VI CONFERENCIA LATINOAMERICANA DE SANEAMIENTO

BOLIVIA 2022

#SaneamientoUn LlamadoALaAcción

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BRAULT

Jean-Martin Brault es Especialista Sénior de la Práctica Global de Agua del Banco Mundial en la región de América Latina y el Caribe, con más de 15 años de experiencia apoyando y liderando operaciones, servicios analíticos y de asesoramiento, e ingeniería en América Latina, África Occidental y en el Oriente Medio y África del Norte. Jean-Martin tiene un doctorado en ingeniería de aguas residuales de la Ecole Polytechnique en Montreal, Canadá, y actualmente se centra en la transformación digital en empresas de agua y la gestión "inteligente" del agua, el tratamiento y la reutilización de las aguas residuales, así como la gestión de los lodos fecales y el saneamiento urbano inclusivo.

LATINOSAN

Saneamiento Urbano Inclusivo

CITYWIDE INCLUSIVE SANITATION

GWSP
GLOBAL WATER SECURITY & SANITATION PARTNERSHIP

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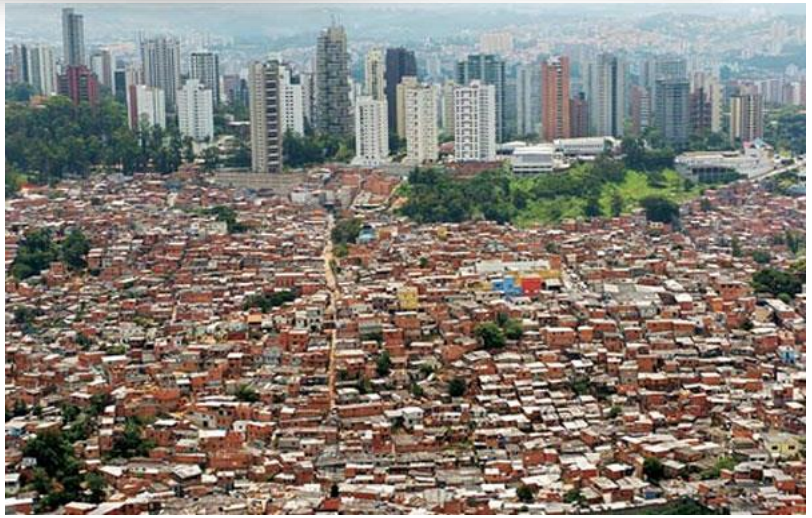
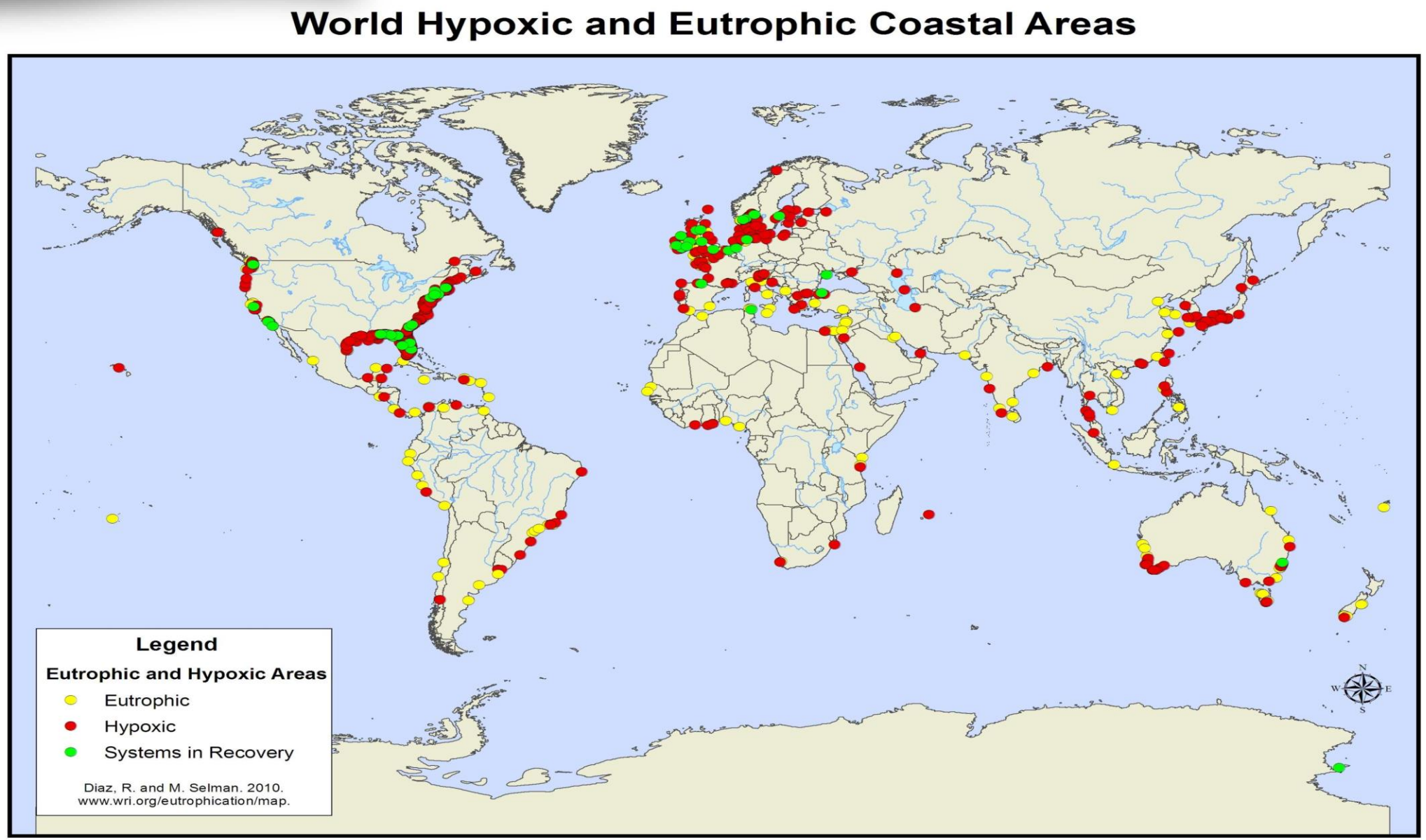
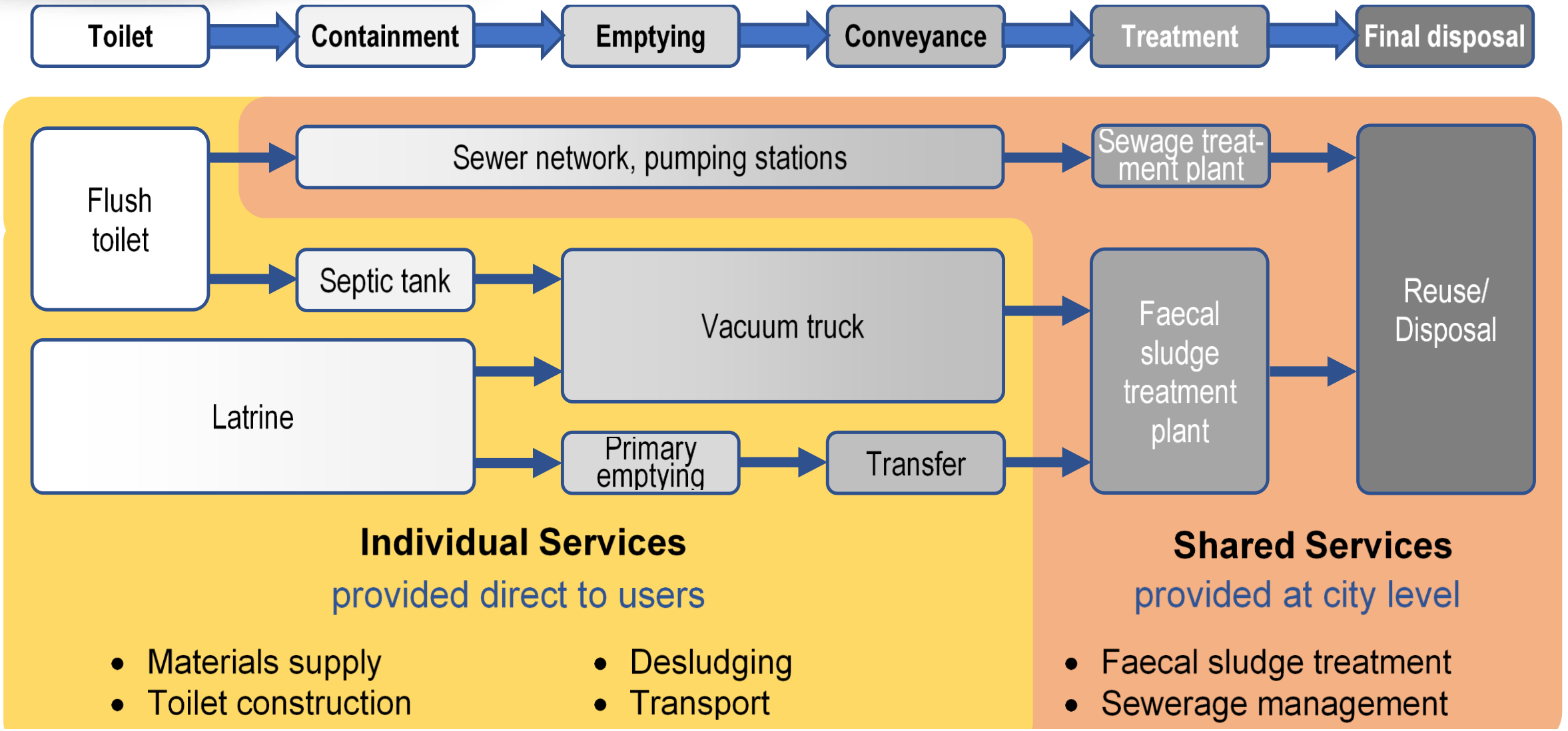
Crecimiento urbano y crecientes necesidades de servicios de saneamiento



El impacto en nuestros mares y oceanos



Saneamiento Seguro : apoyándose en una cadena de servicio completa



Saneamiento Urbano Inclusivo (Citywide Inclusive Sanitation, CWIS)

Herramientas y Recursos CWIS

***NEW: CONNECTING THE UNCONNECTED: Approaches for Getting Households to Connect to Sewerage Networks (launched on Nov.19, 2020)**

This guide looks at the reasons why so many households still get left behind and remain unconnected to existing or new sewer networks. The report also provides an overview and lessons from global experiences in order to identify the elements that can help maximize connections to sewers, including for low-income households, while drawing on the principles of CWIS.

Health, Safety and Dignity of Sanitation Workers: An Initial Assessment

The World Bank, World Health Organization (WHO), International Labour Organization (ILO) and WaterAid have joined forces to shed light on the neglected issue of sanitation workers. This report, the most extensive global exploration of the topic to date, analyzes the problems, explores good practices, and sets out actions to improve the health, safety and dignity of sanitation workers.

Shared and Public Sanitation: Championing Delivery Models That Work

A guide to the design and implementation of shared, community and public sanitation facilities, with a focus on operation and management models that support long-term service provision. The document draws on good experiences from across the globe and provides guidance for service providers (whether private or public sector entities) and service authorities, as well as consideration of the user perspective, including special needs for people with disabilities, women, the elderly, etc.

Fecal Sludge and Septage Treatment: A Guide for Low- and Middle-Income Countries

Available in English | French

This engineering design manual responds to the urgent need to provide guidance to engineers on how to design treatment works to appropriately handle the increasing volumes of faecal sludge and septage collected in the rapidly expanding towns and cities of the world. It discusses the urban contexts that influence treatment requirements and the different septage/fecal sludge treatment processes available.

Evaluating the Potential of Container-Based Sanitation:

Over the past decade, container-based sanitation (CBS) approaches have emerged as an alternative service delivery modality for the urban poor without access to other onsite or sewered solutions. Existing CBS approaches focus on delivering a *sanitation* service along the whole sanitation service chain – from containment through to treatment and reuse – rather than only providing a traditional infrastructure intervention.

The CWIS Costing & Planning Tool:

This free-to-use, open-database online tool allows planners to compare the capital and running costs of different types of sanitation solutions along the whole sanitation service chain at the component, system, and city levels – for both sewered and onsite interventions.

Fecal Sludge Flow Diagrams (SFDs):

The SFDs depict the movement of fecal sludge/septage and wastewater across a city with the objective of providing impactful visualizations of the status of sanitation in a city, in order to assist planners, decision-makers and other stakeholders in better understanding the bottlenecks, gaps and 'leakage' of waste in the city.

Urban Sanitation Rapid Assessments:

The *Urban Sanitation Rapid Assessment tool* is designed to guide task teams and their government counterparts to understand the sanitation context of the city and to recommend short-term priority interventions that are in line with the project's development objective as well as the Sustainable Development Goals.

Strategic Sanitation Planning:

The *City-level Strategic Planning for Urban Sanitation Guidance Note* is intended for use by World Bank task teams and their government counterparts, as well as other teams/organizations who are in the early stages of designing a new sanitation intervention or a new approach to providing sanitation services within a city.

Countywide Inclusive Sanitation Planning Guide:

The Government of Kenya's 'Countywide Inclusive Sanitation' initiative was initiated with the support of World Bank Technical Assistance to better understand sanitation challenges along the rural/small town/peri-urban/urban continuum. A methodology was developed in collaboration with Nakuru County and relevant national government representatives to address sanitation challenges in a county-wide manner in Nakuru. This note summarizes the methodology used in order to encourage its application in other counties in Kenya and similar decentralized administrative boundaries in other countries.

Urban Sanitation Implementation Indicators:

These indicators have been developed to guide Bank teams and their government counterparts in the development of results frameworks for urban sanitation projects and programs.

Find our guide at

https://openknowledge.worldbank.org/handle/10986/37317

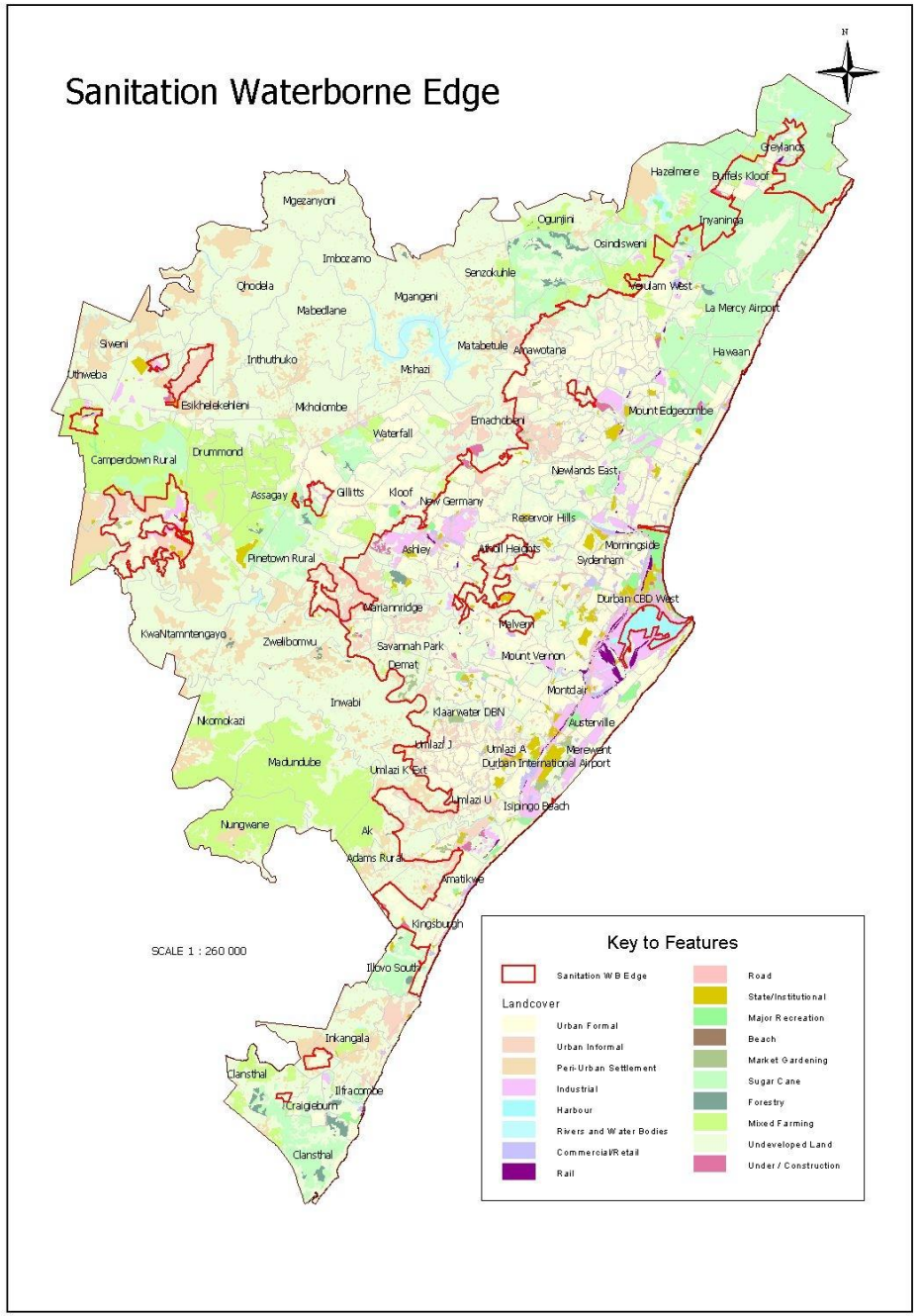
Pensando diferentemente: la “línea divisoria de saneamiento” de Durban

Caso de DURBAN, SUDÁFRICA

- Proporcionar alcantarillado a las 250.000 familias que no están conectadas a la red en Durban costaría más de US$ 4,500 millones... y no es asequible

- La política adoptada definió una “línea divisora de saneamiento” dentro de la cual la densidad era lo suficientemente alta como para que se pueda conectar alcantarillado a PTARs de una manera asequible

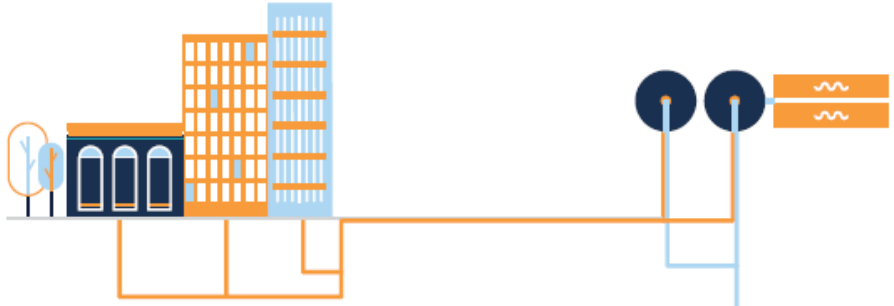
- Fuera de la línea divisora urbana, se han proporcionado opciones de saneamiento fuera de la red / in situ por unos US$ 250 millones (~ 5%)



Pensando diferentemente: el Plan Nacional de Saneamiento de Uruguay

Objetivo: 100% cobertura de saneamiento seguro en 2030

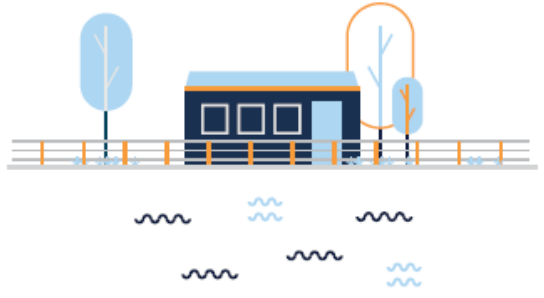
Densidad alta:
saneamiento por redes



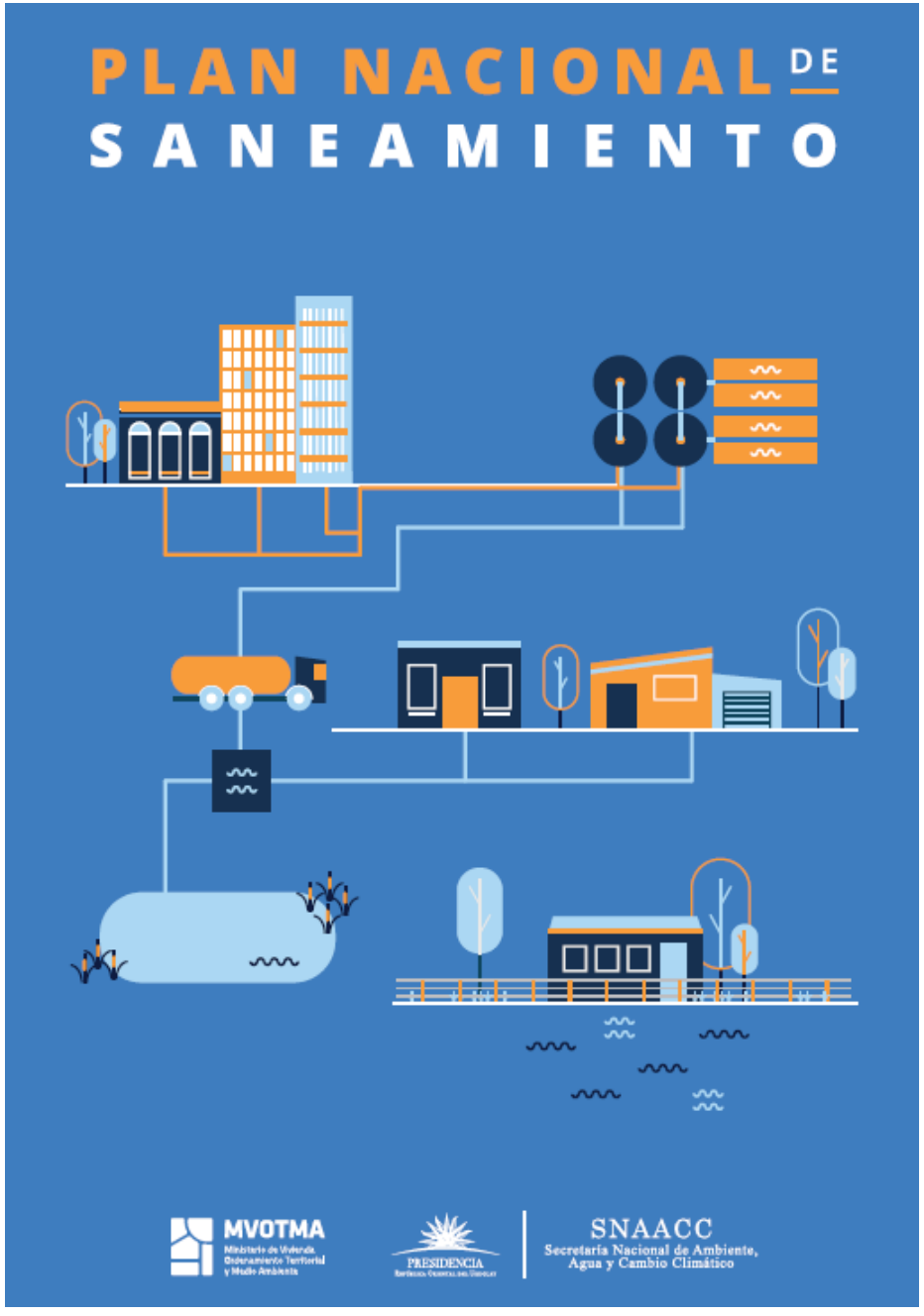
Densidad media:
tratamiendo
con barométrica

Densidad baja:
disposición en sitio

Densidad rural:
disposición en sitio



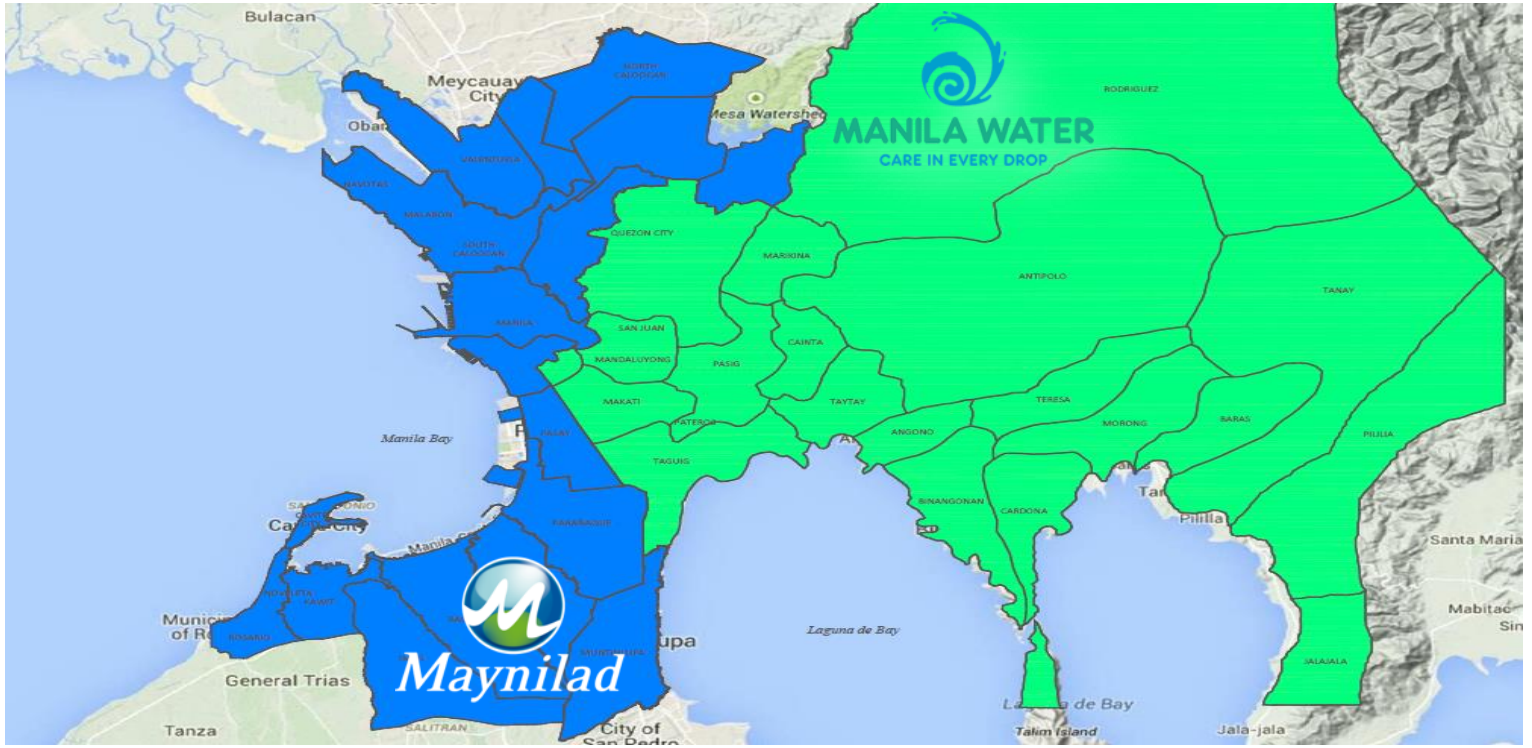
Fuente: elaboración propia



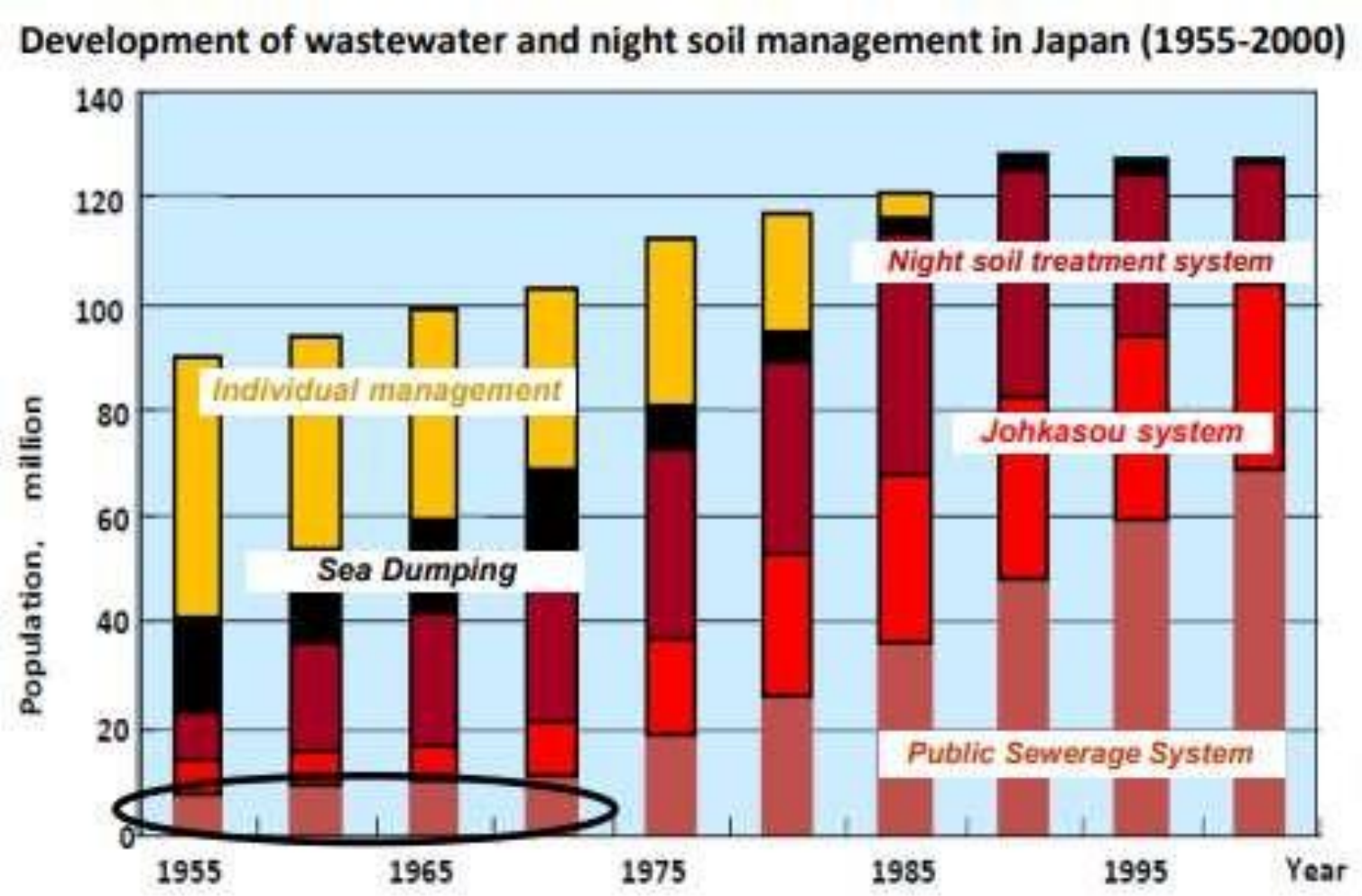
Pensando diferentemente: operadores privados y saneamiento in situ

Caso de MANILA, FILIPINAS

- Población: 10 millones
- Zonas informales de alta densidade: 18.500 capita / Km^2
- 2 concesiones de 25 años
- Los operadores tuvieron que incorporar varias soluciones de saneamiento em su menú de servicios para poder respetar sus obligaciones contractuales
- Pasaron de 3% de alcantarillado a 15% em 10 años, manteniendo en paralelo un servicio de limpieza de más de 100,000 fosas sépticas (85% de la población)

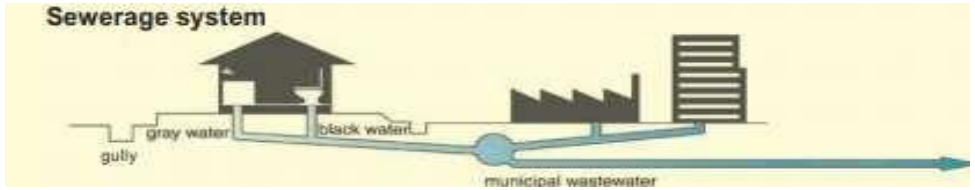


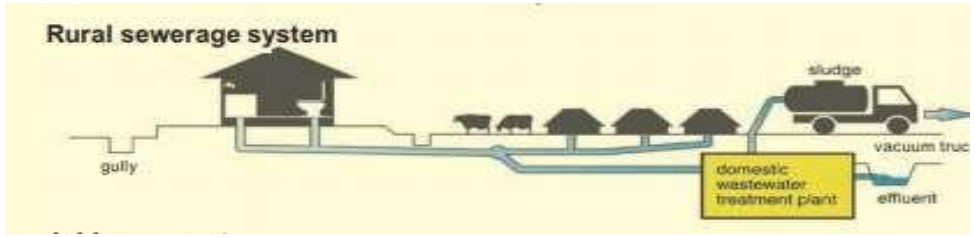
Pensando diferentemente: lograr la cobertura universal en Japón con la adopción de soluciones de saneamiento variadas

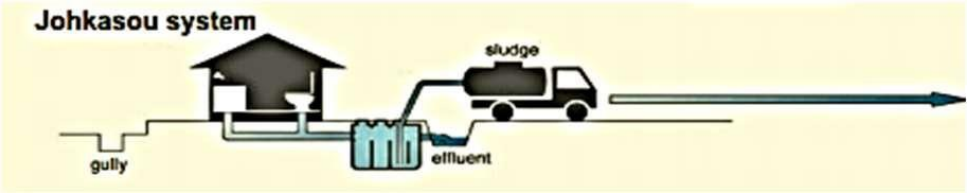


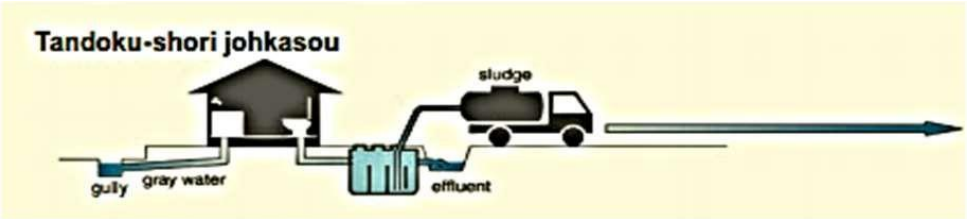
Fuente: Consórcio de Saneamiento de Japón; https://www.jeces.or.jp/spread/pdf/ws07.pdf

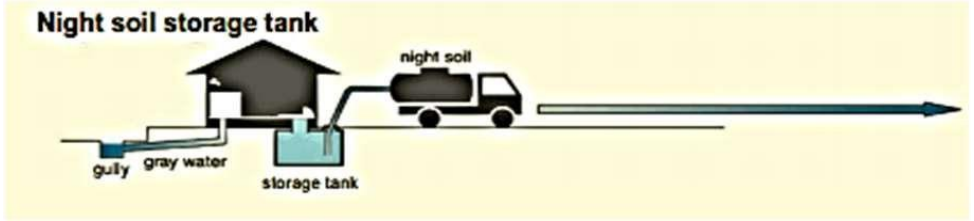
Pensando diferentemente: los sistemas in situ en Japón







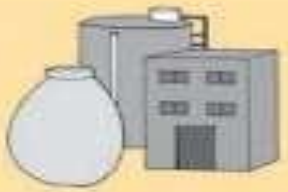




Wastewater treatment facility

Night soil treatment facility

Treatment plant for treating collected night soil and johkasou sludge.



Night soil treatment and organic waste recycling center

Treatment plant for treating and recycling collected night soil, johkasou sludge and other organic wastes

Fuente: Ministerio del Ambiente, Japón. https://www.jeces.or.jp/en/downroad/pdf/nightsoilsystems_en.pdf

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GRACIAS!

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