As a response to the water crisis in Mexico City, Tacubaya Hydric District proposes a sustainable and decentralized water management system that integrates green and gray infrastructure to valorize urban waters—rainwater, graywater, and blackwater—as a resource rather than waste.

Keywords:
Water management, sustainability, medium scale, re-urbanization, infrastructural turns
DISTRITO HÍDRICO TACUBAYA / TACUBAYA HYDRIC DISTRICT

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Ubicación / Location: Tacubaya, Ciudad de México, México
Cliente / Client: Mexico Innovation Fund, David Rockefeller Center for Latin American Studies

Presupuesto / Budget: $7,000 USD
Año de proyecto / Project year: 2019-2022
Visualizaciones / Visuals: Oficina de Resiliencia Urbana, ArzoZ


A Sítuación actual / Current situation
Unlike conventional large-scale grey infrastructure or small-scale green infrastructure projects, the medium-scale “hydric district” proposes a design framework to address the water crisis in Mexico City while improving livability and biodiversity. The Hydric district expands on the conventional notion of water resources with the main premise that urban waters—rainwater, grey and sewage water—are a valuable resource and not waste.

Mexico City is going through one of the most severe environmental crises in the world, sustained by an inadequate and linear model of water extraction, pollution, and drainage. The city faces critical water scarcity aggravated by socio-spatial disparity in its distribution and management. Although there are enormous pressures to urbanize sustainably and compactly, the current water management model is no longer enough to provide the most basic water services to its residents or to new developments. Therefore, water management policy is central to the negotiation between urban redevelopment and water sustainability.

Historically, Mexico City has addressed the water crisis either at the monumental scale of grey infrastructure or, more recently, at the scale of uncoordinated green infrastructure projects. Although many resources are allocated to public and private works, almost none are channeled into exploring sustainable water management systems.

This work explores the historic area of Tacubaya as a testing ground for a “hydric district,” which can be used to apply alternative solutions for decentralized water management. The hydric district is an urban planning and design framework that integrates green and grey infrastructure and bases its processes in urban water reuse, retention, treatment and infiltration—while increasing livability by improving urban biodiversity.

The design framework of the “hydric district” proposes three main analytical lenses: 1. Reveal the history of water 2. Consolidate and expand the open space system 3. Urban water as a resource instead of a waste

These, in turn, translate into spatial strategies and a series of urban and landscape projects integrated into the dense urban fabric of Tacubaya.

Thus, the commitment of design is neither with the anthropocentric approach nor with commercial immediacy, but with the improvement of the lives of human beings and other living beings. The project proposes the collective exploration of new models and alternative ways of inhabiting cities, guided by the universal principles of equity and sensitivity to the environment. In the next 50 years, we envision a more water-sensitive and decentralized model for Mexico City. The scaling of medium-scale “hydric districts” creates a path to achieve this vision by exposing how crucial water is to life in cities.

Leyenda / Legend
1 Parque lineal río Tacubaya / Tacubaya River Linear Park
2 Corredores hídricos y de conexión / Water and connection corridors
3 Intervención en edificios históricos / Intervention in historic buildings
4 Jardines y espacios públicos históricos / Historic gardens and public spaces
5 Conexión Tacubaya norte-sur / North-south Tacubaya connection
6 Bosque Lira / Lira Forest
7 Plantas de tratamiento de agua / Water treatment plants
8 Sistemas de mercado / Market systems
9 Equipamientos emisores y productores de agua tratada / Treated water emission and production equipment
10 Nuevos desarrollos de vivienda / New housing developments

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