The Oregonian
FRIDAY, SEPTEMBER 5, 2008

C

NEWSROOM • 503-221-810
NEWSROOM@NEWS.OREGONIAN.CO
2M

Sewage backup: Would you like one?

Metro report | The region is billions of dollars behind on repairs and on new pipes, roads, bridges and buildings

By ERIC MORTENSON
THE OREGONIAN

Turn the tap, flush the toilet, flip the light switch. Water flows, waste goes, light floods the room.

The bridge holds up, and the school building is safe. Someone mows the grass at the park and treats the water at the community pool. The traffic signals change even when no one sees them.

Things work.

For now, anyway. But as our roads, bridges, water and sewer lines, schools, public buildings, parks and energy plants age, we could be headed for an expensive breakdown.

The problem is acute in the Portland area, where 680,000 more people are expected by 2035. According to an analysis by Metro, the regional government, meeting the population and job growth in Multnomah, Clackamas and Washington counties will require infrastructure improvements of $27 billion to $41 billion.

Even if that growth doesn't occur, the region's infrastructure needs $10 billion worth of repair, said Malu Wilkinson, a Metro planner.

"We're trying to emphasize that is not just a problem of growth. It's also a problem of living off investments made 30, 40, 50 or 100 years ago — without reinvesting," Wilkinson said.

Case in point: Lake Oswego.

The city has a bad stretch of old sewer pipe. The Oswego Lake Interceptor ranges from 12 inches to 3 feet in diameter and carries the waste flushed by two-thirds of the city's 36,000 residents.

About 18,000 linear feet of the pipe runs beneath the surface of Oswego Lake, long the city's rippling symbol of prestige and place. The pipe, buried beneath the lake bottom in some places and kept submerged by timbers or steel pilings elsewhere, carries sewage to Portland's wastewater treatment plant at Tryon Creek.

It was built in the early 1960s and is too small to handle Lake Oswego's projected population growth. An earthquake could break the pipe or shake it off its pilings, emptying waste into the lake.

More routinely, seeping storm water overwhelms the trunk lines, collector lines and household laterals that feed into the interceptor. During heavy rains, sewage sometimes backs up and burbles out of manhole covers, at times leaking tens of thousands of gallons of untreated waste, city engineer Joel Komarek says.

The spills violate state and federal law and are unacceptable to the city, according to a city fact sheet.

After 10 years of study and consideration of more than 20 options, Lake

Please see **MAINTENANCE,** Page C4

ROSS WILLIAM HAMILTON/THE OREGONIAN

Ramsey Taylor walks her dog, Georgie Bailey, next to Lakewood Bay in Lake Oswego. The city will issue revenue bonds to replace a major sewer pipe that runs along the bottom of Oswego Lake.

Maintenance: Blumenauer touts 'federal partnership'

Continued from Page C1

Oswego has settled on a solution: Build a larger, stronger pipe underwater along the route of the interceptor. Sections will be supported by pilings, others will be buoyant, tethered to the bottom by cables — a construction method that will be "the first of its kind, anywhere," the city says.

The pipe will have the capacity to serve 5,500 acres — 1,000 acres more than the existing interceptor. That capacity is thought to represent Lake Oswego's ultimate buildout. Komarek, the city engineer, thinks it will last 75 years, maybe more.

But it will cost $100 million, and even Lake Oswego, one of Oregon's wealthiest communities, doesn't have that kind of cash on hand. The city will have to borrow it through a 20-year revenue bond and pay it back by increasing utility bills. Over 10 years, the sewer portion of utility bills would increase 10 percent a year, rising from an average today of $326 a year to $768 annually.

When the original interceptor was built in the early 1960s, the federal government had an open wallet for such projects. This time around, no significant federal or state funding help is available.

"Unlike in the past there really isn't," Komarek said. "The (interceptor) funding is completely from local dollars."

Every public works director, treatment plant operator and facilities planner in the region could be nodding in agreement.

Portland's Water Bureau needs to relocate a pair of conduits that cross the Sandy River on a 114-year-old steel bridge. The conduits carry up to 185 million gallons a day of drinking water and are considered susceptible to quakes, floods, landslides or sabotage. Burying them under the Sandy would be a $21 million job.

The city also has fallen behind on maintaining more than 1,250 lane miles of streets.

Gresham has a $30 million backlog of deferred road maintenance, said Dave Rouse, director of the city's Department of Environmental Services. The city added two large areas during expansion of the urban growth boundary in recent years, but development has been delayed by the cost of providing basic infrastructure: $285 million for the Springwater industrial area and $150 million for Pleasant Valley, which will be primarily residential.

Lack of money is the common problem.

Local governments have been constrained by voter-approved property tax limits. The state's gas tax — used to pay for transportation projects — hasn't increased since 1993. System development charges assessed on new development have limited application and can be used only on capital projects.

Traditional funding methods are expected to cover half the $27 billion to $41 billion cost associated with projected job and population growth, Metro says. In response, local governments and utility districts are erasing turf boundaries to collaborate on projects and coordinate their efforts.

Perhaps the oldest example is a coalition of about two dozen road departments and agencies that share resources during storms or on projects that require special equipment. A small town may pay for use of a county's pavement striping machine that it couldn't afford to buy itself, for example.

Such arrangements usually involve small-scale projects, Rouse said. "I think we're squeezing as much out of that arrangement as we can."

Much bigger savings could come from an arrangement in Clackamas County, where three sewer districts and a half-dozen cities face capacity limits at the Kellogg Creek and Tri-City wastewater treatment plants. Among the partners are Oregon City, Milwaukie, West Linn, Gladstone, Happy Valley, Damascus and a wide swath of unincorporated Clackamas County.

If the partners pool resources, improvements extending to 2030 will cost about $585 million. If they go it alone, it would take more than $1 billion to achieve the same treatment capacity, according to a report by the county's Water Environment Services.

At one time, the federal government helped local governments comply with the Clean Water Act by paying 78 percent of the costs of sewer and drinking water projects. With a change in administrations next year, it's likely to get back in the game, said U.S. Rep. Earl Blumenauer, D-Portland.

Blumenauer is calling for a new national plan to deal with infrastructure problems, noting that the federal contribution to projects dropped to 3 percent during the Bush administration's two terms. Additional federal funding will be part of a mixture of fees and local contributions, he said.

Blumenauer said the Democratic Party platform contains good language regarding infrastructure improvements. He said he's spoken about the issue with Barack Obama, the party's presidential candidate.

"I think there will be a federal partnership, no question about it," Blumenauer said. "This is not a short-term, one-simple-little-twist solution. This is a major rethinking of how we're going to rebuild and renew America."

•

Eric Mortenson; 503-294-7636; ericmortenson@news.oregonian.com

ROSS WILLIAM HAMILTON/THE OREGONIAN

It will cost $100 million to replace the sewer pipe that runs along the bottom of Oswego Lake, an example of the infrastructure problems facing the tri-county Portland area.

Needs are high, funding is scarce

Some of the findings from Metro's infrastructure analysis:

Civic buildings, plazas: Funding often needs voter approval; no dedicated funding for operation, maintenance.

Energy: Based on current use, the region will need two or three new 400-megawatt power plants by 2035.

Parks and open spaces: The area needs 5,000 acres of new parks and 8,000 acres of open spaces to meet population increases, but development squeezes space and makes land more expensive.

Sewer and storm water: There's no reliable source for funding big sewage treatment capital projects. Storm water systems have little excess capacity.

Schools: Geographic "mismatch" exists between school capacity and needs in newly urbanized areas. Land values make school siting difficult.

Transportation: The largest unmet need, with a $7 billion finance gap. About 75 percent of local road budgets are spent on maintenance.

Water: Conservation has reduced per-capita use, but demand from projected population growth would exceed regional supplies.