The Roots and Consequences of Cascadia's Runaway Growth
Our target is sprawl— that is, the ever-expanding circle of urban and suburban development; the strip malls that can’t be visited without a car; the tangled, crowded mess of freeways.

Our zoning laws recognize that land can be conserved for purposes other than these. We all live near unwisely developed lands that might otherwise give us food or forests, natural scenery and healthy watersheds. And yet these attributes are slowly eroded as suburban areas expand.

As a matter of physics, at some point sprawl will have to stop. Will it end before it’s too late—say, at an imaginary line, such as Portland’s innovative urban growth boundary? Or will it collide with an unmovable object, like the Pacific Ocean?

The point is that land, like the forest, is not in unlimited supply. We cannot afford to waste it.

Sprawl also wastes transportation resources. People who live further from places of work must commute greater distances on a road system that inevitably will be expanded to meet that need. Who will pay for the new roads, and whose homes must be displaced to make way?

Sprawl is not an Oregon issue, or a Puget Sound issue, or an urban issue. It is everywhere; and as Tim Palmer writes in this issue, sprawl creates a landscape in which any one place could almost be photocopied from any other place. Sprawl threatens to consume the entire Northwest, detracting from the quality of life for everyone and every living thing.

We encourage people to begin thinking about growth on a regional, or, if you will, a bioregional level. We don’t pretend to present all the answers, but we are eager to open the discussion.

Dear Reader

In our cover story this month, we suggest Cascadia’s runaway growth ought to be stopped. But what do we mean when we call for a brake on “growth?” Not a slowdown in construction of affordable housing, which is in short supply in Cascadia’s major cities, or a curb on the creation of jobs for people who need them.

EDITORIAL

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Udder Madness: Factory Dairies Invade the Northwest, Polluting the Waters

By Paul Koberstein

YAKIMA, Washington - Marcella and Ed Garza live on a two-lane county road in the lower Yakima Valley, a quiet place in the heart of the state where small, family dairies have dotted the landscape for as long as anyone can remember. But their dream house has become a nightmare.

Last month, the neighboring dairy crowded a herd of several hundred cows into a pen built a stone's throw from the Garza's back porch. The smell is beyond words. They fear it just a matter of time before the cows' waste begins running onto their property.

For the Garzas and many of the their neighbors in the Yakima Valley, life took an abrupt turn for the worse about 10 years ago. Darigold expanded milk and cheese production at its plant in Sunny Side, a small town four miles up the road from the Garza's house. This attracted new dairies to their neighborhood - but not the familiar family farms consisting of, say, 50 golden guernseys grazing in green pastures. The newcomers brought herds numbering in the thousands, imprisoning them in iron pens to lay in their waste, all day and all night. They usher the animals into a milking facility three times a day, their udders thickly caked in feces and urine that must be removed with a high-pressure wash.

Only an aggressive diet of antibiotics can keep these animals infection-free and, presumably, alive. The Yakima Valley's dairy cow population has grown to a point where it now produces about as much waste as a city of 2 million - equal to about three Seattle's worth. What's more, the dairy waste is not treated, in contrast to the pains taken to clean municipal waste. Instead it is mixed with waste from the milking facilities and sprayed on the land or flushed into lagoons. The trouble is, there is too much manure for the land to absorb. Some of the waste has nowhere to go but off the property and, ultimately, into public waters.

In short, as Garza says, these aren't dairies. They are factories in the field. And, the Seattle Post-Intelligencer reported last year, they are "virtually unregulated."

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New Alaska Road Scheme Promises Winter Driving Thrills

By Katie Durbin

Outside Alaska, it's a scheme that wouldn't pass the laugh test: A $232 million, 65-mile toll road linking Juneau to Skagway along a wilderness route notorious for avalanches and so remote that the state would be hard-pressed to patrol it.

But that's what the Alaska Department of Transportation is advocating in a project called Juneau Access, designed to improve access to Alaska's water-bound capital city.

Juneau, Alaska's capital, is a former mining town situated on a narrow ledge of flat land surrounded by the steep glaciated peaks of the Alaska Coast Range. Its residents enjoy its splendid isolation. With only 40 or so miles of paved road, the city is presently accessible from the outside only by air, boat, cruise ship or the Alaska Marine Highway ferry. The road would travel up the east side of Lynn Canal to Skagway, with a ferry connection near the town end across Lynn Canal to the community of Haines. It would cross five major rivers, skirt no fewer

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That still seems to be the case even through the Washington Department of Ecology fined the DeRuyster Brothers Dairy in the Yakima Valley $30,000 last March. The dairy was dumping dairy waste into an irrigation return drain. The waste ultimately ended up in the Yakima River, polluting the river’s water, in violation of the dairy’s lawful limit of zero discharges off site.

In most cases, the Department of Ecology simply asks violators not to do it ever again. If they are found guilty, the violations are not just to the Yakima but coastal areas of Washington, particularly along the Nooksack River in Whatcom County. There, dairy pollution has contaminated clam and oyster beds used by members of the Lummi Nation.

The state has only four inspectors. The recent Legislative bill Gov. Gary Locke’s proposal to hire an additional nine.

The state enforcement against the dairies is so lax that the U.S. Environmental Protection Agency has found it necessary to express criticisms in the new media. “The EPA has not felt that the state’s program is adequate to respond to pretty poor compliance within the industry,” Dave Ragsdale, director of EPA’s dairy compliance program in Olympia, told Cascadia Times. “The whole process was set up to not work very well. Basically, it keeps Ecology off the backs of polluters.”

Even the Washington State Dairy Federation thinks enforcement is needed. “The main concern is the lack of enforcement running through all of the federation’s meetings is that the dairy operators want enforcement on producers who are in violation,” said Debbie Becker, the group’s executive director. In an effort to force the state and the EPA to do something, Garza and her neighbors formed a citizen group they call Community Association for Restoration of the Environment. In late October they were preparing to file papers in federal court announcing their intent to sue up to 10 dairies for violations of the Clean Water Act. With technical assistance from the Columbia Basin Institute, a Portland-based nonprofit, they have determined that the dairies have repeatedly broken the law.

“Both the federal law and the state law make it clear that waste should not be dumped into the Yakima River. When it is, it poisons all the wildlife and makes it a bad place to be.”

With heavy fines and a variety of criminal and civil charges off site.

The dairies are a major cause of particulate air pollution. Manure and urine contains ammonia, which evaporates into the atmosphere and combines with nitric acid pollution to form ammonium nitrate particles. Each cow is responsible for 11 to 20 pounds of ammonia emissions every year.

The exodus has been bad news in California’s Central Valley, where some of the dirtiest operators are now the target of a federal grand jury who will determine whether contamination there constitutes criminal violations of the Clean Water Act. Punishment of violators could consist of both fines and imprisonment every year.

Water quality in the Yakima Valley is of concern to other forms of agriculture. One winery located less than 3 miles downstream from the nearest dairy has installed expensive water treatment facilities next to grape irrigation canals that empty into the Yakima. Wastewater from the dairies in Garza’s neighborhood has been shown to run into the canals. This is illegal, according to the EPA. Tests show that deadly E. coli bacteria commonly associated with manure is also present at dangerous levels.

Residents have called for testing for the parasite cryptosporidium.

But the smelly, however vile, is only a small part of the problem. Looking across the valley from Garza’s front porch, you can see the trees that line the Yakima River’s banks. Studies show that the Yakima contains dangerous levels of fecal coliform. It’s not hard to imagine where this deadly bacteria comes from. Just follow the water. Farm irrigation canals that empty into the river contain even deadliest levels of fecal coliform. Wastewater from the dairies in Garza’s neighborhood has been shown to run into the canals. This is illegal, according to the EPA. Tests show that deadly E. coli bacteria commonly associated with manure is also present at dangerous levels.

None of this has spurred the Department of Ecology into action. That leaves the job to the EPA, which is planning more dairy inspections through next June. “We will be much more aggressive than we’ve been in the past,” says Ragsdale.

But Marcella Garza and her neighbors say they’ve run out of patience. “Only when local residents take it upon themselves to enforce the law will the problem get solved,” she said.
Big Mining Companies Abandon Blackfoot Project, Leaving Tiny Outfit in Charge

By Patti Robberstein

The proposed McDonald cyanide gold mine next to Montana's Blackfoot River is worth 7 million ounces of gold— or roughly $2.5 billion— to today's gold prices. What Montanans want to know is, why are the big mining companies selling out to Canyon Resources? The sale agreement with Canyon, Phelps Dodge has been delayed, possibly until 2001.

In 1994, Phelps Dodge sold out to a Canadian outfit, Echo Bay Mines, but had to take it back after Echo Bay fled through a loophole in the sale agreement.

Now Phelps Dodge, the Arizona-based copper company, is saying adios to the Blackfoot again. Last month, it sold a 30% interest in the gold deposit, estimated to be worth $34 million, to Canyon, on the other hand, has not met its obligations under those loans, though was not in default.

Fled through a loophole in the sale agreement with Canyon, Phelps Dodge has been delayed, possibly until 2001. The company wishes to purchase 100 percent ownership of the McDonald Gold Project, "noting that the Blackfoot River in Norman McLean's novella, "A River Runs Through It." More than a few Montanans would jump down their life for the Blackfoot, and that's not counting the state's many committed environmentalists.

We do know that Canyon is no Phelps Dodge. Phelps earns about $500 million a year, and has such deep pockets it can buy Montana if it wants to. In effect, that's what is said in 1996, laying down $2.5 million to defeat a Montana organizing council in Denver, which is suing Canyon for desecrating Native American sacred sites at a gold mine in Death Valley.

"Having this project in the hands of a financially shaky company presents huge liability risks to the state of Montana," says chairman of the Clark Fork Coalition. "If Canyon does pull together financing to build this mine, will they have money left over to cover the inevitable problems, such as cyanide leaks? We think of Summerville when we think of Canyon having a go at the Blackfoot."

Summitville is the Exxon Valdez of gold mining. Heavy metals and acid leached from the mine, killing all life in a Rio Grande tributary for 18 miles downstream. The company declared bankruptcy and left town without cleaning up the mess. Cassiana Times has learned that under the terms of its sale agreement with Canyon, Phelps Dodge cannot be held liable for any disaster to the Blackfoot.

"Phelps is getting out of town because this mine is running into a lot of opposition," says Flynn. "They probably saw a huge Superfund site on their hands, with billions of dollars water under the bridge. That could possibly pollute much of the groundwater in western Montana."

That wasn't enough for Phelps. Phelps now has the opportunity to develop the major domestic gold reserve of the McDonald project into a sizable long-lived mining operation. This acquisition represents a dramatic growth step for the company. Canyon paid $5 million down, and promised to pay as much as $145 million later, for Phelps Dodge's 72 percent interest in the gold deposit, estimated to be worth $300 million. It is expected to produce 300,000 ounces of gold annually for 12 years.

The decision on permits for the mine rests with the state of Montana, which owns most of the land. An environmental impact statement is due in mid-1998. The Blackfoot faces impacts of the McDonald project into a sizable long-lived mining operation. This acquisition represents a dramatic growth step for the company. Canyon paid $5 million down, and promised to pay as much as $145 million later, for Phelps Dodge's 72 percent interest in the gold deposit, estimated to be worth $300 million. It is expected to produce 300,000 ounces of gold annually for 12 years.

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Field Notes continued

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SAY WHAT?

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...wantonly slaughtering seals in a Vancouver Island river without having explored alternatives, says marine mammal scientist Andrew Trites, director of the University of B.C.'s marine mammal research unit.

Trites accuses the fisheries department of taking directions from the rod and gun club. The fisheries department says the cull of seals in Punnett River is designed to protect endangered Chinook salmon.

In fact, however, the salmon: now spawning are not endangered, Trites says. Moreover, the threatened Chinook species returns in the spring, and by that time, new seals will move up from the harbor to replace the exterminated herd. Trites says the department has failed to consider other factors impacting the Punnett River system, which include a hydroelectric dam, river dredging and pesticides.

Recipe of the Month from Senator Murray's Endangered Species Cookbook

Republicans have been bashing Sen. Patty Murray, D-WA, for publishing her favorite salmon recipes on the Web. Eating an endangered animal, they say, is a no-no. Now if the GOP would only go after activities that kill salmon by the million, like dams.

INGREDIENTS
8 tablespoons unsalted butter 1/3 cup honey 1 tablespoon lemon juice 1 tablespoon natural liquid smoke flavoring 1/3 cup brown sugar 1 teaspoon crushed dried pepper flakes 1 tablespoon lemon zest 1 pepper 1 center-cut Washington salmon fillet (approx. 2 lbs.) with skin

PREPARATION
1. Mix together the butter, honey, brown sugar, lemon juice, liquid smoke and red pepper flakes in a sauce pan. Cook over medium heat for 6-8 minutes. Cool to room temperature.
2. Place salmon in a small dish. Pour the sauce over the salmon. Allow to marinate for 30 minutes.
3. Heat the grill.
4. When grill is heated, sprinkle the lemon zest onto salmon. Place salmon on grill. Cook for 6 to 8 minutes. Turn salmon over and cook it for another 6-8 minutes.
5. Pepper to taste.
7. Enjoy.

*Serves 3-4 people

writes, the damage is invisible. "The plant is green and healthy looking, but doesn't set fruit." The visible damage to Morgan's orchard was an exception.

What makes these chemicals even more insidious, Grier says, is that laboratory tests of plants can't detect the presence of SUs at levels that are causing the damage. That means farmers haven't been able to prove conclusively through chemical testing that SUs are the cause of the damage.

Morgan is not the only victim of these powerful new chemicals. Numerous cherry orchardists in Oregon's Wasco County, and fruit, flower and vegetable growers in Washington's Tri-Cities area, have experienced damage to their crops in recent years.

As early as 1989, EPA officials in Eastern Washington were aware of the problem. In a memo to the EPA's Office of Pesticide Programs that year, Gary O'Neal, director of the Region 10 Air and Toxics Division, said farmers affected by spray drift "feel that if an herbicide is registered by EPA, a method sensitive enough to detect it at any level that can produce crop damage should be available." O'Neal urged research to develop such a method.

EPA and state officials have tried with limited success to referee disputes between wheat farmers on one side and fruit growers on the other. In The Dalles, orchardists, wheat growers, applicators and a country extension agent came together as the Wasco County Spray Drift Task Force to try to find voluntary solutions to the problem. "We concluded that, yes, there are areas immediately adjacent to wheat fields that are at risk if spray drifts," said Ken Bailey, president of the Wasco County Fruit and Produce League. "But we did not come to the point of making recommendations for buffers." Instead, the group urged applicators to avoid spraying during thermal inversions and when the wind is blowing toward orchards.

In 1991, after the state of Washington placed a moratorium on application of the SU herbicide Harmony due to drift problems, DuPont Chemical voluntarily imposed a one-mile buffer on application of SU herbicides on next to susceptible crops. But DuPont lifted the buffer after six months in response to complaints from aerial applicators.

Federal scientists have belatedly sounded the alarm about SUs, though it's not clear who is listening. "Expanded use of the sulfonylureas around the world could have a devastating impact on the productivity of non-target crops, and the makeup of natural plant communities and wildlife food chains," three EPA researchers warned in a 1993 report.

Their concern stemmed from tests they conducted at the EPA research laboratory in Corvallis, Ore. to measure the effect of minute amounts of SUs on cherry trees and garden peas. They found that when chlorosulfuron, a commonly applied SU marketed as Glean, was applied during critical stages of development at rates as low as one one thousandth of the recommended application rate, it reduced yields of peas and cherries. In a follow-up study, the researchers found canola, sunflower and soybean plants also showed reduced yield after exposure to extremely low amounts of SUs.

The researchers took their warning a step further up the food chain, suggesting that birds dependent on certain plants could be vulnerable if those plants stopped reproducing.

The problem with SUs is just one example of the uncharted territory we are entering as we introduce more sophisticated and more potent pesticides into our environment, warns Grier. "Basically, EPA regulations are designed to protect growing crops, not birds, butterflies and people," she says. "They're not great for the front. We put our national pesticide law together in the post-Silent Spring era. It dealt with eradication, and DDT."

Those deadly poisons are now banned, but hundreds of new chemicals registered by the EPA pose more subtle risks to plants, fish, wildlife and human health that we are just beginning to understand.

Morgan, who has received a crash course in chemistry since 1994, says his concern about SUs goes beyond his own orchard. He wonders about their effect on wetlands and native plants. Despite the alarming warnings, use of the SU herbicides is expected to increase because of growing pressure to replace other herbicides that are more toxic to animals or potentially hazardous to groundwater.

The answer, Morgan believes, is stricter licensing standards. "It's up to the manufacturers to assure their product is safe. But when a company produces SUs, he says, "they have a lot of money invested and they aren't going to tell us everything. I wish the EPA could open this back up and re-evaluate whether it should be registered for use. But once EPA gets a chemical registered, it's politically difficult to un-register it."

The Road to Juneau

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...than 58 known avalanche chutes, and traverse a prized and presently protected 46,000-acre roadless area known as Berners Bay. Environmentalists say it would affect 12 salmon runs and critical habitat for Steller sea lions.

The department's environmental impact statement gives the road an avalanche hazard rating of 346 (100 is considered "very high") and admits that ”avalanches could push a vehicle into the water at most sites.” The high risk of avalanches virtually guarantees that the road would be closed in winter, when the Alaska Legislature convenes in Juneau. To pay for maintaining the new road, the department proposes a $25 one-way toll.

But critics question whether toll fees would cover the cost of staffing toll booths and ferry terminals, adding state trooper patrols, controlling avalanches with explosives and plowing the road. Under the plan, ferry service from Juneau to Skagway would be sharply curtailed once the road is completed.

Citizens testifying at public hearings in Juneau, Haines and Skagway in September came down firmly on the side of improved ferry access and against the road. "We have a highway out there. It’s level and you never have to pave it,” said fisherman Craig McCormick at a hearing in Haines. "We don’t have maintenance on the roads we have now,” said Haines bus company owner Paul Nelson. "What happened to the commitment to these roads?”

Skagway residents warned that road access to Juneau would cost the town jobs in tug and barge services and make it impossible for their own local businesses to compete. "It would be the death knell for year-round businesses in Skagway,” said resident Averell Harp.

Will this project, reminiscent of former Gov. Wally Hickel’s wild public-land conservation efforts with wings and fly? Unlikely, judging from early response. The U.S. Environmental Protection Agency has warned that the department’s environmental impact statement is “heavily biased in favor of the highway alternative” rather than improved ferry services, and, therefore, possibly illegal.

Even Alaska’s most influential citizen, U.S. Sen. Ted Stevens, is apparently lukewarm toward the Juneau-Skagway Road. An unnamed staffer for Stevens, chairman of the Senate Appropriations Committee, told the Juneau Empire the proposal was unlikely to “get a lot of support in Congress, despite the strength of the delegation.”