Introduction

The purpose of this report is to provide a summary of the suggested goals and example targets for the update to the Environmental Stewardship Initiative (ESI) Strategic Plan. The report includes the following:

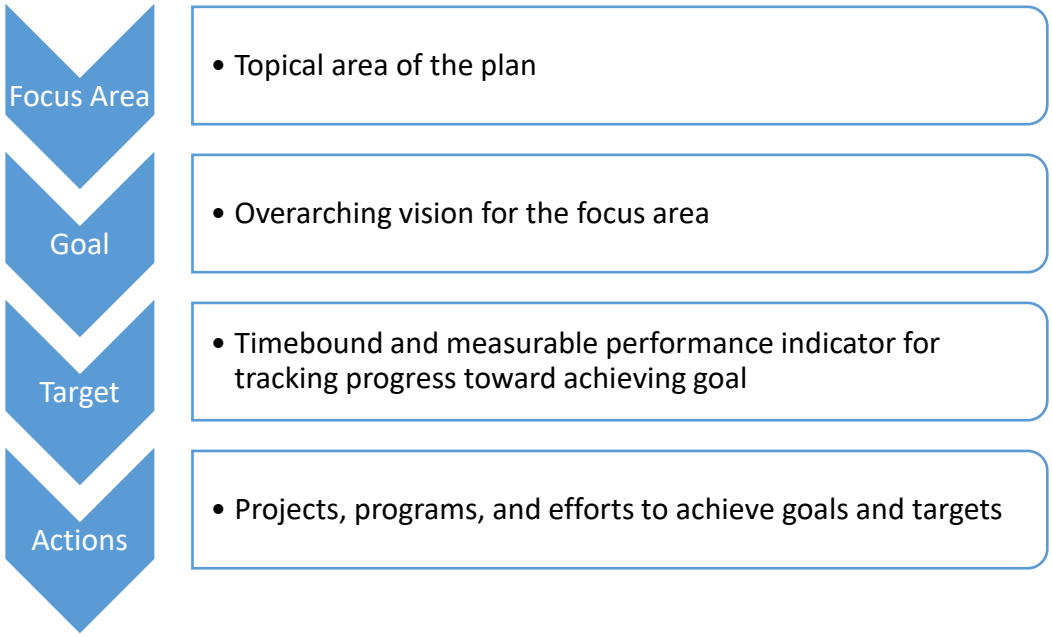
- Summary of existing environmental goals and targets;
- Suggestions for updated and new environmental goals;
- Example targets from peer cities for each goal.

These goals and targets will provide an overall framework for the strategies and actions in the plan. The ESI Strategic Plan will include the same focus areas as the current ESI Strategic Plan, which include:

1. Materials Management & Waste;
2. Mobility & Land Use;
3. Natural Systems;
4. Energy; and
5. Climate Change.

This report seeks to build upon and enhance existing environmental efforts, and provide a framework for the development of strategies and actions for the updated plan. Each focus area in the plan will have an overarching goal, and associated with each goal are example targets, which are measurable performance indicators which can be used for tracking progress. An illustration of the hierarchy of the focus area, goals, targets, and actions is provided below in Figure 1.

Figure 1: ESI Strategic Plan Overview



The report outlines example targets for both communitywide efforts and for municipal operations. Many leading cities choose to have goals and targets for municipal operations which either mirror their citywide goals, or exceed the citywide goals. Some cities which want to "lead by example", choose to adopt more aggressive goals for their municipal operations, to demonstrate their commitment.

Context and Background

The Environmental Stewardship Initiative was started in 2007 to coordinate interdepartmental efforts to improve the environment in Bellevue. The work of ESI has been guided by the 2013-2018 ESI Strategic Plan[1]. To prepare for the update of the ESI Strategic Plan, the ESI Progress Report[2] summarizes progress toward Bellevue's environmental goals, key project highlights from the past five years, and brief updates on each of the actions in the ESI Strategic Plan and considerations for possible next steps.

A key takeaway from the ESI Strategic Plan Progress Report is that the city's environmental goals are a mix of short-term and long-term goals, aspirational and more achievable goals, measurable and qualitative goals, and goals which are included in Council adopted plans or in other strategic plans.

Goal setting is part of a larger performance management approach, which involves aligning measurable outcomes to overall citywide visions and policies. Local governments seeking to develop action plans for their environmental efforts are using goal setting and performance management to define future outcomes and develop strategies and actions for achieving those goals. Bellevue's City Council Vision relating to a High Quality Built and Natural Environment establishes the vision for the environment in Bellevue and the interplay of the built and natural environment of the "City in a Park".

Bellevue's Comprehensive Plan is the city's overarching policy document which provides the policy direction for ESI and for the five focus areas of the ESI Strategic Plan. The suggested goals outlined in this document aim to advance the associated policies from the Comprehensive Plan. The example targets for each goal provide an illustration of the types of commitments leading cities are making to focus their environmental action plans. A selection of best practice examples from Pacific Northwest cities, leading national cities, and cities from recent Bellevue Downtown Association study tours are included as examples.

Similar to the interrelationship of the various elements of Bellevue's Comprehensive Plan, the focus areas of the ESI Strategic Plan are also interdependent. Mobility and Land Use, Energy, and Waste all impact the Climate Change focus area and the ability for the city to reduce greenhouse gas emissions and adapt to climate change. The Natural Systems focus area is closely tied to the Mobility and Land Use

[1]Environmental Stewardship Imitative Strategic Plan: https://bellevuewa.gov/enviornment.
[2] ESI Strategic Plan Progress Report: https://bellevuewa.gov/city-government/departments/community-development/environmental-stewardship/esi-stategic-plan.

focus area, because the city's land use policies and development patterns impact the natural environment in Bellevue.

Suggested Goals and Example Targets

A preliminary scan of best practice strategies for achieving these environmental goals and targets has been completed, but further analysis will be required to finalize the recommended targets for the plan. This report is intended to solicit input on the goals for each focus area, and to provide examples of possible targets for each goal. Existing goals and targets and current performance toward the existing targets are also provided, from the ESI Progress Report and the ESI Performance Dashboard[3].

The following section outlines the suggested goals, existing targets (if applicable), and example additional or new targets. The associated comprehensive plan policy is provided for each focus area and goal, along with best practice examples and recommendations for next steps. The example targets for each focus area, provide a suggestion for the type of target which may be relevant for Bellevue, however further analysis is needed before a numerical target is recommended. The sample targets and strategies provide some best practice examples, which were used to inform the example targets.

1. Materials Management & Waste

2013-2018 ESI Strategic Plan Goal
Inspire systemic change that will reduce negative impacts to land, air, water, materials, and energy resources from existing consumption and waste practices.

Associated Comprehensive Plan Policy
Work with residents, businesses, and waste haulers to continue to improve percentage of waste diverted from landfill. (EN-17)

Suggested Goal
Reduce the negative impacts from consumption and waste practices.

Context
King County provides solid waste planning, transfer, and disposal services under the Solid Waste Interlocal Agreement (ILA). King County is in the process of updating the 2001 Comprehensive Solid Waste Management Plan. Republic Services contracts with the city for the collection of solid waste generated in Bellevue. The 7-year contract, beginning June 2014, provides garbage, recycling, and organics collection services to single-family, multifamily, and commercial customers. Under state law, commercial entities can independently contract for the collection of their recyclable materials. Several

[3] ESI Performance Dashboard: https://k4c.scope5.com/public_dashboard.

private recycling companies provide commercial service. The city manages the solid waste contract with Republic Services and provides outreach, education, and technical assistance to residents and businesses aimed at promoting waste prevention, recycling, and proper disposal of hazardous and moderate risk wastes.

In 1989, Washington State established a 50% recycling goal when the Washington Legislature passed ESHB 1671, known as the Waste Not Washington Act. King County has a goal of recycling 70% by 2030, and all waste in the long-term, which is included in the King County Solid Waste Management Plan[4].

As part of a comprehensive climate or sustainability action plan, many leading cities around the country are establishing aggressive recycling goals. These goals range from minimizing and managing waste to more aggressive zero waste targets.

Communitywide Targets and Strategies	**Municipal Operations Targets and Strategies**
Existing target: • Achieve a 50% recycling rate citywide by 2030[5].	Existing target: • N/A
Potential new long-term target: • Achieve a 70% recycling rate citywide by 2040 (King County Solid Waste Management Plan).	Potential new targets: • Achieve a 50% recycling rate for municipal operations by 2025. • Achieve a 70% Recycling rate for municipal operations by 2035.
Bellevue's Current Performance	
• Bellevue's communitywide recycling rate for contracted services was approximately 39.7% in 2018. • 2018 Single-family recycling rate (Republic Services only): 64.3% • 2018 Multifamily/Commercial recycling rate (Republic Services only): 22.3%	• Bellevue City Hall 2017 Recycling rate: 66% • Bellevue Service Center 2017 recycling rate: 39%.
Peer City Examples	
• Reduce waste 70% short-term; and Zero Waste of Resources long-term (King County, WA: 2019 King County Solid Waste Management Plan) • Recycle 70% of municipal solid waste by 2022, and recycle 70% of construction and	• Achieve a 90% diversion of waste from municipal operations by 2030 (Cleveland, OH).

[4] King County 2019 Comprehensive Solid Waste Management Plan: https://www.kingcounty.gov/depts/dnrp/solid-waste/about/planning/comp-plan.aspx.
[5] Utilities Strategic Plan: https://utilities.bellevuewa.gov/utilities-projects-plans-standards.

Communitywide Targets and Strategies	Municipal Operations Targets and Strategies
demolition debris by the year 2020 (Seattle, WA). • Achieve zero waste by 2040 (Austin, TX). • Achieve zero waste by 2022 (San Jose, CA). • Achieve a 40% diversion rate by 2020, a 60% rate by 2030 and zero waste by 2040 (Dallas, TX).	
Sample Strategies	
• Education and outreach to promote recycling and organics collection for single-family residential, multi-family residential, and commercial properties • Mandatory commercial recycling and/or organics collection • "Pay as you throw" financial incentives for waste reduction • Require construction and demolition recycling at jobsites	• Recycling and organics collection at all city facilities • Zero waste events • Construction and demolition waste recycling for city projects

Assessment

Bellevue's citywide recycling rate has been around 40% for the past five years. It is comprised of a high diversion rate for single-family residential households and a lower rate for multi-family and commercial buildings. Bellevue's waste and recycling efforts are guided by the 2015 Bellevue Comprehensive Plan and the King County Solid Waste Management Plan. This 2019 King County Solid Waste Management plan includes a goal of a 70% diversion rate. The King County Solid Waste Management Plan will be reviewed by Bellevue's Intergovernmental Relations Office and Utilities Department and presented to Council. The results of this process will inform the ESI Strategic Plan update.

Recommended Next Steps

The City Council will have the opportunity to review the 2019 King County Solid Waste Management Plan, likely during the summer or early fall of 2019. Any waste reduction goals and targets for the ESI Strategic Plan, will mirror any citywide goals and targets which may result from the King County Solid Waste Management Plan. Further analysis is needed for a municipal operations recycling goal, along with an understanding of the implications and costs of gathering this data for city facilities.

Considerations

As part of evaluating the King County Solid Waste Management Plan and its implications on Bellevue, Council may wish to consider the following:

- What impact do the County goals and policies have on Bellevue?
- Does Bellevue seek to adopt goals and targets similar to the countywide goals for waste management within Bellevue? Is there any interest in considering goals which are more aggressive then the County goals?

2. Mobility & Land Use

2013-2018 ESI Strategic Plan Goal
Significantly expand the use of convenient low- or zero emission transportation for commutes in and through Bellevue.

Associated Comprehensive Plan Policies

- Establish targets to increase the proportion of commute trips by modes other than driving alone. Periodically evaluate progress toward these targets and adjust programs and activities as needed to achieve the. (TR-8)
- Continue to ensure that the city as an employer sets a positive example by maintaining a comprehensive and effective transportation demand management program for its employees. (TR-12)
- Ensure that the transportation system infrastructure in Bellevue provides mobility options for all modes, and accommodates the mobility needs of everyone, including underserved populations. (TR-12)
- Promote a clear strategy for focusing the city's growth and development to the Downtown regional growth center and to other areas designated for compact, mixed use development served by a full range of transportation options. (LU-1)
- Promote the use of alternative fuels such as electricity and compressed natural gas and evaluate the use of such fuels for the city's vehicles. (EN-54)
- Support means to reduce transportation-source greenhouse gas emissions. (TR-140).

Suggested Goal
Minimize the environmental impacts of transportation and development in Bellevue by focusing development in growth centers and providing all residents with access to a variety of mobility options.

Context
The Washington State Growth Management Act (GMA) requires state and local governments to manage Washington's growth by identifying and protecting critical areas and natural resource lands, designating urban growth areas, preparing comprehensive plans and implementing them through capital investments and development regulations. Bellevue's Comprehensive Plan[6] is the city's preeminent policy document, which guides all growth and development in Bellevue, in accordance with regional growth strategies. Bellevue also has a number of other sub-plans which support the Comprehensive Plan, such as neighborhood area plans, the Pedestrian-Bicycle plan, the Smart Mobility Plan, and the

[6] Bellevue Comprehensive Plan: https://bellevuewa.gov/city-government/departments/community-development/planning-initiatives/comprehensive-plan.

Commute Trip Reduction plan[7]. The goals and targets provided here build on the policy direction from Bellevue's Comprehensive Plan.

Washington State has a goal of registering 50,000 plug-in electric vehicles by 2020. Washington State also recently enacted into law, House Bill 2042[8], to advance the adoption of electric vehicles in Washington State. This bill reinstates the sales tax exemption for electric and alternative fuel vehicles, enables public and private utilities to invest in electric vehicle infrastructure, provides funding for EV car-sharing for low income communities, and provides funding for transit fleet electrification.

In terms of electrifying vehicles in fleets, the State of Washington has a law[9], requiring RCW state agencies and local governments to fuel publicly owned vehicles, vessels, and construction equipment with electricity or biofuels to the extent practicable. The City of Bellevue is required to comply with this law, however there is some flexibility in how fleet managers implement this requirement due to the "extent practicable" qualification.

Communitywide Targets and Strategies	**Municipal Operations Targets and Strategies**
Existing target: • Reduce drive-alone trips to 55% for citywide residents and 60% for citywide workers by 2035[10].	Existing target: • N/A
Potential additional targets: • Increase non-motorized mode share to 10% of all commute trips in Bellevue for citywide workers and citywide residents by 2030. • Increase transit ridership by 1% annually. • Become the national leader in electric vehicle adoption by increasing electric vehicle ownership to 20% of all registered vehicles in Bellevue by 2030. • All new job growth in Bellevue is balanced with complementary proportionate growth in housing.	Potential target: • Reduce drive alone commute trips for city employees to 50%. • Increase the number of EVs in Bellevue's fleet to 25% of all city vehicles by 2030.
Bellevue's Current Performance	
• 100+ new EVs registered per year in Bellevue	City employees drive alone commute trips:

[7] Bellevue Transportation plans: https://transportation.bellevuewa.gov/planning.
[8] Washington State Green Transportation Legislation: HB 2042.
[9] Washington State and Local Government Agency Electric Vehicle and Alternative Fuel policy: RCW 43.19.648.
[10] Bellevue Comprehensive Plan, Transportation Element: https://bellevuewa.gov/city-government/departments/community-development/planning-initiatives/comprehensive-plan.

Communitywide Targets and Strategies	Municipal Operations Targets and Strategies
• 2017 drive-alone rate was 65% for city residents	• 2017 Drive alone rate for City Hall: 40% • 2017 Drive alone rate for Bellevue Service Center: 56%
Peer City Examples	
• Reach 45% non-drive alone (55% drive alone) by 2030 (Redmond, WA). • City targets for 2030 are 26,700 boardings per day based on the anticipated arrival of light rail service in 2024 (Redmond, WA). • By 2035, increase the mode share of daily non-drive alone trips to 70% citywide (30% drive alone) (Portland, OR). • Portland, OR: Goal of 25% of all commute trips are done by bike by 2035, and 25% by transit • Portland, OR: Replace at least 10,000 gas- or diesel-powered vehicles with electric vehicles in Multnomah County • Seattle, WA: Increase electric light duty vehicle ownership to 30% by 2030 • Sacramento, CA: Achieve 75,000 zero emission vehicles on the road by 2025.	• Portland, OR: Add 60 electric vehicles to the City's sedan fleet to increase the percentage of electric vehicles from 20 to 30% • Seattle, WA: Purchase 100 new EVs through 2017 (to achieve 40% electrification of current light duty fleet); 250 EVs by 2020 (70% of light duty fleet) with a target of 400 EVs by 2023 (100% of light duty fleet). • Sacramento, CA: Achieve at least 50% of annual light-duty fleet purchases to be ZEV by 2018 and 75% of annual light-duty fleet purchases to be ZEV by 2020
Sample Strategies	
• Commute trip reduction programs for large and small businesses • Expanding access to public transit • Expanding network of bike lanes and sidewalks to improve pedestrian and cyclist access and safety • Encouraging and/or incentivizing alternative fuel vehicles • Electric vehicle charging infrastructure in public facilities, workplaces, and residences.	• Incentivizing public transportation commute trips with Orca cards • Providing electric vehicle charging infrastructure for employees and vehicle fleet • Assessing the total cost of ownership for electric vehicles in the vehicle fleet • Employee driver education around the benefits of electric vehicles and anti-idling

Assessment

The goals outlined above align with Bellevue's Comprehensive Plan, and the associated targets related to commute trips, mode share, and transit access are best practice transportation performance metrics for cities. Continuing to support the provision of mobility alternatives and an increase in non-motorized commuting, will not only help to reduce traffic and congestion in Bellevue, but will also serve to reduce greenhouse gas emissions associated with transportation and help advance the city's Transportation and Mobility vision.

Many leading cities are establishing goals and targets related to supporting the transition to electric vehicles, which would be a new target for Bellevue. A key strategy for reducing transportation related greenhouse gas emissions is transitioning to alternative fueled vehicles, both for the city's vehicle fleet and communitywide. Establishing a target for increasing electric vehicles in Bellevue could also help to motivate and encourage Bellevue residents to consider electric vehicles as they would be supporting one of the city's environmental goals.

A goal and target related to the jobs-housing balance is not common for sustainability plans, however there is regional policy direction for balanced job and housing growth and this issue represents one of the greater transportation and affordability issues facing the Puget Sound region. As job growth continues in targeted areas and affordable housing develops in others, this has impacts on transportation related greenhouse gas emissions. Furthermore, with transportation emissions comprising 43% of Bellevue's communitywide emissions, any mobility and land use targets will be closely interrelated with any potential greenhouse gas emissions reduction target.

Recommended Next Steps
Staff recommend further analysis of possible targets for mobility and land use, based on the examples provided above.

Considerations
In considering updated goals and targets for Mobility and Land Use, Council may wish to consider:

- How do Bellevue's existing Mobility and Land Use goals and targets impact a possible climate target, and how might the city wish to update or supplement its Mobility and Land Use targets?

3. Natural Systems

2013-2018 ESI Strategic Plan Goal
Repair the integrity of natural systems in and around Bellevue to the highest of standards, which will allow residents, fish, and wildlife to thrive.

Associated Comprehensive Plan Policies

- Work toward a citywide tree canopy target of at least 40% canopy coverage that reflects our "City in a Park" character and maintain an action plan for meeting the target across multiple land use types including right-of way, public lands, and residential and commercial uses. (EN-12)
- Manage Bellevue's forest resources, including street trees, formal plantings, and self-sustaining natural stands, to ensure their long term vitality. (PA-31)
- Equitably distribute a variety of parks, community centers and other indoor and outdoor recreation facilities throughout the city. (PA-3)
- Make low impact development the preferred and commonly-used approach to site development to minimize impervious surfaces, native vegetation loss, and stormwater runoff. (EN-46)

- Manage aquatic habitats, including shoreline and riparian (streamside) habitats, to preserve and enhance their natural functions of providing fish and wildlife habitat and protecting water quality. (EN-64)

Suggested Goal
Improve and preserve the integrity and health of Bellevue's natural systems and ensure all of Bellevue's residents have access to Bellevue's abundant natural resources.

Context
Bellevue boasts 2,700 acres of natural and green areas throughout the city, which are part of a local and regional ecosystem of habitats and natural processes. The streams, lakes, and forests of Bellevue connect the city, like its streets, to Bellevue's neighbors, and are part of the Puget Sound watershed ecosystem. The natural systems in Bellevue are managed through various national, state, and local laws and policies, such as the National Pollution Discharge Elimination System Program (NPDES) stormwater permit, land use code, clearing and grading code, critical areas code, and other permitting requirements.

The NPDES permit addresses water pollution by regulating sources that discharge pollutants into natural bodies of water such as Lake Washington and Coal Creek. The Environmental Protection Agency authorizes state governments to perform permitting, administration and enforcement of the program. As part of Bellevue's NPDES requirements, the City reviewed its land use and clearing and grading codes, and updated them to align with the Washington State Department of Ecology Stormwater Manual. Bellevue completed this update to its land use and clearing and grading codes at the end of 2016. This code update resulted in updated requirements for single-family development for impervious surface cover along with updated clearing and grading permit requirements related to tree removal.

As part of the 2015 Comprehensive Plan update, the City adopted a goal of a 40% tree canopy, based on best practice recommendations from American Forests, a leading urban forestry organization. Bellevue has been measuring its tree canopy since the 1980's, and as of 2017 last reported that the tree canopy was 37%.

Bellevue is a member of the Cascade Water Alliance, which is a municipal corporation comprised of seven municipalities (five cities and two water and sewer districts) in the Puget Sound region that joined together to provide safe, clean, reliable water supply to its 380,000 residences and more than 20,000 businesses. Cascade Water Alliance administers regional water conservation services on behalf of its members. The 2014-2019 Conservation Program includes goals for water conservation for Cascade's service territory.

Communitywide Targets and Strategies	**Municipal Operations Targets and Strategies**
Existing targets:	Existing targets: • N/A

Communitywide Targets and Strategies	Municipal Operations Targets and Strategies
• Achieve a 40% tree canopy citywide[11] • Ensure at least 72% of residents live within a 1/3 of a mile of a park, trail, or open space[12]. • Preserve the health of Bellevue's urban forest by maintaining 70% of public urban forests in class 1 and 2 condition (Parks Performance Indicator). • Cascade Water Alliance water conservation goal: The 2014-2019 Conservation Program has a goal of achieving water savings of 0.6 million gallons per day (mgd) in terms of annual average consumption and 1 mgd during the peak season.[13]	
Potential targets: • Strive to reduce impervious surface cover to 40% or less of the city. • Maintain or improve the health of streams to at least "fair" using the standardized stream health metric.	Potential target: • Reduce municipal water consumption by 10% by 2030 below 2011 levels.
Bellevue's Current Performance	
• 2017 Tree Canopy was 37%. • 2017 impervious surface cover was 40%. • 74% of Bellevue's public urban forest was in class 1 or class 2 condition in 2017.	• Municipal water consumption increased by 44% between 2011 and 2017.
Peer City Examples	
• Kirkland, WA tree canopy goal: 40% • Seattle, WA tree canopy goal: 30% • Shoreline, WA tree canopy goal: 40% • Redmond, WA forest health goal: bring 1,035 acres of Redmond's forested parkland into active management over the next 20 years. • Washington D.C.: Use 75% of the landscape to capture rainwater for filtration or reuse.	• Denver, CO: Reduce use of potable water by 22% for parks and golf courses and by 20% in city facilities[14].

[11] Bellevue Comprehensive Plan, Environment Element: https://bellevuewa.gov/city-government/departments/community-development/planning-initiatives/comprehensive-plan.
[12] Bellevue Parks and Open Space System Plan, 2016: https://parks.bellevuewa.gov/UserFiles/Servers/Server_4779004/File/Parks%20&%20Community%20Services/Park-Planning/ParksOpenSpacePlan/parks-open-space-plan-2016.pdf.
[13] Cascade Water Supply Conservation Program: https://cascadewater.org/water-supply/water-supply-plan-overview/.
[14] ACEEE Water conservation goals database: https://database.aceee.org/city/water-services.

Communitywide Targets and Strategies	Municipal Operations Targets and Strategies
Sample Strategies	
• Tree retention and replacement requirements • Tree planting programs for public and private property • Forest health management programs and projects • Water efficiency and conservation education and outreach	• Improve water efficiency in city facilities and irrigation systems • Drought tolerant landscaping to minimize irrigation demands • Tree retention and replacement requirements for city projects • Low impact development requirements or guidelines for city projects

Assessment

There is no one overarching metric or target for measuring the health of the natural systems in a city. Cities typically use a number of different goals and targets to establish their priorities related to improving the health of the natural environment. Bellevue already has a number of best practice targets addressing tree canopy coverage, park and open space accessibility, forest health management and restoration.

Bellevue staff monitor the health of Bellevue streams and are currently performing a multi-year assessment of stream health for all streams in Bellevue. The city could consider adding an overarching stream health target, although Bellevue's streams are in varying conditions and also necessitate varying levels of restoration, depending on their role in the regional water system. Therefore, an overarching target for streams will require further analysis to determine feasibility and applicability to Bellevue's stream restoration efforts.

Cascade manages Bellevue's water conservation programming, and has established a conservation goal for its territory and supporting programs. Due to the fact these efforts are handled through a regional entity, it is not recommended to consider any changes to the water conservation targets through this planning process. However, staff will evaluate the costs and benefits of further water conservation and efficiency strategies for Bellevue's municipal operations and will evaluate a possible target for municipal operations.

Recommended Next Steps

Evaluate strategies for achieving the 40% tree canopy target. Consider new or updated targets related to forest health, impervious surface cover, and stream health. The forest health target may need to be revised, based on an updated forest health classification system which will likely be implemented in 2019. Also consider creating a long-term park and open space access goal, since the current goal of 72% has been achieved. Staff recommend continuing to evaluate possible updates to the targets for forest health, stream health, and a potential new target for impervious surface cover. Staff will also review other possible targets related to reducing stormwater runoff and improving water quality.

Considerations

As Bellevue continues to develop, how can the city strive to preserve and enhance the natural environment?

4. Energy

2013-2018 ESI Strategic Plan Goal
Ensure long-term access to clean energy and water while reducing the fiscal and environmental impacts of consumption.

Associated Comprehensive Plan Policy
Promote and invest in energy efficiency and renewable energy resources as an alternative to non-renewable resources. (EN-4)

Suggested Goal
Ensure long-term access to clean energy while reducing the fiscal and environmental impacts of consumption.

Context
Leading cities, businesses, and organizations around the country are establishing goals and targets to transition to 100% renewable energy. Nationally, over 90 cities[15], and hundreds of companies have made commitments to using 100% renewable energy. Local organizations such as T-Mobile, REI, Salesforce, Bellevue College, Starbucks, Wework, and Microsoft have all made similar commitments and have participated in Puget Sound Energy's (PSE) Green Direct[16] program for large customers or are sourcing renewable energy through other channels.

The context for clean energy in Washington State has just changed significantly with the recent passage of Senate Bill 5116. This bill establishes the Washington clean energy transformation act "to support the clean energy economy and to transition to a clean, affordable, and reliable energy future". The bill requires that utilities phase out all coal fired electricity generation by 2025, by 2030 be carbon neutral, and by 2045 utilities must self-generate 100 percent clean energy. The implications of this new legislation on utilities and their integrated resource planning process and other green power and energy efficiency programs is currently being evaluated.

Communitywide Targets and Strategies	Municipal Operations Targets and Strategies
Existing target: • N/A	Existing target:

[15] Sierra Club 100% Renewable Energy Commitments in Cities, Counties, and States: https://www.sierraclub.org/ready-for-100/commitments.
[16] PSE Green Direct program: https://www.pse.com/green-options/Renewable-Energy-Programs/green-direct.

Communitywide Targets and Strategies	Municipal Operations Targets and Strategies
	• Reduce energy use by 10% by 2020, compared to 2015 for city operations (Bellevue Operations Policy Team goal)
Potential targets: • 100% of all energy consumed in Bellevue is from clean or renewable energy sources by 2050. • Increase installed capacity of onsite renewable energy in Bellevue by 10% by 2030. • Reduce citywide energy use by 10% by 2030.	Potential targets: • Use 100% clean or renewable energy by 2030 for all city facilities. • Reduce municipal energy use by 20% by 2030.
Bellevue's Current Performance	
• Annually increasing onsite solar installed in Bellevue by an average of 360 kilowatts per year. • Over 500 Bellevue customers have signed up for PSE's Green Power purchasing program. • In 2017, 41% of PSE's electricity supply is through clean energy sources[17] (including hydroelectric, wind, nuclear, and other sources).	• As of September 2018, Bellevue reduced electricity use by 7.8% and natural gas use by 9.1% for city operations. • Starting in 2021, approximately 70% of Bellevue's electricity will be supplied through green power, through PSE's Green Direct program. • Municipal energy use per square foot has decreased by 22% between 2011 and 2017.
Peer City Examples	
A growing number of cities and counties[18] have announced 100 percent renewable electricity goals for their communities, including: • King County, WA: Increase countywide renewable electricity use to 90% by 2030 • Atlanta, GA 100% renewable energy by 2030 • Boulder, CO 100% renewable energy by 2030 • Minneapolis, MN 100% renewable energy by 2030 • Salt Lake City, UT 100% renewable energy by 2032 • San Diego, CA 100% renewable energy by 2035 • San Jose, CA 100% renewable energy by 2022 • Spokane, WA: 100% renewable energy by 2030	Some cities which have adopted communitywide renewable energy goals have also adopted goals for their municipal operations, which sometimes have a more aggressive timeline: • Atlanta, GA 100% renewable energy for city operations by 2025 • Minneapolis, MN 100% renewable energy by 2022 • Boston, MA: reduce municipal energy use by 20% within five years • Atlanta, GA: reduce municipal energy use 20% by 2020, from a 2009 baseline.

[17] PSE 2017 Fuel Mix report: https://www.pse.com/pages/energy-supply/electric-supply.
[18] U.S. Conference of Mayors report on Cities with 100% Renewable Energy Goals: http://www.usmayors.org/wp-content/uploads/2018/10/City-Wide-Goals.pdf.

Communitywide Targets and Strategies	Municipal Operations Targets and Strategies
Cities have also established targets related to decreasing energy use, including: • Austin, TX: reduce energy consumption in buildings 5% each year through 2020.	
Sample Strategies	
• Promoting and/or incentivizing onsite solar installations, such as through a Solarize campaign. • Advocating for state-level incentives for renewable energy, such as through net-metering. • Supporting state-level legislation for transitioning to renewable energy. • Supporting efforts to allow for PSE to provide voluntary programs for purchasing green power, such as through PSE's Green Direct program and Green Power program, to accelerate the transition to clean energy.	• Installing solar on city facilities. • Purchasing renewable energy through utility programs. • Reducing energy use in city facilities and operations through building energy efficiency upgrades. • Promoting energy conservation in city facilities through education and outreach.

Assessment

Many cities and companies which have established 100% renewable energy goals have made these commitments to help further the transition to clean energy in their region and nationally. With new legislation in Washington State through Senate Bill 5116, Washington's investor owned utilities will be required to develop plans to transition off of coal and toward cleaner energy sources.

Bellevue could consider establishing a 100% renewable energy goal which could mirror the statewide legislation, which could likely be achieved by required action resulting from the new statewide legislation. The city could also consider a target which an accelerated timeline, for either the entire community or Bellevue's municipal operations.

Bellevue may also seek to establish a goal to reduce energy use, similar to many leading cities, which would have many benefits including investing in existing buildings to be more energy efficient, decreasing energy costs for residents and businesses, and reducing greenhouse gas emissions from energy use. The City has worked on reducing energy use from city facilities for nearly a decade, and could build on these efforts with a citywide energy reduction goal.
Note: The current ESI Strategic Plan includes a focus area for Energy and Water. For the updated ESI Strategic Plan, water has been moved to the Natural Systems focus area.

Recommended Next Steps

Evaluate feasibility and relevance of including a renewable energy goal and target for citywide energy use and municipal operations. Evaluate impacts of potential state legislation on feasibility of renewable

energy goals. Develop recommendations for citywide and municipal renewable energy and energy use goals and targets.

Considerations

Does the City of Bellevue want to establish a communitywide and/or municipal operations renewable energy target, which aligns with the State of Washington, or perhaps a target with an accelerated timeline?

5. Climate Change

2013-2018 ESI Strategic Plan Goal
Measure, communicate, plan, and act to reduce citywide greenhouse gas emissions.

Associated Comprehensive Plan Policy
Establish an achievable citywide target and take corrective actions to reduce greenhouse gas emissions such as reducing energy consumption and vehicle emissions, and enhancing land use patterns to reduce vehicle dependency. (EN-6)

Suggested Goal
Reduce Bellevue's greenhouse gas emissions and prepare and adapt to ongoing climate change impacts.

Context
Based on analysis from leading scientific and international policy efforts, taking action to mitigate the negative effects of climate change will require efforts from national, state, and local levels of government, along with the private sector. The State of Washington has committed to reduce greenhouse gas emissions by 50% by 2040, and Bellevue has endorsed the Countywide Planning Policy which calls to reduce countywide GHG emissions, compared to a 2007 baseline, by 25% by 2020, 50% by 2030, and 80% by 2050.

Cities around the world are establishing greenhouse gas emissions reduction targets to guide their climate action efforts[19]. These emissions reduction targets typically align with international scientific consensus that we need to globally reduce our emissions by at least 80% by 2050 to avoid the most harmful impacts of climate change. Cities with greenhouse gas emissions reduction targets and climate action plans recognize that to achieve their local goals, action is required at the federal, state, and local level. These plans can be used to help identify state-level policies which would help to achieve local climate goals.

Many local companies have also established greenhouse gas emissions reduction goals. PSE has established a goal to reduce emissions 50% by 2040; REI has committed to being "climate-neutral" by 2020, and Salesforce has committed to net-zero greenhouse gas emissions.
Bellevue has endorsed a regional climate action goal through the King County Cities Climate Collaboration and has the opportunity to update its emissions reduction target, which is currently out of date, to guide Bellevue's climate action efforts.

[19] ARUP and C40 Cities Climate Leadership Group, Global Aggregation of City Climate Commitments: https://www.c40.org/researches/global-aggregation-of-city-climate-commitments-methodology.

Communitywide Targets and Strategies	Municipal Operations Targets and Strategies
Existing target: • Reduce communitywide greenhouse gas emissions by 7% below 1990 levels by 2012[20].	Existing target: • Reduce municipal operations greenhouse gas emissions by 7% below 1990 levels by 2012[21].
Potential updated target: • Reduce communitywide greenhouse gas emissions by 80% by 2050, and 50% by 2035 below 2011 levels.	Potential updated target: • Reduce municipal operations greenhouse gas emissions by 50% by 2030 and 80% by 2040 below 2011 levels.
Bellevue's Current Performance	
• Reduced community greenhouse gas emissions by 7% between 2011 and 2017	• Reduced municipal greenhouse gas emissions by 19% between 2011 and 2017
Best Practice Targets	
Dozens of cities around the U.S. have established emissions reductions targets[22]. A snapshot of some local government targets are below: • King County, WA, Redmond, WA, and Issaquah, WA: 50% reduction by 2050 compared to 2007 baseline 80% reduction by 2050 compared to 2007 baseline • Seattle, WA: Zero net emissions by 2050 • Denver, CO: 80% reduction by 2050 compared to 2005 baseline • San Diego, CA: Reduce emissions 80% by 2050 below 2010 levels. • Portland, OR: 40% reduction in carbon emissions by 2030 and an 80% reduction by 2050 (compared to 1990 levels) • Nashville, TN: 30% reduction by 2030 compared to a 2014 baseline; 70% reduction by 2050 compared to a 2014 baseline	Many cities with communitywide greenhouse gas emissions reductions targets also adopt targets for their municipal operations, which are either the same or have a more aggressive timeline then the communitywide target. Some examples are as follows: • King County, WA: Reduce emissions for County operations by at least 15% by 2015, 25% by 2020, and 50% by 2030 (with some departments committing to carbon neutrality earlier). • Seattle, WA: Zero net emissions by 2050 for municipal operations • Denver: Reduce greenhouse gas emissions produced from City government and DIA activities to less than 3% of the level of emissions that meet the Community Climate Goal. • San Diego, CA: 50% below 2010 levels by 2035, with interim goals of 15% below 2010 levels by 2020 and 40% below 2010 levels by 2030.

[20] Bellevue Resolution 7517, adopting the Mayor's Climate Protection Agreement: https://publicrecordscenter.bellevuewa.gov/Resolutions/7517.pdf.
[21] Ibid.
[22] American Council on an Energy Efficiency Economy database of city climate and energy targets: https://database.aceee.org/city/local-government-energy-efficiency-goals.

Communitywide Targets and Strategies	Municipal Operations Targets and Strategies
	• Portland, OR: Reduce city government greenhouse gas emissions by 53% below fiscal year 2006-07 levels by 2030. • Nashville, TN: reduce greenhouse gas emissions from municipal operations by 80% by 2050, with interim reduction targets of 20% by 2020 and 40% by 2030.
Sample Strategies	
• Energy efficiency and conservation in commercial and residential buildings • Incentives or requirements for green building for new construction • Purchasing renewable energy • Onsite renewable energy • Reducing emissions from transportation • Increasing access and use of transportation alternatives • Waste minimization from residential, commercial, and industrial facilities.	• Energy efficiency and conservation in municipal buildings and equipment • Purchasing renewable energy • Onsite renewable energy • Reducing emissions from vehicle fleet • Reducing emissions associated with commute trips and employee travel • Increasing access and use of transportation alternatives • Waste minimization from city facilities

Assessment

Establishing a greenhouse gas emissions reduction target helps to orient a city's environmental efforts and provide overarching direction for strategic and actions for a plan. The Comprehensive Plan provides direction to establish an updated emissions reduction target and take corrective actions to reduce greenhouse gas emissions such as reducing energy consumption and vehicle emissions, and enhancing land use patterns to reduce vehicle dependency.

Climate Change is one focus area which is closely interrelated with the other focus areas of the ESI Strategic Plan. There is a direct relationship between a greenhouse gas emissions reduction target and goals and targets for the other ESI Strategic Plan focus areas, including Mobility and Land Use, Energy, and Materials Management and Waste targets. For example, a greenhouse emissions reduction target of reducing emissions 80% by 2050 would be a factor in developing recommendations for transportation and energy targets. Alternatively, the targets for the other focus areas will have an impact on the recommendations for a greenhouse gas emissions reduction target.

Population and job growth also have an impact on a city's ability to reduce its greenhouse gas emissions, as additional households and office space typically lead to increased energy use, waste, and transportation related emissions. In Bellevue's case, greenhouse gas emissions have decreased 7% between 2011 and 2017, despite a growth in population of 11% during that time.

Recommended Next Steps

Continue to evaluate strategies and associated implementation impacts for achieving a greenhouse gas emissions reduction goal, such as a more aggressive but achievable goal of a 60% reduction by 2050 and

a goal in line with international scientific recommendations of 80% by 2050. Also develop a recommendation for interim year goals, such as for 2030 or 2035. Include in the analysis the impact of federal, state, and local policies, such as the federal vehicle fuel efficiency standards and the new state clean energy legislation.

Considerations

When evaluating a possible greenhouse gas emissions reduction target, some considerations include:

- How does the proposed target compare with other peer cities, and any regional, state level, and international targets?
- How do the targets in the other focus areas, especially Mobility and Land Use, Energy, and Materials Management and Waste relate to a greenhouse gas emissions reduction target?

Next Steps

Staff will continue to evaluate the example targets provided in this report and return to Council with recommendations for targets to include in the updated ESI Strategic Plan. Staff will also begin a public outreach and engagement process to gather initial ideas from residents and businesses on strategies for achieving the suggested environmental goals, through listening sessions, focus groups, and online engagement anticipated to begin in the summer of 2019.