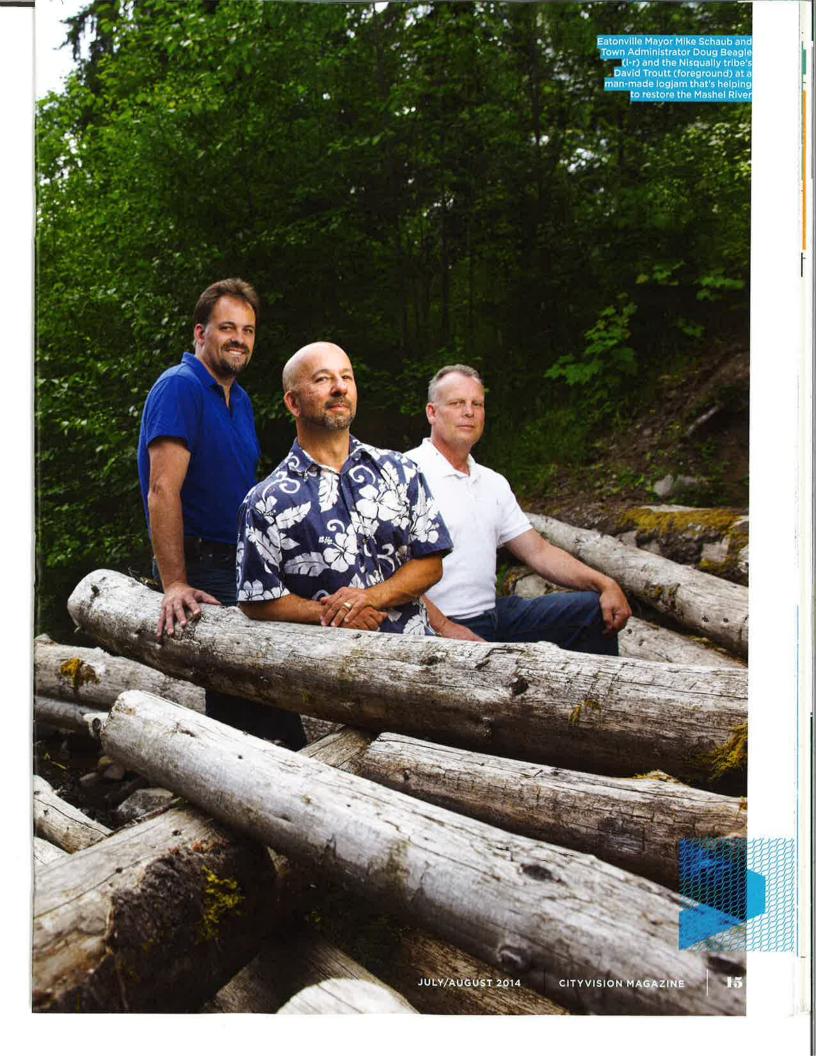# COMMON

BUILDING SUSTAINABLE COMMUNITIES MEANS REACHING ACROSS
ADMINISTRATIVE, JURISDICTIONAL, ECONOMIC, AND CULTURAL LINES.

CAUSE

BY **TED KATAUSKAS** PHOTOGRAPHS BY **MIKE KANE**

IT TOOK A DELUGE of almost biblical proportions to convince David Troutt that a mutually beneficial partnership between the Nisqually Indian Tribe and the Town of Eatonville had been sanctioned by a higher power. In the summer of 2006, the tribe and the town had worked together to build an artificial logjam on the banks of the Mashel River in Eatonville's primary public park, a pilot project designed to test a theory that adding woody debris to the vegetation-stripped Mashel—a key tributary of the Nisqually River where the watershed's struggling salmon population returns to spawn—would improve fish habitat while protecting the riverbank from erosion.

"The main issue is that the channel has been modified and constricted over time," explains Troutt, natural resources director for the Nisqually Indian Tribe, which inhabits 3,500 acres of reservation land near the mouth of the Nisqually just downstream from Eatonville. "A lot of the large trees that are necessary for providing hiding places for fish—and growing areas for algae and things that feed on algae, like insects, that ultimately feed fish—all of that complexity has been lost due to urbanization of the Mashel and logging practices on the upper Mashel. It needed some love. And it needed a partnership to make it happen."

That partnership was tested a few months later, when an early-winter Pacific squall inundated the Nisqually River valley and supercharged the current of the Mashel, which normally flows at a leisurely rate of 50 cubic feet per second, to a raging 5,000 cubic feet per second. At the height of the storm, Troutt's phone rang.

"The mayor—and this was two mayors ago—called us and said, without a lot of added explanation, 'You need to get up here and see this!'" Troutt recalls. "So we immediately got in our cars and drove up to Eatonville, and we stood on the logjam in the park with the mayor, and he proudly looked at it and said, 'This thing works. This thing definitely works!'

"We were seeing the Mashel running as big as we'd seen it in years, and the logjam was holding; it was calming the flow down so there was no erosion. The park was protected, and the fish habitat was protected."

After the storm subsided and the river returned to its usual tranquil state, the tribe's fisheries biologists donned snorkeling gear to inspect the logjam. They found salmon sheltering in an eddy around the pile, just as they had hoped.

"We showed that you can do large, softer-engineered projects that provide multiple benefits, that protect urban infrastructure but also provide fish benefits," Troutt says. "It started with that one big project before the big flood that showed that this could work."

THE NISQUALLY PEOPLE have continuously inhabited this watershed for thousands of years, subsisting on a salmon harvest that, according to legend, was once so bountiful that it seemed fishermen could walk upon the fishes' backs from one bank to another. Salmon runs determined the location of villages, which were spread along the banks of the Nisqually and its tributaries from the foot of Mount Rainier all the way to Puget Sound, but an 1854 treaty confined the tribe, with a present-day population of 585 enrolled members, to its current location. The river's native fish population—both Nisqually River chinook and steelhead are listed as threatened under the federal Endangered Species Act—has experienced a similar decline, with an annual run of around 30,000 fish, of which only 10 percent are wild. (The rest bear fin tags from the reservation's hatcheries.)

"Salmon is the centerpiece of both the tribe's culture and its economy," stresses Troutt. "Every family on the Nisqually res-

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ervation is touched in one way or another by salmon and natural resources from an economic standpoint. We've diversified over the years with the casino and the store and other economic opportunities, which is a very good thing, but still there is a very strong connection between tribal membership and salmon and natural resources. It's still absolutely critical."

These cultural and economic threads have only recently begun to be woven into the fabric of the neighboring town of Eatonville. As local legend has it, in 1889 a Nisqually known as Indian Henry led settler Thomas C. Van Eaton to a two-square-mile tract bounded by the Mashel River and Ohop Creek (another Nisqually River tributary). Van Eaton established a town he dubbed Eatonville, which became a stagecoach stop for travelers

CHANGE AGENT
Q&A WITH JAY INSLEE

Governor Jay Inslee talks about Executive Order 14-04 and how cities are on the front lines of innovation when it comes to waging war on climate change.

When you signed your climate change executive order in Shoreline in April, you said, "This is the right time to act. This is the right place. And we are the right people to make this happen." Why now? It's the right time to act because we are already getting hurt in our state by carbon pollution. We're seeing it on a daily basis, from having to increase our forest fire budget, to our oyster growers having to move their operations to somewhere with less acidic waters, to having to plan differently how we handle irrigation. This is not the next generation's problem. It's not a half-century away; it's a half-hour away.

Why here? Why us? This is exactly in our wheelhouse: to solve technological problems with technical innovation. We've led the world in aerospace, in software—we even invented the four-dollar cup of coffee—and now this is perfect for us to invent whole new industries around clean energy.

What's the next step? There's no silver bullet; there's silver buckshot when it comes to solving this problem. We are attacking it on multiple fronts.

We're developing a cap, a limitation on carbon pollution, that is the most cost effective and best suited to our industrial development; we have work ongoing to develop a clean fuel standard; we have efforts to increase our research and development investments at our research institutions; we're looking at building codes and ways to finance energy efficiency upgrades. We are even electrifying some of our transportation corridors by putting in charging stations for electric cars that are coming online like gangbusters.

What about weaning the state off of coal-fired utilities? We also are continuing to support our renewable portfolio standard, which has an accelerated target for the development of renewable energy. We are working with our utilities to wean ourselves off of coal by wire—electricity that comes from coal generated plants in other states—and replace that with more efficient systems.

> THIS EXAMPLE SHOULD BE USED EVERYWHERE, WORKING TO MOVE BOTH AGENDAS FORWARD AT THE SAME TIME.
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en route to Mount Rainier. Eatonville was incorporated 20 years later, when a lumber company imported workers for a burgeoning sawmill, and the town thrived until the mill closed in 1954.

For the last half-century Eatonville has struggled, and more recently has suffered as Weyerhaeuser divested itself of thousands of acres of surrounding timberland to out-of-state investment firms that have speeded up the harvest from 50-year to 10-year cycles to maximize returns, sending profits not into the local economy but to East Coast investors. In the last four years, assessed value of all taxable property in Eatonville, with a population of 2,758, has plummeted 42 percent.

"Our general fund revenue has echoed the economy in the last four to five years and had been reduced substantially [to $2.35 million]," says Doug Beagle, administrator of the town, which employs 21 and has a total budget of $8 million, including $150,000 for stormwater abatement. "The tribe has always been there fostering relationships so we can get funds for stormwater initiatives. ... We are in the tribe's watershed, so we have to be good stewards, and we have to be willing to come to the table and listen to their experience."

And this is what the Nisqually said: Eatonville was unintentionally killing their fish. The town took its drinking water from the shallow Mashel, and the town's antiquated sewer system diverted all stormwater, which naturally would have flowed back into the Mashel, untreated, into Ohop Creek. The result: high temperatures and extremely low flows in the Mashel, intolerable conditions that peaked and ebbed precisely when adult chinook, hardwired to find cool, deep pools to spawn, swam up the Mashel.

"It wasn't doing what stormwater normally does, which is slowly infiltrate through the soils and recharge the system and keep base flows at a fish-friendly level for a long period of time," says Troutt. "So we reached out to the town and said we were very open to a conversation about how we develop a stormwater plan that keeps the water in the watershed but doesn't become burdensome economically."

That conversation led to the logjam pilot project in 2006, which has since spawned dozens more like it throughout the Nisqually watershed. In 2009, another innovative demonstration project, funded with a grant from the state Department of Ecology, involved disconnecting the downspouts of the town library from Eatonville's stormwater pipes and into a 500-square-foot "rain garden" planted with native vegetation that naturally filters runoff from the structure's roof as it seeps its way gradually into the Mashel. Since then, Eatonville residents (including the current mayor) and businesses have paid upward of $4,000 apiece

to install three-dozen rain gardens in front yards and parking lots all around town, more per capita than any city in the nation; another half-dozen are in the works, spurred by a $130,000 EPA grant that will train local high school students to design and install rain gardens as their required senior projects.

"This is not an NPDES [National Pollutant Discharge Elimination System] community; this is not a Phase 2 community that has any regulations requiring the town to do this," notes David Hymel, an Eatonville resident who runs Rain Dog Design, a rain garden installation business. "They are stepping up to do this all on their own. For a small town, they are going way beyond the call of duty."

Over the past decade, the tribe has invested $5.5 million in Eatonville, including $100,000 for the construction of rain gardens and the resurfacing of parking lots with pervious concrete, $20,000 for a scale model of the Nisqually watershed that's on display at the town visitor center, and $100,000 that was used to draft Eatonville's Comprehensive Stormwater Plan Update. That document, adopted last December by the town council, embraces low-impact development practices like rain gardens and prioritizes capital improvement projects, most critically redirecting the town's stormwater flows from Ohop Creek into the Mashel.

"The key in my mind has been through partnerships and relationships and not through new regulations and new laws," stresses Troutt. "I think this is the future of what needs to happen if we really are going to recover Puget Sound—and we're going to recover salmon in Puget Sound in particular. This example should be used everywhere, working to move both agendas forward at the same time: their economic agenda and our environmental agenda. These two things are so clearly linked, and they get that, and we love that about them."

NOTHER INNOVATIVE city-led partnership, the King County Cities Climate Collaboration, is taking a similarly collaborative approach to global warming. In 2012, long-range planners and sustainability staff from nine Sound cities (Issaquah, Kirkland, Mercer Island, Redmond, Renton, Seattle, Shoreline, Snoqualmie, and Tukwila) founded the group (also known as "K4C"), which grew out of a monthly sustainability roundtable. Since every other meeting revolved around what individual

What role will cities play in realizing the state's goals for greenhouse gas reduction? Cities are free to use their creative juices; we don't intend to be a brake on them. Thirty cities in our state already have signed this mayoral compact with a thousand cities nationwide that have agreed to have their own policy to adopt more efficient systems to reduce their carbon footprint. We don't want to restrain or retard any of their own activities; we want to encourage them. That's number one. Number two is we want to work with them, because with most if not all of these policies I've talked about, there is an interface with cities, a parallel effort with electrification of our transportation corridors, working with them on building codes, and they themselves are looking at financing mechanisms to help businesses and consumers finance energy efficiency upgrades, rooftop solar, and other alternatives. We've looked at using the bonding authority of municipalities to help people finance these things.

What's the potential economic payoff? When we build new energy systems, we put people to work. When I was in Dayton, a real dynamic town in southeastern Washington, this woman told me that there were 30 people who live in that town who are working in the wind energy industry, and those are jobs that weren't there 10 years ago. They're there because we adopted a renewable energy portfolio that literally has wind turbines sprouting faster than hops in eastern

Washington, and there are hundreds if not thousands of people working in that industry today.

It's happening all across the state. The largest manufacturer of carbon fiber, which replaces steel in a lot of electric cars like the BMW i3, is in Moses Lake. The largest manufacturer of silicon substrates for solar panels is in Moses Lake. The leading engineering company in off-shore wind turbines with enormous potential for the West Coast is in Bellevue. These are real jobs in real time.
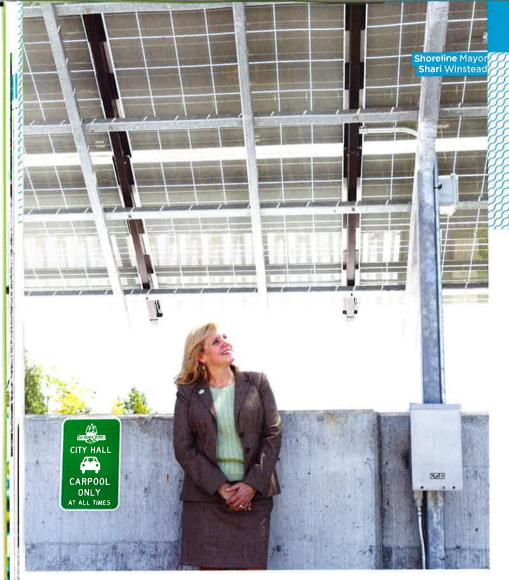
What about other benefits? The other upside is that we are avoiding damage. There's a cost that has been assessed at $10 billion to our state associated with climate change if we don't arrest this problem. That's from the destruction of our forests from fires, water intake to storm sewers associated with sea-level rise, a decline in productivity of whole industries like our oyster industry and our wine industry. People talk about the cost of action, but there's a huge cost of inaction here.

Anything else you want to say to city leaders here? I want to thank the leaders in municipal government, Republicans and Democrats, who are coming up with really creative on-the-ground solutions. In places like Bothell and Mukilteo, I've seen really great leadership that has helped build some of the most energy-efficient city halls in the country. I want to show my respect for those mayors and city councilmembers who are doing that.

municipalities were doing to combat global warming, the K4C signatories agreed to collectively adopt a set of consistent standards, goals, and benchmarks for climate mitigation projects; to share data and support the climate mitigation efforts of all partners; to secure and pool grant funding for the group's climate mitigation projects; and to develop outreach tools that would rally state and federal decision makers, as well as the general public, around the group's climate mitigation efforts. Moreover, K4C upped the ante of the US Conference of Mayors Climate Protection Agreement (a pledge all but one of the participating cities had signed), working on a regional policy to halve countywide greenhouse gas emissions from 2007 levels by 2030, with a goal of reaching an 80 percent reduction by 2050, or "80 by 50!" as the rallying cry goes.

Members agreed to a population-based fee (from $500 to $10,000) that was used to support group activities and hired Olympia-based Climate Solutions to evaluate regional strategies for reducing 2012 greenhouse gas emissions and to perform a "carbon wedge" analysis to develop scenarios for achieving the group's ambitious reductions. Even with greenhouse gas emission reductions targeted by three existing federal and state laws (increasing fuel economy to 54.5 miles per gallon by 2030; upping the mix of renewables in the state's energy supply by 15 percent by 2020; and increasing energy efficiency of new construction by 70 percent by 2030), to achieve K4C's 2030 goal Climate Solutions determined that King County cities collectively would have to reduce vehicle miles driven by 20 percent and reduce vehicle emissions by 15 percent, increase the energy efficiency of existing buildings by 25 percent, and increase renewable energy use by 20 percent while phasing out coal-fired power plants.

As daunting as that may seem, King County Executive Dow Constantine remains optimistic.

"Together as municipalities we need to think about what we can do to reduce our emissions across the entire region," he says. "The exciting thing to me is that this is not about dragging our cities kicking and screaming; it's not about setting standards that they can't meet. This is about cities bringing exciting ideas to the table and pushing the entire region forward.

"GETTING CITIZEN BUY-IN IS IMPORTANT. WE HAVE TO MODEL IT, WE HAVE TO LIVE IT, AND NOT JUST TALK ABOUT IT.

—SHARI WINSTEAD

"Ten or fifteen years ago, if you suggested that our most rural communities would be coming up with and implementing innovative approaches to reducing climate emissions, some folks would have told you that you were in Fantasyland. But the fact is, that is where our ideas are coming from. They're not just coming from downtown Seattle; they're coming from Snoqualmie and Issaquah and Redmond and cities across the urban trench that are creating solutions that are appropriate to their circumstance and to their citizens. That's a model that can work anywhere where people have a genuine commitment to protecting our future."

To achieve its own "80 by 50" community-wide goal for greenhouse gas reduction, Issaquah—the only city in the county aside from Seattle with a full-time sustainability director—is planning to redevelop its 900-acre commercial core into a mixed-use town center oriented around walking and biking rather than driving. Critical to that development will be replicating its success with the zHome, a 10-unit townhome demonstration project completed in 2011 whose units use 70 percent less water and a third of the energy of a typical townhome and generate all of their electricity on-site via rooftop solar panels, reducing their net energy use to zero. Yet despite the success of the zHome and the fact that 17 percent of Issaquah's housing stock is Built Green–certified (the highest in region), the city's utility, Puget Sound Energy (PSE), still burns coal to generate nearly a quarter of the its electricity—posing a significant challenge to Issaquah in getting to "80 by 50." Which is where K4C comes in.

"When it comes to greenhouse gas reduction, there are some things that you can do as a city and some things where it makes more sense to work collectively as a region," says Issaquah's sustainability director, David Fujimoto. "With other cities in the county climate collaboration, hopefully we can increase the demand for cleaner sources of energy and work with PSE to consider the alternatives."

EVEN THOUGH Seattle City Light uses clean hydropower instead of coal to generate the electricity it sends to Shoreline, another K4C founding member, that city still decided to build a new LEED-gold-rated city hall with solar panels on its roof. Since May 2010, those panels have generated 96,323 kilowatt-hours of electricity, enough to power 21 average homes for an entire year, saving the equivalent of 134,855 pounds of carbon from the atmosphere (had that electricity been generated at a coal-fired power plant).

"It all comes down to walking the talk, and that starts at city hall," explains Shoreline Mayor Shari Winstead. "Shoreline has a gold LEED-certified city hall. We didn't draw up plans to get gold; we drew up plans for silver. But as we became more aware of what this would mean for our community, it became a priority. Citizens are looking to take steps. If we want the community to come along, we have to be leaders, so we put solar panels on our roof, Priuses in our garages. We have to model it, we have to live it—not just talk about it."

Which is why Shoreline adopted its groundbreaking 50-point Environmental Sustainability Strategy in 2008. All but eight of the points have been implemented, including Forevergreen. com, a website (built with a $50,000 energy efficiency and conservation block grant from the American Investment Recovery Act) that puts the city's carbon footprint at the fingertips of its citizens. Its clickable pie charts, energy use and generation meters, deeper-dive buttons (e.g., "What It Measures," "Why it Matters," and "What You can Do"), and a four-leaf report card (from red to green) all tracks the city's progress on its "80 by 50"

greenhouse gas emissions goal.

And in addition to tracking the city's carbon footprint, the website tracks the community's carbon footprint. Clicking "City Vehicle Emissions" calls up a chart that illustrates how carbon from Shoreline's fleet of 50 vehicles (Priuses included) increased by 7 metric tons from 2009 to 2012, yielding an orange leaf report card denoting limited progress. By contrast, clicking "Vehicle Emissions" on the Community Carbon Footprint page calls up a chart showing that emissions from the city's 40,000 privately owned vehicles added 7,734 metric tons of carbon to the atmosphere in that same period, earning a scarlet leaf report card indicating that improvement is needed—and hopefully making an important point.

"The municipal slice of greenhouse gas emissions is very small," says Shoreline senior planner Miranda Redinger. "The homeowner making the right decisions is the one who will move the dial on carbon, not the city."

Still, in light of the debate raging around whether climate change is real and given the stakes involved, cities need to take the first step.

"We cannot wait for global consensus, and we cannot wait for congressional action," Constantine says. "The solution, the salvation, is going to come from the local level. That's where we control the land use and the building codes and the transportation that ultimately impacts climate change. So it is up to us to act and set the example for other levels of government and to give those leaders at the state and national level permission to move forward boldly."

MEANWHILE, BACK IN EATONVILLE, the Nisqually tribe and town leaders are planning the next move in the town's ambitious comprehensive stormwater plan: securing the grants it will take to realize the dream of a river restored. And looking further into the future, David Troutt envisions using windfall from the tribe's casino to buy back Nisqually timberland that Weyerhaeuser sold off to out-of-state investors and create a community-managed forest with a sawmill singing again in Eatonville.

"Being adjacent to all these lands, Eatonville will be a key partner. I see them benefiting significantly from this project as it goes forward," he says. "That's our long-term vision: it protects jobs, it protects the economy, it protects salmon habitat, it protects the tribe's hunting and gathering interests forever."

It's a big deal for us."

In the nearer term, on October 18, members of the Nisqually Indian Tribe and residents of the Town of Eatonville plan to gather at Mill Pond Park on the banks of the Mashel for the second-annual salmon festival, celebrating the return of the fall chinook run with tours of man-made logjams and rain gardens and a salmon feast, hosted with a grant from the tribe. A few weeks later, Eatonville residents will join tribal members by embracing yet another shared tradition: tossing frozen salmon carcasses from Nisqually hatcheries into the river to nourish juvenile chinook. Over time, the destinies, traditions, and cultures of the once-divided neighbors continue to converge, like the recharged waters of the Mashel flowing into the Nisqually.

"Eatonville is setting the bar for other communities to change the way they look at things," Troutt says. "I am so proud of what they've done, that they are willing to embrace this at whatever political cost and accept the challenge and move forward."

The key is to resist the impulses that pit salmon, returning to spawn as they have for eons, against the two-year election cycles that define modern politics. When we look to promote sustainability—of the environment, of traditions, of economies, of our communities—we simply must cast a broad, collaborative, open-minded net.

"The main thing that it's almost impossible for elected officials to keep in mind is that it's not about us, and it's not about now," says Carl Safina, who visited the Nisqually in 2012 as part of his *Saving the Oceans* series on PBS. "And being in office is mostly about us and mostly about now, which is a mistake. It's more important to think about what's left when you leave than what you can get when you're here. If you think about what you're becoming, you're on the right track, and if you think about what you're getting, you're on the wrong track."

In other words, whether you're mulling climate change or stormwater challenges, your political calculus should yield long-term, rather than the short-term, dividends.

"Working in Indian country is a great advantage because that's what the tribes do: they look six or seven generations down the road," Troutt says. "Bill Frank, a great friend who was a mentor to me for the 30 years I've been here, passed away a couple of weeks ago. Everything he did was not about himself or even people who are here today; it was about the people who haven't touched the earth yet.

"That's what it really comes down to—can we all embrace that kind of notion? It's going to take change. But if we're going to be successful, ultimately, we've got to get there." ©