the basin itself. The Cutzamala System, pumps water over 1,100 meters in elevation from reservoirs in the State

Hypothesis.

of Mexico and Michoacán regions to reach the capital. This system is energy-intensive and vulnerable to drought and infrastructure deterioration (Perló Cohen, 2009). Similarly, the Lerma System, developed earlier in the mid-20th century, brings water from the western basin through tunnels and pumping stations. Meanwhile, over 60% of the city's water still comes from underground aquifers beneath the basin. The never-ending pumping from these aquifers has caused significant land subsidence, and Mexico City sinks at a rate of 10 to 50 centimetres per year (with the Chalco land being most heavily affected), increasing infrastructure stress, flood risks, and disrupting the urban drainage system (Delgado-Ramos, 2015). These interconnected systems have created a fragile and ecologically unsustainable cycle of dependency, further deepened by rising water demand, climate change, and social inequalities in water access.

In addition, the Mexico basin has experienced a demographic explosion in the last 100 years, with its population multiplying by at least 20 times. The need for habitable space has exponentially increased the urban sprawl of the city, thus eliminating the spaces destined for water cycling processes. On the other hand, the once natural territories, used as ecosystem services for the development of ancient pre-Hispanic cities, have lost both their practices and their cosmological values.

The long-standing division between social and ecological cycles in the basin of Mexico cannot be understood merely as a technical issue, but rather as the material expression of an ontological fracture. In contrast, pre-Hispanic cosmologies perceived these spheres not as separate, but as interdependent manifestations of a unified existence. As Neil Adger affirms, "social and ecological systems are not just linked, but intertwined to the point that they co-define each other" (Adger, 2000). In this sense, water was never an isolated resource—it was a living presence shaping urban form, agricultural logic, ritual practice, and collective identity. The urban fabric emerged from the basin not in opposition to its hydrology, but in

resonance with it. The collapse of this resonance, initiated through the arrival of the Spaniards imposed split between land and life, has produced a condition in which ecological degradation and social vulnerability are not only present, but interrelated and mutually reinforcing. Within this framework, the endorheic nature of the basin of Mexico becomes more than a geographic fact—it is a model of cosmological alignment, where cycles of water, soil, and human subsistence once operated as a coherent whole. It is from this basin territorial logic that the present research narrows its focus. The Chalco region, located at the southeastern edge of the former lacustrine system, is a contemporary fragment of this disrupted continuity—one where the tensions between historical cosmologies and contemporary urban pressures are vividly inscribed on the land. By engaging with this site, the project seeks to explore how vernacular hydrological practices and cosmopolitical values may once again inform spatial and architectural responses in territories marked by both ecological memory and systemic vulnerability.

Mexico City is living a critical moment of constant flooding and water scarcity due to extractive practices related to water management and intensified by global warming. This crisis, therefore, constitutes the engine which facilitates an ontological shift in the city's current cosmology. This research, therefore, seeks to promote the redirection of the fragmented social and environmental realm, in order to reinvent a holistic conception of territory, that addresses the water crisis in Mexico City as a socio-environmental problem to be managed. The reconciliation of Aztec water practices with those established by the Spaniards represent a focal point, where cultural synchronization will permit the coexistence of a multiplicity of cosmologies within the same space (Escobar, 2018). Although the basin has already been modified by the urban sprawl up to a point of no return, the promotion of pre-Hispanic hydrological practices can serve as a strategy to alleviate the current extreme water cycles and embrace the revalorization of the relationship between water and citizen.

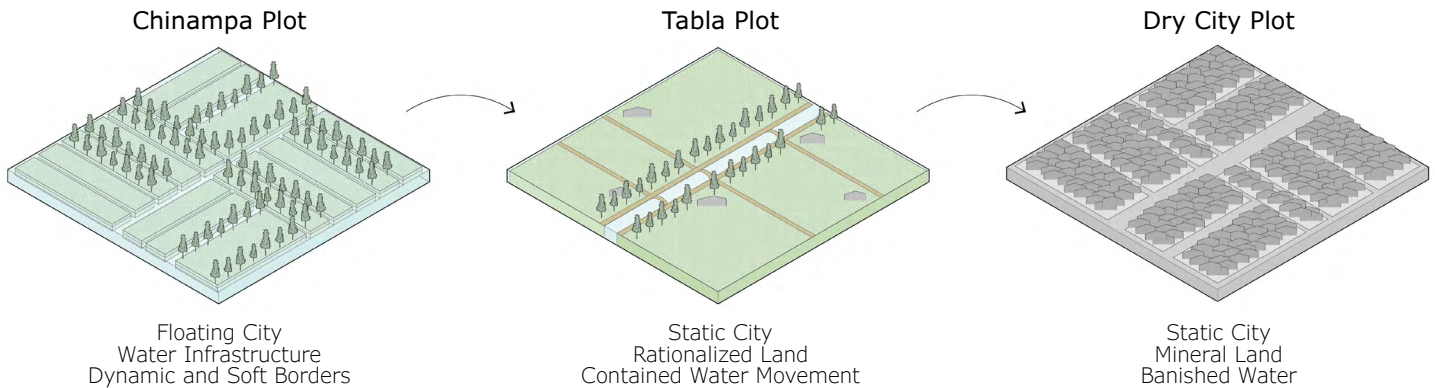


Diagram 8 | Evolution of Urban Fabric in the Basin of Mexico  
Source: By Author



Research Question.		Expected Outcomes.	
<p><b>How to identify and implement vernacular Aztec-inspired water values and practices to spatially enhance the process of regeneration and expansion at Tlahuac-Xico Lake, formerly known as Chalco Lake?</b></p>			
<p><b>Subquestions.</b></p>			
<p><b>Cultural</b></p> <p>Why does contemporary Mexico City continue to follow the principles towards water management established by the Spanish occupation of the Endoreic Basin of Mexico 500 years ago?</p> <p>Why did the Spanish colonial administration perceived the natural lakes in the basin as obstacles to progress?</p>			
<p><b>Territorial</b></p> <p>How can the natural hydric cycles in the basin of Mexico be managed, where water doesn't follow an arrival-departure cycle, but an arrival (precipitation &amp; run-off) - absorption (infiltration &amp; evapo-transpiration) one?</p> <p>As a consequence of climate change, how would Mexico City's settlements placed on the former Chalco lake evolve after long-lasting periods of floods?</p> <p>Which are the reasons and practices that led to the unintended reappearance of the ancient Chalco Lake, and how present are they still?</p>		<p>To propose an academic framework that addresses territories with a large presence of water as a flexible element of transformation and production of habitable spaces, resilient to the pre-existing ecosystem, based on Aztec inspired water values and practices, specifically those of the Chalcas, and taking into consideration the physical flows of water in the Tlahuac- Xico lake.</p> <p>The aim of the project will be to direct the design towards the first stage of the regeneration process, where individual interests may be unified to generate community through an architectural program based on community reactivation , with water being the central guiding axis.</p> <p>The research and design project will strive to promote the socio-environmental approach in the specific region of the Basin of Mexico, but as a paradigm shifting perspective in the relationship in between nature, society, and economy. It seeks to become a catalyst for questioning the contemporary concept present in diverse regions of the world towards the dislocated relationship between water flows and economically productive dry cities.</p>	
<p><b>Socio-Economical</b></p> <p>Following the Doughnut Economical and Environmental model, what kind of territorial imbalance has caused the ever closer approach to the ecological ceiling and social foundation, for the ecological cycles and urban fabric?How have the ancient foundational principles of water in the basin evolved and which role do they play in contemporary life?</p> <p>How have the ancient Aztec foundational principles of water in the basin evolved and which role do they play in contemporary life?</p>			



Development.

The Death of a Lake, the Birth of a Lake - The Chalco Lake Case

Before the Spanish conquest, the Chalco region was part of a highly complex hydrological network that defined not only its physical landscape but also the social, cultural, and spiritual lives of its inhabitants. As one of the five lakes of the Basin of Mexico, Lake Chalco was a freshwater body intricately linked to a system of *chinampas*, causeways, and canals that supported dense urban centres and agricultural practices adapted to the cyclical flooding and drying of the valley (Frederick, 2019). These pre-Hispanic societies did not only survive in this lacustrine environment; they thrived in it, creating *chinampas* that expanded the lake’s productivity and allowed for multi-cropping cycles that supported large populations. Water was understood as a sacred entity. Its management was embedded within cosmological frameworks that respected the existent natural cycles. The *chinampa* system reflected this understanding: It was a method of agriculture that worked with, not against, the flow of water. Crops were grown on narrow plots surrounded by canals, where the rise and fall of the waters enriched the soil and sustained biodiversity. Beyond mere functionality, the integration of daily rituals with ecological cycles reinforced a holistic relationship between humans and their environment, a relationship that would be systematically dismantled in the centuries to come (Bobbink, 2022).

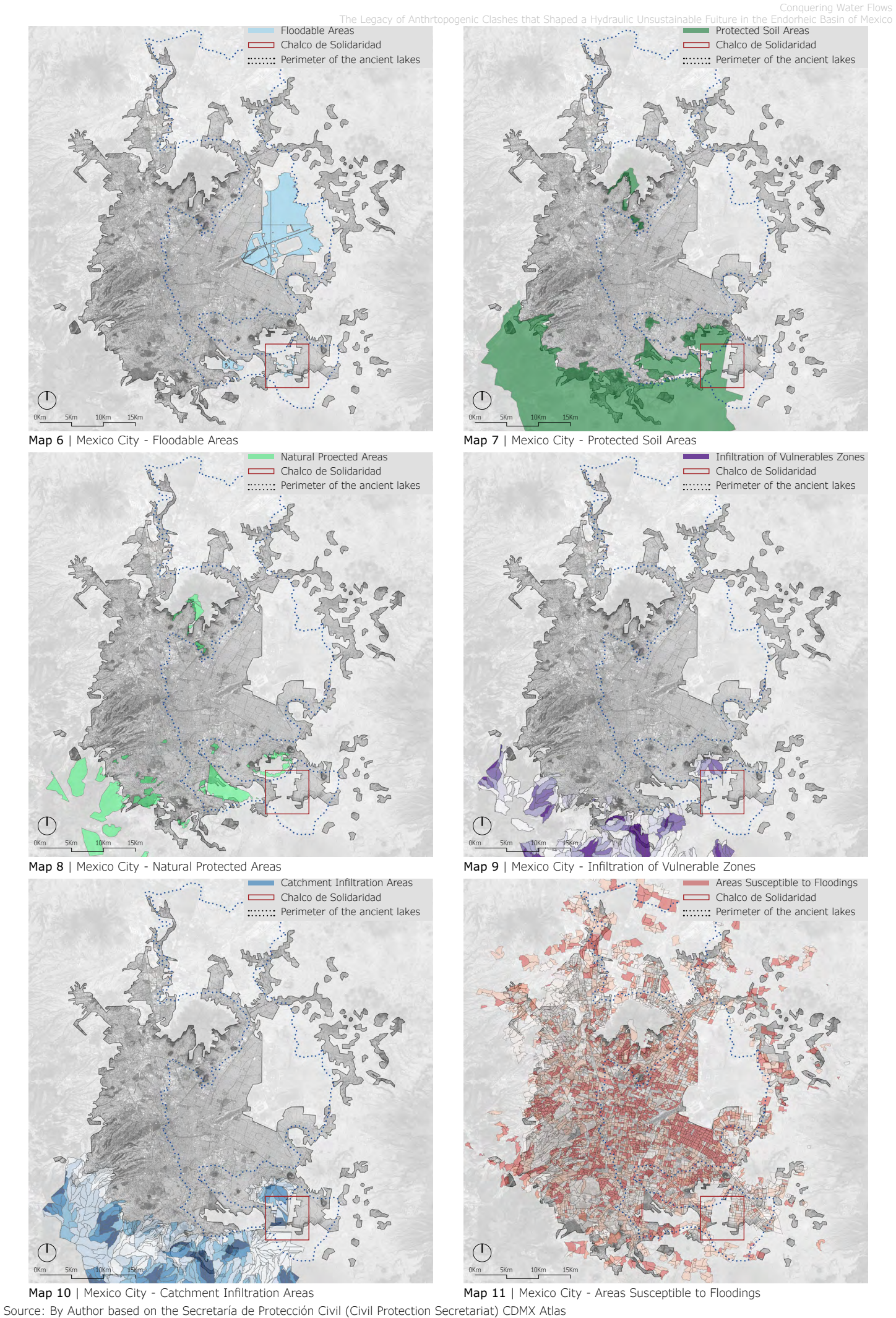
With the arrival of the Spanish and their subsequent imposition of new territorial logics, these delicate relationships began to erode. The Spanish period saw the gradual privatization of communal lands, the introduction of European agricultural methods, and the first large-scale modifications of the basin’s hydrological systems, including early drainage strategies (Frederick, 2019). However, it was not until the Porfirian era at the end of the nineteenth century, including the Lerdo Law establishment in 1856a.D., that the most profound rupture occurred. It must be noted that by the time that Porfirio Díaz rose to power, Aztec knowledge of the hydric cycles in the basin was already greatly forgotten. Porfirio Díaz was a Mexican general and political leader who served as president for several terms between 1876 and 1911, a period marked by rapid modernization and infrastructure development across the country. Under Porfirio Díaz’s modernization policies - influenced by Spanish and later European ideals of progress and rational land use - water was reimagined purely as an obstacle to territorial development. In 1895, the Díaz government authorized the large-scale drainage of Lake Chalco, aiming to convert the fertile lakebed into arable land

for commercial agriculture (Amaro-Altamirano, 2008).

The *chinampas*, which had harmonized with the seasonal flows of water, were abandoned, and the natural wetlands were replaced by rigidly engineered land parcels designed for economic extraction named as *tablas*. The construction of canals like La Compañía sought to control and direct the flow of water permanently, erasing the soft-infrastructure established previously. This transformation was not only ecological but social. The pre-Hispanic communities that had lived in dialogue with the lake found themselves displaced from their ancestral territories. The loss of the lake severed the foundations of local economies and cosmologies. The *tianguis*, fishing, small-scale *chinampa* farming, and the ritual uses of water disappeared almost entirely, replaced by labour arrangements tied to *haciendas* and capitalist agricultural enterprises (Frederick, 2019). Despite localized resistance efforts, including lawsuits and armed confrontations, these communities were unable to prevent the alienation of their lands.

The Mexican Revolution, at the beginning of the twentieth century, opened a new chapter for the region. In an effort to address deep-rooted land inequalities, the revolutionary government institutionalized the *ejido* system through the 1917 Constitution. An *ejido* is a form of communal landholding where the land is owned by the state but allocated to a community for collective use, allowing rural populations to cultivate plots without the threat of privatization (Frederick, 2019). In the Chalco area, several *ejidos* were created across the dried lakebed, redistributing lands previously held by *haciendas* (Amaro-Altamirano, 2008).

However, the redistribution of the pre-existent *tablas* through *ejidos* did not reconstruct the pre-Hispanic relationships with water and land. The environment had already been fundamentally altered by drainage, and the *ejidatarios* inherited a territory stripped of its former fertility and biodiversity. In addition, many *ejidos* lacked irrigation infrastructure and were marginalized from urban markets. While the legal framework emphasized collective ownership, the economic reality often pushed *ejidatarios* into precarious subsistence farming, reinforcing cycles of poverty and land degradation (Frederick, 2019). Environmental health took a back seat to social vulnerabilities as the focus of discussion. The territory, therefore, once again, fell victim to a set of values whose, objectives were to prioritize the city expansion over the ecological cycles.





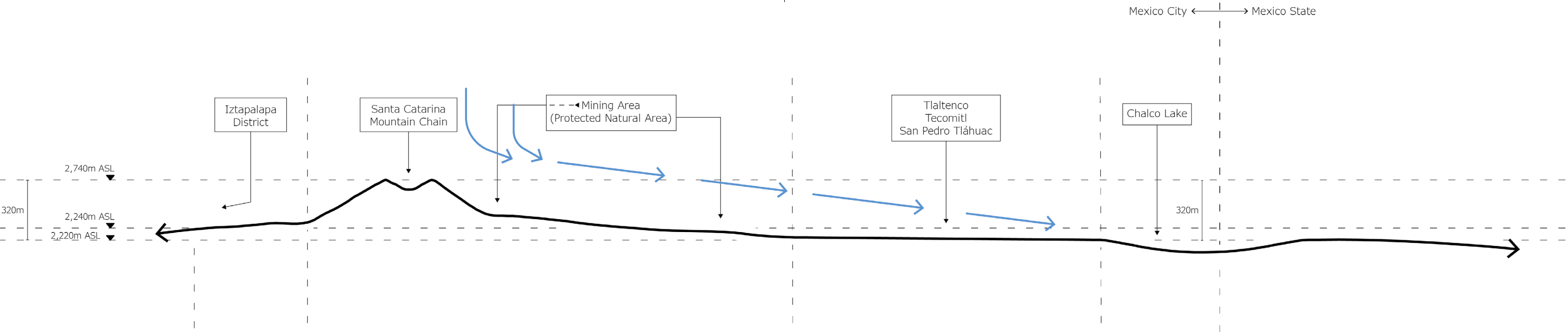


Diagram 9.1 | Conceptual Section of Chalco de Solidaridad and its Hydric Flows  
Source: By Author

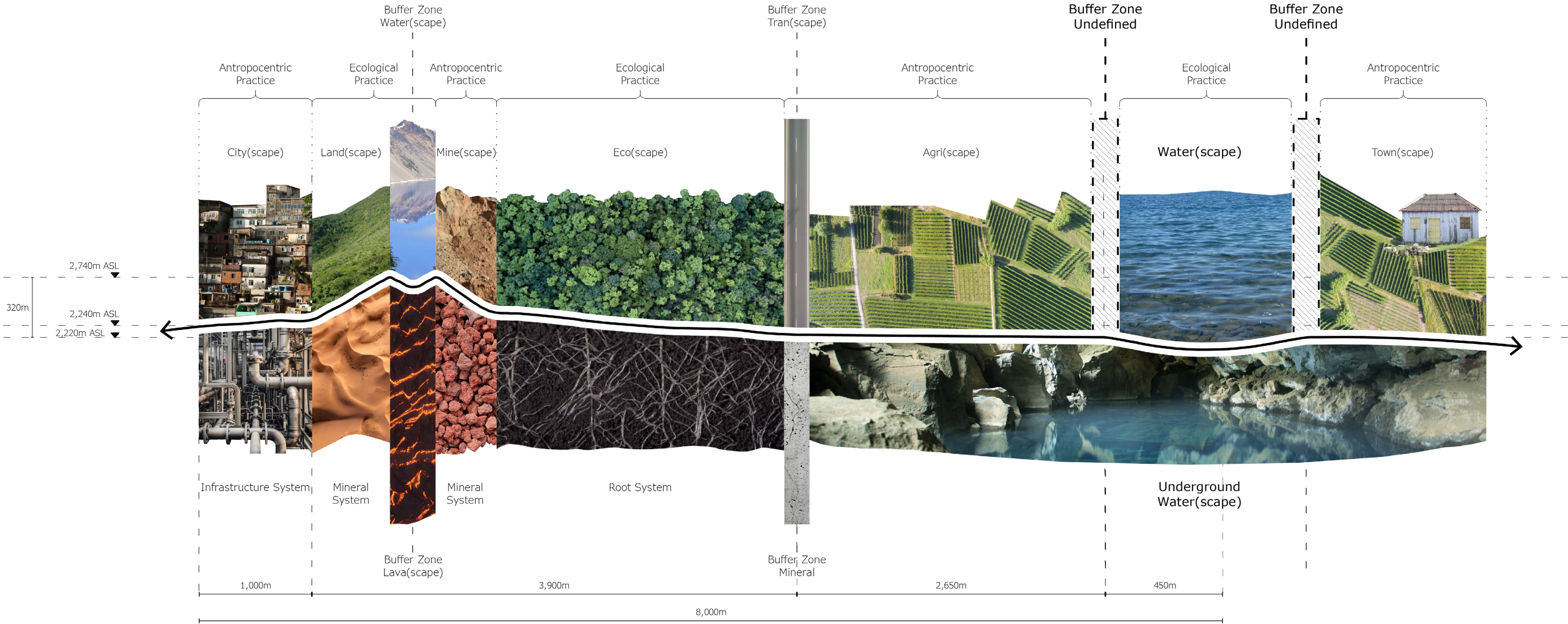


Diagram 9.2 | Conceptual Section of Chalco de Solidaridad and its territorial textures  
Source: By Author



## Development.



December 1985



March 2003



March 2005



March 2008



December 2009



December 2012



March 2013



May 2016



January 2017



November 2020



May 2022



October 2024

**Image 9 |** Tláhuac-Xico Lake Morphological Transformation throughout Time  
Source: Google Earth Pro

## Development.

By the late twentieth century, economic pressures and shifting government policies further eroded the viability of the *ejido* system. The 1992 reforms to Article 27 of the Constitution under Carlos Salinas de Gortari's administration allowed for the privatization of *ejido* lands, which would permit the integration of rural territories into the national market economy. Carlos Salinas de Gortari, president of Mexico from 1988 to 1994, led a series of economic reforms aimed at liberalizing the economy and promoting market-driven development. In practice, this reform opened the floodgates for a wave of land sales that transformed the landscape once again. In Chalco, *ejido* lands were rapidly subdivided and sold, often informally, to developers and individuals seeking affordable plots close to Mexico City (Connolly, 2003).

The newly established settlements sprawled across a fragile, degraded, and eroded territory. Infrastructure was minimal or absent: streets were often unpaved, sewage and drainage systems were non-existent, and drinkable water scarce. Yet the demand for housing exceeded the limitations of the city's planning, and migration to the area intensified. It was in this context that the federal government, under Salinas de Gortari's presidency, implemented the Solidaridad program - a flagship social development initiative aimed at addressing poverty and marginalization through community participation and public works projects.

Valle de Chalco Solidaridad was born as a municipality in 1994, its very name bearing the ideological imprint of the Solidaridad program (López-Santiago, 2017). Federal funds poured into the area, financing schools, clinics, paved roads, and electrification projects. In many ways, Solidaridad succeeded in regularizing informal settlements and integrating marginalized populations into the institutional framework of the state. However, the program's approach remained fundamentally top-down, focused on technical solutions rather than addressing the structural causes of marginalization and environmental degradation. In spite of the monumental transformation of Chalco's territory, the layers of the past continued to be latent. The old grid designed to house *chinampas* became the blocks of the new neighborhoods and the irrigation ditches and water canals became its streets and avenues.

The creation of the municipality coincided with a massive demographic influx. Migrants from rural Mexico and even from other countries settled in Valle de Chalco Solidaridad, drawn by the promise of land ownership and proximity to Mexico City. The result was a dense, heterogeneous population with diverse cultural backgrounds but few social ties (Bartolo Ruiz, 2010). Unlike the *pueblos* of the colonial period or the tightly knit *ejido* communities, the new neighbourhoods

were fragmented, which concluded into an urbanised area where people lacked a sense of belonging.

Meanwhile, the environmental consequences of the long history of territorial transformation became increasingly apparent. The overextraction of groundwater, combined with impermeabilization of the soil due to urban sprawl, led to subsidence across the valley. At the same time, the failure of the existing drainage infrastructure, particularly La Compañía Canal, resulted in frequent floods. In 2000, 2005, and 2010, ruptures in the canal's walls caused widespread inundation of neighbourhoods, displacing thousands of residents and exacerbating already precarious living conditions (Ponce-Pacheco and Novelo-Casanova, 2018). The last major water crisis in Chalco took place in the summer of 2024, being the rainy season in Mexico City. From approximately August 2 to September 7 a state of contingency was declared in Chalco. The height of standing water exceeded 1.50 meters throughout the municipality and its inhabitants had to be transferred to temporary shelters (Ramón, 2024). This case is indicative of the continued state of ecological detriment in the area, where water management strategies continue to focus on the separation of the anthropogenic and natural realm, by building a dry city in the middle of a wet territory.

Additionally, the extraction of tezontle, a volcanic rock used in construction, from the Sierra de Santa Catarina, particularly from the Xaltepec volcano, has significantly impacted the region. This mining activity has led to environmental degradation, including deforestation, loss of biodiversity, and disruption of natural water infiltration processes, further exacerbating the area's vulnerability to flooding and land subsidence (Miranda, 2021).

Compounding these vulnerabilities was the reappearance of the lake itself. In a bitter irony, the efforts to erase Lake Chalco had not succeeded in permanently transforming the landscape. Excessive pumping of groundwater caused depressions in the land, allowing water to accumulate once more in the lowest-lying areas. The modern Tláhuac-Xico Lake, heavily polluted and disconnected from its ancestral cycles, emerged as a toxic mirror of the past. Far from providing life, it became a hazard: A repository of sewage, industrial runoff, and garbage that threatened public health and agricultural viability (Ponce-Pacheco, 2018).

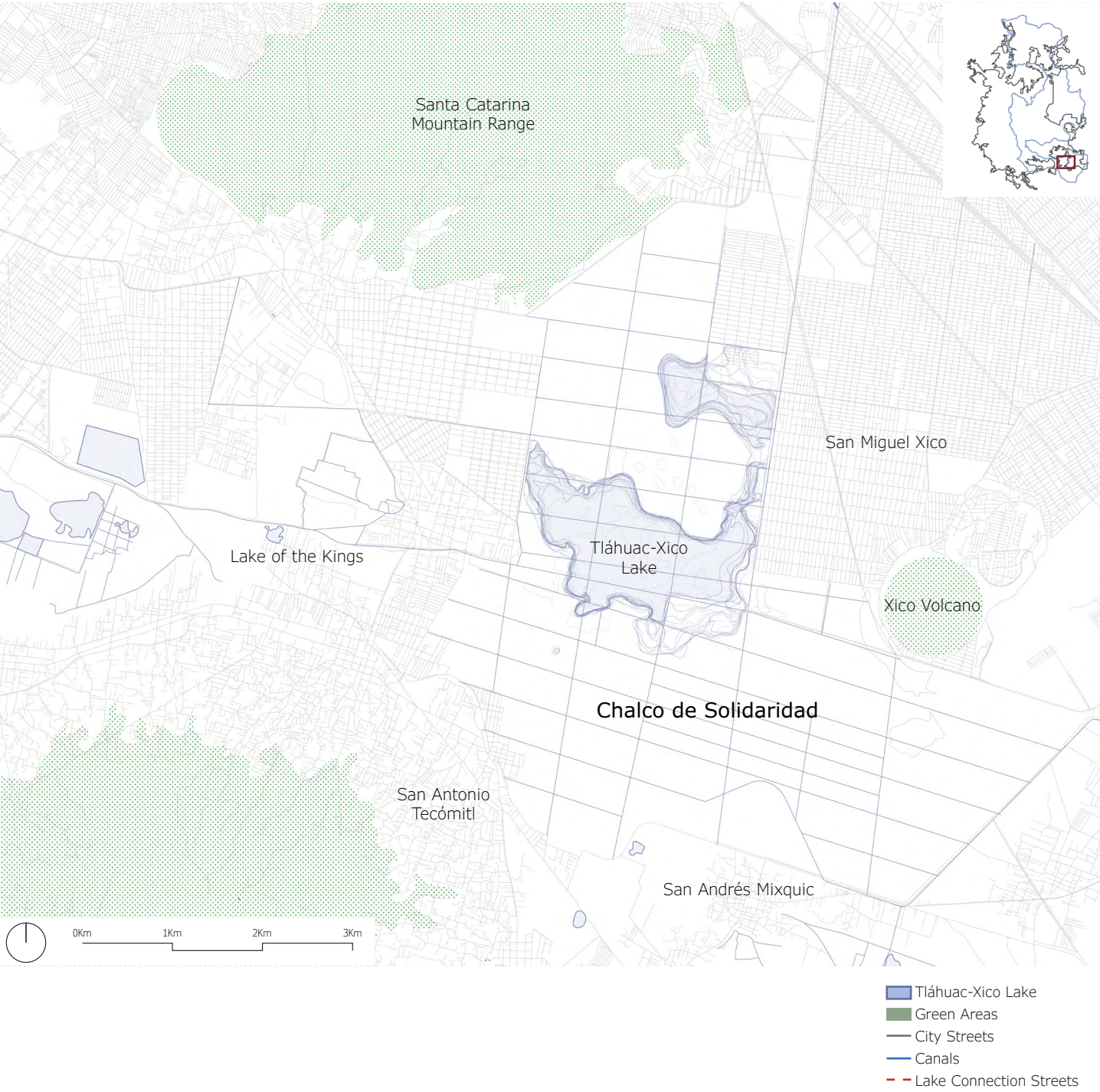
The neighbourhoods closest to the lake, such as Xico, illustrate the profound contradictions of the region. While water accumulates visibly in their proximity, residents suffer from chronic water scarcity, relying on intermittent deliveries by truck or unsafe well water. Their precarious homes, often self-built with minimal



Development.

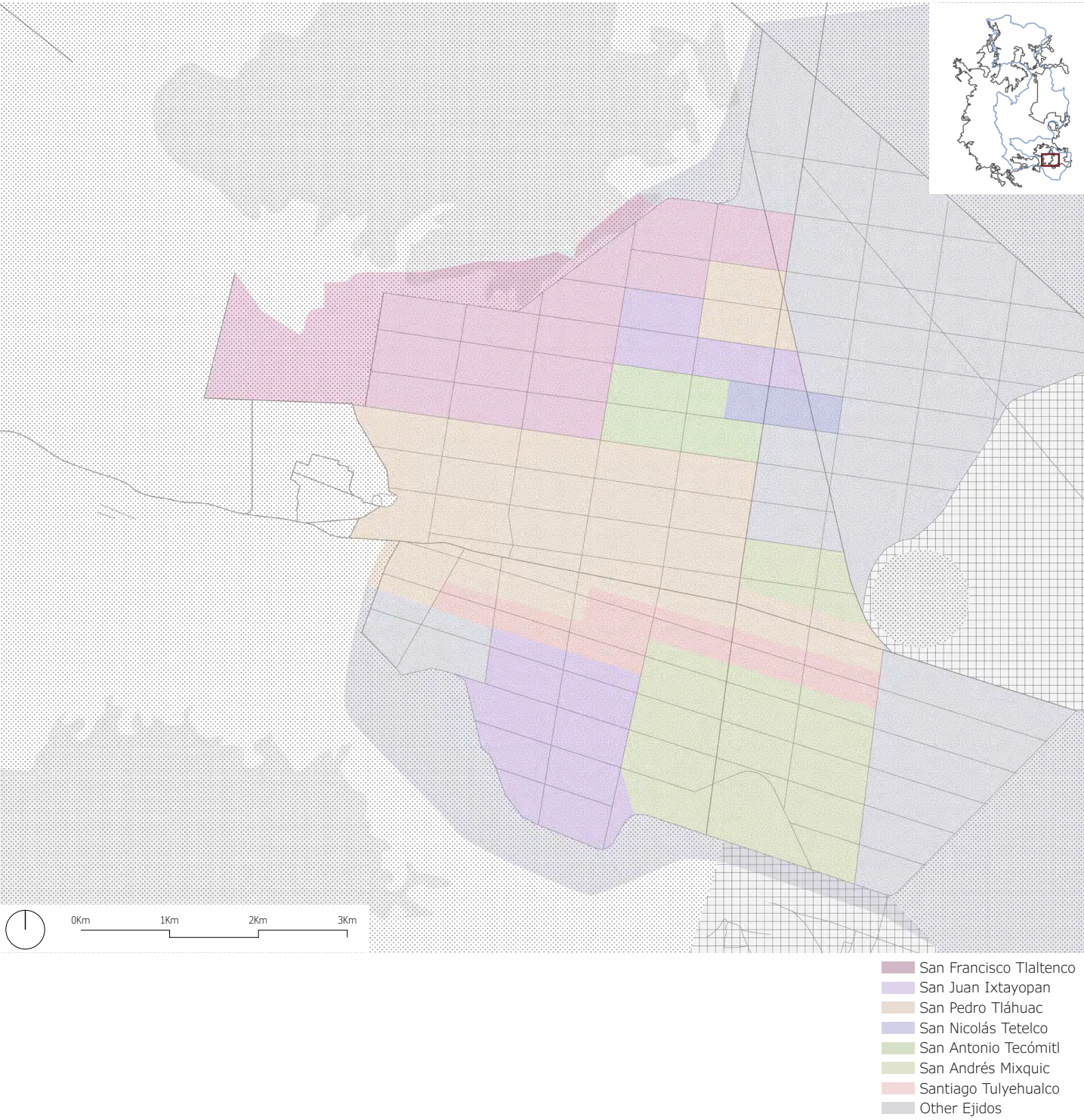
technical guidance, stand vulnerable to flooding, ground subsidence, and earthquakes. The lack of cohesive community networks, born from the fragmentation of migratory origins, makes collective resilience even more difficult (Bartolo Ruiz, 2010). In places like Xico, the combination of weak hard-infrastructure support,

precarious housing, and environmental risks leads to a permanent condition of vulnerability. This situation is compounded by the minimal state presence beyond emergency interventions and the challenges posed by the degraded environmental realm (Ponce-Pacheco, 2018).



Map 12 | Chalco de Solidaridad and Tláhuac-Xico Lake  
Source: By Author

Development.



Map 13 | Chalco de Solidaridad Political Divisions of *Ejidos*  
Source: By Author based on INEGI





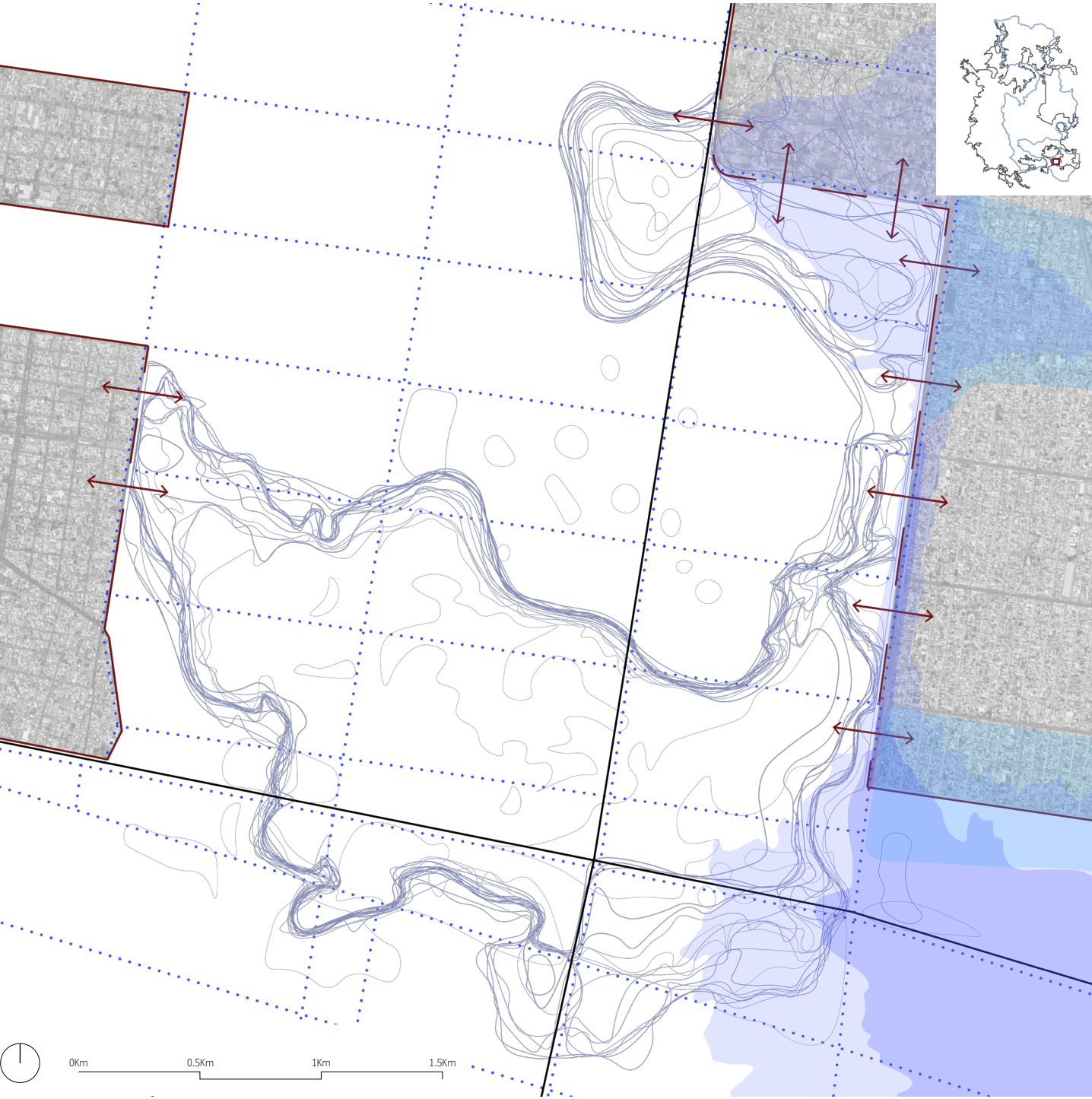
**Image 10** | Tláhuac-Xico Lake View 1  
Source: By Author



**Image 11** | Tláhuac-Xico Lake View 2  
Source: By Author



Development.



**Map 14** | Tláhuac-Xico Lake Seasonal Floodings  
Source: By Author based on the Secretaría de Protección Civil (Civil Protection Secretariat) CDMX Atlas

Development.



Development.

A Reflection on Top-Down Landscape Recovery -  
The Proyecto de Habilidadación del Lago Tláhuac-Xico  
(The Tláhuac-Xico Lake Rehabilitation Project)

In recent years, a series of design projects have been proposed and must be exposed in this research, with the Proyecto de Habilidadación del Lago Tláhuac-Xico being the most renowned. It has emerged as the principal institutional response to the ecological and social deterioration of the Chalco region and, specifically, the Tláhuac-Xico lake. Promoted by the Comisión de Cuenca de los Ríos Amecameca y La Compañía (Amecameca and La Compañía River Basin Commission), in collaboration with the federal entities CONAGUA (National Water Commission) and SEDEMA (Mexico City Ministry of the Environment), the project seeks to stabilize water levels, create controlled wetlands, and provide recreational infrastructure across the lake area.

Framed as a strategy for ecological restoration, urban risk mitigation, and social inclusion, the project proposes the construction of wetland cells, water treatment infrastructure, recreational parks, and cultural *plazas*. The objective is to convert the flooded, polluted space into a “functional” lake, with ecological and urban benefits for the surrounding communities. Theoretically, this comprehensive intervention seems to address the chronic flooding, habitat loss, and lack of public space that characterize the region. However, the project reveals significant tensions between its stated goals and its underlying approach. Although participatory language is employed in the project descriptions, the planning, design, and proposed management structures largely reflect a top-down approach. Decisions regarding landscape configuration, hydrological flows, and spatial organization were made at federal and city levels, with limited input from the basin’s current inhabitants. The notion of ecological recovery promoted here is largely technocratic: It imagines nature as something to be stabilized and ordered through engineered interventions, rather than understood as a dynamic and unstable system. Nature is also perceived as a series of encapsulated elements and not as a large system (endorheic basin) composed of many territorial subsystems (mountains-fun-offs-lakes).

This tendency toward a generic, universalizing model is visible in the project’s design typologies. Wetland parks, boardwalks, lookout towers, and cultural spaces are proposed following standardized formats often deployed in urban green infrastructure projects worldwide. There is little attempt to root the intervention in the specific historical, hydrological, or cultural context of Chalco and Xico. The long history of

*chinampa* agriculture, the informal adaptive practices developed by residents in response to flooding, and the fluctuating materiality of the lacustrine landscape are not fully engaged in the project’s vision. Ancestral social and economic practices such as the *tianguis*, are disregarded as potential catalysts for change, and are not included in the project proposal.

At the same time, the project offers undeniable potential benefits. Stabilizing water levels through controlled infiltration could help mitigate the floods that have repeatedly devastated Valle de Chalco Solidaridad and adjacent areas. Creating structured wetland zones could offer partial restoration of biodiversity, reintroducing habitats for aquatic and bird species lost to urban expansion. The addition of recreational and cultural infrastructure may provide safe public spaces in an area where social fragmentation and lack of amenities persist.

Nonetheless, the distribution of these benefits risks reproducing patterns of exclusion. The proposed amenities are concentrated along major access roads and consolidated neighbourhoods, potentially marginalizing the most vulnerable communities settled at the lake’s unstable edges. Moreover, the language of “ecological recovery” can obscure the complex social realities of the area: many of the so-called “invaders” of the lake zone have developed vernacular strategies to live with the seasonal water cycles, practices that the formal project neither acknowledges nor incorporates.

Yet, even within its top-down framework, the Proyecto de Habilidadación del Lago Tláhuac-Xico opens certain opportunities. The large-scale investment and political attention it brings could create a platform for the recognition and integration of local initiatives. Alternative strategies could be explored during the implementation phase: hybrid wetland-agriculture systems inspired by *chinampa* logics, decentralized water management through community-based harvesting structures, and dynamic, phase-based ecological regeneration rather than static engineering solutions. Above all, the project’s greatest opportunity may lie in shifting its temporal and epistemological frameworks. Rather than fixing the lake into a finalized object, recovery could be understood as an ongoing negotiation between hydrological processes, ecological rhythms, and human inhabitation. Recognizing the lake as a living, unstable entity, rather than an infrastructure to be stabilized, would align recovery efforts with the inherent conditions of the Chalco basin,

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offering a more situated and resilient future.

In its current form, the Proyecto de Habilidadación del Lago Tláhuac-Xico stands as both a symptom and a reflection of contemporary territorial politics: An ambitious, well-financed attempt to restore degraded environments, but one that risks reproducing the rooted separations between water and land, ecology and urbanization, formal and informal, that have long characterized the transformation of the Basin of

Mexico. Despite the formalization of the project, both by state authorities and by the Comisión de Cuenca de los Ríos Amecameca y La Compañía, with the objective of delivering the first results by 2024, the project is still on hold. Both the lake territory and its surroundings remain in the same state of degradation and new housing projects have been developed in the area, continuing to encroach on the environmental realm.

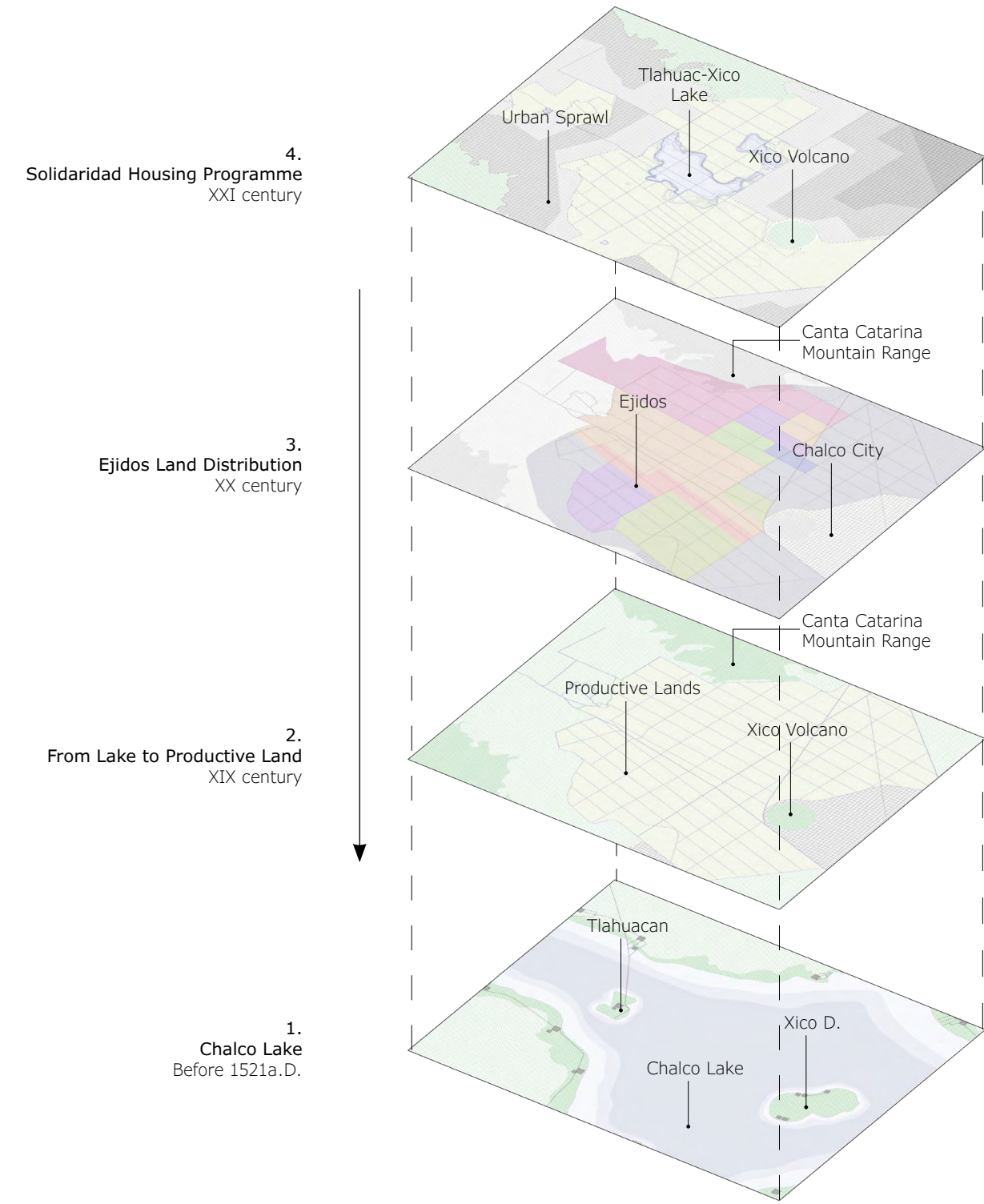


Diagram 10 | Chalco Palimpsest Superimposed Territories throughout History  
Source: By Author



Towards a Hydro-Cultural Reimagination of Chalco

The Chalco region today stands as a palimpsest of centuries of territorial transformations, ruptures, and adaptations. It is not just the result of recent demographic growth or poor planning; rather, it reflects a long history of major transformations—from the first settlers and the rise of Aztec cities, through the Spanish conquest, and into successive waves of modernization and urbanization. To understand Chalco’s current condition, its fragmented social structures, precarious environmental stability, and broken water cycles, is to recognize the layered history that has continually reshaped its land.

Yet, within this complex and degraded landscape, seeds of possibility remain. The adaptive strategies of pre-Hispanic societies, particularly the Aztecs, offer critical lessons not as nostalgic relics but as methodologies capable of informing contemporary territorial management. Aztec cosmology, far from being a purely mythological framework, served as a powerful modifier of space: a pragmatic system wherein cities were constructed in dynamic equilibrium with the hydrological cycles of the basin. Practices such as the *chinampa* agriculture, canal networks, and seasonal urban adaptations were not isolated techniques; they were embedded within an ontological commitment to coexistence between the social and environmental realms.

In this sense, reengaging with Aztec knowledge today is not about restoring a romanticized past, but about adapting vernacular practices to contemporary conditions. Despite the enormous challenges posed by overpopulation and urban sprawl, there remains an urgent opportunity to ease the ecological and social contingencies of Chalco by strategically reviving ancient water management principles. Practices rooted in the sensitive modulation of water flows, dynamic adaptation to flooding, and productive landscape infrastructures could alleviate some of the vulnerabilities exacerbated by hard, centralized infrastructure systems of control.

The cosmology that once organized the basin offers more than a symbolic or historical reference, it provides an operational model for rethinking the relationship between the built environment and hydrological systems. Unlike modern hard infrastructures that aim to dominate and neutralize water as an external threat, Aztec hydrological practices embodied an ontology wherein water was integral, sacred, and cyclical. By

reinterpreting this cosmology in contemporary terms, we could begin to imagine forms of hydro-cultural infrastructure that are adaptive rather than static, integrative rather than divisive, and productive instead of extractive.

Thus, it becomes clear that the productive path forward demands an ontological turn: a radical shift away from the perspectives that conceive of water as a problem to be solved through monumental engineering. Instead, it is necessary to promote a re-sensitization to the flows, rhythms, and unpredictability of the basin’s water cycles. Rather than constructing ever more elaborate hard infrastructures, Chalco requires a new generation of soft, productive hydro-infrastructures, systems that embrace flooding as a cyclical event, that restore infiltration and evapotranspiration processes, and that enable coexistence between urban life and environmental dynamics.

This vision calls for the creation of a hydro-cultural landscape wherein the dichotomy between social and environmental realms is overcome. It implies embracing uncertainty, designing for flexibility, and rooting territorial interventions within the cultural, historical, and ecological specificity of the basin. Projects such as the Proyecto de Habilitación del Lago Tláhuac-Xico, while well-intentioned, risk failure precisely because they reproduce the same top-down, technical responses that historically disrupted the basin’s dynamic equilibrium. True recovery demands not just infrastructural innovation, but a fundamental reconsideration of how territory is conceived, inhabited, and cared for.

Finally, any attempt to regenerate Chalco must seriously consider the traces left by each epoch that has shaped its present condition. From the sacred lakes of the Aztecs, to the first Spanish modifications, to the drained fields of the Porfirian era, from the subdivided *ejidos* to the informal urbanizations of recent decades. Every layer holds clues not only to the mistakes of the past but also to the possibilities of the future. Only by weaving this fragmented palimpsest, acknowledging its scars, its losses, but also its latent potentials, would it be feasible to begin to imagine a Chalco where water is no longer conquered, but once again becomes a vital, generative force at the heart of social and environmental life.

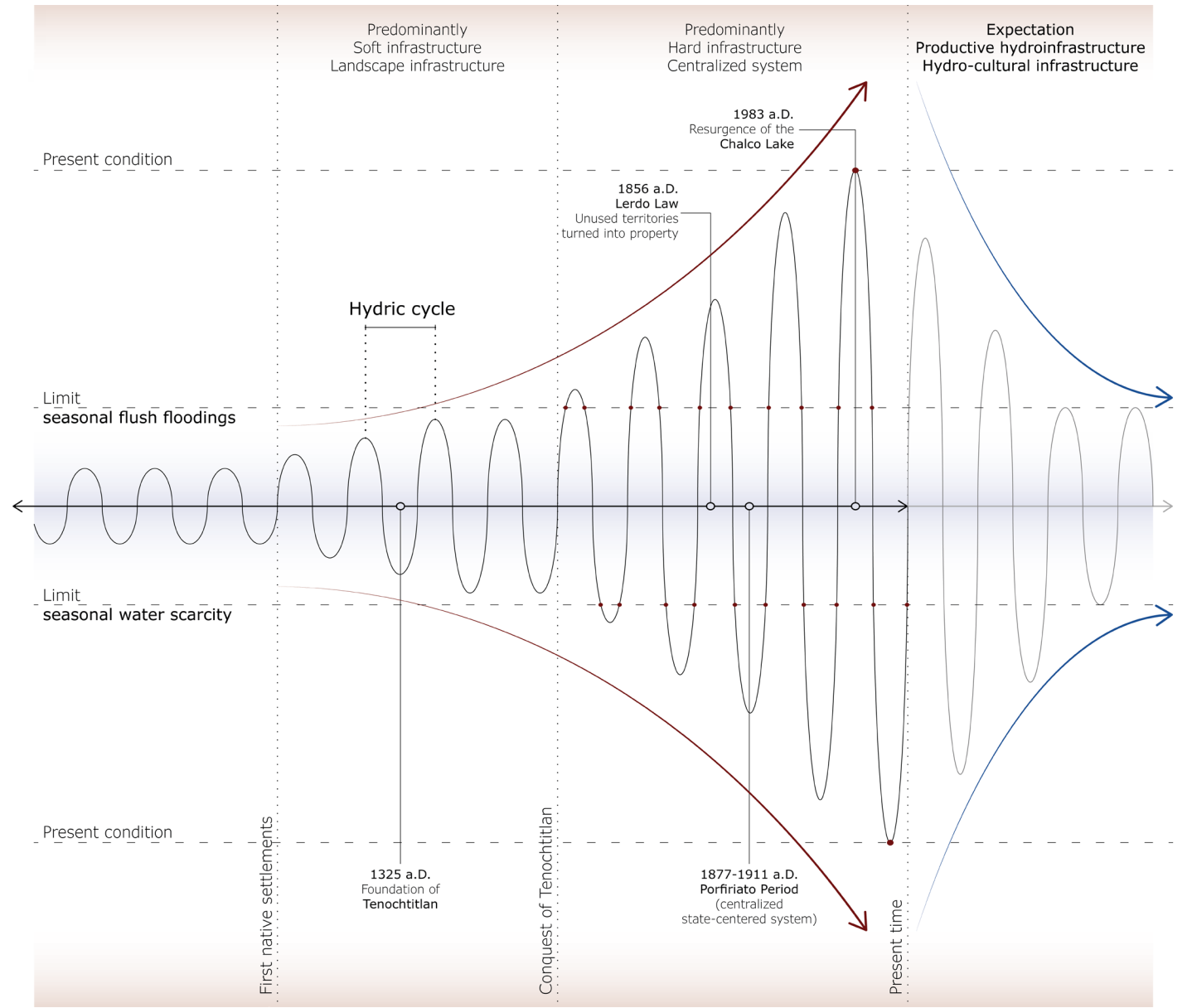


Diagram 10 | Behaviour of Water Cycles During Human Inhabitation in the Basin of Mexico and Expected Future Outcomes  
Source: By Author



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Appendix A

Final Reflection

Throughout this academic year, both the development of my architectural design project and the accompanying research process in my final thesis have become a collection of challenges, discoveries, and learnings. These were partly self-imposed—born from a desire to explore in depth a context that is familiar to me—and partly unexpected, emerging along the way and revealing the complexities of working with living realities that are constantly changing and deeply shaped by history and culture.

From the beginning, I chose to situate my project in Mexico City, my place of origin. This decision arose from a sense of clarity I had gained while living abroad: geographic and emotional distance allows us to observe more clearly the places we once took for granted. A kind of “zooming out” occurs, diluting immediate emotions and making space for a bigger, and in many ways more objective, perspective. This external viewpoint allowed me to approach my city more critically, with the desire to understand not only its physical configuration and contemporary issues but also the symbolic and cultural systems that have shaped it over time.

The choice to work with the theme of water was partly rooted in my perceived familiarity with the territory. I believed that knowing the city “like the back of my hand” would allow me to move forward quickly and confidently. I imagined that designing in Mexico, as a Mexican, would naturally make decision-making easier. However, I soon discovered that this sense of familiarity was misleading. The territorial, social, and historical dynamics surrounding water in the Basin of Mexico turned out to be far more complex and difficult to consolidate through ideas than I had expected.

One of the main methods I proposed from the beginning was mapping. My aim was to understand territorial transformations from a hydrological perspective, and I considered maps to be essential tools for this purpose. But I quickly encountered a fundamental challenge: water resists representation. Its changing nature, continuous flow, and intermittent presence defy attempts to fix it in a static image. Conventional maps, no matter how detailed, fail to capture that dynamism. I found the city full of absences—bodies of water that have been displaced, buried, or simply forgotten—that still exist in memory, in stories, and in barely perceptible physical traces in the territory. This difficulty led me to question the logic of cartographic representation itself. What does it mean to map a

territory like Mexico City, whose history is marked by the systematic displacement of water? How can one represent something that is no longer there, but whose absence so profoundly defines the present? These questions transformed my relationship with design tools and forced me to adopt a more critical and experimental approach to them.

At the same time, I faced another challenge: Conducting interviews. My intention was to speak with residents of Chalco—the area I selected for the development of my project—in order to understand how water-related problems are experienced from their own perspectives. However, the context was not conducive to this type of engagement, resulting in a series of few interviews that lacked the in-depth answers I was looking for to my questions.. For various reasons—from distrust to the social conditions of the area—the interviews I had planned could not take place as I had hoped. I had to rethink my methodology and seek out expert voices—researchers and professionals—who could offer another perspective of knowledge from the site. In this way, I would put together the pieces of each interview to construct a sustained narrative. In doing so, I encountered a wide variety of narratives, often contradictory. Each person seemed to hold a different “truth” about the history and current state of water in the city. These truths emerged from beliefs, oral histories, technical data, and even myths. This landscape revealed something fundamental to me: in a place like Mexico, and especially in Mexico City, the lines between history and myth, between science and popular knowledge, are blurred. There is a constant coexistence between the rational and the symbolic, and understanding the territory requires acknowledging this coexistence.

Facing this multiplicity of narratives made me more aware of how complex it is to build clear and precise thinking around issues that, for a long time, I had considered part of my basic understanding of the place where I was born. I realized that many of the ideas I held about the city—its history and how it functions—were not grounded in verifiable information, but in stories learned during childhood, shaped by emotions and socially transmitted values. This realization was undoubtedly one of the most important moments in the entire process: I learned to doubt, to pause what I thought I knew, and to leave space for new ways of understanding.

This practice of questioning extended into the historical

Apendix A.

realm as well. While researching the cycles of occupation of the territory and the birth of Mexico City after the conquest of Tenochtitlan, I began to reflect on how that history has been told to us. I found myself critically restudying concepts such as “colony,” which are widely used in many parts of the world without nuance, as if all peoples had experienced similar processes. I realized that the official history we learned in school is just one version among many, and that multiple narratives have been silenced or marginalized. I began to see the conquest as an event of global resonance in its time, but also as a phenomenon with many dimensions and consequences that still shape the cultural, social, and territorial dynamics of the country today.

This entire process of reflection, frustration, adaptation, and learning transformed not only my understanding of the thesis project, but also my role as an architect. Design ceased to be merely a technical or aesthetic exercise and became a form of dialogue with the territory, with its history, and with its inhabitants. I came to understand that intervening in a place is not simply about proposing a new form, but about engaging in conversation with what already exists, with what is

remembered, with what their residents believe in, and with what has been lost.

My thesis did not provide me with definitive answers. In fact, it left me with far more questions than certainties. But it taught me to ask better questions, to observe with attention, and to represent with care. I learned not to take anything for granted, not even what seems obvious simply because I grew up with it. Most of all, I learned that design is also a form of critical thinking—one that can challenge structures, narratives, and imaginaries. Working on Mexico City was both a challenge and a privilege. Rediscovering it from a new perspective, allowing myself to be surprised by its complexity, and accepting that I will never fully know it has been a deeply formative experience. I don’t feel that this process has come to an end. On the contrary, I have the sense that a door has only just opened. This research and design journey has, so far, been a way to approach a deeper understanding of the place I come from and my relationship with it. I know that this threshold I now stand at will continue to accompany me—both professionally and personally—as a source of ongoing questions, learning, and transformation.