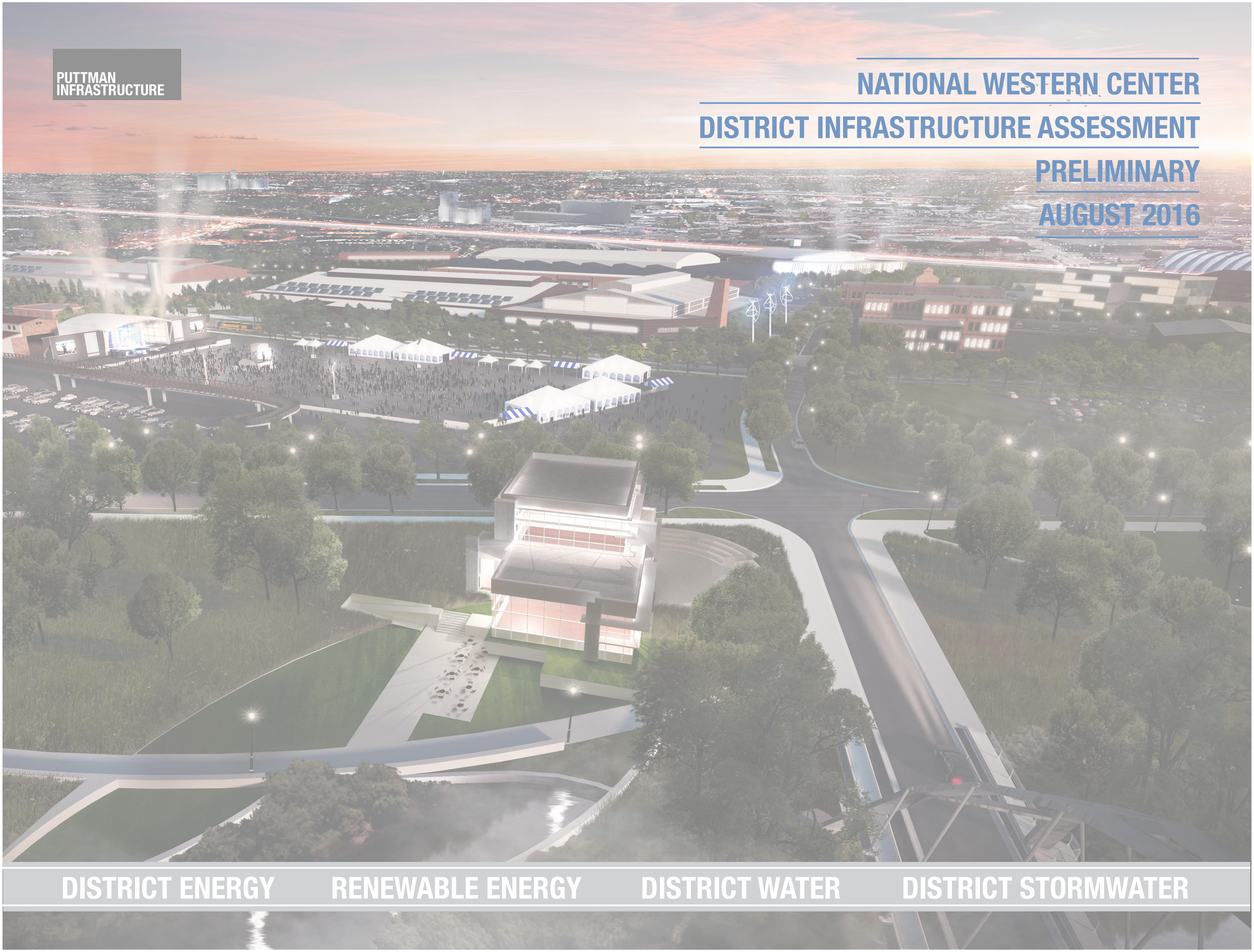

PUTTMAN
INFRASTRUCTURE

NATIONAL WESTERN CENTER
DISTRICT INFRASTRUCTURE ASSESSMENT

PRELIMINARY

AUGUST 2016

DISTRICT ENERGY RENEWABLE ENERGY DISTRICT WATER DISTRICT STORMWATER


NATIONAL WESTERN CENTER
EXPOSITION HALL
ARENA
JOHN DEERE
CHEVROLET
CINCH
JEANS & SHIRTS
Brighton
47th AVE

NWC

PRELIMINARY
DISTRICT INFRASTRUCTURE ASSESSMENT

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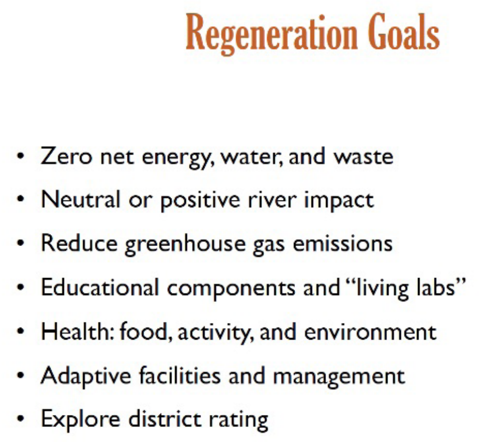
EXECUTIVE SUMMARY

District infrastructure is a smart investment for National Western Center. Innovative district-scale systems that leverage existing National Western Stock Show assets – such as district energy, renewable energy, district water and district stormwater – demonstrate tremendous potential to reduce resource consumption and carbon emissions while generating significant economic benefit to the development partners of the National Western Center.

This objective of this report is to introduce the concept of district infrastructure and provide a preliminary assessment of the benefits of district infrastructure as compared to traditional development.

NWC Regeneration Goals

As shown in this assessment, the use of district infrastructure is foundational to achieving NWC's regeneration goals, especially zero net energy and water.



Regeneration Goals

- Zero net energy, water, and waste
- Neutral or positive river impact
- Reduce greenhouse gas emissions
- Educational components and "living labs"
- Health: food, activity, and environment
- Adaptive facilities and management
- Explore district rating

Figure 1 — Regeneration Framework

Benefits of District Infrastructure

Puttman Infrastructure's AIM Model (Assess to Invest) was used to identify and evaluate energy and water strategies NWC could utilize to achieve net-zero goals. Preliminary results show the benefits of district infrastructure in reducing resource consumption over multiple systems.

Utility district energy helps NWC reduce energy demand by 20%, a district-scale water recycling system provides a 30% water savings, and maximizing onsite solar PV helps to meet over 25% of the district's energy demand through on-site and renewable energy.

An initial district stormwater concept was prepared but additional cost benefit assessment work should be completed.

See Figure 2 for a performance summary comparison between conventional systems (BAU) and district infrastructure systems.

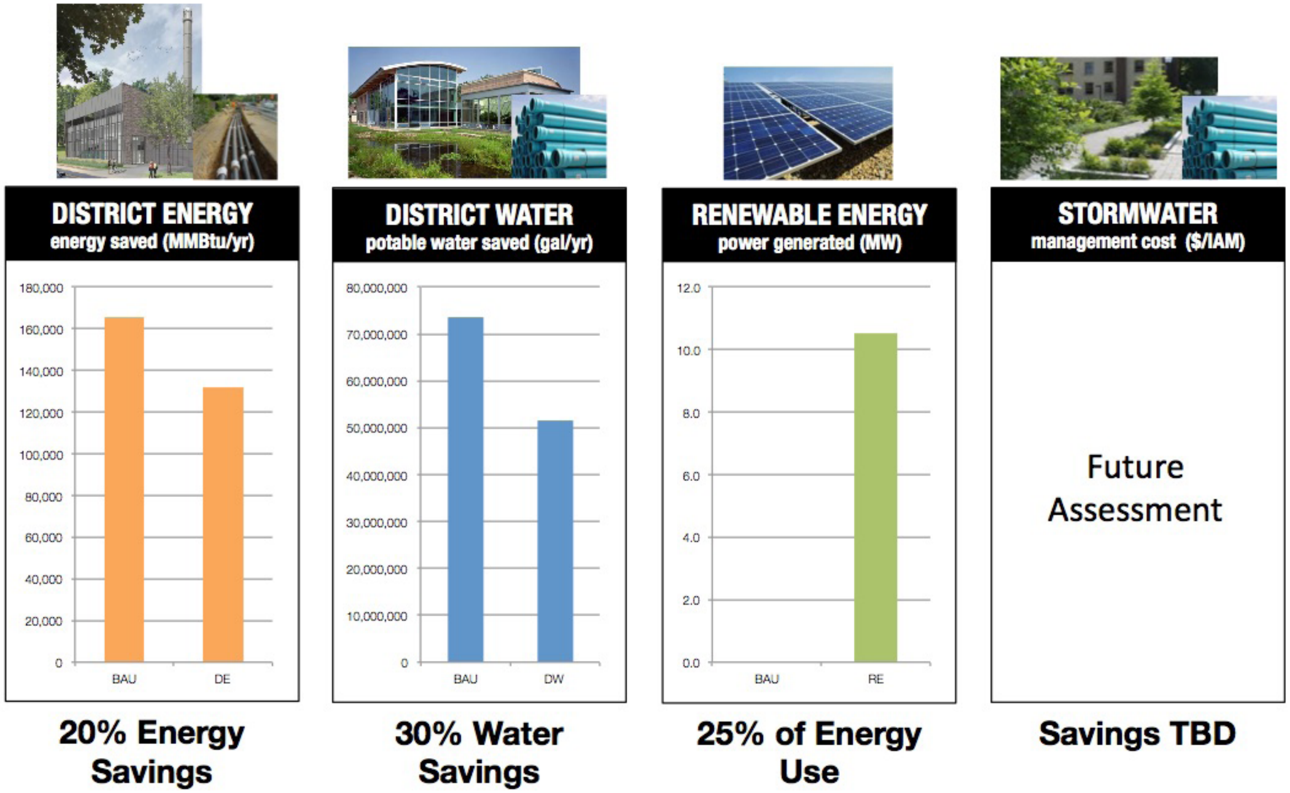


Figure 2 — Performance Summary

NWC District Infrastructure Center

Although this preliminary assessment concluded each district infrastructure system to be financially viable independent of each other; both district energy and district water have the potential to be located in one single location with NWC.

Co-locating district infrastructure equipment and supporting elements in one centralized location would not only reduce capital and operating costs but it would create a unique educational and research opportunity for the NWC development partners and the greater community.

In one location, researchers and visitors would be able to see and learn about the sustainable infrastructure systems that help NWC realize its regeneration goals.

Figure 3 — NWC District Infrastructure Center Concept

1

INTRODUCTION

Section 1 provides background and context for National Western Center including the desire to assess the potential of district infrastructure to serve the project site while achieving regeneration goals.

What is infrastructure?

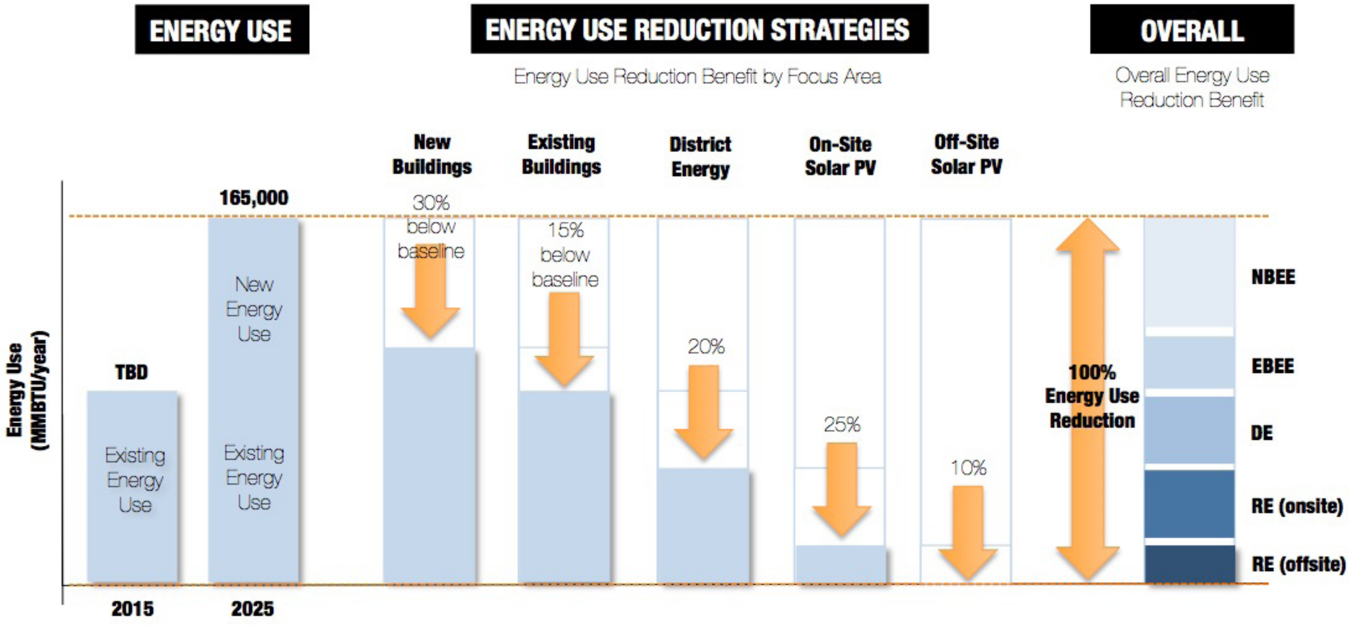
Infrastructure is the basic physical and organizational structures and facilities (e.g. buildings, roads, and utilities) needed for the operation of a society or enterprise. Provided well, infrastructure allows communities to thrive. Provided in a more integrated and innovative manner, infrastructure allows communities to thrive sustainably.

Conventional Infrastructure Systems

Communities need high-quality water to support health and economic activities and robust sewer systems to manage the wastewater generated from them. Stormwater infrastructure is used to minimize flooding and reduce pollution from impacting natural waterways. Electricity and natural gas infrastructure provides energy for homes, businesses and industry. Historically, these infrastructure systems have been provided in a "centralized" approach, where large central plants generate electricity and potable water or treat wastewater.

District Infrastructure Systems

Over the last decade, efficient green building has been utilized to minimize the demands on these centralized infrastructure systems. As green building evolves, building scale efficient design can only push resource conservation so far cost-effectively. Now infrastructure itself has been identified as the next step in building more sustainable and resilient communities.



NOTES:

1. Existing development assumptions and energy use not estimated.
2. "% below baseline" based on estimated annual energy demand of full build out.
3. New building energy reduction = 56% and existing building energy reduction = 50% (EUI range of 40-45).

Figure 4 — NWC Pathway to Net Zero Energy

Providing energy, water, wastewater and stormwater services through more localized, distributed infrastructure, allows a more integrated and optimized infrastructure service approach - further reinforcing high performance, green building with innovative and efficient district infrastructure systems.

This report highlights the most suitable district infrastructure systems to support the National Western Center vision. These district infrastructure systems include district energy, district water, district stormwater and renewable energy.

Why District Infrastructure?

Much of the development of the past century focused on large, centralized, single purpose infrastructure systems. These systems were highly effective for promoting economic development, public health and environmental quality in rapidly growing urban areas. And these systems will continue to play an important role in cities.

However, aging infrastructure, the densification and expansion of cities, new fiscal constraints, new technologies, and changing societal values are calling for an expanded toolkit to optimize infrastructure and meet sustainability objectives. Not as a replacement for traditional, centralized infrastructure systems, but as an alternative or complementary strategy to address new challenges and seize new opportunities.

Sustainability demands creative and flexible solutions that are sensitive to local context and that produce real improvements in service quality and resource efficiency. In recent years, the focus as been on building-scale alternatives to centralized infrastructure – high efficiency to net-zero green building – but buildings may not always be the most appropriate or cost-effective scale to promote sustainability. District infrastructure systems – neighborhood-scale utilities that provide services such as heating, cooling, electricity, and reclaimed water – are emerging as a key strategy for cities that are pursuing aggressive sustainability goals.

A Pathway to Net-Zero

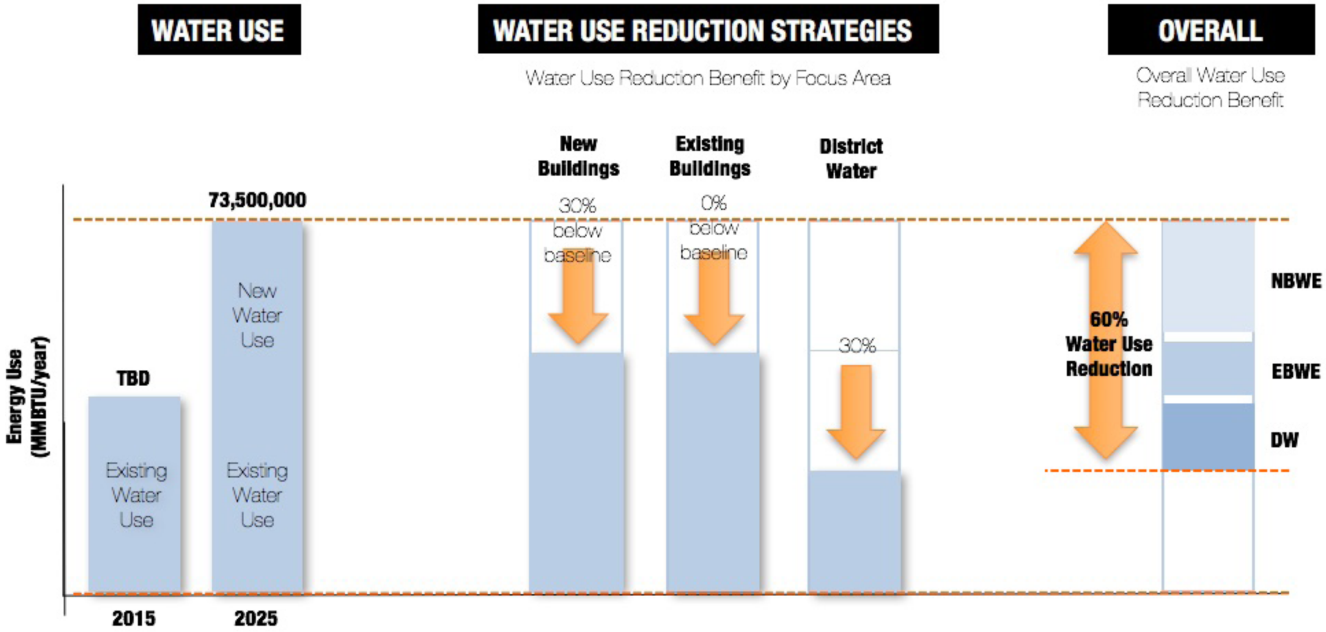
Achieving net-zero energy and water requires a coordinated and integrated effort between high-performance buildings and innovative infrastructure. Two net-zero assessments were conducted for energy and water for NWC.

Achieving net-zero energy requires a mix of mix of new building and existing building energy efficiency, district energy, on-site renewable energy and on-site renewable energy. Combined, the benefits of each strategy generate a 100% reduction in net energy use per year.

District energy and renewable energy infrastructure (solar PV) is foundational to achieving NWC regeneration goals.

A summary of NWC's pathway to net zero energy is provided in Figure 4.

Net-zero water is defined by many as living within the water that falls on a site; however, in detail, this approach generally allows for the use of potable, City water only for potable purposes (i.e., drinking water). As a result, achieving net-zero water is generally achieved by supplying 100% of the non-potable water of a development with water from the site.



NOTES:

1. Existing development assumptions and water use not estimated.
2. "% below baseline" based on estimated annual water demand of full build out.
3. New building water reduction = 35% and existing building water reduction = 25%.
4. 100% of non-potable water from district water.

Figure 5 — NWC Pathway to Net Zero Water

Like in energy, achieving net-zero water for NWC also requires a mix of efficiency and infrastructure. In the case of NWC, a district water system can be used to collect, treat and reuse 100% of the wastewater generated for non-potable purposes. Though technically feasible, Colorado water law may need to be advanced to ensure district water is viable from a regulatory perspective.

A summary of NWC's pathway to net zero water is provided in Figure 5.

2

DEVELOPMENT ASSUMPTIONS

Section 2 identifies the key development assumptions used to conduct the district infrastructure assessment.

In order to evaluate the potential benefits of district infrastructure, it is important to understand the potential development that it will provide service to.

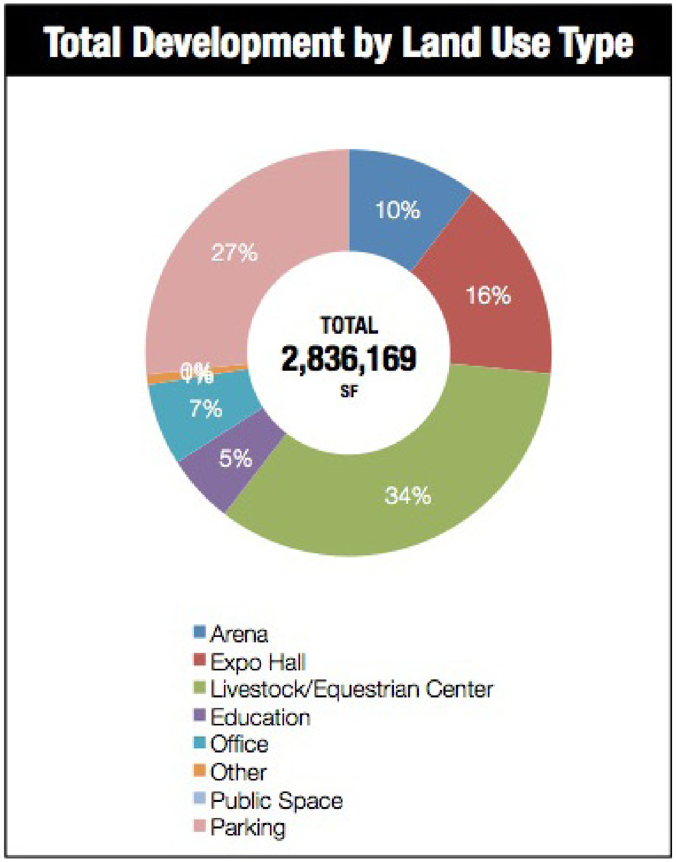
Planned Development

The development will consist of approximately 2,836,000 SF of buildings, with a mix of Arena, Trade Show/Expo Hall, office space, livestock/equestrian center, education, structured & surface parking, and public space. Development assumptions are based on the program provided in the North Denver Cornerstone Collaborative, NWC Site Tour document from September 25, 2015.

A summary of NWC development at full build out is provided in Figure 6.

Phasing

The NWC Site Tour document shows development occurring over 8 phases. The specific timeline has not been developed but Phases 1-2 are planned to be developed over the next 7-10 years with the rest of the Phases to follow. Full build out is anticipated within a 20 year period.



NOTE:
Development assumptions based on program provided in the North Denver Cornerstone Collaborative, NWC Site Tour document (September 25, 2015).

Figure 6 — NWC Development Assumptions (Full Build Out)

3

DISTRICT ENERGY

District energy has the potential to both reduce energy use and GHG emissions while generating financial benefits for the National Western Center. Section 3 provides an overview of district energy and summarizes the results of a preliminary district energy feasibility assessment, including district energy system options.

District Energy Overview

District energy is not a new concept. It has been used as far back as the Romans. District energy helped the initial development of the electric power industry by enhancing the economics of new power plants by generating additional revenue from waste heat recovery. Today, more than 50% of all building stock in countries of Northern Europe is connected to district systems.

In Stockholm, Sweden, for instance, the entire city of more than 800,000 people is served by two systems. As they incrementally expanded to serve more people, these systems added new sources of energy. With such systems, technologies tend to evolve on a regular basis, approximately every 15 to 20 years.

Based on 2005 information from the International District Energy Association (IDEA), the U.S. and Canada had about 650 district systems in operation, though a number of systems have begun operations since then. Of this number, more than 75 percent serve either university or hospital campuses, while the remainder serve portions of downtown urban areas. These district energy systems provide energy to about 10 percent of non-residential spaces in the U.S.

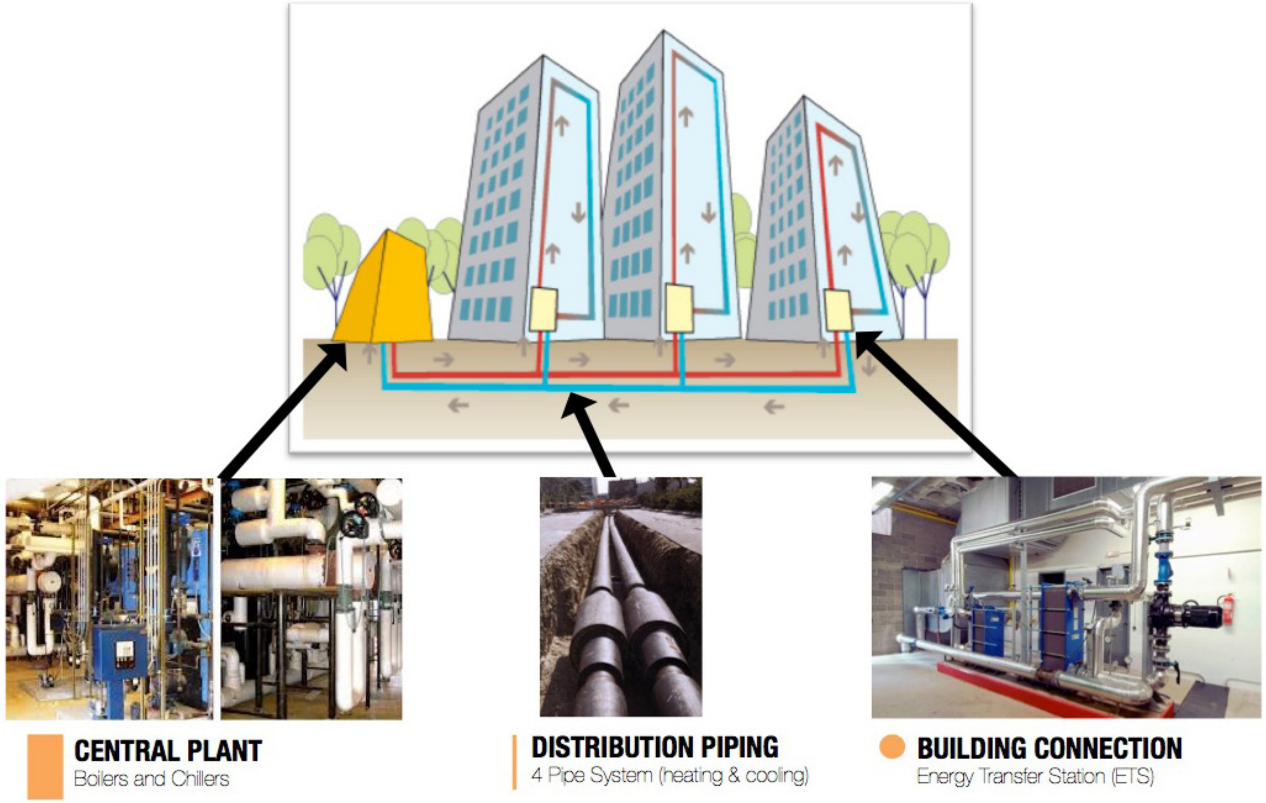


Figure 7 — District Energy System Concept

District energy refers to the central provision of heating and/or cooling services within a defined service area. Electricity is sometimes also produced as part of combined heat and power (CHP) systems (also referred to as cogeneration). There are three main components to a district energy system:

Central Energy Plant (CUP)

One or more energy-producing plants provide all of the heating and/or cooling energy required by customers within the defined service area. A single, central plant offers significant economies of scale compared to individual systems within every building, and simplifies system design and operation. However, several plants may be better in certain circumstances, notably where development is slow and/or dispersed, or where different energy sources are being integrated in different locations.

Distribution Piping System (DPS)

Hot and/or cold water is distributed to individual customers via underground pipes (one supply and one return pipe each for heating and for cooling). While older district heating systems distributed energy in the form of steam, newer systems almost all use hot water distribution. Systems often grow out of a central distribution line, with smaller loops that link buildings together.

Energy Transfer Station (ETS)

Individual buildings are served via energy transfer stations (ETS) consisting of heat exchangers and meters, eliminating the need for on-site boilers in the case of district heating and chillers or cooling towers in the case of district cooling. Within buildings, thermal energy must be provided to individual spaces by hydronic HVAC systems, which could include fan coils, hydronic baseboards or in-floor radiant systems.

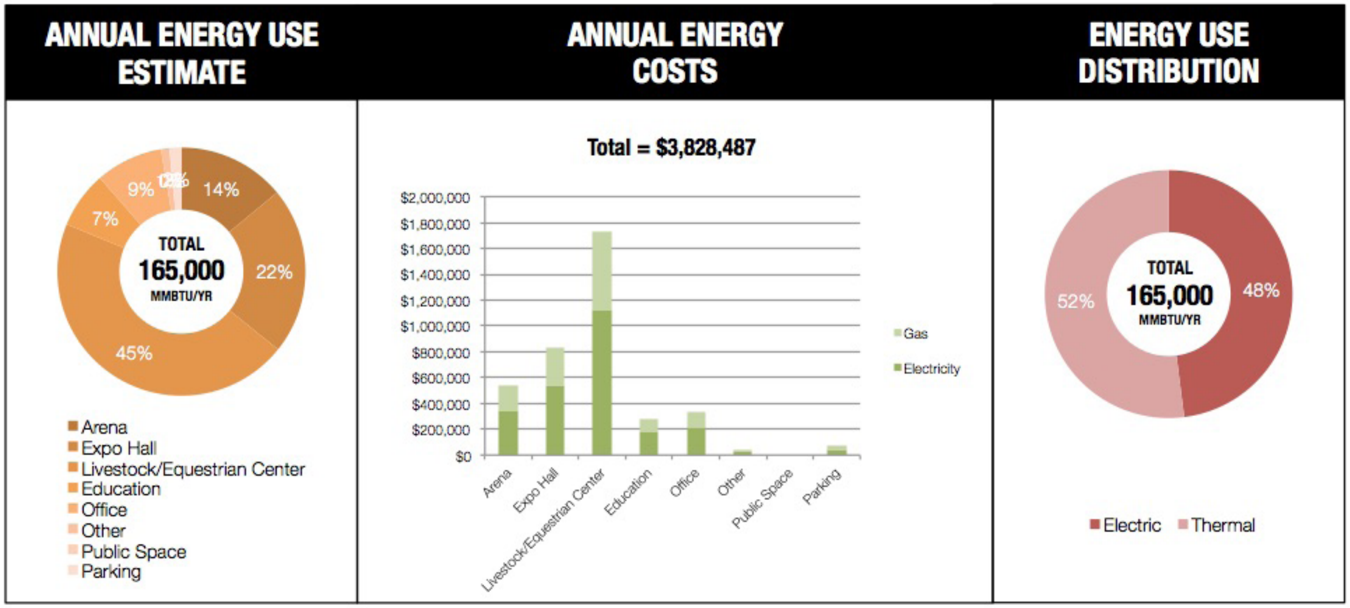
In order to deliver district energy services, some form of utility service provider (e.g., a local government or a privately-owned utility), assumes responsibility for capital investments (i.e., construction), secures (i.e., generates or captures) and delivers energy that meets the end users' needs, and ultimately charges building owners for use of the system. A utility is simply an entity that plans, invests in and operates the infrastructure required to deliver services and recover costs, both capital and ongoing operating costs, whether through user rates or other funding mechanisms.

Energy Assumptions & Estimates

For each use type of the NWC, energy use intensity factors (EUIs) were established to estimate annual energy consumption based on conventional building performance. Energy use and cost estimates were based on development assumptions at full build out, with electricity and natural gas rates from Xcel Energy. Annual building energy use at full build out for NWC was estimated at 165,000 MMBtu/year with a potential cost of $3.83M annually.

Further assessing energy use for each building type (existing and new) allows thermal and non-thermal energy uses to be identified. Thermal uses include building heating and cooling while non-thermal energy use includes elements such as lighting, air movement, and plug loads. Thermal energy use for NWC was estimated at 52% of total energy use and non-thermal energy use was estimated at 48% of total energy use.

The total annual cost of building energy use for NWC at build out was estimated at approximately $3.83M, of which $1.34M comes from natural gas. Electricity and natural gas rates were based on recent utility rate schedules from Xcel Energy.



NOTES:

1. Energy use and cost estimates based on development assumptions at full build out.
2. Electricity and natural gas rates from Xcel.

Xcel Energy®

Figure 8 — Summary of Energy Use and Cost Estimates

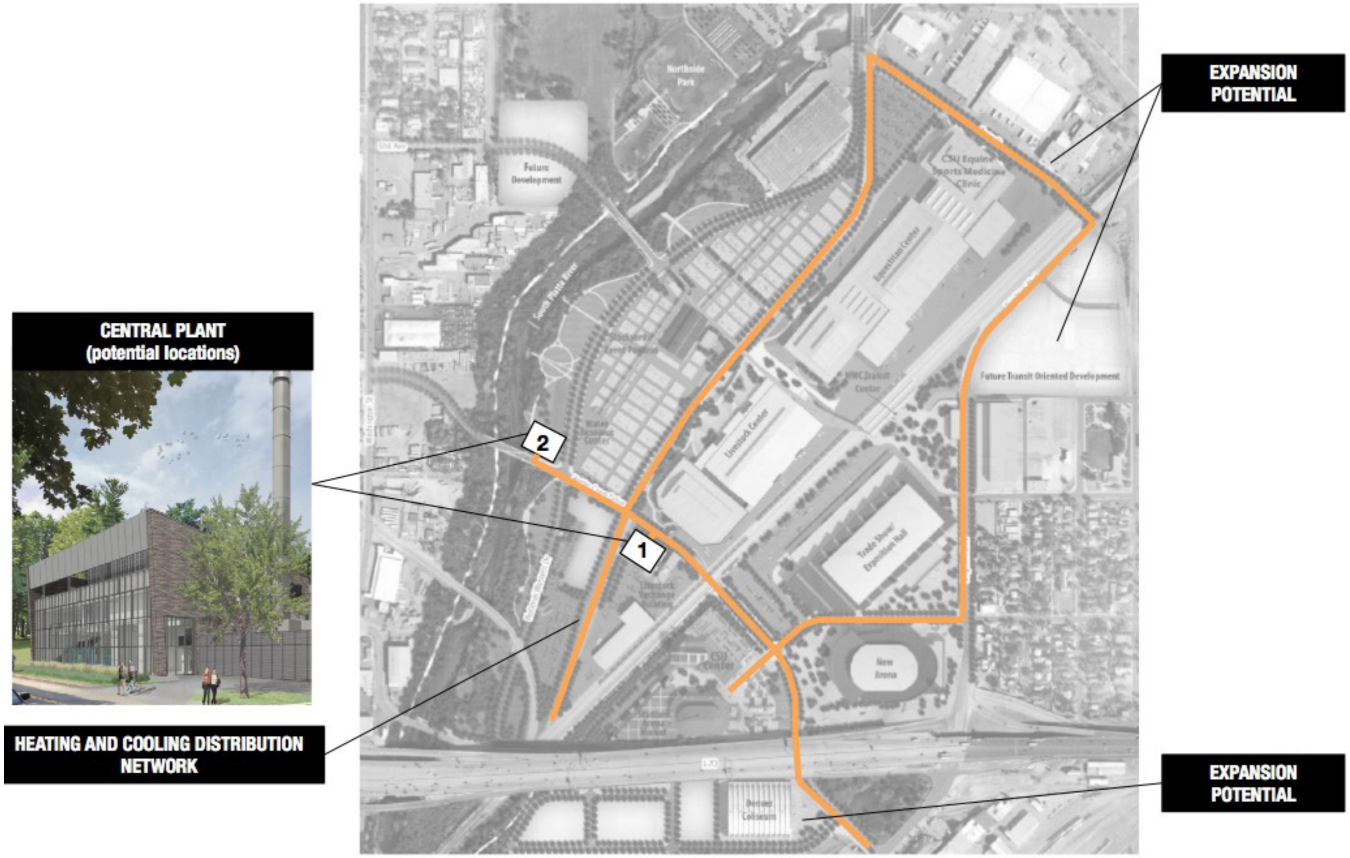


Figure 9 — District Energy Concept A

Concept A: Conventional District Energy

Concept A assumes district infrastructure to provide both heating and cooling. The system would be a conventional district energy system including district heating (condensing gas boilers), district cooling (electric centrifugal chillers), a four-pipe distribution system (two heating pipes for supply and return and two cooling pipes for supply and return), and energy transfer stations (ETS) at each building connected to the system to transfer energy to the building. District heating and cooling equipment to be located at the central utility plant (CUP) site. No building-scale heating or cooling equipment is required.

Option A would reduce NWC annual energy input by 10%. Capital cost for Option A is estimated at $10M but would reduce life cycle costs to $118M (17% decrease from BAU).

Capital costs include both plant costs and distribution piping costs.

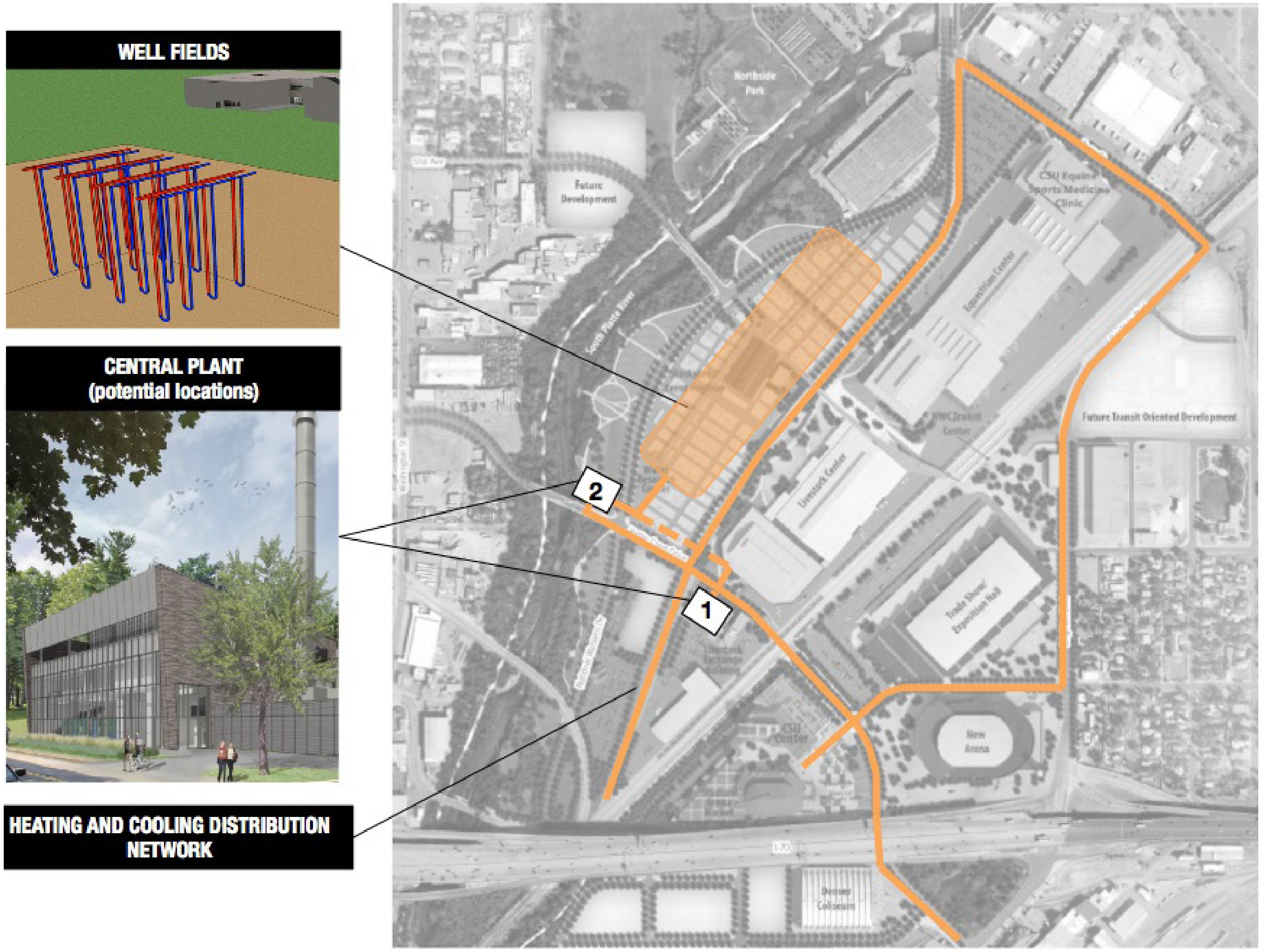


Figure 10 — District Energy Concept B

Concept B: Ground Source Heat Pump (GSHP) with Well Field

Concept B would couple a central plant with a heat pump and closed-loop ground source well field. A system configured like this would utilize thermal storage capacity of the earth to improve system efficiency while reducing equipment size at the central plant.

Option B would reduce NWC annual energy input by 15%. Capital cost for Option B is estimated at $14.5M but would reduce life cycle costs to $116M (18% decrease from BAU).

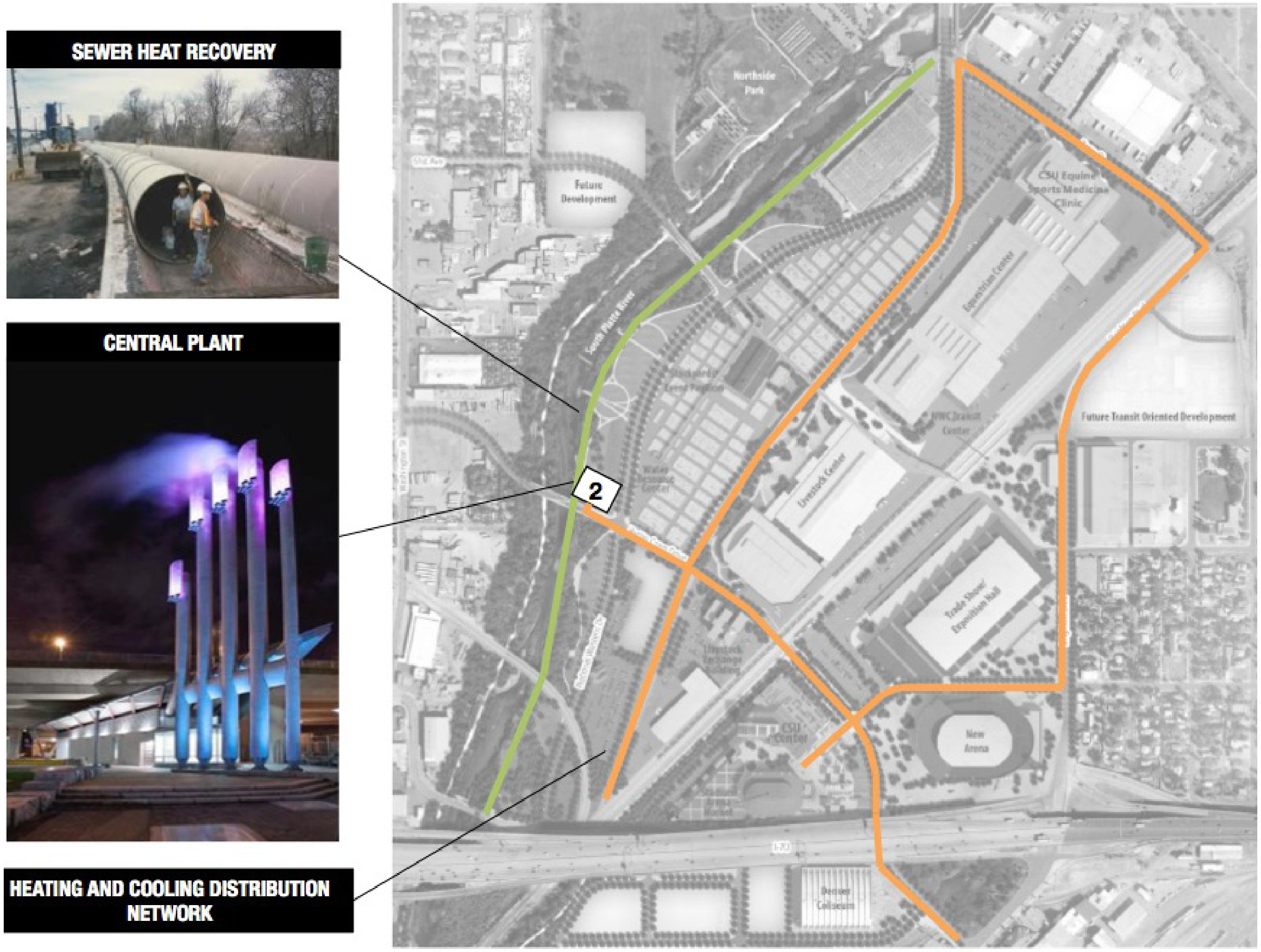


Figure 11 — District Energy Concept C

Concept C: Sewer Heat Recovery

Concept C would create thermal sharing between NWC and the City of Denver's existing sewer mains running along the river.

Option C would reduce NWC annual energy input by 20%. Capital cost for Option C is estimated at $19.5M but would reduce life cycle costs to $115M (19% decrease from BAU).

Concept D: Waste-to-Energy Fuel Facility

NWC generates significant amounts of animal waste each year. Collecting, storing and using this waste as fuel within a biomass energy facility has potential to both generate electricity as well as heat for NWC.

Option D would reduce NWC annual energy input by 20%. Capital cost for Option D is estimated at $16.5M but would reduce life cycle costs to $124M (12% decrease from BAU).

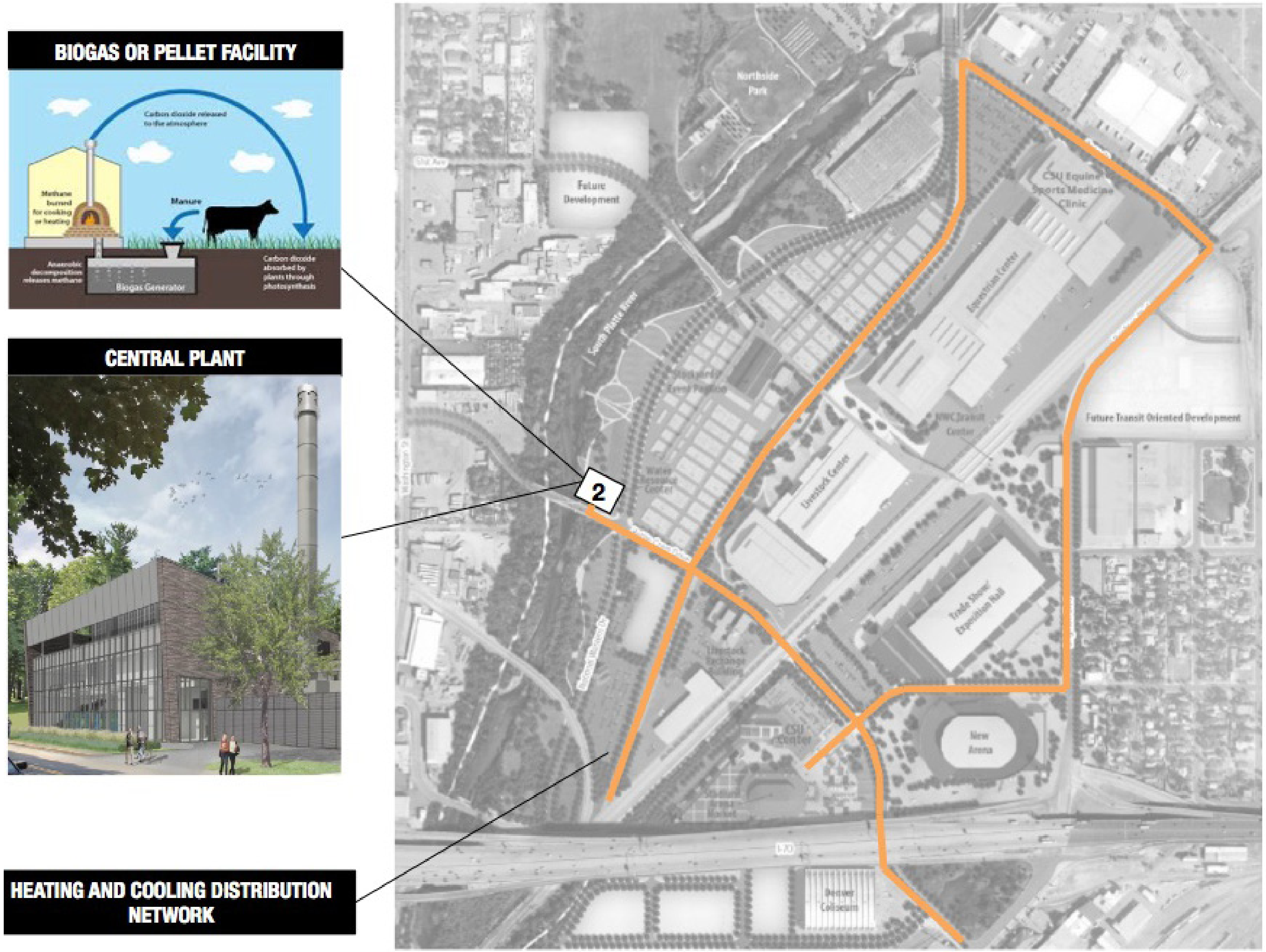


Figure 12 — District Energy Concept D

Preliminary Financial Analysis

Annual heating and cooling energy use and costs were estimated for two scenarios: 1) building-specific heating and cooling and 2) buildings connected to district energy (including multiple system options). A comparison to annual energy related costs for each scenario was conducted. Over the 20-year comparison period, the annual cost of energy is lower for buildings connected to district energy.

The lower operating cost of buildings connected to district energy enhances building net operating income (NOI) for building owners, generating increased asset value.

Figures 13 and 14 show financial comparisons between the energy options for NWC.

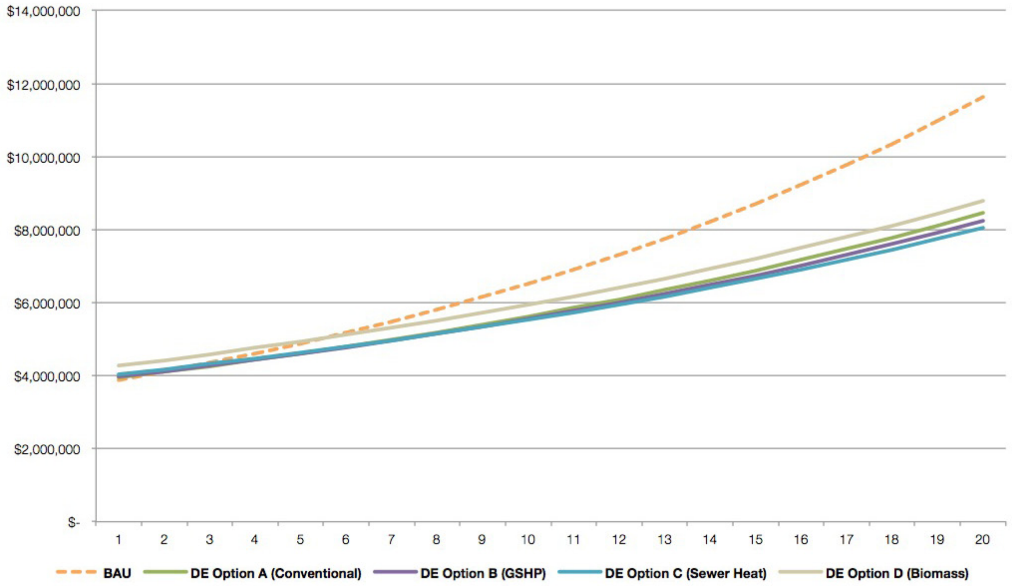


Figure 13 — Cost of Service Comparison

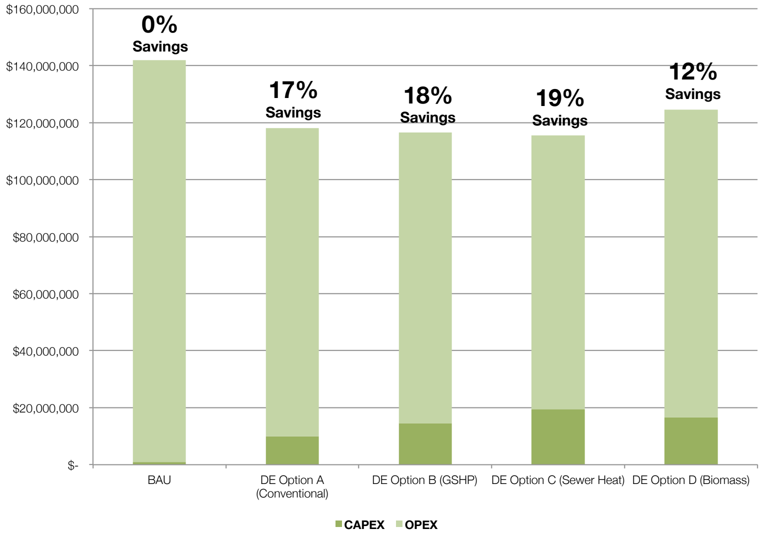


Figure 14 — Cost of Service Comparison (20 year summary)

4

RENEWABLE ENERGY (SOLAR PV)

Section 4 provides a summary of the renewable energy assessment conducted for the National Western Center. Given Denver's amount of sunny days annually, combined with a significant amount of roof area, generating clean, renewable energy from the sun makes good sense.

With over 300 days of sunshine per year, it is of no surprise that solar makes sense in Denver. As the price of solar equipment declines and incentives for solar continue to increase, Denver is a good environment for solar energy.

Figure 15 — Solar PV Installation Concepts

Renewable Energy Concept

A preliminary analysis of the available roof potential to install solar PV panels was conducted for NWC. Approximately 627,000 SF of available area for solar PV was identified across both new and existing buildings and some ground-based areas. A solar PV system of this size in Denver has the potential to generate approximately 6-8MW of renewable energy annually - equivalent to 20-25% of the annual electricity use of NWC at build out.

See Figure 16 for a summary of renewable energy potential for NWC.

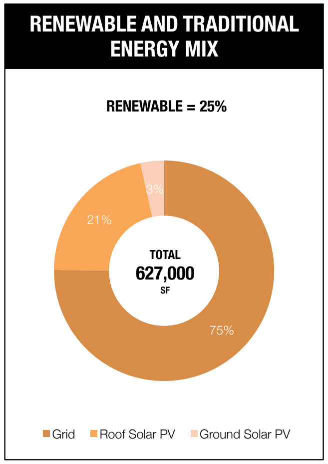
System Components

Most available roof area at the National Western Center would be covered in solar PV panels to maximize renewable energy generation potential. Each building installation would require its own inverter and metered grid connection.

Preliminary Financial Analysis

Assuming 627,000 SF of solar PV panels could be installed in NWC, total installed system cost would be approximately $18.8M (without incentives).

Figure 17 demonstrates the financial viability of onsite renewable energy generated with solar PV versus energy provided by the grid.



SOLAR PV ASSUMPTIONS:

1. 75% of total roof area available for solar PV.
2. 2 acres of ground mount solar PV.

Figure 16 — Renewable Energy Potential for NWC

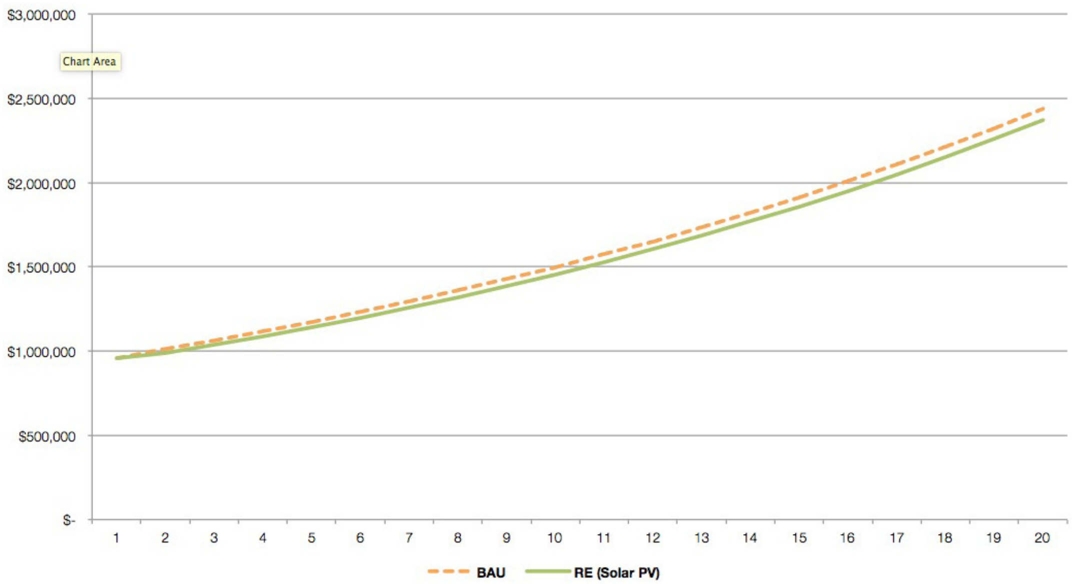


Figure 17 — Renewable Energy Cost of Service Comparison

5

DISTRICT WATER

Use of a district water system to serve the National Western Center has the potential to reduce annual potable water use by 50% - all while reducing both capital and operating costs to the buildings connected to it. Section 5 provides an overview of district water and the options assessed.

1.

District water is a term used to describe the provision of non-potable water – water not used for drinking or related consumptive uses – at a multi-building or neighborhood scale to meet non-potable water demand such as toilet flushing, HVAC, and irrigation. Sources of non-potable district water typically include rainwater harvesting, reclaimed greywater (non-toilet wastewater) and reclaimed blackwater (all wastewater). District water systems have the potential to reduce potable water demand from the buildings connected to it by 25-65% annually in a manner more cost effective than similar building-scale systems.

District Water Overview

Recent technological advances in wastewater treatment systems allow for cost-effective treatment and reuse of wastewater, converting "wastewater" into a safe and reliable non-potable water supply suitable for uses that do not demand high-quality potable water (e.g., toilet flushing and irrigation). Although these systems at a building scale may be difficult to justify financially, linking multiple buildings to one centralized system is often cost effective while greatly reducing demand on the municipal water supply system.

A district water system collects wastewater from multiple buildings and conveys it to a centralized wastewater treatment system. The wastewater treatment system treats the wastewater to a water quality standard compliant with local regulations for water reuse. The treated wastewater effluent, or non-potable water, is then distributed back to the buildings for use in toilet flushing, irrigation or use in cooling towers related to the building's mechanical systems.

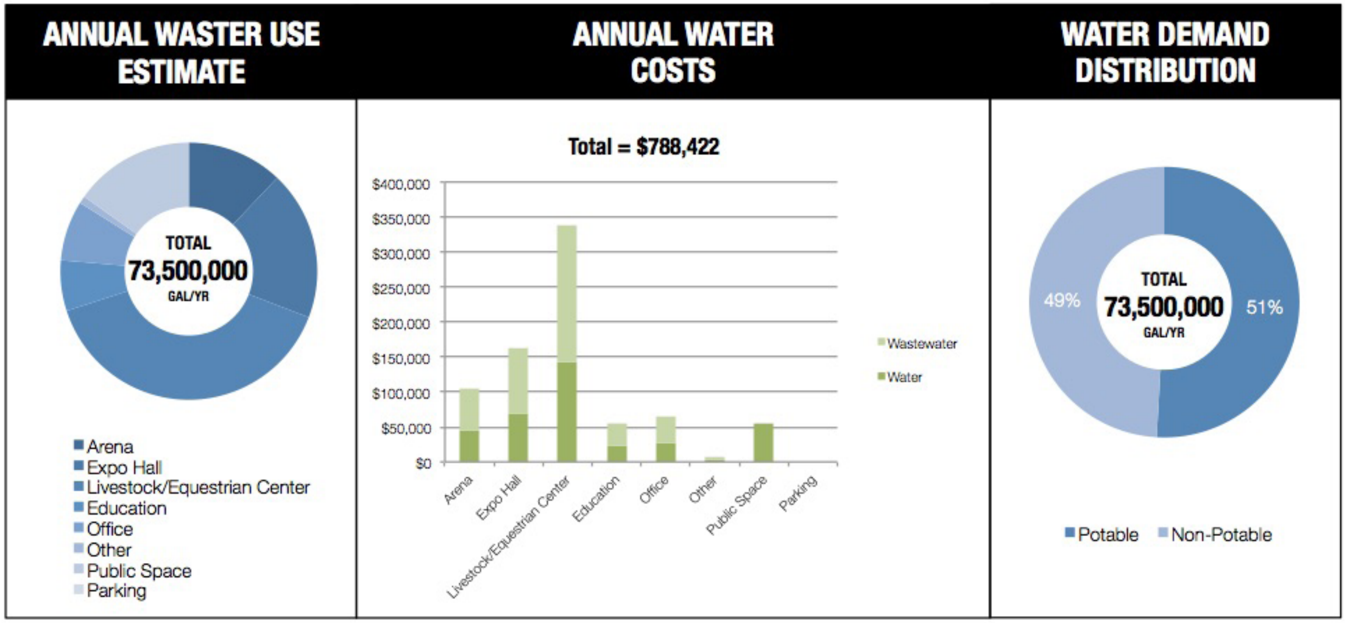
Buildings served by a district water system still have a municipal potable water system connection but also have a non-potable water connection from the district water system. Any unused district water is generally of a quality that would allow for on-site discharge via drywells or sumps versus discharge to the public sewer system. As a result, district water provides the financial benefits of reduced potable water costs as well as reduced sanitary sewer costs.

Assessing District Water Viability

As with district energy, the core district water assessment is the comparison of district-scale water options to a building-scale (BAU) option to determine which option is more cost effective – and generates additional value for the National Western Center. Two district water options were evaluated in this assessment.

Water Assumptions & Estimates

Similar to the energy methodology used to assess energy use and cost for district energy, water use intensity factors (WUIs) were established to estimated annual water consumption. WUIs based on development assumptions at full build out. Annual water use at full build out for NWC was estimated at 73.5M gallons/year.


ANNUAL WASTER USE ESTIMATE

ANNUAL WATER COSTS

WATER DEMAND DISTRIBUTION

WATER USE AND COST ASSUMPTIONS:

1. Water and wastewater use and cost estimates based on development assumptions at full build out.
2. Water and wastewater rates from Denver Water and City of Denver.

DENVER WATER

Figure 18 — Summary of Water Use and Cost Estimates

Further assessing water use for each building type (existing and new) allows potable and non-potable water demands to be identified. Potable water demands would be demands that must be supplied by high-quality potable water. Non-potable demands could be supplied by reclaimed water treated to appropriate state and local standards. Potable water demand was estimated at 51% of overall demand while non-potable water demand was estimated at 49% of overall water demand.

Should a non-potable water supply be provided to NWC, potable water demand could be reduced by as high as 49% annually - saving over 36,000,000 gallons of high quality potable water per year.

Concept A: Constructed Wetlands (”Living Machines”)

The wastewater system system is comprised of a wastewater collection system, treatment system (i.e. “living machine”), and non-potable distribution system. The reclaimed water will be used for irrigation, toilets, and cooling (district energy). A “living machine” is recommended to provide wastewater treatment because of the natural treatment processes utilized are effective, energy efficiency and provide a visual learning opportunity to the community. Each living machine would be sited within new open space in a manner that showcases the technology while reinforcing the green nature of the development.

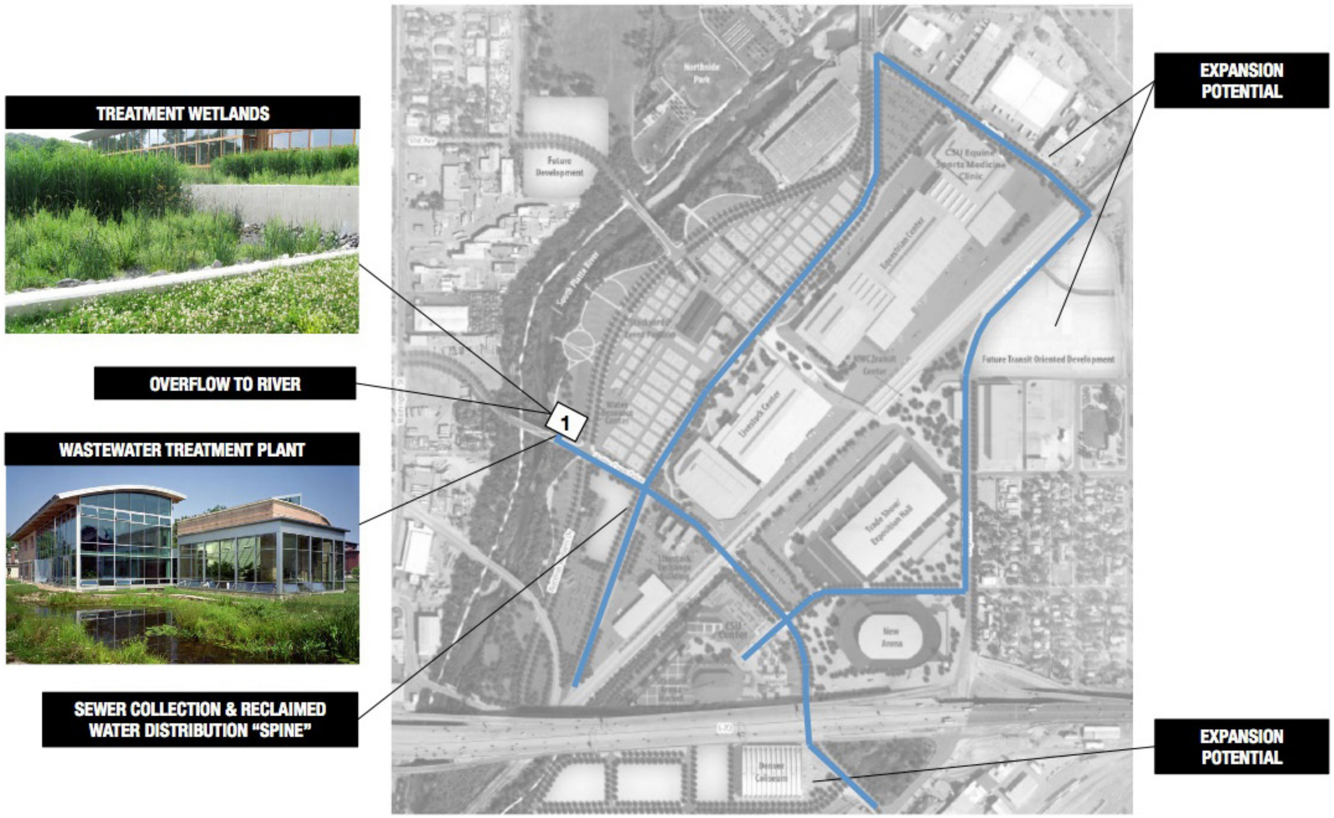


Figure 19 — District Water Concept A

Concept B: Denver Water Reclaimed Water System

Denver currently has a reclaimed water system supplied by treated effluent generated from the Robert W. Hite wastewater treatment facility located approximately one mile north of NWC.

It is unclear how close Denver's reclaimed water system is to the NWC site. Should it be within a half-mile or so from NWC, consideration should be given to potentially connecting NWC to Denver's reclaimed water system to supply non-potable water.

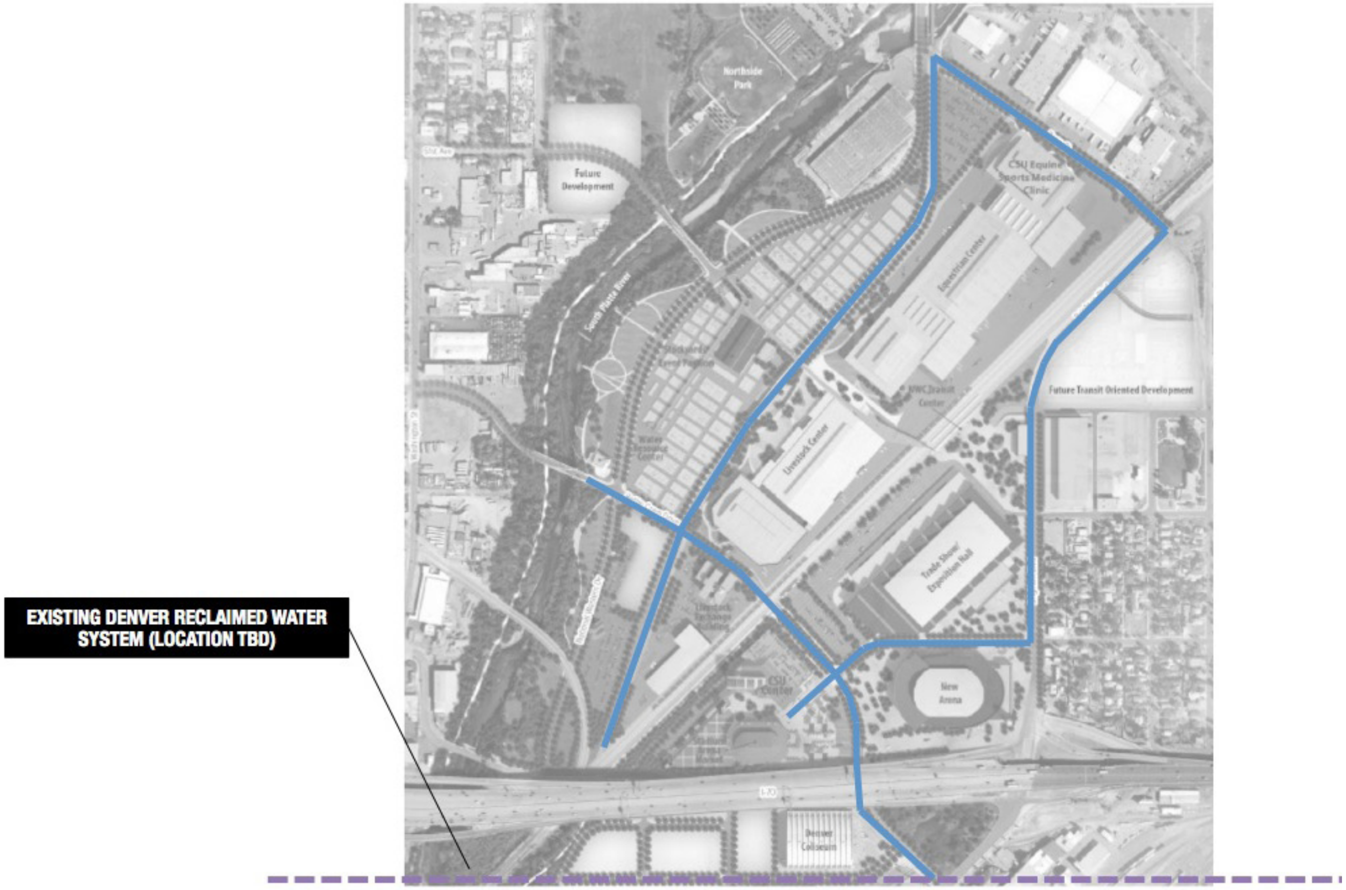


Figure 20 — District Water Concept B

Preliminary Financial Analysis

Annual water use and costs were estimated for three scenarios: 1) conventional water system (municipal potable water used to meet all water demands), 2) district water system (municipal potable water used to satisfy potable demands and onsite wastewater treatment and reuse to meet non-potable demands), and 3) connection to the Denver reclaimed water system for non-potable demands. Annual water related costs for each scenario was compared.

Over the 20-year comparison period, the annual cost of water is 24% lower for buildings connected to district water. Over that same 20-year period, the cost of water is 14% lower for buildings connected to the Denver reclaimed water system.

The lower operating cost of buildings connected to district water enhances building net operating income (NOI) for building owners, generating increased asset value.

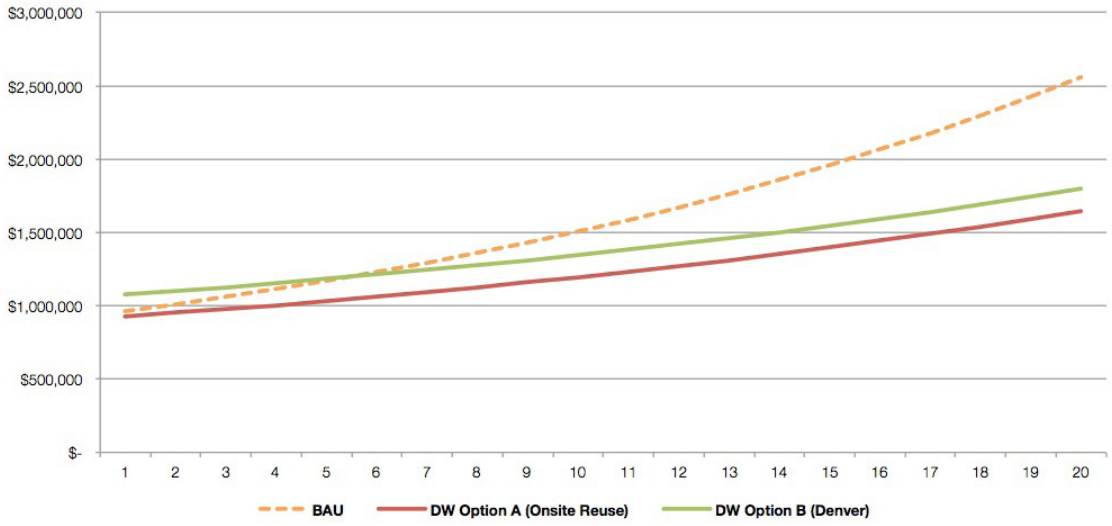


Figure 21 — Cost of Service Comparison

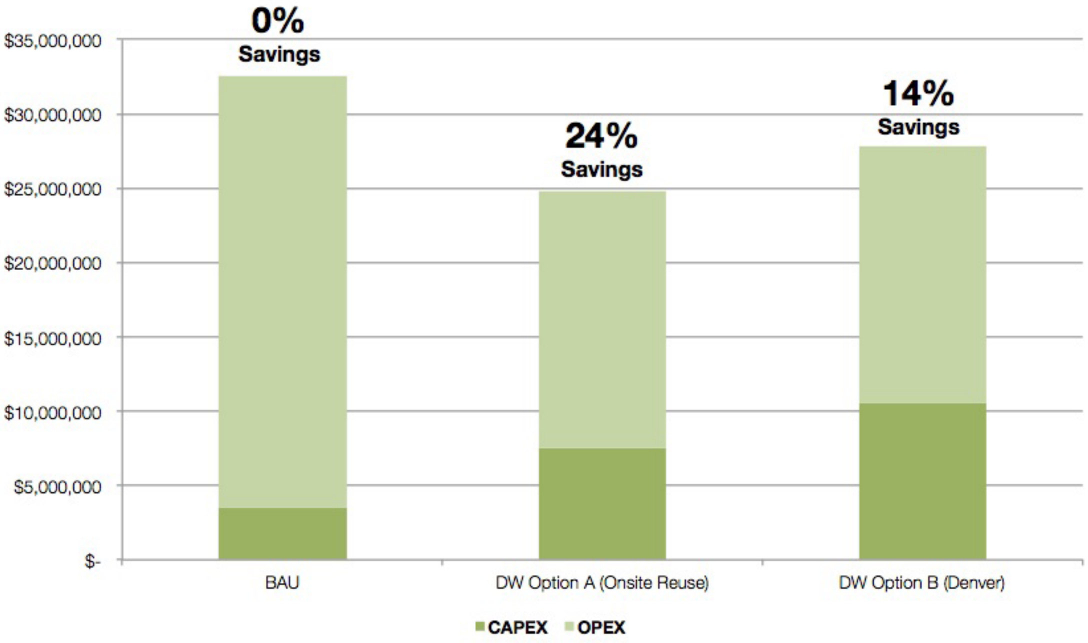


Figure 22 — Cost of Service Comparison (20 Year Summary)

6

DISTRICT STORMWATER

District stormwater optimizes the use of green infrastructure to manage stormwater in a more ecologically connected and cost effective manner versus the use of grey infrastructure. Further assessment is recommended to determine the best district stormwater system for the National Western Center. The conceptual district stormwater framework has been provided to build from.

District stormwater optimizes the use of green infrastructure to manage stormwater in a more ecologically connected and cost effective manner versus the use of grey infrastructure.

District Stormwater Overview

District stormwater is an approach to stormwater management that seeks to maximize the use of multi-benefit, green infrastructure best management practices (BMPs) on properties and within streets to meet regulatory requirements in a more ecologically connected and cost-effective manner as compared to use of single-benefit grey infrastructure BMPs. The National Western Center presents, at scale, a unique opportunity to implement a district stormwater system that meets regulatory requirements while maximizing ecological value in a cost effective manner. Achieving this outcome is possible through the use of multi-benefit green infrastructure best management practices (BMPs) versus single-benefit grey infrastructure BMPs.

Real estate developers as well as stormwater agencies are exploring cost-effective stormwater solutions to help resolve this tension. District stormwater has been identified as a potential strategy to meet stormwater requirements in not only a more cost effective manner but also in a manner that provides community benefit through greenspace and placemaking.

A district stormwater system collects stormwater runoff from multiple properties, conveys it to a centralized stormwater facility for treatment and infiltration, and discharges any treated stormwater overflows on-site through the use of drywells or sumps.

As NWC continues development planning efforts, a comprehensive green infrastructure strategy should be prepared and compared to a traditional stormwater infrastructure approach. The concept shown here demonstrates a conceptual district stormwater framework that could be utilized.

Figure 23 — Green Infrastructure Concepts

NWC District Stormwater Framework

Figure 24 shows a conceptual framework to manage stormwater generated from NWC in a more sustainable and integrated manner.

Focused on mimicking the natural watershed conditions that existed prior to development, the site could be considered as sub-watersheds of the river.

Within each sub-watershed, green infrastructure would be used to collect, convey, store/infiltrate and release stormwater to the river in the most natural way possible.

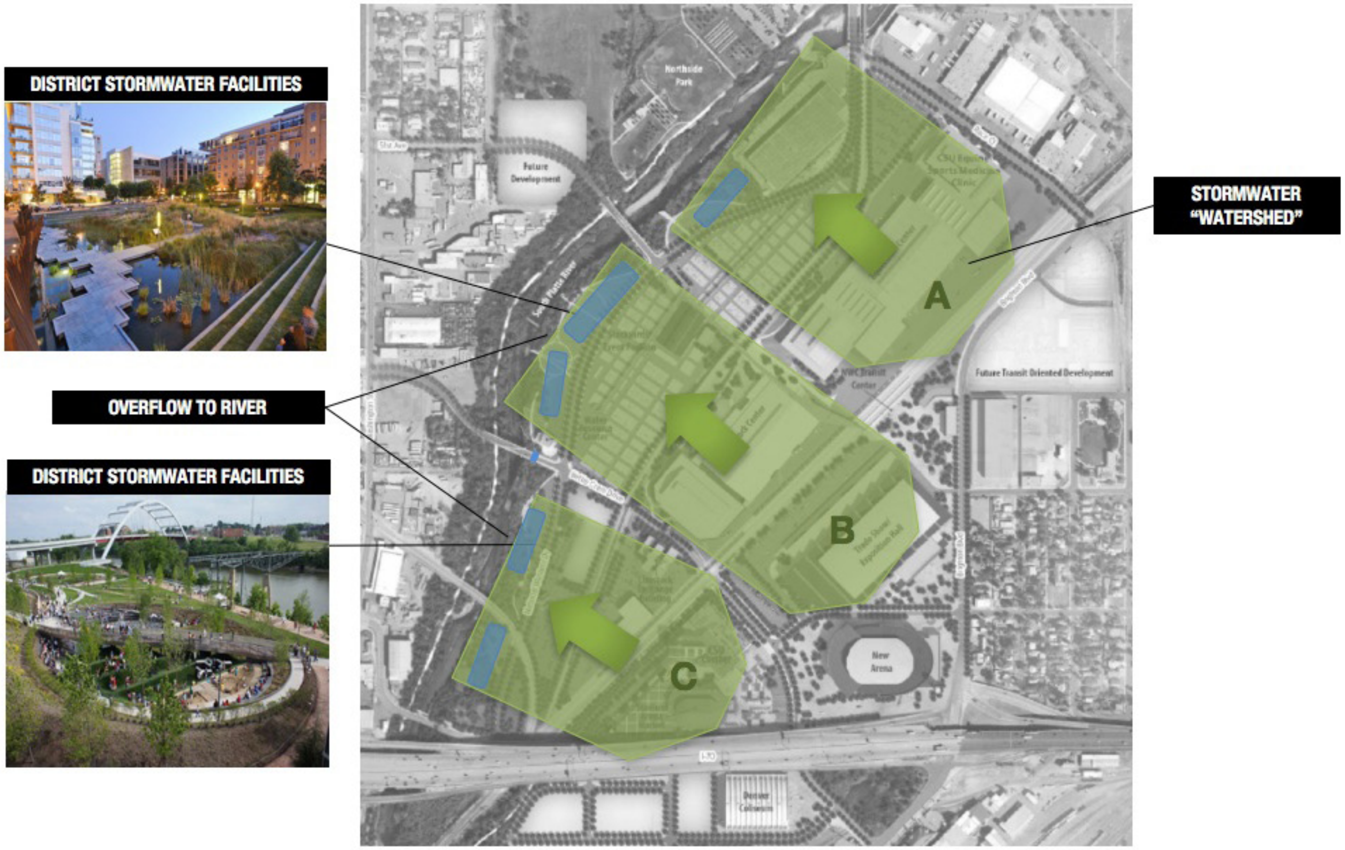


Figure 24 — NWC District Stormwater Concept

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NEXT STEPS

This section summarizes recommended next steps to support the development of district infrastructure systems to serve the National Western Center.

1. Confirm Development Timeline

A clear development timeline should be established, including potential phasing, for the development of National Western Center. Once a timeline has been established, critical decision points need to be identified related to the implementation of district infrastructure systems. For district infrastructure to be successfully implemented, it needs to be integrated early in the planning process.

2. Build Demonstration Pilot Support

NWC should work with potential City partners to foster support for district infrastructure. All three entities are tasked with finding innovative strategies to reduce energy and water use and manage stormwater. District infrastructure has the potential to satisfy these needs. As such, engagement and partnership with these City partners will generate valuable learning opportunities for NWC and the greater City of Denver.

3. Conduct Detailed District Infrastructure Feasibility Assessment

The work in this report is preliminary in nature. More detailed district infrastructure feasibility assessment should be conducted to solidify the opportunity and value proposition of district infrastructure identified to date. Detailed technical, financial, regulatory and development feasibility should be completed. Engagement with City partners should also be included in this effort to build support for district infrastructure.

4. Preliminary Go / No Go Decision

Based on the outcomes of Steps #1-3, a preliminary "go/no go" decision should be made regarding whether or not to implement district infrastructure as part of NWC. Criteria to make this determination should be based on technical, financial, regulatory, public agency support and private infrastructure provider level of interest.

It will be important to identify the preliminary "go/no go" decision process as part of the development timeline (Step #1) to ensure decisions are made in a manner that does not slow development.

5. Engage with Private Infrastructure Provider

Once a preliminary "go/no go" has been completed for each system, NWC should engage with a private infrastructure partner to finance, develop and operate each district system.

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ACKNOWLEDGEMENTS

This report was made possible through a generous commitment from the Green Communities Program of the Natural Resources Defense Council (NRDC). In addition to NRDC's support, the contributions made by the following organizations and individuals helped to shape the focus and findings of this preliminary district infrastructure assessment:

Jocelyn Hittle
Director of Denver Operational Initiatives
Colorado State University

Celia Vanderloop
Environmental Project Manager
North Denver Cornerstone Collaborative
City of Denver

Eric Shafran
Development Consultant
City of Denver / Sii LLC

Jeff Childs
Director of Finance
National Western Stock Show

Catherine Cox Blair
Project Manager
Natural Resources Defense Council

Ben Polly
Engineer
National Renewable Energy Laboratory

Otto VanGeet
Senior Engineer
National Renewable Energy Laboratory

Shanti Pless
Senior Research Engineer
National Renewable Energy Laboratory

Thomas J. Puttman, PE, AICP, LEED AP
President and CEO
Puttman Infrastructure, Inc.

Joseph F. Payne, PE
Project Manager
Puttman Infrastructure, Inc.

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