Mexico City Water Fund Strategic Plan

VERSION 0.7 – FULL PLAN

17 August 2017

Mexico City Action Plan – Updated 17 Aug 2017

Key Dates		
Board Meeting	20 Sept	Strategic Plan Framework Overview
Board Meeting	26 Oct	Final Strategic Plan Review
Launch	21 or 22 Nov	Introduce WF to all

Actions	Who	Date
Stakeholder Section: • Refine section (a lot of repetition, handle "detractors", align on priorities with Colin, etc.) stakeholder slides and get to next level (Omar and Eduardo do and David/Colin to comment) • After initial work by Omar, Eduardo, Colin and David, we'll do a call to finalize this section	Eduardo, Omar, David, Colin, Bert	24 August - refinement 04 September - call
Discuss stakeholder tooling with Esteban	Carlos	24 August
Raise people concerns with LAWFP	Carlos & John	24 August
Explore how to communicate long-term goals/objectives in Strategic Context Section	John	24 August
Explore if and how to link to 100+ stakeholders after slide 15 to list of 'priority stakeholders'	John	24 August
Explore how to visualize goal achievement after the problem/goal slides in strategic context section add long term goals per Banamex comment	John	07 September
Create Sustainable Financing Strategy (will inform pitch for LACC meeting on 9/25)	David/FEMSA Team	30 August
Adjust 1A cash flow for lower spending early on	Peter (updates based on Colin's feedback)	24 August
Finalize science and document review government/process/standards and incorporate into Desired State	Peter and Bert with help from team (TNC and FEMSA)	07 September
Address Colin's comments on Strategic Context, modify Word document/Strategic Plan accordingly, escalated any comment concerns	Omar, with Support From Bert, Peter and Colin	24 August
Develop milestones/Gantt tracking for Roadmap for interventions	Omar	07 September
Develop and begin implementing translation efforts	Omar	14 September
Develop 1st draft of KPIs (milestones will inform)	Team – led by Bert	07 September
Develop Communication Strategy	Eduardo & team (agency)	30 September

Contents

1. Primer: Water Security & Water Funds
2. Strategic Context
3. Mexico City WF's Vision, Mission, Values & Principles
4. Critical Obstacles/Risks To The Vision & Mission
5. Strategic Interventions & Goals
6. Stakeholder Engagement/Influencing Governance
7. Resource Requirements and Financing
8. Implementation Roadmap
9. Indicators of Success, KPIs & Benchmarks
10. Communications Strategy
11. Updating The Strategic Plan

Purpose

The purpose and objective of this 5 Year Plan is to:

1. **Improve Decision-Making** – Establishing a framework for evolving and documenting important strategic choices made by Water Fund leadership
2. **Create Focus** - Allowing for more effective goal setting and purpose-based leadership/action by the Water Fund
3. **Create a Shared Roadmap** – Driving measurable progress toward relevant impact and systemic change

1. Water Security Primer

Mexico City Water Fund Strategic Plan

What is Water Security?

Societies can enjoy water security when they successfully manage their water resources and services to:

- satisfy household water and sanitation needs in all communities;
- support productive economies in agriculture, industry, and energy;
- develop vibrant, livable cities and towns;
- restore healthy rivers and ecosystems;
- build resilient communities that can adapt to change.

How Can Water Funds Help?

Water Funds can contribute to improved water security by:

Convening stakeholders to enable meaningful & positive impact on scale

Creating awareness, educating and bringing together existing and new participants in an ongoing, structured and robust dialog which builds consensus and drives positive collaborative action

Positively influencing water-related governance & decision making

To help create systemic change, bring new decision-making structures

Closing important & relevant evidence gaps

Conducting scientific studies and aggregating our results with existing data to provide actionable insights

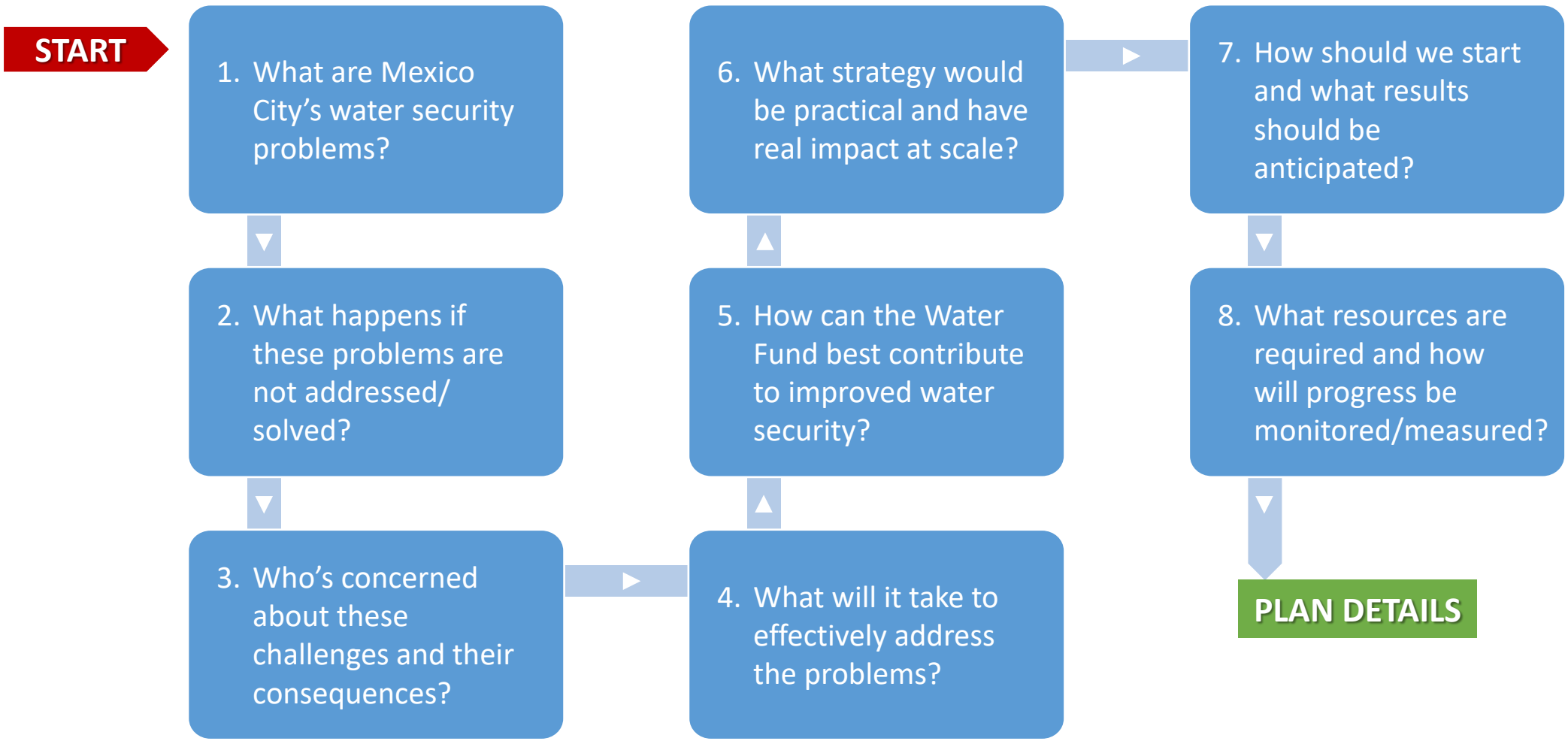
Encouraging & driving implementation of natural infrastructure & other similar innovative projects

Which could include implementation and providing financial, planning or other support for such projects

2. Strategic Context

Mexico City Water Fund Strategic Plan

Strategic Context Overview



What Are Mexico City's Water Security Problems?

More water used than recharged, increasing the rate at which the City is sinking

Significant 'lost water' and supply inefficiencies

Storm water floods the City during the rainy season

Water delivery and sanitation networks are inadequate

Untreated wastewater poses risks within/outside the City

Problem No.

1

More water used than recharged, increasing the rate at which the City is sinking

- Groundwater is over-allocated by 750 - 850 Million m^3 of per annum – which is approximately the same amount that is used by the City's population each year and enough water to fill Estadio Azteca at least 750 times
- Over-allocation reduces future GDP potential by more than MXN$ 27,800 billion/year
- Subsidence has lowered the City center area by as much as 9 meters, causing floods and damage
- To fully address the current shortfall (and allow the aquifer to recover) would require an estimated investment of almost MXN$ 4,000 million
- Total loss of infiltration per year due to land use change is around 1 to 2 million m^3

Overexploitation of the aquifers and land use changes, which reduce the aquifer recharge capacity in and around Mexico City, have accelerated the ongoing land subsidence problem, which causes physical damage to urban infrastructure and the aquifer.

Significant ‘lost water’ and supply inefficiencies

- Leaks and other losses are estimated more than 40%
- One in every 4 bills goes unpaid
- Payment of water fees is incomplete, late and not linked to actual consumption
- The current financial structure offers few incentives for water use efficiency
- Water use rights and tax resource transfer collection mechanisms are not transparent
- Drinking water fees charged are far below world standards and heavily subsidized

Poor systems and management contribute to an unsustainable financial model and wasted water.

Problem No.

3

Storm water floods the City during the rainy season

- Flooding is a major risk in at least 8 boroughs located mainly in the eastern portion of Mexico City, having severe negative impacts on road transport networks, generating heavy traffic and economic losses
- CDMX estimates that on average annual cost of rain, floods, wind, hail, and sewage overflows to be MXN$ 580 million, with more than 49,000 individuals impacted on average
- One day of operation lost at the airport due to flooding costs at least MXN$ 200 million

Loss of and damage to green infrastructure, and lack of effective feeders (secondary) to primary storm water infrastructure lead to flooding in the entire valley.

Problem No.

4

Water delivery and sanitation networks are inadequate

- Almost 2 million people have no access to piped, potable water – losing more than MXN$ 1,600 million per year of purchasing power
- The *pipa* water delivery network is unreliable and disruptive to life in services areas
- Wells and boreholes in the eastern part of the city are polluted and unsuitable for consumption and show harmful levels of ammonium nitrate in the water
- Once the Atotonilco Wastewater Treatment Plant comes on-line, about 35% of the wastewater will be discharged without treatment.

The water delivery and sanitation networks are insufficient to serve all residents of Mexico City.

Problem No.

5

Untreated wastewater poses risks within/outside the City

- The Metropolitan Area of Mexico City is by far the largest single producer of wastewater that is used for agricultural purposes
- Mexico City's use of untreated wastewater for irrigation increases gastrointestinal infections caused by water consumption. Morbidity from entamoeba histolytica has increased from 2.7 to 15.3 per thousand children wherever sewage is used for irrigation
- Environmental costs of the lack of wastewater treatment are estimated as the value of treating wastewater in the Valle de México (infrastructure, operating, and capital costs) - about MXN$ 5.70/m^3

Untreated wastewater is currently a health risk inside and outside of the city when should be considered a resource.

What If These Problems Are Not Addressed/Solved?

Economic Impact

- Associated costs continue to increase due to:
  - Needs for importing more water with significant economic, environmental and social costs
  - Further subsidence and damage to infrastructure
  - Continued flooding and associated damage
  - An unsustainable financial system with insufficient investments
- Growth and economic productivity stagnation that is not sustainable financially

Environmental Impact

- Further development leading to more overexploitation and aquifer damage
- Further soil and groundwater contamination
- Less resilience to climate change
- Loss of natural vegetation and ecosystem functionality in the Conservation Area
- Faster runoff and more damaging floods

Social Impact

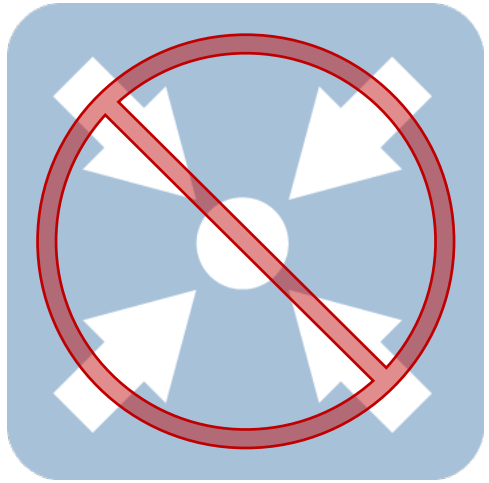
- Increased health impacts related to floods, water-borne disease and pollution
- Without adequate supply and sanitation networks, social stress will likely increase, affecting proportionately more the poorest and most vulnerable segments of society.
- Less nature, lower quality of life, increased vulnerability to water shocks, loss of livelihoods.

Who's Concerned About These Challenges/Consequences?

Population of More than

>20 Billion

w/in the largest metropolitan area in Latin America facing water scarcity



But No Clear Central Platform

where stakeholders can convene & collaborate on comprehensive solutions/optimum path forward

What Will It Take To Effectively Address These Problems?

Convening Organization

bringing together stakeholders to improve governance & accelerate the selection/implementation of solutions

+

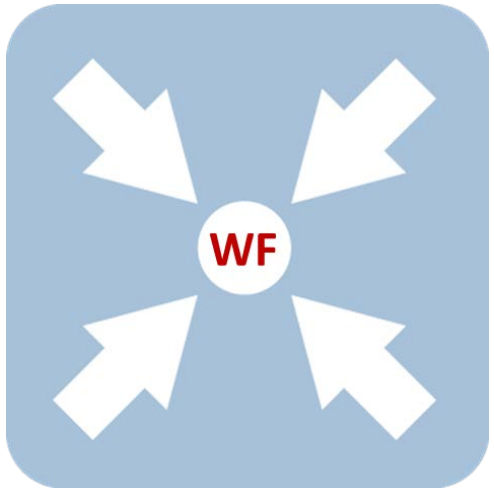
				
More water used than recharged, increasing the rate at which the City is sinking	**Significant 'lost water' and supply inefficiencies**	**Storm water floods the City during the rainy season**	**Water delivery and sanitation networks are inadequate**	**Untreated wastewater poses risks within/ outside the City**
To resolve, these problems will require initiatives and related policies:				
That reduce water demand and increase supply	*To improve the management of water use*	*To improve the collection, transportation and reuse of rainwater*	*That increase investment in water and wastewater networks and technologies*	*That increased investment in wastewater treatment and wastewater reuse technologies*

How Can The WF Best Contribute To Improved Water Security?

START W/QUICK WINS TO BUILD CREDIBILITY

Convening stakeholders to enable meaningful & positive impact on scale	Positively influencing water-related governance & decision making
Closing important & relevant evidence gaps	Encouraging & driving implementation of natural infrastructure & other similar innovative projects

POSITION THE FUND FOR SUCCESS



- Credible central collaboration point where key stakeholders can accelerate water security improvements
- Concentrating efforts on effectively influencing and improving public policy

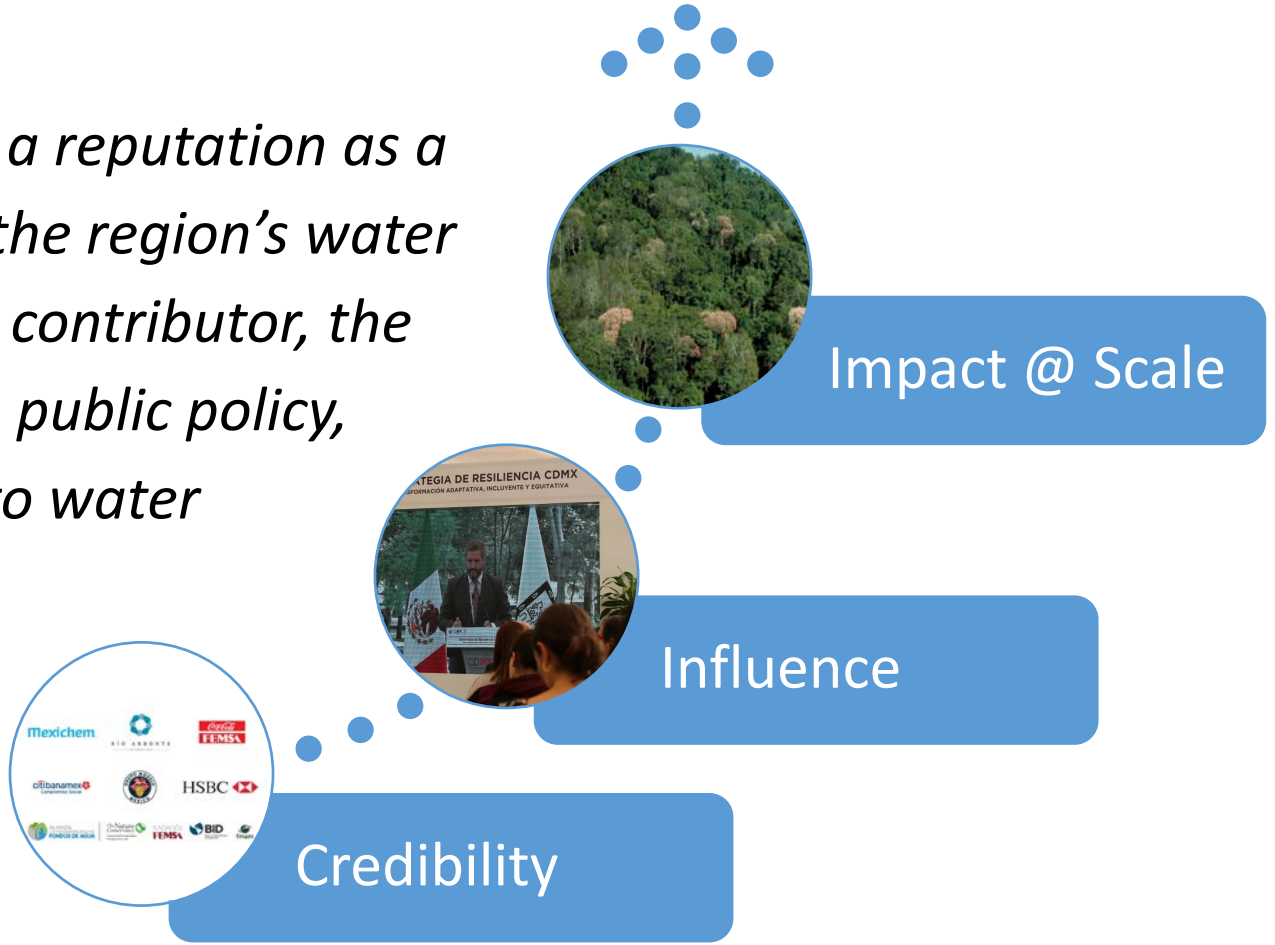
HELP CREATE SYSTEMIC CHANGE & WATER SECURITY

- Removing barriers and unlocking the potential to make significant and comprehensive improvements in water security across the region

What Strategy Would Be Practical & Have Real Impact At Scale?

WATER FUND'S STRATEGY

Mexico City Water Fund will first build a reputation as a credible entity that can help enhance the region's water security. Once established as relevant contributor, the WF will increase its ability to influence public policy, mobilize stakeholders and contribute to water governance, ultimately unlocking the potential to create significant impacts at scale.



How Should We Start?

CDMX CIUDAD DE MÉXICO

SEDEMA

SISTEMA DE AGUAS DE LA CIUDAD DE MÉXICO

+

Convening stakeholders to enable meaningful & positive impact on scale

Positively influencing water-related governance & decision making

Closing important & relevant evidence gaps

Encouraging & driving implementation of natural infrastructure & other similar innovative projects

ENGAGE CRITICAL STAKEHOLDERS

- To ensure alignment, without which the WF could not operate or exist

BEGIN BUILDING CREDIBILITY

- Showing how the Fund can contribute to solving water security problems in ways that are impactful and scalable
- Delivering examples where the Fund has influenced public policy, even if in small ways, to show the future impact that can be made

…And What Results Should Be Expected?

More water used than recharged, increasing the rate at which the City is sinking

Significant 'lost water' and supply inefficiencies

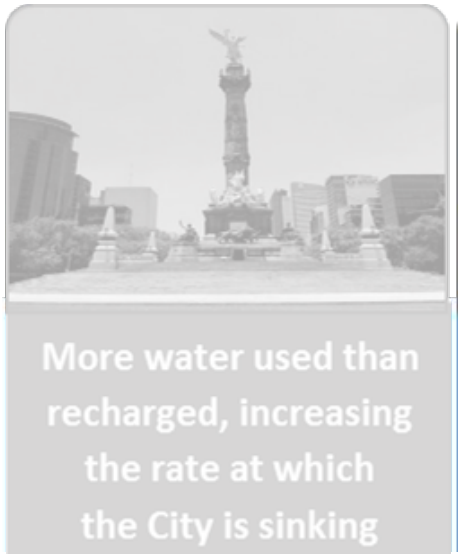
Storm water floods the City during the rainy season

Water delivery and sanitation networks are inadequate

Untreated wastewater poses risks within/ outside the City

What's Needed	Recommended WF Intervention(s)	5-Year Goal(s)
To resolve this will require initiatives and related policies that reduce water demand and increase supply.	A. Implement restoration/conservation projects that increase credibility, influence public policies, generate a replicable model and maintain and/or increase recharge.	• Save 500 ha in recharge areas (saving an est. 3 million m^3 of water/year). • Restore 800 ha of land (increasing recharge by an est. 4 million m^3 of water/year). • Prove that natural infrastructure can make a significant (>3 m^3/s) impact on recharge of the aquifer • Water Fund holds a formal role in relevant governance bodies, such as the CDMX Resiliency Plan
	B. Promote water-use efficiency and water/wastewater reuse in all sectors (residential, business, agriculture, institutions, government) to impact demand, build credibility and influence water use standards and policies (safeguard recovered volumes).	• Water Fund is recognized as Water Champion (as measured by 'perception studies').

…And What Results Should Be Expected (cont.)?



More water used than recharged, increasing the rate at which the City is sinking

Significant 'lost water' and supply inefficiencies

Storm water floods the City during the rainy season

Water delivery and sanitation networks are inadequate

Untreated wastewater poses risks within/ outside the City

What's Needed	Recommended WF Intervention(s)	5-Year Goal(s)
To resolve this will require initiatives to improve the management of water use and related policies.	A. Engage with relevant stakeholders and governing bodies to demonstrate effective management, pricing systems and structure.	• Reduce non-revenue water to 36% by influencing the utility and other relevant stakeholders.
	B. Set up an exchange with other cities with similar problems to understand relevant best practice solutions that could be applied locally.	• At least 4 mega-city benchmarks executed and best practices from benchmarks incorporated into the WF's strategic plan. • At least 4 MOU's established with stakeholders in cities to adopt best practices.

…And What Results Should Be Expected (cont.)?

More water used than recharged, increasing the rate at which the City is sinking

Significant 'lost water' and supply inefficiencies

Storm water floods the City during the rainy season

Water delivery and sanitation networks are inadequate

Untreated wastewater poses risks within/ outside the City

What's Needed	Recommended WF Intervention(s)	5-Year Goal(s)
To resolve this will require initiatives and related policies to improve the collection, transportation and reuse of rainwater.	A. Support relevant interventions identified in the AEP, UNAM, CAF & Deltares study: TOWARDS A WATER SENSITIVE MEXICO CITY - Public space as a rain management strategy.	• Develop a Master Plan for the implementation of specific interventions. • Jointly execute 10 demonstration projects.

…And What Results Should Be Expected (cont.)?

More water used than recharged, increasing the rate at which the City is sinking

Significant 'lost water' and supply inefficiencies

Storm water floods the City during the rainy season

Water delivery and sanitation networks are inadequate

Untreated wastewater poses risks within/ outside the City

What's Needed	Recommended WF Intervention(s)	5-Year Goal(s)
To resolve this will require increased investment in water and wastewater networks and technologies.	A. Study the current situation associated with domestic supply and sanitation issues to: • define affected stakeholders and cur-rent impacts (economic, social, etc.); • monetize the cost of inaction related to these matters; and • use data to define most appropriate interventions and sources of funding, creating justification for change and a sense of urgency.	• Influence government agencies and non-governmental stake-holders to increase investment by 10% for water supply and sanitation infrastructure improvements.

…And What Results Should Be Expected (cont.)?

More water used than recharged, increasing the rate at which the City is sinking

Significant 'lost water' and supply inefficiencies

Storm water floods the City during the rainy season

Water delivery and sanitation networks are inadequate

Untreated wastewater poses risks within/ outside the City

What's Needed	Recommended WF Intervention(s)	5-Year Goal(s)
To resolve this will require increased investment in wastewater treatment and wastewater reuse technologies.	A. Create a program to encourage the adoption of innovative treatment and reuse technologies and improved practices (with an emphasis on natural infrastructure) and recognize achievements.	• Program created and effective technologies/practices have been adopted at least 3 times – preferably by consumer-facing companies or other high visibility stakeholders..

What Resources Are Required & How Will Progress Measured?

Resource Requirements ≈

MXN$ 238 Million

To implement the recommend interventions over the next 5 years financed by a combination of LAWFP and local funding sources

Details on interventions, financing, resource requirements, implementation plans and progress measures are provided throughout the remainder of this Plan

3. Vision, Mission, Values & Principles

Mexico City Water Fund Strategic Plan

Vision, Mission, Values & Principles

Water Security Vision for Mexico City

We envision a water secure Mexico City by 2050, which means:

- a water balance has been achieved,
- water and wastewater are effectively managed;
- clean water & sanitation is provided to all;
- more resilient to flood and droughts; and
- is done in a way that can be sustained.

Water Fund Mission

Our mission is to contribute to improved water security in Mexico City. We will do this by: 1) helping to close evidence gaps; 2) Influencing decision making; 3) implementing and supporting natural infrastructure projects; and 4) convening stakeholders to enable meaningful positive impact on scale. We believe our contributions will result in these outcomes:

- more groundwater recharge and wiser use of water;
- greater investment and innovation to improve water/wastewater management and resiliency to flood and droughts; and
- a more robust and positive dialog on the value of water.

Values

- Integrity, trust & transparency
- Respect for the environment, people, communities & cultures
- Commitment to inclusion, understanding, communication and cooperation
- Credibility, excellence, efficiency, efficacy, accountability and tangible lasting results
- Initiative, innovation and creativity

Principles

- Have a preference for conservation and natural infrastructure solutions
- Foster economic growth and public good, always aiming for creating shared value
- Drive towards systemic change
- Utilize science-based driven decision-making

4. Critical Obstacles/Risks To The Vision & Mission

Mexico City Water Fund Strategic Plan

Critical Obstacles/Risks To The Our Mission

#	Critical Potential Obstacles/Risks	How WF Will Navigate/Mitigate
1	Existing 'players' construe the WF as a threat to their position (e.g., local authorities) which could also affect other stakeholder perceptions.	WF will use best practice stakeholder engagement process to deeply understand each stakeholder's aspirations, interests and influence coupled with routine and purpose-driven engagement to avoid this potential. We will also define the Water Fund's objectives to be complementary to other key stakeholders, thus avoiding overlap (competition).
2	The stakeholder landscape is fragmented with multiple municipal and state authorities governing the areas of potential intervention. Some existing interventions, policies and plans are already being implemented by some actors, but lack synergy and coordination.	Networks of the WF Steering Committee members and the Director are sufficiently deep to create an understanding of this landscape and address its challenges. This, coupled with best practice stakeholder engagement processes, position the WF to not only mitigate this risk, but could uniquely position it to serve as the coordinating platform, reducing this obstacle for all. Also the WF should be presented as a neutral platform serving the common good.
3	The problem is very large and complex, addressing the entire water security situation with all its dimensions could overwhelm any single organization.	WF's systematic approach to selecting an optimum mix of interventions creates clarity and focus, providing the best chance for: 1) gaining credibility by making impact quickly; and 2) then realizing impacts over the long-term that will contribute to systemic change, in a modular approach that starts with the most realistic interventions and builds a track record before tackling more complicated items.
4	Corruption and non-enforcement could limit the WF and other supporters' effectiveness, thus making current challenges more difficult to resolve.	WF priorities and plans include significant focus on careful communications and advocacy to encourage better governance through incentives to drive greater integrity through positive behavior change. The WF's own activities should be driven by its values and principles, and should be in line with international transparency standards, to lead by example. The Water Fund will execute a sound anti-corruption policy to maintain credibility, effectiveness and to reduce risks.
5	Acquired land rights by minorities (e.g. squatters, legal or illegal) seem to trump the interests of the majority of inhabitants in the case of protection of recharge areas.	The WF has an ongoing pilot project that is actively addressing these risks to deal with the social dimension of this issue, at a smaller scale. Learnings and best practices will be extended to other interventions as relevant.

Critical Obstacles/Risks To Our Mission (cont.)

#	Critical Potential Obstacles/Risks	How WF Will Navigate/Mitigate
6	There's too little political capital in fixing infrastructure (especially for natural infrastructure), promoting such interventions may be difficult politically.	Careful stakeholder engagement by the WF will include delivering tools to help enable better decisions. Specifically these efforts will include providing better 'investment cases' that justify the value of investing in appropriate infrastructure.
7	The potential for conflict of interest among WF stakeholders, including participants not conforming with relevant legal requirements; official development plans that conflict with the WF's Vision/Mission; proposed WF changes that are perceived as negatively impacting government revenue, etc.	Shared values and principles among the WF Steering Committee members, their current organizational reputations and effective stakeholder engagement serves to mitigate some dimensions of this risk. WF priorities and plans that focus on advocacy to encourage better governance aim-to address conflicting priorities with policy makers and government agencies.
8	WF's credibility and reputation negatively impacted by: error and omissions; lack of results/realization of goals.	Enhancements to the WF's creation and operation processes, the WF's governance structure, the use of experts and committees and other checks and balances mitigate the risks of errors and omissions. Similarly these changes create focus and increase the chance for realizing timely impact. Realistic, yet meaningful objectives will also be established to mitigate risk of failure.
9	WF's ability to respond to unanticipated change and/or unintended consequences from the Fund's actions. Examples could include: greater than expected impact from climate change; greater growth than anticipated in the City and/or source areas that affect supply; and natural disasters.	Enhanced processes, governance and tools (especially audit/assurance and continuous improvement measures) should help the WF better manage change and mitigate this risk. Also, a crisis management system should ensure an effective response to any unforeseen circumstance.
10	WF is unable to establish financial sustainability over the long-term.	With previously mentioned process enhancements, creating a financially sustainable WF is contemplated as part of its Design phase. For this WF, long term financial plans are being devised for various sources of future funding, including financing from private-sector investors, multilaterals and relevant government agencies as described in the Resource Assessment/Requirements section of this Plan. The WF will aim to make a sound case for investment that is attractive to and targeted at different financial audiences.

Critical Obstacles/Risks To Our Mission (cont.)

#	Critical Potential Obstacles/Risks	How WF Will Navigate/Mitigate
11	The WF is restricted, prohibited or unable to contribute or participate in relevant formal public decision-making structures.	As above, process enhancements require WFs contemplate and position the Funds to participate as part of its Design phase. For this WF, plans are underway to ensure the WF has increasing influence. Clear neutrality and autonomy through collaboration with different sectors and stakeholders should establish the WF as a relevant resource institution
12	Certain groups view the WF as an advocate for privatization trigger political backlash.	Ensure the WF has a broad basis of members and partners from different sectors, including academia, civil society and the public sector, to dilute current dominance of private companies. The WF will communicate that it goals and objectives are to improve water security for all users and not a vehicle to promote corporate interests.
13	The changing of political powers at the State or local level could harm momentum, especially if new regimes have divergent views on water security and how to fund improvements in a challenging financial environment.	Strong communications and stakeholder engagement that the goals and objectives of the WF are cross-cutting, unrelated to party affiliation or private interests and are aimed at the critical to the economic, social and environmental well-being of the entire region. Also, based on scientific evidence, demonstrate the benefits of the WF's goals and objectives.

5. Strategic Interventions & WF Goals

Mexico City Water Fund Strategic Plan

Addressing Problems w/Aligned Interventions, Goals & Actions

PROBLEM

More water used than what's re-charged causing the City to sink

Desired Systemic Change		Long-Term WF Goals	
Ways The WF Can Contribute	Strategic Interventions	How Does This Advance WFs Strategy Over The Next 5 Years?	WF 5 Year Goal(s)
✓ ✓ ✓ ✓		Credibility	
		Influence	
		Impact @ Scale	

Strategy Result Chain	Strategy Result Chain
Strategy Result Chain	Strategy Result Chain

Impact @ Scale

Influence

Credibility

STRATEGIES, GOALS & ACTIONS ALIGNED WITH THE WF's STRATEGY

Problem No.

1

ⓘ

PROBLEM

More water used than recharged, increasing the rate at which the City is sinking

DETAILS

Overexploitation of the aquifers and land use changes, which reduce the aquifer recharge capacity in and around Mexico City, have accelerated the ongoing land subsidence problem, which causes physical damage to urban infrastructure and the aquifer.

MAGNITUDE

- Groundwater is over-allocated by 750 - 850 Million M^3 of per annum. This over-allocation costs more than MXN$ 27,800 billion/year.
- Subsidence has lowered the City center area by as much as 9 meters, causing floods and damage.
- To address the current shortfall (and allow the aquifer to recover) would require an estimated investment of almost MXN$ 4,000 million.
- Total loss of infiltration per year due to land use change is around 1 million M^3.

Desired Systemic Change

- ☑ A water balance has been achieved.
- ☑ Water and wastewater are effectively managed.
- ☐ Clean water & sanitation is provided to all.
- ☑ The metropolis is more resilient to flood and droughts.

Long-Term WF Goals

- ☑ More groundwater recharge and wiser use of water in the region.
- ☑ Greater investment and innovation to improve water/ wastewater management and resiliency to flood and droughts.
- ☐ A more robust and positive dialog on the value of water.

Ways The WF Can Contribute	Strategic Interventions	*How Does This Advance WFs Strategy Over The Next 5 Years?		WF 5 Year Goal(s)
	A. Implement restoration/conservation projects that increase credibility, influence public policies, generate a replicable model and maintain and/or increase recharge	**Credibility**	★★★★☆	Save 500 ha in recharge areas (saving an estimated 3 million m^3 of water per year) Restore 800 ha of land (increasing recharge by an estimated 4 million m^3 of water per year) Prove that natural infrastructure can make a significant (>3 m^3/s) impact on recharge of the aquafer Water Fund holds a formal role in relevant governance bodies, such as the CDMX Resiliency Plan
		Influence	★★☆☆☆	
		Impact @ Scale	★☆☆☆	
	B. Promote water-use efficiency and water/wastewater reuse in all sectors (residential, business, agriculture, institutions, government) to impact demand, build credibility and influence water use standards and policies (safeguard recovered volumes).	**Credibility**	★★★★☆	Water Fund is recognized as Water Champion (Perception Studies)
		Influence	★★★☆☆	
		Impact @ Scale	★☆☆☆☆	

*Strategy ratings based on the expert opinion of team members and are in relation to each other

Problem No.

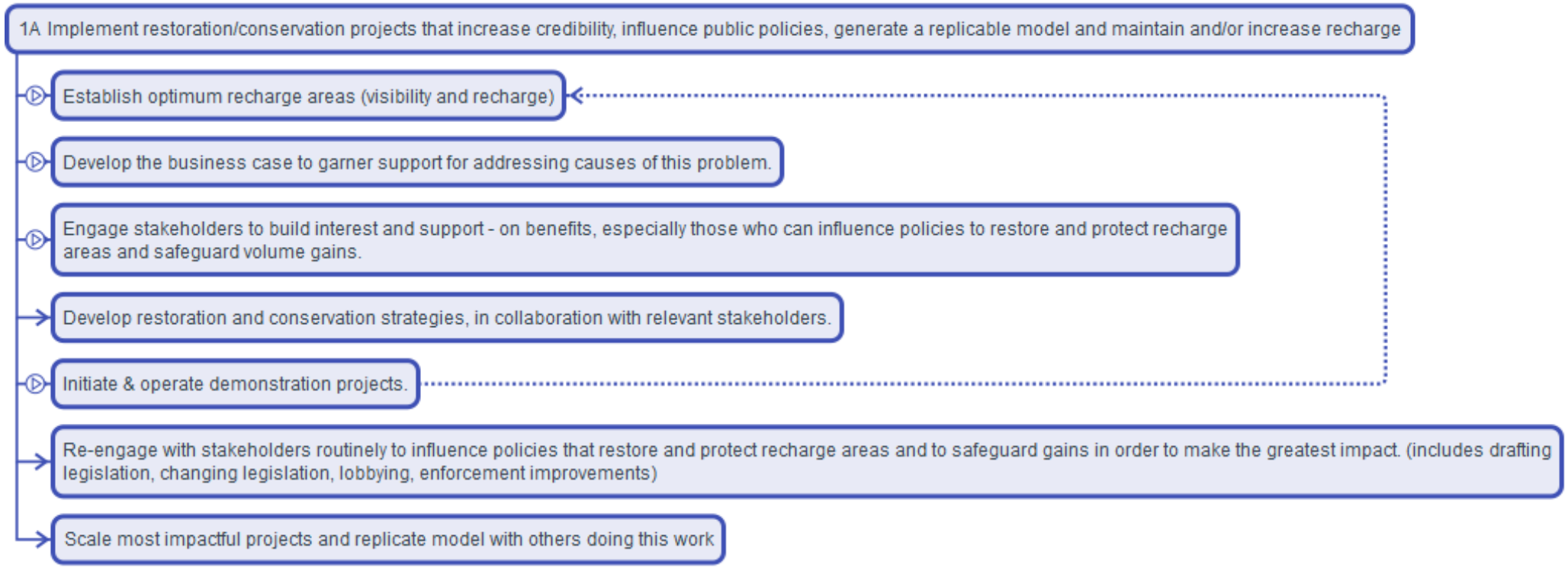
1

ⓘ

More water used than recharged, increasing the rate at which the City is sinking

Overexploitation of the aquifers and land use changes, which reduce the aquifer recharge capacity in and around Mexico City, have accelerated the ongoing land subsidence problem, which causes physical damage to urban infrastructure and the aquifer.

Intervention Strategy 1A: Results Chain



WF 5 Yr. Goal(s)

- Save 500 ha in recharge areas (saving an estimated 3 million m^3 of water per year)
- Restore 800 ha of land (increasing recharge by an estimated 4 million m^3 of water per year)
- Prove that natural infrastructure can make a significant (>3 m^3/s) impact on recharge of the aquafer
- Water Fund holds a formal role in relevant governance bodies, such as the CDMX Resiliency Plan

Problem No.

1

ⓘ

More water used than recharged, increasing the rate at which the City is sinking

Overexploitation of the aquifers and land use changes, which reduce the aquifer recharge capacity in and around Mexico City, have accelerated the ongoing land subsidence problem, which causes physical damage to urban infrastructure and the aquifer.

Intervention Strategy 1B: Results Chain

WF 5 Yr. Goal(s)

- Water Fund is recognized as Water Champion (Perception Studies)

Problem No.

2

ⓘ

PROBLEM

Significant ‘lost water’ and supply inefficiencies

DETAILS

Poor systems and management contribute to an unsustainable financial model and wasted water.

MAGNITUDE

- Leaks and other losses are estimated at 40%.
- One in every 4 bills goes unpaid.
- Payment of water fees is incomplete, late and not linked to actual consumption.
- The current financial structure offers few incentives for water use efficiency.
- Water use rights and tax resource transfers collection mechanisms are not transparent.
- Drinking water fees charged far below world standards and heavily subsidized.

Desired Systemic Change

- ☑ A water balance has been achieved.
- ☑ Water and wastewater are effectively managed.
- ☐ Clean water & sanitation is provided to all.
- ☑ The metropolis is more resilient to flood and droughts.

Long-Term WF Goals

- ☑ More groundwater recharge and wiser use of water in the region.
- ☑ Greater investment and innovation to improve water/ wastewater management and resiliency to flood and droughts.
- ☑ A more robust and positive dialog on the value of water.

Ways The WF Can Contribute	Strategic Interventions	*How Does This Advance WFs Strategy Over The Next 5 Years?		WF 5 Year Goal(s)
	A. Engage with relevant stakeholders and governing bodies to demonstrate effective management, pricing systems and structure.	**Credibility**	★★★★☆	Reduce non-revenue water to 36% by influencing the utility and other relevant stakeholders
		Influence	★★★☆☆	
		Impact @ Scale	★★☆☆☆	
	B. Set up an exchange with other cities with similar problems and exchange best practices.	**Credibility**	★★★★☆	At least 4 city benchmarks executed and best practices from benchmarks incorporated into the WF’s strategic plan At least 4 MoU’s established with relevant stakeholders in cities
		Influence	★★★☆☆	
		Impact @ Scale	★☆☆☆☆	

*Strategy ratings based on the expert opinion of team members and are in relation to each other

Problem No.

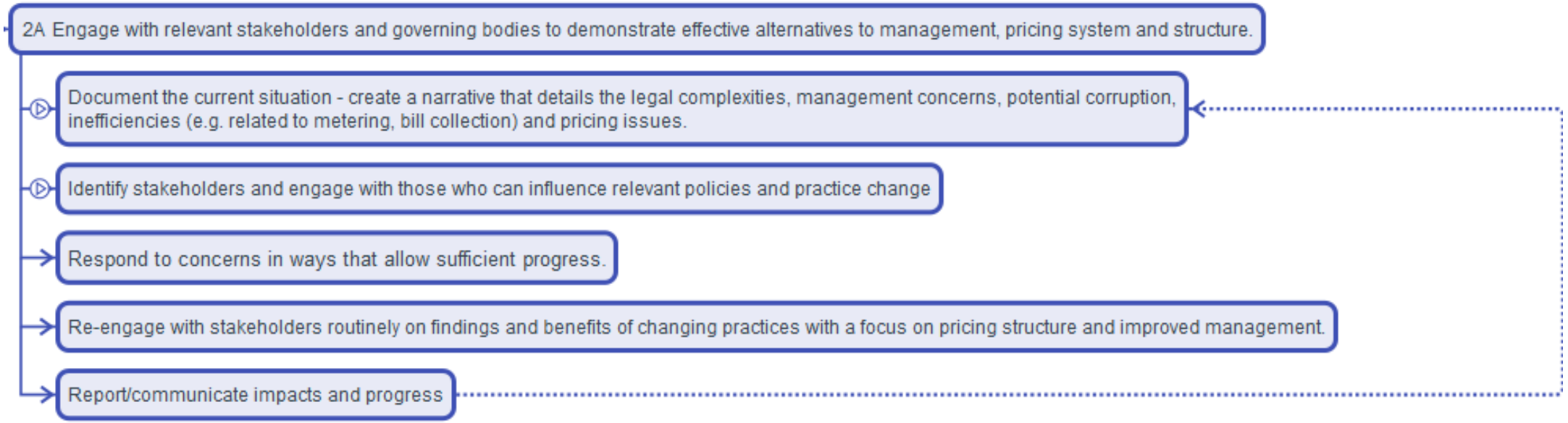
2

ⓘ

Significant ‘lost water’ and supply inefficiencies

Poor systems and management contribute to an unsustainable financial model and wasted water.

Intervention Strategy 2A: Results Chain



WF 5 Yr. Goal(s)

- Reduce non-revenue water to 36% by influencing the utility and other relevant stakeholders

Problem No.

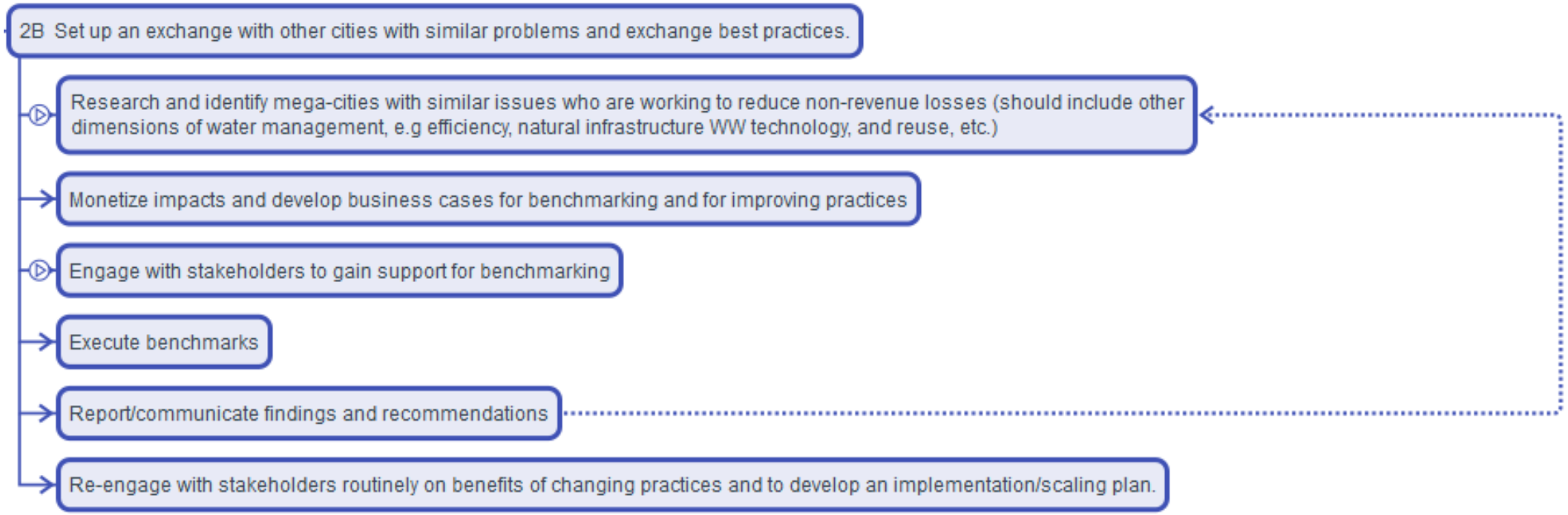
2

ⓘ

Significant ‘lost water’ and supply inefficiencies

High amounts of non-revenue water and poor management contribute to increased costs and water waste.

Intervention Strategy 2B: Results Chain



WF 5 Yr. Goal(s)

- At least 4 city benchmarks executed and best practices from benchmarks incorporated into the WF’s strategic plan
- At least 4 MoU’s established with relevant stakeholders in cities

Problem No.

3

ⓘ

PROBLEM

Storm water floods the City during the rainy season

DETAILS

Loss of and damage to green infrastructure, and lack of effective feeders (secondary) to primary storm water infrastructure lead to flooding in the entire valley.

MAGNITUDE

- Flooding is a major risk in 8 major boroughs of Mexico City, having severe negative impacts on road transport networks, generating heavy traffic and economic losses.
- CDMX estimates that on average annual cost of rain, floods, wind, hail, and sewage overflows to be MXN$ 580 million, with more than 49,000 individuals impacted on average
- One day of operation lost at the airport due to flooding costs at least MXN$ 200 million.

Desired Systemic Change

- ☐ A water balance has been achieved.
- ☑ Water and wastewater are effectively managed.
- ☐ Clean water & sanitation is provided to all.
- ☑ The metropolis is more resilient to flood and droughts.

Long-Term WF Goals

- ☑ More groundwater recharge and wiser use of water in the region.
- ☑ Greater investment and innovation to improve water/ wastewater management and resiliency to flood and droughts.
- ☐ A more robust and positive dialog on the value of water.

Ways The WF Can Contribute	Strategic Interventions	*How Does This Advance WFs Strategy Over The Next 5 Years?		WF 5 Year Goal(s)
	A. Support relevant interventions identified in the AEP, UNAM, CAF & Deltares study: TOWARDS A WATER SENSITIVE MEXICO CITY - Public space as a rain management strategy.	**Credibility**	★★★★☆	Develop a Master Plan for the implementation of interventions Jointly execute 10 demonstration projects
		Influence	★★★☆☆	
		Impact @ Scale	★☆☆☆☆	

*Strategy ratings based on the expert opinion of team members and are in relation to each other

Problem No.

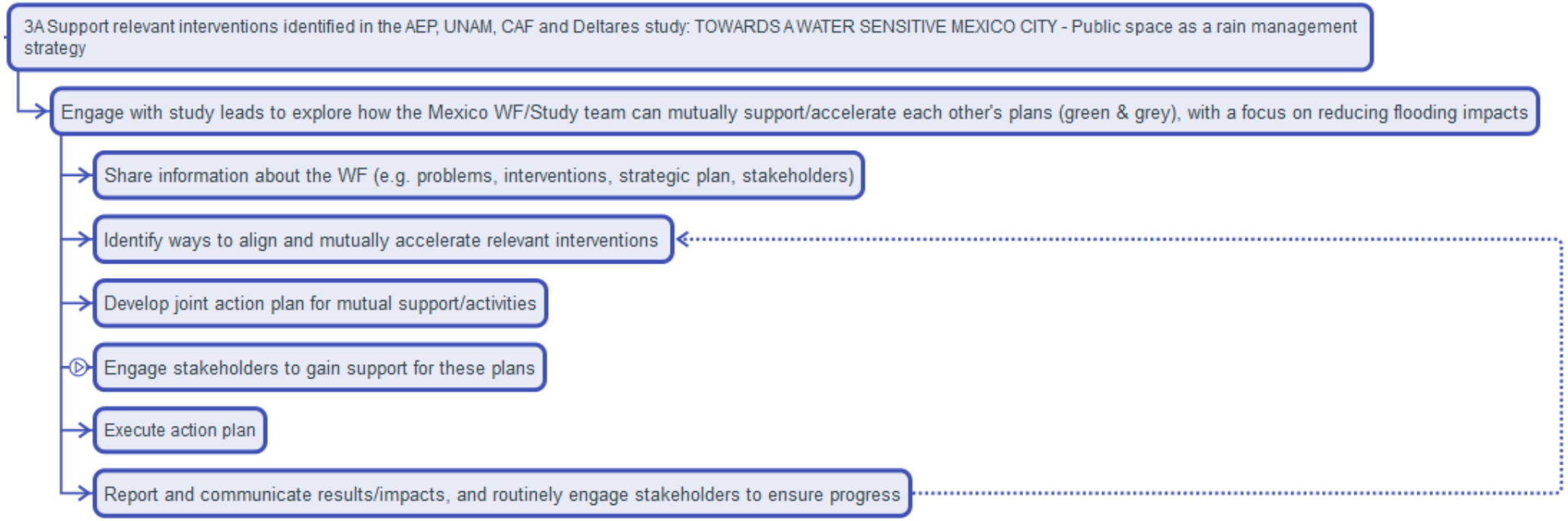
3

ⓘ

Storm water floods the City during the rainy season

Loss of and damage to green infrastructure, and lack of effective feeders (secondary) to primary storm water infrastructure lead to flooding in the entire valley.

Intervention Strategy 3A: Results Chain



WF 5 Yr. Goal(s)

- Develop a Master Plan for the implementation of interventions
- Jointly execute 10 demonstration projects

Problem No.

4

ⓘ

PROBLEM

Water delivery and sanitation networks are inadequate

DETAILS

The water delivery and sanitation networks are insufficient to serve all residents of Mexico City.

MAGNITUDE

- Almost 2 million people have no access to piped water – losing more than MXN$ 1,600 million per year of purchasing power.
- The pipa water delivery network is unreliable and disruptive to life in services areas.
- Iztapalapa's wells and boreholes are polluted and unsuitable for consumption and the outlying areas of the City show harmful levels of ammonium nitrate in the water.
- Today, 85% of wastewater is discharged without treatment. Even with the new Atotonilco Wastewater Treatment Plant coming on line soon, ≈40% of the City's wastewater will remain untreated.

Desired Systemic Change

- ☐ A water balance has been achieved.
- ☑ Water and wastewater are effectively managed.
- ☑ Clean water & sanitation is provided to all.
- ☐ The metropolis is more resilient to flood and droughts.

Long-Term WF Goals

- ☐ More groundwater recharge and wiser use of water in the region.
- ☑ Greater investment and innovation to improve water/ wastewater management and resiliency to flood and droughts.
- ☐ A more robust and positive dialog on the value of water.

Ways The WF Can Contribute	Strategic Interventions	*How Does This Advance WFs Strategy Over The Next 5 Years?		WF 5 Year Goal(s)
	A. Study the current situation associated with domestic supply and sanitation issues to: • define affected stakeholders and current impacts (economic, social, etc.); • monetize the cost of inaction related to these matters; and • use data to define most appropriate interventions and sources of funding, creating justification for change and a sense of urgency.	**Credibility**	★★★★☆	Influence government agencies and non-governmental stakeholders to increase investment by 10% for water supply and sanitation infrastructure improvements.
		Influence	★★★☆☆	
		Impact @ Scale	★☆☆☆☆	

*Strategy ratings based on the expert opinion of team members and are in relation to each other

Problem No.

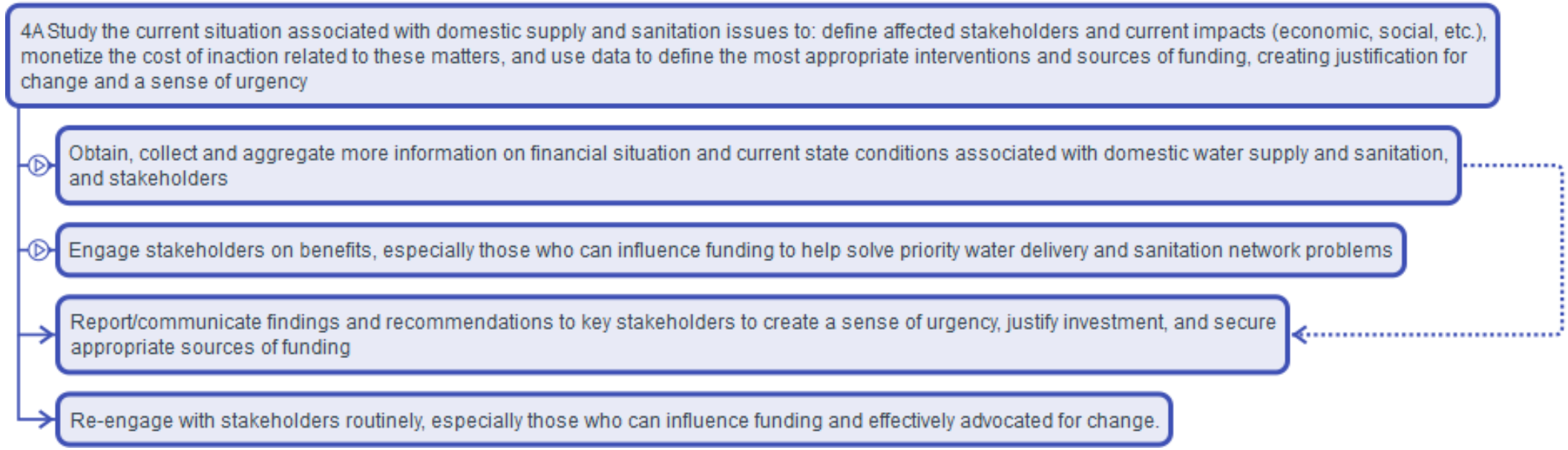
4

ⓘ

Water delivery and sanitation networks are inadequate

The water delivery and sanitation networks are insufficient to serve all residents of Mexico City.

Intervention Strategy 4A: Results Chain



WF 5 Yr. Goal(s)

- Influence government agencies and non-governmental stakeholders to increase investment by 10% for water supply and sanitation infrastructure improvements.

Problem No.

5

ⓘ

PROBLEM

Untreated wastewater poses risks within/outside the City

DETAILS

Untreated wastewater is currently a health risk inside and outside of the city when should be considered a resource.

MAGNITUDE

- Globally, the Metropolitan Area of Mexico City is by far the largest single producer of wastewater that is used for agricultural purposes.
- Mexico City ranks first in the world for gastrointestinal infections caused by water consumption – affecting 12,000 children per year.
- Environmental costs of the lack of wastewater treatment are MXN$ 5.70/m3.

Desired Systemic Change

- ☐ A water balance has been achieved.
- ☑ Water and wastewater are effectively managed.
- ☑ Clean water & sanitation is provided to all.
- ☐ The metropolis is more resilient to flood and droughts.

Long-Term WF Goals

- ☐ More groundwater recharge and wiser use of water in the region.
- ☑ Greater investment and innovation to improve water/ wastewater management and resiliency to flood and droughts.
- ☐ A more robust and positive dialog on the value of water.

Ways The WF Can Contribute	Strategic Interventions	*How Does This Advance WFs Strategy Over The Next 5 Years?		WF 5 Year Goal(s)
	A. Create a program to encourage the adoption of innovative treatment and reuse technologies and improved practices (with an emphasis on natural infrastructure), and recognize achievements	**Credibility**	★★★★☆	Program created and effective technologies/practices have been adopted at least 3 times – preferably by consumer-facing companies or other high visibility stakeholders.
		Influence	★★★☆☆	
		Impact @ Scale	★☆☆☆☆	

*Strategy ratings based on the expert opinion of team members and are in relation to each other

Problem No.

5

ⓘ

Untreated wastewater poses risks within/outside the City

Untreated wastewater is currently a health risk inside and outside of the city when should be considered a resource.

Intervention Strategy 5B: Results Chain

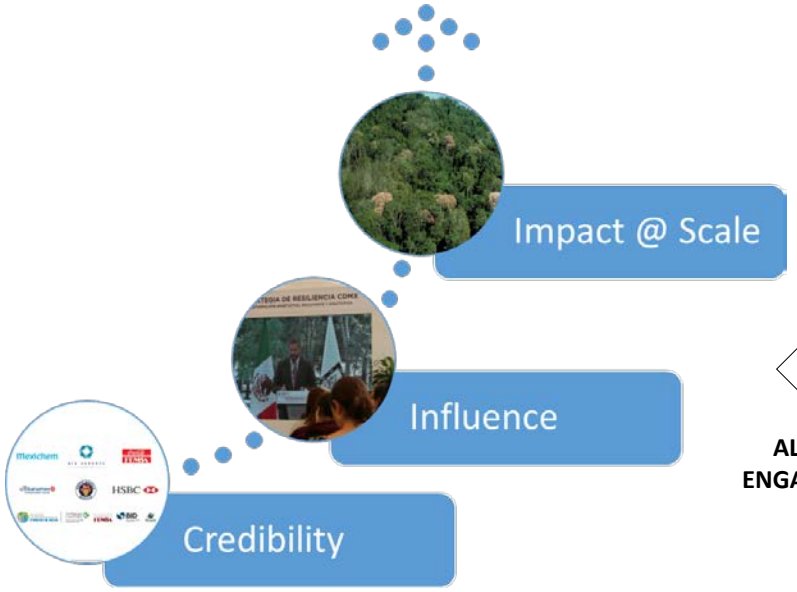
WF 5 Yr. Goal(s)

- Program created and effective technologies/practices have been adopted at least 3 times – preferably by consumer-facing companies or other high visibility stakeholders.

6. Stakeholder Engagement/Influencing Governance

Mexico City Water Fund Strategic Plan

WF's Approach To Aligned & Strategic Engagement



Strategy

ALIGNED ENGAGEMENT

For Priority Stakeholders

ADDRESSING THESE

CRITICAL STAKEHOLDERS

INFLUENCE TRIGGERS

DYNAMIC NATURE

Key Considerations

Aligned Stakeholder Engagement Model

STAKEHOLDER PRIORITIZATION

LAUNCH ENGAGEMENT

CRITICAL

Who must we be aligned with to ensure WFs can effectively operate?

CREDIBILITY

Who can help most to establish WFs credibility?

- Professional Organizations & Academic Institutions?
- Government & Government Authorities?
- Intergovernmental Organizations?
- Enterprises & Facilities?
- Civil Society Organizations & Water User Associations?

LAUNCH

PROACTIVE ENGAGEMENT

CRITICAL

CREDIBILITY

INFLUENCE

IMPACT @ SCALE

ENGAGEMENT SUPPORTING WF & STRATEGY

PROBLEM

More water used than what's re-charged causing the City to sink

Desired Systemic Change		Long-Term WF Goals	
Ways The WF Can Contribute	Strategic Interventions	How Does This Advance WFs Strategy Over The Next 5 Years?	WF 5 Year Goal(s)
✓ ✓ ✓ ✓		Credibility	
		Influence	
		Impact @ Scale	

ENGAGEMENT TO ADVANCE STRATEGIC INTERVENTIONS

STRATEGIC (POST-LAUNCH)

REACTIVE ENGAGEMENT

PREPARED FOR **INFLUENCE TRIGGERS**

(events e.g., floods; influential media article; etc.)

Responding to trends and how priorities are evolving over time

MGT OF CHANGE

Launch: Stakeholder Engagement Priorities

These were stakeholders that FEMSA identified as “detractors” – ones that need to be engaged to ensure their support of the WF. We had many already on our list. Can you add these in the proper category and spell out
SCJN – Nation´s Supreme Court of Justice (Federal)
SHCP - Secretariat of Finances and Public Credit (Federal)
PAOT - Mexico City´s Environmental and Land-Use Zoning Prosecutor (CDMX)
CANILEC – National Chamber of Milk Industrials
CFE - Federal Electricity Commission
PROFEPA - Federal Environmental Protection Prosecutor

…e be aligned with to ensure WFs can effectively operate?

	Rationale
	Main legal and political power in the City
	Main authority on environmental matters
	Main authority on water affairs

…establish WFs credibility?

		Intergovernmental Orgs.	**Industry Assoc. & Prof Orgs**	**Private Sector**	**Civil Soc. & Water Users Orgs.**
National Autonomous University (UNAM)	Metropolitan Environmental Commission (CAME; Interstate Level)	Interamerican Development Bank (BID)	CESPEDES/WBCSD)* Above all	Partners (FEMSA, Modelo, HSBC, Mexichem, Coca-Cola, Citi-Banamex)	The Nature Conservancy (TNC)
Colegio de Mexico (COLMEX)	Mexico City House of Representatives (ALDF; Water Committee)	World Bank (BM)	Mexican Hydraulic Association (AMH)	ARCA Continental	PRONATURA
National Polytechnic Institute (IPN)	Minister of Urban Development and Housing (SEDUVI; CDMX Level)	Dutch Partnership (DELTARES, NWP, Embassy)	Mexican College of Civil Engineers (CICM)	Aguas de Mexico	WWF
Technological Institute of Monterrey (ITESM)	BANOBRAS	PHI UNESCO (UN’s Hydrological)	Carbonated Water & Soda National Association (ANPRAC)	VEOLIA (Hugo to include the private sector natural partners)	Fondo Mexicano de Conservacion Para La Naturaleza
Metropolitan Autonomous University (UAM)	Regional Watershed Organization for the Valley of Mexico (OCAVAM; Federal Level) National Water Commission (CONAGUA; Federal Level)	Development Bank of Latin-America (CAF)	Mexico Brewers Association (Cerveceros de Mexico)	AT&T, GE, (Tech. Partners)	Fundacion Gonzalo Rio Arronte **Competitor Bosque de Agua
Water Center for Latin-America and the Caribbean (CAALCA)	Environmental Ministry (SEMARNAT: Federal Level)		Mexican Council for Business (CMN)	BIMBO, PEPSICO, DANONE, NESTLE, UNILEVER, Constellation, LALA, Penafiel, Heineken, Kellogs, (Food & Beverage Partners)	Reforestamos Mexico

Launch: Stakeholder Engagement Priorities (contin.)

CRITICAL	Priorities: Who must we be aligned with to ensure WFs can effectively operate?
Stakeholder	**Rationale**
Mayor of Mexico City	Main legal and political power in the City
Environment Minister	Main authority on environmental matters
SACMEX Director	Main authority on water affairs

CREDIBILITY	Priorities: Who can help most to establish WFs credibility?				
Academic Inst. & Think Tanks	**Government (all)**	**Intergovernmental Orgs.**	**Industry Assoc. & Prof Orgs**	**Private Sector**	**Civil Soc. & Water Users Orgs.**
Mexican Institute for Competitivity (IMCO)	Environmental Institute of Water Technology (IMTA: Federal Level)			CEMEX, ALFA, Pochteca, HELVEX, Kimberly Clark, MABE, ROTOPLAS, (Manufacturing Partners)	National Assoc. Of Water Utilities (ANEAS), National Assoc. Of Irrigation Users (ANUR) National Agricultural Council (CNA), Regional Watershed Council for the Mexico Valley + Lerma (Consejo de Cuenca de VM + Lerma)
Mario Molina Center (CMM)	Tlalpan, Cuauhtemoc Majors (CDMX Level *)			WaL-Mart, Posadas, s, Ideal, Acciona, d more key players)	
World Resources Institute (WRI)	International Trust for Agriculture (FIRA)				
GEO Initiative (Iniciativa GEO)	Resiliency Manager of Mexico City				
Science Committee for the Fund					

These were stakeholders that FEMSA identified as “detractors” – ones that need to be engaged to ensure their support of the WF. We had many already on our list. Can you add these in the proper category and spell out
SCJN
SHCP
PAOT
CANILEC
Federal
CFE
PROFEPA

Launch: Stakeholder Engagement Approach

CRITICAL	Engagement Approach	
Stakeholder	**Rationale**	**Launch Engagement Approach**
Mayor of Mexico City	Main legal and political power in the city	Signed MOU with WF, re-engage to provide update and invite to launch (POC is Sec of Env)
Environment Minister	Main authority on environmental matters	Meet in Sept to: show evolution of WF and Topilejo Project, discuss partnership on Resiliency agenda of city, and provide information about launch event
SACMEX Director	Main authority on water affairs	Meet after Sec of Env meeting to present the WF, invite to launch, and explore areas of collaboration

CREDIBILITY	Strategic Engagement Approach				
Academic Inst. & Think Tanks	**Government**	**Intergovernmental Orgs.**	**Industry Assoc. & Prof Orgs**	**Private Sector**	**Civil Soc. & Water Users Ogs.**
• Recognized as a relevant, valid, foreseeable partner who understands the complexities of WS in MX City • Recognized as understanding the technical aspects of WS	• Recognized as a relevant, valid, foreseeable partner who understands the complexities of WS in MX City (a good bet and worth listening to) • Understand WF's objectives and plan are complementary to their mission and goals, not an overlap • Recognized as valid convener/facilitator of multi-stakeholders to address WS (common ground)	• Recognized as a valid, neutral, autonomous, transparent platform serving the common good (social and environmental well-being) • Recognize as valid convener/facilitator of multi-stakeholders to address WS (common ground) • Goals and objectives are recognized to improve water security for all users and not a vehicle to promote corporate interests • Aligned with the United Nation's Sustainable Development Goals (SDG)	• Recognized as a partner that can speed up the process and offer more legitimate, scalable solutions to WS problems • Recognized as understanding business value (can develop the business case) and risks related to WS • Recognized as an efficient, well-run organization that is accountable for actions and commitments • Recognized as a valid convener of stakeholders to address WS (common ground)	• Recognized as a partner that can speed up the process and offer more legitimate, scalable solutions to WS problems • Recognized as understanding business value (can develop the business case) and risks related to WS • Recognized as an efficient, well-run organization that is accountable for actions and commitments • Recognized as a valid convener of stakeholders to address WS (common ground)	• Recognized as a valid, neutral, autonomous, transparent platform serving the common good (social and environmental well-being) • Recognized as valid convener/facilitator of multi-stakeholders to address WS (common ground) • Goals and objectives are recognized to improve water security for all users and not a vehicle to promote corporate interests • Aligned with the United Nation's Sustainable Development Goals (SDG)

Strategic: Engagement Priorities & Approach

ANTICIPATED ENGAGEMENT SUPPORTING WF & STRATEGY	Approach	Examples Of How This Could Evolve
Engage/maintain alignment w/Critical Stakeholders?	Continue to engage with priority stakeholders listed in the launch and monitor for new critical stakeholders over time as per Communication Plan	• Face-to-face meetings 2X/year to give updates on WF and conservation projects, and explore ways to collaborate • Receive monthly bulletin • Informal engagement at events • Mexico City Water Week
Engage to build/maintain WFs credibility (interest, awareness)?	Regular engagement as per the Communication and Stakeholder Engagement Plans. Involve in projects and activities as appropriate.	• Internet site and social (FB, Twitter, LinkedIn, Infographics) • Projects, papers, studies, etc. as appropriate • Mexico City Water Week
Engage those who help WF build influence?	Regular engagement as per the Communication, Stakeholder Engagement and Public Affairs Plans (Early engagement on policy agenda - Results Chains/Roadmap identify timing). Involve in projects and activities as appropriate.	• Face-to-face meetings 4X/year • Involvement with select stakeholders on interventions, including policy discussions, as appropriate • Technical reviews/policy reviews and updates • Mexico City Water Week
Engage for impacts WF could eventually scale?	Build relationship/partnerships as per the Communication, Stakeholder Engagement and Public Policy Plans. Regular engagement and involvement in interventions , especially policy improvements, as appropriate.	• Involvement in natural infrastructure projects and other interventions (project, review and advisory teams) • Participate in development of policies, plans and regulations (project, review and advisory teams) • Mexico City Water Week

Strategic: Engagement Priorities & Approach (cont.)

ANTICIPATED ENGAGEMENT TO ADVANCE STRATEGIC INTERVENTIONS				
Interventions For Water Security Problems	**WF Aims: What's Needed?**	**What Needs To Be Avoided?**	**Changes Required?**	**Approach?**
1A Enhance Natural Infrastructure	• Collaboration/acceptance • Support of pilots - $s • Policy improvements	• Duplication • Alienation of others	• Land use policies that protect/restore recharge areas	Engage to educate and increase awareness of situation using science and business case. Obtain support for natural infrastructure and the associated policy enhancements.
1B Promote Efficiency	• Collaboration/acceptance • Support of pilots - $s • Policy improvements	• Duplication • Alienation of others	• Improved practices and policies/standards	Engage to promote efficiency and support of improvements, and associated policy enhancements.
2A Reduce Non-revenue	• Collaboration/acceptance • Support of pilots - $s • Policy improvements	• Duplication • Alienation of others	• Pricing structure to reflect the value of water, improved management	Engage to educate and increase awareness of situation using science and business case. Obtain support for management improvements and the associated policy enhancements.
2B Benchmark with Cities	• Collaboration/acceptance • Support of pilots - $s	• Alienation of others • Duplication	• NA	Engage to gain support for benchmarking and testing/implementing potential improvements identified.
3A Support Deltare Study Outcomes	• Collaboration/acceptance • Support of pilots - $s	• Alienation of others • Duplication	• NA	Engage to gain support for a partnership and testing/implementing potential improvements identified.
4A Study Financial of W & WW Services	• Collaboration/acceptance • Support of pilots - $s • Policy improvements	• Duplication • Alienation of others	• Improved investments, practices and policies/standards	Engage to educate and increase awareness (create a sense of urgency) of situation using science and business case. Obtain support for increasing the investment in W & WW networks and the associated policy enhancements.
5A Encourage WW Technologies	• Collaboration/acceptance • Support of pilots - $s • Policy improvements	• Duplication • Alienation of others	• Improved investments, practices and policies/standards	Engage to educate and increase awareness of situation using science and business case. Encourage changes and obtain support for increasing the investment in improved wastewater technologies, reuse and practices.

Change Management: Readiness For Influence Triggers

ANTICIPATED INFLUENCE TRIGGERS			
Potentially Relevant Triggers	**What's Needed To Prepare?**	**Categories of Stakeholders Potentially Impacted**	**Possible WF Response(s)?**
Flood	Statements (including an opinion on issue and WF strategy/plan), facts, key messages, Q&As, spokesperson protocol, map of specific stakeholders concerned with this issue	Government (including municipalities), Intergovernmental Organizations (development banks), Companies, Civil Society	Outreach to critics, counter measures to tell the WF's story on the issue, media/stakeholder workshops and field trips, editorial on WS
Drought	Statements (including an opinion on issue and WF strategy/plan), facts, key messages, Q&As, spokesperson protocol, map of specific stakeholders concerned with this issue	Government (including municipalities), Intergovernmental Organizations (development banks), Companies, Civil Society	Outreach to critics, counter measures to tell the WF's story on the issue, media/stakeholder workshops and field trips, editorial on WS
Influential Media Activity	Statements (including an opinion on issue and WF strategy/plan), facts, key messages, Q&As, spokesperson protocol, map of specific stakeholders concerned with this issue	Potentially all, if an attack on the WF – will depend on the topic	Media workshops and field trips, if negative - outreach to critics, counter measures to tell the WF's story on the issue, editorial on WS
Infrastructure failures	Statements (including an opinion on issue and WF strategy/plan), facts, key messages, Q&As, spokesperson protocol, map of specific stakeholders concerned with this issue	Government (including municipalities), Intergovernmental Organizations (development banks), Companies, Civil Society	Media workshops and field trips, editorial on WS
Negative public feedback by stakeholders	Statements (including an opinion on issue and WF strategy/plan), facts, key messages, Q&As, spokesperson protocol, map of specific stakeholders concerned with this issue	Potentially all, depends on nature of negative feedback	Outreach to critics, counter measures to tell the WF's story on the issue, media/stakeholder workshops and field trips, editorial on WS
Invasion of conservation areas	Statements (including an opinion on issue and WF strategy/plan), facts, key messages, Q&As, spokesperson protocol, map of specific stakeholders concerned with this issue	Government (including municipalities), Civil Society	An immediate action plan supported by authorities, editorial on WS

Managing Other Anticipated Change

- [Changes in which stakeholders are considered ‘priority’]
- [Changes in perceptions of stakeholders]
- [Change in WF’s focus, resulting in changes in stakeholder priorities]
- [more anticipate changes?]
- [Tooling we envision can help?]

Need To Complete

Stakeholder Engagement/Influencing Governance – Work Remaining

Gaps To Be Filled To Get To V1

- Confirm overarching approach with Esteban and refine as needed
- Get Tooling and conduct prioritization of stakeholders Launch & Strategic (Post Launch)
- Complete identified gaps

7. Resource Requirements & Financing

Mexico City Water Fund Strategic Plan

Addressing Problems w/Alignment & Appropriate Resources

- **WATER SECURITY PROBLEMS**
- **WF STRATEGY**
- **WF LONG TERM GOALS**
- **DESIRED SYSTEMIC CHANGE**

ALIGNED STRATEGIC INTERVENTIONS & 5-YEAR GOALS

ALIGNED & STRATEGIC ENGAGEMENT

RESOURCES NEEDED TO IMPLEMENT STRATEGY & INTERVENTIONS

SOURCES OF FINANCING & FUNDRAISING PLANS

Resource Needed To Implement Intervention Strategies

Problem	Interv. Strat.	Intervention Strategy Summary	Resource Req. Range (Million MX)* By Intervention Strategy		
			Low	Most Likely	High
1	A	Implement restoration/conservation projects…	$ 108.5	$ 135.6	$ 162.8
1	B	Promote water-use efficiency along with water/wastewater reuse…	$ 14.4	$ 18.0	$ 21.6
2	A	Engage with relevant utilities and governing bodies…	$ 5.7	$ 7.2	$ 8.7
2	B	Set up an exchange with other mega-cities…	$ 3.2	$ 3.9	$ 4.8
3	A	Support relevant interventions identified in the AEP, UNAM, CAF Banco & Deltares study…	$ 10.8	$ 13.6	$ 16.2
4	A	Study the current financial situation associated with domestic supply and sanitation issues…	$ 6.2	$ 7.7	$ 9.2
5	A	Create a program to encourage the application of innovative treatment and reuse technologies…	$ 3.8	$ 4.7	$ 5.5
		WF Operation (est. 15% of Intervention Strategy/Action Resource Req.):	$ 22.9	$ 28.6	$ 34.3
		Fundraising (est. 10% of of Intervention Strategy/Action Resource Req.):	$ 15.3	$ 19.1	$ 22.9
		Estimated Resource Requirements Range MX (All):	**$ 190.8**	**$ 238.4**	**$ 286.0**

*Note: Estimates resource cost at +/- 20%

Financing Strategy

- FF Providing Finance Strategy

Resource Requirements & Financing – Work Remaining

Gaps To Be Filled To Get To V1

- Estimate resource requirements for each water security problem/intervention strategy
- FF To provide sources of funding and sustainable finance strategy
- Likely to include:
  - Seed funding provided for two years from LAWFP while the WF seeks sustainable sources of financing
  - Sustainable financing strategies that could involve
    - engaging with government agencies to formally open public sources for WF activities and interventions; and/or
    - Innovative finance (e.g., green bonds/social investment)
- Add costs to fundraise/acquire financing
- May need to reprioritize initiatives/initiative strategies based on the potential for available funding over the period covered by this plan
- Theory of Change should increase interest and enhance reputation and influence, which will enable the public source discussion as the solution to long-term, sustainable financing. Early impact results will further justify the use of public sources

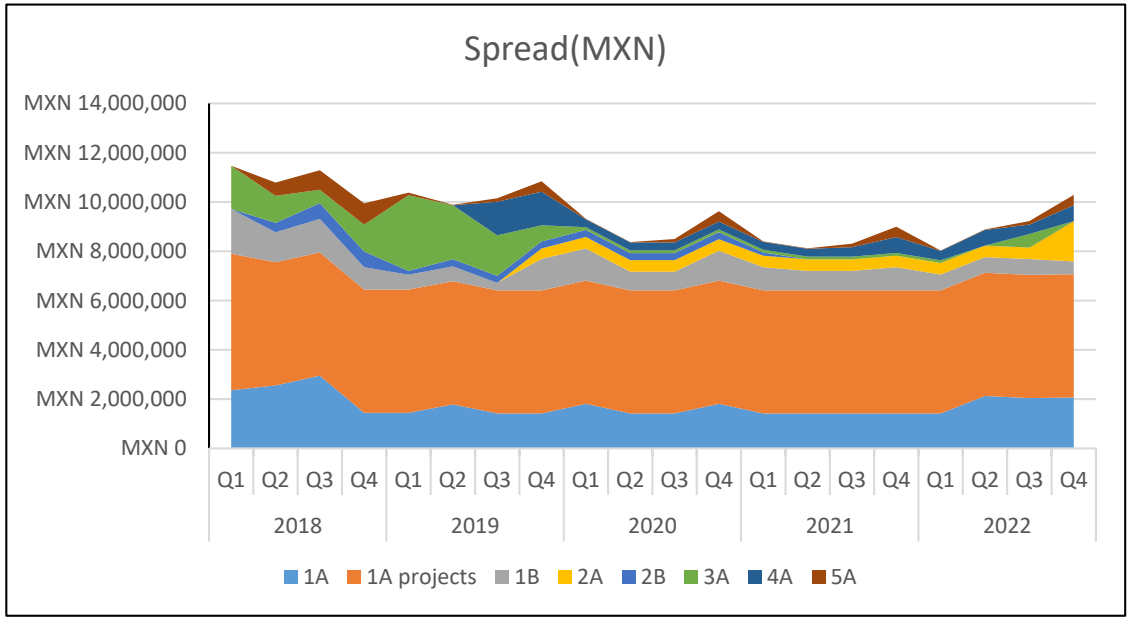
8. Implementation

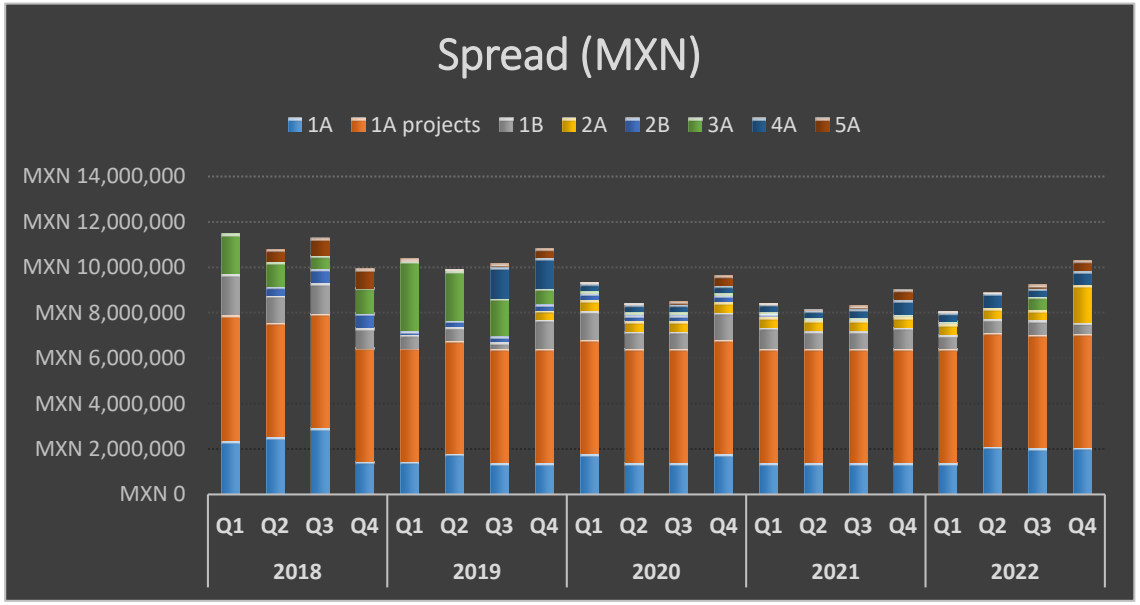
Mexico City Water Fund Strategic Plan

Timing criteria (what to do first)

- Builds credibility and influence
- Timing – takes a long time (must start 1A to prove concept and reach year goals
- Quick wins to create interest and build momentum/credibility for the Fund
- Resources of the fund, especially at the start

Mexico City Water Fund Strategic Roadmap - Expenses





For Intervention 1A, the dollars for natural infrastructure restoration and conservation projects (capital costs) are extracted because they are very high (50% of total WF 5 year budget) compared to the overall 5 year budget. The project work begins early (Q1 2018) and carries through to the end. The costs were spread evenly throughout the entire project as there are 4 projects

- 1A is daily management by fund personnel
- 1A Projects includes: on-the-ground restoration and conservation projects, recharge studies, field projects, drafting legislation/policies/plans/ programs, land ownership assessments. Most of this work/expenditure is executed through contracts.

Mexico City Water Fund Strategic Roadmap – 1A

Intervention Strategy	Max days	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4	
Action 1: Establish optimum recharge areas (visibility and recharge) - science, stakeholder, policy optimum	35																					
		35																				
Action 2 Develop the business case to garner support for addressing causes of this problem.	85																					
			42.5	42.5																		
Action 3 Engage stakeholders to build interest and support - on benefits, especially those who can influence policies to restore and protect recharge areas and safeguard volume gains.	40																					
		7	7	7	7	7	5															
Action 4 Develop restoration and conservation strategies, in collaboration with relevant stakeholders.	60																					
				15			15			15			15									
Action 5 Initiate & operate demonstration projects.	960																					
		48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	
Action 6 Re-engage with stakeholders routinely to seek partnerships to influence policies that restore and protect recharge areas and to safeguard gains in order to make the greatest impact. (includes drafting legislation, changing leg - lobbying, enforcement changes)	80																					
								6	6	6	6	6	6	6	6	6	6	6	6	4	4	
Action 7 Scale most impactful projects and replicate model with others doing this work (additional mapping to get to more ha (100,000), plan to replicate to wider area)	80																					
																			27	26	27	
	TIME	90	97.5	112.5	55	55	68	54	54	69	54	54	69	54	54	54	54	54	81	78	79	1340
	PERCENTAGE	7%	7%	8%	4%	4%	5%	4%	4%	5%	4%	4%	5%	4%	4%	4%	4%	4%	6%	6%	6%	100%

Mexico City Water Fund Strategic Roadmap – 1B

Intervention Strategy	Max days	2018				2019				2020				2021				2022			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Action 1 Obtain, collect and aggregate baseline information on current practices, efficiency indexes, opportunities and ways to influence water using behaviors	60																				
		60																			
Action 2 Develop the business case, including cost of no action. As necessary, make assumptions, such as improving efficiency in business sector by 10%, etc.	85																				
			40	45																	
Action 3 Promote efficiency and reuse strategies, and develop awareness/commnunication strategies and campaign (what to do 1st, how, pilots, etc.)	40																				
					15	10	10	5													
Action 4 Engage stakeholders on benefits, especially those who can influence the success of strategies and safeguard & reuse policies and standards (toilets)	40																				
					15	10	10	5													
Action 5 Execute strategies and plans	240																				
									40	40	20	20	20	20	15	15	15	10	10	5	10
Action 6 Measure benefits ($, social, environmental, energy, etc.), report, communicate impact	54																				
													10	6	6	6	6	6	6	6	2
Action 7 Re-engage with stakeholders routinely to influence water use policies and reuse practices, and to safeguard water savings	75																				
									2	3	5	5	10	5	5	5	10	5	5	10	5
	TIME	60	40	45	30	20	20	10	42	43	25	25	40	31	26	26	31	21	21	21	17	594
	PERCENTAGE	10%	7%	8%	5%	3%	3%	2%	7%	7%	4%	4%	7%	5%	4%	4%	5%	4%	4%	4%	3%	100%

Mexico City Water Fund Strategic Roadmap – 2A

Intervention Strategy		2018				2019				2020				2021				2022			
	Max days	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Action 1 Document the current situation - create a narrative that details the legal complexities, management concerns, potential corruption, inefficiencies (e.g. metering, bill collection) and pricing issues. (includes monetization)	9																				
									9												
Action 2 Identify stakeholders and engage with those who can influence relevant policies and practice change	30																				
										10	10	10									
Action 3 Re-engage with stakeholders routinely on findings and benefits of changing policies, practices and behaviors with a focus on pricing structure and improved management.	90																				
													10	10	10	10	10	10	10	10	10
Action 4 Report/communicate impacts and progress	25																				
																					25
	TIME	0	0	0	0	0	0	0	9	10	10	10	10	10	10	10	10	10	10	10	35	154
	PERCENTA	0%	0%	0%	0%	0%	0%	0%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	23%	100%

Mexico City Water Fund Strategic Roadmap – 2B

Intervention Strategy		2018				2019				2020				2021				2022				
	Max days	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Action 1 Research, identify and select cities with similar issues who are working to reduce non-revenue losses (should include other dimensions of water management, e.g efficiency, natural infrastructure WW technology, and reuse) (includes why this is important)	12																					
			12																			
Action 3 Engage with stakeholders to gain support for benchmarking and plan visits	40																					
				20	20																	
Action 4 Execute benchmarking efforts	20																					
						5		5		5		5										
Action 5 Report/communicate findings and recommendations	36																					
							9		9		9		9									
Action 6 Re-engage with stakeholders routinely on benefits of changing policies, practices and behaviors and to develop an implementation/scaling plan	16																					
								4		4		4		4								
	TIME	0	12	20	20	5	9	9	9	9	9	9	9	4	0	0	0	0	0	0	0	124
	PERCENTAGE	0%	10%	16%	16%	4%	7%	7%	7%	7%	7%	7%	7%	3%	0%	0%	0%	0%	0%	0%	0%	100%

Mexico City Water Fund Strategic Roadmap – 3A

Intervention Strategy		2018				2019				2020				2021				2022				
	Max days	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Action 1 Engage with study leads to explore how the Mexico WF/Study team can mutually support/accelerate each other's plans (green & grey), with a focus on reducing flooding impacts	24																					
		12				12																
Action 4 Develop joint action plan for mutual support (could include urban green infrastructure master plan)	5																					
		4				1																
Action 5 Engage stakeholders to gain support for the plan	60																					
			10	5	10	15	10	5	5													
Action 6 Execute action plan, including financing one pilot project	30																					
							10	10	1	1	1	1	1	1	1	1	1	1				
Action 7 Report and communicate results/impacts, and continue to engage stakeholders	5																					
																				5		
	TIME	16	10	5	10	28	20	15	6	1	1	1	1	1	1	1	1	1	0	5	0	124
	PERCENTA	13%	8%	4%	8%	23%	16%	12%	5%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	4%	0%	100%

Mexico City Water Fund Strategic Roadmap – 4A

Intervention Strategy		2018				2019				2020				2021				2022			
	Max days	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Action 1 Obtain, collect,aggregate and monetize information on the socio-economic situation associated with domestic water supply and sanitation, and stakeholders	85																				
								42.5	42.5												
Action 2 Engage stakeholders on benefits, especially those who can influence funding to help solve prioity water delivery and sanitation network problems (includes reuse of water & wastewater)	60																				
										10	10	10	10	10	10						
Action 3 Report/communicate findings and recommendations to key stakeholders to create a sense of urgency, justify investment, and secure appropriate sources of funding	36																				
																12		12		12	
Action 4 Re-engage with stakeholders, especially those who can influence the funding and effectively advocate for change	60																				
																	20		20		20
	TIME	0	0	0	0	0	0	42.5	42.5	10	10	10	10	10	10	12	20	12	20	12	20	241
	PERCENTAGI	0%	0%	0%	0%	0%	0%	18%	18%	4%	4%	4%	4%	4%	4%	5%	8%	5%	8%	5%	8%	100%

Mexico City Water Fund Strategic Roadmap – 5A

Intervention Strategy	Max days	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4	
Action 1 Obtain, collect, aggregate and maintain information on the current state of treatment practices and innovative treatment/reuse technologies/practices and their benefits.	60																					
			30	30																		
Action 2 Monetize impacts and develop business cases for support and investment in innovative treatment and reuse technologies, and changing practices (and cost of no action)	20																					
					20																	
Action 3 Engage stakeholders on benefits of these technologies and practices, and identifying potential financial supporters	15																					
				5	5	5																
Action 4 Promote and support the adoption of innovative treatment and reuse technologies, and improve practices	15																					
			1	2		1	1	1		1	1	1		1	1	1		1	1	1		
Action 5 Monitor/report/communicate progress and recommendations to key stakeholders on further adoption of innovative treatment and reuse technologies, and improved practices	36																					
				8				7				7				7				7		
Action 6 Recognize innovative treatment and reuse technologies, and improved practices	120																					
					24				24				24				24				24	
	TIME	0	31	45	49	6	1	8	24	1	1	8	24	1	1	8	24	1	1	8	24	266
	PERCENTAGE	0%	12%	17%	18%	2%	0%	3%	9%	0%	0%	3%	9%	0%	0%	3%	9%	0%	0%	3%	9%	100%

9. Indicators of Success, KPIs & Benchmarks

Mexico City Water Fund Strategic Plan

Indicators of Success, KPIs & Benchmarks

Concepts & Considerations

- The WF has successfully catalyzed and created a recognized, central entity that can address and solve water security problems on scale. This was accomplished through appropriate stakeholder engagement, demonstrated water security improvements and effective communication.
- Water for all needs
- Thriving economy
- Subsidence stops
- Need to address the full shortfall – but can settle for sealing with 0.2% loss of infiltration first, then start rolling back the degradation while building on the larger considerations related to over-allocation and infrastructure.
- [what else?]

GUIDANCE
How will we know if we are successful?
A set of performance measures that show progress toward achieving specific Water Fund strategies and ultimately the Water Fund goals, mission and vision.
Water Fund indicators will show the gap between actual and targeted performance (both in terms of results connected to activity and impact) and when adjustments to plans need to be made.

Indicators of Success, KPIs & Benchmarks (cont.)

Key Points To Communicate

- [list during meeting]
- [2]
- [3]
- [*n*]

Gaps To Be Filled To Get To V1

- [list during meeting]

GUIDANCE

How will we know if we are successful?

A set of performance measures that show progress toward achieving specific Water Fund strategies and ultimately the Water Fund goals, mission and vision.

Water Fund indicators will show the gap between actual and targeted performance (both in terms of results connected to activity and impact) and when adjustments to plans need to be made.

10. Communication Strategy

Mexico City Water Fund Strategic Plan

Communications Strategy

Concepts & Considerations

- [insert]
- [what else?]

GUIDANCE
Why and how will communicate our plans and progress. Includes how communications are formed/ disseminated and to whom?
The strategy/approach for formulating and disseminating the Water Fund messages across to its targeted audiences. It includes what objectives communications will support, who will receive Water Fund communications (the audience/stakeholders), key messages and content to be delivered, delivery methods and appropriately maintained schedules (for delivering these messages).
A Water Fund Communication Strategy can be key to gaining support and resources to achieve the vision and mission, with more detailed tactical plans updated at least annually (reference the Annual Operating Plan).

Communications Strategy (cont.)

Key Points To Communicate

- Brand
- Comms for Stakeholder Engagement
- Comms for Board
- Launch Event
- Social Witness Reporting Support
- WF Annual Reporting
- Communication Plan

Gaps To Be Filled To Get To V1

- [list during meeting]

GUIDANCE

Why and how will we communicate our plans and progress. Includes how communications are formed/ disseminated and to whom?

The strategy/approach for formulating and disseminating the Water Fund messages across to its targeted audiences. It includes what objectives communications will support, who will receive Water Fund communications (the audience/stakeholders), key messages and content to be delivered, delivery methods and appropriately maintained schedules (for delivering these messages).

A Water Fund Communication Strategy can be key to gaining support and resources to achieve the vision and mission, with more detailed tactical plans updated at least annually (reference the Annual Operating Plan).

11. Updating The Strategic Plan

Mexico City Water Fund Strategic Plan

Updating The Strategic Plan

Key Points To Communicate

- Updated every 3-5 years; and/or
- When necessary due to significant change or in anticipation of a significant change.

Gaps To Be Filled To Get To V1

- None identified

GUIDANCE
How/when will we incorporate learnings and update this Plan?
A process that will specify routine review and management of change procedures for updating the Strategic Plan.
Performance should be reviewed routinely through the Operational Governance Management system. Strategic plans should be reviewed periodically and updated every 3-5 years/ and/or when necessary due to significant change.

Supplemental Materials

Mexico City Water Fund Strategic Plan

5 Dimensions Of Water Security

1. **Domestic Urban Water Security**: Providing all people with reliable, safe water and sanitation services.
2. **Economic Water Security:** Productive use of water to sustain economic growth in the food production, industry and energy sectors of the economy.
3. **Urban Water Security:** Creation of better water management and services to support vibrant and livable water-sensitive cities.
4. **Environmental Water Management:** Health of rivers & aquifers and measurement of progress on restoring rivers, aquifers and ecosystems to health on a national and regional scale.
5. **Resilience to water related natural disasters:** Building of resilient communities that can adapt to change and are able to reduce risk from natural disasters related to water and to minimize the impact of future disasters.

Water Security Details

Dimensions	Elements of Dimensions	Way WF Can Help
Domestic Urban Water Security	▪ Access to piped water supply ▪ Access to improved sanitation ▪ Hygiene	**Help create awareness and catalyze coordination among stakeholders to incorporate these issues in holistic plans**
Economic Water Security	▪ Broad economic development ▪ ***Water for agriculture*** ▪ ***Water for industry*** ▪ ***Water for energy***	**Improve governance between sectors, provide tools and data for better decision making & implement relevant projects to prove/foster relevant issues**
Urban Water Security	▪ ***Urban water supply*** ▪ Urban wastewater collection ▪ ***Flood and storm drainage*** ▪ ***Urban river health***	**Improve governance between stakeholders, provide tools and data for planning & implement relevant projects to prove relevant issues, finance relevant components**
Environmental Water Management	▪ ***River health*** ▪ ***Flow alteration*** ▪ ***Environmental governance*** ▪ ***Aquifer health***	**Create governance between stakeholders, provide tools and data for planning & implement/finance relevant components, responsible for management of natural assets**
Resilience to water related natural disasters	▪ ***Floods and windstorms*** ▪ ***Droughts*** ▪ ***Storm surges and coastal floods***	**Create governance between stakeholders, provide tools and data for planning & implement/finance relevant components**

Convening stakeholders to enable positive action
+
Influencing decision-making
+
Closing evidence gaps
+
Implementing & supporting natural infrastructure and other innovative projects

Water Security Problem 1 - Intervention Strategies Considered

Problem Statement(s) & Associated Water Security Dimensions					
1. **More water used than recharged, increasing the rate at which the City is sinking** - Overexploitation of the aquifers and land use changes, which reduce the aquifer recharge capacity in and around Mexico City, have accelerated the ongoing land subsidence problem, which causes physical damage to urban infrastructure and the aquifer.	X	X	X	X	X

WF Support Category				Potential Intervention Strategies
EV	IF	G	S	
X	X	X	X	✓ (1A) Implement restoration/conservation projects that increase credibility, influence public policies, generate a replicable model and maintain and/or increase recharge
X	X		X	✓ (1B) Promote water-use efficiency and water/wastewater reuse in all sectors (residential, business, agriculture, institutions, government) to impact demand, build credibility and influence water use standards and policies (safeguard recovered volumes).
X	X		X	• Improve water management practices to promote conservation (use measurement and reporting, fee collection, losses, incentives, pricing, etc.).
X	X	X	X	✓ Enhance public policy to protect recharge areas. REMOVED – becomes part of 1A
	X		X	• Help to provide a "leak reporting app" to the people of Mexico City.
	X		X	• Helping to pay for a pilot repair team & incentivize for results, scaling up deployment of successful results.
X	X	X	X	✓ (1C) Monetize: 1) cost of subsidence and provide cases for investment connected to various remedies; 2) a comparison of preserving watershed health vs. inter-basin transfer. REMOVED – becomes part of 1A

EV: Closing Evidence Gap **IF:** Influencing Decision-Making **G:** Implementing/Supporting Natural Infrastructure Projects **S:** Convening Stakeholders To Enable Positive Action

Water Security Problem 1 – Magnitude Details

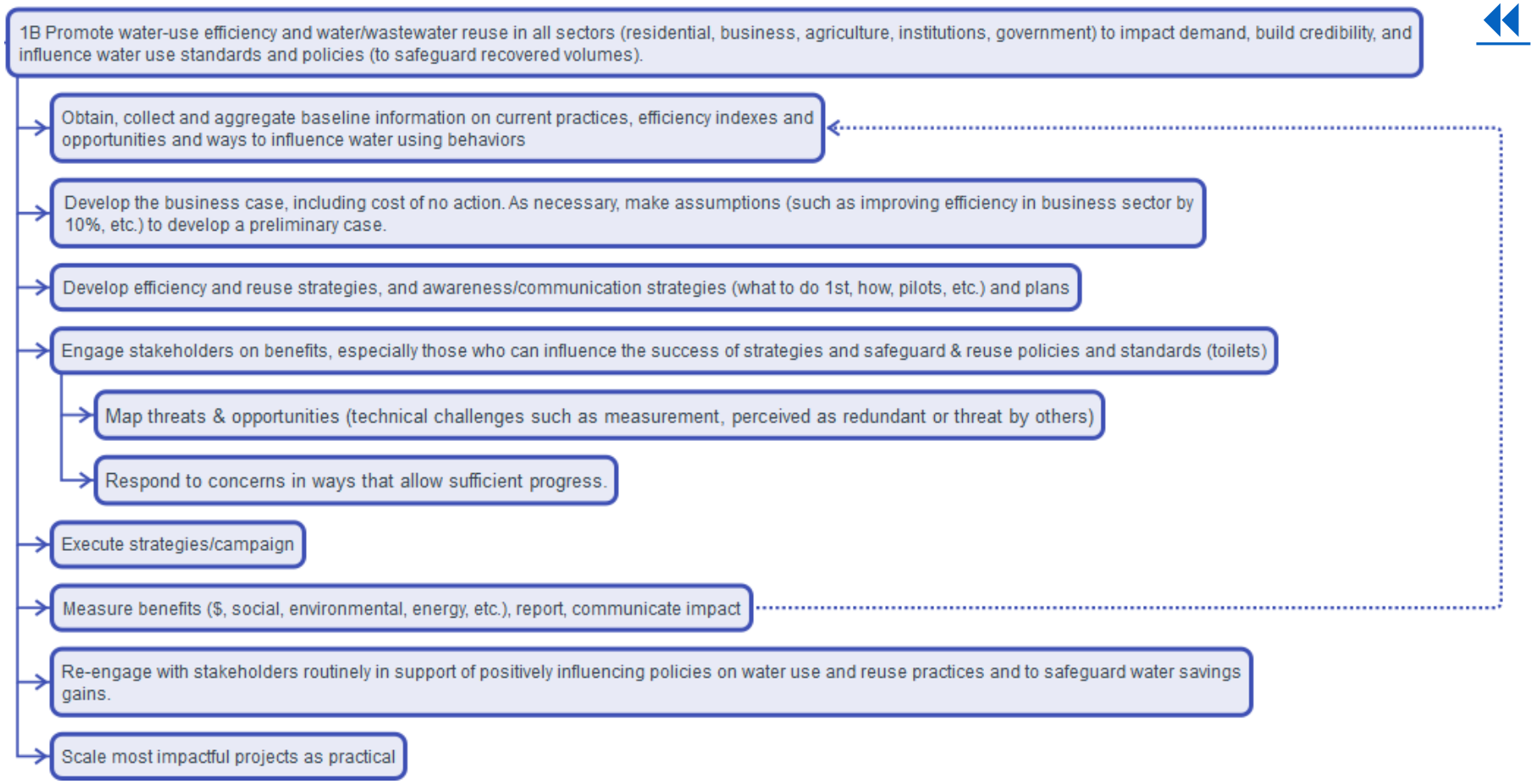
Back To Sec 2 Back To Sec 5

1. More water used than recharged, increasing the rate at which the City is sinking - Overexploitation of the aquifers and land use changes, which reduce the aquifer recharge capacity in and around Mexico City, have accelerated the ongoing land subsidence problem, which causes physical damage to urban infrastructure and the aquifer.

Full Version Of The Magnitude Of The Problem	Reference
Groundwater is over-allocated by 750 - 850 Million m^3 of per annum. This over-allocation represents a monetary value to business of MXN$ 27,800 billion. Industrial and commercial sectors in Mexico City contribute 33.2% of Mexico's total GDP.	Calculated in Situation Analysis (2017) FAO. (2017, July 12). AQUASTAT website. Retrieved from fao.org: http://www.fao.org/nr/water/aquastat/main/index.stm
Subsidence has lowered the City Center Area by as much as 9 meters, it exacerbates the flood-prone conditions in the City and has damaged the infrastructure (water and sewer lines, as well as the metro system)	Full reference (CDMX, 2016).
To supply the City with the current shortfall volume, allowing aquifer recovery and sustainable use, would cost between MXN$ 2.36/m^3 and MXN$ 10.86/m^3, with full implementation totaling an investment of almost MXN$ 4,000 million.	FAO. (2017, July 12). AQUASTAT website. Retrieved from fao.org: http://www.fao.org/nr/water/aquastat/main/index.stm
Total loss of infiltration per year, due to land use change, can be between 1 and 2 million m^3, calculated by the difference between infiltration rates of pristine and non-pristine land use times the areal lost.	Calculated in Situation Analysis (2017). Mapeo y Evaluación del Papel de la Infraestructura Verde Para Mejorar la Capacidad de Infiltración para Guiar los Esfuerzos de Conservación y Restauración en Bosque de Agua y Suelo de Conservación: Identificación de Áreas de Mayor Capacidad de Infiltració (2016)

Water Security Problem 1
Intervention Strategy 1A
Result Chain Details

Water Security Problem 1
Intervention Strategy 1B
Result Chain Details



Water Security Problem 2 - Intervention Strategies Considered

Problem Statement(s) & Associated Water Security Dimensions						
2. Significant 'lost water' and supply inefficiencies - Poor systems and management contribute to an unsustainable financial model and wasted water.	X	X	X	X	X	

WF Support Category				Potential Intervention Strategies
EV	**IF**	**G**	**S**	
X	X		X	✓ (2A) Engage with relevant stakeholders and governing bodies to demonstrate effective management, pricing systems and structure.
X	X		X	• Advocating for mandatory metering.
X	X		X	• Improve administration and management practices to better measure and report use, activate corrective actions, and receive payments (create right incentives)
X	X		X	• Monetize costs of subsidence and provide cases for investment of various remedies to attract donors to invest in improved treatment
X	X	X	X	✓ (2B) Set up an exchange with other cities with similar problems and exchange best practices.

EV: Closing Evidence Gap **IF:** Influencing Decision-Making **G:** Implementing/Supporting Natural Infrastructure Projects **S:** Convening Stakeholders To Enable Positive Action

Water Security Problem 2 – Magnitude Details

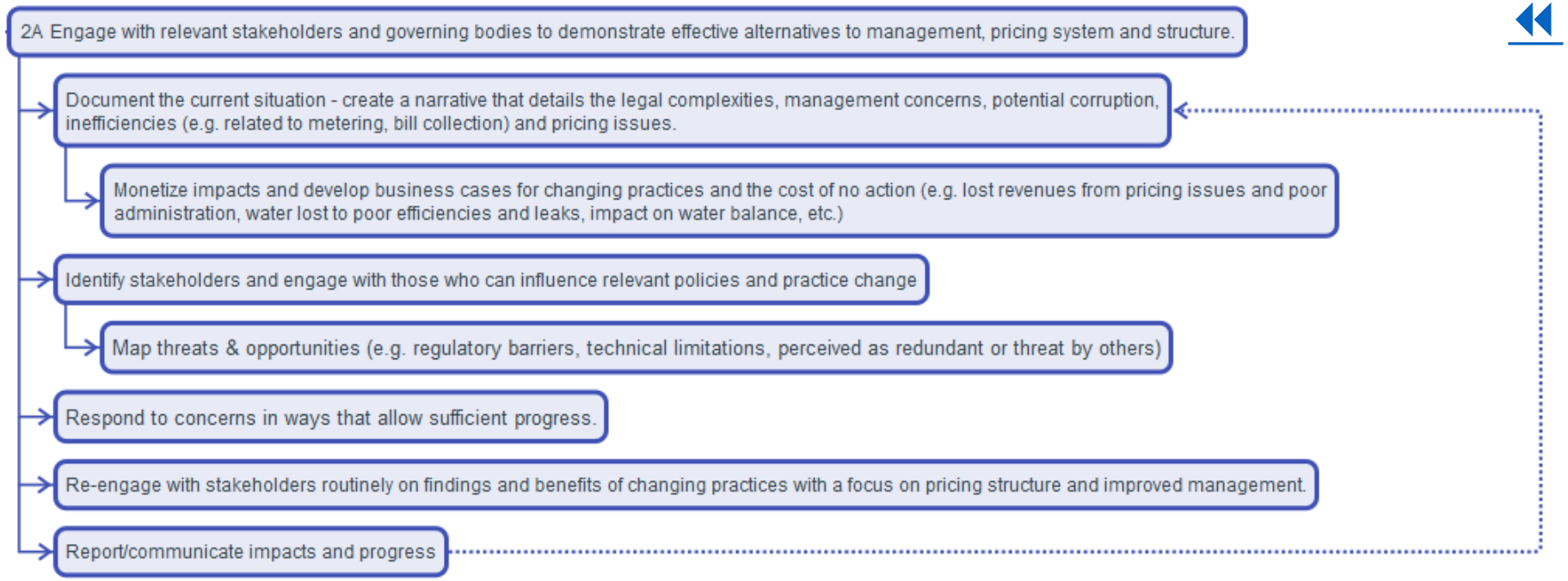
Back To Sec 2 Back To Sec 5

2. Significant 'lost water' and supply inefficiencies - High amounts of non-revenue water and poor management contribute to increased costs and water waste.	
Full Version Of The Magnitude Of The Problem	Reference
SACMEX acknowledges that estimates of water losses through leakage in the ZMVM Water Network varies widely. The non-revenue water (leaks, not measured, used illegally, and other losses) is estimated at 41%.	SACMEX. (2016). El Agua en la CDMX. Mexico City: SACMEX.
The amount of unaccounted water lost due to leaks within the distribution system is generally estimated as 15% as a rule-of-thumb in the absence of better data. The rate of fee collection is estimated as 77%, which means that 1 in every 4 bills goes unpaid.	SACMEX. (2016). El Agua en la CDMX. Mexico City: SACMEX.
Collection of fees for water usage poses a large challenge in Mexico City. The water supplier often does not have the ability to distribute a bill for services and instead, invoices are generated once per year. This does not allow the user to track its water usage on a monthly or quarterly basis, resulting in lack of awareness on how much water is used. Late payments are not discouraged, as the water service is not cut off due to late payment and discounts are often offered for people who pay late as an incentive to collect any revenue. This often results in deliberate late payment.	Banco Mundial. (2013). Agua Urbana en el Valle de México.
The current financial structure offers few incentives for water supply companies to be more efficient. Suppliers are not required to meet performance levels and government money transfers are not contingent on the quality of the service.	Banco Mundial. (2013). Agua Urbana en el Valle de México.
Water use rights and tax resource transfers collection mechanisms are not transparent. Water use rights are paid with resources from the municipality and payment is done directly between the City Council and the National Water Commission (CONAGUA) bypassing the water supplier. Tax resource transfers are often not registered in the operators' records. For example, investments are not accounted for in the assets and there is no record of the value of the infrastructure and therefore the relevant depreciation is not recorded.	Banco Mundial. (2013). Agua Urbana en el Valle de México.
Drinking water fees charged far below world standards and heavily subsidized. The unsubsidized cost of water for domestic users ranges from MXN$ 448.00/1,000 liters for up to 15,000 liters of usage to MXN$ 4,590.25/1,000 liters (plus an additional MXN$ 81.81 per 1,000 liters) for over 120,000 liters of usage. However, the actual costs for domestic users ranges from MXN$ 38.95/1,000 liters for up to 15,000 liters of usage to MXN$ 3,972.90/1,000 liters (plus an additional MXN$ 81.81 per 1,000 liters) for over 120,000 liters of usage. These figures are heavily dependent upon location within the City and social stratum. As a comparison, water costs MXN$ 20 per 1,000 liters in the Netherlands (unsubsidized). This shows that even with subsidies, a person in the lowest income bracket in Mexico still pays more for their water than the average user in the Netherlands.	http://www.sacmex.cdmx.gob.mx/storage/app/media/uploaded-files/6_tarifas172.pdf https://www.evides.nl/over-evides/nieuws/2015/nieuwe-drinkwatertarieven

Water Security Problem 2

Intervention Strategy 2A

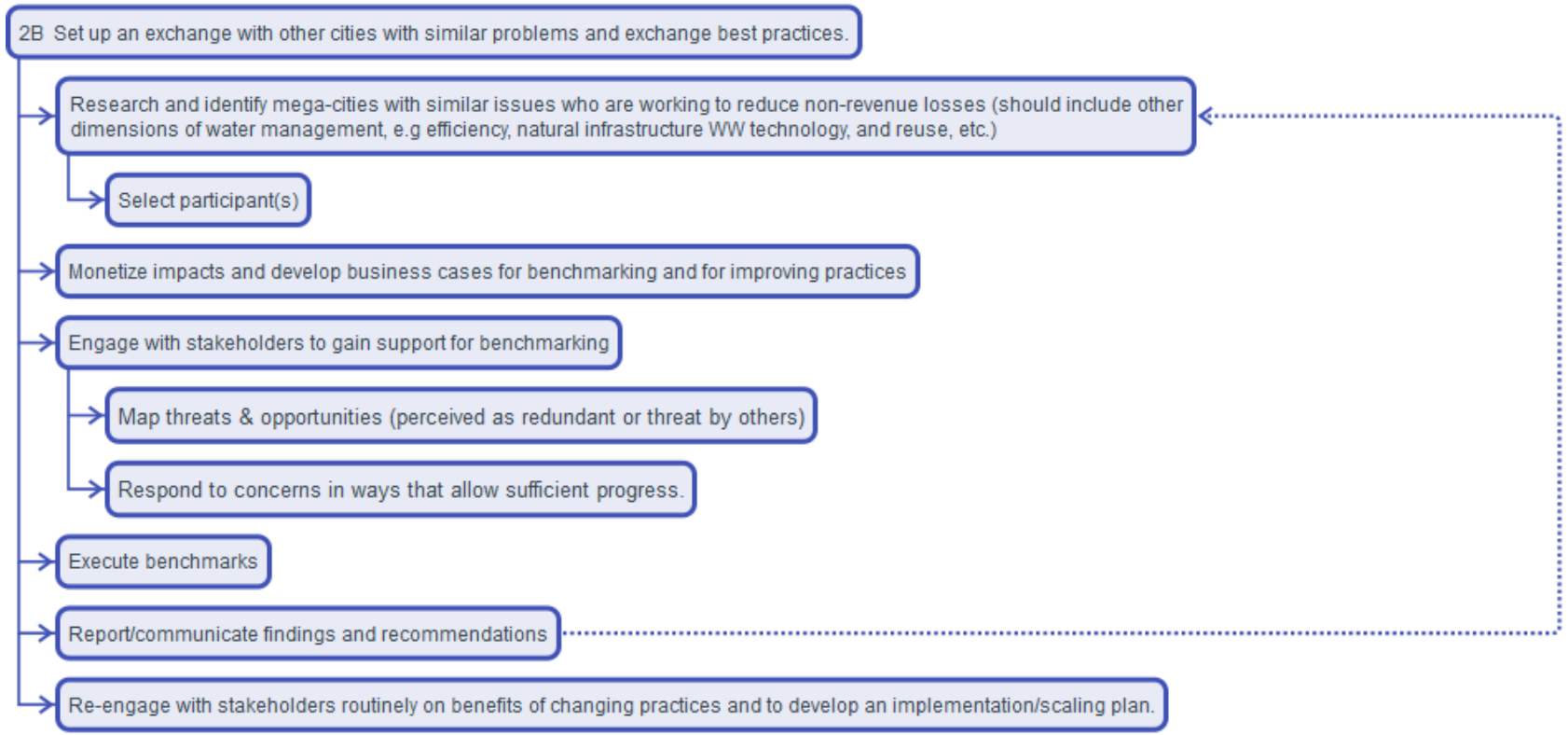
Result Chain Details



Water Security Problem 2

Intervention Strategy 2B

Result Chain Details



Water Security Problem 3 - Intervention Strategies Considered

Problem Statement(s) & Associated Water Security Dimensions					
3. Storm water floods the City during the rainy season - Loss of and damage to green infrastructure, and lack of effective feeders (secondary) to primary storm water infrastructure lead to flooding in the entire valley.	X	X	X		X

WF Support Category				Potential Intervention Strategies
EV	**IF**	**G**	**S**	
X	X	X	X	• Study to determine if natural infrastructure can have a positive impact on flooding (part of study related to problem statement no. 4)
X	X	X	X	• Create awareness and implement education programs especially with regard to improper solid waste disposals impact on this problem.
X	X	X	X	• Establish an drive implementation of urban natural infrastructure master plan.
X	X	X	X	• Drive implementation of natural urban infrastructure to reduce and regulate flows during peak precipitation events (based on a water fund master plan).
X		X		✓ (3A) Support relevant interventions identified in the AEP, UNAM, CAF & Deltares study: TOWARDS A WATER SENSITIVE MEXICO CITY - Public space as a rain management strategy.

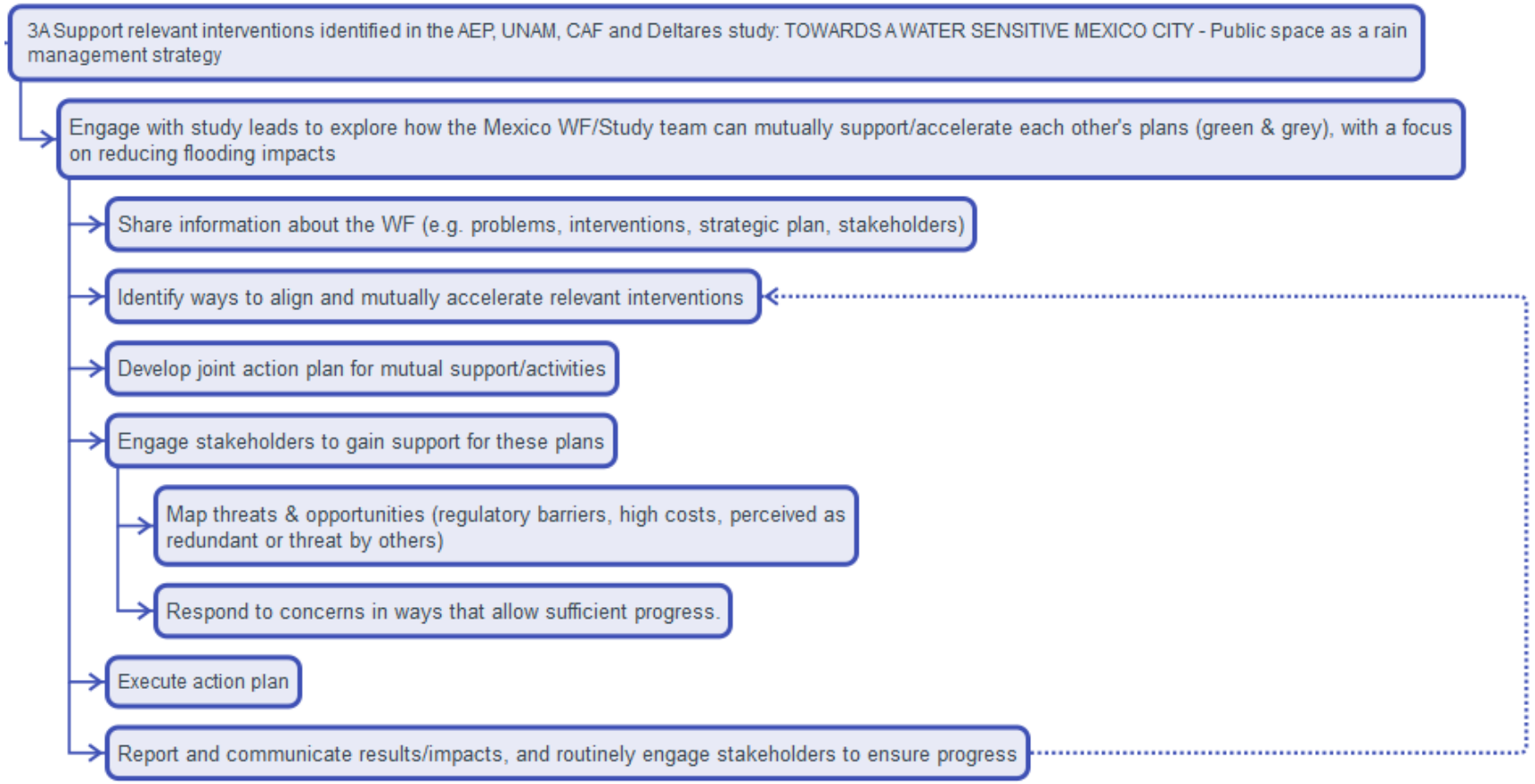
EV: Closing Evidence Gap **IF:** Influencing Decision-Making **G:** Implementing/Supporting Natural Infrastructure Projects **S:** Convening Stakeholders To Enable Positive Action

Water Security Problem 3 – Magnitude Details

Back To Sec 2 Back To Sec 5

3. Storm water floods the City during the rainy season - Lack of effective feeders (secondary) to primary storm water infrastructure leads to flooding within the city during the rainy season.	
Full Version Of The Magnitude Of The Problem	Reference
Flooding is a major risk in 8 major boroughs of Mexico City, including Gustavo A. Madero, Venustiano Carranza, Iztacalco, Iztapalapa, Tláhuac, Xochimilco, Cuauhtemoc, and Benito Juárez. Flooding in these areas are shown to have severe negative impacts on road transport networks, generating heavy traffic and economic losses.	CDMX Resilience Office. (2016). 100 Resilient Cities: Mexico City. Mexico City: CDMX.
The number of people affected, as well as the economic impacts of rain, floods, wind, hail, and sewage overflows has been estimated by CDMX over the time period of 1980-2013. The average annual economic cost during this time was calculated to be MXN$ 581 million dollars and the average number of people affected was 49,970.	CDMX Resilience Office. (2016). 100 Resilient Cities: Mexico City. Mexico City: CDMX.
These factors increase the potential for flooding events and their severity and the resulting economic and social impacts. For example, the Benito Juárez International Airport generates an economic value of MXN$ 78,170 million per year. One day of operation lost at the airport due to flooding would equate to a loss of MXN$ 213 million.	Oxford Economics. (2011). Economic Benefits from Air Transport in Mexico. Retrieved from International Air Transport Association: https://www.iata.org/policy/Documents/Benefits-of-Aviation-Mexico-2011.pdf

Water Security Problem 3
Intervention Strategy 3A
Result Chain Details



Water Security Problem 4 & Intervention Strategies Considered

Problem Statement(s) & Associated Water Security Dimensions							
4. Water delivery and sanitation networks are inadequate - The water delivery and sanitation networks are insufficient to serve all residents of Mexico City.					X	X	X		X
WF Support Category				**Potential Intervention Strategies**					
EV	**IF**	**G**	**S**						
X	X		X	A. (4A) Study the current situation associated with domestic supply and sanitation issues to: • define affected stakeholders and current impacts (economic, social, etc.); • monetize the cost of inaction related to these matters; and • use data to define most appropriate interventions and sources of funding, creating justification for change and a sense of urgency.					
X	X		X	• Influence administration and management practices to collect appropriate water fees, which can be used to enhance water and waste water services					

EV: Closing Evidence Gap **IF:** Influencing Decision-Making **G:** Implementing/Supporting Natural Infrastructure Projects **S:** Convening Stakeholders To Enable Positive Action

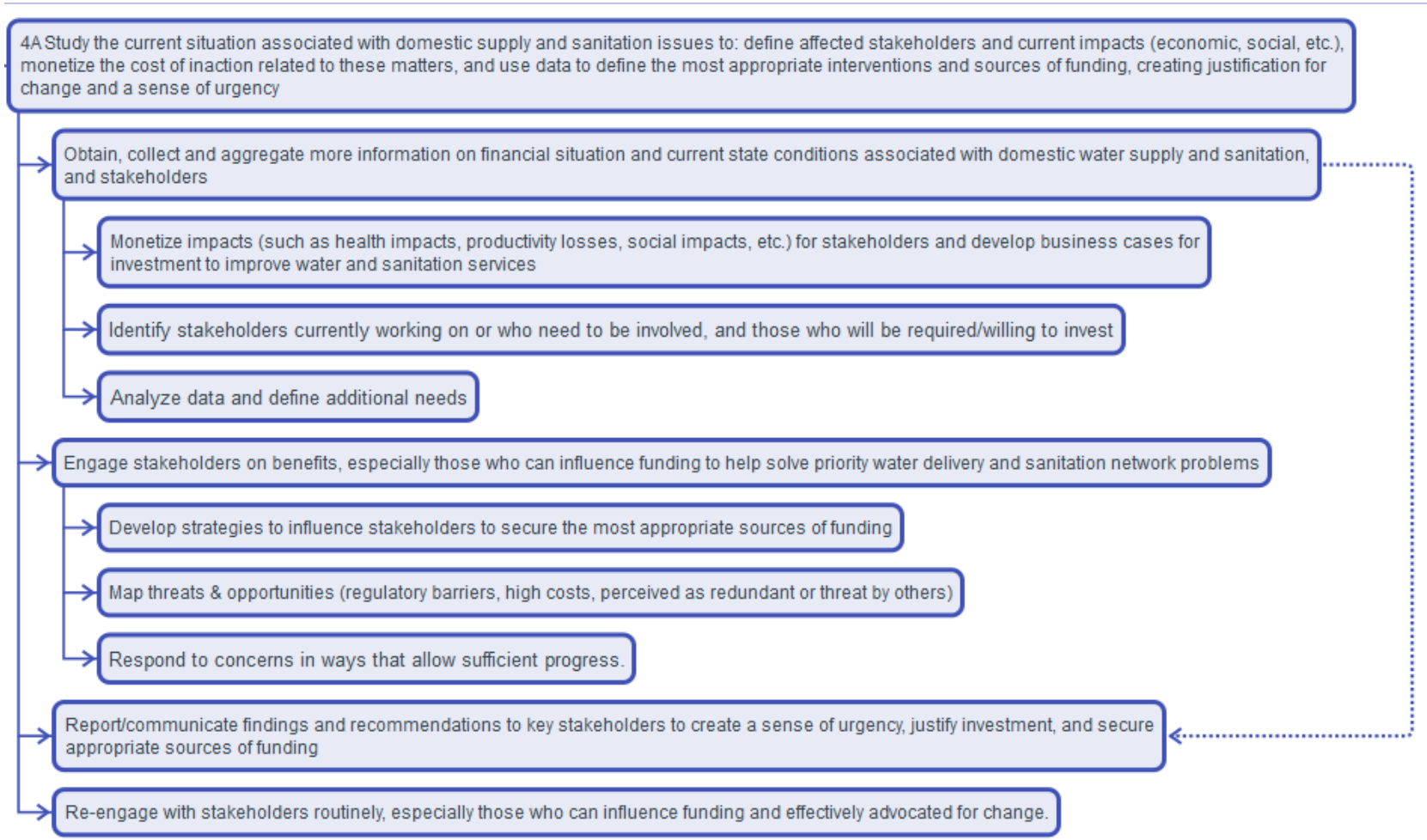
Water Security Problem 4 – Magnitude Details

Back To Sec 2 Back To Sec 5

4. Water delivery and sanitation networks are inadequate - The water delivery and sanitation networks are insufficient to serve all residents of Mexico City.

Full Version Of The Magnitude Of The Problem	Reference
There is approximately 23 million people in the Valle de México and about 8.4% of this population (+ 1.93 million people) have no access to service and purchase water from private seller who distribute it in tanks. This resource deprived population pays on average MXN$ 142/m3 (about 14 times more than what users connected to the service pay). Assuming 20 liters daily use per person this amounts to MXN$ 1,634 million per year loss of purchasing power for this group.	OECD. (2015). OECD Territorial Reviews: Valle de México. Paris: OECD Publishing.
The pipa water delivery network is very unreliable and disruptive to life in services areas. Sometimes the pipa drivers will push families against each other to benefit from who will pay more for its services. Women are often forced to wait at home for their water delivery, meaning that they are unable to work.	Kimmelman, M. (2017, February 17). New York Times. Retrieved from Mexico City, Parched and Sinking, Faces a Water Crisis: https://www.nytimes.com/es/interactive/ciudad-de-mexico-al-borde-de-una-crisis-por-el-agua/
Iztapalapa's development was largely unplanned and about 1.8 million (mostly poor) people have moved to the area over the past four decades with the infrastructure being slowly built around them. The groundwater from shallow wells and boreholes in the area is polluted with magnesium, nitrogen, sodium, iron, and hydrogen sulfide and required treatment before use for human consumption. The outlying areas of the City are the most vulnerable and often lag in gaining access to sanitation services. Wastewater is collected, but the majority of it is not treated. In areas where wastewater is discharged, there is a high level of ammonium nitrate contamination. The areas of Iztapalapa, Tláhuac and Gustavo A. Madero show levels of ammonium nitrate in the water in excess of 1 mg/L.	Salcedo, A. (2015, November 12). Mexico City's water crisis- from source to sewer. Retrieved from The Guardian: https://www.theguardian.com/cities/2015/nov/12/mexico-city-water-crisis-source-sewer SACMEX. (2016). El Agua en la CDMX. Mexico City: SACMEX.
The Valle de México generates 2,664 million m3 of wastewater (84 m3/s), of which Mexico City contributes 347 million m3 (11 m3/s but treats only 15% of the total volume. The remaining 85% of wastewater is discharged without any treatment; further polluting the rivers that transfer effluent away from the City. The Atotonilco Wastewater Treatment Plant will treat only 60% of the wastewater that is discharged to the agricultural areas in the Valley of Mezquital and the Valley of Tula in Hidalgo. This plant is in the final stages of construction and is expected to start operations in late 2017.	CONAGUA. (2013). Estadísticas del Agua de la Región Hidrológico- Administrativa XIII. Ciudad de México: CONAGUA. SACMEX. (2016). El Agua en la CDMX. Mexico City: SACMEX. CONAGUA, SEMARNAT. (2017, June). Proyectos Estratégicos. Retrieved from gob.mx: http://www.gob.mx/cms/uploads/attachment/file/230077/Strategic_Projects_-_June_2017.pdf

Water Security Problem 4
Intervention Strategy 4A
Result Chain Details



Water Security Problem 5 & Intervention Strategies Considered

Problem Statement(s) & Associated Water Security Dimensions										
5. Untreated wastewater poses risks within/outside the City - Untreated wastewater is currently a health risk inside and outside of the city when should be considered a resource.					X	X	X	X	
WF Support Category				**Potential Intervention Strategies**					
EV	**IF**	**G**	**S**						
X	X		X	• Create awareness and implement education programs with key stakeholders using reporting and data on impacts.					
	X		X	• (5A) Develop and implement a performance recognition program (start with wastewater performance, but later extend to best management practices in other dimensions of water management) that includes assessing, reporting and rewarding performance. (was previously selected as an Intervention)					
X	X		X	✓ (5B) Create a program to encourage the adoption of innovative treatment and reuse technologies and improved practices (with an emphasis on natural infrastructure), and recognize achievements					
X	X		X	• Influence the implementation new and wastewater treatment capacity and improve existing facilities.					
X	X		X	• Set up an exchange with other mega-cities with similar problems and exchange best practices.					

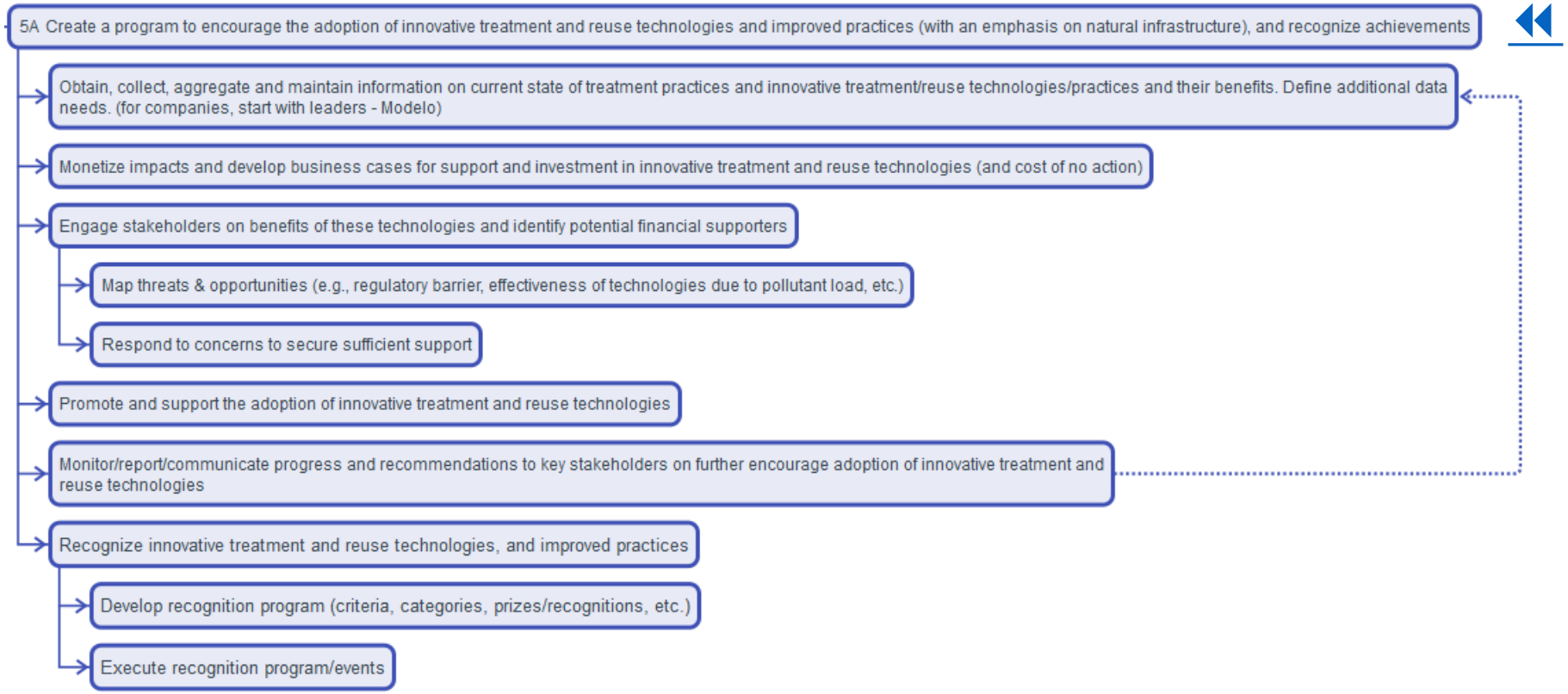
EV: Closing Evidence Gap **IF:** Influencing Decision-Making **G:** Implementing/Supporting Natural Infrastructure Projects **S:** Convening Stakeholders To Enable Positive Action

Water Security Problem 5 – Magnitude Details

Back To Sec 2 Back To Sec 5

5. Untreated wastewater poses risks within/outside the City - Untreated wastewater poses hygiene and health risks within Mexico City and areas where effluent is received.	
Full Version Of The Magnitude Of The Problem	Reference
Globally, the Metropolitan Area of Mexico City is by far the largest single producer of wastewater that is used for agricultural purposes. The use of untreated wastewater for irrigation severely impacts the health of producers and consumers of crops (sorghum, barley, oat, wheat, corn, tomatoes, carrots, onions, and coriander). Otherwise a semi-arid region, the valley has become an important agricultural area by using untreated wastewater, with 110,000 ha of official and unofficial irrigated area, and more than 50,000 water users in the different irrigation districts. The wastewater mostly travels by deep drainage to the Tula River. A proposal to partially solve the City's water treatment issue is the completion of a new Water Treatment Plant called the Atotonilco Plant, due in 2017. The proposed Wastewater Treatment Plant will have 35 m3/s of capacity and will treat more than 40% of the wastewater produced in the Valle de México.	SEMARNAT. (2011). Planta de Tratamiento de Aguas Residuales Atotonilco. Retrieved from CONAGUA: http://www.conagua.gob.mx/CONAGUA07/Publicaciones/Publicaciones/SGAPDS-19-11.pdf
Research shows that Mexico City ranks first in the world for gastrointestinal infections caused by water consumption, mostly due to pipe leaks that cause bacteria contamination. Morbidity rates for Ascaris lumbricoides in children between zero and four years; and Ent amoeba histolytica for individuals between five and 14 years have increased from 2.7 to 15.3 per thousand children and from 12.0 to 16.4 per thousand respectively.	Sosa-Rodriguez, F. S. (2012, April 05). Assessing Water Quality in the Developing World: An Index for Mexico City. Retrieved from InTECH: https://www.intechopen.com/books/water-quality-monitoring-and-assessment/assessing-water-quality-in-the-developing-world-an-index-for-mexico-city
Environmental costs of the lack of wastewater treatment are estimated as the value of treating wastewater in the Valle de México. These include infrastructure costs such as the Eastern Discharge Tunnel (TEO) (over MXN$ 30,034 million and the Atotonilco plant (MXN$ 10,022 million) among others which are currently under construction. Also the operating costs (2% of the investment value plus MXN$ 1,421 million per year estimated operating cost at the plant). The total equivalent cost is MXN$ 5.70/m^3 (US$ 0.49/m^3).	Banco Mundial. (2013). Agua Urbana en el Valle de México.

Water Security Problem 5 Intervention Strategy 5A Result Chain Details



Interventions and Goals

Problem	Intervention	Goal
1. Overexploitation of the aquifers and land use changes, which reduce the aquifer recharge capacity in and around Mexico City, have accelerated the ongoing land subsidence problem, which causes physical damage to urban infrastructure and the aquifer.	A. Implement restoration/conservation projects that increase credibility, influence public policies, generate a replicable model and maintain and/or increase recharge	Save 500 ha in recharge areas (saving an estimated 3 million m^3 of water per year) Restore 800 ha of land (increasing recharge by an estimated 4 million m^3 of water per year) Prove that natural infrastructure can make a significant (>3 m^3/s) impact on recharge of the aquafer Water Fund holds a formal role in the 2018-2024 Environmental Plan and the Resiliency Plan
	B. Promote water-use efficiency and water/wastewater reuse in all sectors (residential, business, agriculture, institutions, government) to impact demand, build credibility and influence water use standards and policies (safeguard recovered volumes).	Water Fund is recognized as Water Efficiency Champion (Perception Studies)
2. Poor systems and management contribute to an unsustainable financial model and wasted water.	A. Engage with relevant stakeholders and governing bodies to demonstrate effective management, pricing systems and structure.	Reduce non-revenue water to 36% by influencing the utility and other relevant stakeholders
	B. Set up an exchange with other cities with similar problems and exchange best practices.	At least 4 city benchmarks executed and best practices from benchmarks incorporated into the WF's strategic plan At least 4 MoU's established with stakeholders in cities
3. Loss of and damage to green infrastructure, and lack of effective feeders (secondary) to primary storm water infrastructure lead to flooding in the entire valley.	A. Support relevant interventions identified in the AEP, UNAM, CAF & Deltares study: TOWARDS A WATER SENSITIVE MEXICO CITY - Public space as a rain management strategy.	Develop a Master Plan for the implementation of interventions Jointly execute 10 demonstration projects
4. The water delivery and sanitation networks are insufficient to serve all residents of Mexico City.	A. Study the current situation associated with domestic supply and sanitation issues to: • define affected stakeholders and current impacts (economic, social, etc.); • monetize the cost of inaction related to these matters; and • use data to define most appropriate interventions and sources of funding, creating justification for change and a sense of urgency.	Influence government agencies and non-governmental stakeholders to increase investment by 10% for water supply and sanitation infrastructure improvements.
5. Untreated wastewater is currently a health risk inside and outside of the city when should be considered a resource.	A. Create a program to encourage the adoption of innovative treatment and reuse technologies and improved practices (with an emphasis on natural infrastructure), and recognize achievements	Program created and effective technologies/practices have been adopted at least 3 times – preferably by consumer-facing companies or other high visibility stakeholders.

Launch: Stakeholder Engagement Priorities (Highlighted)

- Need to add "detractors"
- Removed non priority for linked slide

CREDIBILITY	Priorities: Who can help most to establish WFs credibility?				
Academic Inst. & Think Tanks	**Government (Authorities, Lawmakers, etc)**	**Intergovernmental Orgs.**	**Industry Assoc. & Prof Organizations**	**Private Sector**	**Civil Soc. & Water Users Orgs.**
National Autonomous University (UNAM)	Metropolitan Environmental Commission (CAME; Interstate Level)	Interamerican Development Bank (BID)	National Construction Chamber (CMIC)	Partners (FEMSA, Modelo, HSBC, Mexichem, Coca-Cola, Citi-Banamex)	The Nature Conservancy (TNC)
Colegio de Mexico (COLMEX)	Mexico City House of Representatives (ALDF; Water Committee)	World Bank (BM)	Mexican Hydraulic Association (AMH)	ARCA Continental	PRONATURA
National Polytechnic Institute (IPN)	Minister of Urban Development and Housing (SEDUVI; CDMX Level)	Dutch Partnership (DELTARES, NWP, Embassy)	Mexican College of Civil Engineers (CICM)	Aguas de Mexico	WWF
Technological Institute of Monterrey (ITESM)	BANOBRAS	UN Water	Carbonated Water & Soda National Association (ANPRAC)	VEOLIA (Hugo to include the private sector natural partners)	Fondo Mexicano de Conservacion Para La Naturaleza
Metropolitan Autonomous University (UAM)	Regional Watershed Organization for the Valley of Mexico (OCAVAM; Federal Level) National Water Commission (CONAGUA; Federal Level)	PNUMA (UN's Environmental)	Mexico Brewers Association (Cerveceros de Mexico)	AT&T, GE, (Tech. Partners)	Fundacion Gonzalo Rio Arronte **Competitor Bosque de Agua
Water Center for Latin-America and the Caribbean (CAALCA)	Environmental Ministry (SEMARNAT: Federal Level)	Swedish Water International Institute (SIWI)	Mexican Council for Business (CMN)	BIMBO, PEPSICO, DANONE, NESTLE, UNILEVER, Constellation, LALA, Penafiel, Heineken, Kellogs, (Food & Beverage Partners)	Cemtro Mexicano de Derecho Ambiental (CEMDA)
Mexican Institute for Competitivity (IMCO)	Environmental Institute of Water Technology (IMTA: Federal Level)	PHI UNESCO (UN's Hydrological)	National Chamber of Diary Products Association (CANILEC)	CEMEX, ALFA, Pochteca, HELVEX, Kimberly Clark, MABE, ROTOPLAS, (Manufacturing Partners)	Conservation International **Competitor Bosque de Agua
Mario Molina Center (CMM)	Tlalpan, Cuauhtemoc Majors (CDMX Level *)	Global Environmental Facility (GEF)	Paper Industry National Chamber (Camara del Papel)	WaL-Mart, Posadas, Interacciones, Ideal, Acciona, (Hugo to add more key players)	Fresh Water Action Network for Mexico (FANMEX)
World Resources Institute (WRI)	International Trust for Agriculture (FIRA)	Development Bank of Latin-America (CAF)	(CANACINTRA)		Reforestamos Mexico
GEO Initiative (Iniciativa GEO)	Resiliency Manager of Mexico City	International Water Association (IWA)	(COPARMEX)		International Union for the Conservation Nature (IUCN)
Science Committee for the Fund		World Water Council (WWC)	(CESPEDES/WBCSD)* Above all		Fondo Mexicano Para La Comunicacion Y Educacion Ambiental, Consejo Consultivo del Agua
Already involved University Think Tank	Already involved Municipal Federal			Already involved Already involved NGO Water User Groups	National Assoc. Of Water Utilities (ANEAS), National Assoc. Of Irrigation Users (ANUR) National Agricultural Council (CNA), Regional Watershed Council for the Mexico Valley + Lerma (Consejo de Cuenca de VM + Lerma)

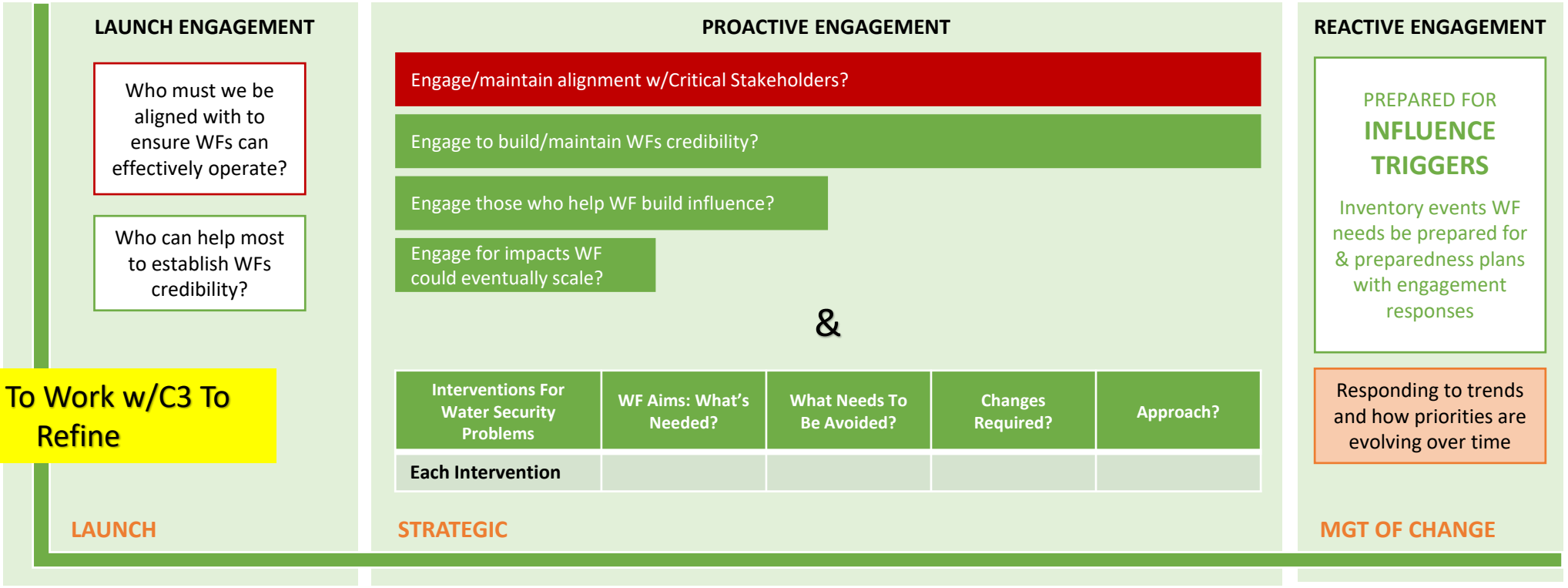
Launch: Stakeholder Engagement Approach

Phase/Support Level	Tactical Engagement - CREDIBILITY					
	Academic Inst. & Think Tanks	**Government**	**Intergovernmental Orgs.**	**Industry Assoc. & Prof Orgs**	**Companies**	**Civil Soc. & Water Users Orgs**
Strategic/Supporter	• Joint technical paper on WS in MX City released shortly after launch	• Joint article with mayor released day of launch • Address points on common ground in launch speeches • Organized roundtable on relevance of natural infrastructure • Panel that includes SACMEX	• Participate in their conferenc panels wi • Seek feed appropria • Launch follow-up • Invite some to be part of working committees – think about this more, could hurt of not executed well or lack of interest (communication, science, board, policy) • Invite some to be part of projects		• Involve in certain projects	• Participate in their riate • Seek feedback as appropriate
Strategic/Uncertain Support						
Launch/Supporter	• Email invitation to launch • Send bulletin • Invite to act as members of advisory board (patronato)	• Email invitation to launch • Send bulletin • Invite to session at SIWI and try to engage there • Meeting with Sec of Environment in September (others POCs may be there) • Invite to act as members of advisory board (patronato) • Sign MOU with IMTA before launch • Signed agreement with City for water resiliency partnership	• Email invitation to launch • Send bulletin • Invite to session at SIWI and try to engage there (mtg IDB scheduled) • Rotterdam visit • Invite to act as members of advisory board (patronato) • Invite to be key permanent strategic partner (voice with no vote – WB, IDB, UN)	• Email invite to launch • Send bulletin • Meet with priorities individually to present the WF and invite to launch • Invite to session at SIWI and try to engage there • Informal engagements with lower priorities • Invite to Mexico Water Week • Invite to act as members of advisory board (patronato)	• Email invitation to launch • Send bulletin • Invite to launch event at a series of breakfast meetings where a high level overview of WF will be presented • Ask president of WF (Mariano, and Juan Puablo) to make follow-up calls to CEOs to invite to launch event and to become partners (check with founders on membership strategy) • Invite to session at SIWI and try to engage there • Invite to be partners/funders	• Email invitation to launch • Send bulletin • Invite to session at SIWI and try to engage there • Invite to act as members of advisory board (patronato)
Launch/uncertain Support						

This is just a tactical brainstorm on launch and longer engaggement

Stakeholder Prioritization Elements

Base Prioritization Criteria: Interest In Water + Degree To Which Stakeholder Can Influence + Willingness To Work w/WF to identify the most important stakeholders who the WF wants as 'allies' and those WF does not want as 'detractors'.



Strategic: Engagement Priorities & Approach Details

ANTICIPATED ENGAGEMENT SUPPORTING WF & STRATEGY		
Elements	**Priority Stakeholders**	**Approach**
Engage/maintain alignment w/Critical Stakeholders?	List	
Engage to build/maintain WFs credibility?		
Engage those who help WF build influence?		Need To Complete
Engage for impacts WF could eventually scale?		

Strategic: Engagement Priorities & Approach Details

ANTICIPATED ENGAGEMENT TO ADVANCE STRATEGIC INTERVENTIONS					
Interventions For Water Security Problems	**Priority Stakeholders**	**WF Aims: What's Needed?**	**What Needs To Be Avoided?**	**Changes Required?**	**Approach?**
1A	[list]	• [summarize]	• [summarize]	• [summarize]	[describe]
1B					
2A					Need To Complete
2B					

Strategic: Engagement Priorities & Approach Details (cont.)

ANTICIPATED ENGAGEMENT TO ADVANCE STRATEGIC INTERVENTIONS					
Interventions For Water Security Problems	**Priority Stakeholders**	**WF Aims: What's Needed?**	**What Needs To Be Avoided?**	**Changes Required?**	**Approach?**
3A	[list]	• [summarize]	• [summarize]	• [summarize]	[describe]
4A					
5A					

Need To Complete

Intervention 1A: Resource Needs

Problem 1: I More water used than what's recharged causing the City to sink		**Intervention 1A: Implement restoration/conservation projects that increase credibility, generate a replicable model and maintain and/or increase recharge**									**Days**	**Cost**	**10%**	**$**
WF Labor	Salary and Fringe Daily Rate (MX)	Action 1: [Discrete Action From Result Chain] Establish optimum recharge areas (visibility and recharge) - science, stakeholder, policy optimum	Action 2 Develop the business case to garner support for addressing causes of this problem.	Action 3 Engage stakeholders to build interest and support - on benefits, especially those who can influence policies to restore and protect recharge areas and safeguard volume gains.	Action 4 Develop restoration and conservation strategies, in collaboration with relevant stakeholders.	Action 5 Initiate & operate demonstration projects.	Action 6 Re-engage with stakeholders routinely to seek partnerships to influence policies that restore and protect recharge areas and to safeguard gains in order to make the greatest impact. (includes drafting legislation, changing leg - lobbying, enforcement changes)	Action 7 Scale most impactful projects and replicate model with others doing this work (additional mapping to get to more ha (100,000), plan to replicate to wider area)	Action 8	Action 9	**Totals**	**Total**	**Labor Contingency**	**Totals**
Director Level Resource	$9,054	10	20	40	12	160	80	60			382	$3,458,498	$345,850	$3,804,347
Manager Level Resource	$7,141	20	85	30	60	960	75	80			1,310	$9,355,317	$935,532	$10,290,849
Staff Resource	$1,000	35	10	10	8	240	40	50			393	$393,000	$39,300	$432,300
Support	$750	5	5	5	4	240	20	15			294	$220,500	$22,050	$242,550
Subtotal ($)		$272,116	$801,848	$590,140	$548,132	$8,724,390	$1,314,902	$1,175,787			2,379	$13,427,315	$1,342,731	$14,770,046
											Misc. Totals	**Cost Total**	**15% Admin Markup**	**$ Totals**
Travel Expense														
Miles (enter miles)	$5.00													
Air/Rail	[Enter $]													
Hotel (enter nights)	$1,500													
Rental Car (enter days)	$800													
Meals (enter days)	$500													
Tolls/Taxi/Park	[Enter $]													
Subtotal ($)													$0	
												Cost	**15%**	**$**
Other Expenses (contractors, service contracts, capital, etc.)												**Total**	**Admin Mark-Up**	**Totals**
												$0		
Recharge study		$540,000										$540,000	$81,000	$621,000
Field projects (saplings, payments, etc.)						$100,000,000						$100,000,000	$15,000,000	$115,000,000
Drafting legislation/policies/plans/programs							$4,000,000				$4,000,000	$4,000,000	$600,000	$4,600,000
Land Ownership Assessment,								$200,000				$200,000	$30,000	$230,000
Subtotal ($)		$540,000				$100,000,000	$4,000,000	$200,000				$104,740,000	$15,711,000	$120,451,000
											Misc. Totals	**Cost Total**	**15% Admin Mark-Up**	**$ Totals**
Supplies														
Printed Materials (per page)	$1.00										0			
Telecommunications	3% of Labor	$8,163	$24,055	$17,704	$16,444	$261,732	$39,447	$35,274			$402,819	$402,819	$60,423	$463,242
Shipping	[Enter $]													
Supplies	[Enter $]													
Misc.	[Enter $]													
Databases	[Enter $]													
Other	[Enter $]													
Subtotal ($)	Contingency / Markup	$8,163	$24,055	$17,704	$16,444	$261,732	$39,447	$35,274				$402,819	$60,423	$402,819
												Total	**Contingency**	**$**
Totals w/Markup	Applied											**Costs**	**& Markup**	**Totals**
WF Labor	10%	$299,327	$882,032	$649,154	$602,945	$9,596,829	$1,446,393	$1,293,365				$13,427,315	$1,342,731	$14,770,046
Travel Expense	15%											$0	$0	
Other Expenses	15%	$621,000				$115,000,000	$4,600,000	$230,000				$104,740,000	$15,711,000	$120,451,000
Supplies	15%	$9,388	$27,664	$20,360	$18,911	$300,991	$45,364	$40,565				$402,819	$60,423	$402,819
Grand Total		$929,715	$909,696	$669,514	$621,855	$124,897,821	$6,091,757	$1,563,930				$118,570,134	$17,114,154	$135,623,866
Estimated Range (+/- 20%)														
Low (Rounded to nearest hundred thousand)		$700,000.0	$700,000	$500,000	$500,000	$99,900,000	$4,900,000	$1,300,000	$0	$0		$108,500,000	**Most Likely >**	$135,600,000
High (Rounded to nearest hundred thousand)		$1,100,000	$1,100,000	$800,000	$700,000	$149,900,000	$7,300,000	$1,900,000	$0	$0		$162,800,000	**(nearest hundered thousand)**	

Intervention 1B: Resource Needs

Intervention 1B: Promote water-use efficiency and water/wastewater reuse in all sectors (residential, business, agriculture, institutions, government) to impact demand, and influence water use standards and policies to safeguard recovered volumes.									Days	Cost	10%	$
Action 1 Obtain, collect and aggregate baseline information on current practices, efficiency indexes, opportunities and ways to influence water using behaviors	Action 2 Develop the business case, including cost of no action. As necessary, make assumptions, such as improving efficiency in business sector by 10%, etc.	Action 3 Promote efficiency and reuse strategies, and develop awareness/commnunication strategies and campaign (what to do 1st, how, pilots, etc.)	Action 4 Engage stakeholders on benefits, especially those who can influence the success of strategies and safeguard & reuse policies and standards (toilets)	Action 5 Execute strategies and plans	Action 6 Measure benefits ($, social, environmental, energy, etc.), report, communicate impact	Action 7 Re-engage with stakeholders routinely to influence water use policies and reuse practices, and to safeguard water savings	Action 8	Action 9	Totals	Total	Labor Contingency	Totals
12	20	20	40	60	27	80			259	$2,344,898	$234,490	$2,579,387
24	85	40	30	240	45	75			539	$3,849,249	$384,925	$4,234,174
60	10	20	10	120	54	40			314	$314,000	$31,400	$345,400
9	5	20	5	10	10	20			79	$59,250	$5,925	$65,175
$346,789	$801,848	$501,732	$590,140	$2,384,671	$627,315	$1,314,902			1,191	$6,567,396	$656,740	$7,224,136
									Misc. Totals	Cost Total	15% Admin Markup	$ Totals
											$0	
										Cost Total	15% Admin Mark-Up	$ Totals
igital Mat, Stickers)		$2,200,000								$2,200,000	$330,000	$2,530,000
					$600,000					$600,000	$90,000	$690,000
						$4,000,000				$4,000,000	$600,000	$4,600,000
		$1,400,000							$1,400,000	$1,400,000	$210,000	$1,610,000
		$1,000,000							$1,000,000	$1,000,000	$150,000	$1,150,000
		$4,600,000			$600,000	$4,000,000				$9,200,000	$1,380,000	$10,580,000
									Misc. Totals	Cost Total	15% Admin Mark-Up	$ Totals
									0			
$10,404	$24,055	$15,052	$17,704	$71,540	$18,819	$39,447			$197,022	$197,022	$29,553	$226,575
$10,404	$24,055	$15,052	$17,704	$71,540	$18,819	$39,447				$197,022	$29,553	$197,022
										Total Costs	Contingency & Markup	$ Totals
$381,468	$882,032	$551,905	$649,154	$2,623,138	$690,046	$1,446,393				$6,567,396	$656,740	$7,224,136
										$0	$0	
		$5,290,000			$690,000	$4,600,000				$9,200,000	$1,380,000	$10,580,000
$11,964	$27,664	$17,310	$20,360	$82,271	$21,642	$45,364				$197,022	$29,553	$197,022
$393,432	$909,696	$5,859,215	$669,514	$2,705,409	$1,401,688	$6,091,757				$15,964,418	$2,066,293	$18,001,158

$300,000	$700,000	$4,700,000	$500,000	$2,200,000	$1,100,000	$4,900,000	$0	$0	$14,400,000	**Most Likely >**	$18,000,000
$500,000	$1,100,000	$7,000,000	$800,000	$3,200,000	$1,700,000	$7,300,000	$0	$0	$21,600,000	**(nearest hundered thousand)**	

Intervention 2A: Resource Needs

Problem 2: Significant 'lost water' and supply inefficiencies	Intervention 2A: Engage with relevant stakeholders and governing bodies to demonstrate the effective management, pricing system and structure.									Days	Cost	10%	$
WF Labor	Salary and Fringe Daily Rate (MX)	Action 1 Document the current situation - create a narrative that details the legal complexities, management concerns, potential corruption, inefficiencies (e.g. metering, bill collection) and pricing issues. (includes monetization)	Action 2 Identify stakeholders and engage with those who can influence relevant policies and practice change	Action 3 Re-engage with stakeholders routinely on findings and benefits of changing policies, practices and behaviors with a focus on pricing structure and improved management.	Action 4 Report/communicate impacts and progress	Action 5	Action 6	Action 7	Action 8	Action 9	Totals	Total	Labor Contingency	Totals
Director Level Resource	$9,054	3	30	60	8						101	$914,420	$91,442	$1,005,861
Manager Level Resource	$7,141	9	10	60	25						104	$742,712	$74,271	$816,983
Staff Resource	$1,000	6	10	90	25						131	$131,000	$13,100	$144,100
	$0													
	$0													
	$0													
	$0													
	$0													
Support	$750	1									1	$750	$75	$825
Subtotal ($)		$98,184	$353,024	$1,061,707	$275,966						337	$1,788,882	$178,888	$1,967,770
											Misc. Totals	Cost Total	15% Admin Markup	$ Totals
Travel Expense														
Miles (enter miles)	$5.00													
Air/Rail	[Enter $]													
Hotel (enter nights)	$1,500													
Rental Car (enter days)	$800													
Meals (enter days)	$500													
Tolls/Taxi/Park	[Enter $]													
Subtotal ($)													$0	
												Cost Total	15% Admin Mark-Up	$ Totals
Other Expenses (contractors, service contracts, capital, etc.)														
												$0		
Business case for Action		$500,000										$500,000	$75,000	$575,000
Policy change				$4,000,000								$4,000,000	$600,000	$4,600,000
												$0		
												$0		
Subtotal ($)		$500,000		$4,000,000								$4,500,000	$675,000	$5,175,000
											Misc. Totals	Cost Total	15% Admin Mark-Up	$ Totals
Supplies														
Printed Materials (per page)	$1.00										0			
Telecommunications	3% of Labor	$2,946	$10,591	$31,851	$8,279						$53,666	$53,666	$8,050	$61,716
Shipping	[Enter $]													
Supplies	[Enter $]													
Misc.	[Enter $]													
Databases	[Enter $]													
Other	[Enter $]													
Subtotal ($)	Contingency /	$2,946	$10,591	$31,851	$8,279							$53,666	$8,050	$53,666
	Markup											Total	Contingency	$
Totals w/Markup	Applied											Costs	& Markup	Totals
WF Labor	10%	$108,003	$388,327	$1,167,878	$303,562							$1,788,882	$178,888	$1,967,770
Travel Expense	15%											$0	$0	
Other Expenses	15%	$575,000		$4,600,000								$4,500,000	$675,000	$5,175,000
Supplies	15%	$3,387	$12,179	$36,629	$9,521							$53,666	$8,050	$53,666
Grand Total		$686,390	$400,506	$5,804,507	$313,083							$6,342,548	$861,938	$7,196,436
Estimated Range (+/- 20%)														
Low (Rounded to nearest hundred thousand)		$500,000	$300,000	$4,600,000	$300,000	$0	$0	$0	$0	$0		$5,700,000	**Most Likely >**	$7,200,000
High (Rounded to nearest hundred thousand)		$800,000	$500,000	$7,000,000	$400,000	$0	$0	$0	$0	$0		$8,700,000	**(nearest hundered thousand)**	

Intervention 2B: Resource Needs

Problem 2: Significant 'lost water' and supply inefficiencies		Intervention Strategy 2B: Set up an exchange with other cities with similar problems and exchange best practices.									Days	Cost	10%	$
WF Labor	Salary and Fringe Daily Rate (MX)	Action 1 Research, identify and select cities with similar issues who are working to reduce non-revenue losses (should include other dimensions of water management, e.g efficiency, natural infrastructure WW technology, and reuse) (includes why this is important)	~~Action 2 Monetize impacts and develop business cases for benchmarking and for improving practices~~	Action 3 Engage with stakeholders to gain support for benchmarking and plan visits	Action 4 Execute benchmarking efforts	Action 5 Report/communicate findings and recommendations	Action 6 Re-engage with stakeholders routinely on benefits of changing policies, practices and behaviors and to develop an implementation/scaling plan	Action 7	Action 8	Action 9	Totals	Total	Labor Contingency	Totals
Director Level Resource	$9,054	4		25	20	8	16				73	$660,917	$66,092	$727,009
Manager Level Resource	$7,141	12		40	10	8	16				86	$614,166	$61,417	$675,582
Staff Resource	$1,000	4		40	4	36	16				100	$100,000	$10,000	$110,000
	$0													
	$0													
	$0													
	$0													
	$0													
Support	$750	4		10	10	8	8				40	$30,000	$3,000	$33,000
Subtotal ($)		$128,912		$559,500	$263,988	$171,561	$281,122				299	$1,405,083	$140,508	$1,545,591
											Misc. Totals	Cost Total	15% Admin Markup	$ Totals
Travel Expense														
Miles (enter miles)	$5.00													
Air/Rail	[Enter $]				$1,404,000						$1,404,000	$1,404,000	$210,600	$1,614,600
Hotel (enter nights)	$3,600				130						130	$468,000	$70,200	$538,200
Rental Car (enter days)	$800				130						130	$104,000	$15,600	$119,600
Meals (enter days)	$500				130						130	$65,000	$9,750	$74,750
Tolls/Taxi/Park	[Enter $]													
Subtotal ($)					$2,041,000							$2,041,000	$306,150	$2,347,150
												Cost	15%	$
Other Expenses (contractors, service contracts, capital, etc.)												Total	Admin Mark-Up	Totals
												$0		
												$0		
												$0		
												$0		
												$0		
Subtotal ($)													$0	
											Misc. Totals	Cost Total	15% Admin Mark-Up	$ Totals
Supplies														
Printed Materials (per page)	$1.00										0			
Telecommunications	3% of Labor	$3,867		$16,785	$7,920	$5,147	$8,434				$42,152	$42,152	$6,323	$48,475
Shipping	[Enter $]													
Supplies	[Enter $]													
Misc.	[Enter $]													
Databases	[Enter $]													
Other	[Enter $]													
Subtotal ($)	Contingency / Markup	$3,867		$16,785	$7,920	$5,147	$8,434					$42,152	$6,323	$42,152
	Applied											Total Costs	Contingency & Markup	$ Totals
Totals w/Markup														
WF Labor	10%	$141,803		$615,450	$290,387	$188,717	$309,234					$1,405,083	$140,508	$1,545,591
Travel Expense	15%				$2,347,150							$2,041,000	$306,150	$2,347,150
Other Expenses	15%											$0	$0	
Supplies	15%	$4,447		$19,303	$9,108	$5,919	$9,699					$42,152	$6,323	$42,152
Grand Total		$146,251		$634,753	$2,646,644	$194,636	$318,933					$3,488,235	$452,981	$3,934,894
Estimated Range (+/- 20%)														
Low (Rounded to nearest hundred thousand)		$100,000	$0	$500,000	$2,100,000	$200,000	$300,000	$0	$0	$0		$3,200,000	**Most Likely >**	$3,900,000
High (Rounded to nearest hundred thousand)		$200,000	$0	$800,000	$3,200,000	$200,000	$400,000	$0	$0	$0		$4,800,000	**(nearest hundered thousand)**	

Intervention 3A: Resource Needs

Problem 3: Storm water floods the City during the rainy sea		Intervention 3A: Support relevant interventions identified in the AEP, UNAM, CAF and Deltares study: TOWARDS A WATER SENSITIVE MEXICO CITY - Public space as a rain management strategy									Days	Cost	10%	$
WF Labor	**Salary and Fringe Daily Rate (MX)**	Action 1 Engage with study leads to explore how the Mexico WF/Study team can mutually support/accelerate each other's plans (green & grey), with a focus on reducing flooding impacts	~~Action 2 Share information about the WF (e.g. problems, interventions, strategic plan, stakeholders)~~	~~Action 3 Identify ways to align and mutually accelerate relevant interventions~~	Action 4 Develop joint action plan for mutual support (could include urban green infrastructure master plan)	Action 5 Engage stakeholders to gain support for the plan	Action 6 Execute action plan, including financing one pilot project	Action 7 Report and communicate results/impacts, and continue to engage stakeholders	Action 8	Action 9	**Totals**	Total	Labor Contingency	**Totals**
Director Level Resource	$9,054	20			5	60	15	5			105	$950,634	$95,063	$1,045,698
Manager Level Resource	$7,141	24			5	45	30	5			109	$778,420	$77,842	$856,261
Staff Resource	$1,000	24			5	20	30	5			84	$84,000	$8,400	$92,400
	$0													
	$0													
	$0													
	$0													
	$0													
Support	$750	4			5	10	5	5			29	$21,750	$2,175	$23,925
Subtotal ($)		$379,468			$89,726	$892,085	$383,799	$89,726			327	$1,834,804	$183,480	$2,018,284
Travel Expense											**Misc. Totals**	**Cost Total**	**15% Admin Markup**	**$ Totals**
Miles (enter miles)	$5.00													
Air/Rail	[Enter $]													
Hotel (enter nights)	$1,500													
Rental Car (enter days)	$800													
Meals (enter days)	$500													
Tolls/Taxi/Park	[Enter $]													
Subtotal ($)													$0	
Other Expenses (contractors, service contracts, capital, etc.)												**Cost Total**	**15% Admin Mark-Up**	**$ Totals**
												$0		
												$0		
Finance a pilot project							$10,000,000					$10,000,000	$1,500,000	$11,500,000
												$0		
												$0		
Subtotal ($)							$10,000,000					$10,000,000	$1,500,000	$11,500,000
Supplies											**Misc. Totals**	**Cost Total**	**15% Admin Mark-Up**	**$ Totals**
Printed Materials (per page)	$1.00										0			
Telecommunications	3% of Labor	$11,384			$2,692	$26,763	$11,514	$2,692			$55,044	$55,044	$8,257	$63,301
Shipping	[Enter $]													
Supplies	[Enter $]													
Misc.	[Enter $]													
Databases	[Enter $]													
Other	[Enter $]													
Subtotal ($)	Contingency /	$11,384			$2,692	$26,763	$11,514	$2,692				$55,044	$8,257	$55,044
Totals w/Markup	Markup Applied											**Total Costs**	**Contingency & Markup**	**$ Totals**
WF Labor	10%	$417,415			$98,698	$981,294	$422,179	$98,698				$1,834,804	$183,480	$2,018,284
Travel Expense	15%											$0	$0	
Other Expenses	15%						$11,500,000					$10,000,000	$1,500,000	$11,500,000
Supplies	15%	$13,092			$3,096	$30,777	$13,241	$3,096				$55,044	$8,257	$55,044
Grand Total		$430,507			$101,794	$1,012,071	$11,935,420	$101,794				$11,889,848	$1,691,737	$13,573,328
Estimated Range (+/- 20%)														
Low (Rounded to nearest hundred thousand)		$300,000	$0	$0	$100,000	$800,000	$9,500,000	$100,000	$0	$0		$10,800,000	**Most Likely >**	$13,600,000
High (Rounded to nearest hundred thousand)		$500,000	$0	$0	$100,000	$1,200,000	$14,300,000	$100,000	$0	$0		$16,200,000	**(nearest hundered thousand)**	

Intervention 4A: Resource Needs

Problem 4: Water delivery and sanitation networks are inade		Intervention Strategy 4A: Define affected stakeholders and current impacts (economic, social, etc.), monetize the cost of inaction, and use data to define the most appropriate interventions and sources of funding to create a sense of urgency for change.									Days	Cost	10%	$
WF Labor	**Salary and Fringe Daily Rate (MX)**	Action 1 Obtain, collect,aggregate and monetize information on the socio-economic situation associated with domestic water supply and sanitation, and stakeholders	Action 2 Engage stakeholders on benefits, especially those who can influence funding to help solve prioity water delivery and sanitation network problems (includes reuse of water & wastewater)	Action 3 Report/communicate findings and recommendations to key stakeholders to create a sense of urgency, justify investment, and secure appropriate sources of funding	Action 4 Re-engage with stakeholders, especially those who can influence the funding and effectively advocate for change	Action 5	Action 6	Action 7	Action 8	Action 9	**Totals**	**Total**	**Labor Contingency**	**Totals**
Director Level Resource	$9,054	20	60	8	60						148	$1,339,941	$133,994	$1,473,936
Manager Level Reesource	$7,141	85	45	8	45						183	$1,306,888	$130,689	$1,437,577
Staff Resource	$1,000	10	20	36	20						86	$86,000	$8,600	$94,600
	$0													
	$0													
	$0													
	$0													
	$0													
Support	$750	5	10	8	10						33	$24,750	$2,475	$27,225
Subtotal ($)		$801,848	$892,085	$171,561	$892,085						450	$2,757,579	$275,758	$3,033,337
											Misc. Totals	**Cost Total**	**15% Admin Markup**	**$ Totals**
Travel Expense														
Miles (enter miles)	$5.00													
Air/Rail	[Enter $]													
Hotel (enter nights)	$1,500													
Rental Car (enter days)	$800													
Meals (enter days)	$500													
Tolls/Taxi/Park	[Enter $]													
Subtotal ($)													$0	
												Cost	**15%**	**$**
Other Expenses (contractors, service contracts, capital, etc.)												**Total**	**Admin Mark-Up**	**Totals**
												$0		
Policy support					$4,000,000							$4,000,000	$600,000	$4,600,000
												$0		
												$0		
												$0		
Subtotal ($)					$4,000,000							$4,000,000	$600,000	$4,600,000
											Misc. Totals	**Cost Total**	**15% Admin Mark-Up**	**$ Totals**
Supplies														
Printed Materials (per page)	$1.00										0			
Telecommunications	3% of Labor	$24,055	$26,763	$5,147	$26,763						$82,727	$82,727	$12,409	$95,136
Shipping	[Enter $]													
Supplies	[Enter $]													
Misc.	[Enter $]													
Databases	[Enter $]													
Other	[Enter $]													
Subtotal ($)	Contingency / Markup	$24,055	$26,763	$5,147	$26,763							$82,727	$12,409	$82,727
	Applied											**Total Costs**	**Contingency & Markup**	**$ Totals**
Totals w/Markup														
WF Labor	10%	$882,032	$981,294	$188,717	$981,294							$2,757,579	$275,758	$3,033,337
Travel Expense	15%											$0	$0	
Other Expenses	15%				$4,600,000							$4,000,000	$600,000	$4,600,000
Supplies	15%	$27,664	$30,777	$5,919	$30,777							$82,727	$12,409	$82,727
Grand Total		$909,696	$1,012,071	$194,636	$5,612,071							$6,840,307	$888,167	$7,716,065
Estimated Range (+/- 20%)														
Low (Rounded to nearest hundred thousand)		$700,000	$800,000	$200,000	$4,500,000	$0	$0	$0	$0	$0		$6,200,000	**Most Likely >**	$7,700,000
High (Rounded to nearest hundred thousand)		$1,100,000	$1,200,000	$200,000	$6,700,000	$0	$0	$0	$0	$0		$9,200,000	**(nearest hundered thousand)**	

Intervention 5A: Resource Needs

Problem 5: Untreated wastewater poses risks within/outside the City.		Intervention 5A: Create a program to encourage/promote the adoption and recognition of innovative treatment and reuse technologies and practices (with an emphasis on natural infrastructure)									Days	Cost	10%	$
Labor	Salary and Fringe Daily Rate (MX)	Action 1 Obtain, collect, aggregate and maintain information on the current state of treatment practices and innovative treatment/reuse technologies/practices and their benefits.	Action 2 Monetize impacts and develop business cases for support and investment in innovative treatment and reuse technologies, and changing practices (and cost of no action)	Action 3 Engage stakeholders on benefits of these technologies and practices, and identifying potential financial supporters	Action 4 Promote and support the adoption of innovative treatment and reuse technologies, and improve practices	Action 5 Monitor/report/communicate progress and recommendations to key stakeholders on further adoption of innovative treatment and reuse technologies, and improved practices	Action 6 Recognize innovative treatment and reuse technologies, and improved practices	Action 7	Action 8	Action 9	Totals	Total	WF Labor Contingency	Totals
Director Level Resource	$9,054	2	2	15	15	8	15				57	$516,059	$51,606	$567,664
Manager Level Resource	$7,141	20	20	10	10	8	120				188	$1,342,595	$134,260	$1,476,855
Staff Resource	$1,000	60	10	5	5	36	60				176	$176,000	$17,600	$193,600
	$0													
	$0													
	$0													
	$0													
	$0													
Support	$750	5	5	3	3	8	50				74	$55,500	$5,550	$61,050
Subtotal ($)		$224,687	$174,687	$214,470	$214,470	$171,561	$1,090,280				495	$2,090,154	$209,015	$2,299,169
											Misc. Totals	Cost Total	15% Admin Markup	$ Totals
Travel Expense														
Miles (enter miles)	$5.00													
Air/Rail	[Enter $]													
Hotel (enter nights)	$1,500													
Rental Car (enter days)	$800													
Meals (enter days)	$500													
Tolls/Taxi/Park	[Enter $]													
Subtotal ($)													$0	
												Cost Total	15% Admin Mark-Up	$ Totals
Other Expenses (contractors, service contracts, capital, etc.)														
												$0		
Recognition Award							$2,000,000					$2,000,000	$300,000	$2,300,000
												$0		
												$0		
												$0		
Subtotal ($)							$2,000,000					$2,000,000	$300,000	$2,300,000
											Misc. Totals	Cost Total	15% Admin Mark-Up	$ Totals
Supplies														
Printed Materials (per page)	$1.00										0			
Telecommunications	3% of Labor	$6,741	$5,241	$6,434	$6,434	$5,147	$32,708				$62,705	$62,705	$9,406	$72,110
Shipping	[Enter $]													
Supplies	[Enter $]													
Misc.	[Enter $]													
Databases	[Enter $]													
Other	[Enter $]													
Subtotal ($)	Contingency /	$6,741	$5,241	$6,434	$6,434	$5,147	$32,708					$62,705	$9,406	$62,705
	Markup											Total	Contingency	$
Totals w/Markup	Applied											Costs	& Markup	Totals
WF Labor	10%	$247,155	$192,155	$235,916	$235,916	$188,717	$1,199,309					$2,090,154	$209,015	$2,299,169
Travel Expense	15%											$0	$0	
Other Expenses	15%						$2,300,000					$2,000,000	$300,000	$2,300,000
Supplies	15%	$7,752	$6,027	$7,399	$7,399	$5,919	$37,615					$62,705	$9,406	$62,705
Grand Total		$254,907	$198,182	$243,316	$243,316	$194,636	$3,536,923					$4,152,858	$518,421	$4,661,874
Estimated Range (+/- 20%)														
Low (Rounded to nearest hundred thousand)		$200,000	$200,000	$200,000	$200,000	$200,000	$2,800,000	$0	$0	$0		$3,800,000	**Most Likely >**	$4,700,000
High (Rounded to nearest hundred thousand)		$300,000	$200,000	$300,000	$300,000	$200,000	$4,200,000	$0	$0	$0		$5,500,000	**(nearest hundered thousand)**	

BETTER BUSINESS, BETTER WORLD℠

Antea Group Global Centers

USA Headquarters
5910 Rice Creek Parkway, Suite 100
St. Paul, MN 55126, USA
USA Toll Free: +1 800 477 7411
International: +1 651 639 9443

Belgium
Roderveldlaan 1
2600 Antwerpen

Brazil
Rua Catipará, 57 - Brooklin Paulista
São Paulo - SP, 04561-060

Colombia
Calle 35 No. 7-25, Piso 12
Bogota, DC

France
29, Avenue Aristide Briand – CS 10006
94119 Arcueil Cedex

Netherlands
Monitorweg 29
1322 BK Almere

www.anteagroup.com

INOGEN®