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#### CITYVISION MAGAZINE VOL.7 NO.5

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#### Every four years, the United States Department of Defense publishes its Quadrennial Defense Review (QDR),

a document that defines the strategic challenges facing the nation and the world and serves as the foundation for reshaping the nation's military forces to meet those challenges. In both 2010 and 2014, the QDR identified climate change as a significant global and national threat. The 2014 QDR concludes: "As greenhouse gas emissions increase, sea levels are rising, average global temperatures are increasing, and severe weather patterns are accelerating.... These effects are threat multipliers that will aggravate stressors ... such as poverty, environmental degradation, political instability, and social tensions...."

In May 2014, the United States Global Research Program issued its National Climate Assessment, including regional assessments of climate impacts. The regional assessment for the Pacific Northwest finds that climate change is already impacting snowmelt, precipi-



CITIES NEED **TO PLAN** FOR CLIMATE IMPACTS.

tation, and water supply, as well as creating vulnerabilities related to sea-level rise, erosion, ocean acidity, and wildfires.

This year in Washington state, we observed firsthand the "threat multiplier" nature of a changing climate in the form of fires, droughts, floods, and reduction in snowpack. While it is not credible to claim that a specific weather event was caused directly by climate change, such adverse events have been happening with greater frequency and intensity over the past 20 years, a fact consistent with a warming climate.

The primary strategies for addressing climate impacts are "mitigation"-reducing greenhouse gases (GHG)-and "adaptation"-preparing for changes already under way. Cities need to recognize and plan for impacts on infrastructure such as water, surface water, wastewater treatment, transportation, and public safety. Also, reducing GHG will likely bring changes in energy, transportation, and economics. Responding, or failing to respond, to climate change will impact finances and risk management and raise liability issues.

This issue of Cityvision is dedicated to discussing issues associated with climate change, adaptation, and mitigation. Your AWC is working to assist cities in meeting these new challenges.

Paul Roberts

Councilmember, Everett



**SEPTEMBER/OCTOBER 2015** 

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Association of Washington Cities Inc. 1076 Franklin St. SE Olympia, WA 98501 360-753-4137 800-562-8981 Fax: 360-753-0149 awcnet.org

# 9/10.15



#### Welcome note **CityBeat**

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Fires, droughts, floods-what may sound apocalyptic is rather a challenge Washington cities are facing head-on. And in our popular **NOTED** feature, we filter out the nitty-gritty of the EPA's recently announced Clean Power Plan.

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#### The Heat Is On

When it comes to climate change, it's up to cities across the state, no matter their size, to take the initiative on meeting the varied challenges of a warmer world. By Ted Katauskas

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22 Expert perspectives on cutting carbon emissions and tackling growth amid population and climate pressures. Plus, Kenmore builds community as it builds a new city hall, earning an AWC Municipal Excellence Award.

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Working together, we'll have more than a snowball's chance on climate change.

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## Congratulations City Champions and Transportation Champions!

These AWC awards acknowledge the hard work and dedication of legislators who championed critical city issues during the 2015 legislative session.

#### **City Champions**

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#### **City Champion All-Star**

**Representative Larry Springer** 

#### **Transportation Champions**

Governor Jay Inslee Representative Judy Clibborn Senator Curtis King Representative Jake Fey Senator Joe Fain Representative Ed Orcutt Senator Steve Hobbs Representative J.T. Wilcox Senator Marko Liias

Thank and congratulate these Champions and encourage your legislators to become 2016 Champions!



#### **INSIDE:**

NOTED Scouring the EPA's Clean Power Plan THE QUESTION How are you working on climate change? CALENDAR AWC Regional Meetings and more

#### Sea Level Best

Flood-prone Olympia acts to stem a climate-change tide.



**TWENTY-FIVE YEARS AGO**, the City of Olympia distinguished itself as one of the first municipalities in the nation to adopt a comprehensive policy regarding climate change. And for good reason: when it comes to global warming– induced sea-level rise, Olympia happens to be one of the most vulnerable big cities in the state, if not the nation.

With a downtown that sits upon a bed of settling dredge sediment just a few feet above high tide at the southernmost tip of Budd Inlet, a tidally influenced arm of Puget Sound that already crests at 18 feet or more on swollen high tides, local citizens occasionally have to wade out to their cars. For locals, Budd Inlet is like a bathtub filled to the brim, and the threat of rising waters from Puget Sound—by up to more than four feet by the turn of the next century—looms like a leaky faucet that can't be shut off.

Which is why, responding to citizen concern in May 1990, Olympia's council established a global warming task force to examine how vulnerable Washington's *continued on page 10* →





# Up in Smoke

#### Chelan businesses feel the heat.

#### NESTLED AT THE FOOT OF THE

Cascades, with glittering waters that stretch for over 50 miles and sustain a picturesque, fertile valley filled with vineyards and orchards, Lake Chelan is a summer vacation paradise. Except this year, when wildfires kept the tourists away.

Burning over 80,000 acres, the Chelan Complex Fire—one of dozens of climate change-associated infernos that plagued the state for yet another summer, even claiming firefighters' lives in nearby Twisp—damaged homes, businesses, and crops throughout the Lake Chelan Valley. The damage didn't stop there: the lack of seasonal visitors meant businesses that depend heavily on tourism, a huge portion of local commerce, saw a significant loss in revenue.

City Administrator Paul Schmidt notes the loss to city revenue from cancellations at one city-owned RV park: "We've issued \$54,000 in refunds to date," he says. "Our loss compared to this time last year is roughly \$190,000-that's 22 percent of our revenue." Even once the worst local blaze was contained, lingering smoke from other fires throughout Washington and Idaho kept visitors away for most of August, a major chunk of Chelan's roughly 100-day tourist season. This left tourism-dependent businesses like hotels, restaurants, and retail hurting. According to a Lake Chelan Chamber of Commerce survey, 17 percent of

businesses asked reported an estimated loss of revenue of over \$100,000.

The downturn may also have longterm effects, says Chelan Realtors Council President Russ McClellan, whose real estate business came to a full stop during the fire. "People come to visit and fall in love with the valley and our beautiful lake, so they might decide to look for a summer home," McClellan explains. "We didn't get any of those buyers this year."

At press time the fire was 80 percent contained, air quality had improved, and the city was hoping for a late-summer (and early fall) boost. But the financial implications will likely continue to put a strain on Chelan businesses. McClellan, for one, says they won't know the full impact on real estate until later in the year, but he remains optimistic.

"At the end of the day, it's encouraging to see the cooperation and love and generosity that comes from adverse conditions," he says. "This is a unique community."

-Katie Vaughan





Nationally, carbon dioxide emissions from fossil fuel combustion are the states' single largest source of greenhouse gas emissions (GHG). How does Washington rate?

CO2 EMISSIONS, IN MILLIONS OF METRIC TONS (2013)

**42.62** Transportation

12.68 Industrial

**11.58** Electric power

5.26 Residential

3.84 Commercial

WASHINGTON RANKS 28TH IN ENERGY-RELATED CO2 EMISSIONS (2011)

The state's GHG emission reduction goals:

**2020** Reduce to 1990 levels

**2035** 25% below 1990 levels

**2050** 50% below 1990 levels

Sources: U.S. Environmental Protection Agency, U.S. Energy Information Administration, RCW 70.235.020

#### SLICE OF LIFE

# Well Worn

#### Tiny Startup acts to keep its water flowing after a drought scare.

THIS SUMMER'S DROUGHT HIT HARD

all across the state, but few areas were affected as harshly as the small, remote towns and cities that rely on single water sources and small budgets to maintain them. That was the case in unincorporated Startup in Snohomish County.

The problems began in early July, when one of Startup's two wells stopped producing water. The wells, which sit a mere 50 feet away from each other, draw from the same aquifer and act as the community's main water source. The sudden drying of one well led residents to

Startup's intertie with Sultan is not a short-term solution but can act as an effective fallback plan should the wells dry up again in the future.

fear that the second, which is only eight feet deeper than the first, might not be far behind.

Startup declared a state of emergency and established fees for excessive water usage. Managing the demand for water created a shortterm solution and earned Startup accolades from the Washington Department of Health, but with a single well servicing a community of roughly 550 residents it was time to start thinking long-term.

Startup called in Seattle-based public works engineering consultant firm Gray & Osborne, which first aided the community in determining why the well had run dry in the first place. "It is definitely related to the drought, and the problem was exacerbated by sediment that had also accumulated in the well," says Corinne Travis, a civil engineer with the firm.

Fortunately, Startup has seen rainfall in the area since calling in Gray & Osborne. A plan for a third well, which was on the table when Startup thought its second well might also fail, has been scrapped for the moment. And while the region's aquifers have started to recharge, an intertie with the neighboring city of Sultan—which would physically

> connect the water supplies of the two communities in case of another drought, the sort of backup connection Sultan itself currently has with Everett—has been proposed.

Startup "made a formal request to the Sultan city council to see if the council would be supportive of an intertie," says Mick Matheson, public works director and city engineer for the city of Sultan. The council was

supportive, and now all that remains to be seen is whether Startup can find funding for the nearly \$1 million required to establish the intertie. In any case, Startup's intertie with Sultan is not a short-term solution—design and construction of the intertie could take up to a year—but can act as an effective fallback plan should the wells dry up again in the future.

"I do think that it's a good reminder for all water systems that relying on just one source, just one particular type of source," says Travis, "can cause reliability issues if the source is compromised in any way."

—Brandon Staley

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#### NOTED

In 2013, coal was approximately 15% of the state's energy mix. This rule focuses on reductions from existing power plants. The transportation sector is the state's largest source of greenhouse gases.

Washington's use of hydropower-even with its year-to-year variability-will help the state meet reduction targets because hydropower doesn't release greenhouse gases.

> Washington's 2030 rate goal is 983 pounds of CO<sub>21</sub> a middle-of-the-road goal. Its 2030 mass goal is 7360,183 short tons of CO<sub>2</sub>.

Ecology, Commerce, and the Utilities and Transportation Commission are scheduling community stakeholder meetings.

#### CUTTING CARBON POLLUTION: THE EPA CLEAN POWER PLAN

On August 3, President Obama and the Environmental Protection Agency announced the Clean Power Plan-a historic step in reducing carbon pollution from power plants while maintaining energy reliability and affordability for ratepayers and businesses. EPA also issued final Carbon Pollution Standards for new, modified, and reconstructed power plants.

#### WHAT IS THE CLEAN POWER PLAN?

EPA is establishing interim and final carbon dioxide (CO<sub>2</sub>) emission performance rates for fossil fuel-fired electric steam generating units (generally coal- and oil-fired power plants) and natural gasfired combined cycle generating units. States must develop and implement plans that ensure the power plants in their state achieve the interim CO<sub>2</sub> emission performance rates between 2022 and 2029 and the final CO<sub>2</sub> emission performance rates for their state by 2030. When the Clean Power Plan is fully in place in 2030, carbon pollution from the power sector will be 32 percent below 2005 levels. Each state has the flexibility to select a strategy that best suits its needs, with three measures to use for interim and final goals: • A rate-based state goal measured in pounds of CO<sub>2</sub> per megawatt hour? • A mass-based state goal measured in total short tons of CO<sub>2</sub>r

• A mass-based state goal with a new source complement measured in total short tons of CO2.

The final rule also gives states the option of working on multistate approaches, including emissions trading. Trading rate credits (for the rate-based system) or allowances (for the mass-based system) lets affected power plants use out-of-state reductions without upfront interstate agreements.

The flexibility of the rule allows states to reduce costs to consumers, minimize stranded assets, and spur private investments in renewable energy and energy efficiency technologies and businesses. To ensure opportunities for communities-particularly low-income communities, minority communities, and tribal communities-to continue to participate in decision making, EPA is requiring that states demonstrate how they are actively engaging with communities as part of

their public participation process in the formulation of state plans. States will be required to submit a final plan, or an initial submittal with of extension request, by September 6, 2016. Final complete state plans must be submitted no later than September 6, 2018. A long compliance period and phased-in reductions give states the time and flexibility they need to maintain system reliability. States are periodically required to compare achieved and projected emission levels. Fossil fuels will continue to be a critical component of America's energy future. The Clean Power Plan simply makes sure that fossil fuel-fired power plants will operate more cleanly and efficiently, while expanding the capacity for zero- and low-emitting power sources.

Sources: EPA August 2015 Fact Sheet6

State plans can include incentives for early adopters. Washington's rate reduction is 37% by 2030. The closure of the Transalta coalfired plant in 2025 and other existing policies will help the state reach that goal.

States can meet EPA goals by making fossil fuel power plants more efficient, using more low-emitting power sources, expanding renewable energy generation, or increasing energy efficiency.

> The plan offers incentives for early investments in energy efficiency and renewable energy projects in low-income areas.

For more information: awcnet.org

CITYVISION MAGAZINE SEPTEMBER/OCTOBER 2015

#### The Question

#### How are you working on climate change?



**DOUG SCHULZE** *City Manager, Bainbridge Island* 

We are currently updating our Comprehensive Plan. Community members have expressed a high level of interest in making sure that our updated plan addresses climate change, so we are developing sustainability policies and goals as well as giving appropriate consideration to the potential impacts of climate change on Bainbridge Island.



**GEORGE BRADY** Mayor, Pateros

We don't drink the "man caused global warming" Kool-Aid, but we do believe the Earth has cycles of wet and dry, cold and hot. At least in our area, we are in a dry cycle, so we are conserving water in all of our parks as best we can. We also are concerned about wildfires—especially after the last two years in Okanogan County and are working to do water/storage upgrades that will increase our abilities to fight fire.



RAGAN MYERS Tourism and Events Coordinator, Long Beach

We are seeing changes—humpback whales in the mouth of the Columbia River and brown pelicans by the thousands, with crowds lining up to watch. No snow in the mountains last winter, so people came to the beach where the weather was extremely mild. I'm not a biologist; I work on tourism, and this is bringing in people. But why is it happening?

#### **TRAINING HIGHLIGHTS**

#### ELECTED OFFICIALS ESSENTIALS WEBINAR

**December 5 - Statewide viewing locations** AWC's Elected Officials Essentials live webinar is your intro to city hall, a look at both the legal and personal sides of how you can build your leadership capacity. We're taking the training to you, making it mobile, meaningful, and manageable. During the day, you'll network with a group of your peers, interact virtually with trainers who've worked extensively with cities, and spend time together examining some very real municipal scenarios with the help of an on-site city attorney. The morning session covers your basic legal obligations and liabilities and your statutory role and responsibilities. In the afternoon, you'll explore what makes your city hall work meaningful—how you as a leader contribute to a greater good and a healthier community.

#### AWC REGIONAL MEETINGS October 1-December 4

You wanted the regional meeting connections and information, with a little more convenience. Because your time matters, AWC piggybacked four of its regional meetings onto your existing local meetings. You'll hear from AWC's new CEO, Peter King, as he describes where the association is going in 2016 with its Operation: Strong Cities initiative.

Oct 1 Fife (with Pierce County Cities & Towns) Oct 8 Pullman Oct 14 Chelan Oct 15 Mountlake Terrace (with Snohomish Cities & Towns) Oct 20 Vancouver Nov 10 Yakima Nov 12 Bellingham Nov 12 Suguamish (with Kitsap Regional Coordinating Council) Dec 4 Liberty Lake (with Northeast Washington Regional Mayors)

#### WELLNESS PLANNING FORUMS

#### OCTOBER

- 1 Spokane
- 8 Richland
- 15 Bothell 22 Centralia
- 29 Chelan

#### **OTHER TRAININGS**

#### OCTOBER

28-29	<b>Retro Safety Academy</b>
	Chelan
20-70	Member Expe Cholon

#### NOVEMBER

- 12-13 Retro Safety Academy Issaquah
  - 15 Growth Management Act 25th Anniversary Conference Tacoma

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#### Sea Level Best continued from page 5

capital city might be to the effects of climate change and to outline a plan to protect it.

"Rather than considering the issue of global warming and sustainability as outside the domain of local government because so many factors are beyond their control, Olympia has chosen to do what it *can* do," the task force wrote in the report it submitted to Olympia's council in December 1991. "Such choices by individuals and organizations may well lead the way to the necessary actions on a global scale."

The task force—essentially the public works department's policy and program development division, plus students from Evergreen State College—articulated the basic tenets of what would become the city's Global Warming Initiative, a three-tier plan devoted to an overall reduction of municipal greenhouse gas emissions, an increase in tree cover, and an investment in infrastructure and new policies.

"It's interesting to go back and read that 1991 document and realize it's still contemporary and valid," says Andy Haub, Olympia's water resources director, whose tenure with the city's public works department dates to the founding of the task force. But for the next 25 years, like many cities, Olympia concentrated on the greenhouse gas equation—doing things like purchasing fuel-efficient fleet vehicles and green power—while, as Haub confesses, "we really didn't pursue the more challenging issue of sea-level rise." Then public concern following the theatrical release of Al Gore's 2006 *An Inconvenient Truth* helped make sea-level rise a priority.

The council allocated \$250,000 to a research account on sea-level rise, which Haub's department used to purchase aerial photography, run computer simulations of downtown flooding scenarios, and commission an Edmonds-based civil engineering firm to draft a detailed technical report outlining infrastructure investments the city might make to flood-proof its downtown, from \$65,000 one-way valves on storm drains to an \$8.5 million flood barrier system that would protect the urban core from a one-foot rise in sea level and could be expanded to meet projected needs.

"When we get extreme high tides in Olympia, sea-level rise is visible and tangible: this is our key issue and focus relative to climate change," says Haub, adding that the city has no intention of abandoning its downtown. "I don't think that the costs are that high; it's just a matter of starting."

Before the waters rise. –*Ted Katauskas* ©



#### PROFILE



# No City Is an Island

Mercer Island Mayor Bruce Bassett on why citizens—and municipalities—can't act alone when it comes to climate change.



#### You relocated your family to Washington after you wound down your Silicon Valley tech start-up in 2001. Why Mercer Island?

I grew up in Olympia, and as our kids got to school age we started thinking about where we really wanted to be located, and that led us back to my roots in the Northwest. Mercer Island appealed to us as having a great mix of excellent schools, fine parks, and a small-town community feel, yet with ready access to the big cities nearby. I also wanted to get a lot more involved in community issues.

#### How did you get so involved with sustainability?

I was putting together the tools I needed to be able to measure my own carbon footprint, the thought being that if the goal is to lower our collective carbon footprint, I should figure out what my own contributions are and use that as a starting point with real data.

#### And what did your personal data show?

You find that you can make some very significant changes in your footprint. For instance, we installed a solar hot-water system on the roof, and we changed our cars over to hybrids. When you make those kinds of changes you significantly



lower your footprint, but what you find after you do those things is that it's fairly difficult to make further changes—you can only turn down the thermostat so far before your family rebels.

#### What's the biggest obstacle?

Discretionary air travel really racks up the carbon footprint quickly, and it's something that we do have the ability to change, as opposed to heating our homes enough to be comfortable.

#### But if you choose to limit your air travel, isn't someone else just going to take your empty seat?

If you and 200 other people don't book that trip, *then* that plane doesn't fly. In the aggregate, we do make a distinct difference in that respect.

#### Same goes for cities like Mercer Island, right?

We challenged our public to increase the rate of participation in our local utility's renewable energy program and upped the number of participants by 55 percent; we're up to 803 homes that have agreed to offset their power usage. That was a nice win that also got us a solar photovoltaic installation at our community center and led to the EPA's national Green Power Community award, which we received in 2013. And in 2014 we helped our citizens sign up to have photovoltaic installations on their roofs by bringing in a single installer who gave discount rates to folks because he's working in quantity rather than on a one-off basis.

#### Mercer Island also is a founding member of the King County-Cities Climate Collaboration, K4C.

We can do a small amount as a city government; we can do somewhat more by influencing our community. But to have a larger impact, we have to collaborate with neighboring jurisdictions and figure out how to all be pushing in the same direction. And



#### We need to engage in reducing our impact now, even if all you can do today is take the smallest first steps.

the K4C is really an ideal way for us to combine our energies and join forces: 11 cities that represent approximately 1.5 million people.

That influence can be used to address factors like the amount of power that comes from burning coal. One city alone really can't do much, but by having multiple cities all making that part of an agenda in working with the utility, we have a much larger voice.

#### What are some challenges Mercer Island has faced?

One of the things we have struggled with is: how do we, as a city, measure our carbon footprint on a regular basis? In the past, we have used software that was updating energy information only on an annual basis or every few years, which really is not frequent enough to be able to make decisions.

#### What you need is real-time feedback, like the efficiency gauge on a Prius.

That's a perfect example. If you've got the immediate feedback, you can make immediate decisions. A number of cities within the K4C are banding together to begin using a software package that will allow us to have much more frequent updates at a quite reasonable cost. Not only will we have the data and be making decisions wisely, but we'll also be comparing notes, because we will all be using similar tools and can learn from each other.

#### Where else is Mercer Island leading the climate-change charge?

We established what we call a green revolving fund, money that can be spent on energy improvements that will have a fairly short payback period. One of the things we spent that money on was the replacement of incandescent streetlights and parking lot lights with LED lights that have a higher up-front cost but a much longer life and far lower energy usage.

#### Any advice for local electeds?

Climate change is one of those things we can't put off. We need to engage in reducing our impact now; even if all you can do today is take the smallest first steps, it's the right time to take those steps rather than delaying any longer.

#### Or waiting for others to take the first step.

Cities have the ability to make a real difference. It's exciting not to have to wait for the federal government to take action, but rather to feel like we can make a difference ourselves. C

# By the Numbers

Cityvision looks at how Mercer Island became a green jewel on Lake Washington.

POPULATION DATA FROM THE 2010 U.S. CENSUS, UNLESS OTHERWISE INDICATED





Mayor Matt Larson and Associate City Planner Nicole Sanders help keep Snoqualmie on top of climate change developments.



# THF IS ON

WHEN IT COMES TO CLIMATE CHANGE, IT'S UP TO CITIES LARGE (AND ESPECIALLY SMALL) TO TAKE THE LEAD ON MEETING THE CHALLENGES OF A WARMER WORLD.

BY TED KATAUSKAS | PHOTOGRAPHS BY MIKE KANE

AYOR MATT LARSON dates his—and the city of Snoqualmie's—climate change epiphany to November 2, 2007, the day he signed the U.S. Conference of Mayors Climate Protection Agreement. Seattle Mayor Greg Nickels had launched the initiative in February 2005 on the day the Kyoto Protocol went into effect, challenging 140 mayors around the nation to join Seattle in adopting the reductions in greenhouse gas emissions embraced by 141 nations—but not the United States. It took two years, but by the end of a two-day U.S. Conference of Mayors climate change summit in Seattle that November—hosted by Nickels with keynote addresses by Michael Bloomberg, Al Gore, and Bill Clinton—Larson had decided to stop stalling and, like nearly 700 of his peers at that time, commit his city to the pledge. "Until then, my thinking had been, 'What can a little town like Snoqualmie hope to affect on climate change? This is a big-city problem, so let big cities take the lead,'' says Larson, now in his third term as mayor of one of the fastest-growing small cities in the state. "But look at the U.S. Census: 80 percent of the population lives in what is defined as an urban area, and 60 percent of those urban areas are suburbs and towns of 20,000 or less. On a per capita basis, suburban areas generate twice the amount of carbon pollution as dense urban areas. When you put that data together, I don't think small cities should be left off the hook on this."

Signing the pledge was the easy part. Convincing a council of seven—and a city of 12,000—to accept the challenge was a daunting task.

"When I first rolled this out in a meeting with the local community, a number of folks were just rolling their eyes," Larson recalls. "I was criticized by some who felt that this was a highly partisan issue, and that I was betraying my office as a nonpartisan mayor."

At the suggestion of City Administrator Bob Larson (no relation), Snoqualmie asked for help by partnering with a third party: faculty and graduate students from the University of Washington's Department of Urban Design & Planning, plus undergraduates from UW's Community, Environment & Planning program. In 2008 and 2009, the UW team spent nine months in Snoqualmie, polling the community, interviewing municipal employees, and auditing the city's operations. That research yielded two key documents: a sustainability survey, participated in by 2.4 percent of city residents, in which more than half said they would support and even pay for new city sustainability programs; and the City of Snoqualmie Sustainability Strategy, 93 pages outlining 77 action items recommended to jump-start the process, a list ranging from adopting anti-sprawl land-use policies and adopting building





-MATT LARSON, SNOQUALMIE MAYOR

codes that promote energy efficiency to increasing the city's recycling rate and planting more street trees to create shade and absorb carbon dioxide.

"When you take your partisan glasses off, the vast majority of our residents take this issue seriously," says Snoqualmie's mayor. "Gauging community support, we felt we could move more aggressively rather than doing a lot of education and outreach."

Based on the encouraging survey results, Snoqualmie's council endorsed the mayor's sustainability plan, and the city hired Nicole Sanders, the UW group's project leader who graduated in 2009 with a master's degree in urban planning, as an associate planner charged with, in addition to the usual duties, overseeing the implementation of the Sustainability Strategy. Six years later, with much of the program (now known as Green Snoqualmie) in place, Sanders is working to enshrine the strategy she helped articulate as a graduate student into the city's updated comprehensive plan.

"Small cities look at these programs and think, 'That's going to take a lot of time; let Seattle or Bellingham take care of it,'" says Sanders, a founding member and co-chair of the King County-Cities Climate Collaboration (K4C), a coalition of 12 cities and one county aligned around climate change. "That won't work. You can't just rely on big cities to fix it. Our hope is that showing that this is doable will galvanize additional cities to action.... Climate change is not just one big problem; it's a huge problem, a whole bunch of big problems in a big problem ball."

ELPING CITY, STATE, AND TRIBAL LEADERS

understand the many facets of that big problem ball, including how their constituents might be vulnerable to climate change and how best to prepare for it, is what the University of Washington's Climate Impacts Group (CIG) does best. Founded at the UW in 1995, CIG is one of the nation's oldest climate change research groups, a half-dozen academics and technical specialists providing decision-relevant climate impacts science and adaptation planning support for local and regional governments in the Pacific Northwest and beyond. For starters, CIG outreach and adaptation specialist Lara Whitely Binder usually answers two questions.

"Is climate change real?" she quotes. "Absolutely. There is no hesitation or doubt among the scientists who work here, and there never has been."

The next one: "Is it happening now, and are we causing it?" When we look at studies of global warming trends over the past 120 years, it is clear that temperatures are increasing, not only from the instrumental data, but also from changes in the Earth's physical systems-receding glaciers, declining snowpack, rising sea-surface temperatures, etc. The scientific community can say with 95 percent confidence that more than half of the warming observed globally since 1951 is due to human causes, principally activities that release large amounts of carbon dioxide and other greenhouse gases into the atmosphere. As we move to the scale of the Pacific Northwest, it becomes more difficult to determine how much of the warming that has been observed in this region is due to human causes versus natural variability. However, it is clear looking forward in time that rising greenhouse gases will cause significant warming in the Pacific Northwest."

Exactly what does that mean for Washington? Recent reports produced by CIG point to significant changes in the state's climate: By the 2050s, average annual temperatures could increase by as much as 5.8 degrees Fahrenheit, and spring snowpack could decline by 38–46 percent. By the later part of the century, the region could see a 17–21 percent decline in summer hydropower production; a tripling in the area burned by wildfire in the interior Columbia Basin; a 16 percent increase in the number of streams with summer water temperatures that are stressful for salmon; a 13 percent increase in the number of days with more than an inch of rain; increased health problems associated with more heat events and deteriorating air quality; sea-level rise in the range of 4 to 56 inches in Seattle and other parts of the state; and an increase in ocean acidity deleterious to marine life.

"The impacts of this global-scale problem will be felt most acutely at the state and local level," the 2009 report concludes. "State and local governments, businesses and private citizens will be forced to deal with the physical impacts of climate change and the associated economic costs of lost productivity, damaged infrastructure, and increasing emergency response costs, among others. At its core, adapting to climate change is an inherent part of providing for the safety, health, and welfare of a community."

"All cities need to be preparing for climate change," Whitely Binder says. "Don't assume you can wait until you can see climate change happening, because by that point it's too late. The sooner local governments start working on this, the more options and time they will have to start implementing the changes that are needed to increase resilience."

As a result, Washington cities, counties, and tribes

#### **CLIMATE CONTROL** Q&A WITH STEVE MODDEMEYER

Seattle-based sustainable development consultant Steve Moddemeyer talks about the decisions, infrastructure investments, and attitude adjustments your city needs to make now to thrive in an uncertain future defined by climate variability.



the interface between sustainability and infrastructure. When I went into consulting eight years ago, I was hired to help the International Water Association launch a program called Cities of the Future.

They wanted you to identify and showcase the world's most innovative municipal infrastructure projects. Why that? Because cities are developing globally now, and many of them are not taking into account the impacts of climate change, new technologies, and resource scarcity. When it comes to infrastructure, we're building 19th- and 20th-century cities, even though we're living in a 21st-century world with a lot of accelerated change.

#### How did you identify the innovators?

They actually sent me around the world for a couple of years to study the most advanced projects, which are adaptable to an uncertain



future because they are extremely efficient with energy and water use and at the same time very livable.

#### What's one example?

The granddaddy is Hammarby Sjostad, a district in Stockholm that was designed in the 1990s around high mobility and high sustainability. They closed all the loops, meaning they reused water, they reused energy, they thought about solid waste, brought in streetcars and bicycles, and created a real model about how cities and neighborhoods can develop in a sustainable wav.

#### But there's more than that.

They didn't have to wait for a special new technology to do this; they used existing tools in a creative way. They asked: How many renewables can we use? Can we use natural daylight? Can we use the heat of the earth? Can we use energy from solid waste that normally would be thrown away and recapture it? When we do all of that, we start shrinking the demand for water and energy from the outside, and the neighborhood can take care of itself. If the grid continued on page 19 →



increasingly are turning to CIG and climate change consulting firms like Seattle-based Cascadia Consulting Group to develop short-term and long-range climate adaption plans. The adaptation process typically begins with a "vulnerability assessment," an audit of how services and assets like existing bridges and stormwater systems can be expected to perform when subjected to various climate change scenarios. This is followed by development of an adaptation plan (such as replacement of existing sewer system with wider-diameter pipe) and an implementation plan (say, a schedule of replacing sections of obsolete sewer pipe with wider pipe as part of a long-term maintenance plan).

In May, the City of Tacoma hired Cascadia (with CIG as a subcontractor) to augment its climate action plan—created in 2008 by city staff and a citizen stakeholder group—with a climate risk assessment funded by utility revenues and a share of the city's planning budget. The final report, due in December, will assess Tacoma's overall vulnerability to climate change and offer a prioritized matrix of next steps and ideas for mitigating those risks.

"Our office of sustainability was focused on livability, protecting the local environment, and greenhouse gas mitigation by reducing fuel and energy use," explains Kristi Lynett, Tacoma's sustainability officer. "Three years or so ago, we became aware that leading cities around the country were starting to look at adaptation—how we need to prepare for climate change impacts that are coming or are here already.... Everyone is interested, but it's hard for folks to think out 85 years—because nobody in the room is going to be around in 85 years."

Yet Lynett anticipates that the \$50,000 invested in the study will be money well spent.

"For any kind of planning, it's not good to have your head in the sand," she cautions. "We all have earthquake planning, tsunami and lahar planning. I'm sure climate change soon will be just another component of risk management and resiliency planning. It's smart to be thinking about what could happen, but it's a policy decision as to how much risk you are willing to take."

At Climate Impacts Group, Whitely Binder echoes that sentiment.

"It may not be politically favorable to talk about planning for climate change, but there is value in planning for extremes," she says. "Planning for climate change is not about being green; it's not about doing something because it's good for the environment. It more falls in line with planning for the health and safety and welfare of your community. Climate change affects your community's economy, investments, and public safety—all of the things that are the normal day-to-day responsibilities of local government."

ND WHAT, LOCAL ELECTEDS MAY ASK, about the state's responsibilities when it comes to addressing climate change? Given how politically radioactive the issue seems to be in Washington's Legislature, frustrated citizen groups are seeking to circumvent legislative inaction via the initiative process—just as cities took the lead to counter federal intransigence on the Kyoto Protocol.

Consider the plight of the Carbon Pollution Accountability Act, an ambitious set of greenhouse gas reduction policies the governor announced in December 2014. To meet Legislaturemandated greenhouse gas reduction goals (reducing statewide emissions to 1990 levels by 2020 and halving 1990 levels by 2050) and generate income to bolster the state's flagging budget, Gov. Inslee proposed a California-style, market-based cap-and-trade system that sought to limit carbon pollution by requiring refineries and major polluters to pay for emissions. The revenue generated (projected at \$1 billion in the program's first year) would be invested in transportation and education programs and would provide tax relief for the state's lowest-income wage earners. But after six months and three special sessions, the Legislature set aside any climate change action and adjourned in July. On top of that, as a concession in a transportation package that green-lighted a \$15 billion Sound Transit light rail expansion, the governor agreed to a poison pill provision that promised to divert hundreds of millions of dollars from transit and pedestrian projects if he issued an executive order establishing a low-carbon fuel

#### THE IDEA IS SIMPLE: YOU TAX BAD THINGS LIKE POLLUTION INSTEAD OF GOOD THINGS LIKE ECONOMIC ACTIVITY.

-YORAM BAUMAN, CARBON WASHINGTON CO-FOUNDER

standard requiring the state's refineries to produce cleanerburning gasoline.

Into this fray entered Carbon Washington, a Seattle-based grassroots coalition that in March filed Initiative 732, a revenue-neutral carbon tax. Modeled after British Columbia's carbon tax (enacted in 2008), I-732 would impose a carbon emissions tax on certain fossil fuels and fossil fuel–generated electricity; revenues collected (from utility bills and at the pump) would be used to shave a percentage point off of the state sales tax, eliminate the business and occupancy tax for manufacturers, and, like the governor's ill-fated proposal, provide tax relief for low-income wage earners.

"The idea is simple: you tax bad things like pollution instead

goes down or the regional water system goes down, this community isn't affected because it's designed to provide many of its own needs.

#### What's the distinction between climate change mitigation and adaptation?

Mitigation—reducing the amount of carbon we put into the atmosphere-is very much about reducing air pollution. Adaptation is adapting to a climate that is already changing, and that ends up being mostly about water, because changes in the amount and timing of water is how the shifts in climate are going to manifest. Climate won't be as stable as we've grown accustomed to. In fact, it's not even going to be as stable as it's been the past 10,000 years.

### What does that mean for city leaders and urban planners?

When we're building a bridge or we're building a water supply system or a levee to hold back a flooding river, we can't just look at the past for guidance anymore. The instruction to the engineers is now shifting to: "Build us the system that that will best meet our needs now but is also the most flexible and adaptable to alternate potential futures."

#### From a climate change perspective, which is the greater worry for Washington cities: wildfires or floods?

Fires are terrible, but water and floods kill way more people. Still, they are connected. It's the cycle of drought, which leads to fire, which denudes the soil. When an intense rainstorm hits, it leads to erosion, which fills in the rivers and causes unprecedented floods. Ironically, in the aftermath of large wildfires we need to take care of those who are most vulnerable to flooding.

#### Why is social equity important to consider when it comes to planning for climate change?

If we think about what gives a community a capacity to adapt to change, it's the community itself, the social resilience: the connectivity between people in the community. We don't all have to agree with each other—we maybe have different politics—but if an event happens, that doesn't matter anymore. We all pull together.

#### Your takeaway?

One of the key things here is that we want to have a community that is smart and that survives a tough time. If people feel like they're victims, they have much less ability to figure out what they need to do. They get very passive, and being passive isn't what's needed. We need to reinforce the identity of our communities as being smart, and adaptable, and flexible—and that's a story that leaders can tell and that people respond to.

#### In other words ...

It's all about figuring out what it takes to thrive even when things go sideways. It truly requires personal responsibility; it requires thinking about our families; it requires thinking about our neighborhoods, and thinking about our city, and community, and region. At each level there are things that we can do to increase our capacity to adapt to an uncertain future, and that's really the main goal.

of good things like economic activity," explains Carbon Washington co-founder Yoram Bauman, an environmental economist and co-author of *Tax Shift: How to Help the Economy and Improve the Environment*. Since 2008, Bauman noted in a 2012 op-ed piece published in the *New York Times*, British Columbia's carbon tax has cut the province's fuel consumption by 4.5 percent, reduced corporate income tax from 12 to 10 percent, and made personal income taxes for people earning less than \$119,000 a year the lowest in Canada. As of the end of August, Carbon Washington's signature gatherers had collected more than half of the 315,000 endorsements required to put the measure on the November 2016 ballot. The initiative's prospects for passage are decent, but far from guaranteed, Bauman concedes. "But once we explain the idea to people, the more they hear about it, the more people like it," he adds. "People want to do something about climate change."

From another direction, the Alliance for Jobs and Clean Energy (AJCE), a powerful Seattle-based grassroots coalition of more than 150 environmental, social justice, faith-based, labor, and other groups, criticizes I-732 for not doing enough to address equity and social justice issues associated with climate change.

"Climate change disproportionately impacts those who are least able to cope with it, often low-income communities and

#### An EMERALD SHADE of GREEN

**IN 2005**, Washington's biggest and often described as the nation's greenest—city created headlines worldwide when Seattle Mayor Greg Nickels launched the Mayor's Climate Protection Initiative and challenged U.S. mayors to do what the federal government would not: meet the ambitious greenhouse gas (GHG) emissions reduction targets established by the Kyoto Protocol. Since then, more than 1,000 mayors representing 89 million Americans have accepted that pledge, vowing to reduce citywide greenhouse gas emissions to 7 percent below 1990 levels by 2012.

Did the Emerald City meet that goal? Short answer: no. According to the 2012 Seattle Community Greenhouse Gas Emissions Inventory published in April 2014, from 1990 to 2012 the city reduced GHG emissions in three core sectors—transportation, buildings, and municipal waste—by 4 percent. That's the bad news. But there was also good news:

"Between 1990 and 2012, Seattle's population and jobs grew 23 percent and 15 percent respectively, even while our emissions fell," wrote Jill Simmons, then director of the city's Office of Sustainability & Environment. "The 2012 GHG inventory demonstrates that cities can grow in population and economic activity while still reducing emissions." Even more impressive: during that same period, core emissions per Seattleite fell by 22 percent to about half the national average and a third lower than the average King County resident outside of Seattle.

Inspired by that success, in June 2013 Seattle's city council committed itself to an even more ambitious goal in adopting Resolution 31312, a Climate Action Plan that commits the city to achieving carbon neutrality by 2050. The biggest stumbling block: GHG emissions from the transportation sector, which accounted for 64 percent of the city's total from 1990 to 2012 and increased by 9 percent during that period. The plan established a series of benchmarks, short-term "We didn't want to just adopt a plan without a detailed roadmap of how we'd get there," explains Jessica Finn Coven, the former Washington State Director of environmental nonprofit Climate Solutions, who became the city's sustainability director in June. "The plan called for more than 80 short-term actions to help lay the groundwork to achieve our climate goals, and we've been tracking all of them. We're now working on what the city needs to do from 2015 to 2030."

Those efforts led to Seattle being named one of 16 Climate Action Champions in 2014 by President Obama. But there's no resting on laurels here; recently, Seattle hired

#### "Cities are also laboratories of innovation, showing how you can get things done locally to have a real impact on a global problem."

actions such as building bicycle lanes separated from automobile traffic and mandating audits of the least efficient commercial buildings, that would be implemented by 2015. Its long-term actions, including expanding a network of electric vehicle charging stations and implementing a minimum energy efficiency standard for the city's entire stock of buildings, would be implemented by 2030. Climate Impacts Group and other contractors to draft a climate resiliency strategy prioritizing investments the city will need to make to confront climate change.

"Cities are major emitters of greenhouse gases," Finn Coven says. "But they are also laboratories of innovation, coming up with innovative models that show how you can get things done locally to have a real impact on a global problem." –*TK* 

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IF SNOQUALMIE IS A MEMBER OF A BODY THAT REPRESENTS 70 PERCENT OF THE POPULATION OF THE LARGEST COUNTY IN THE STATE, THEN WE HAVE A VOICE.



-NICOLE SANDERS, SNOQUALMIE CITY PLANNER

communities of color, which face the brunt of environmental justice of any kind," explains Deric Gruen, spokesperson for Communities of Color for Climate Justice, many of whose members steer the AJCE. "First and foremost, just climate policy would center on equity. That might be people of color living in an urban neighborhood where fossil fuel pollution causes asthma, farmworkers facing a slower growing season with fewer crops and less income, or even low-income people who can't participate in the green economy because they lack the money up front needed to buy solar for their rooftops."

In search of equity, the AJCE planned to announce on October 6 its intention to send its own equity-based carbon pollution initiative to Washington voters in 2016. As that effort continued at press time, Alliance director Lisa MacLean e-mailed *Cityvision* to underscore why local electeds matter in the organization's quest for climate justice.

"Cities are on the front lines of climate change impacts to our economies, environment, public health and safety, and vulnerable communities," she writes. "Yet broader state and federal action is essential to accelerate the shift to a clean energy economy. Accounting for the cost of global warming pollution to our economy and communities would put enormous wind in the sails of these local efforts supplying revenue for local clean energy and transportation, but also by sending an even stronger positive market signal for local projects."

**IKE THOSE LONG UNDER WAY IN SNOQUALMIE.** Since adopting its sustainability plan in 2009, the city has been named Greenest Town in Puget Sound after winning Puget Sound Energy's Green Power Challenge in 2013 (for encouraging 8.2 percent of its ratepayers to enroll in the utility's green power program); dedicated a new green city hall, built to LEED Silver standards, including a 9.9-kilowatt rooftop solar array purchased with the \$40,000 it won from PSE; installed five electric-vehicle charging stations around the city; expanded the capacity of its stormwater system with retention ponds and bioswales; began using reclaimed water for irrigation; and used FEMA grants to elevate 146 homes in the city's most flood-prone neighborhoods, among other actions. Then there's being a founding member of the K4C.

"Before the K4C I was in a vacuum at my desk. Now I meet with folks from other cities every two to four weeks: we talk about what we're doing with our solarize programs and see where we shine and also where we need to step up," says Nicole Sanders, who adds that K4C is crucial in making sure Snoqualmie's voice is heard in Olympia, whether it's about greenhouse gas reductions or pressuring PSE to decommission coal-fired power plants—which generate 30 percent of the utility's power—and invest in solar, wind, and hydropower. "Every third lightbulb in my home is coalpowered; every third time I turn on the dishwasher, that's a coal-fired dishwasher. We won't make a difference in climate change if we just tell people to switch to LED lightbulbs.

"You can't help if you do it by yourself. We need to have a unified voice. The state won't listen to Snoqualmie alone, but if Snoqualmie is a member of a body that represents 70 percent of the population of the largest county in the state as the K4C does, then we have a voice."

Which also is the moral of this story for Snoqualmie's mayor.

"There's no reason or excuse in the world that small cities cannot engage in this as much as anyone else," stresses Matt Larson. "It's laughable for one small city to say, 'We can tackle climate change,' because by ourselves our impact is so insignificant. But this is part of a collective effort. If it's Snoqualmie and three hundred or three thousand smaller cities, then it's a real impact....

"I extend a challenge to smaller cities. I hope that's the role we play: an example of a small community and how we approached things—that by our mistakes and successes we have paved a way to make it easier for cities of our size to follow this same path." C

# CITYWISE

## 22 CUTTING CARBON EMISSIONS 24 BUILDING A CITY HALL FOR ALL 25 CONNECTING FARMS TO THE PEOPLE THEY FEED



#### **Source Codes**

Whether a city uses New Energy Cities' Energy Map and Carbon Wedge or similar tools, the key information to gather remains the same:

#### ENERGY USE

- How much energy do you use?
- What are the sources?
- What are the BTUs generated from each source?
- What are the emissions associated with each source?
- What are the various end uses of the energy?
- Which sources can be tapped for which end uses?

#### CARBON GOALS

- What reductions will federal regulations achieve?
- What reductions will state mandates achieve?
- What further regulations can produce further reductions?
- What end uses can be adjusted, and by how much?
- What energy sources can be adjusted, and by how much?

**ELIZABETH WILLMOTT**, Climate Solutions

# POTENTIAL ENERGY

PATHWAYS FOR CITIES LOOKING TO CUT CARBON EMISSIONS

**WHAT DOES IT TAKE FOR CITIES TO MOVE** from carbon reduction goals to actual decreases? In New Energy Cities' seven years of experience working with Northwest cities, we have found that getting on a path to deep carbon reduction boils down to three elements: carbon math, action-ready agendas, and a commitment to making it all happen.

#### **Carbon Math**

Many cities globally have set goals of cutting their carbon emissions in half by 2030, and by 80 percent by 2050. Some leaders have even adopted a goal of carbon neutrality. To decide what goal works for a community, city officials need to do some basic math on their sources and uses of energy and the associated carbon emissions. A valuable first step is to create an Energy Map, a standard element of New Energy Cities' work with cities that shows a community's energy system on a single page and in a simple format.

As a snapshot of the community's energy use and carbon emissions in a single year, the Energy Map is just the first step. For a community to understand how to achieve a deep cut in carbon emissions like the ones just mentioned, New Energy Cities develops a Carbon Wedge analysis.

Based loosely on a Princeton University initiative, the Carbon Wedge graphic depicts the scale of what it would take for a community to achieve a specific long-term goal. The graphic first shows the impact of existing and proposed state laws—such as energy codes and mandates for utilities to source a percentage of their fuel mix from renewable energy—and then outlines the ways

#### Elizabeth

Willmott is program manager for Climate Solutions' New Energy Cities, helping cities meet their carbon reduction goals.

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CITYVISION MAGAZINE

a community can close the remaining emissions gap. This includes actions to make buildings more efficient, increase the use of renewable energy, promote the use of cleaner vehicles, and reduce vehicle miles traveled.

The Carbon Wedge graphic shows in a colorful, easyto-read display how all of these efforts add up to a broader goal. It helps communities decide whether a long-term goal is achievable, as well as set sector-based targets. Above all, the Energy Map and Carbon Wedge analyses are communications tools to frame discussions between key players in getting on the path to a low-carbon future.

#### **Action-Ready Agendas**

Once city officials have adopted a goal, it's time to create an agenda for carbon reduction—and for city staff to roll up their sleeves on specific strategies in building energy efficiency, transportation, and a renewable power supply.

At a high level, a city's Energy Map and Carbon Wedge guide where and how elected officials and staff should look at taking action. For example, a city that gets electricity from coal and natural gas should prioritize partnering with its energy utility on widespread energy efficiency and large- and small-scale renewable energy, whereas a city that gets primarily carbon-neutral electricity from its utility should focus more on reducing carbon emissions from natural gas used in heating buildings and petroleum used in transportation.

Cities do not need to come up with carbon reduction strategies from scratch. Many cities around the U.S. and the world have policies, programs, and partnerships that provide best practices. For example, the Innovation Network for Communities' 2014 report *The Road to 2050: "80x50" Strategy Maps for Carbon-Neutral Cities* succinctly summarizes how leading U.S. cities are doing this work, including:

- Advocacy and partnership with energy utilities to reduce fossil fuel use
- Incentives and voluntary programs to promote public transit use, building energy efficiency, and electric vehicle adoption
- Streamlined permitting for rooftop solar installation
- Increased energy code compliance
- Requirements for buildings to report their annual energy use

The questions for a community starting out on this path are: Which policies or programs align most with our community priorities? How much do they cost? With whom can we partner to defray costs and build political will? How should we sequence the activities? New Energy Cities has helped a number of Northwest cities to answer these questions.

Ultimately, staff can package their recommendations in a climate action plan, a sustainable energy strategy, or a simple action agenda. The format matters far less than whether the city elected officials and management team sign off on a cohesive program of carbon reduction activities in transportation, buildings, and energy that add up to meeting the goal.

#### **Making It Happen**

Finally, the focus of implementation should be on mustering elbow grease to get the job done. The most important

#### Cities do not need to come up with carbon reduction strategies from scratch.

ingredient of a successful city carbon reduction effort is that staff have clear direction and robust support from elected officials and senior management, including sufficient capacity and resources to implement the top-priority reduction strategies.

The next steps are not free of obstacles. Lack of funding, for example, remains a significant barrier for many cities, especially in states that do not have carbon pricing revenue. However, communities that are deeply committed to carbon reduction, such as Boulder, CO, and Babylon, NY, have created their own innovative funding mechanisms, and an increasing number of cities are turning to green bonds for low-carbon, sustainable capital projects. Meanwhile, multijurisdictional partnerships such as the King County-Cities Climate Collaboration (K4C) and the San Diego Regional Climate Collaborative can help cities reduce costs by coordinating information-sharing and fostering efficient, collective action among city staff.

The road for cities to reduce carbon emissions is known. What we need now to travel that road is political will. C

#### **CITYWISE**



#### Another Notable Project

#### COUPEVILLE - TRIP REDUCTION PROGRAM

Coupeville (pop. 1,800) adopted a climate protection plan in 2007, with the goal of reducing community carbon emissions by 20 percent in 20 years. As part of the effort, the town launched a community trip reduction program, modeled after DOT's program, in which local residents committed to walking, ridesharing, and using public transportation. At the end of one year, 161 participants reduced CO<sub>2</sub> emissions by 756,950 pounds.

DOT supplied the town's parttime community sustainability coordinator with technical support and the state's Rideshare Online software, which let participants record trips and calculate the savings in dollars and carbon emissions. Town council authorized a small budget for incentives: monthly drawings for \$50 gift certificates to local businesses. Utility bill inserts publicized the program. Collaboration with Island County Health Department and the Sustainable Whidbey Coalition took the project Island-wide. Employers jumped in to explain the program, and coworkers figured out whether they lived close enough to rideshare.

Bottom line: 12,702 recorded commute trips via bus, car- and vanpools, walking, and biking; 39,493 gallons of saved gasoline; and \$281,644 saved.



#### WINNER, AWC Municipal Excellence Awards

# A HOUSE UNITED

KENMORE'S CITY HALL INVITES AND REFLECTS COMMUNITY VALUES.

WHAT SORT OF PATH does a city take toward winning AWC's Most Cool City Hall? If you're 2015 winner Kenmore (incorporated 1988), like many new cities you initially operated from what was meant to be temporary quarters, spending the first year in a 1,500-square-foot space in a small strip mall and later occupying a former bank branch building complete with a drive-up window. That 4,000-square-foot building was intended to be the city hall location for no more than 3–5 years, but it ended up being a nine-year occupancy—during which time the city needed to lease additional office and storage space. Clearly, it was time for a city hall that could house all staff under one roof.

What Kenmore ended up with was a 36,930-square-foot building, complete with about 15,000 square feet of underground parking, in the heart of a redeveloping down-town and across from Kenmore Village, which is slated for significant residential and commercial redevelopment. Prospective developers and investors have had a positive

#### The new city hall is also Kenmore's first LEED Gold building.

reaction to the building; it gives them a concrete sense of the city's future. And because the building is sited close to the street, with ample sidewalks, it contributes to a walkable downtown.

The new city hall is also Kenmore's first LEED Gold building. Sustainable features include considerable natural lighting (thanks to lots of skylights) in interior spaces and generous windows

to reduce energy use; a vegetated roof and permeable pavement to reduce stormwater runoff; countertops and other finishes made from recycled materials; and solar panels to power at least 2.5 percent of the building's energy use. During construction, the contractor recycled over 94 percent of the construction debris—exceeding LEED goals by about 20 percent.

But LEED isn't the only cool factor: Kenmore's city hall embodies the community's interest in sustainable development. Trees that were on the site prior to construction reappeared in the completed project—a Japanese maple was replanted near a courtyard entrance, for example—and wood salvaged from birch and spruce trees was crafted into furniture, including the council chambers' lectern. And the city partners with local arts organizations for rotating displays on a gallery wall in the lobby, with opening receptions for each show.

The community has embraced the new council chambers and adjacent community meeting room. Offered at no or minimal charge to local residents, the space entertains everything from Girl Scout troop meetings, photography classes, and wedding receptions to a Joint Transportation Committee meeting. At night the council chambers' glass wall even shines like a lantern—symbolizing openness and transparency. Now that's cool. C

**SEPTEMBER/OCTOBER 2015** 



# TOWNAND **COUNTRY**

SUSTAINABLE GROWTH PLANNING TIES FOOD PRODUCERS TO FOOD CONSUMERS.

#### **GROWTH MANAGEMENT AND CHANGE** are never

easy, particularly when they occur on a dramatic scale. Over the past 25 years, Washington has grown from a population of just under 5 million to over 7 million today. How dramatic is an increase of 2 million people? Consider that 2 million is twice the combined populations of today's Seattle, Spokane, and Vancouver!

Since 1990, many cities around the state have managed this growth using Growth Management Act (GMA) planning tools. Cities and counties have worked together to plot maps and adopt regulations to shape three distinct and mutually exclusive landscapes: (1) urban growth areas where new population and employment are concentrated; (2) resource lands where agricultural and forestry industries are conserved; and (3) rural areas that permit farming and forestry but are characterized primarily by low residential densities and open space.

These plans have enabled cities and counties to address growth and governance issues in the preceding decades, but can they also serve as a framework for responding to climate change, today's most pressing public policy issue? While the GMA does include a goal to "protect the environment, including air and water quality," there are no specific requirements or guidelines addressing mitigation of and adaptation to the impacts of greenhouse gas (GHG) emissions.

Several cities have fashioned their own local responses

to climate change. For example, Everett used the optional elements authority of the GMA to include in its updated comprehensive plan a "Climate Change and Sustainability Element." For its part, Shoreline adopted a Climate Action Plan, committing to reduce community greenhouse gas emissions 80 percent by 2050, which is even more ambitious than the statewide goal of 50 percent.

However, a large issue like climate change calls for committed, coordinated, multijurisdictional action. More than a dozen cities joined with King County to promote exactly that. They identified strategies to reduce sprawl and associated transportation-related GHG emissions and to sequester carbon by focusing growth in urban centers and protecting and restoring forests and farms within the urban growth area.

What challenges will the next 25 years bring? We will need to manage the demands and impacts of continued population growth (see "More in Store," below) as well as the multiple effects of the "new normal" that climate change will bring, to both our state and other parts of the country.

Perhaps the most sobering consequence of extreme weather elsewhere in the U.S.  $continued \rightarrow$ 

Edmonds-based Joe Tovar advises cities on land use strategies, comprehensive plans, development regulations, and public involvement programs.

#### More in Store

How much will our state's population grow over the next guarter-century? The Washington Office of Financial Management has forecast three potential scenarios:

> current 7.4 million low estimate 8.8 million medium estimate 10.7 million high estimate

The "worst case scenario," with population growing more than 50 percent, would add 3.7 million residents by 2040, or almost three times the combined number of people who today reside in Seattle, Spokane, Tacoma, Vancouver, and Bellevue.



**CITY 101** 



2040

2040



#### **CITYWISE**

will be the effect of droughts on food production in the Midwest and California. Prolonged droughts could affect the cost and availability of food to sustain our increasing population, most acutely in the largest and burgeoning urban counties: King, Pierce, Snohomish, and Clark.

While our agricultural sector is a mainstay of Washington's economy and an important source of food for the entire state, it will be important to enhance food production on both sides of the Cascades. Western Washington, where almost 80 percent of the state's population now lives, has excellent soils and a temperate climate. Yet much of its farmable land is not farmed. That is why cities and counties in this part of the state must collaborate to strengthen the local food economy, especially in areas close to metropolitan regions.

Local governments in these areas should work together and with their citizenry and the farming community. They should support urban and community farming, encourage the purchase of locally produced food, and protect existing and potential farmland from urban encroachment. In practice, meeting these goals will entail maintaining the urban growth boundary, protecting designated agricultural resource lands, and looking for ways to make farming more viable in rural lands, particularly where they abut urban growth areas.

Effective strategies will require flexible and innovative solutions to help make farming more viable—for example, increases in the availability of water for irrigation, affordable housing for farmers and farmworkers close to the land, domestic water and sanitation to serve such housing, and programs to support the next generation of farmers. Beyond that, it's not a farm without farmers; we won't have the next generation of farmers without programs to recruit, train, and facilitate access to financing for new farms and new farmers.

Are these challenges daunting? Yes. Can we meet them? Possibly. One thing is certain. The interdependence between city and farm will become more obvious and critical in an era of population growth and climate change. All city residents, especially those in the burgeoning population centers west of the Cascades, have an existential stake in the future viability of farming in all corners of our state. GMA and local planning set the framework for good growth. Now let's work together to tap its capacity—and create new tools—to make sure that farming has a future in Washington. **C** 

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#### **THE SNOWBALL EFFECT**

Climate change forces us all to adjust our expectations. But together, we can build for the future.

**AH, THE GOOD OLD DAYS**, when winter meant heaps of snow in the mountains and clanking chains on the passes. By contrast, this year the Cascades, Olympics, Blues, and Selkirks saw precious little of the white stuff, and the record-low snow-pack affects power generation, water supplies, and irrigation resources, not to mention the impacts on all of the businesses, products, and employment related to winter recreation.

But snow on the mountaintop is just the tip of the climate change iceberg. Climate variability affects our environment, economy, public health, and safety. Taking a few words of wisdom from K4C's principles, it's going to take strong leadership, local solutions, and deep regional partnerships to reduce greenhouse gas emissions. Fundamentally, local leaders can accomplish more by collaboratively working through decisions related to transportation and land use, energy and green building, forests and farms, and consumption and materials management. Collaboration increases our efficiency and magnifies the impact of our actions.

Not every city can shoulder the world's burdens. All communities have to pursue strategies that make the most sense for them and have the greatest local impact. And the work needs to be inclusive so that communities of color and lowincome, immigrant, and youth populations are engaged in and benefit from fair and fiscally equitable solutions.

When it comes to climate, we can't simply pine for the good old days. But we can engage people both inside and outside of city hall to create a cleaner, stronger, more resilient new day. C

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