Climate Adaptation Master Plan for Water (CAMP4W)

WORKING MEMORANDUM #4

IRP 2020 INITIAL FINANCIAL PLAN AND BUSINESS MODEL DISCUSSION

September 2023

Section 1 Overview

In 2022 Metropolitan's Board adopted the 2020 Integrated Water Resources Plan (IRP), which assessed regional water reliability needs through 2045 and incorporated scenario planning to address wide-ranging uncertainties. The IRP was organized into a Regional Needs Assessment (Phase 1) and an implementation phase (Phase 2). Phase 2 is coordinated through the Climate Adaptation Master Plan for Water (CAMP4W) process currently underway.

The CAMP4W process serves to better integrate the resource planning of the IRP with financial planning toward the aims of reliability, resiliency, financial sustainability, affordability, and equity. This planning also integrates the need to respond to challenges presented by climate change. On September 12, 2023, the Board approved the use of climate information and modeling under Representative Concentration Pathway (RCP) 8.5 as a basis for planning purposes in CAMP4W. This action further recognizes the need to adaptively plan towards generally accepted outcomes of a more severe climate change future.

The CAMP4W process is adhering to a streamlined schedule to facilitate the development of a completed CAMP4W Part 1 Report by the first quarter of 2024. To this end, Working Memoranda are being developed to coincide with key topics being discussed with and presented to the Board and Member Agencies. These Working Memoranda will ultimately be compiled to form key chapters of the CAMP4W Part 1 Report. Gathering valuable input from the Board and Member Agencies on these memoranda at set intervals along the way is allowing Metropolitan to maintain the streamlined schedule.

Due to this process, two separate topics have been combined into Working Memorandum 4. One summarizes the Long-Range Financial Plan Needs Assessment (LRFP-NA), which has undergone a lengthy development process that began in 2022. The second portion of Working Memorandum 4 discusses updated business model alternatives. Unlike the LRFP-NA, the business model discussion is in the early conceptual stage. While these two components are on different timelines and are at different levels of development, they are combined herein to facilitate progress and consolidate deliverables to the Board and Member Agencies. It is important to consider this distinction as the document is reviewed.

This Working Memorandum focuses on financial planning and business model discussions, including:

Long-Range Financial Plan (LRFP): To address the reliability gaps identified in the IRP Needs Assessment, Metropolitan has begun the multi-phased, multi-year Long-Range Financial Plan (LRFP) development process. The initial LRFP Needs Assessment (LRFP-NA) (Phase 1) currently underway builds upon the IRP Needs Assessment and is consistent with the goals and objectives of the CAMP4W process pertaining to resiliency, reliability, financial sustainability, affordability, and equity.

Phase 2 of the LRFP will integrate specific capital projects and outline funding and financing strategies based on Board input on policy goals and objectives and the outputs from the CAMP4W planning process. Phase 2 will be developed as the CAMP4W process progresses past the development of the decision-making framework and into the identification of specific proposed capital projects needed to fill the water supply gap as well as infrastructure projects to address vulnerabilities associated with climate change and other hazards and the refurbishment and replacement of Metropolitan's existing facilities and conveyance system. The refinement of the LFRP will be done through an iterative process, where the CAMP4W outcomes are revised based on findings from the LRFP, and the LRFP is adjusted based on the CAMP4W recommendations until a balanced outcome is achieved.

Business Model: The CAMP4W process will also facilitate discussions about Metropolitan's Business Model, which presents an opportunity to deploy shared resources in order to remain ***stronger together***. The Business Model considerations include Metropolitan's expanding role within the region and potential revenue alternatives.

The following sections of this Working Memorandum provide an overview of the LRFP-NA (**Section 2**) and an introduction of possible components of the Business Model that will be further developed in the coming months (**Section 3**).

Section 2 Long Range Financial Plan Needs Assessment Summary

2.1 Background

Understanding the financial impacts associated with bridging the supply gap identified in the IRP Needs Assessment will facilitate the iterative and adaptive methodology that is the cornerstone of the CAMP4W process. The LRFP-NA is designed as a Phase 1 document that provides high-level guidance on the rate impacts and funding opportunities Metropolitan will need to consider to be resilient and reliable in the future. Phase 2 will see an updated LRFP based on CAMP4W findings, which will include specific projects and additional project types to be pursued. Identifying these specific components may impact the categories of projects needed (supply, storage, conveyance, increased system flexibility, etc.), with the goal of identifying the most cost-effective decisions to meet the region's needs and risk tolerance. Phase 2 of the LRFP will therefore present a refined total cost and associated rate and tax implication analysis.

The LRFP-NA is designed to:

- Provide high-level financial analysis of rate and tax impacts under various resource development scenarios presented in the IRP Needs Assessment and summarized in **Figure 1** (see also **CAMP4W Working Memorandum 3** for a detailed discussion on the IRP Needs Assessment).
- Discuss the primary capital financing and funding methods Metropolitan has at its disposal.
- Introduce potential financial tools that could become components of a tailored financial strategy.
- Catalogue Metropolitan's key policies related to the capital markets.

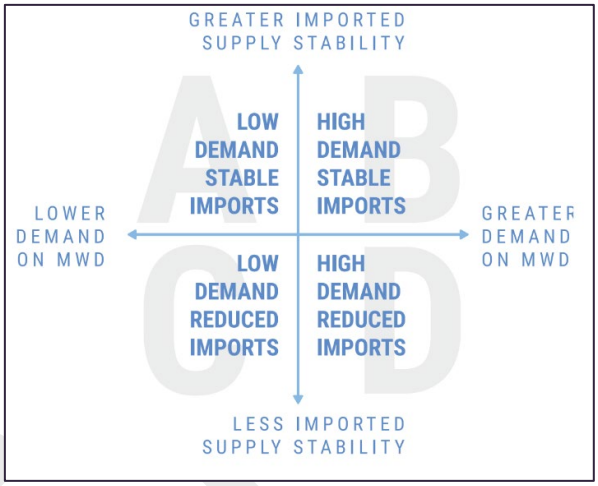


Figure 1. IRP Needs Assessment Planning Scenarios A, B, C and D

The LRFP-NA considers the four planning scenarios identified in the IRP Needs Assessment, which summarized the core supply, flexible supply, and storage needed under each scenario. Only Scenario A avoids shortages without additional water supply and system reliability investments. The remaining scenarios identified potential gaps in core supply and storage for each scenario (acre-feet (AF) needed for each year from 2025 to 2045). It defined high-level actions needed to achieve reliability in each scenario.

The baseline financial forecast was created by taking the 2022/23 and 2023/24 Adopted Budget and 10-Year Financial Forecast and removing the assumed Pure Water Southern California project costs. The baseline, therefore, does not include significant additional resource development but does include ongoing funding for conservation, local resource projects, capital refurbishment and replacement, and various operating assumptions pertaining to cost inflation rates, interest rates, and power and treatment unit costs. Per the 10-Year Financial Forecast, $300 million of annual capital improvement plan (CIP) funding is included in the base cost assumptions for all LRFP-NA scenarios, escalating at 3% annually over the forecast period. The CIP funding largely reflects the deferral of facility expansion projects and focuses instead on necessary refurbishment and replacement of aging infrastructure and compliance with regulatory requirements. The resource development costs presented in the LRFP-NA analysis are in addition to the baseline CIP funding from the 10-Year Financial Forecast. Additionally, the baseline cost includes $30.5 million of annual funding for residential, commercial, and outdoor conservation programs, and conservation messaging. The conservation development scenario included in the LRFP-NA and presented in subsequent sections of this Working Memorandum would add funding in addition to the baseline amount of $30.5 million. Financial plans typically do not project beyond a 10-year period. The LRFP-NA forecasts the average annual rate increases needed to meet the resource development requirements of each scenario over a 10-year period, through 2032, which would include projects to be completed by 2035. Scenario D (**Figure 1**) requires the most significant resource development to reliably meet projected Member Agency demands 100 percent of the time. This scenario shows that core supply would need to increase by as much as 300 thousand acre-feet (TAF) by 2032 beyond Metropolitan's existing resource portfolio of supplies.

2.2 Key Considerations

The LRFP-NA developed key questions that framed the outline of the document and helped guide the analysis. These questions include:

- What are the rate impacts and how much does it cost to provide 100 percent reliability (i.e., meet Member Agency water resource demands fully) under a heavily stressed climate and demand scenario, while considering Member Agencies' potential changes in demands and local conditions?
- Can Metropolitan address the core supply needs in Scenario D solely through conservation?
- What bond financing options are available and what is Metropolitan's debt capacity to finance the projected capital investments?
- How much outside funding from federal and/or state grants should Metropolitan target?
- What other financing tools or structures can Metropolitan explore to address Scenario D capital investments while balancing the varying needs of its member agencies?

2.3 Rate Impacts for Various Scenarios

To establish a comparative cost metric, the average annual rate[1] increase needed to meet the resource development requirements of each Scenario were developed. Cost assumptions were developed based on estimated unit cost per acre-foot of either core supply or storage. Unit rates were developed as follows (see **Figure 2** for definitions):

- Core supply unit cost: $3,000/AF (2023$). The sources used to develop the unit cost for core supply are based on three Southern California desalination and recycling projects. These unit costs are representative of a new core supply that is developed in-region, which operates continuously, and reflects the higher marginal price associated with investing in new conveyance and advanced treatment facilities.
- Storage unit cost: $300/AF of storage capacity (2023$). The sources used to develop the unit cost for storage are based on Metropolitan's cost for construction of Diamond Valley Lake and preliminary results of an in-region storage study. The storage unit cost is based on built capacity, not a calculation of anticipated yield. As such, $300/AF can be interpreted as the annual financing and O&M cost per acre foot of built capacity of new storage.

The IRP Needs Assessment identified three categories of supply:

Core Supply: A supply that is generally available and used every year to meet demands under normal conditions and may include savings from efficiency gains through structural conservation.

Flexible Supply: A supply that is implemented on an as-needed basis and may or may not be available for use each year and may include savings from focused, deliberate efforts to change water use behavior.

Storage: The capability to save water supply to meet demands at a later time. Converts core supply into flexible supply and evens out variability in supply and demand.

Figure 2. Definitions of Core Supply, Flexible Supply and Storage

[1] Average Annual Rate refers to the aggregate rate for full-service treated water.

- Flex supply unit cost: $600/AF. The sources used to develop the unit cost for flex supply are Metropolitan's current supply programs and recent transfer transactions. Minimal quantities of flex supplies are required on average for each of the IRP scenarios. As such flex supplies do not significantly impact the modeling results.

Figure 3 and **Figure 4** present the net shortages identified in the IRP Needs Assessment, through 2032, based on the projected demands from the IRP Needs Assessment (**Figure 5**). The LRFP-NA modeled multiple scenarios, summarized in **Figure 6**. The LRFP-NA identified multiple findings, including the following:

- Estimated rate increases assuming only core supply for each IRP Needs Assessment Scenario A through D (**Figure 7**).
- Estimated rate increases for Scenario D assuming both core supply and storage is developed (sensitivity of shortage) (**Figure 8**).
- Estimated Capital Investment for IRP D Scenario assuming 200 TAF of core supply is developed and 250 TAF of storage (**Figure 9**).
- Summary of estimated overall annual rate increases from 2025-2032 (**Figure 10**).
- Sensitivity analysis assuming low demands are experienced when Scenario D is built (**Figure 11**).

Figure 3. Project Net Shortages Under Different Supply and Demand Conditions through 2032

Core Supply Needs in 2032			
	No Storage	250 TAF Storage (182 TAF storage in 2032)	500 TAF Storage (364 TAF storage in 2032)
IRP A	0 TAF	0 TAF	0 TAF
IRP B	50 TAF	30 TAF	30 TAF
IRP C	15 TAF	15 TAF	15 TAF
IRP D	300 TAF	200 TAF	200 TAF

Figure 4. Core Supply Needs in 2023

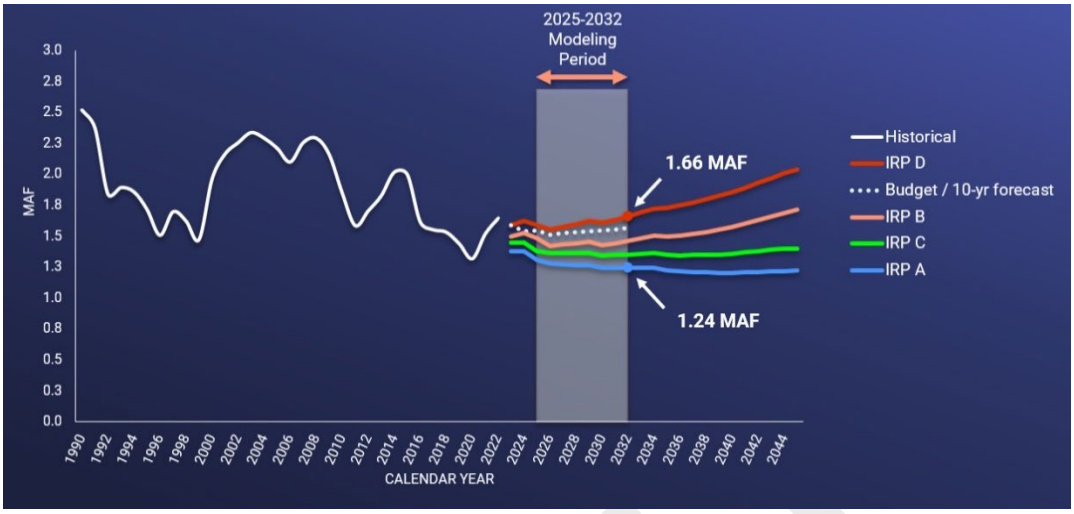


Figure 5. Projected Water Demands for IRP Scenarios

#	Scenario Short Descriptions	IRP Scenario	Import Reliability	Demands	2035 Core Supply Target (AF)	2045 Storage Target (AF)	2032 Storage Target (AF)
1	IRP A, No Storage	A	High	Low (1.24 MAF[11])	N/A	N/A	N/A
2	IRP B, No Storage	B	High	High (1.46 MAF)	50,000	-	-
3	IRP C, No Storage	C	Low	Low (1.35 MAF)	15,000	-	-
4	IRP D, No Storage	D	Low	High (1.66 MAF)	300,000	-	-
5	IRP D, 250 TAF Storage	D	Low	High (1.66 MAF)	200,000	250,000	181,818
6	IRP D, 500 TAF Storage	D	Low	High (1.66 MAF)	200,000	500,000	363,636
7	IRP D w/ IRP A Demand	D	Low	Low (1.24 MAF)	200,000	250,000	181,818

Note: Footnote 11 in the LRFP-NA states:
MAF=Million acre feet

Figure 6. Comparison of Modeled Scenarios
(Figure 13 in LRFP-NA)

To achieve 100 percent reliability in 2032 under Scenario D projections, developing a combination of core supply and storage provides the lowest rate increase for that scenario. As summarized in **Figure 10,** at 7.1 percent, this increase is higher than the lowest value of 5.6 percent, but lower than the highest value of 8.4 percent. This configuration was used to calculate a scale of estimated capital investment using the unit rates presented above to estimate capital and O&M costs. Taking the derived capital financing unit rate and multiplying by a resource development target results in an annual financing cost, which was then worked into an estimated total project cost.

To be 100 percent reliable by 2032 under the IRP D scenario with the lowest average annual rate increases (7.1 percent), Metropolitan's preliminary estimate is that $5.5 billion to $6.0 billion of capital investment (in 2023 dollars) could be needed to achieve that objective (**Figure 9**). However, this should be considered a **high-level estimate, as numerous factors can affect the overall cost of a project**. Additional distribution infrastructure, economies of scale, inflation, environmental and regulatory compliance, and treatment technology will impact the ultimate cost of a project.

IRP Scenario	IRP A	IRP B	IRP C	IRP D
Core Supply Development	0 TAF	50 TAF	15 TAF	300 TAF
Average Annual Rate Increase through 2032	6.2%	5.6%	5.6%	8.4%

Figure 7. Estimated Rate Increase Under IRP Scenarios for Core Supply Only
(Figure 1 in LRFP-NA)

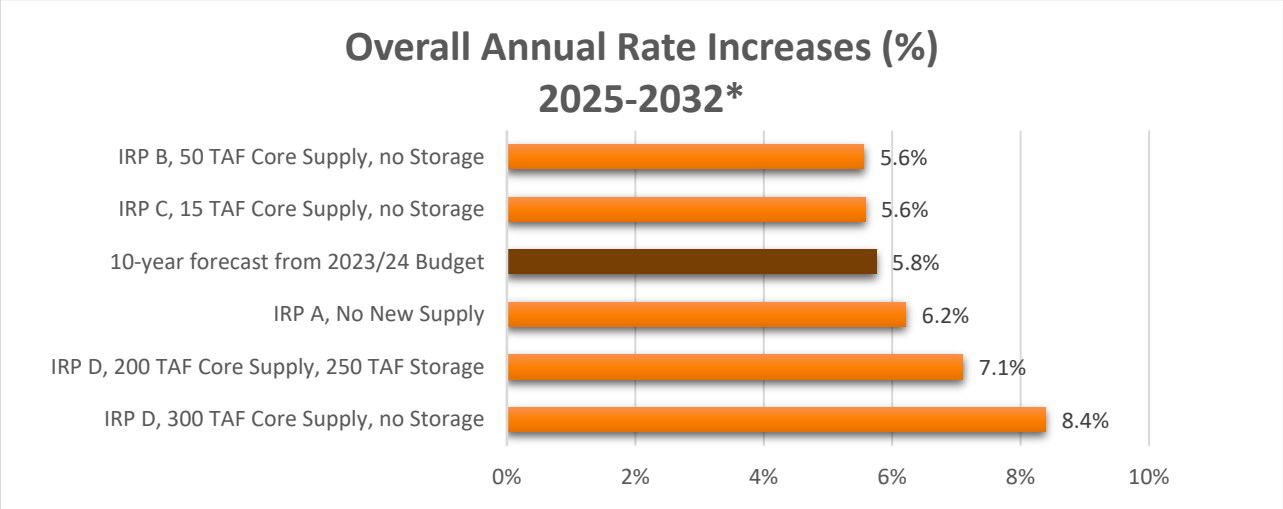
IRP D	300 TAF Core Supply	200 TAF Core Supply	200 TAF Core Supply
	0 TAF Storage	250 TAF by 2035	500 TAF by 2035
Average Annual Rate Increase through 2032	8.4%	7.1%	7.4%

Figure 8. IRP Scenario D Annual Rate Increase Sensitivity of Shortage
(Figure 2 in LRFP-NA)

Resource Development		Estimated Capital Investment (billions in 2023$)
Core Supply (TAF)	Storage Capacity (TAF)	
200	250[4]	$5.5 - $6.0

Note: Footnote 4 LRFP-NA): Refer to Figure 10 for supply and storage development requirements by year.

Figure 9. Estimated Capital Investment for IRP D Scenario
(Figure 3 in LRFP-NA)



**Increases in different rate elements may vary as a result of the Cost of Service allocation and cost recovery approach for each project. Impacts on a member agency will depend on how and when they take water. For example, the more a project is allocated to supply then the full-service water rate will increase higher than the price for SDCWA exchange agreement deliveries.*

Figure 10. Projected Water Demands for IRP Scenarios

**Member agency rate impacts might be substantially higher than the overall rate increase as a result of the Cost of Service allocation and cost recovery approach taken for each project. For example, if a project only impacts the supply function, then the rate increase for full-service water would increase more and the price increase on the SDCWA exchange deliveries would be less.*

Figure 11. Sensitivity Analysis – Low Demands for IRP D Scenario – Average Annual Overall Rate Increases (2025-2032) (Figure 2 in LRFP-NA)

2.4 Managing Risk with Development and Conservation Assumptions

As development decisions are made, inherent risks and tradeoffs must be considered. On one hand, if Metropolitan develops resources to meet Scenario D projections, and invests in capital projects equivalent to 200 TAF of core supply and 250 TAF of storage, but future demands are significantly lower, such as projected under Scenario A, Metropolitan would need to raise rates an additional 3.8 percentage points (from 7.1 percent up to 10.9 percent) due to the reduced revenues that would be seen under the current Business Model. On the other hand, if Metropolitan were to develop limited supply by only assuming Scenario A projections, but Scenario D conditions were to occur instead, by 2032 the region could see shortages of up to 300 TAF from 10 to 23 percent of the time. Establishing what risk tolerance the Board is willing to face will be an ongoing decision point as the adaptive process continues into the future.

Another factor to consider is the impact of focusing more heavily on conservation as a potential path towards achieving a balanced water portfolio by reducing demands, rather than developing new core supplies. While conservation programs do have the potential to be significantly beneficial, there is insufficient data on the availability and price of the marginal effectiveness of expanding conservation programs. Further study is needed to identify the available capacity and price elasticity of conservation. Conservation programs require front-loaded expenditures for future water savings realized over the lifetime of the investment. Based on the approach analyzed in the LRFP-NA, implementing a robust conservation program able to reduce demands by 300 TAF by 2032 would require expenditures of more than $1.1 billion per year. While conservation can be an effective tool to manage demand, it should be evaluated as a part of a multi-pronged approach to solving projected gaps between available supplies and Member Agency demands. Other conservation options will be further considered through the CAMP4W process as conservation provides multiple benefits such as a reduced risk of stranded assets.

2.5 Initial Considerations for Metropolitan's Ability to Fund the Program

Historically, Metropolitan has developed its capital infrastructure predominantly through its own revenues and financing tools. Metropolitan has maintained a highly rated and successful bond program over its history to meet its capital financing needs.

Given the significant investment required to address the impacts of climate change on top of the existing requirements to maintain Metropolitan's existing system infrastructure, Metropolitan may explore additional options. The following discussion addresses Metropolitan's bond program debt capacity and opportunities for funding from federal and state grant and loan programs. A summary of the funding options discussed further in the LRFP-NA is included in **Figure 12**.

2.5.1 Metropolitan's Bond Program Debt Capacity

To maintain its highly rated bond program, Metropolitan has:

- Adopted prudent debt policies and comprehensive financial best practices.
- Issued a variety of debt instruments to lower its cost of capital.
- Balanced the prioritization of key financial metrics consistently in each biennial budget.
- Managed its relationship proactively with the rating agencies and bond investors.

Types of Financing Tools Available to Metropolitan:

- General Obligation Bonds
- Revenue Bonds
- Certificates of Participation
- Long-Term Tax-Exempt Bonds
- Short-Term Notes and Certificates
- Taxable/Tax-Credit Bonds
- Fixed Rate Loans
- Variable Rates Loans
- Subsidized Loans
- Federal/State Grants (such as Bureau of Reclamation, FEMA, or State Department of Water Resources grant options)
- Federal/State Legislative Budget Appropriations
- Federal/State Loans (WIFIA, SRF, CA IEDB) or debt issued through other entities
- Revenue sources such as rates, fixed charges (Readiness-to-Serve charge and Capacity Charge), property taxes, and lease or other contractual Payments and Appropriations
- Floating Rate Notes
- Variable Rate Demand Bonds (VRDBs)
- Commercial Paper
- Bank Line of Credit
- Other options such as: Tax credit bond (TCB) Financing, New Property Tax Secured Bonds, Tax rate increases

Refer to Section 9 of the LRFP-NA for additional information.

Figure 12. Funding Options

It is estimated that Metropolitan has a range of revenue bond debt capacity between $3.6 billion and $5.1 billion (assuming debt service target does not fall below 1.50x and other requirements are met).

This analysis indicates that based on previously discussed assumptions, there is ***barely sufficient revenue bond debt capacity to accommodate this new projected capital financing need***. In addition, costs may be higher than the preliminarily estimated $5.5 billion to $6.0 billion in capital needs because of the following:

- While $300 million annual costs for CIP projects (mostly refurbishment and replacement of Metropolitan's existing facilities and conveyance system) are assumed in the rate impact analysis, funding of costs associated with increased refurbishment and replacement need to be considered carefully in the context of debt capacity.
- Projected costs for supply and storage projects are preliminary in nature, based on unit costs, which could be higher when specific projects are identified.
- There may be risk associated with assumptions related to Member Agency demands, if water sales do not occur as projected. This would negatively impact net operating revenues and potentially debt service coverage.
- Impacts beyond 2032 have not been established to address the 2045 projections presented in the IRP Needs Assessment, which include significantly more core supply and storage.

Based on these findings, although Metropolitan may be able to finance these capital needs by maximizing its revenue bond capacity, this may not be the only or most advisable approach.

2.5.2 Exploring Federal and State Funding Opportunities

Metropolitan's new Centralized Grants Management team in the Sustainability, Resilience and Innovation (SRI) office will provide a coordinated approach to analyzing, helping secure and complying with grant funding requirements.

Government grants and other legislative support could include:

- Existing federal legislation to address climate change impacts on various capital infrastructure including water-related projects.
- State priorities focused on climate change impacts.
- Water Infrastructure Finance and Innovation Act (WIFIA) loan managed by the U.S. Environmental Protection Agency (EPA).
    - WIFIA can provide loan funding up to 49 percent of Eligible Project Costs at competitively low rates, currently around 4 percent.
    - Potential for Master Loan Agreement with EPA to fund qualifying expenditures for a combination of eligible projects, in addition to funding for specific projects.
    - Would have the potential to provide approximately $3 billion in loan authorization, depending upon the project(s) submitted and qualifying eligibility (based on the maximum estimate of capital infrastructure needs in IRP D scenario of $6.0 billion).
- New approaches and/or opportunities to advocate for new tools that could enable Metropolitan to save on the cost of its infrastructure investments.
- Actions that mandate increased water efficiency can reduce Metropolitan costs for incentive-based conservation.

2.6 Metropolitan's Board Direction

Based on the results of the LRFP-NA, Metropolitan staff seek Board feedback on three important questions critical to the undertaking of Phase 2:

- What is an acceptable average annual rate increase on full-service water sales through 2032 to fund water portfolio projects and/or conservation to address expected impacts of climate change as analyzed within the 2020 IRP Needs Assessment?
- What is the desired estimated allocation between core supplies (which includes conservation), flex supplies, and storage in the optimal portfolio mix developed within the acceptable average annual rate increases identified by the Board?
- What alternative financing approaches interest the Board either singularly or in combination to address funding of future capital investments?

The findings of the LRFP-NA financial analysis are dependent on the assumed unit costs for each resource. Although Metropolitan exercised care in selecting appropriate references on which to base the

unit costs, it is anticipated that when Phase 2 of the LRFP concludes, there will be differences between project-specific unit costs and those modeled here in LRFP-NA. During the second phase of the LRFP, staff will provide a refined financial forecast that considers the Board's approved resource development portfolio that emerges from the CAMP4W process.

In addition, the Board will be evaluating Business Model alternatives, which are discussed in **Section 3**. Since each part of the CAMP4W process is interconnected, the iterative and adaptive approach employed by Metropolitan throughout this process will allow for informed decision and refinement. While the Business Model discussion is preliminary, it is important to consider its potential impact on the LRFP and vice versa.

Section 3 Business Model Considerations

While the exact nature of the hazards a utility faces can vary based on geographic location across the United States, one fact that remains constant is that climate change is having a profound impact on water utilities nationwide. Utilities in the water industry are having to reevaluate their strategies for managing available water supplies, often establishing multiple approaches to adapt as conditions evolve over time.

The Board requested during a recent CAMP4W workshop that additional discussion on the Business Model occur early in the CAMP4W process. Therefore, the CAMP4W process will discuss Metropolitan's current Business Model and facilitate discussions and establish recommendations pertaining to updates to the Business Model.

Framework: The CAMP4W process will consider Metropolitan's evolving function within the region and seek to establish how Metropolitan can best serve the region in facilitating reliability and resiliency in the face of a changing climate, while maintaining financial sustainability.

This section provides a discussion of the following components of the Business Model alternatives:

- Metropolitan's core business and potential for an expanded function within the region
- Alternative revenue structures
- Integration of Business Model development into the CAMP4W process

The Board's February 2023 CAMP4W retreat included discussion on the need to consider possible updates to the business model to build resilience, something that has been raised in past evaluations as well. The CAMP4W process will facilitate progressing discussions related to these topics and options that could strengthen Metropolitan's capacity to invest in necessary resource projects and programs.

3.1 Metropolitan's Historical Role as Importer and Potential Evolving Role to Meet the Needs within the Region

Metropolitan's core business is structured around the sale of treated and untreated water through the importation of water. To conduct this core business, Metropolitan must develop and maintain a network of supportive facilities, which includes conveyance facilities, storage facilities, treatment facilities, and other infrastructure. Metropolitan must also undertake additional efforts such as regional planning, design, water quality monitoring, maintenance, permitting, and other tasks associated with providing a reliable supply of treated and untreated water. All these functions have centered around importing water to ensure delivery of wholesale water service.

The Board and Member Agencies have expressed an interest in potentially revising Metropolitan's functions in the region due to an increasing focus on developing local supply options to address the reduced reliability of imported supplies. Considering the need for Metropolitan to continue to serve Member Agencies, an updated Business Model presents an opportunity to deploy shared resources in order to remain ***stronger together***.

Metropolitan will be exploring multiple components that could be included in the updated Business Model. These options may include but are not limited to:

- Metropolitan developing its own local supplies.

- Metropolitan facilitating financial or other mechanisms to enable the sharing of water resources between Member Agencies (e.g., Metropolitan developing and owning infrastructure that transfers supplies from one or more Member Agencies to storage owned by another Member Agency, or for direct use by other Member Agencies).
- Metropolitan expanding local capacity and regional benefits through co-investing in local resource development.
- Metropolitan providing support to Member Agencies to develop affordability strategies for their customers across the region, including but not limited to technical or policy guidance, advocacy for state action or funding, and fiscal capacity to facilitate external grants or other funding.

The CAMP4W process can enable discussion and creativity about how Metropolitan can best support the region's future through engagement of the Board and Member Agencies in a collaborative and transparent manner. Section 3.3 provides a discussion on how this process corresponds to the other CAMP4W efforts.

3.2 Alternative Revenue Structures

Across the nation utilities are faced with the challenge of evaluating their ability to maintain financial sustainability in the face of an uncertain climate, increased operational and capital costs, aging infrastructure, and expectations of greater equity, such as the need to invest disproportionally in areas that historically have experienced under investment. Metropolitan also faces similar challenges, but at a wholesale level. As a voluntary cooperative without consistent purchase commitments, Metropolitan may also see reduced water demands due to conservation and/or increased local supply that can impact rates, as discussed in Section 2. These challenges could support a revision to Metropolitan's existing revenue structure or the consideration of new revenue structures to support Metropolitan's continued agility and financial sustainability.

At the October Finance, Audit, Insurance and Real Property Committee, staff will bring forward an analysis of alternative cost recovery options for Pure Water Southern California. This discussion of Pure Water cost recovery options may serve as a foundation for future Board discussion on Metropolitan's Business Model. In addition to the cost recovery options for Pure Water Southern California, other cost recovery alternatives may merit further consideration for revisions to Metropolitan's revenue structure while continuing to ensure fairness across the Member Agencies. These may include, but not be limited to:

- Volumetric model
- Volumetric model with demand commitments
- Tax-based revenue model
- Non-volumetric
- Creating different services with different rates
- Increased fees for new annexations

A key component in the CAMP4W process involves open collaboration with the Board and Member Agencies. Exploring all potential options so that the Board and Member Agencies have the opportunity to consider the pros and cons of each will be critical as Metropolitan makes decisions about future investments. In addition to the financial analysis of each option, other benefits may be weighed, such as an alternative's ability to elicit collaboration and shared goals among Member Agencies and objectives of fairness and equity.

3.3 Integration of Business Model Development into the CAMP4W Process

As is the case with the CAMP4W process in general, the development of a Business Model for Metropolitan that will serve the region in the future is best done through an iterative process. Decisions on the Business Model structure will evolve as the process considers: 1) Member Agency interests in increasing collaboration and maximizing local resources, 2) the establishment of a decision-making framework to allow the selection of specific projects to fill gaps and increase reliability and resiliency, 3) updates to the LRFP based on selected projects, and 4) the establishment of how equity and affordability pertain to Metropolitan as an agency. Since these aspects all inform one another, establishing a framework that is adaptable, flexible, and iterative will allow Metropolitan to establish the most beneficial Business Model heading into the future.

Figure 13 presents the major touch points where the updated Business Model, as well as the LRFP, will be drafted through the CAMP4W process. Beyond these high-level input points, Metropolitan will be discussing the components that go into the Business Model with the Board and Member Agencies throughout the process. This will allow Metropolitan to adjust based on preferences, findings, and opportunities discovered along the way. As a two-directional process, some Business Model decisions will impact other CAMP4W components at the same time as those components will impact the Business Model decisions.

Some key questions that will be presented through the process include the following:

- To what extent should individual Member Agencies' potential for developing local resources be considered in the context of greater regional needs, such that Metropolitan could facilitate that regional benefit?
- How much should Metropolitan be developing its own local resources, such that it evolves from a service dependent upon imported supplies to one with more supply resource diversity?
- What cost recovery alternatives should Metropolitan incorporate?
- What options does Metropolitan have in terms of facilitating affordability programs for retail customers of Metropolitan's Member Agencies, including practical, legal and ethical considerations?

As the CAMP4W process unfolds, Metropolitan will engage in many discussions with the Board and Member Agencies as Metropolitan strives to establish the best path forward for continued long-term sustainability. Metropolitan may also look to engage with other agencies across the nation to gain insight into what options are being implemented and to gain perspective on lessons learned regarding what does and does not achieve the intended goals.

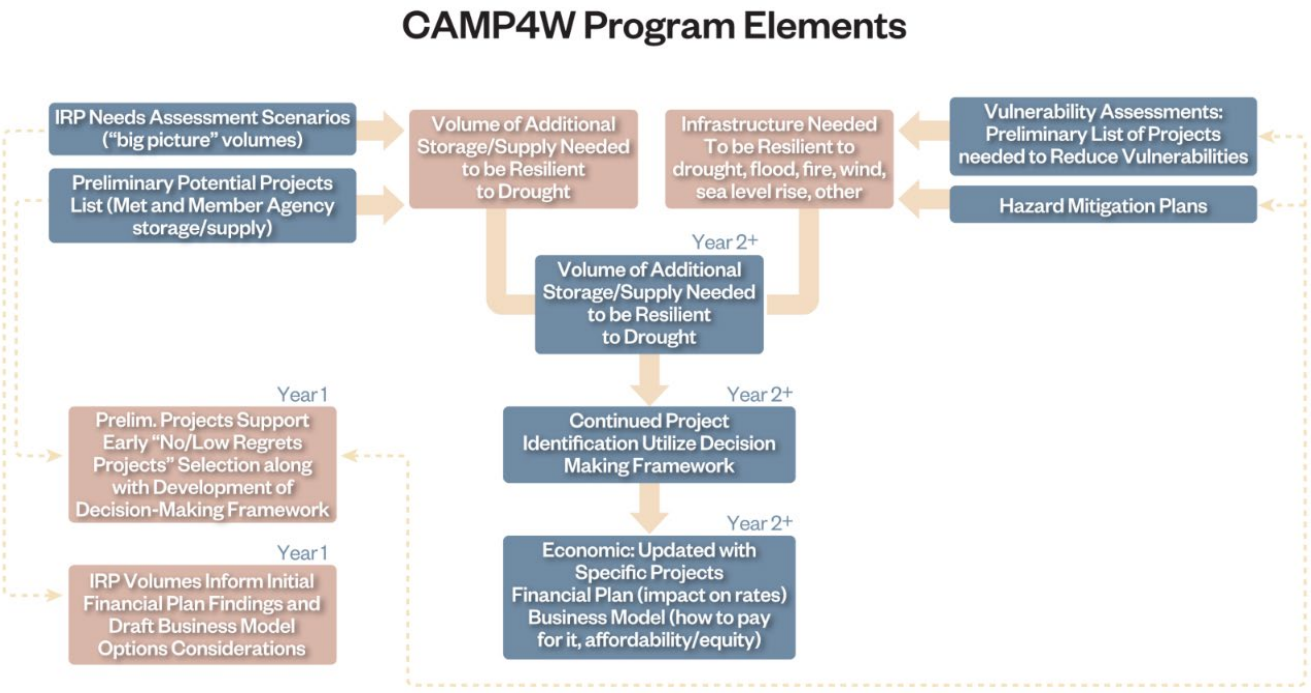


Figure 13. CAMP4W Program Elements