

The Sustainability Action Subcommittee's proposal to update
Spokane Sustainability Action Plan



2021 DRAFT





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ACKNOWLEDGMENTS

Cities & Organizations

This Sustainability Action Plan was developed using multiple models for guidance, including the following:

- ❖ City of Flagstaff – Climate Action & Adaptation Plan, 2018
- ❖ City of Reno – Sustainability & Climate Action Plan 2019 - 2025
- ❖ ICLEI – Local Governments for Sustainability, USA, 2018 Template
- ❖ City of Portland – Operationalizing Equity Checklist

The Plan Authors

This report was researched and written by the members of the City’s Sustainability Action Subcommittee (SAS). This document provides a comprehensive set of strategies and actions the SAS recommends the City adopts to ensure a more resilient future for the people living and working in Spokane. The SAS report also provides a recommended framework for Plan implementation and prioritization as well as descriptions of our development process and public engagement.

City Council created the SAS in early 2019 to provide recommendations on updating the 2009 Sustainability Action Plan. In preparation for this update, we researched solutions the City and its residents can take to both mitigate our contribution to climate change and help make our community become more resilient in the face of future challenges.

We respectfully ask the City to consider adopting the recommendations outlined in this report as an update to the Spokane Sustainability Action Plan.

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Spokane's Sustainability Action Plan (SSAP)

This plan updates and expands upon Spokane's 2009 Sustainability Action Plan. It identifies specific strategies and actions that will help meet our 100% renewable energy goals as adopted by the City in 2018, and to meet regulation set by the State of Washington to address greenhouse gas emissions.

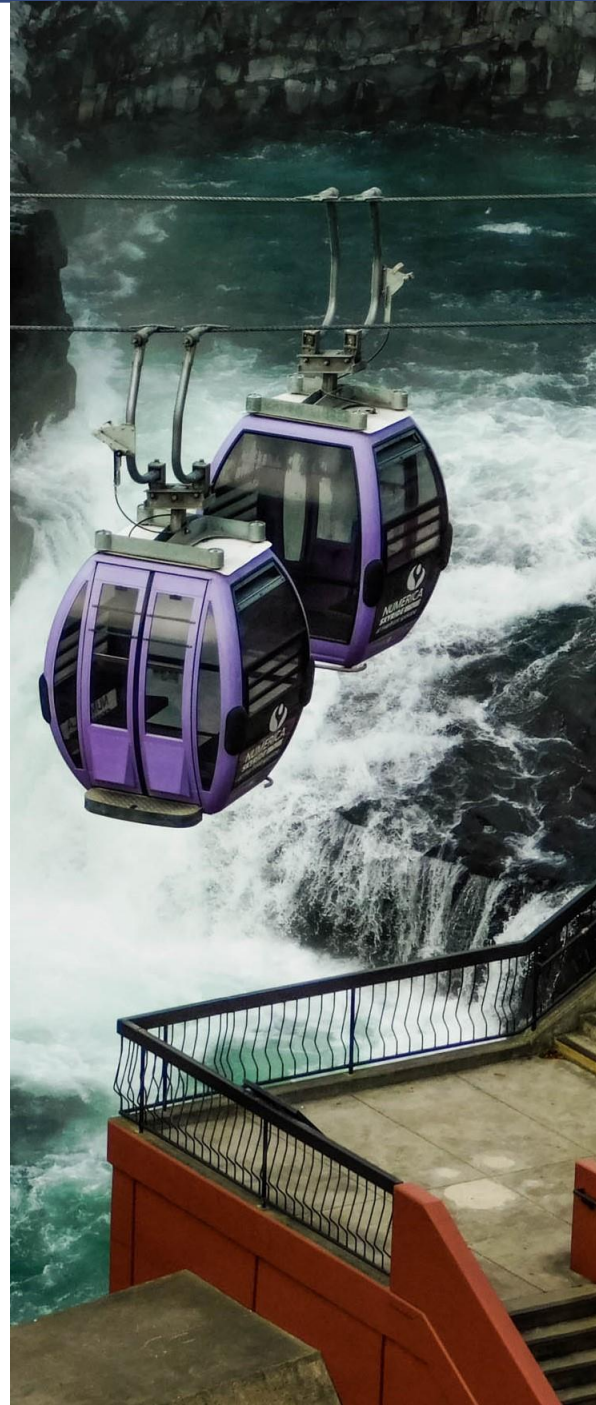
While climate change is a global issue, it requires local action. We believe that Spokane has much to gain by embracing the opportunities presented by this challenge.

With this in mind, we are taking an approach to sustainability planning that balances the need to reduce greenhouse gas emissions with our commitment to create jobs and foster an equitable community.

For example, in partnership with Avista, the Spokane Regional Transportation Council, and Urbanova, we have won a grant to install electric vehicle charging stations throughout Spokane County as part of a regionwide transportation electrification (TE) plan. The implementation of this regional TE plan will reduce emissions, cut transportation costs, create jobs, and bring more opportunities to historically underserved areas of our city.

While our plan helps us become environmentally responsible, it will also help us become more resilient by preparing our community for impacts caused by changing weather patterns. It will help us incentivize the development of a local clean energy economy and secure the economic benefits of becoming a resilient city. With smart mitigation efforts, we'll be able to protect the economic and social benefits of our local tourism industry, beloved public events like Bloomsday, regional farming, the Spokane River, and our aquifer.

We hope that this plan will contribute to what Spokane has been for over a hundred years — a hub of prosperous innovation, collaboration, and creativity — built through the efforts of community members with the vision and courage to shape their own future.



INTRODUCTION

Spokane's Sustainability Action Plan answers the City's call to address environmental and climate related requirements at both the local and State levels. Local leaders, organizations, and residents have been working hard to continue Spokane's culture of environmental sustainability and love of the outdoors since 2009, when the City adopted its first Sustainability Action Plan. This plan ensures the long-term prosperity of everyone who lives here, visits, and contribute to our community.

Our Objectives

Build Resiliency

Ensure our neighborhoods and economy are ready for future challenges

95% by 2050

Use a step approach to reduce greenhouse gas emissions compared to 2016 levels

Prioritize Most Impacted

Prioritize those most vulnerable to health impacts and economic downturns related to climate change

Criteria used to evaluate Actions and Strategies

The degree of impact to reduce greenhouse gas emissions & co-benefits in the areas of:

- Improved Environment
- Economic Impacts
- Increased Equity
- Increased Health & Well Being

In 2018, the City worked with local energy experts to adopt a goal of 100% renewable electricity by 2030, establishing Spokane as a leader. The State of Washington enacted legislation in 2019 that impacts Spokane:

- *Clean Energy Transformation Act (2019)* –requires 100% renewable electricity use
- *Greenhouse Gas reduction targets (2019)* – 30-year targets requiring a step approach

Spokane's Sustainability Action Plan provides a guide to achieve those requirements, mitigate risks from climate change, and invest in strengthening our communities to ensure the equitable prosperity of our residents and the protection of our natural resources for generations to come.

Our Actions

To achieve our goals, we are acting across these seven sectors



Buildings & Energy



Transportation & Land Use



Waste Diversion & Material Conservation



Water Resources



Economic Prosperity



Natural Environment



Health & Wellbeing

THE SAS PROCESS

Development of this Plan

This plan was drafted by the Sustainability Action Subcommittee with input and engagement from dozens of local, regional, and national experts. Over a period of two years, members of the SAS researched sustainability and climate policy as well as planning frameworks used by local governments throughout the US to develop this plan. Prior to adoption, this plan will undergo an additional six months of public engagement which allows time to incorporate public feedback.



Tour of the Next Level Treatment under construction at the Riverside Park Water Reclamation Facility in Sept 2019. Photo Credit: Hannahlee Allers

The Sustainability Action Subcommittee (SAS) Process

When City Council began forming the SAS in 2019, Council President Breean Beggs (then Council Member Breean Beggs) envisioned this group as “the brainchild of Spokane’s very own Project Drawdown”. According to Breean, “this means identifying the areas of city and community operations that have the highest potential to experience increased sustainability over the next five years and the action steps it would take to achieve those improvements. Areas that are at the top of my mind based on my current understanding are: water conservation (well under way), increased renewable energy generation in and around the city, energy conservation in the built environment, reduction of waste (including, reduction of packaging, recycling, composting and reuse), transportation transformation to electrical vehicles and mode shift to transit, cycling and walking.”

As the team began to take shape, CM Beggs purposely left the directive on how to achieve the above stated goals up to the volunteer citizens that make up the SAS. He wanted the subcommittee to pursue ideas that members felt passionate about. His vision is what we refer to as the *democratization of policy making*, where policy ideas are vetted by a broad range of local stakeholders and bubble up into practice rather than being mandated from a single elected official or governing body.

Membership & Workgroups

Members of the SAS have expertise in the fields of energy, biofuel, planning, natural resource management, ecology, forestry, transportation, health, equity, sustainable business practices, and the built environment. Work was divided into the following workgroups:

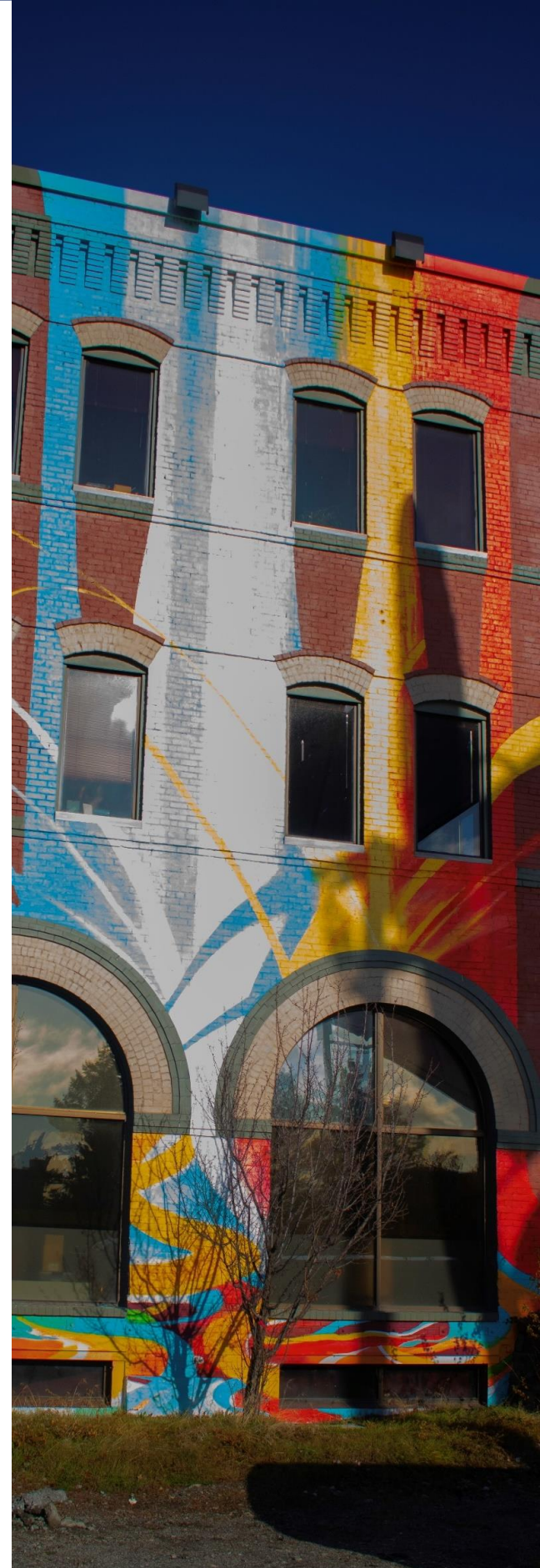
- Built Environment
- Energy
- Health & Equity
- Natural Resources
- Planning & Land Use
- Sustainability & Climate Action Planning
- Transportation
- Waste/Recycling



SAS Guiding Principles

The following principles were adopted by the SAS to help guide the development of this Plan.

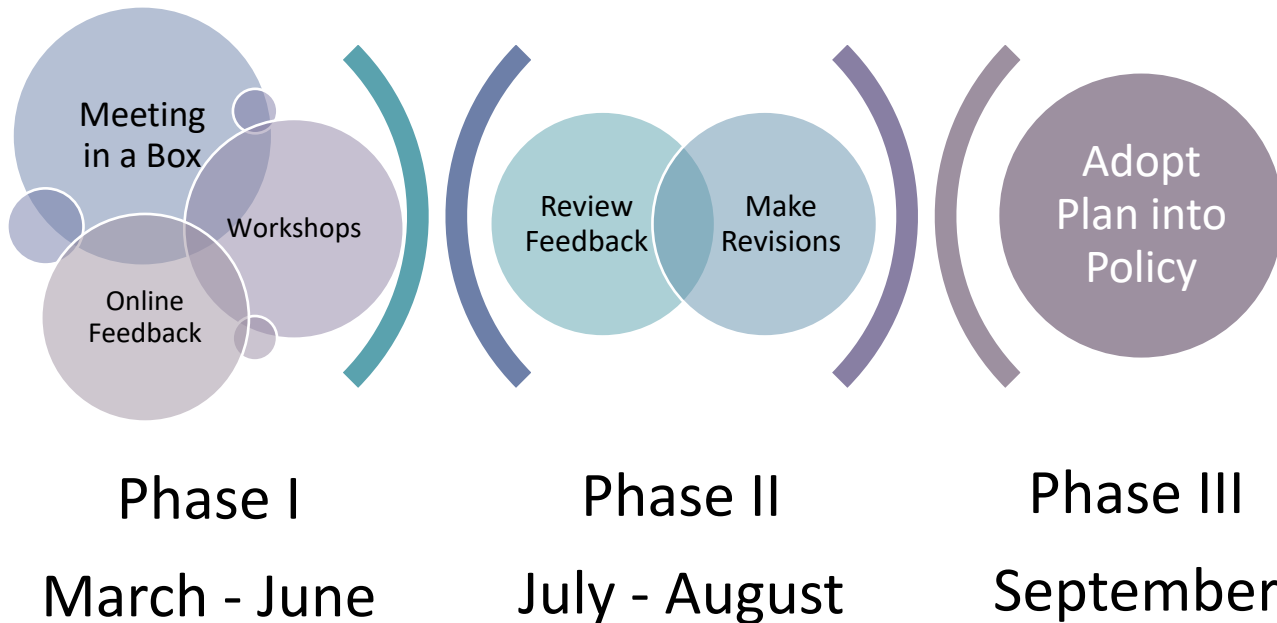
1. We seek to provide future generations with a quality of life equal to or better than the quality of life we now are experiencing.
2. We seek to bring people and stakeholders together to co-create solutions and move our community towards resilience in the face of climate change
3. We believe climate strategies must address historic inequalities and environmental injustices. We will work to undo environmentally racist actions and systems.
4. We believe that equitable inclusion is imperative in sustainability planning, therefore we will engage the community often and through diverse formats of communication.
5. We believe that all people in Spokane should benefit from environmental programs and policies, not just a wealthy few.
6. In a time of uncertainty, we seek to help prepare our community for the challenges to come. We seek to protect the right of all members of our community, human and other than human, to a healthy environment.
7. We believe that every action we take must be evaluated for its impact on the climate.
8. We believe urgent action is required!



FEEDBACK ON THIS PLAN

The Process for Community Engagement

In March of 2021, the SAS will release the first draft of their Plan for public engagement. Over the following six-month period, members of the Spokane community will have the opportunity to provide feedback on the recommendations contained within the SAS Plan. Public comments and feedback will be collected and provided to City Council for consideration along with the detailed recommendations from the SAS.



Education & Outreach Events

A series of virtual workshops and presentations are planned for Phase I. These events will be posted online and shared on City Council's social media pages. To schedule a live presentation and feedback session, members of the community can email SAS@SpokaneCity.org to request a virtual meeting. Alternatively, you can request the "Meeting in a Box" materials to receive everything you need to conduct your own Sustainability Action Plan virtual meeting.

To provide feedback directly to the SAS, you can fill out our feedback form by using this link:

Additional Plan Components

During Phases I & II of the Community Outreach timeline, members of the SAS will be finalizing the following additional components to be added to our recommendations prior to City Council adoption:

- Targeted economic analysis
- Community Action Guide
- Communication strategies
- Climate vulnerability assessment

WHY WE NEED A PLAN

Why We Need a Plan

In 2018, the Climate Impact Research Consortium (CIRC) facilitated a climate adaptation project here in Spokane. CIRC is comprised of an interdisciplinary team of scientists from Universities in Washington, Oregon, and Idaho and funded by the National Oceanic and Atmospheric Administration (NOAA). CIRC scientists paired with local stakeholders to conduct research and write a [report](#) around five key areas: Temperature, Precipitation, Stream Flow, Snowpack, and Wildfires. Our research indicates that without bold action toward reducing greenhouse gas emissions, Spokane can expect to see the following impacts throughout this century:



Warmer Year-Round Temperatures

- Increased temperatures in all seasons
- Temperature increases more intense during summer months
- Longer, drier summers



Decreased Snowpack

- Change in type and timing of precipitation means more rain in the spring and fall, less rain in the summer
- Less snow in the mountains means changes in river flow that will impact native fish and wildlife as well as recreation on the river
- Shorter winter sport season in the mountains



Increased Risk of Wildfire

- Wetter springs mean more underbrush growth for fire fuel
- Hotter, drier summers mean longer, hotter burns
- Increase wildfires equals loss of habitat and increase smoke



Economic & Recreational Costs

- Hoopfest and Pig Out in the Park combined bring an estimated \$54M to Spokane every year – increase heat and smoke during the summer months will impact these events
- Earlier low flows on the Spokane River diminish our ability to recreate on the river
- Warmer winters equals fewer days on the slopes



Disproportionate Impacts

Increase risk of respiratory and heat-related illness will impact people who are:

- Disproportionately exposed: children, outdoor workers, under-sheltered
- Disproportionately impacted: low-income, people with underlying health issues (asthma, heart disease, respiratory illness), elderly

REDBAND TROUT

Native Redband Trout: Locally, substantial impacts to the species will likely occur in the upper Spokane River, where populations are already depressed. Projected reduced flows below Post Falls Dam could result in warmer water temperatures that benefit smallmouth bass (a non-native species) and approach the upper lethal temperature range for redband trout



Photo credit: Sean Zenishek

WHY WE NEED A PLAN

Climate Change is Already Here

As longtime residents of Spokane County attest, hazardous air quality days used to be rare in our area and when they did happen in the past it was due to blowing dust or agricultural field burning. Although forest fires have always been a feature of western ecosystems, climate change is causing larger, longer fires that result in days and even weeks of air so hazardous it is dangerous to breathe. As indicated in the graphs below, the trend toward increasing numbers of hazardous air days is increasing over time.

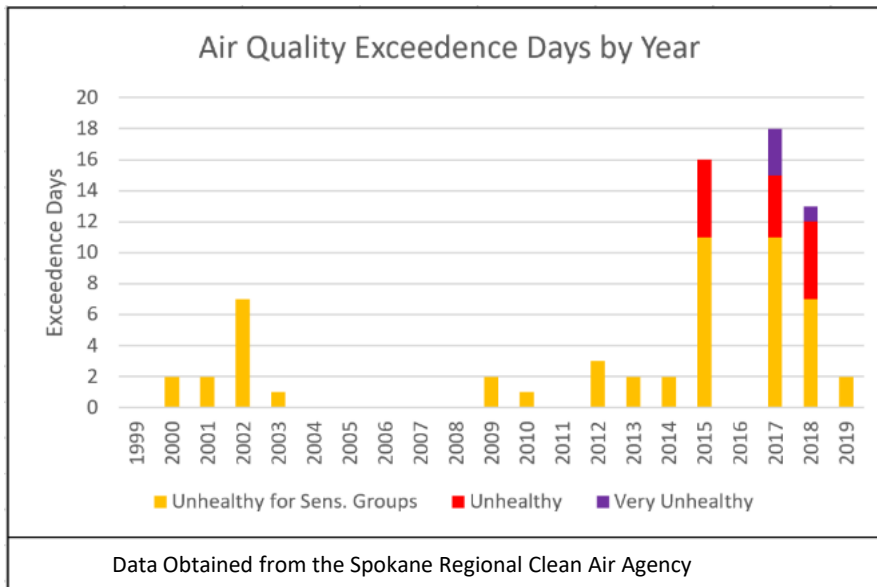


Figure 1: number of days where AQI is greater than 100 in Spokane over the most recent 20 year period

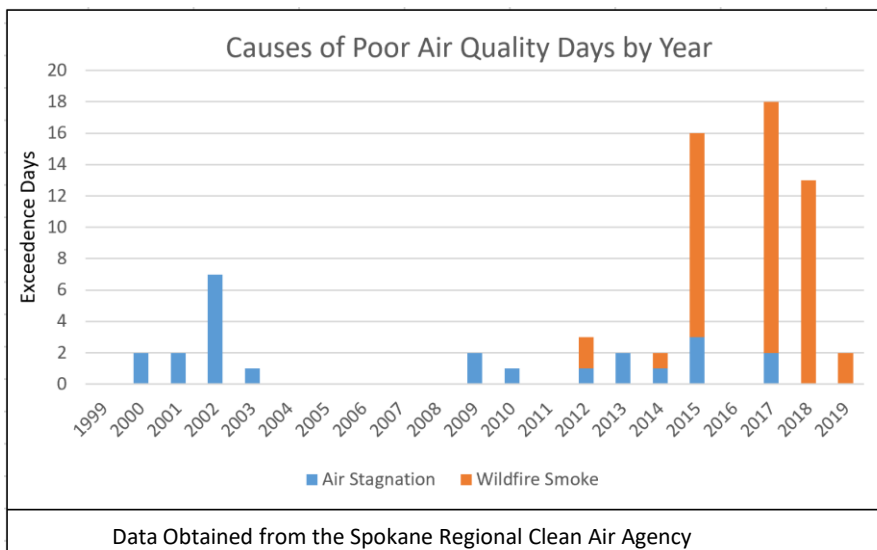


Figure 2: causes of poor air quality in Spokane over the most recent 20 year period

According to the Spokane Regional Clean Air Agency (SRCAA), on September 13th, 2020 residents in Spokane County experienced the most hazardous air quality since 1999, the year in which the SRCAA began reporting. The air quality index (AQI) for that day reached 479 out of 500 due to regional wildfire smoke.

SPOKANE'S CONTRIBUTION TO CLIMATE CHANGE

Greenhouse Gas Emissions

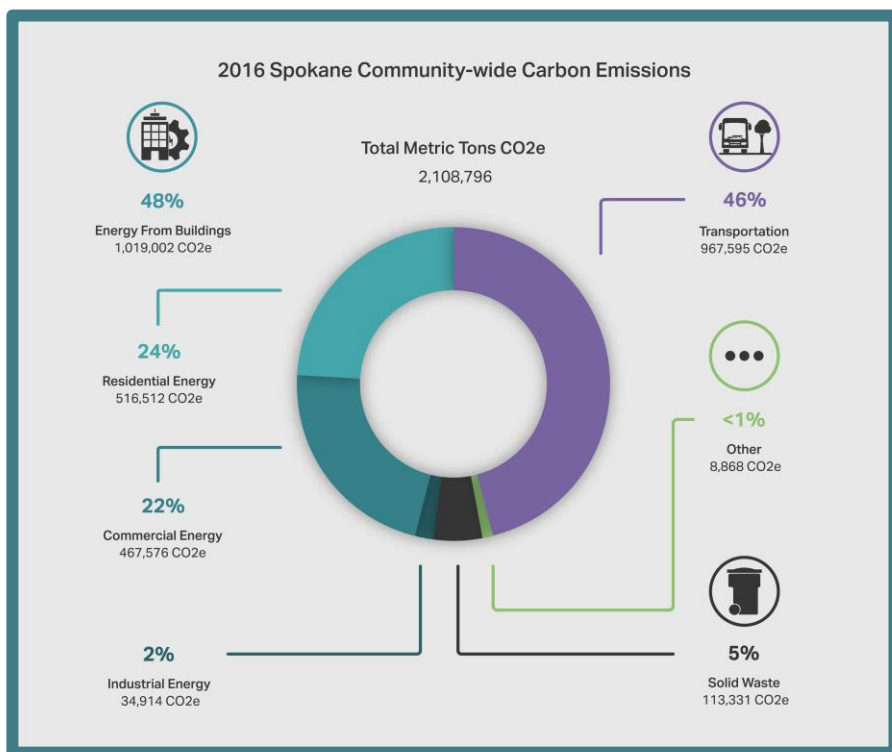
Greenhouse gas (GHG) emissions (aka climate pollution) in Spokane are mostly caused by burning fossil fuels for transportation and temperature control in buildings. Other sources include the incineration of solid waste, movement of water, and treatment of wastewater.

Steps to reduce climate pollution are being taken at the international, national, state, and local levels. In the Paris Agreement 194 countries committed to reducing their climate pollution. As part of that agreement, the United States committed to reduce its climate pollution 25% by 2025 compared with 2005 levels. In 2019 the State of Washington committed to this GHG reduction schedule:

- 2020 - reduce to 1990 levels
- 2030 - 45% below 1990 levels
- 2040 - 70% below 1990 levels
- 2050 - 95% below 1990 levels and achieve net zero emissions

Spokane is participating in this worldwide effort. The city's first greenhouse gas inventory covered 1990-2005. In 2016, Spokane's community-wide emissions were 2,108,796 metric tons carbon dioxide equivalent (MTCO₂e). In 2017 the city set the goal "to reduce GHG emissions created by activities within the boundaries of the City of Spokane by at least thirty percent (30%) below the 2005 baseline level by the year 2030" (SMC15.050.20.A).

In 2018, the Spokane City Council committed to "100% renewable energy for the city of Spokane's community electricity supply by no later than 2030." In 2021 Spokane City Council passed an ordinance requiring 95% reduction of climate pollution and net neutral by 2050*.



*action pending

Transportation emissions include all forms: but the largest percent of the transportation emissions come from personal vehicles.

Transportation Type	Percent of Total
Passenger Vehicles and Motorcycles	44%
Light Duty Trucks	18%
Railroad	11%
Heavy Duty Vehicles	10%
Regional Airports (Spokane & Geiger Field)	16%
Public Transportation (STA)	1%
Other	1%
Total	100%

ALIGNMENT WITH EXISTING PLANS & LAWS

Relationship to Other City Plans

The SAS considered other City plans during the development of the Sustainability Action Plan (SAP)¹. These plans either inform or could be informed by the SAP. Some of these documents already emphasize climate and sustainability solutions outlined in this Plan, while others will need to be updated to integrate sustainability and climate action.

- Spokane Sustainability Action Plan (2009)
- Spokane Comprehensive Plan “Shaping Spokane” (2017)
- Spokane Housing Action Plan (currently under development)
- Spokane Water Conservation Master Plan (2020)
- Spokane City Bicycle Master Plan (2017)
- Spokane Pedestrian Master Plan (2015)

Relationship to Regional Plans & Programs

The following regional plans also have the potential to interact with the City’s sustainability and climate goals.²

- Spokane County Comprehensive Plan (updated 2019)
- Spokane County Solid Waste and Moderate Risk Waste Management Plan (2015)
- Horizon 2040: The Spokane Regional Metropolitan Transportation Plan
- Spokane Regional Health District’s Walk Bike Bus Program
- Spokane Transit Authority Moving Forward 10 Year Plan (2016)
- WSDOT Active Transportation Plan (2021, under development)
- Avista Utilities Integrated Resource Plan (2020)
- Avista Utilities Transportation Electrification Plan (2020)
- Spokane Food Policy Council’s Food Action Plan (currently under development)

Related City & State Code

In recent years, the City of Spokane and the State of Washington have passed laws that help guide the goals and strategies outlined in this plan.¹¹

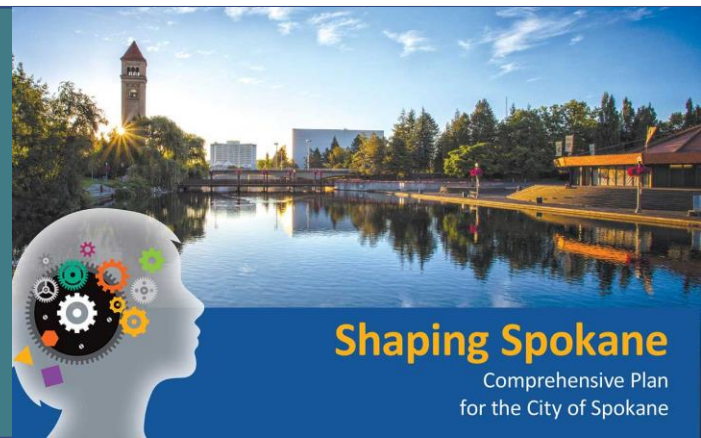
Spokane Municipal Code Chapter 15.05 – Climate Change

- 2017 Climate Change Ordinance aligns City’s climate targets with the State targets
- 2018 100% Renewable Energy Ordinance C35668
- 2014 Resolution 0070 – Supporting anadromous fish recovery throughout the Upper Columbia Watershed

Washington State

- 2019 Clean Energy Transformation Act (CETA)
- Revised Code of Washington 70A.45.020 -- Green House Gas Emissions Reductions
- 2019 Use Food Well Washington Plan
- Revised Code of Washington 19.27A -- Washington State Energy Code

As the City’s Comprehensive Plan is the primary guiding document for citywide planning, development, and conservation, we have indicated alignment to the Comprehensive Plan at the beginning of each sector chapter.



Shaping Spokane

Comprehensive Plan
for the City of Spokane



Vision 2050

As a community, Spokane ensures the well-being of all our people and the ecosystems of which we are a part. We do this by investing in our neighborhoods and caring for our natural habitats while building an equitable, regenerative, carbon-free economy that is resilient and sustainable.

Sustainability Action Plan Goals

In order to achieve our vision for Spokane, we have identified the following goals:

1. Reduce communitywide greenhouse gas emissions from 2016 baseline by:
 - 45% by 2030 to 1,159,838 metric tons
 - 70% by 2040 to 632,639 metric tons
 - 95% by 2050 to 105,440 metric tons and achieve net zero emissions
2. Build resilient neighborhoods by invest in our local communities, systems, and economy with these key areas in mind:
 - ☐ Healthy Ecosystems
 - ☐ Economic Opportunity
 - ☐ Equity
 - ☐ Health & Wellbeing
3. Prioritize people and communities most vulnerable to health impacts and economic downturns related to climate change

Collaboration and Partnership is Key

The strategies and actions of this plan are written under the assumption that Spokane regional partners will honor our history of collaboration and co-creation. Together we work smarter and more efficiently while building trust and amplifying our shared goals.

PLAN OVERVIEW

How this Plan is Organized

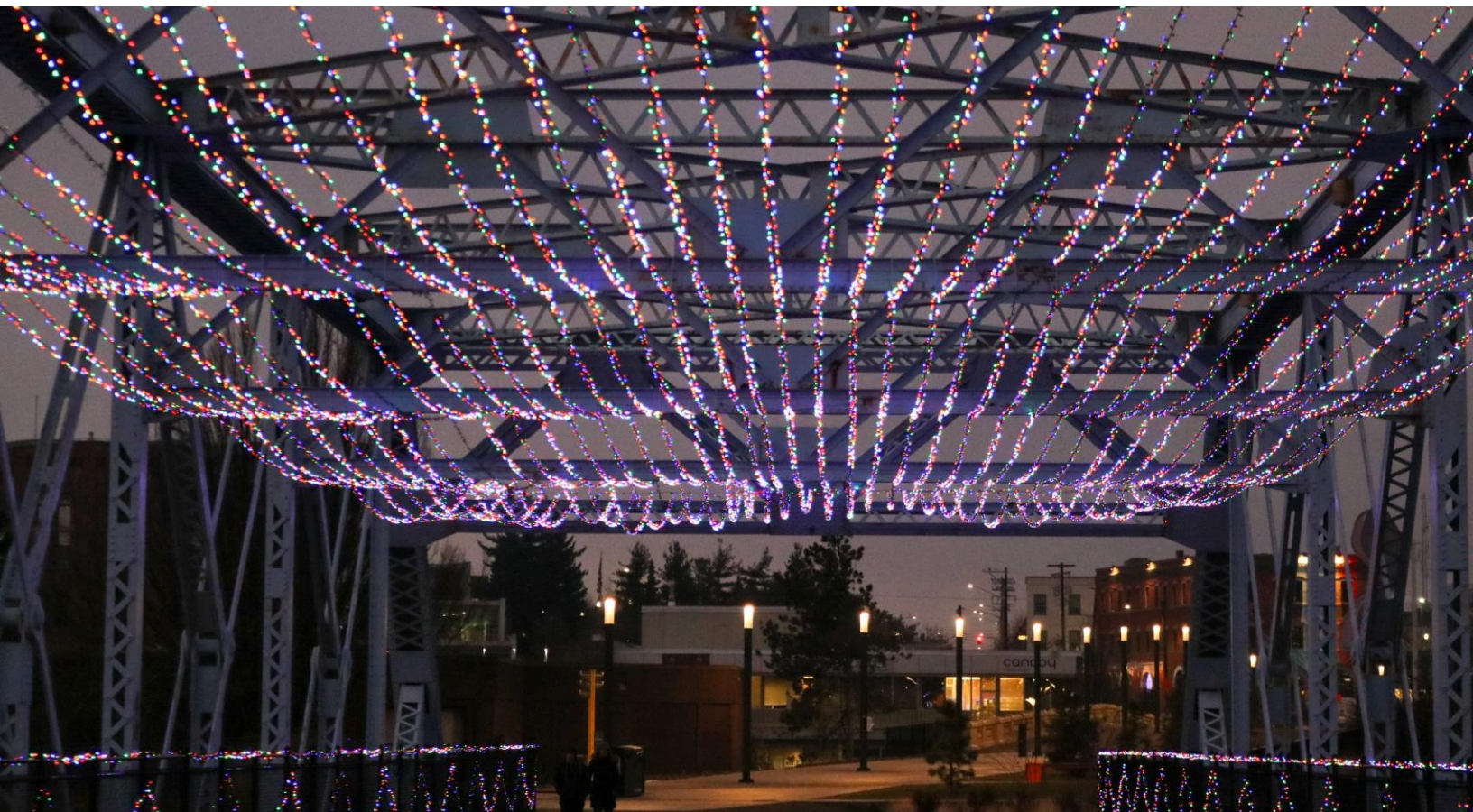
The Spokane Sustainability Action Plan presents goals, strategies, and actions to mitigate and adapt our community to the impacts of climate change. The Plan is organized around these focus areas:

- Seven Sector Strategies
- Implementation Strategies
- Equity Considerations & Strategies
- Communication Strategies

How We Work

For each focus area, this document describes the City of Spokane's sustainability goals, related strategies, and actions for achieving those strategies. The strategies and actions outlined were identified priorities by the Spokane community, the City of Spokane, and the Sustainability Action Subcommittee. Each focus area is organized in the following manner:

- **Goals** set the vision for action that must be taken within each sector.
- **Strategies** outline a more specific framework for implementation of the Sustainability Action Plan goals.
- **Priority Actions** are actions within a strategy that are prioritized from a broader set of potential actions through an evaluation of cost, effectiveness, feasibility, and co-benefits.



THE 7 SECTORS



Buildings & Energy

refers to Spokane's desire to be a leader of carbon-efficient building science, helping builders and property owners meet the Washington State Energy Code's requirement for all new buildings to be emissions neutral by 2031, as well as to meet the large and growing need to retrofit buildings to reduce emissions



Transportation & Land Use

refers to promoting livable neighborhoods for people of all backgrounds and means and seeking land use strategies for the City of Spokane that minimize the negative impact on the environment while promoting equity, affordable housing, and transportation choices



Waste Diversion and Material Conservation

refers to the work that Spokane and its residents are doing to be innovative champions of materials use, reuse and conservation, and environmental stewardship



Water Resources

refers to the protection and support of the Spokane River aquatic system and watershed to ensure a clean and sustainable water supply and healthy riparian habitat



Economic Prosperity

refers to the balance of costs and opportunities associated with adapting to and mitigating the climate crisis in Spokane. Creating resiliency in our city means investing in local business and neighborhoods to help them thrive both during times of economic growth and times of economic challenges



Natural Environment

refers to ensuring that clean air, clean water, and a healthy tree canopy is a community right and can prepare the community to mitigate the risks of climate change, ensure equitable access to open spaces, and provide habitat for beneficial species



Health & Wellbeing

refers to the work of creating a city with local leadership that prevents potential problems by proactively investing in public health and emergency services, housing, and resiliency infrastructure

CO-BENEFITS OF A SUSTAINABILITY PLAN



In addition to the benefits of reducing the impacts of climate change, many of the strategies and actions addressed in this SAP will enhance our lives in Spokane. For example, increasing energy efficiency in buildings will reduce the daily costs involved in heating or cooling buildings, both residential and commercial.

In 2016 Spokane Transit (STA) expected to save at least \$120,449 a year as a result of energy-efficient improvements made to its bus maintenance facilities.³

Higher Quality of Life for All

Spokane is known for its high quality of life.⁶ Many sustainability and climate actions recommended in this plan will help to maintain and even improve our quality of life that may otherwise be threatened if we take no action at all. From higher-paying green jobs and lower energy costs to greater opportunities to enjoy outdoor activities, the SAP will help ensure that Spokane will continue to be recognized as a place with a high quality of life. We can do better than “near perfect, near nature,” and become a community that is “near perfect, in tune with nature.”

Economic Resilience

Spokane can improve its resilience while addressing climate change by leading the development of green business practices and living wage jobs. Capitalizing on climate solutions, rather than continuing business as usual will better position us for the economic opportunities of the future. A Green Washington award winner⁵, Greater Spokane Incorporated has been recognized for its work with local businesses and community organizations in support of energy efficiency and reducing expenses through conservation. To foster economic resilience for our region’s unique small businesses, Spokane Independent Metro Business Alliance launched an online Live Local marketplace in 2020.

Improving the lives of low-income and underserved members of our community

The poorest zip code in the northwest is 99201, downtown Spokane and West Central, where the median income is \$26,685.⁴ As we work to tackle climate change and create a post-fossil fuel economy, we will create new job opportunities and better living conditions for people who were left behind in the fossil-fuel era.

Public Health

The health of members of our community is affected by the lifestyle choices available to us and the impacts of the pollution generated by burning fossil fuels. Spokane has a strong network of recreational cycling trails, but needs much work developing safe and well-maintained commuter bike routes. The Downtown and East Central neighborhoods are particularly affected by air pollution from vehicles on the freeway.

Look for these co-benefits highlighted at the beginning of each chapter!



Improved Environment



Economic Opportunity



Health & Wellbeing

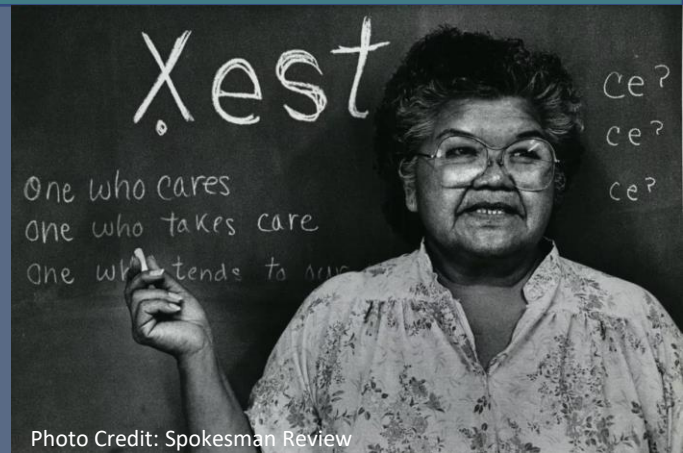


Increased Equity

THE SPOKANE PEOPLE

Pauline Flett, a Spokane Tribe elder who played an instrumental role in preserving the tribe's Salish dialect, teaches a course in 1983.

For more information on Pauline's work, watch this [video](#).⁷



Acknowledgment of Tribal Lands

We acknowledge that we are on the unceded land of the Spokane people. And that these lands were once the major trading center for the Spokanes as they shared this place and welcomed other area tribes through their relations, history, trade, and ceremony. We also want to acknowledge that the land holds the spirit of the place, through its knowledge, culture, and the original peoples Since Time Immemorial. As we take a moment to consider the impacts of colonization may we also acknowledge the strengths and resiliency of the Spokanes and their relatives. As we work together making decisions that benefit all, may we do so as one heart, one mind, and one spirit. We are grateful to be on the shared lands of the Spokane people and ask for the support of their ancestors and all relations. We ask that you recognize these injustices that forever changed the lives of the Spokane people and all their relatives. We agree to work together to stop all acts of continued injustices towards Native Americans and all our relatives. It is time for reconciliation. We must act upon the truths and take actions that will create restorative justice for all people.

xest is a Salish word meaning: One who cares, one who takes care

The first language used in our region was a dialect of Salish, a family of languages spoken by indigenous people of the Pacific Northwest. This language is rich in words and expressions that convey appreciation and care for the gifts of the natural world. A few local Salish words are adopted into this plan to transmit the reverence the Spokane Tribe has always shown to preserving our water, land, and other natural resources. The word xest means, good, in the sense of one who cares, one who takes care. The Spokane Tribe has an ancient legacy of being ones who care for this beautiful spot of earth that we call home.

We honor the memory and work of Pauline Flett, pictured above, and other elders whose tireless efforts to help preserve the Salish language and the translating of many of the traditions and stories of this ancient indigenous people has enhanced our understanding of the Spokane Tribe as good stewards of the natural world. Pauline broadened our view of this beautiful land by revealing its long history. The mission statement of the Spokane Tribe's Natural Resources Department to "Preserve, Protect Manage and Enhance the long-term sustainability of the natural resources for present and future generations" is a continuation of the Native American legacy. May each of us be xest, one who cares for our natural environment.



SUSTAINABLE DEVELOPMENT GOALS

In 2015, after decades of research, consultation, and planning, all 193 nations of the world signed onto a set of Sustainable Development Goals (SDGs) to help restore a rapidly deteriorating natural world, and an unjust and unsustainable economic system.

People everywhere are being impacted by the many dire consequences of the climate crisis: rising temperatures, poor air quality, polluted water, declining ecosystems, and many other emerging problems. It is our vision that through our action, the Spokane Community will serve as a model for other cities around the globe.

Although this Spokane Sustainability Action Plan was developed using a local framework, we saw value in identifying alignment with the global project. This Plan specifically acts on the following eight SDGs.

SUSTAINABLE DEVELOPMENT GOALS



Zero Hunger

During the COVID-19 pandemic and subsequent economic crisis, we witnessed many in our community struggle to put food on the table. Creating a regional response to hunger means coordinating efforts to make our local food system stronger and more agile to emerging challenges.



Clean Water *xsetk*[™]

xsetk[™] - means “good clean water” in Salish, the language of the Spokane Tribe who has lived here for many centuries. For the Spokane People, water is sacred. For centuries, the river and the Salmon provided for many of their needs. They are “a river people”, holding regular tribal gatherings on the banks of the river near our current day City Hall. Today, we all have a responsibility to protect this precious resource.



Industry, Innovation, & Infrastructure

Buildings and industry contribute approximately 50% of Spokane’s carbon emissions. By developing energy efficient buildings and finding innovative ways to approach economic growth and development, we can move toward lasting solutions to economic and environmental challenges, promote energy efficiency, and create new jobs.



Solar panels on the Catalyst Building Photo
Credit: Kara Odegard

The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace and justice.

SUSTAINABLE DEVELOPMENT GOALS



Sustainable Cities & Communities

Our overall goal is an equitable, inclusive, safe, livable, vibrant, fun and prosperous city. This is a challenging task. We need to talk to citizens and look to other cities around the world for the information and ideas of how to accomplish it. Other cities will in turn observe and weigh our progress in Spokane. This is how our example can become a factor in rescuing the world. If we can do it, the world can do it.



Responsible Consumption & Production

By changing the way we produce and consume goods and resources, we can divert materials from incineration and maximize their use to reduce impacts to our environment. Responsible consumption and production means reduce, reuse, and recycle materials in that order.



Climate Action

Something as simple as planting trees, which has been a special project of Spokane for the last century, can help remove pollution in Spokane and around the world. This is a ready example of how people create solutions in their own communities that benefit the entire world. Many other projects, such as increasing the walking and biking paths, outlined in this Plan align with this Climate Action goal.



Life Below Water *nx^wyx^wyetk^w*

We enjoy beautiful fresh water sources such as lakes, streams, rivers, wetlands, and ponds in Spokane. Each of these *nx^wyx^wyetk^w* (life in the water/life from the water - water lifeways) must be protected if they are to survive for future generations. Spokane's well-established system of monitoring waterways and limiting what goes in them is an example of good stewardship that can protect our fish and serve as an example to many places in the world.



Life On Land

How land is used is a key to a clean environment. Spokane's own Riverfront Park is the perfect showplace of this idea. Replacing carbon-puffing trains with spirit-enhancing trees is the ideal of a "green economy" that can promote business while it enhances the environment. The City's Urban Forestry program improves life in the city while it contributes to a clean environment for insects, birds, animals, and humans alike.

PATH FORWARD FOR SPOKANE













The City of Spokane is committed to enhancing a 50-year legacy of action and leadership, ensuring a sustainable, equitable and secure future for all citizens. We can accomplish this by reducing greenhouse gas emission, promoting high standards for water, air and natural resources, and by following and creating best practices as determined locally, nationally and globally to help promote a sustainable ecosystem. We are intent on ensuring a just and resilient economy and a healthy community full of happy, engaged citizens.


























SUMMARY OF SECTOR STRATEGIES

Plan Summary


















The following pages summarize the strategies from each of our seven sectors. This is a quick-glance look at the more detailed chapter plans that follow. Each strategy identified in this plan was evaluated against four primary factors: GHG reductions, social benefits, upfront costs, and long-term economic benefits. The icons accompanying each strategy help to illustrate the initial cost benefit analysis that we conducted. More analysis will be necessary during the implementation stage and over time.










Legend

	GHG Reductions	Social Benefits	Investment Cost	Economic Benefit
Moderate				
Significant				
High				

 Buildings & Energy		GHG Impact	Social Benefit	Investment Cost	Economic Benefit
BE 1	Ensure new construction is as efficient as possible and fully reliant on renewable fuels				
BE 2	Upgrade existing buildings for high efficiency and renewable energy sources; increase energy efficiency at publicly-funded facilities				
BE 3	Invest in city-scale and distributed energy generation and storage				
BE 4	Harness energy from waste resources				
BE 5	Neutralize carbon emissions from fossil gas and other fossil fuels used in buildings				
BE 6	Partner with regional building, energy, & efficiency organizations for public education & outreach				
































SUMMARY OF SECTOR STRATEGIES

 Transportation & Land Use		GHG Impact	Social Benefit	Investment Cost	Economic Benefit
TL 1	Advance land use planning to minimize vehicle miles traveled (VMT) and increase community resiliency			\$	\$ \$ \$
TL 2	Encourage land use that promotes varied housing options			\$	\$ \$ \$
TL 3	Increase transit ridership			\$ \$	\$ \$
TL 4	Increase adoption of walking, cycling, and micromobility			\$	\$ \$
TL 5	Improve transportation safety			\$	\$ \$
TL 6	Support existing & new programs to reduce VMT			\$	\$ \$
TL 7	Increase adoption rate of Zero Emission Vehicles (ZEVs) including electric bicycles			\$ \$	\$ \$ \$
TL 8	Update comprehensive plan to incorporate climate action and updated sustainability goals			\$	\$ \$

 Waste Diversion & Material Conservation		GHG Impact	Social Benefit	Investment Cost	Economic Benefit
WD 1	Maximize composting of inedible food, yard waste, and other organic waste			\$	\$ \$
WD 2	Minimize food waste generated by residents and businesses			\$	\$ \$
WD 3	Promote, support, and incentivize a circular economy			\$ \$ \$	\$ \$ \$
WD 4	Support state-wide and regional waste management solutions			\$ \$	\$ \$ \$
























































SUMMARY OF SECTOR STRATEGIES















 Water Resources		GHG Impact	Social Benefit	Investment Cost	Economic Benefit
WR 1	Protect water quality, fish, wildlife, ecosystem function, and no-impact recreational opportunities in the Spokane River through responsible, long-term watershed planning and management		  	\$ \$	\$ \$ \$
WR 2	Protect and build climate resilience in streams, shorelines, aquifer, wetlands, and floodplains through responsible watershed planning		  	\$ \$	\$ \$ \$
WR 3	Work with regional partners to align Spokane Valley Rathdrum Prairie (SVRP) Aquifer management in the face of projected population growth and future climate		  	\$	\$ \$ \$
WR 4	Create clear process and policies for assessing and approving land use and development that will impact future aquifer pumping volumes		  	\$	\$ \$ \$
WR 5	Improve stormwater and wastewater management		  	\$ \$ \$	\$ \$ \$
WR 6	Support development of opportunities to engage citizens in City water management		 	\$ \$	\$ \$
WR 7	Promote and fund City programs that align with the Water Conservation Master Plan		  	\$	\$ \$ \$
WR 8	Partner with regional groups to provide City input for Spokane River Watershed & SVRP Aquifer management plans and projects		 	\$	\$ \$
WR 9	Identify opportunities to acquire critical areas, natural areas, and connecting riparian corridors for protection and conservation		  	\$ \$	\$ \$ \$



SUMMARY OF SECTOR STRATEGIES

 Economic Prosperity	GHG Impact	Social Benefit	Investment Cost	Economic Benefit
EP 1 Engage with regional and neighborhood business associations to create coordinated economic resiliency		  	\$ \$	\$ \$ \$
EP 2 Expand access to sustainable business practices & resources	 	  	\$ \$	\$ \$ \$
EP 3 Adopt and implement regional policies and initiatives that support workers		  	\$ \$	\$ \$ \$
EP 4 Support just and sustainable State and Federal economic development policies	 	  	\$	\$ \$ \$

 Natural Environment	GHG Impact	Social Benefit	Investment Cost	Economic Benefit
NE 1 Strengthen and support regional conservation		  	\$	\$ \$
NE 2 Prevent negative impacts to natural resources and build climate resilience		  	\$	\$ \$
NE 3 Increase carbon sequestration by growing urban tree canopy	 	  	\$ \$ \$	\$ \$ \$
NE 4 Establish diverse, 'future climate'-adapted landscaping within the built environment		  	\$	\$ \$
NE 5 Support development of volunteer opportunities to engage citizens in City projects		 	\$	\$ \$
NE 6 Promote City programs that align with sustainability goals		 	\$ \$	\$ \$ \$
NE 7 Establish a City funding source for education and outreach programs that promote natural resources stewardship		  	\$ \$	\$ \$ \$
NE 8 Work with regional partners to align natural resource management		 	\$	\$ \$ \$
NE 9 Establish funding for management of City lands		 	\$ \$	\$ \$ \$

 Health & Wellbeing	GHG Impact	Social Benefit	Investment Cost	Economic Benefit
HW 1 Increase household food security regionwide		  	\$ \$	\$ \$
HW 2 Increase access to affordable housing and healthcare		  	\$ \$	\$ \$ \$
HW 3 Include climate impacts in disaster and emergency management response		  	\$ \$	\$ \$ \$
HW 4 Increase community awareness of climate change risks and impacts		  	\$	\$ \$

Implementation & Monitoring

While some of the actions within this plan are well underway, over the coming months, the City of Spokane will engage with community members, businesses, institutions, and other stakeholders through the Sustainability Action Subcommittee (SAS) to prepare for any prerequisite or additional actions needed to begin plan implementation.

These prerequisite actions include:

- Creating detailed implementation plans for each sector outlined in the Sustainability Action Plan. These will be known as Sector Implementation Plans
- Identifying and establishing regional partnerships around the goals and strategies
- Creating citizen advisory groups for programs that require considerable community engagement
- Making necessary changes to local policies or existing programs, including staffing and budget
- Using an equity framework, developed in partnership with City staff and Community Based Organizations, to identify priority actions

Establishing a monitoring process enables the City to track the impacts of the actions included in the plan and compare estimated impacts to what is achieved in terms of energy savings, renewable energy production, GHG emissions reduction, conservation, and community resiliency. Assessing the implementation status of the actions will allow determination of whether the action is performing well and to identify corrective measures. This process is also an opportunity to understand barriers to implementation and identify best practices or new opportunities in moving forward.



EQUITABLE IMPLEMENTATION



Martin Luther King Jr. Day at the East Central Community Center, 2018 Photo Credit: City of Spokane

Equity vs. Equality

Equity does not mean everyone gets an equal share, but that benefits are broadly shared. Equity focuses on outcomes, ensuring that the benefits are distributed in a way that addresses existing barriers, disparities, or disparate needs. It is critical to consider Spokane communities facing structural inequities. This includes communities facing barriers based on race, ethnicity, income, gender or sexuality, language, and physical accessibility, as well as other marginalized groups.

Health & Equity

Social inequities across our community play a significant role in the health outcomes of our citizens. Because of this, the effects of climate change are expected to more significantly impact our most vulnerable residents. Also referred to as social determinants of health, these disparities are influenced by education, income, race, access to healthcare, and even by the neighborhoods in which we live. For more information on health equity and climate change, visit the World Health Organization's website⁷ or the Washington State Department of Health's website.⁸

Disproportionally Exposed vs. Disproportionally Susceptible

The indicators of harmful heat and air quality associated with climate change pose health risks to Spokane County residents at large, however these risks are unlikely to be distributed uniformly across all demographic groups. It is thus necessary to identify populations who may be either **disproportionately exposed** to these indicators or **disproportionately susceptible** to adverse health consequences of exposure. Groups commonly vulnerable to higher exposure include individuals who are low income, homeless or work outdoors, as well as school-age children and communities of color. Groups who may be disproportionately susceptible to the adverse health consequences of exposure include individuals who are elderly or disabled, individuals with pre-existing cardiovascular or respiratory disease risk factors, and individuals without access to health insurance. An evaluation of vulnerable populations in Spokane is necessary to develop mitigation and resilience strategies most effectively and equitably.

Spokane has historically excluded the working class, Black, Indigenous, people of color, LGBTQ, and under-resourced communities from decision-making processes. Additionally, the benefits or burdens of policies, programs, and investments have not always been fair or shared equitably across all people. Equity can be accomplished through understanding historical discrimination and addressing the unjust systems.

Not everyone will experience the impacts of climate change the same way. Inequalities that already exist in Spokane today, like housing and healthcare, will be heightened by climate impacts.

EQUITY CHECKLIST

Operationalizing Equity

To help ensure equitable outcomes in our planning, the Sustainability Action Subcommittee uses this equity checklist. Originally developed by the City of Flagstaff, this framework, which draws on the City of Portland's Climate Action Plan, provides a foundation for Spokane's equity process. As the Sustainability Action Subcommittee developed the strategies and actions in this plan, they used the following checklist to ensure benefits could be shared equitably across our community without creating unintended negative consequences to any geographic area or group of people. An additional equity analysis will be conducted prior to implementation in order to ensure the City is prioritizing action to communities most in need.

Impact Analysis

- ☐ Disproportionate outcomes: Does the proposed action generate direct or indirect burdens (including costs) to historically underserved communities? If yes, what opportunities exist to mitigate these impacts?
- ☐ Shared benefit: Are the benefits dispersed not only equally, but equitably? Does the proposed action reduce disparities as indicated on the Washington Environmental Health Disparities Map?⁹
- ☐ Accessibility: Are the benefits of the proposed action broadly accessible to all residents and businesses throughout Spokane, with consideration of small businesses and those owned by marginalized groups?
- ☐ Capacity: Does the proposed action help build community capacity through funding and expanded knowledge base, or other resources?
- ☐ Accountability: Does the proposed action have appropriate accountability mechanisms to ensure that the communities mentioned above, as well as any other vulnerable communities, will:
 1. Not be disproportionately harmed
 2. Share in the benefits equitably

Empowering Community

- ☐ Relationship building: Does the proposed action help foster the building of effective, long-term relationships and trust between diverse communities and local governments?
- ☐ Engagement: Does the proposed action engage and empower the above communities in a meaningful, authentic, and culturally appropriate manner? Are community stakeholders involved and engaged in implementation?
- ☐ Alignment and partnership: Does the proposed action align with and support existing priorities of the communities listed above, creating an opportunity to leverage resources and build collaborative partnerships?
- ☐ Economic opportunity and staff diversity: Does the proposed action support the above groups through workforce development, contracting opportunities, and increased diversity of City staff and volunteers?



If we don't figure out a way to create equity, real equity, of opportunity and access, to good schools, housing, health care, and decent paying jobs, we're not going to survive as a productive and healthy society.

--Tim Wise

2018 "Everybody Counts" survey,
Photo Credit: City of Spokane

Environmental justice is the movement to ensure that no community suffers disproportionate environmental burdens or goes without enjoying fair environmental benefits.

-- Van Jones

Environmental Justice Program

Members of the Sustainability Action Subcommittee Equity Workgroup, City staff, and Community Based Organizations have outlined a plan for an Environmental Justice Project in Spokane. Initial funding for this project is provided by a National League of Cities, Resilient Communities grant award. The goal of our project is to make social and racial justice a central priority in our city's environmental work. We aim to establish an Environmental Justice advisory group and to partner with communities disproportionately impacted by climate change to inform the implementation of our Sustainability Action Plan. Recommendations recently published by the Washington State Environmental Justice Task Force¹⁰ will provide a framework to guide Spokane's work.



Summer Art Program at the Corbin Art Center
Photo Credit: Spokane Parks & Recreation

Overarching Goal:

Increase resiliency in underserved and highly impacted communities in Spokane by reducing environmental health disparities exacerbated by climate change.

Environmental Justice Strategy: Identify, engage with, and prioritize support for at-risk populations (Environmental Justice Program)	
Priority Actions	
EJ 1.1	Establish an Environmental Justice (EJ) advisory group by leveraging partnerships with Community Based Organizations supporting traditionally underserved communities
EJ 1.2	Identify the most vulnerable communities that are disproportionately at risk of climate impacts
EJ 1.3	Identify and prioritize the most urgent issues impacting the target communities
EJ 1.4	Create an EJ work plan for meaningful and continued engagement around the issues identified above
EJ 1.5	Implement EJ work plan
EJ 1.6	Adopt equity framework when creating detailed implementation plans to support this Plan

JUST TRANSITION FOR WORKERS

“Just Transition” is a principle, a process and a practice. The principle of just transition is that a healthy economy and a clean environment can and should co-exist. The process for achieving this vision should be a fair one that should not cost workers or community residents their health, environment, jobs, or economic assets. Any losses should be fairly compensated.

- Just Transition Alliance



Photo Credit: J. Craig Sweat Photography

Clean Energy Workforce

Spokane will achieve our target of net neutral carbon emissions in thirty years by investing in energy efficiency, clean energy, infrastructure improvements, materials conservation, and nature-based solutions. These ambitious initiatives will require a skilled workforce and innovative leadership ready to position Spokane businesses to take advantage of the economic opportunities this transition brings to our region. Even though these opportunities have the potential to boost our local economy, some investments and planning will need to be made to ensure that no one gets left behind. Transforming and mobilizing Spokane’s workforce will require some investments and preparation in the areas of workforce development, labor protections, and place-based solutions developed by those industries and people most impacted.

In order to ensure our region is prepared to make this transition, the following actions have been identified as important next steps.

Transition for Workers Strategy: Identify regional workers and industries most vulnerable under a clean-energy economy, and develop programs to support them through the transition	
Priority Actions	
TW 1.1	Establish a workforce development technical advisory group for the purpose of identifying opportunities to preserve existing skilled workforce while meeting emerging needs in clean energy, circular economy, and conservation sectors
TW 1.2	Expand local and national apprenticeship programs to meet growing demands for a skilled workforce
TW 1.3	Work with Avista to support workers currently employed in the natural gas sector
TW 1.4	Establish long-term platform for meaningful and continued engagement of stakeholders around the issues identified above
TW 1.5	Ensure that any equity framework for decision-making includes an analysis of workers in potentially vulnerable sectors

IMPLEMENTATION STRATEGIES

To accomplish the goals outlined in this plan, it will require ongoing effort by City leadership, City staff and community members. City Council will be responsible for overseeing the implementation and progress of this plan, and an annual report on implementation progress will be completed by the SAS in conjunction with City staff and community partners.

The following strategies outline a framework for implementation of the Sustainability Action Plan goals, strategies, and actions.



Strategy 1. City of Spokane formally commits to climate action

Priority Actions

IS 1.1	Continue to meet the requirements of the Global Covenant of Mayors
IS 1.2	Formally adopt new GHG goals into SMC to match the goals outlined in this plan (2021)
IS 1.3	Continue to partner with ICLEI year over year to conduct GHG inventories and measure progress toward our goals
IS 1.4	Develop a mitigation and adaptation matrix to help with internal City decision making

Strategy 2. Develop foundation for successful Plan implementation

Priority Actions

IS 2.1	The SAS shall lead the effort to create detailed Implementation Plans for each of the seven chapters included in this Plan by collaborating with other City Departments and community stakeholders
IS 2.2	The Sustainability Action Subcommittee (SAS) will continue to provide guidance and support for the plan
IS 2.3	Council shall develop a review and update schedule for the Plan including requirements for an annual report. The annual report should include an analysis of all targets, strategies, and actions ensuring they remain relevant
IS 2.4	City Council will review progress of the plan on an annual basis
IS 2.5	The City, in partnership with the SAS and community stakeholders, will host ongoing community conversations on projected climate impacts specific to Spokane
IS 2.6	Update City's Comprehensive Plan to include environment and climate related priorities, especially as they relate to this plan
IS 2.7	Review Spokane Municipal Code for alignment and make necessary updates to accommodate for Plan goals and strategies

IMPLEMENTATION STRATEGIES

Strategy 3. Support Sustainability & Climate Action within City Departments

Priority Actions	
IS 3.1	During the Strategic Planning process, the City shall incorporate commitment to sustainability and climate action
IS 3.2	Each City Department shall identify strategies and actions where they will provide support for the plan
IS 3.3	Each Division shall identify efforts that support their department's committed strategies and actions
IS 3.4	The Mayor's proposed budget, presented during the annual budget review process, will incorporate a report on energy efficiency, water conservation, and resiliency action projects that are funded in existing work plans or will be incorporated into work plans for the upcoming fiscal year
IS 3.5	The City shall fund and assess capital and/or programmatic investments that are recommended to ensure the city's ability to mitigate risks associated with climate change

Strategy 4. Elevate sustainability & climate action in City Council priorities

Priority Actions	
IS 4.1	Identify areas for Council action in support of the Plan
IS 4.2	City Council shall provide annual budget funding in support of the Plan each October
IS 4.3	Identify state and federal legislative priorities that support the goals of the Plan and enable implementation of Plan strategies and actions
IS 4.4	Prior to approving the annual budget, strategic plans, or department plans, Council will ensure that the budget or plan aligns with our commitment to the SSAP

Strategy 5. Direct Sustainability Action Subcommittee (SAS) to aid in implementation of this Plan

Priority Actions	
IS 5.1	Identify and foster community partnerships in support of the plan
IS 5.2	Create a process to identify and track external funding opportunities
IS 5.3	Each SAS workgroup shall continue to ensure the strategies and actions in their sector(s) remain relevant and update sector goals, strategies, and actions on a regular basis
IS 5.4	Continue to provide ongoing policy & budgetary recommendations toward accomplish plan goals

Strategy 6. Ensure adequate staff capacity to implement Plan

Priority Actions	
IS 6.1	All City staff shall be invited to participate in accomplishing the goals of the SSAP
IS 6.2	Department and Division managers are responsible for communicating Department and Division goals and commitment to the plan to their staff members
IS 6.3	The Administration and Council shall partner on aligning City programs to amplify both the program itself and progress toward the Plan's goals
IS 6.4	City Council will ensure that City Departments have identified funding for their committed strategies and actions toward Plan goals prior to approving the annual budget

IMPLEMENTATION STRATEGIES

Strategy 7. Develop a City-wide Climate Plan integration process	
Priority Actions	
IS 7.1	Conduct a community-wide GHG inventory every two years using ICLEI's Clear Path protocol. The inventory shall include an assessment of local government operations as well.
IS 7.2	Partner with the City's Emergency Management Director, Council's Manager of Sustainability Initiatives, Climate Impact Research Consortium, the SAS, and other local stakeholders to complete the Climate Vulnerability Assessment (2021)
IS 7.3	Engage with regional efforts related to resiliency in order to align Plan objectives with regional priorities and collaborate where alignment occurs
IS 7.4	Integrate projected climate impacts into data models for risk assessment
IS 7.5	Develop a disaster preparedness plan for both natural and man-made disasters

Strategy 8. Integrate Equity Considerations into Plan Implementation	
Priority Actions	
IS 8.1	Work with Manager of Equity & Inclusion to ensure the City uses an Equity Review process during implementation
IS 8.2	Work with Manager of Equity & Inclusion for on-going improvement of the Equity Review Process
IS 8.3	Partner with community organizations, Neighborhood Councils, and others to ensure engagement with BIPOC and low-income communities not only with implementation of the plan, but also as part of the ongoing improvements to the plan
IS 8.4	Engage community members from all income levels, races and ethnicities, political persuasions, and neighborhoods in Plan outreach efforts
IS 8.5	Incorporate equity indicators into monitoring and evaluation processes

Strategy 9. Promote sustainable use of resources among Spokane residents	
Priority Actions	
IS 9.1	The SAS Equity and Communication Workgroups shall continue to build partnerships in the community, identify community needs, determine barriers to participation, recommend ways to make climate action events more accessible to residents, and ensure that Plan implementation follows established equity recommendations and processes
IS 9.2	Partner with Urbanova, The ZoNE Project, APIC, NAACP, and other organizations to understand environmental justice issues impacting our community
IS 9.3	Roll out customized Community Climate Solutions website (2021)
IS 9.4	Support programs and opportunities for youth to be actively involved in decision-making and climate action
IS 9.5	Maintain and promote strategies and actions for community participation as part of on-going plan revisions and implementation

IMPLEMENTATION STRATEGIES

Strategy 10. Support community leadership on climate action

Priority Actions	
IS 10.1	Create comprehensive list of community partners for climate action using stakeholder mapping methodology
IS 10.2	Work with SAS to ensure continual engagement and action in various areas of the Plan: education & outreach, natural resources, waste & recycling, environmental justice, etc
IS 10.3	Partner with climate and conservation focused nonprofit organizations to align on mutual priority areas

Strategy 11. Report regularly to the community on greenhouse gas emissions and climate action

Priority Actions	
IS 11.1	Continue to update and publish greenhouse gas emissions inventories for both the City of Spokane municipal organization and the Spokane community
IS 11.2	Create an online dashboard to illustrate progress on the Plan's actions. This dashboard will be updated annually, with indicators showing which actions have been completed, which are in progress, and which have not been started





BUILDINGS & ENERGY

Co-Benefits



Offers significant opportunities for GHG reduction and improves air and water quality.



Provides substantial energy savings to businesses and building owners. Increases property values and makes Spokane a more economically desirable place to live.



Improves health outcomes by reducing air and water borne particulates, especially for vulnerable populations.



Provides energy efficiency programs that allow people of all income levels to realize savings on utilities.

SDG Alignment





Buildings & Energy

It is our vision to make Spokane a center of carbon-neutral building science and energy production achieving key benchmarks ahead of state mandates. We will engage the passion of our community along with commercial expertise to drive forward a thriving local green economy.



Sector Level GHG Impacts: Buildings & Energy

Emission Source	2016 Baseline		2030 Reduction Target 45% & 948,958 MT		2040 Reduction Target 70% & 1,476,155 MT		2050 Reduction Target 95% & 2,003,356 MT	
	Metric Tons CO ₂ e	Percent of Total	Metric Tons CO ₂ e	Percent Reduction	Metric Tons CO ₂ e	Percent Reduction	Metric Tons CO ₂ e	Percent Reduction
Electricity	415,570	20%	83,114	80%	41,557	90%	0	100%
Gas	587,375	28%	411,163	30%	205,581	65%	24,369	95%

Comprehensive Plan Alignment

Chapter 5: Capital Facilities and Utilities

- CFU 1: Adequate Public Facilities and Services
- CFU 3: Coordination
- CFU 5: Environmental Concerns
- CFU 6.2: Economic Development

Chapter 6: Housing

- H 1: Housing Choice & Diversity
- H 2: Housing Quality

Chapter 7: Economic Development

- ED 1: Cooperative Partnerships
- ED 2: Land Availability for Economic Development
- ED 6: Infrastructure
- ED 8: Quality of Life and the Environment

GOAL 1. Encourage efficient, renewable energy buildings

Strategy 1. Ensure new construction is as efficient as possible and fully reliant on renewable fuels

Priority Actions	
BE 1.1	Work with local partners to implement state energy code by creating a Spokane specific plan for an aggressive building electrification program to decrease reliance on combustion fuels. The City should take a leadership role in providing direction and facilitating building decarbonization through the State energy code
BE 1.2	Offer education and incentives for installing electric air and water heating systems, including heat pumps
BE 1.3	Require installed electric hookup options for all appliances in new construction
BE 1.4	Eliminate gas hookups from all new commercial and multifamily residential buildings by 2023, and from all new construction by 2028
BE 1.5	Encourage and incentivize natural carbon materials, such as cross-laminated timber, in construction
BE 1.6	Encourage the re-use of existing buildings rather than demolishing and starting new

Strategy 2. Upgrade existing buildings for high efficiency and renewable energy sources; increase energy efficiency at publicly-funded facilities

Priority Actions	
BE 2.1	Evaluate all municipal buildings to determine a path to net neutral emissions by 2023 through retrofits or renewable energy installation, including off-site generation, to benefit under CETA programs
BE 2.2	Conduct an energy audit at Riverside Park Water Reclamation Facility (RPWRF) and Upriver Dam and install all feasible efficiency upgrades
BE 2.3	Develop and adopt a rental licensing policy program requiring minimum efficiency standards for all housing rentals including requirements to make energy efficiency data available to renters
BE 2.4	Participate in Avista's energy efficiency and conservation programs for City owned facilities
BE 2.5	Continue to provide flexible work schedules, work-from-home, and shared workspaces for City employees to demonstrate efficient use of office resources
BE 2.6	Subsidize home energy efficiency retrofits for affordable housing units

GOAL 2. Promote local production and sourcing of renewable energy

Strategy 3. Invest in city-scale and distributed energy generation and storage

Priority Actions	
BE 3.1	Introduce local incentives for solar and continue to support solar incentives at the State level
BE 3.2	Require all new commercial buildings to be solar-ready
BE 3.3	Require all new residential & commercial buildings to have onsite renewable energy generation by 2025. Some buildings may be exempt due to practicality based on location and individual situation.
BE 3.4	Include energy storage solutions as part of City of Spokane's Energy Initiatives
BE 3.5	Evaluate energy storage at Waste to Energy (WTE)
BE 3.6	Partner with local energy companies to create and implement a citywide plan for large-scale, public solar installations
BE 3.7	Partner with Avista to identify renewable energy installations most beneficial to the grid

Strategy 4. Harness energy from waste resources

Priority Actions	
BE 4.1	Evaluate forestry slash to energy
BE 4.2	Evaluate diversion of biological waste materials to higher-value end uses, such as biofuel, at Waste to Energy (WTE)
BE 4.3	Plan for alternatives to biogas flaring at Riverside Park Water Reclamation Facility (RPWRF)
BE 4.4	Evaluate anaerobic digestion of green waste
BE 4.5	Evaluate electricity generation from waste straw at WTE

Strategy 5. Neutralize carbon emissions from fossil gas and other fossil fuels used in buildings & transportation

Priority Actions	
BE 5.1	Partner with Avista to increase renewable natural gas (RNG) into the gas supply
BE 5.2	Source renewable natural gas for City fleet vehicles currently using compressed natural gas
BE 5.3	Explore options to expand the use of compressed natural gas in City owned vehicles where electricity is not a valid fuel option
BE 5.4	Partner with local businesses and compressed natural gas providers to explore expanding the use of renewable natural gas in private fleet vehicles currently using compressed natural gas as a fuel source

GOAL 3. Engage community in energy efficiency and renewable energy

Strategy 6. Partner with regional building, energy, & efficiency organizations for public education & outreach

Priority Actions	
BE 6.1	Offer a clearinghouse for information, advertising grant and other programs to building owners and construction contractors; job opportunities to workers; etc.
BE 6.2	Research and amplify community energy efficiency programs particularly those with a focus on low-income households
BE 6.3	Partner with Spokane Public Schools and local energy experts to establish renewable energy & energy efficiency curriculum across all major academic areas
BE 6.4	Educate community members on ways to participate in renewable energy and energy efficiency programs focusing on cost savings and health benefits
BE 6.5	Fund and implement a contractor training program led by building scientists for carbon-efficient building methods, appliances, and products
BE 6.6	Create a public outreach and scheduling hub to connect contractors with prospective customers for clean building projects



“The new Catalyst building aims to be one of the largest zero-carbon, zero-energy buildings in North America, as certified by the International Living Future Institute (ILFI). The adjacent Morris Center will be the heart of an innovative shared energy model called an Eco-District, where a centralized plant will power the two new buildings and additional buildings in the future.”

-- catalystspokane.com

The Catalyst building in Spokane, Photo credit: Kara Odegard



TRANSPORTATION & LAND USE

Co-Benefits



Offers significant opportunities for GHG reduction and improves air and water quality.



Reduces costs for residents and keeps more dollars in our local economy while creating greater energy independence.



Improves health outcomes by reducing air and water borne particulates, especially for vulnerable populations. Offers both physical and mental health benefits.



Provides more options for housing and transportation at all income levels and improves transportation safety for people of all ages and abilities can participate.

SDG Alignment





TRANSPORTATION & LAND USE

We envision a Spokane that preserves land at the edges of the city and promotes livable neighborhoods for people of all backgrounds and means. We accomplish this by creating a set of land use strategies for the City of Spokane that minimize the negative impact on the environment while promoting equity by encouraging development that:

- encourages diverse housing opportunities in all neighborhoods for all income levels
- promotes walkable neighborhoods
- preserves and expands green spaces
- supports all modes of transportation with special consideration for sustainable modes
- reduces the financial burden of maintaining the city-owned infrastructure



Sector Level GHG Impacts: Transportation & Land Use

Vehicle Type	2016 Baseline		2030 Reduction Target 45% & 948,958 MT		2040 Reduction Target 70% & 1,476,155 MT		2050 Reduction Target 95% & 2,003,356 MT	
	Metric Tons CO ₂ e	Percent of Total	Metric Tons CO ₂ e	Percent Reduction	Metric Tons CO ₂ e	Percent Reduction	Metric Tons CO ₂ e	Percent Reduction
Passenger, light duty truck, motorcycle	600,227	28%	300,114	50%	60,227	90%	0	100%
City Fleet (also included above)	10,070	.5%	5,035	50%	2,517	75%	0	100%

Comprehensive Plan Alignment

Chapter 3: Land Use

- LU 1: Citywide Land Use
- LU 3: Efficient Land Use
- LU 4: Transportation
- LU 8: Urban Growth Area
- LU 10: Joint Planning

Chapter 4: Transportation (most sections)

Chapter 6: Housing

- H 1: Housing Choice & Diversity
- H 2: Housing Quality

Chapter 7: Economic Development

- ED 1: Cooperative Partnerships
- ED 2: Land Availability for Economic Development

ED 6: Infrastructure

ED 8: Quality of Life and the Environment

Chapter 10: Social Health

SH 8: Food Access & Security

Chapter 12: Parks and Recreation

PRS 3: Bicycle and Pedestrian Circulation

TRANSPORTATION & LAND USE

GOAL 1. Support mixed use and walkable communities

Strategy 1. Advance land use planning to minimize vehicle miles traveled (VMT) and increase community resiliency

Priority Actions	
TL 1.1	Increase the supply of attainable housing in proximity to employment opportunities, activity centers and the High Performance Transit (HPT) network
TL 1.2	Review and revise parking requirements for all types of development
TL 1.3	Ensure new developments and major redevelopments adhere to existing street grid
TL 1.4	Increase parking lot tree coverage requirements (alt: solar panel)
TL 1.5	Allow bicycle parking to substitute for required auto parking
TL 1.6	Allow limited commercial use in Residential High Density (RHD) and Residential Multi Family (RMF) zones to enable mixed-use development
TL 1.7	Increase low-intensity neighborhood commercial uses in residential zones

Strategy 2. Encourage land use that promotes varied housing options

Priority Actions	
TL 2.1	Develop and implement plan to build variety of housing types in every neighborhood using the Planning Departments housing needs assessment as a guide
TL 2.2	Revise standards for Residential Single Family (RSF) and Residential Two Family (RTF) zoning to encourage affordable housing and increase density
TL 2.3	Revise development code to allow greater flexibility for mixed-use development
TL 2.4	Adopt accessory dwelling unit (ADU) reform to encourage more of this housing type
TL 2.5	Audit City development code to identify and eliminate constraints and conditions
TL 2.6	Promote increased density and upzoning in residential zones around HPT corridors
TL 2.7	Decrease minimum parcel sizes in new developments to increase density in new construction



TRANSPORTATION & LAND USE

GOAL 2. Reduce motor vehicle miles traveled (VMT) and promote active transportation modes

Strategy 3. Increase transit ridership

Priority Actions	
TL 3.1	Partner with STA on their long-term planning and sustainability goals to increase frequency, coverage, and operational hours
TL 3.2	Lobby for transit funding at the State and Federal Level
TL 3.3	Encourage Transit Oriented Design (TOD) in City planning
TL 3.4	Encourage STA to continue upgrading bus stops and include more amenities
TL 3.5	Work with regional partners to expand reduced and free fare programs

Strategy 4. Increase adoption of walking, cycling, and micromobility

Priority Actions	
TL 4.1	Plan and buildout bicycle greenway network
TL 4.2	Create and implement bicycle parking plan
TL 4.3	Plan and prioritize construction of downtown protected "micromobility" lanes
TL 4.4	Develop and implement requirements for bicycle detours as part of the RFP process for street projects
TL 4.5	Prioritize development of pedestrian-centered neighborhoods, i.e. 10-minute neighborhoods
TL 4.6	Implement protected bike lane network throughout the city
TL 4.7	Make automatic pedestrian recall the default operation at controlled intersections
TL 4.8	Prioritize bike, pedestrian, and multimodal transportation in budgeting
TL 4.9	Identify additional commercial areas where it is appropriate to limit or restrict automobiles and prioritize pedestrians, bicycles, and micromobility

Strategy 5. Improve transportation safety

Priority Actions	
TL 5.1	Install marked or signalized crosswalks at bus stops on arterial streets
TL 5.2	Identify funding and continue supporting Safe Routes to School program
TL 5.3	Adopt Vision Zero framework to reduce fatalities and severe injuries
TL 5.4	Adopt protected bike lane policy for high traffic areas

TRANSPORTATION & LAND USE

Strategy 6. Support existing & new programs to reduce VMT

Priority Actions

TL 6.1	Work with regional partners to enhance and promote the commute trip reduction program
TL 6.2	Work with employers to encourage telecommuting, video-conferencing, and alternative commuting
TL 6.3	Apply per-ride tax to ride hailing apps, put into fund for active transportation projects
TL 6.4	Work with private sector to develop a program to trade in old cars for electric bikes
TL 6.5	Educate people on how density and effective land use help meet sustainability goals

This is an aerial view of a two-way protected cycle track demonstration on Spokane Falls Boulevard in the fall of 2019. Pop-up demonstrations like this one are a low-cost tool for testing safer bicycle and pedestrian infrastructure before investing in larger street renovation projects.

Protected bike lanes make cycling safer and more attractive for people of all ages and abilities.



Photo Credit: Spencer Gardner

TRANSPORTATION & LAND USE

GOAL 3. Advance alternative and low carbon fuel in regional transportation

Strategy 7. Increase adoption rate of Zero Emission Vehicles (ZEVs) including electric bicycles

Priority Actions	
TL 7.1	Work with regional partners to implement Avista's regional Transportation Electrification (TE) Plan
TL 7.2	Plan and implement conversion of City fleet vehicles to ZEV; 50% by 2030; 100% by 2040
TL 7.3	Support regional education efforts including the launch of a regional TE Experience Center
TL 7.4	Support State & Federal Clean Fuel and ZEV legislation
TL 7.5	Encourage ride-share companies to adopt ZEV fleets
TL 7.6	Include e-bikes in subsidy and trade-in programs
TL 7.7	Encourage mode shift of freight, last mile delivery, and city fleet to bikes or e-bikes where feasible
TL 7.8	Evaluate and update City code to encourage EV charging infrastructure in new development

GOAL 4. Integrate Sustainability Action Plan goals, strategies, and actions into City planning

Strategy 8. Update comprehensive plan to incorporate climate action and updated sustainability goals

Priority Actions	
TL 8.1	Audit the Comprehensive Plan for opportunities to include sustainability into policy language
TL 8.2	Bring forward amendments to the comprehensive plan during the annual update cycle where opportunities exist to integrate sustainability into comprehensive plan goals, policies and discussions prior to the 2026 major update
TL 8.3	Ensure SAS is a stakeholder in the 2026 Comp Plan major update process
TL 8.4	Update City codes and planning documents to ensure preservation of urban farmland
TL 8.5	Reassess centers and corridors for new opportunities to encourage more sustainable land use



Left: A Spokane-style directional chevron. Designed by Emeline Gardner for the 2019 Spokane in Motion bicycle "popup" event. This prototype became a permanent stencil a year later.



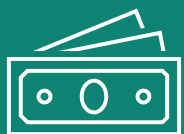


WASTE DIVERSION & MATERIAL CONSERVATION

Co-Benefits



Results in fewer emissions and improves air and water quality. Reduces the environmental impacts of resource exploitation.



Reduces cost of waste management to the City and ratepayers while making funds available for other purposes. Transition on circular economy creates jobs and economic opportunities.



Improves health outcomes, especially for those with respiratory and cardiovascular illnesses. Increases food security.



Reduces hunger and food insecurity for low-income community members.

SDG Alignment





WASTE DIVERSION & MATERIAL CONSERVATION

Spokane and its residents are innovative champions of materials use, reuse and conservation, and environmental stewardship.

Waste Diversion & Material Conservation Goals:

- Reduce waste going to waste to energy plant or landfills by 95% by 2050
- Divert waste materials toward the highest and best use
- Prioritize materials re-use and conservation to minimize climate impacts
- Consider environmental equity in waste/recycling policy
- Minimize economic costs of waste management systems for low-income residents



City employees participating in a recycling audit in 2020. These “lid lifts” help identify contamination in the recycling stream. Photo credit: Kristine Major

Sector Level GHG Impacts: Waste Diversion & Material Conservation

Vehicle Type	2016 Baseline		2030 Reduction Target 45% & 948,958 MT		2040 Reduction Target 70% & 1,476,155 MT		2050 Reduction Target 95% & 2,003,356 MT	
	Metric Tons CO ₂ e	Percent of Total	Metric Tons CO ₂ e	Percent Reduction	Metric Tons CO ₂ e	Percent Reduction	Metric Tons CO ₂ e	Percent Reduction
WTE	100,533	5%	65,346	35%	50,267	50%	5,027	95%
Biogenic*	136,713		68,357	50%	34,178	75%	6,836	95%

*Biogenic emissions in this table refer to the combustion of biological material in the municipal waste stream. It is outside the scope of our community GHG inventory however these emissions can be reduced through food rescue initiatives, composting biological material into soil amendments, or digesting into biofuels. In other words, there is a higher and better use for these materials outside of direct incineration.

Comprehensive Plan Alignment

Chapter 5: Capital Facilities and Utilities

CFU 5.5 Waste Reduction and Recycling

Chapter 7: Economic Development

ED 8.4 Environmental Protection Business Opportunities

Chapter 9: Natural Environment

NE 5.3 Packaging Reduction

NE 5.4 Profit from Waste

Chapter 10: Social Health

SH 8: Food Access & Security



WASTE DIVERSION & MATERIAL CONSERVATION

Waste Trends: National and Local

The US EPA has found that the average municipal waste output per person in the US has risen from 2.7 pounds in 1960 to 4.9 pounds in 2018 – an increase of about 81%. Of that total, about 3.03 pounds of waste per person per day was sent to landfills or incinerated. In 2018, the residents of Spokane County produced 310,677 tons of waste that was burned at the WTE incinerator or landfilled. This averages about 3.3 pounds per person per day.

It is reasonable to assume that the waste production per person for the City is about the same as for the county, and that it has reached that figure following a similar trend to the rest of the nation. There are many reasons for the increase in waste output: changing patterns of consumption; the variety, quality and durability of consumer products; increased packaging; and Americans' attitudes and habits about thrift and conservation.

Managing and disposing of municipal waste is one of the great challenges that every city faces. The cost of this is a direct burden on the citizens, which is paid as part of the utility bill. Conserving materials, reducing waste, and diverting it from incineration and landfills would save money and reduce greenhouse gas emissions.

This is a complex issue inextricably tied to long-term worldwide trends in manufacturing, packaging, and materials valuation, use and management. The City cannot simply impose a solution. The roots of the problem are global, and the branches are cultural. Solving it will entail many strategies: fostering a conservation ethic among citizens; promoting laws at every level of government that do not allow manufacturers to externalize costs; and better technical engineering. The City of Spokane will engage in efforts to change people's habits and attitudes about consumption and will promote conservation of the food, materials, and products our residents use. There will still be waste, and that will be addressed in the most efficient manner, producing the least emissions and impacts possible.

Our Waste-to-Energy (WTE) Plant is one of Washington's top emitters of greenhouse gases. In 2014, the WTE plant released more than 235,000 metric tons of carbon dioxide into the atmosphere. Incinerating waste to generate energy does release less greenhouse gases than burying it in a landfill. However, prioritizing reduced consumption, reuse, and recycling efforts to decrease the amount of municipal garbage is the most effective way to reduce carbon emissions, as well as all other harmful substances produced by combustion at the WTE plant.

Our goal is to reduce waste and divert materials towards the highest and best use while also holding producers accountable for the product and packing waste they create. By promoting smart solutions in our region, Spokane will become a leader in the circular economy where waste disposal is minimized, and economic opportunities are maximized. These efforts will create jobs, reduce pollution, and improve the way of life for all community members.



Spokane County Recycles artist, Ava King, North Central High School, Grade 7

*There is no good way to deal with trash except
not to make it in the first place.*

*--Kris Major, Waste Reduction Education Coordinator,
City of Spokane*

WASTE DIVERSION & MATERIAL CONSERVATION

GOAL 1. Invest in waste diversion programs to substantially reduce volume of Municipal Solid Waste (MSW)

Strategy 1. Maximize composting of inedible food, yard waste, and other organic waste

Priority Actions	
WD 1.1	Work with businesses to develop systems for separation and collection of inedible food waste from other waste materials for composting
WD 1.2	Promote and facilitate the use of compostable packaging and foodservice ware
WD 1.3	Develop residential food waste collection and provision of composting bins to divert food waste from the Waste to Energy (WTE) plant
WD 1.4	Use trash audits to enforce food waste separation at residential and business sources

Strategy 2. Minimize food waste generated by residents and businesses

Priority Actions	
WD 2.1	Support diversion of excess edible food from commercial & institutional kitchens and grocery outlets to community members in need through food rescue programs
WD 2.2	Educate businesses and residents on the impacts of food waste and best practices to reduce it

The New Clean Materials System

The Center for Sustainable Infrastructure is a Washington State nonprofit dedicated to helping the Pacific Northwest move toward a smarter, more sustainable materials management system. CSI provides education and advocacy that will lead us toward better environmental and economic outcomes.

Read more about their projects at sustaininfrastructure.org

Transforming the PNW Waste & Recycling System

Old Waste System

1970s Current waste management system established

OUTDATED

- Systems fail to actually prevent waste
- Recycling is down, landfilling is up
- Changes in packaging and materials make it harder to recycle
- Toxic exposures from products



Wasted resources



Costly to ratepayers



Not sustainable



Harm to human health



Air, land & water pollution



Contributes to climate change

New Clean Materials System

Now Opportunity for system transformation



JOB, HEALTH & ENVIRONMENT

- Prevent waste at all stages
- Longer life and more use from products
- Optimize recycling
- Develop clean production job clusters



Tens of thousands of jobs



Export solutions globally



Sustainable



Healthier people



Cleaner environment



Supports climate sustainability

WASTE DIVERSION & MATERIAL CONSERVATION

GOAL 2. Boost regional economic opportunity by promoting circular waste programs

Strategy 3. Promote, support, and incentivize a circular economy

Priority Actions	
WD 3.1	Incentivize the production and consumption of durable goods
WD 3.2	Support policies that prioritize easily recyclable, and compostable packaging (ex. Extended Producer Responsibility)
WD 3.3	Build on the progress of standing networks addressing waste reduction outreach to continually update residents and businesses on current waste management regulations
WD 3.4	Increase enforcement of curbside recycling contamination and fund seasonal cart-tagging programs for recycling
WD 3.5	Promote markets for recycled or reused materials, such as through increased local business purchasing of recycled products and reusing of materials
WD 3.6	Transform recycling infrastructure to maximize materials separation and recovery and minimize contamination
WD 3.7	Increase access to sustainable purchasing
WD 3.8	Support and promote sharing and exchange economy among residents
WD 3.9	Support a statewide Industrial Symbiosis program to create circularity in manufacturing

Strategy 4. Support state-wide and regional waste management solutions

Priority Actions	
WD 4.1	Build regional recycling infrastructure and markets
WD 4.2	Support policies and regulations that reduce waste, especially difficult to recycle waste
WD 4.3	Incubate industrial solutions to waste and recycling (eco-district)



Water and air, the two essential fluids on which all life depends, have become global garbage cans.

— Jacques-Yves Cousteau

WASTE DIVERSION & MATERIAL CONSERVATION

Existing Waste Diversion and Material Conservation Initiatives

There are many organizations at both the regional and state level working on reducing waste. Below are just a few of those initiatives.

Food Waste & Food Security:

Washington Department of Ecology: Use Food Well Washington Plan

Spokane County Food Security Coalition

Spokane Food Policy Council

Feed Spokane

Spokane Food Fighters

Packaging & bags:

Statewide plastic grocery bag ban

Department of Ecology Plastics Study

Proposed state extended producer responsibility bill

Recycling & Waste Diversion:

Spokane Recycling Taskforce

Zero Waste Washington



Photo Credit: Sea to Sky Removal

Left: Employees at Sea to Sky Removal, a Vancouver, BC company dedicated to reducing waste in the construction sector, created this list of “REs” to consider before throwing materials into the trash. We think it makes for good policy!

Right: A trophy designed from trash was awarded for team recognition during the 2013 Spokane River Clean Up. A creative reinvention of discarded material!



Photo Credit: Kris Major

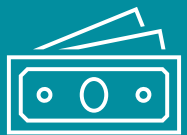


WATER RESOURCES

Co-Benefits



Improves watershed management, focusing on retaining instream flow minimums in the Spokane River and protecting fish habitat and riparian ecosystem



Protects SVRP Aquifer capacity while stabilizing utility costs through water conservation interventions. Ensures Spokane remains a premier destination for conventions and tourism.



Ensures Spokane River is healthy, clean, swimmable and fishable, and SVRP Aquifer remains a sustainable, potable water source.



Advances watershed education within all communities and protects fish resources as a cultural food source.

SDG Alignment





Our River & Aquifer

The Spokane River is a central feature of Spokane's natural environment. The lifeways of Spokane's original inhabitants revolved around the river: it was their main source of sustenance and their cultural touchstone. When the European settlers arrived, they chose the site along the Spokane River to access all the benefits that a major river provides. The Spokane River is a critical component of the City's heritage.

Spokane's natural environment has been greatly impacted by water, from historic floods to the more frequently occurring summer droughts. While our climate is defined by relatively low annual precipitation, our region abounds with lakes, wetlands, streams and our beautiful Spokane River.



The Spokane Valley-Rathdrum Prairie Aquifer flows beneath our feet throughout a large section of our area and is an Environmental Protection Agency designated 'sole source aquifer', signifying that our drinking water is almost entirely supplied by this gift of groundwater. As more people move to this region, we must project how increased water consumption will both impact the aquifer and the Spokane River, which are physically connected and feed water to one another.

To protect our aquifer and the Spokane River, the City must creatively manage wastewater and stormwater runoff that our growing urban area creates. Direct interventions are in place to increase pollutant removal from wastewater through tertiary treatment before it is discharged into the Spokane River. Our City has also made smart investments to redirect urban stormwater to holding tanks where it is 'metered' in and combined and treated with municipal wastewater. Innovative solutions are rolling out to increase on-site stormwater treatment projects like storm gardens and bioswales. Natural and managed water resources do not exist independently of one another. We all live within a watershed, and every one of our activities directly or indirectly affects the health and quality of our shared water. The interconnections of our water, both seen and unseen, are complex.

Because the aquifer is a regional treasure that does hold a carrying capacity, ensuring its recharge is critical. The City of Spokane is committed to working collaboratively with our regional partners to ensure it remains abundant and unpolluted for future generations.



WATER RESOURCES

Water Resources include natural and managed water systems that humans and other living things rely on to survive. Natural water systems encompass surface water (i.e., Spokane River and its tributaries, wetlands, lakes, and seasonal streams) and groundwater (aquifer). City-managed water resource processes include drinking water delivery, as well as wastewater/stormwater treatment and discharge.

The City of Spokane envisions a healthy water future for our area. Our region abounds with plentiful lakes, streams and the beautiful Spokane River.



Sector Level GHG Impacts: Water Resources

Emissions from Pumping	2016 Baseline		2030 Reduction Target 45% & 948,958 MT		2040 Reduction Target 70% & 1,476,155 MT		2050 Reduction Target 95% & 2,003,356 MT	
Accounted for in B&E Sector	Metric Tons CO ₂ e	Percent of Total	Metric Tons CO ₂ e	Percent Reduction	Metric Tons CO ₂ e	Percent Reduction	Metric Tons CO ₂ e	Percent Reduction
Electricity	6,846	>1%	1,369	80%	685	90%	0	100%
Gas	209	>1%	209	0%	209	0%	10	95%

Comprehensive Plan Alignment

Chapter 3: Land Use

- LU 1: Citywide Land Use
- LU 3: Efficient Land Use
- LU 8: Urban Growth Area
- LU 9: Annexation Boundaries

Chapter 5: Capital Facilities and Utilities

- CFU 1: Adequate Public Facilities and Services
- CFU 3: Coordination
- CFU 5: Environmental Concerns

Chapter 7: Economic Development

- ED 6: Infrastructure
- ED 8: Quality of Life & the Environment

Chapter 9: Natural Environment

- NE 1: Water Quality
- NE 2: Sustainable Water Quality
- NE 3: Shorelines
- NE 4: Surface Water
- NE 6: Native Species
- NE 7: Natural Land Forms
- NE 8: Agricultural Lands
- NE 15: Natural Aesthetics
- NE 16: Quality of Life
- NE 17: Natural Environment Education
- NE 18: Energy Conservation
- NE 19: Flood Hazards Management

Chapter 10: Social Health

- SH 8: Food Access & Security

Chapter 14: Shorelines

WATER RESOURCES

GOAL 1. Protect the Spokane River and natural aquatic systems through watershed-level planning and policy (wetlands, shorelines, streams, floodplains, aquifer recharge areas)

Strategy 1. Protect water quality, fish, wildlife, ecosystem function, and no-impact recreational opportunities in the Spokane River through responsible, long-term watershed planning and management

Priority Actions	
WR 1.1	Maintain minimum instream flow set in rule for the Spokane River through water conservation and drought action planning and policy
WR 1.2	Determine feasibility for banking City senior water rights and other water rights in a trust to ensure future base River flows (by 2023)
WR 1.3	Identify and address impacts to the Spokane River that are a direct result of regional pumping of the Spokane Valley Rathdrum Prairie (SVRP) Aquifer
WR 1.4	Develop an overarching management plan/process that directs how future City development and associated water withdrawal will concurrently ensure maintaining the health of the Spokane River (by 2025)
WR 1.5	Protect aquatic ecosystem biodiversity and fish conservation areas
WR 1.6	Pursue options for adding the Spokane River Gorge for natural area status
WR 1.7	Develop long-term strategies for achieving and maintaining Spokane River temperature range targets to support native fish

Strategy 2. Protect and build climate resilience in streams, shorelines, aquifer, wetlands, and floodplains through responsible watershed planning

Priority Actions	
WR 2.1	Protect the following sensitive resources through acquiring, maintaining, and restoring strategies: wetlands, vital fisheries areas, terrestrial wildlife habitat and agricultural lands
WR 2.2	Prioritize preventing ecologically-damaging actions during planning phase of development over post-development mitigation strategies, including restoration
WR 2.3	Maintain healthy riparian habitat corridors and assume lead role in restoring damaged critical riparian areas to prevent erosion and re-establish water-protecting ecological services
WR 2.4	Partner with regional agencies and organizations to develop a flood risk assessment to responsibly manage areas projected to experience increased flooding events in future climate
WR 2.5	Enforce protection of wetlands, including exploring wetland restoration/creation options, updating wetland delineation maps, and enforcing wetland buffer requirements

WATER RESOURCES

GOAL 2. Ensure clean and sustainable water supply

Strategy 3. Work with regional partners to align Spokane Valley Rathdrum Prairie (SVRP) Aquifer management in the face of projected population growth and future climate

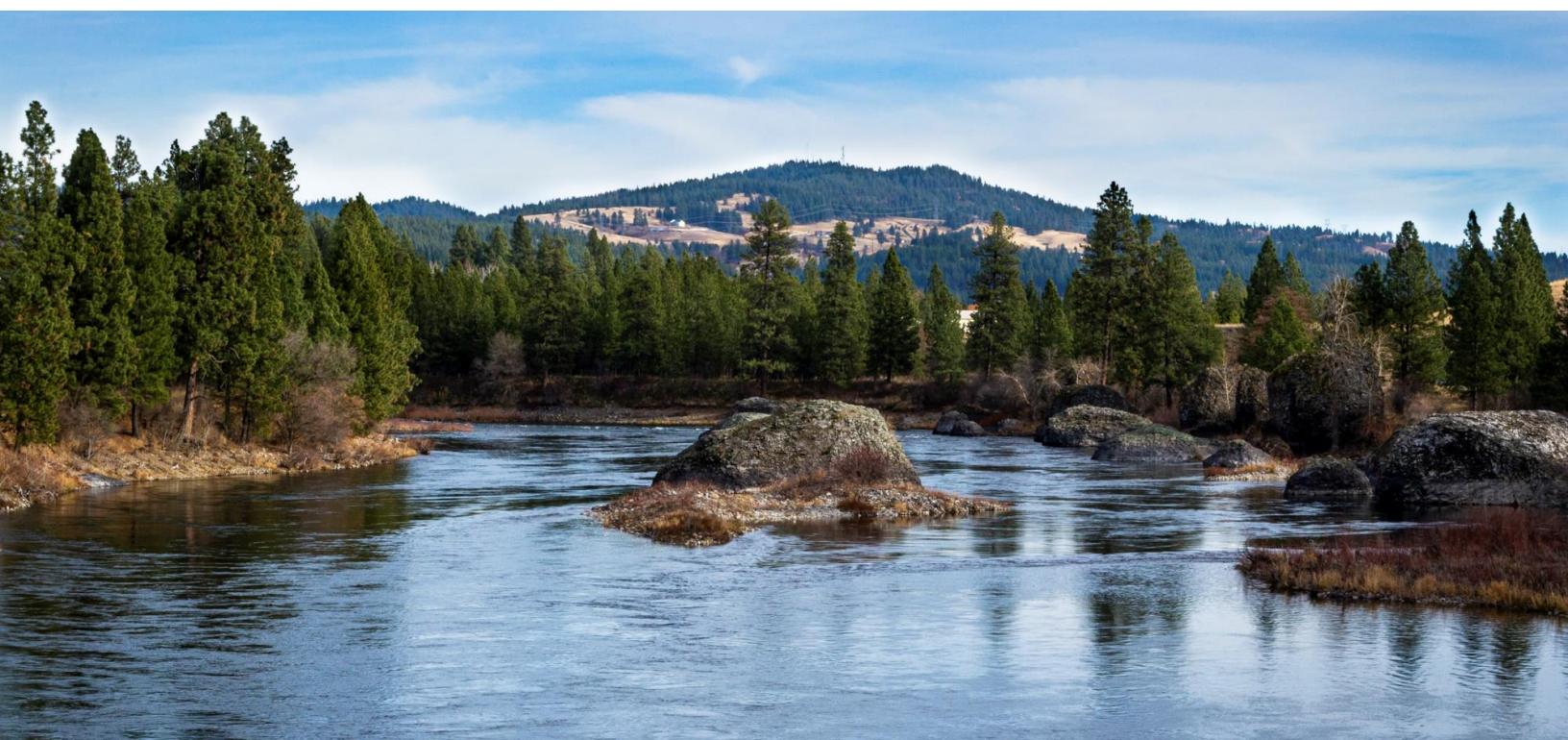
Priority Actions	
WR 3.1	Develop a comprehensive plan that assesses regional projected pumping impacts to the aquifer based upon population and economic growth projections and identify opportunities for regional collaborative solutions by 2023
WR 3.2	Adopt updated Water Conservation Master Plan in 2021; implement policy around water conservation targets and drought response (plan to be updated every 5 years)
WR 3.3	Prioritize water conservation strategies that address critical importance of lowering summer, outdoor water use through efficient irrigation and landscape standards
WR 3.4	Protect aquifer from surface pollutants and contamination, prioritizing aquifer recharge areas
WR 3.5	Conduct an analysis on how the City of Spokane can conserve water resources using indirect potable reuse and/or purple pipes

Strategy 4. Create clear process and policies for assessing and approving land use and development that will impact future aquifer pumping volumes

Priority Actions	
WR 4.1	Develop an annual water supply and water quality report card (by 2023) and establish strategies for addressing results (by 2025)
WR 4.2	Develop clear policy that prioritizes maintaining water capacity during critical summer season (i.e., Drought Response Plan)
WR 4.3	Integrate projected climate impacts into data models for drought risk assessment
WR 4.4	Examine the policy and process for new water extensions and intertie agreements to ensure those actions meet defined criteria for protecting base river flows; include conditional, legal agreements for some cases (by 2023)
WR 4.5	Update City water extension amendment process to prevent loss of critical natural areas, wetlands, and prime agricultural lands to development

WATER RESOURCES

Strategy 5. Improve stormwater and wastewater management	
Priority Actions	
WR 5.1	Develop adaptive management strategies with the overriding goal of ensuring clean, fishable, and swimmable water in the Spokane River
WR 5.2	Prioritize Low Impact Development (LID) practices in City projects, including reducing impervious surface expansion
WR 5.3	Develop policy that requires clear, achievable on-site stormwater management for new developments
WR 5.4	Continue to invest in wastewater treatment and stormwater management strategies to further reduce pollutants entering Spokane River
WR 5.5	Collaborate with regional partners to ensure permitted dischargers meet Department of Ecology clean water requirements
WR 5.6	Prioritize investing in wastewater treatment upgrades and innovations



qeʔqs čštīm łuʔ qeʔ čyaʔtín. Salish for let us care for our resources. čyaʔtín refers to the things we hold dear to us, precious resources. čštīm is the act of caring for something.

WATER RESOURCES

GOAL 3. Educate & engage community in water resources stewardship

Strategy 6. Support development of opportunities to engage citizens in City water management

Priority Actions	
WR 6.1	Support the development of a 'Water Conservation Ambassador' Program to train citizen volunteers to take City messaging around water conservation targets and drought actions to larger community
WR 6.2	Support programs that engage community in watershed understanding, river-aquifer relationship, and sustainability planning
WR 6.3	Expand City program that recognizes individuals and businesses who contribute to protecting water resources (low water users, turf conversion, innovative design)
WR 6.4	Engage K-12 and regional College & University students in watershed programming and planning through civic engagement opportunities
WR 6.5	Collaborate with regional organizations to develop and deliver community education programs (aquifer recharge area protection, floodplain risks, downstream impacts, wastewater, stormwater)

Strategy 7. Promote and fund City programs that align with the Water Conservation Master Plan

Priority Actions	
WR 7.1	Increase visibility and understanding of projects that demonstrate City leading by example through City website, City social media, and signage
WR 7.2	Create opportunities for more community input during planning phase of City programs
WR 7.3	Create physical signage and online resources that educate public about SVRP Aquifer and watersheds (City includes four watersheds: Middle Spokane, Lower Spokane, Little Spokane River, Hangman Creek)
WR 7.4	Create plaza designs with natural elements that include signs to educate the community around water resources

WATER RESOURCES

GOAL 4. Establish mutually beneficial partnerships with community organizations and agencies to leverage funding and invite community input

Strategy 8. Partner with regional groups to provide City input for Spokane River Watershed/SVRP Aquifer management plans and projects

Priority Actions

WR 8.1	Create a Spokane River Vision Plan with regional partners, including Gonzaga University
WR 8.2	Encourage continual City engagement in the Idaho Washington Aquifer Collaborative (IWAC)
WR 8.3	Encourage continual City engagement in Spokane Aquifer Joint Board
WR 8.4	Support organization and agency management plans and programs that address watershed level sustainability strategies
WR 8.5	Collaborate regionally to develop disaster response plan for shared water resources like the SVRP aquifer and Spokane River

Strategy 9. Identify opportunities to acquire critical areas, natural areas, and connecting riparian corridors for protection and conservation

Priority Actions

WR 9.1	Seek partnerships with agencies and organizations to purchase and protect critical shoreline areas that will maintain existing riparian corridors and/or connect undeveloped regional land to water resources for wildlife benefit
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“Plans to protect air and water, wilderness and wildlife, are in fact plans to protect man.”

— Stewart L. Udall, Secretary of the Interior
from 1961 to 1969

Existing Watershed Initiatives

There are many organizations at both the regional and state level working on protecting our waterways and aquifer.¹²

Watershed:

- Greater Spokane River Regional Conservation Partnership Program (RCPP)
- Spokane County Voluntary Stewardship Program
- WRIA 54 (Lower Spokane Watershed) Watershed Plan (2009)
- WRIA 55 (Little Spokane) and 57 (Middle Spokane) Watershed Plan (2005)
- WRIA 56 (Hangman) Watershed Plan (2005)
- WRIA 55 (Little Spokane Watershed Planning) Spokane County Watershed updates: [link](#) (Hirst decision on permit exempt wells)

Rivers & Streams:

- City of Spokane Shoreline Master Plan
- Family Forest Fish Passage Program
- Spokane Regional Toxics Taskforce Comprehensive Plan to Reduce PCBs in the Spokane River
- The Great Spokane River Gorge Strategic Master Plan

Spokane-Valley Rathdrum Prairie Aquifer:

- SVRP Aquifer Atlas
- Water Offset Projects--Managed Aquifer Recharge 2020 Field Report:
- Idaho Washington Aquifer Collaboration (IWAC) Efficient Irrigation and Landscape Design Handbook
- Cleaner Water Faster signage campaign (Centennial Trail) IWA
- Spokane Valley-Rathdrum Prairie bi-state aquifer study



ECONOMIC PROSPERITY

Co-Benefits



Reduces wasted resources and pollution while creating a healthy environment where humans and nature coexist.



Positions Spokane as a leader in clean energy, material conservation, and innovation, to take advantage of the opportunities available to communities who embrace sustainable development.



Builds a workforce with access to living wages and benefits to keep loved ones healthy and thriving. Increases economic vitality of the region while ensuring our residents have access to healthy food.



Creates a just distribution of opportunities and benefits gained from taking actions toward a more prosperous and resilient economy.

SDG Alignment





ECONOMIC PROSPERITY

In 2020, we ushered in a year of devastating economic impacts as a result of the COVID-19 pandemic. Although there are some success stories, in many ways, our community was left unprepared to quickly adapt to the challenges our economy faced. As leaders throughout the Spokane region determined actions needed for their economic recovery, we soon discovered that the same strategies employed to address the pandemic also apply in preparing our community for climate change. The core priority of City leadership is to ensure the prosperity of city residents, and to do this, the City needs to invest in the basic human needs of healthcare, housing, and workforce development.

The strategies and actions outlined in this chapter are dedicated to building resiliency through economic development and preparedness. These actions will better prepare Spokane residents for future challenges of any kind, include those challenges expected with arrive with a changing climate.



City Council Member, Betsy Wilkerson, at a press conference in 2020. Photo credit: City of Spokane

Current City and Regional Initiatives¹³

Creating resilient communities means that residents have equitable access to housing, employment, healthcare, and education. The following projects and initiatives are currently underway in support of these goals.

- Spokane Housing Action Plan (under development)
- Washington State Universal Health Care Work Group
- Ubanova's Neighborhood Impact and Smart & Connected Streetlight Projects
- The ZoNE's Equitable Employment Pathways Program

Comprehensive Plan Alignment

Chapter 3: Land Use

LU 1: Citywide Land Use

Chapter 4 Transportation

TR 1: Transportation Network for All Users

TR 9: Promote Economic Opportunity

Chapter 6: Housing

H 1: Housing Choice & Diversity

H 2: Housing Quality

Chapter 7: Economic Development (most sections)



ECONOMIC PROSPERITY

GOAL 1. Invest and promote a just, regenerative, and resilient local economy

Strategy 1. Engage with regional and neighborhood business associations to create coordinated economic resiliency

Priority Actions	
EP 1.1	Re-establish City department dedicated to centralizing and addressing economic development planning that amplifies the Public Development Authority and Neighborhood Business District frameworks
EP 1.2	Work with regional business organizations to fully understand current challenges for local, small business and develop a plan to address those challenges
EP 1.3	Partner with regional and neighborhood business associations to develop resiliency plans for specific sectors of our economy, including retail, hospitality, nonprofit, and food processing & supply
EP 1.4	Continue to develop and invest in the Spokane Independent Metro Business Alliance's Live Local campaign designed to educate local consumers on how to support local businesses
EP 1.5	Evaluate and update scoring criteria that the City uses to determine infrastructure and capital investments to ensure equitable investments, especially in historically underserved and underinvested neighborhoods or districts
EP 1.6	Work with regional organizations to develop Best Practice Guidelines to help small businesses be more agile and adaptable
EP 1.7	Identify and recognize creative local strategies that have proven beneficial during challenges (co-op model, shared services, online marketplace)
EP 1.8	Work with regional partners to conduct an analysis on supply chain dependability and develop plan to prioritize regional supply and infrastructure
EP 1.9	Partner with local Universities, Colleges, and private organizations to support research and development opportunities for Spokane's small and medium sized business community
EP 1.10	Develop a centralized marketing program for all City-sponsored business districts. This program should build on the Live Local marketplace developed in response to the 2020 pandemic and should be an ongoing resource for local business, rather than an ad hoc program during crises

Strategy 2. Expand access to sustainable business practices & resources

Priority Actions	
EP 2.1	Provide resources to small businesses helping them save money through energy efficiency and resource conservation strategies
EP 2.2	Create public, private partnerships to pilot programs for waste diversion including reducing food waste, expanding commercial composting, and developing programs to address hard to recycle materials

Building a Stronger Local Food System

The Spokane region is located within a rich agricultural area, but very few crops and livestock grown here feed our residents. We spend over \$1.5 billion each year buying food from outside our region and less than \$5 million buying locally grown food.¹⁹ If people who live in Spokane eat more locally grown food, we will create a more resilient local food system, strengthen our economy and reduce climate impacts associated with transporting food great distances. Citizens, neighborhoods, growers, food-related businesses, non-profit organizations and local governments need to work together to take the far-reaching actions that are needed to localize and strengthen Spokane's food system.

ECONOMIC PROSPERITY

GOAL 2. Ensure local workforce has access to affordable healthcare, transportation, housing, and education

Strategy 3. Adopt and implement regional policies and initiatives that supports workers

Priority Actions	
EP 3.1	Continue to support and implement Spokane Housing Action Plan
EP 3.2	Work with public and private partners to create citywide program for increasing access to capital for homeownership at all income levels
EP 3.3	Invest in and support public transit infrastructure that increases access to affordable and convenient transportation options
EP 3.4	Use the City's 5 th Avenue Initiative as a model for prioritizing investment in historically underserved communities citywide
EP 3.5	Coordinate local workforce training needs through Public Development Authorities (PDAs) to align with the needs of large regional employers and industries (ex. IT support, healthcare)

Strategy 4. Support just and sustainable State and Federal economic development policies

Priority Actions	
EP 4.1	Support State and Federal healthcare reform that will allow workers to maintain affordable healthcare benefits and access to healthcare regardless of employment status
EP 4.2	Support statewide efforts to incorporate climate action, affordable housing, and transportation within the Growth Management Act
EP 4.3	Implement Industrial Symbiosis strategies in conjunction with statewide efforts and in coordination with the local PDAs

We will move to a low-carbon world because nature will force us, or because policy will guide us. If we wait until nature forces us, the cost will be astronomical.

-- Christiana Figueres

There are costs to addressing sustainability and climate impacts -- sometimes significant costs -- but there are huge opportunities as well. Innovation and technology are at the heart of mitigating climate change and Spokane is well positioned to take advantage of those opportunities. From an eco-district on the West Plains, to energy innovators in the University District, and a thriving local food economy, Spokane has a lot to offer and a lot to gain by committing to and investing in environmental sustainability.



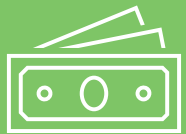


NATURAL ENVIRONMENT

Co-Benefits



Protects, connects, and expands natural ecosystems, and grows urban tree canopy to strengthen the health and build climate resilience of the Spokane River Watershed.



Improves livability measures, supports value added strategies that keep natural resource industry by-products (agriculture, forestry) in our local markets, and supports a visitor economy.



Increases positive social, mental, and physical health outcomes and protects agricultural land to support community food sovereignty and resilience.



Equitably increases tree-planting in underserved neighborhoods, improves equitable community access to green space and encourages Tribal involvement in plan development.

SDG Alignment





Near Nature, Near Perfect

The citizens of Spokane are caring stewards of their natural environment, protecting for future generations the beauty, amenities, and ecosystem services it provides.

For thousands of years, the natural environment was the economy of Spokane's first peoples. The fish from the river, the forest and prairie wildlife, and the native plants provided for all their needs. When European peoples settled the site at the Spokane Falls, they relied on the natural environment for their economy: timber, mining, agriculture and power generation.

In the 21st century, the economy has changed and relatively few citizens rely directly on the natural resources of the region for their livelihoods. Still, the quality of the natural environment bears a direct impact on the quality of life for Spokane's citizens and attracts visitors to our region.



The City of Spokane supports the goal of ensuring clean air, clean water, healthy terrestrial ecosystems, and a robust, equitably distributed tree canopy as a right of the community to best adapt to impacts of climate change. The City will prioritize protecting remaining natural areas that are connected regionally to land supporting diverse plant communities, wildlife, soils and water. The City also recognizes the critical role it plays in preserving and protecting the heart of our city, the Spokane River. These natural resources will be managed through a proactive process to ensure ecological services provide environmental resilience to climate change impacts. It will be critical to balance protection of biodiversity and natural cycles within healthy green and blue spaces along with our most precious gift, our incredible river. We will ensure smart growth strategies, including providing equitable community access to nature, as well as ensuring there is clean and flowing water that protects the biodiversity and integrity of our river for the benefit of our community.

ᠰᠠᠰᠤᠯᠠᠭᠤᠨ. Means good land, flat, open, fertile in Salish. The word breaks down to ᠰᠠᠰᠤ, good, -ᠤᠯᠠᠭᠤᠨ, land or area.



NATURAL ENVIRONMENT

Natural Environment refers to vital living systems that include the water, air, soil, and fellow species in a region. These finite ecological factors are largely interdependent and require a certain level of health and connectivity in order to support the viability of the larger ecological community. This focus area places value on the health of these living systems and attempts to ensure their optimal function. Thoughtful planning and protection of open spaces throughout a region can go a long way towards ensuring a high degree of environmental quality, which supports a vibrant, life-sustaining community, now and for future generations.



Comprehensive Plan Alignment

Chapter 3: Land Use

- LU 1: Citywide Land Use
- LU 6: Adequate Public Lands and Facilities
- LU 8: Urban Growth Area

Chapter 5: Capital Facilities and Utilities

- CFU 3: Coordination
- CFU 5: Environmental Concerns

Chapter 7: Economic Development

- ED 8: Quality of Life and the Environment

Chapter 9: Natural Environment (most sections)

Chapter 10: Social Health

- SH 1: Funding Mechanisms to Support Social Health
- SH 8: Food Access & Security

Chapter 12: Parks & Recreation

- PRS 1: Preservation and Conservation
- PRS 2: Parks and Open Space System

Chapter 14 Shorelines



Benefits of Trees

We know that trees take in carbon from the air to produce energy for their growth. This makes trees natural mitigators of greenhouse gas emissions in the atmosphere. More analysis is needed to fully quantify the mitigating impacts of Spokane's tree canopy, but we do have a good sense for the economic benefits trees provide. In 2012, the City of Spokane conducted an economic analysis of the City's street trees, and the results are impressive!

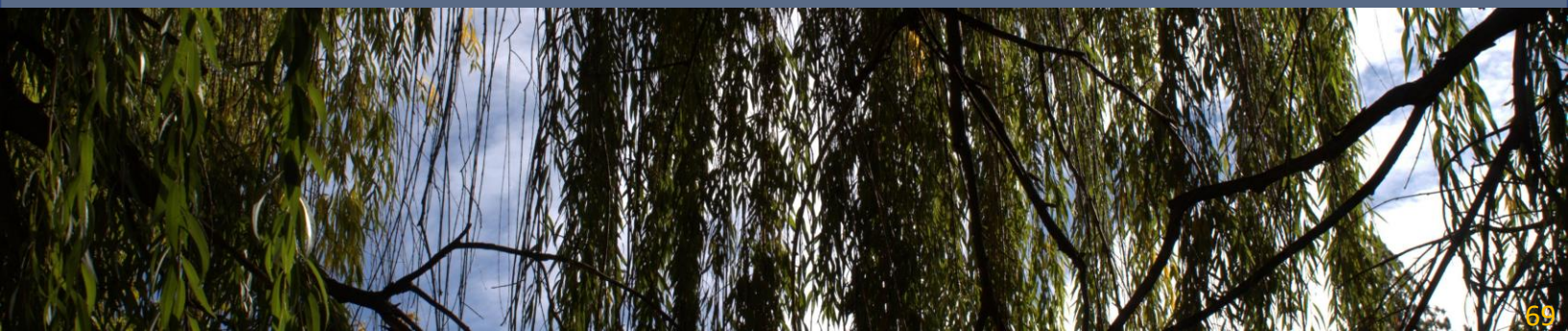
The following are figures for 76,533 street trees inventoried and analyzed for value and benefits in the City of Spokane. The information is an especially useful tool to evaluate the condition of our tree population and provide factual foundation for policy and management decisions. These 76,533 street trees provided the following benefits in 2012:¹⁴

- \$714,302 is saved annually in reduced heating and cooling costs.
- \$75,778 is saved annually in reduction of atmospheric CO₂.
- \$113,296 is saved annually in air quality improvements.
- \$290,602 is saved annually in stormwater mitigation by rain interception and storage.
- Trees beautify Spokane, attracting more tourists, and businesses, lowering crime rates, increasing marketability and property values at a value of \$2,850,251 annually.

You can calculate the benefits of trees on your property or the right-of-way by using the National Tree Benefit Calculator.¹⁵

Trees give us many benefits that are equally important but are not easily converted to dollar savings. A few examples are listed below.

- Research has shown pavement shaded by trees will last 10 years longer than exposed pavement. This results in less maintenance, saving material and labor costs.
- People are more likely to shop in business districts with treescaping and are likely to spend more.¹⁶
- Patients with even just a view of greenery: parks, gardens, and/or trees heal faster.¹⁷
- Trees provide a wealth of wildlife habitat and are especially important in urban areas as connections to open space and wild areas.
- Vehicles on freeways and highways can produce noise that exceeds 100 decibels. Dense plantings of trees and shrubs can reduce this noise by 6-15 decibels.



NATURAL ENVIRONMENT

GOAL 1. Protect and build climate resilience in natural ecosystems within and surrounding City of Spokane

Strategy 1. Strengthen & support regional land conservation

Priority Actions	
NE 1.1	Create a Critical Areas Protection Plan that prioritizes conservation and restoration of ecologically important biodiversity areas and corridors (by 2023)
NE 1.2	Prioritize evaluating biodiversity within City Natural Areas so that at-risk species and habitats are protected through focused management actions
NE 1.3	Identify and restore damaged riparian areas and prioritize the protection of habitat along streams and rivers (by 2030)
NE 1.4	Establish land use planning and zoning policies that protect natural resources within City owned properties, prioritizing undeveloped Natural Areas

Strategy 2. Prevent negative impacts to natural resources and build climate resilience

Priority Actions	
NE 2.1	Adopt land management practices that preserve and improve ecosystem health (soil, plant and animal habitat) on City owned property
NE 2.2	Address and prevent potential impacts to natural resources during planning phases of land development rather than relying on mitigation as a post-development strategy
NE 2.3	Evaluate overall health of natural areas on a regular, established cycle to identify ecosystem transition and disease and pest outbreaks; develop management strategies to address risks
NE 2.4	Support regional partnerships to manage forest in order to reduce wildfire risk, including forest drought mitigation planning



hec člčil is Salish for trees, forests. It means many things standing up.

NATURAL ENVIRONMENT

GOAL 2. Increase urban tree canopy and climate-adapted plant landscapes within the built environment

Strategy 3. Increase carbon sequestration by growing urban tree canopy

Priority Actions	
NE 3.1	Create a Master Planting Plan (by 2021) to increase City's urban canopy from the current level of 23% to 40% cover by 2030; use an equity framework to prioritize low-canopy and low-income neighborhoods
NE 3.2	Review and revise the approved street tree list (following adoption of Master Planting Plan) and update tree list regularly to provide more information on drought and heat tolerance; water requirements; and resistance and resilience to disease, pests, and storm damage
NE 3.3	Retrofit residential streets where possible to provide adequate street strips for planting
NE 3.4	Identify long-term funding and strategies for tree monitoring and maintenance phases, including supplemental watering and pruning, to increase survivability
NE 3.5	Implement policy that incentivizes private property owners, public property owners, and developers to establish additional trees and consider alternatives to removing established trees

Strategy 4. Establish diverse, 'future climate'-adapted landscaping within the built environment

Priority Actions	
NE 4.1	Establish policy to require inclusion of regionally native and climate-adapted plants in future planting projects on City owned properties
NE 4.2	Reduce water and chemical inputs on City-maintained land, promoting water and wildlife conservation
NE 4.3	Incentivize establishment of native, climate-adapted plant landscaping for private landowners and developers, and enlist help from landscape designers and plant nurseries to promote City strategies

At The Lands Council, we have a vision to increase our city-wide urban tree canopy using an environmental justice and equity lens. Our canopy efforts will be focused on areas at the intersection of low-income and low canopy coverage in an effort to bridge that canopy gap and offer the ecosystem benefits that trees provide to all residents.

--Chelsea Updegrove, Director of Development & Communications at The Lands Council



NATURAL ENVIRONMENT

GOAL 3. Educate and engage citizen community in Natural Resources stewardship

Strategy 5. Support development of volunteer opportunities to engage citizens in City projects

Priority Actions	
NE 5.1	Develop a Conservation Ambassador Program (or similar program) to train volunteers to take sustainability and climate action messaging out to the community (by 2022)
NE 5.2	Develop a Green Corps Program (or similar program) to generate citizen volunteers trained to implement planting, monitoring and maintenance phases of PLANT Ordinance (by 2022)
NE 5.3	Develop a Pollinator Gardens Program to establish habitat for our local pollinators, and provide education to the public about the critical role they play in the ecosystem (by 2022)
NE 5.4	Create opportunities within K-12 education, colleges, and universities for students to contribute input and service work to City natural resources programs and projects
NE 5.5	Assess opportunities for citizen science work to contribute to a database that can be accessed to better understand ecosystem health and management needs within natural areas

Strategy 6. Promote City programs and projects that align with sustainability goals

Priority Actions	
NE 6.1	Expand incentive programs like SpokaneScape that encourage residents to replace lawn with mulch and native, drought-tolerant plant species
NE 6.2	Create signage for City Parks turf conversion projects, pollinator gardens and native landscaping (by 2022)
NE 6.3	Increase visibility and accessibility of sustainability programs on City website and establish an effective social media campaign (by 2022)
NE 6.4	Partner with Department of Natural Resources to create climate-informed and fire-adapted community strategies around urban canopy, particularly near urban-wildland interface

Strategy 7. Establish a City funding source for education and outreach programs that promote natural resources stewardship

Priority Actions	
NE 7.1	Partner with community organizations and agencies already implementing work that supports City Natural Resource management goals to build strong multi-agency grant opportunities
NE 7.2	Develop and encourage the use of curricula in local schools to build a stewardship ethic and climate science understanding in young people
NE 7.3	Expand opportunities for voluntary contributions in utility bills to collect funds for urban forestry and other City programs

NATURAL ENVIRONMENT

GOAL 4. Establish partnerships with community organizations and agencies to leverage funding and invite community input

Strategy 8. Work with regional partners to align natural resource management

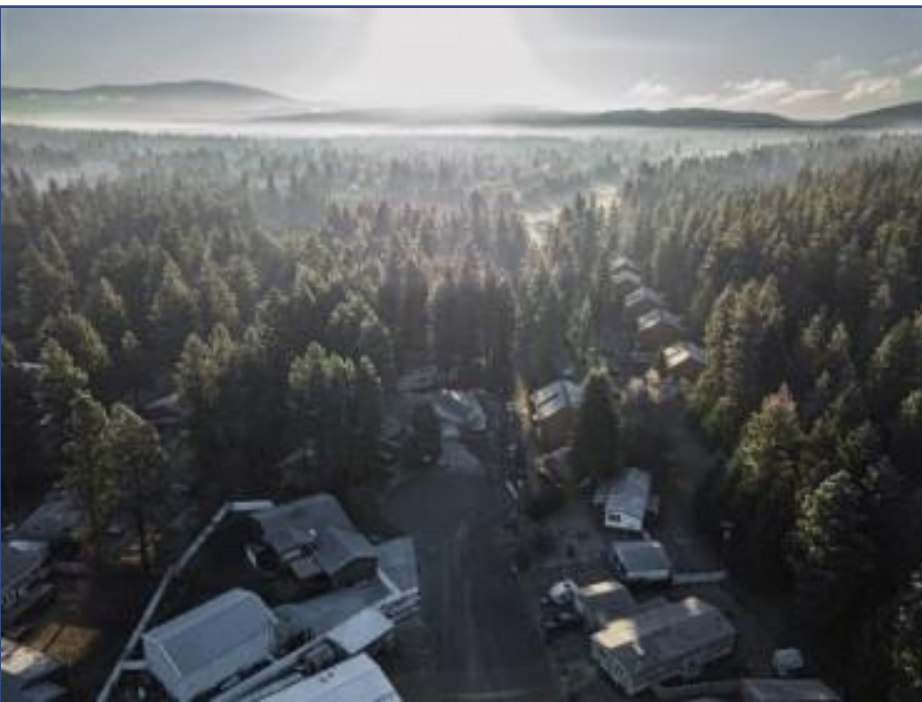
Priority Actions

NE 8.1	Update Critical Areas Report through collaborative management programs with land managers and regulatory and non-regulatory agencies (by 2022)
NE 8.2	Support statewide inventory of at-risk species and ecosystems
NE 8.3	Assess regional wildfire risks and develop plans to mitigate risks in native forests in and around the City (by 2022)
NE 8.4	Support Spokane County Noxious Weed Board efforts to identify and control noxious weeds
NE 8.5	Collaborate with research community to incorporate appropriate species and management methods for future climate into City plans

Strategy 9. Establish funding for management of City lands

Priority Actions

NE 9.1	Increase City budget for Natural Resources Management and Environmental Programs
NE 9.2	Partner with community organizations and agencies that will leverage City funding budget and capacity, and maximize partner funding opportunities
NE 9.3	Conduct feasibility assessment for creation of a Climate Justice Fund that ensures investment in projects that will directly benefit underserved segments of the community
NE 9.4	Partner with organizations and agencies to promote equitable access to City natural areas and the Spokane River



How we treat our land, how we build upon it, how we act toward our air and water, in the long run, will tell what kind of people we really are.

-- Laurance S. Rockefeller

Existing Watershed Initiatives¹⁷

There are many organizations at both the regional and state level working on protecting our natural environment

Forests:

Washington State Department of Natural Resources

- Washington Forest Action Plan (2020)
- 20-Year Forest Strategic Plan (2020)

Wildlife:

- Washington Department of Fish and Wildlife Landscape Planning for Washington's Wildlife

Plant Communities:

- Spokane County Noxious Weed Board: Identifying and Controlling Noxious Weeds in Spokane County

Sensitive Species & Habitats (Critical Areas):

- Spokane County: Protection of Critical Areas ([link](#))
- Washington Department of Fish and Wildlife: Priority Habitats and Species ([link](#))
- City of Spokane Critical Areas Report (1994) [link](#)

Wildfire:

- DNR Wildland Fire Protection 10-year Strategic Plan [link](#)
- Firewise Program (Spokane County Conservation District in collaboration with Department of Natural Resources)

Climate Resilience:

- Washington State Department of Natural Resources; Plan for Climate Resilience (2020)



HEALTH & WELLBEING

Co-Benefits



Empowers Spokane residents with information on how they can take climate and sustainability actions within their own lives. Promotes local food systems, reduces environmental degradation, and preserves urban farmland.



Decreases healthcare costs over time and increases the safety and security of Spokane residents.



Improves health outcomes for people disproportionately exposed and susceptible to the impacts of climate change including low-income, people of color, the elderly, children, and people with pre-existing health conditions.



Ensures benefits are enjoyed equitably across our community by prioritizing access and investment in underserved communities.

SDG Alignment





The impacts of climate change will intensify issues that Spokane residents face today like financial insecurity, affordable housing, food security, and healthcare access. The COVID-19 pandemic exposed how a crisis disproportionately impacts vulnerable communities. By investing in the health and wellbeing of our residents, Spokane can ensure our city has the systems in place adapt to the impacts of a changing climate. We envision a city with local leadership that proactively invests in public health, access to healthy food, affordable housing, emergency services, and resiliency infrastructure. Empowering communities by making these investments will result in a stronger Spokane.



2020 First Responder's Parade Photo Credit: City of Spokane

Current City and Regional Initiative¹³

Creating resilient communities means that residents have equitable access to housing, employment, healthcare, and education. The following projects and initiatives are currently underway in support of these goals.

- Spokane Housing Action Plan (under development)
- Washington State Universal Health Care Work Group

Comprehensive Plan Alignment

Chapter 3: Land Use

- LU 1: Citywide Land Use
- LU 4: Transportation
- LU 6: Adequate Public Lands and Facilities

Chapter 5: Transportation

- TR 1: Transportation Network for All Users
- TR 20: Bicycle/Pedestrian Coordination

Chapter 6 : Housing

- H 1: Housing Choice and Diversity
- H 2: Housing Quality

Chapter 10: Social Health

- SH 1: Funding & Mechanisms to Support Social Health
- SH 2: Facilities for Special Needs Populations
- SH 4: Diversity & Equity
- SH 5: Public Benefit Uses
- SH 8: Food Access & Security



GOAL 1. Prioritize & invest in underserved communities

Strategy 1. Increase household food security regionwide

Priority Actions	
HW 1.1	Support the Spokane Food Policy Council (SFPC) in studying, identifying and implementing sensible and achievable codes, policies, and requirements that eliminate barriers and reduce costs for urban farms and community gardens and expand local control of food grown, processed, and sold directly to consumers
HW 1.2	Work with regional partners, including SFPC, to develop and adopt a Regional Food Plan. This document will outline the needs of the community and a blueprint for meeting these needs.
HW 1.3	Partner with local nonprofits, advocate groups, and other governmental organizations to create a Regional Food System Partnership. This partnership will bring stakeholders together to maximize our local food system capacity, efficacy, and efficiency.
HW 1.4	Partner with other public entities, local business organizations, and food producers to launch a local food campaign to educate the public on the benefits of eating local

Strategy 2. Increase access to affordable housing and healthcare

Priority Actions	
HW 2.1	Continue to invest in affordable housing and safe, affordable public transportation
HW 2.2	Support policy that addresses low-income access to healthcare and health services
HW 2.3	Collaborate with regional partners to create a robust regional response to homelessness

Household Food Security

According to the USDA, food insecurity means that the “consistent access to adequate food is limited by a lack of money and other resources at times during the year.” In Spokane, it is estimated that 1 in 5 children live in food insecure households. Food security for a household in Spokane is dependent on two things: the existence of a secure and robust supply network that produces food and brings it to market; and the economic ability of a household to access it. This plan addresses both elements of food security with specific strategies in different planning sectors. The COVID-19 crisis demonstrated the vulnerability of global and national food networks to disruption. Despite our location within a large agricultural region, Spokane has grown overly dependent on these external networks for food. This Sustainability Action Plan addresses Spokane’s ability to ensure household food security for all residents.



Under HW Strategy 1, Spokane will strengthen our local food supply network to decrease dependency on global networks. Actions TL 8.4 & WR 4.5 are designed to preserve local farmlands from development. Action EP 1.3 will improve the viability of local businesses, including those involved in food production and processing. About 18% of Spokane residents fall below the federal poverty level.²⁰ This directly impacts the ability of many households to purchase food. EP Strategies 3.1 through 3.5 will, over time, improve the economic well-being of working-class households and reduce unemployment. Strategies EP 2.2 and WD 2.1 will address hunger in the short-term, by supporting programs which divert excess food from commercial and institutional kitchens to those in need.

GOAL 2. Implement climate adaption strategies into emergency and disaster response

Strategy 3. Include climate impacts in disaster and emergency management response

Priority Actions	
HW 3.1	Finalize Climate Vulnerability Assessment by 2021
HW 3.2	Ensure City's disaster and emergency management plans include specific strategies to prepare for vulnerabilities identified in the Climate Vulnerability Assessment
HW 3.3	Partner with regional emergency and disaster response teams to ensure a regional approach is used to responds to any future crises or challenge
HW 3.4	Develop regional plan to respond to increase heat and wildfire smoke for vulnerable populations, including identifying public buildings for cooling and clean air centers

GOAL 3. Create community engagement around sustainability & climate action

Strategy 4. Increase community awareness of climate change risks and impacts

Priority Actions	
HW 4.1	Promote science-based climate change curriculum adopted in all k-12 classrooms
HW 4.2	Develop public outreach campaign on how residents should respond to high heat risks and wildfire smoke
HW 4.3	Provide community tools and opportunities for the public to participate in sustainability and climate action
HW 4.4	Partner with Community Centers and local community organizations working with vulnerable populations to find alignment and opportunities to promote shared goals of health and wellbeing for Spokane residents



According to the American Academy of Pediatrics, climate change poses threats to human health, safety, and security, and children are at particularly high risk. The effects of climate change on child health include:

- Physical and psychological sequelae of weather disasters (e.g., hurricanes, flooding, wildfires)
- Increased heat stress
- Decreased air quality
- Altered vector-borne disease patterns
- Food, water, and nutrient insecurity

Photo from Party in the Park, 2016 Credit: City of Spokane

Notes

1. Existing City Plans

- Spokane Sustainability Action Plan (2009)
<https://static.spokanecity.org/documents/publicworks/environmental/sustainability-action-plan.pdf>
- Spokane Comprehensive Plan (2017)
<https://my.spokanecity.org/shapingspokane/comprehensive-plan/>
- Spokane Water Conservation Master Plan (2020)
<https://static.spokanecity.org/documents/publicworks/water/water-conservation-master-plan-2020-04-27.pdf>
- Spokane City Bike Master Plan <https://my.spokanecity.org/projects/bicycle-master-plan/>
- Spokane Pedestrian Master Plan
<https://static.spokanecity.org/documents/projects/pedestrianplan/spokane-final-pedestrian-plan-adopted-2015-11-02.pdf>

2. Existing Regional Plans

- Spokane County Comprehensive Plan (updated 2019) <https://www.spokanecounty.org/4474/2019-Comprehensive-Plan-Amendments>
- Spokane County Solid Waste and Moderate Risk Waste Management Plan (2015)
<https://www.spokanecounty.org/4725/Spokane-County-ComprehensiveSolid-Waste->
- Horizon 2040: The Spokane Regional Metropolitan Transportation Plan <https://www.srtc.org/wp-content/uploads/2017/10/H2040-Flier-Edit-and-Digital-Copy.pdf>
- Spokane Regional Health District Bike Walk Bus Program: <https://walkbikebus.org/>
- Spokane Transit Authority Moving Forward 10 Year Plan (2016): <http://stamovingforward.com/>
- WSDOT Active Transportation Plan: <https://wsdot.wa.gov/travel/commute-choices/bike/plan>
- Avista Utilities Integrated Resource Plan (2020): <https://www.myavista.com/about-us/integrated-resource-planning>
- Avista Utilities Transportation Electrification Plan (2020): <https://www.myavista.com/energy-savings/green-options/electric-transportation>
- Spokane Food Policy Council's Food Action Plan (currently under development):
<https://www.spokanefoodpolicy.org/>

3. McKinstry, 2016: <https://www.mckinstry.com/2016/09/23/spokane-transits-facility-upgrades-serve-money-and-energy/>
4. The Spokesman Review, 2019: <https://www.spokesman.com/stories/2019/sep/29/shawn-vestal-there-it-is-again-the-center-of-spoka/>
5. Seattle Business Magazine, 2009: <https://www.seattlebusinessmag.com/article/2009-green-washington-awards>
6. The Active Times, 2018 : <https://www.theactivetimes.com/adventure/best-cities-outdoor-enthusiasts-ranked/slide-2>
7. Pauline Flett Video: <https://vimeo.com/401997642> Produced by FactoryTown
8. World Health Organization on health equity: <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>
9. Washington State Department of Health Website on Health Equity:
<https://www.doh.wa.gov/CommunityandEnvironment/HealthEquity>
10. Washington Environmental Health Disparities Map:
<https://www.doh.wa.gov/DataandStatisticalReports/WashingtonTrackingNetworkWTN/InformationbyLocation/WashingtonEnvironmentalHealthDisparitiesMap>
11. Report to the Washington State Governor and Legislature: Environmental Justice Taskforce – Recommendations for Prioritizing EJ in Washington State Government --
https://healthequity.wa.gov/Portals/9/Doc/Publications/Reports/EJTF%20Report_FINAL.pdf

11. City & State Code

- Spokane Municipal Code Chapter 15.05 – Climate Change: <https://my.spokanecity.org/smc/?Chapter=15.05>
- Res 2014-0070 Anadromous Fish Recovery: <https://publicdocs.spokanecity.org/cityclerkrecords/tempimages/5jcwafmtmltysmhs34naxjc2/3551795.pdf>

Washington State

- 2019 Clean Energy Transformation Act (CETA): <https://www.commerce.wa.gov/growing-the-economy/energy/ceta/>
- 2019 Revised Code of Washington 70A.45.020 -- Green House Gas Emissions Reductions: <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.45.020>
- 2019 Use Food Well Washington Plan: <https://ecology.wa.gov/Waste-Toxics/Reducing-recycling-waste/Organic-materials/Food-waste-prevention/Food-waste-plan>
- RCW 19.27A.160 Residential and Nonresidential construction permitted under **the 2031 state energy code must achieve a 70 percent reduction in annual net energy consumption** (compared to the 2006 state energy code)
- RCW 19.27A.020 Construct increasingly efficient homes and buildings that help achieve the broader goal of building **zero fossil-fuel greenhouse gas emission homes and buildings by the year 2031**

12. Existing Watershed & Aquifer Plans & Initiatives

- Greater Spokane River Regional Conservation Partnership Program (RCPP) “The Regional Conservation Partnership Program (RCPP) was developed by the 2014 Farm Bill. It is a partner-driven, locally led approach to enhancing conservation efforts in a targeted area. It offers new opportunities for the USDA Natural Resources Conservation Service (NRCS) to promote innovation, gather new partners to the conservation mission, and demonstrate the value and worth of voluntary, private land conservation.”: <https://www.sccd.org/rcpp/>
- Spokane County Voluntary Stewardship Program: Four categories: Agriculture Stewardship, Forestry Stewardship, Livestock Stewardship, and ‘Grown Local, Sold Local’ (innovation around protecting critical areas): <https://conservationmap.sccd.org/page/start>
- WRIA 54 (Lower Spokane Watershed) Watershed Plan (2009): http://spokanewatersheds.org/files/documents/WRIA54Plan_Aug2009_wfigures.pdf and Implementation Plan (2010): http://spokanewatersheds.org/files/documents/WRIA54-ImplementationPlan_Final12-20-10.pdf
- WRIA 55 (Little Spokane) and 57 (Middle Spokane) Watershed Plan (2005): <http://spokanewatersheds.org/files/documents/WRIA-55-57-Watershed-Management-Plan-Final-1-31-06.pdf>
- WRIA 56 (Hangman) Watershed Plan (2005): <http://spokanewatersheds.org/files/documents/Hangman-Creek-Watershed-Managment-Plan.pdf>
- WRIA 55 (Little Spokane Watershed Planning) Spokane County Watershed updates: link (Hirst decision on permit exempt wells): <https://www.spokanecounty.org/3843/WRIA-55-Watershed-Plan-Update>
- City of Spokane Shoreline Master Plan: <https://my.spokanecity.org/projects/shoreline-master-program-periodic-update/>
- Family Forest Fish Passage Program (Spokane County Conservation District in collaboration with WA State Department of Natural Resources) Financial and technical help around removing in-stream barriers to fish passage on private land: <https://sccd.org/departments/water-resources/family-forest-fish-passage-program-2/>
- Spokane Regional Toxics Taskforce Comprehensive Plan to Reduce PCBs in the Spokane River: http://srrttf.org/wp-content/uploads/2016/04/2016_Comp_Plan_Final_Approved.pdf
- The Great Spokane River Gorge Strategic Master Plan: <https://spokaneriver.net/initiatives/great-gorge-plan/>
- SVRP Aquifer Atlas: <https://www.spokanecounty.org/DocumentCenter/View/3178/2015-Edition-SVRP-Aquifer-Atlas-PDF>

- Water Offset Projects--Managed Aquifer Recharge 2020 Field Report: https://www.spokanecounty.org/DocumentCenter/View/33794/Managed-Aquifer-Recharge-MAR-Field-Investigation-Report-06_18_2020
- Idaho Washington Aquifer Collaboration (IWAC) Efficient Irrigation and Landscape Design Handbook: <https://www.spokaneaquifer.org/irrigation-landscape-design-standards/mobile/index.html>
- Cleaner Water Faster signage campaign (Centennial Trail) IWA: <https://www.spokaneaquifer.org/cleaner-water-faster-centennial-trail-signs/>
- Spokane Valley-Rathdrum Prairie bi-state aquifer study: <https://pubs.usgs.gov/sir/2007/5044/>

13. Current Economic & Social Wellbeing Initiatives

- Washington State Universal Health Care Work Group: <https://www.hca.wa.gov/about-hca/universal-health-care-workgroup>
- Urbanova: <https://urbanova.org/projects/>
- The ZoNE: <https://thezonespokane.org/impact#key>

14. Spokane Urban Forestry Tree Benefits Website: <https://my.spokanecity.org/urbanforestry/tree-benefits/>

15. National Tree Benefit Calculator: <http://www.treebenefits.com/calculator/>

16. Nature Within: <http://www.naturewithin.info/consumer.html>

17. Green Plants for Green Buildings: <https://greenplantsforgreenbuildings.org/>

18. Current Natural Environment related Initiatives

- Washington State Department of Natural Resources
 - Washington Forest Action Plan (2020): https://dnr.wa.gov/publications/rp_2020_forest_action_plan.pdf?3bb1xp
 - 20-Year Forest Strategic Plan (2020): <https://www.dnr.wa.gov/ForestHealthPlan#read-the-plan>
- Washington Department of Fish and Wildlife Landscape Planning for Washington's Wildlife: ---Managing for Biodiversity in Developing Areas (A Priority Habitats and Species Guidance Document) (2009): <https://wdfw.wa.gov/publications/00023>
- Spokane County Noxious Weed Board: Identifying and Controlling Noxious Weeds in Spokane County: <https://www.spokanecounty.org/DocumentCenter/View/21339/Identifying-and-Controlling-Noxious-Weeds-in-Spokane-County-55-pg-booklet>
- Spokane County: Protection of Critical Areas: <https://www.spokanecounty.org/DocumentCenter/View/662/BP-44-Critical-Areas-PDF>
- Washington Department of Fish and Wildlife: Priority Habitats and Species: <https://wdfw.wa.gov/species-habitats/at-risk/phs/maps>
- City of Spokane Critical Areas Report (1994): <https://static.spokanecity.org/documents/business/resources/studies/other/critical-areas-report-1994.pdf>
pg. 2 'Many existing City plans contain goals and policies pertaining to critical areas issues. The following City plans were reviewed and used in developing this report: Generalized Land Use Plan, Shoreline Master Program, Spokane Wetlands Protection Program, Park and Open Spaces Plan, Latah Creek Specific Plan, Lincoln Heights Specific Plan, and Indian Trail Specific Plan. In addition, Spokane County's Critical Areas section of its Comprehensive Plan was also used during the City's critical areas planning process, to help fulfill the interest in coordinating with the County on critical areas planning.
- DNR Wildland Fire Protection 10-year Strategic Plan: https://www.dnr.wa.gov/publications/rp_wildfire_strategic_plan.pdf?ucjvq
- Firewise Program (Spokane County Conservation District in collaboration with Department of Natural Resources): <https://sccd.org/programs/firewise/>
- Washington State Department of Natural Resources; Plan for Climate Resilience (2020): https://www.dnr.wa.gov/publications/em_climateresilienceplan_feb2020.pdf

19. Spokane Regional Food System Inventory, Spokane Food Policy Council

20. Spokane Regional Health District, Demographics and Social Characteristics report (2015), p. 10:

<https://srhd.org/media/documents/DemographicsSpokaneCounty2017.pdf>