

Cumulative impacts of gravel pits not covered in state permit process

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area, “we cannot enjoy healthful water supplies if the river-aquifer system is disconnected by human activities,” Stanford told the planning board. “If these features are damaged or destroyed by gravel mining, disposal of pollutants, flow diversion or other influences, then rivers cannot maintain clean water, robust riparian corridors or habitat for fisheries and wildlife.

“Any activity that substantially or incrementally changes the natural integrity of flood plains and their aquifers will have a direct and pervasive impact on surface water quality. In the case of the Flathead Valley, destruction or pollution of the shallow alluvial aquifer that re-circulates and cleanses river waters will have direct and permanent effects on the water quality and ecological integrity of the river and Flathead Lake.”

BASED IN PART on Stanford’s recommendations, the draft Flathead County Growth Policy included a proposal to “restrict sand and gravel operations in areas that pose a threat to water quality.”

Samdahl said there are about a dozen gravel pits located above the Evergreen aquifer, including several large mines clustered along Jellison Road.

Most of these pits are outside the 100-year flood plain. However, they typically dig down below the water table, creating small lakes and removing the gravel matrix that supports the invertebrates.

The biological station’s concerns about the potential impact this activity might have on water quality “are good, technical points,” Samdahl said. “I think those are solid statements.”

Nevertheless, prohibiting all mining because there might be some impact isn’t reasonable.

“There are always impacts,” Samdahl said. “But certain levels of impacts have been determined by society to be acceptable. When we look at a mine site, we try to make a judgment call: Which impacts are reasonable and which aren’t?”

And in that regard, it doesn’t appear that the agency or the gravel pit operators have dropped the ball. Although neighbors certainly complain about dust and noise, there’s no evidence that the mines have degraded water quality, or that they’ve removed an unsustainable amount of gravel from the Evergreen aquifer.

During the environmental evaluation of the new Paveco gravel pit at the intersection of Pioneer Road and Helena Flats Road — which received final approval last year — state hydrologist Angela McDannel estimated that the surface ponds created by Paveco and the Jellison road pits together would only cover about 41 acres.

By comparison, the aquifer as a whole underlies several thousand acres.

In a telephone interview, McDannel cautioned that the 41 acres of ponds was a very conservative estimate. Based on the amount of land controlled by the gravel pit operators, and on their stated intent of mining all of their property, she felt the ponds would eventually cover a larger area.

To address the possibility that these ponds could eventually have a cumulative effect on the aquifer, she suggested that monitoring requirements be required for future gravel pit applications, specifically to evaluate the long-term effects on invertebrate fauna.

This issue of cumulative

effects is one area where even the DEQ admits its current permitting process might be inadequate.

“With the amount of development that’s taking place in the Flathead, we’ve recognized for some time that it might be appropriate to take a broad look at impacts,” said Steve Welch, the administrator of DEQ’s Permitting and Compliance Division, during an interview last year.

“When we permit gravel mines one by one, we probably don’t get to the level of analysis needed to address cumulative impacts,” Welch said. For example, “we recognize that there could be a potential for water quality, water quantity problems in some areas. We need to look at that on a more regional basis and consider how it could be mitigated.”

The Paveco permit, for example, addresses water quality concerns for that specific site. It requires several precautionary measures to prevent spilled fuel and other contaminants from entering the groundwater, and it also calls for monitoring wells and regular testing to determine if any hydrocarbons have leaked into the aquifer.

Nothing in the permit, though, addresses potential effects of multiple mines operating in the same geographic area.

DEQ proposed conducting a comprehensive environmental analysis specifically to identify some of these broader, regional impacts.

However, that study was recently scuttled because of a lack of funding. So for the time being, except for residential zoning districts, gravel pits can go pretty much wherever the resource is located.

“Unless we can show that there are impacts and document them, we can’t say no,” McDannel said.

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