City of Seattle







MOVING the NEEDLE

SEATTLE'S ENVIRONMENTAL PROGRESS REPORT

— 2014 —

Letter from the Mayor

Dear Fellow Seattleites,

You'd be hard pressed to find a list of the nation's greenest cities that doesn't put Seattle at or very near the top. I'm incredibly proud to be mayor of a city that's known worldwide for its environmental leadership.

Moving the Needle is a report about the City of Seattle's environmental goals and our progress in achieving them. This report details key goals previously set by the City of Seattle, ranging across seven areas: buildings and energy; transportation and land use; food; waste; water; trees and green space and climate change.

The report illustrates that there are many reasons why Seattle is an environmental leader. We are on-track to achieve many of our goals, such as electricity and water conservation; however, there are other goals, like climate change, where the challenge looms large and there is much work to be done.

Moving the Needle is just a start. We intend to use this report to evaluate how we are doing on our environmental commitments and identify areas for improvement. Working with the community, we will evaluate our goals and metrics to ensure they adequately reflect our priorities and reliably track our progress. We will update Moving the Needle biennially to hold us accountable for what we care about over time.

I hope that all of us—policy makers, environmental leaders, businesses and residents—will continue our efforts to create a green, prosperous, and equitable future for our city.

Thank you for all that you've done to make Seattle an environmental leader and thank you for all that you will do to help us aim high, achieve more, and stay at the top of those 'greenest city' lists.

Sincerely,

Mayor Ed Murray

ABOUT MOVING THE NEEDLE

City of Seattle has hundreds of environmental goals expressed in various plans, policies, and programs, which City departments track in many ways. *Moving the Needle* is our first step in assembling a set of high level environmental goals and accomplishments in one report for improved tracking and accountability. It reports on select environmental goals already in place, with the community in mind.

Environmental areas covered in this report include: Buildings & Energy, Transportation & Land Use, Food, Waste, Water, Trees & Green Space and Climate Change.

Moving the Needle is not a sustainability report nor is it an exhaustive accounting of all of Seattle's environmental activities. Please visit www.seattle.gov/environment for more detailed information about the City's environmental plans and activities.

ACKNOWLEDGEMENTS

Thank you to the many City of Seattle staff members from the following departments who contributed to the development of this report.

- Office of the Mayor
- Office of Housing
- Office of Sustainability and Environment
- Department of Human Services
- Department of Finance and Administrative Services
- Department of Neighborhoods
- Department of Transportation
- Department of Parks and Recreation
- Department of Planning and Development
- Seattle City Light
- Seattle Public Utilities

MOVING THE NEEDLE 2014

JILL SIMMONS, Director, Office of Sustainability and Environment
MICHELLE CAULFIELD, Environmental Sustainability Manager
SARA WYSOCKI, Communications Advisor

Buildings & Energy

Leading with conservation & renewable energy

Seattle is fortunate to have a robust supply of clean hydroelectric power with 7 of its own hydro facilities and several renewable power contracts. Today, hydropower supplies 92 percent of Seattle's electricity. Conservation has long been the City's first-priority, with energy conservation programs dating back to the 1970s.

RANKED 1ST IN THE NATION for green building policy

1ST UTILITY IN THE NATION to achieve zero-net carbon emissions

ENVIRONMENTAL STEWARDSHIP is fundamental to how we manage our energy resources. Seattle protects some **13,000 acres of habitat** in our hydro watersheds, including old-growth forest & spawning grounds for salmon.

OUR STRATEGIES:

The City is committed to meeting future energy needs through conservation and renewables as well as protecting our important energy resources for today's generation and the next. Our strategies include:

Energy Conservation

Energy efficiency is our first-priority for meeting electricity needs.

Green Buildings

Seattle is one of the top green building markets in the nation.

Renewable Energy

Seattle is well-positioned to meet future energy needs with low carbon sources.

THE BENEFITS:

- Climate Protection
- Healthy People
- Natural Resource Protection
- Less Waste
- Economic Benefit
- Clean Air

THE CHALLENGE AHEAD:

Aggressive energy codes and green buildings programs are dramatically reducing the amount of energy new buildings use. Now our challenge is to achieve the same results in the buildings that we already live and work in.

Energy Conservation

GOAL 1 — 105,200 MEGAWATT HOURS OF ELECTRICITY SAVED ANNUALLY

ACHIEVED!

PROGRESS

121,290 Megawatt hours saved in 2013.
This is equivalent to:

14,190 homes powered for one year

or

16,040 vehicles garaged for one year

GOAL 2 — REDUCE HOME ENERGY USE BY 20% AND COMMERCIAL ENERGY USE BY 10% BY 2030 (2008 BASELINE)

PROGRESS

3% Reduction

RESIDENTIAL

2008: 18.4M BTU
2012: 17.9M BTU

2% reduction

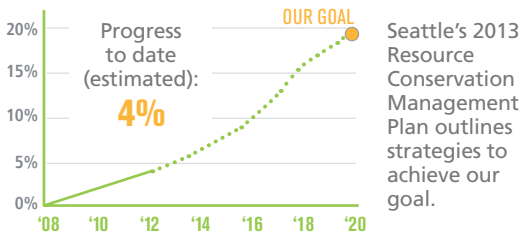
COMMERCIAL

2008: 27.9M BTU
2012: 27.4M BTU

A BTU accounts for total energy (not just electricity) & is the amount of energy needed to heat one pound of water one degree.

GOAL 3 — 20% ENERGY SAVINGS IN CITY FACILITIES BY 2020 (2008 BASELINE)

PROGRESS



Progress to date (estimated): **4%**

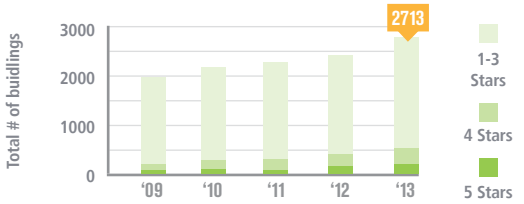
Seattle's 2013 Resource Conservation Management Plan outlines strategies to achieve our goal.

Green Buildings

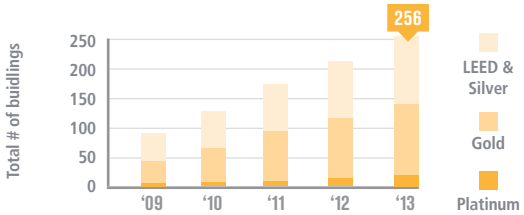
GOAL 4 — INCREASE THE NUMBER AND LEVEL OF GREEN CERTIFIED BUILDINGS

PROGRESS

Built Green: Residential
40% increase (2009 - 2013)



LEED Rated: Primarily commercial
179% increase (2009 - 2013)



32 out of **34** **City-owned buildings** completed between 2000-2013 achieved a LEED rating:

Platinum:	Gold:	Silver:	Certified:
King St Station	20 projects	9 projects	2 projects

Renewable Energy

GOAL 5 — 15% OF ELECTRICITY ACQUIRED FROM NEW RENEWABLE SOURCES BY 2020

PROGRESS

In 2013, almost **5%** of Seattle's electricity came from new renewable sources. New renewable sources includes:

Methane gas capture from Columbia Ridge Landfill (Seattle's municipal solid waste)

Wind projects

Waste-to-heat cogeneration at West Point Treatment Plant (Seattle's wastewater)

GOAL 6 — INCREASE SOLAR ENERGY PRODUCTION IN THE COMMUNITY

PROGRESS

Over **1,000** residents & businesses have installed solar panels in Seattle since 2006.

Our solar capacity is now **6 MW → 38 times** more than in 2008.

Seattle Aquarium recently installed a solar installation through Seattle City Light's **Community Solar Program.**

THE LEADING EDGE

COMMUNITY POWER WORKS

Seattle's energy upgrade program helps residents with low-cost energy assessments, rebates, financing, and pre-approved contractors. Community Power Works delivers energy efficiency solutions and lasting environmental and economic benefits. Customers gain more than energy savings – they're making their homes healthier, safer, more comfortable places to be.

3,040 families with upgrades complete or in progress

1,175 of these are low-income families

30% average energy savings

220,847 TONS of greenhouse gas emissions avoided over the lifetime of the measures

Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT

Transportation & Land Use

Advancing a Dynamic & Connected Seattle

120,000 NEW RESIDENTS & **115,000** NEW JOBS are expected in Seattle over the next 20 years.

40%

OF SEATTLE'S GREENHOUSE GAS (GHG) EMISSIONS COME FROM TRANSPORTATION

This includes both how we get around and how we move goods & services.

OUR STRATEGIES:

As Seattle grows, we will continue to reduce our impact on climate change and build a thriving city. Our strategies include:

Transportation Choices

Providing affordable and reliable transportation options that lower greenhouse gas emissions.

Complete Neighborhoods

Building economically diverse urban neighborhoods where what you need is close to where you live.

Safe Streets

Improving pedestrian & bicycle safety to make walking & biking more appealing.

THE BENEFITS:

- Clean Air
- Connected Communities
- Healthy People
- Optimal Mobility
- Reduced Congestion
- Vibrant Neighborhoods

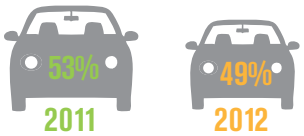
THE CHALLENGE AHEAD:

With strong community input, Seattle has adopted transit, bicycle and pedestrian plans to achieve our vision of moving people and goods efficiently and with less environmental impact. Our challenge now is to make this vision a reality on-the-ground.

Transportation Choices

1 GOAL 25% OF COMMUTERS DRIVE ALONE BY 2035

PROGRESS



Seattle has joined an elite group of cities where less than 50% of workers commute by a single occupancy vehicle.

2 GOAL INCREASE TRANSIT BOARDINGS BY 37% BY 2040 (2012 BASELINE)

PROGRESS

12% increase in 2 years

322,000 boardings occurred daily in Fall 2010

360,000 boardings in Fall 2012

3 GOAL INCREASE THE NUMBER OF BICYCLISTS AND PEDESTRIANS

PROGRESS

59% increase since 2011

27% increase since 2011

Safety improvements, bike lanes & greenways are making it easier to get around by bike and foot. The City counts bicyclists and pedestrians quarterly at 50 locations citywide.

Complete Neighborhoods

4 GOAL 45% OF HOMES LOCATED WITHIN URBAN VILLAGES BY 2030

ALMOST THERE!

PROGRESS

42% of homes are currently within urban villages

This is **133,000** out of a total of 318,000 homes

Seattle's Comprehensive Plan identifies 30 urban villages across the city. These are designated areas to attract new jobs, housing, & investments to connect residents to nearby jobs & amenities.

5 GOAL 85% OF JOBS LOCATED WITHIN URBAN VILLAGES BY 2030

ALMOST THERE!

PROGRESS

84% of jobs are located in urban villages

Top Job Growth Neighborhoods:*

1. South Lake Union
2. Othello
3. Westwood - Highland Park
4. Lake City
5. Columbia City

* % increase in jobs from 2004-2012

6 GOAL ENHANCE NEIGHBORHOOD WALKABILITY

PROGRESS

8TH most walkable large city in the US*

*According to Walk Score™

Many Seattle neighborhoods offer a variety of nearby amenities including:

Public transit | Housing | Services

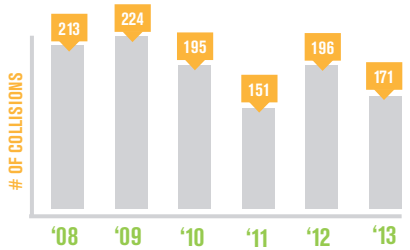
This allows people to leave their cars at home more often.

Safe Streets

7 GOAL ELIMINATE SERIOUS & FATAL CRASHES BY 2030

PROGRESS

20% reduction since 2008



THE LEADING EDGE

ELECTRIFIED TRANSPORTATION

An important climate strategy

Seattle's carbon neutral electricity makes electric transportation a key climate strategy. Growth in Metro trolley buses, the Seattle Streetcar, and Link Light Rail are expanding our electric transit options and Seattle has one of the highest electric car ownership rates in the nation.

The City of Seattle is leading by example with our growing electric fleet:

43 EV Sedans | 32 Off Road Utility Vehicles | 24 fork lifts | 5 Road scooters

9,000 GALLONS of gasoline saved in 2013 with our electric vehicles

Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT

Food

Healthy people, healthy economy, healthy land

The food we produce and consume impacts our health, our economy, and our environment.

Rising obesity and diet-related diseases cost money and lives. Chemically intensive agriculture degrades the quality of our land, our air, and our water.

ONE IN FIVE CHILDREN IN KING COUNTY
does not always have enough to eat and healthy food is even harder for some to afford.

A DIET RICH IN LOCAL FRUITS AND VEGETABLES
reduces greenhouse gas emissions, protects our natural resources, and is good for everyone. Growing, eating, and sharing food brings people together.

OUR STRATEGIES:

Seattle is committed to increasing healthy food access while continuing to protect our farmlands and grow our local food economy for all. Our strategies include:

Healthy Food Access

Seattle residents should have enough to eat and access to affordable, local, healthy, sustainable, culturally appropriate food.

Local Food Production

It should be easy to grow food in Seattle for personal use or business purposes.

Strong Food Economy

Businesses that produce, process, distribute, and sell local and healthy food should grow and thrive in Seattle.

THE BENEFITS:

- Healthy People
- Economic Benefit
- Farmland Protection
- Climate Preparedness
- Social Equity
- Connected Communities

THE CHALLENGE AHEAD:

Sprawl, rising food prices and the changing climate all affect our food system. Parts of Aurora, Lake City, High Point, Delridge, Georgetown, and South Park have limited food and transit access. Consuming local fresh food - and organic wherever possible - promotes health and a thriving food economy.

Healthy Food for All

1 GOAL INCREASE HEALTHY FOOD ACCESS

PROGRESS

Farm to Table brings fresh local produce to children & older adults in Seattle & King County.

45% increase in Seattle early learning centers purchasing healthy food from local farmers. → **29 sites** in 2012, **42 sites** in 2013

300% + increase in early learning centers engaging in food & nutrition education & training.

Fresh Bucks doubles the purchasing power of Supplemental Nutrition Assistance Program (SNAP) shoppers at Farmers Markets.

70% + increase in use of Fresh Bucks at Seattle Farmers Markets.

2012: **1,500** participants
2013: **2,600** participants

In 2013:

90% said they ate more fruits and vegetables.

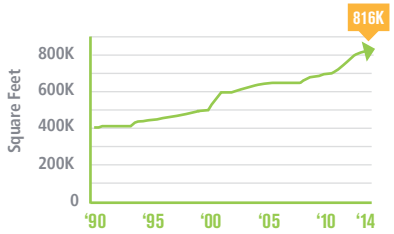
94% said Fresh Bucks made a difference in their families' diet.

Local Food Production

2 GOAL INCREASE URBAN FOOD PRODUCTION

PROGRESS

104% Increase in publicly accessible land for growing food since 1990*

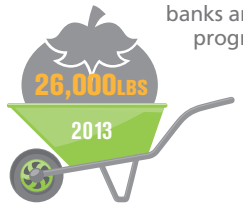


*Best estimate available from Seattle Parks & Seattle P-Patch

Seattle's community gardeners are growing too:

# of P-Patch gardeners:

2010: 4,772
2011: 5,159
2012: 5,830
2013: 6,329



Donated by P-Patch gardeners to Seattle food banks and meal programs.

Strong Food Economy

3 GOAL INCREASE LOCAL FOOD CONSUMPTION

PROGRESS

Farmers markets connect farmers directly to consumers resulting in healthier food for us and economic benefit for farmers.

Total Farmers Market Sales

2010 — $11.9M*
2011 — $12.1M
2012 — $13.2M

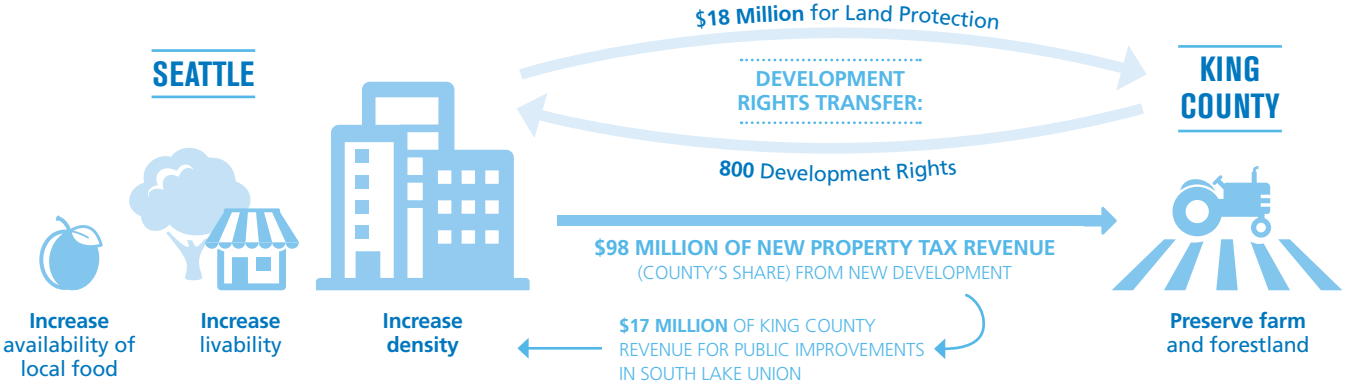
Seattle's 2013 Farmers Market Snapshot:

215	4	16	4
unique farmer vendors	farmers market associations	farmers market locations	year-round farmers markets

THE LEADING EDGE

2013 TRANSFER OF DEVELOPMENT RIGHTS

Seattle and King County's watershed Transfer of Development Rights agreement in 2013 will sustain the production of fresh, local food to supply to residents, restaurants and retailers for generations to come. Seattle developers can now purchase development rights from rural forest and farm lands for increased development capacity in South Lake Union.



Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT

Waste

Picking Up the Pace Toward Zero Waste

OVER THE PAST 25 YEARS, Seattle residents saved over 3 million metric tons of greenhouse gas emissions by recycling.

3 M metric tons of greenhouse gases = **625,000** cars taken off Seattle's roads for 1 yr OR **EVERY** single-family home in Seattle powered for 1 yr

As households have increased recycling, the amount of waste sent to the landfill has decreased.

1980's HOUSEHOLD GARBAGE:

32-GALLON CANS PER WEEK

TODAY'S HOUSEHOLD GARBAGE:

32-GALLON CAN PER WEEK

OUR STRATEGIES:

Seattle residents and businesses divert more waste than nearly every other city in the nation. We strive to maintain and improve on that level of excellence. Our strategies include:

Waste Prevention

Reducing waste by not creating it in the first place.

Recycling & Composting

Expand recycling and composting through services, incentives, and regulations.

THE BENEFITS:

- Climate Protection
- Economic Benefit
- Less Waste
- Natural Resource Protection
- Healthy People
- Toxics Reduction

THE CHALLENGE AHEAD:

While Seattle continues to be a leader in recycling and composting, approximately half of what we send to the landfill is either food waste or recyclable material. We can do better!

Waste Prevention

1 GOAL INCREASE PRODUCTS WHERE WASTE IS MANAGED BY MANUFACTURERS

PROGRESS

In part because of Seattle's efforts, manufacturers are now responsible for safe handling of these discarded products:

- **Electronics** (2006)
- **Mercury-containing lights** (2010)
- **Medicines** (2013)

Future product stewardship laws for:

- Paint
- Carpet
- Batteries

2 GOAL BAN OR DISCOURAGE PROBLEM MATERIALS

PROGRESS

2011 PHONE BOOK OPT-OUT

Over 20% of Seattle's residents have "opted out" of phone book delivery:

Estimated **1M** fewer delivered in 2011 vs 2010 → **900 tons** of paper saved

2009 POLYSTYRENE CONTAINER BAN

A 2009 polystyrene food container ban requires that all single-use food packaging be either compostable or recyclable:

66% decrease in polystyrene in commercial garbage from 2008 to 2012

2012 PLASTIC BAG BAN

Plastic bag pollution poses serious threats to Puget Sound's wildlife.

292 M plastic bags used annually in Seattle before 2012. Only 13% were recycled.

The 2012 Ban **eliminated** the use of these bags.

Recycling & Composting

3 GOAL REDUCE WASTE SENT TO LANDFILL

PROGRESS

27% decrease in landfill waste over the past 7 years:

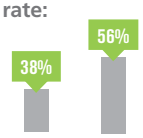
438,400 tons in 2006 → **318,600 tons** in 2013

360 lbs per resident is sent to the landfill annually in Seattle

4 GOAL RECYCLE 70% BY 2022

PROGRESS

Overall recycling rate:



Average monthly pounds of recycleables collected per household:

Single Family: 63 lbs.

Multi Family: 30 lbs.

SINGLE-FAMILY HOUSEHOLDS

70% of waste recycled in 2012

We achieved our highest ever recycling rate in 2012. Key to this success has been organics collection & disposal bans.

MULTI-FAMILY SECTOR

30% of waste recycled in 2012

While achieving their highest recycling rate yet in 2012, more work is needed to help landlords & tenants recycle more.

COMMERCIAL SECTOR

61% of waste recycled in 2012

2,500 businesses recycled organic waste in 2012 compared to 900 in 2008.

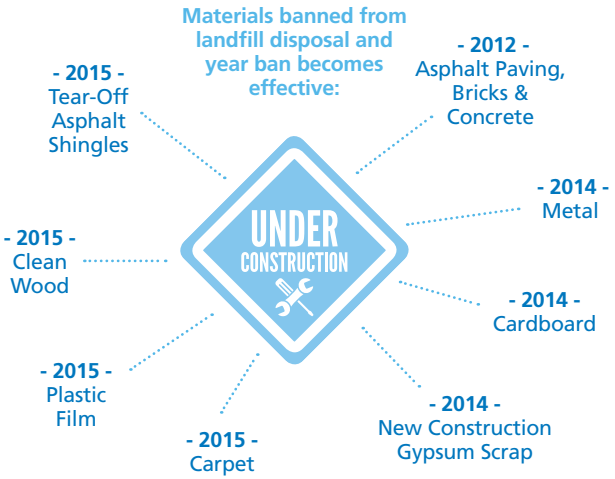
THE LEADING EDGE

CONSTRUCTION & DEMOLITION PROGRAM

As Seattle continues to grow, it's imperative that we look for better ways to manage our waste stream. Waste from construction and development is substantial. Recently, the City took steps to significantly reduce the waste from these activities that goes to our landfills. New requirements have been adopted for new construction, remodeling and demolition activities in Seattle.

SEATTLE CITY COUNCIL HAS ADOPTED A GOAL FOR RECYCLING 70% OF CONSTRUCTION WASTE BY 2020.

70% BY 2020



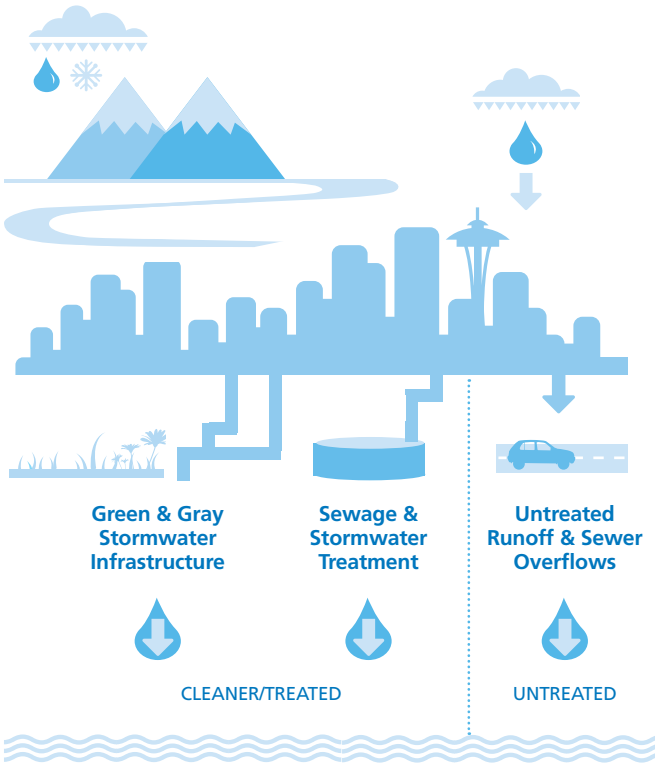
As of January 1, 2014 construction projects file a Waste Diversion Plan before starting a project, and at the end, they file a report on materials delivered to recycling facilities.

Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT

Water

Enhancing quality of life and health through our water system

Seattle is committed to delivering high-quality drinking water and protecting our local waterways.



OUR STRATEGIES:

Seattle will cost-effectively manage the drinking water supply and stormwater runoff while protecting public health and the environment.

Water Conservation

Ensure that saving water continues to be second nature for people by providing excellent education, tools & incentives.

Watershed Protection

Protect water quality & restore habitat in the mountain watersheds that supply our drinking water.

Pollution Prevention

Partner with the community to stop pollution at its source.

Sewage Overflow Prevention

Use system improvements, green stormwater infrastructure, & flow reduction strategies to protect our waterways.

THE BENEFITS:

- Clean Waterways
- Healthy People
- Healthy Fish & Wildlife
- Natural Resource Protection
- Vibrant Neighborhoods
- Climate Preparedness

THE CHALLENGE AHEAD:

For more than 100 years, Seattle has enjoyed plentiful and high-quality drinking water from protected mountain sources. In the future, we will likely see more rain, leading to more sewage overflows and polluted stormwater runoff. Protecting our water supply from the effects of climate change and polluted runoff will preserve our quality of life for future generations.

Water Conservation

1 GOAL USE LESS THAN 105 MILLION GALLONS OF WATER PER DAY*

ACHIEVED!

PROGRESS

In 2013, **93M** gallons per day (mgd) were used by customers of the Saving Water Partnership.

The **Saving Water Partnership** is a collaboration between Seattle Public Utilities & 18 other water utilities to help our region conserve water.

22% increase in population since 1990.

Even so, there has been a **24%** decrease in regional water consumption since 1990

This is a 38% decrease in water consumption per person!

From **126** gallons/day

To **78** gallons/day

* for the Saving Water Partnership

Watershed Protection

2 GOAL DECOMMISSION 236 MILES OF LOGGING ROADS IN CEDAR RIVER WATERSHED BY 2020

PROGRESS

Decommissioned to date: **152** miles

Left to go: **84** miles

Decommissioning decreases sediment input into adjacent streams and habitat fragmentation, benefiting aquatic animals and water quality.

Pollution Prevention

3 GOAL MANAGE 700 MILLION GALLONS OF RUNOFF ANNUALLY WITH GREEN INFRASTRUCTURE BY 2025

PROGRESS

Annual runoff managed through **Green Stormwater Infrastructure:**

Today: 100 M GAL — By 2025: 700 M GAL

GSI Methods: Bioretention and rain gardens, permeable pavement, green roofs, urban canopy cover, rainwater harvesting, soil building, biofiltration, and depaving.

4 GOAL INCREASE POLLUTANT REMOVAL FROM ROADWAYS

PROGRESS

50% increase in pollutant removal between 2011 & 2013

	Miles Swept:	Pollutants Removed:
2011	6,650 MILES	66 tons
2013	10,330 MILES	99 tons

Street sweeping is an incredibly simple and cost-effective method of preventing pollution from getting into our waterways.

Sewage Overflow Prevention

5 GOAL REDUCE SEWER BACKUPS TO LESS THAN 4 PER 100 PIPE MILES BY 2025

ACHIEVED!

PROGRESS

3.1 sewer backups per 100 miles of pipeline in 2013

Fats, oils, and grease (FOG) (i.e. sauces, cooking oil, food scraps & oil from cooked meats) build up in sewer pipes & cause costly blockages & sewer backups.

Keep your drains fat free: Dispose of FOG in a sealed container in your garbage.

6 GOAL REDUCE COMBINED SEWER OVERFLOWS TO NO MORE THAN 1 OVERFLOW PER OUTFALL PER YEAR BY 2025

PROGRESS

Overflows from **52 outfalls** are controlled

87 Outfalls are owned by the City of Seattle. The outfall is considered controlled when it has no more than one overflow per year.

THE LEADING EDGE

SEATTLE'S RAINWISE PROGRAM

Rain that falls on roofs, roads, driveways and compacted soils collects quickly, then runs off into local waterways. During heavy rain storms this "stormwater" can back up and flood homes, overflow sewers, and erode hillsides. It also carries pollutants from cars, lawn chemicals, cleaners and pet waste into Seattle's creeks and swimming beaches.

The **RainWise program** helps homeowners reduce this polluted runoff by providing rebates for natural drainage solutions on their property.

AS OF JANUARY 2014, SEATTLE residents have installed more than: 350 RAINWISE PROJECTS

This filters 5.4 M GALLONS of stormwater annually

The average project controls the runoff from **1,398 SQ FT** of roof area

Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT

Trees & Green Space

Enhancing our urban forest & natural areas

SEATTLE IS A TOP 10 CITY NATIONWIDE FOR urban forests. Our urban forest is accessible; it benefits from strong community partnerships; and is managed through specific policies aimed at protecting our trees.

PARKS AND NATURAL AREAS COMPRISE 11% OF SEATTLE'S LAND AREA.

465 parks & extensive natural areas

25 miles of boulevards

120 miles of trails

MORE THAN HALF OF OUR PARKLAND is natural beaches, forests, and wetlands. These natural areas are vital to growing a healthy and livable city and yield social, environmental, and economic benefits.

OUR STRATEGIES:

Seattle will preserve and enhance its open spaces, parks and trees to maximize ecological, social, and environmental benefits for all. Our strategies include:

Tree Canopy

Preserve and maintain trees, maximize benefits, and increase community engagement in taking care of trees.

Green Space

Provide safe and welcoming places for people to play, learn, contemplate, build community, and experience nature.

Stewardship

Engage the whole community in sustaining and enhancing our parks, natural areas, and trees.

THE BENEFITS:

- Healthy People
- Clean Waterways
- Clean Air
- Vibrant Neighborhoods
- Healthy Fish & Wildlife
- Connected Communities

THE CHALLENGE AHEAD:

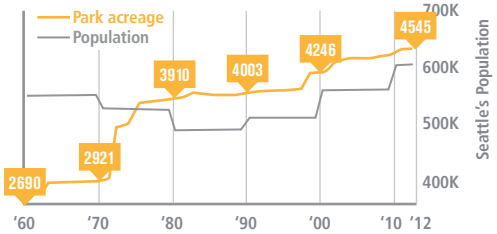
Since the majority of Seattle's trees are on private property, residents play a critical role in protecting our urban forest. Ongoing community support is absolutely essential to a thriving park system—including on-the-ground volunteer restoration and strong community partnerships that ensure Seattle parks and green spaces will continue to be treasured by future generations.

Green Space

1 GOAL ONE ACRE OF OPEN SPACE PER 100 RESIDENTS

PROGRESS

We currently have .75 acres per 100 residents.



2 GOAL ALL RESIDENTS LIVE WITHIN 1/4 MILE OF A PARK

PROGRESS

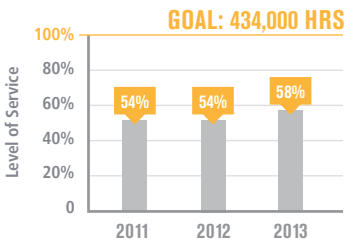
83% of residents → Live within **1/4 MILE** of a PARK

17% of residents → Live outside of **1/4 MILE**

3 GOAL 100% LEVEL OF SERVICE FOR CARE OF SEATTLE'S GREEN SPACES

PROGRESS

Current Level of Service:



Activities include: litter removal; turf, grass & plant care; invasive plant removal; and equipment repair.

Tree Canopy

4 GOAL 30% TREE CANOPY COVER BY 2037

PROGRESS

23% tree cover as of 2007.

New canopy cover assessment coming in 2016.

In 2013, City departments:

Planted 3,082 trees

Removed 917 trees (for power line clearance, public safety, tree failure, & development, etc.)

A net gain of 2,165 Trees

5 GOAL 2,500 ACRES OF FORESTED PARKLAND RESTORED BY 2025

PROGRESS

1,000 acres in restoration = THE COMBINED ACREAGE OF:

Seward Park + Discovery Park + Lincoln Park + Gas Works Park

40% of our goal has been accomplished since 2005

Stewardship

6 GOAL INCREASE VOLUNTEERS CARING FOR NATURAL AREAS AND TREES

PROGRESS

A **17%** increase over the last 3 years

Volunteers caring for trees & natural areas:

2011:	2012:	2013:
24,900	27,600	29,100

NEARLY 10,000 youth volunteered in Seattle parks in 2013

Contributing **55,000** hours!

7 GOAL PLANT 1,800 TREES IN NEIGHBORHOODS ANNUALLY THROUGH COMMUNITY PARTNERSHIPS

ACHIEVED!

PROGRESS

1,811 City-funded trees were planted in yards or planting strips in 2013

In addition, more than **350** community members got a City permit to plant trees at their own expense.

THE LEADING EDGE

GREEN SEATTLE PARTNERSHIP

The Green Seattle Partnership is a unique public/private partnership between the City of Seattle, Forterra, and thousands of community volunteers, who, with the support of businesses and nonprofits, actively work to restore and maintain Seattle's forested parklands. The Partnership relies on large-scale civic engagement to ensure that our children and their grandchildren continue to enjoy the health and economic benefits of vibrant parks, forests, and natural areas throughout Seattle.

648,000 volunteer hours since 2005

156,000 trees planted since 2005

120 forest stewards since 2005

Forest Stewardship Council™ certified - Seattle's forested parks meet the highest international standards in sustainable forest management

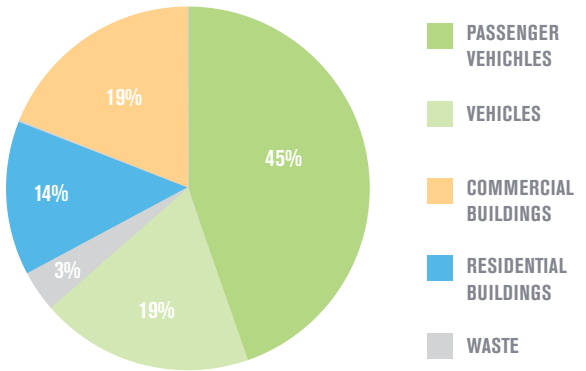
Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT

Climate Change

Doing our part to protect the climate

CLIMATE CHANGE IS THE ENVIRONMENTAL challenge of our time and it's imperative that Seattle do its part to protect the climate. Thanks to our clean electricity, green buildings, complete neighborhoods, and waste reduction programs, Seattle already has a lower footprint than our suburban neighbors, but we have more work to do to achieve our goal of carbon neutrality.

SEATTLE'S 2012 CORE GREENHOUSE GAS EMISSIONS*



* Seattle's core emissions are those the City can most directly affect - Transportation, Building Energy, and Waste.

2050 OVERALL GOAL:

The goals and strategies called out in the previous six sections of this document all support our bold goal of carbon neutrality, as defined as zero net emissions. The 2013 Climate Action Plan lays out a comprehensive strategy to dramatically reduce the footprint of our transportation system, buildings, and waste.

1 GOAL

SEATTLE IS CARBON NEUTRAL BY 2050.

2030 TARGET:

58% REDUCTION IN TOTAL CORE EMISSIONS BY 2030 (2008 baseline)

From 2008 to 2012:
Total emissions **increased 1%** but per person emissions **decreased 6%**.

Seattle's core emissions are **6 metric tons** per person – that's about half the U.S. average.

SECTOR SPECIFIC 2030 EMISSIONS TARGETS:

PASSENGER VEHICLES

82% REDUCTION FROM 2008 LEVELS

Total emissions increased: 6%

Per person emissions decreased: 1%

BUILDING ENERGY

39% REDUCTION FROM 2008 LEVELS

Total emissions decreased: 10%

Per person emissions decreased: 15%

SOLID WASTE

58% REDUCTION FROM 2008 LEVELS

Total emissions decreased: 17%

Per person emissions decreased: 23%

Preparing for a Changing Climate

Addressing climate change is not just a matter of reducing greenhouse gas emissions. We also must prepare for a changing climate. While flooding, heat waves, and extreme high tides are not new challenges in Seattle, climate change will shift the frequency, intensity, and timing of these events.

Projected Pacific NW Climate Impacts

SEA LEVEL RISE

Increase in sea level will lead to greater flooding and likely resulting in property damage and other economic losses.

MORE EXTREME PRECIPITATION

Wetter winters and more extreme precipitation events are expected and could stress our drainage system.

REDUCED MOUNTAIN SNOWPACK

Reductions in snowpack and changes in stream flows will affect how we operate Seattle's water and hydropower generation systems.

INCREASED TEMPERATURES

Increase in average temperatures and extreme heat events will increase the frequency and severity of heat stress, respiratory disease and energy demand for cooling.

2015 Preparedness

2 DEVELOP CITYWIDE CLIMATE PREPAREDNESS STRATEGY BY 2015

GOAL

Work is underway and the City is on track to produce a climate preparedness strategy in 2015 that will identify actions to increase Seattle's resilience to a changing climate, with a specific focus on minimizing disproportionate impacts on vulnerable populations, enhancing ecosystem services, and maximizing cost effectiveness and economic viability.

The Climate Preparedness Strategy will include actions to prepare Seattle's:

- Natural Systems
- Utility Systems
- Built Environment
- Community & Vulnerable Populations

Seattle's Climate Preparedness Toolbox

Sea Level Rise maps identify what parts of the City are most vulnerable under different sea level rise scenarios.

WindWatch provides short-term forecasts of high winds to help prepare for storm-related electrical outages.

Stream flow forecasts inform water reservoir management and help protect salmon.

RainWatch provides short-term forecasts and rain accumulation totals to help better prepare for and respond to incidents of extreme precipitation and urban flooding.

Our Goal	Our Progress	Quick Status	Goal Source
BUILDINGS & ENERGY			
1 105,200 Megawatt hours of electricity saved annually	121,290 Megawatt hours saved in 2013	ACHIEVED TARGET	I-937 (2006)
2 Reduce home energy use by 20% and commercial energy use by 10% by 2030 (2008 baseline)	3% reduction in home energy use; 2% reduction in commercial energy use between 2008 and 2012	MAKING PROGRESS	Climate Action Plan (2013)
3 20% energy savings in City facilities by 2020 (2008 baseline)	4% savings since 2008	MAKING PROGRESS	Resource Conservation Management Plan (2013)
4 Increase the number & level of green certified buildings	179% increase in LEED and 40% increase in Built Green buildings (with a greater percentage certified at higher levels) between 2008 and 2013.	MAKING PROGRESS	MOU for City Green Building (2008)
5 Acquire 15% of electricity from new renewable sources by 2020	Almost 5% of new renewable energy sources acquired in 2012	MAKING PROGRESS	I-937 (2006)
6 Increase solar energy production in the community	38% increase in solar capacity since 2008	MAKING PROGRESS	Department priority
TRANSPORTATION & LAND USE			
1 Only 25% of commuters drive alone by 2035	49% of commuters drove alone in 2012, down from 53% in 2011.	MAKING PROGRESS	State of the City (2014)
2 Increase transit boardings by 37% by 2040 (2012 baseline)	12% increase in transit boardings between 2010 & 2012	MAKING PROGRESS	SDOT Action Agenda (2012) & PSRC Transportation 2040
3 Increase the number of bicyclist and pedestrians	59% increase in bicyclists and 27% increase in pedestrians between 2011 and 2013 from counts at 50 locations citywide	MAKING PROGRESS	SDOT Action Agenda (2012)
4 45% of homes located within urban villages by 2030	42% of homes are located within urban villages (as of 2013)	ALMOST THERE	Comprehensive Plan (2005)
5 85% of jobs located within urban villages by 2030	84% of jobs are located within urban villages (as of 2012)	ALMOST THERE	Comprehensive Plan (2005)
6 Enhance neighborhood walkability	Seattle is the 8th most walkable large city	NEED DATA	Comprehensive Plan (2005)
7 Eliminate serious & fatal crashes by 2030	20% reduction in serious & fatal crashes between 2008 & 2013	MAKING PROGRESS	SDOT Action Agenda (2012)
FOOD			
1 Increase healthy food access	45% increase in Seattle early learning centers purchasing healthy food from local farmers More than 70% increase in Fresh Bucks use at farmers markets between 2012 and 2013	MAKING PROGRESS	Food Action Plan (2013)
2 Increase urban food production	104% increase in publically accessible land for growing food from 1990 to 2013 33% increase in P-Patch gardeners from between 2010 and 2013	MAKING PROGRESS	Food Action Plan (2013)
3 Increase local food consumption	$1 million increase in farmers market sales between 2010 & 2012	MAKING PROGRESS	Food Action Plan (2013)
WASTE			
1 Increase products where waste is managed by manufacturers	3 waste products now managed by manufacturers: electronics, mercury-containing lights, and medicines.	MAKING PROGRESS	Solid Waste Management Plan (2013)

Our Goal	Our Progress	Quick Status	Goal Source
2 Ban or discourage problem materials	3 product discouragement/bans in place: phone book opt out, expanded polystyrene ban, and plastic bag ban.	MAKING PROGRESS	Solid Waste Management Plan (2013)
3 Reduce waste sent to land fill	27% reduction in waste sent to the landfill over the last 7 years	MAKING PROGRESS	Solid Waste Management Plan (2013)
4 Recycle 70% by 2022	56% recycling rate in 2012, up 2% from 2011	MAKING PROGRESS	Solid Waste Management Plan (2013)
WATER			
1 Use less than 105 million gallons of water per day	93 million gallons per day used in 2013	ACHIEVED TARGET	Saving Water Partnership Stated Goal (2013)
2 Manage 700 million gallons of runoff by 2025 with green infrastructure	Manage about 100 million gallons with green infrastructure currently	MAKING PROGRESS	GSI Executive Order (2013)
3 Increase pollutant removal from roadways	50% increase in pollutant removal between 2011 and 2013	MAKING PROGRESS	Department priority
4 Reduce sewer backups to less than 4 per 100 pipe miles by 2025	Approximately 3 sewer backups per 100 pipe miles in 2013	ACHIEVED TARGET	SPU Consent decree (2013)
5 Reduced sewer overflows to one outflow per year by 2025	52 out of 87 outfalls are controlled	NEEDS WORK	SPU Consent decree (2013)
6 Decommission 236 miles of logging roads in Cedar River watershed by 2020	152 miles decommissioned to date	MAKING PROGRESS	SPU Habitat Conservation Plan (2000)
TREES & GREEN SPACE			
1 1 acre of open space per 100 residents	.75 acres of parkland per 100 residents (2012 data)	MAKING PROGRESS	Comprehensive Plan (2005) and Parks & Recreation Development Plan (2006)
2 All residents live within 1/4 mile of a park	83% of residents live within 1/4 mile of a park (as of 2010)	MAKING PROGRESS	Comprehensive Plan (2005) and Parks & Recreation Development Plan (2006)
3 100% level of service for care of Seattle's green spaces	58% level of service for green spaces in 2013	NEEDS WORK	Draft Parks Legacy Plan (2014)
4 30% tree canopy cover by 2037	23% canopy cover as of 2007	NEEDS DATA	Urban Forest Stewardship Plan (2013)
5 2,500 acres of forested parkland restored by 2025	1,000 acres of forested parkland in restoration	MAKING PROGRESS	Green Seattle Partnership 20 Year Strategic Plan (2005)
6 Increase volunteers caring for natural areas and trees	17% increase in Parks volunteers between 2011 and 2013	MAKING PROGRESS	Department priority
7 Plant 1,800 trees in neighborhoods annually through community partnerships.	1,811 City-funded trees were planted in yards or planting strips in 2013.	ACHIEVED TARGET	Urban Forest Stewardship Plan (2013)
CLIMATE			
1 Seattle is carbon neutral by 2050	1% increase in total core emissions; a 6% decrease in per person emissions	NEEDS WORK	Climate Action Plan (2013)
2 Develop citywide climate preparedness strategy	In development	MAKING PROGRESS	Climate Action Plan (2013)

MOVING the NEEDLE

SEATTLE'S ENVIRONMENTAL PROGRESS REPORT

— 2014 —

PREPARED BY: SEATTLE OFFICE OF Sustainability & Environment

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