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Opinion

## Turbid waters point to need for better forest practices

## By Ed Whitelaw and Winston Hovekamp

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In early 2017, we sought a case study for our economics class at the University of Oregon. We wanted to illustrate what happens when economic growth, environmental sustainability, pollution and climate change collide. We found it in the town of Rockaway Beach on the northern Oregon Coast.

Unexpectedly, a character in this case study was an institution strutting its confidence, ignorance and bias far beyond Rockaway Beach: the Oregon Department of Forestry.

Oregon Public Broadcasting reporter Tony Schick got our attention when he investigated a dispute over turbidity — muddy water — in Jetty Creek, the water source for Rockaway Beach. During 1999-2016, Google Timelapse shows logging cleared about 85 percent of the Jetty Creek watershed's forest. According to DOF records, Olympic Resource Management and Stimson owned the land and did the most recent logging, during 2013-16.

In a 2015 draft report, the Oregon Department of Environmental Quality summarized its scientists' findings of the relationship between logging and turbidity in Jetty Creek. But the DEQ suppressed these findings, as Schick reported, "after intense pushback and charges of anti-logging bias from the timber industry and the state's Department of Forestry." DEQ's analysts stand by the science of their report.

Schick interviewed Oregon State Forester Peter Daugherty, who stated, "I don't believe that there's any scientific evidence that forest practices are directly related to some indications of potential increased turbidity" in those coastal watersheds.

We asked Daugherty how he reached this conclusion. He sent us 12 articles. We read them. The articles show forest practices cause erosion, which causes turbidity. We weren't surprised. Causes and their effects pervade environmental systems and, for that matter, virtually all systems. Turbidity threatens the quantity and quality of water for downstream users — households, workers, businesses and municipalities.

This is not some recent discovery. It's virtually verbatim from two phenomenal faculty members at the University of Montana School of Forestry in the early 1960s: Joseph "Smoky Joe" Kramer, a diminutive and bigger-than-life professor of forest botany, and Arnold Bolle, the legendary dean of forestry there. And the discovery had preceded them.

Economists cheer when a company, behaving responsibly, reduces its costs and increases its profits. But if those firms increase profits by imposing their costs on others, economists cry foul and call these firms polluters. When polluters, by chance or intent, fail to bear their own costs, the economy suffers.

This idea emerged in economics over a century ago. It is now doctrine. What also emerged was the prescription: Polluters should pay.

In their textbook, MIT economist and Nobel laureate Paul Samuelson and Yale economist William Nordhaus state the doctrine succinctly: "In an unregulated economy, there will be too little abatement and too much pollution."

We weren't surprised when the timber companies called DEQ's draft report biased. But when the Department of Forestry questioned DEQ's findings and the pollution, its own hypocrisy blared. For contrary evidence, consider these sources:

- Oregon State University geographers Timothy Perry and Julia Jones' 2016 findings show that sustained, large-scale logging in Western Oregon forest systems depletes stream flows by as much as half. Not incidentally, their findings "can be implied to Douglas fir forests in the Pacific Northwest."
- In January, 2015, the National Oceanic and Atmospheric Administration and the U.S. Environmental Protection Agency withheld approval from Oregon's coastal pollution-control program. The agencies stated that the state and forest-products industries are "critical partners"

in protecting habitat and water quality for salmon and trout and for the people and communities that rely on them. ... Silt-choked runoff from poorly managed logging sites not only destroys habitat, but can kill salmon and trout fry and render headwater streams unusable for future spawning."

The DOF boasts Oregon introduced the nation's first forest practices act. That was 1971. Most agree Oregon since has improved its forest practices. But OSU's Perry and Jones, NOAA, EPA and others have found Oregon hasn't improved enough to meet today's challenges, especially those from climate change and those facing Oregon's coastal watersheds.

ODF and the state forester have failed Oregonians, the governor, and the other state agencies whose responsibilities include anything to do with forests and the water that flows from them. It has also failed Oregon's economy. Oregon should start rehabilitating ODF by genuinely holding it accountable to its two aspirations — stewardship and sustainability.

ODF itself has largely ignored them.

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