



ENVIRONMENT

Development In A Wealthy Montana Boom Town Is Fouling A World-Class Trout River

Rapid growth in Big Sky is threatening the Gallatin River, a tributary of the Missouri River and a renowned fly fishing destination.

By Chris D'Angelo

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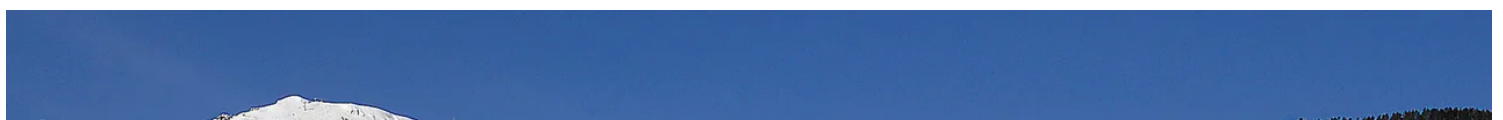


Montana's exclusive Yellowstone Club is a private playground for the rich and famous: world-class skiing and golfing, luxurious multimillion dollar homes nestled in the mountains, and the company of other elites.

"Your mountain sanctuary awaits," the club's website says, alongside revolving videos of people fly fishing on the Gallatin River and skiing fresh lines on empty slopes. Bill Gates, Tom Brady and Gisele Bündchen, Justin Timberlake and Jessica Biel are just a few members of the Yellowstone Club, where condos start at around \$4 million and mansions fetch upward of \$25 million.

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But in the near future, the club's "private powder" — yes, it trademarked that phrase — will be generated in part from treated wastewater. The club and the broader community of Big Sky already use effluent to water four area golf courses, and the Montana Department of Environmental Quality has [granted](#) the private resort a permit to use more than 25 million gallons of wastewater for early-season snowmaking. The club's environmental manager, Rich Chandler, has [said](#) the move "will help conserve our limited water supply and protect the watershed" by increasing snowpack and helping sustain river flows late in the season.





The Yellowstone Club near Big Sky, Montana, touts itself as the only private mountain ski resort in the world. On its [website](#), the club encourages potential members to "take your pursuit of wild trout to the next level."

ERIK PETERSEN/BOZEMAN DAILY CHRONICLE VIA AP

A number of other ski resorts, including Snowbowl in Arizona, have also adopted waste-to-snow reuse, and several environmental and wildlife advocacy groups [supported](#) the Yellowstone Club's effort. But there is something comically dystopian about America's wealthiest spending a fortune to ski atop each other's sewage. More seriously, it reflects long-standing water issues in the ritzy, unincorporated resort community of Big Sky, and the environmental costs of the area's rapid growth.

The community has been home to Big Sky Resort, a public ski mountain, since the early 1970s, but the population has doubled in a little more than a decade, from around [1,500](#) in 2010 to 3,000 today. The 1992 film "A River Runs Through It" helped put this area on the map; many of the fly fishing scenes were filmed on the Gallatin River, a headwaters tributary of the Missouri River and a renowned "blue-



YELLOWSTONE NATIONAL PARK. THE pandemic has [only added to the boom](#), with people fleeing large cities to establish permanent residency in Big Sky.

Conservationists fear all this is fueling a crisis on the river.

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Since summer 2005, neon green algae — a telltale sign of an unhealthy river — has plagued the West Fork Gallatin, which flows directly through the resort town, leaving a [“green trail”](#) extending downstream of where the tributary dumps into the Gallatin.

More recently, the problem has exploded on the river’s main stem. For the last three summers, the noxious algae has choked a large stretch of water around Big Sky, fouling one of the very resources that’s drawn wealthy Americans to gobble up property there. (See top video of drone footage [shot by the Upper Missouri Waterkeeper](#) in August 2020, showing a bloom of green algae along the Gallatin River, several miles downstream from the resort community of Big Sky.) An unprecedented bloom in 2018 stretched along more than 20 miles of the river and its tributaries, covering [as much as 75%](#) of the river bottom in some locations.

Experts are working to pinpoint exactly what’s driving recent blooms, but chronic algae around Big Sky has been largely attributed to nutrient pollution from the area’s ballooning development. Nutrients like nitrogen and phosphorous occur naturally, but humans contribute even more from our septic tanks and other wastewater treatment systems, fertilizers, and clearing land for development. Pollution from America’s most prosperous is sullyng a pristine



water temperatures and reduced snowpack and river water levels.

This algae is nontoxic, but experts warn it can affect overall river health, reducing oxygen levels in the water and potentially harming fish and the bugs they feed on — never mind its ability to sully an angler’s experience.

This summer isn’t expected to be much better on the Gallatin. Montana is experiencing blistering, abnormal heat and drought conditions, and the green gunk is [already in bloom](#).

“We have some of the best natural-state streams, and algae blooms are showing they are out of whack,” said Guy Alsentzer, executive director and founder of Upper Missouri Waterkeeper, an environmental group based in Bozeman. “Nutrients load the gun. Temperature and heat pulls the trigger.”



The 120-mile-long Gallatin River is one of three rivers that converge near Three Forks, Montana, to form the Missouri River.

SARAH LAIRD / 500PX VIA GETTY IMAGES

Water Woes

Three main streams — the West, Middle and South forks of the Gallatin — flow through Big Sky before draining into the river’s main stem a few miles below the resort town. All three have been designated “impaired” waterways for more than a decade due to nutrient loads that exceed state water standards.

Kristin Gardner is executive director of the Gallatin River Task Force, a community-based organization that monitors water quality and leads river restoration work. She said nutrient pollution remains a major issue in greater Big Sky, but that worsening climate impacts appear to have spurred the flare ups of algae on the main stem of the Gallatin in the last few years. The blooms were primarily concentrated in waters below the resort community; however, algae also appeared on a tributary upstream of Big Sky where there is little development.

“The big change is not an increase in nutrients necessarily, but an increase in temperature and a decrease in stream flows,” she said.

Whatever the primary driver, stretches of water this clean and cold shouldn’t be clogged with algae.

“If you’d have told me that 20 years ago, I’d have said, ‘That’s silly. That can’t happen,’” said Toby Swank, president of Fins and Feathers, a Bozeman fly shop and guiding outfit. “What’s going on, it’s scary.”



when nutrient pollution and global warming unleash unstoppable changes. In light of the situation, Upper Missouri Waterkeeper is calling for the state to designate the main stem Gallatin as “impaired,” which would free up resources, and for a halt in new development until current sources of pollution are identified and addressed. Alsentzer said it is time for a science-based “pollution diet” in Big Sky: for proactive state policies to be implemented before it’s too late.

“We shouldn’t be piecemeal approaching what’s happening in the greater community of Big Sky,” he said. “We need to take a holistic approach and the best thing to do right now is to hit pause. We need to hit pause on everything to let the science catch up and direct how we can grow without growth becoming a zero-sum game where the river is the loser.”

Instead, the state has continued to greenlight new development that conservationists warn is likely to further degrade water quality on the Gallatin.



THE COMMUNITY'S MARKETING AIRM, VISIT BIG SKY, ADVERTISES THE COMMUNITY AS A FISHING PARADISE ON ITS website (see screenshot above).

Development Pressures

Two projects in Big Sky Canyon Village, located along the Gallatin River several miles east of the Yellowstone Club and Big Sky proper, have come under intense scrutiny.

Lazy J South, a 200-acre residential and commercial development, first received a state groundwater discharge permit in 2006, but there's been no construction. A new owner purchased the property last year and subsequently got approval from the state environmental quality department — or DEQ — to construct a septic system under the 14-year-old wastewater discharge permit.

Upper Missouri Waterkeeper and Montana Environmental Information Center [filed a lawsuit](#) this month arguing that the DEQ failed to consider the cumulative effects that the development would have on water resources. The groups note in their legal filing that Lazy J South, which will sit less than half a mile from the Gallatin, could result in up to a 20% increase in total discharged septic pollution into area ground and surface water.

“The Montana DEQ is asleep at the switch when it comes to protecting our water from irresponsible subdivisions and poorly planned development,” Derf Johnson, an attorney with the Montana Environmental Quality Information Center, said in a statement.

A second development, known as Big Sky Quarry, is being marketed as a solution to the area's shortage of workforce and affordable housing, although it's not yet clear how much the units will cost. Big Sky Rock LLC is behind the 265-unit condo and family home



RIVER.

Project engineers initially had plans for a single, centralized water treatment system at the Quarry, but suddenly switched gears in 2018 for a series of septic systems that each fall below the gallon-per-day threshold that would require obtaining a discharge permit subject to a more stringent environmental review, according to documents Waterkeeper obtained via state public records requests and shared with HuffPost.

The emails indicate the developers changed course only after conversations with state regulators.

“I was recently contacted by one of the project consultant engineers and told that they may no longer be seeking a discharge permit due to their recent conversation with [DEQ Subdivision Section Supervisor] Rachel Clark,” Chris Boe of the DEQ’s Water Protection Bureau wrote in an August 2018 email to colleagues. Boe noted that his bureau had been working with Big Sky Rock LLC for more than two years on its abandoned centralized system, an effort that included “discussing discharge permitting options, and their need to analyze for cumulative effects and potential impacts to surface water.”

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The DEQ insisted that Quarry engineers were considering multiple septic systems long before agency staff sat down with project engineers for a pre-application meeting in November 2018. In response to HuffPost’s inquiry, the department produced an April 2017 memo in which one Quarry engineer notes that systems discharging more than 5,000 gallons per day require permits that



notice, and that a phased system with each unit falling below that threshold “is an option to consider.”

“The engineer came to the pre-application meeting with a proposal for multiple Level 2 septic systems,” DEQ spokesperson Moira Davin said in an email, adding that the planned system treats wastewater better than a standard septic system.

[Water and Environmental Technologies](#), an environmental consulting firm based in Butte, Montana, was brought on to assist with the Quarry project in 2018. Michael Nicklin, a senior consultant at the company, told HuffPost he recommended the developer consider using SepticNet, a modular septic system patented in 2006 that reduces nitrogen levels in wastewater to below the drinking water standard. Scott Altman, owner of Big Sky Rock LLC, the company behind the Quarry project, said the decision to use SepticNet was “based on the length of build out and getting the best treatment possible at every stage.”

The Quarry will be the first development in Big Sky to use the technology, according to David Erickson, a co-owner of SepticNet and the founder of Water and Environmental Technologies.

Erickson said the problem in Big Sky isn’t the Quarry, which he applauded for its “state of the art treatment proposal,” but rather current development with antiquated septic systems.

“You’ve got all these grandfathered systems going in that we know are causing water quality problems, but there’s no way to stop them at this point,” he said.



Condos and housing in the mountains around Big Sky Ski Resort.

DON & MELINDA CRAWFORD VIA GETTY IMAGES

For Alsentzer, the bottom line is that the DEQ has the ability to require more of new developers given the existing problems on the Gallatin, but has instead chosen to grant categorical exclusions and ignore cumulative environmental effects. The river and landscape are suffering “a nefarious death by a thousand cuts,” he said.

“We have an entire system of government that is corporate captured,” Alsentzer said. “If there’s ever a theme in Montana, it’s that our agencies aren’t looking out for the public anymore. They’re not looking out for the intrinsic value of our rivers or how to protect them from harm. They’re looking at how to incentivize and streamline business. They’re looking at how to make more money.”

Among the documents Waterkeeper unearthed via its public records request is a state engineer’s response to Boe’s email about the



administrative rule that gives the DEQ broad authority to impose specific requirements for sewage treatment and disposal as are necessary and appropriate to” to protect water quality.

Davin, the DEQ spokesperson, said the agency shares concerns about nutrients and algae in the Gallatin River and is supporting the Gallatin River Task Force’s monitoring and river restoration efforts with both state funding and technical assistance. As for DEQ’s authority to implement new safeguards, Davin said that “additional monitoring is needed before we can determine whether any additional requirements or limitations would be part of next steps.”

When HuffPost reached John Meyer, executive director of Cottonwood Environmental Law Center, by phone last week, he was at the sewer district watching a hydrologist put fluorescent tracer dye into the wastewater holding ponds.

Last summer, his firm and two conservation groups filed a lawsuit against the sewer district alleging that polluted water is leaching from the facility into the West Fork, in violation of the Clean Water Act, and that the district is irrigating a Big Sky golf course with treated wastewater with elevated levels of nitrogen. The dye will determine if wastewater is in fact making its way from the ponds to the West Fork.

Meyer’s firm [filed a motion](#) in February asking a federal judge to bar the district from adding new sewer hookups, which would essentially impose a de facto moratorium on new development until the sewer district decreases nitrogen levels in its wastewater. The court is scheduled to hold a hearing next month for arguments in the case.



In 2016, a pipe connected to a wastewater pond at the Yellowstone Club broke, spilling some 35 million gallons of effluent into the West Fork of the Gallatin River. The private club was [ultimately fined](#) more than \$250,000 for the incident, but it came to an agreement with the state to pay approximately \$93,000 in penalties and reimbursements.

ERIC LADD VIA AP

A ‘Glimmer of Hope’

Big Sky’s water problems have almost certainly been exacerbated by the fact that the community is unincorporated, located in two separate counties and without the kind of central, municipal government that might, for example, [enforce building codes](#).

Developers, real estate agents, and resort and land managers sit on the boards of the local resort tax organization, the Big Sky community and recreation nonprofit, the sewer and water district, and the Gallatin River Task Force.

People HuffPost interviewed for this story described it, among other things, as the “Wild West,” a sort of “fiefdom,” and a “company town”



directly tied to the lucrative development boom.

And this isn't just any boom. From February 2020 to February 2021, the median price of a single family home in greater Big Sky [jumped an astonishing 65%](#), from \$1.72 million to \$2.85 million.

“If anyone could do better, in terms of using technology, investments and science to figure out a way to control its impact on the waterway, [Big Sky] could do it,” Alsentzer said.

The biggest hurdle to future growth and development is treating and disposing of wastewater. With its nearly 20-year-old sewage treatment facility nearing capacity, Big Sky has had its back against the wall. The Yellowstone Club's waste-to-snow effort will help alleviate some of the pressure, but not nearly enough.

Late last year, the Gallatin County Commission signed off on the formation of a new sewer and water district in Gallatin Canyon — a first step toward a more centralized system in greater Big Sky. Additionally, the Big Sky County Water and Sewer District is set to begin construction this summer on a nearly \$50 million upgrade to its existing water treatment facility. Phase one of the project, slated to be complete in 2023, will increase the plant's capacity by roughly 50% and significantly reduce nitrogen and phosphorus loads in treated water. A second phase will connect homes and subdivisions in Big Sky Canyon Valley, including the Quarry project, to the upgraded wastewater facility. Sewage from the canyon will be piped to Big Sky and treated, and the district is currently exploring different options for disposal, including groundwater discharge and reuse, according to Ron Edwards, general manager of the Big Sky Water and Sewer District and a member of the Gallatin River Task Force board.



EDWARDS SAID. FOR BIG SKY TO TAKE ON SUCH A PROJECT IS “A STATEMENT OF WHAT WE BELIEVE IN” AS A HEADWATERS COMMUNITY, HE ADDED.

Montana state Sen. Pat Flowers (D-Belgrade), who represents Big Sky, called the planned infrastructure upgrades a “glimmer of hope on the horizon” but voiced concern about what will happen to water quality on the Gallatin in the years before the project is complete.

“It’s the natural resource legacy that we’ve all been able to enjoy,” he said. “That includes clean and cold water. If we don’t have that, it really does cascade negatively to affect our enjoyment of this place, but also the economy.”

Sen. Jon Tester (D-Mont.) wants to see these resources forever safeguarded from pollution and special interests. He’s [introduced legislation](#) to designate 377 miles of rivers, including a 39-mile stretch of the upper Gallatin, as “wild and scenic,” the highest level of federal protection for waterways.



Two anglers cast their lines on the Gallatin River south of Bozeman, Montana.

DIANE BENTLEY RAYMOND VIA GETTY IMAGES

Backward Steps In Big Sky Country

Montana politicians love to recite the old adage that in Big Sky Country “whiskey is for drinking — water is for fighting.” And they’re quick to tout the clean rivers and wild trout that draw so many outdoor enthusiasts to the state each year.

“The fishery has never been stronger,” Montana Gov. Greg Gianforte (R) said of the upper Missouri River in [a May video](#) about businesses in small towns like Craig gearing up for a busy summer season after a tough year during the coronavirus pandemic.

That same week, Upper Missouri Waterkeeper alerted the DEQ to decomposing biological “gunk” extending along several miles of the Missouri River just above Craig. In a May 20 email response, which Waterkeeper shared with HuffPost, DEQ water quality supervisor Darrin Kron wrote that “this condition does seem out of the ordinary for this time of year,” that the substance “could be a combo of last fall’s algae that is dead, and new growth,” but that his section is “very low on technical staffing resources at this time and can’t get out for monitoring or investigation.”

Montana’s water woes aren’t limited to Big Sky or even the upper Missouri River. It’s in the middle of a [statewide drought emergency declaration](#); more than [one-third](#) of its river miles are impaired by nutrient pollution; scientists have documented [a severe decline](#) in



each summer brings new harmful algal blooms and fish kills. Last week, a coalition of fly fishing businesses and conservation groups sent a letter to Gianforte warning that “Montana’s world-class cold water fisheries are dwindling away.”

These mounting threats come as Gianforte plows ahead with a regressive environmental agenda. He has largely dismissed and ignored the threat of climate change, which [threatens to devastate](#) cold-water trout fisheries. Two weeks before his video along the Missouri River, the governor [signed into law](#) a bill that scrapped the numeric nutrient standards the state adopted just six years ago to better protect its water resources and prevent the kind of nutrient pollution that drives algal blooms, fish kills and other environmental threats. More recently, he [withdrew](#) Montana from a bipartisan coalition of more than two dozen states committed to upholding the goals of the Paris climate agreement, then turned around two days later and pleaded for the U.S. Department of Agriculture to declare a drought emergency across his state.

“We’re dismantling our water quality laws in Montana. How do you think that’s going to play out for our trout fisheries?” Pat Byorth, a former state fisheries biologist who now works for Trout Unlimited and serves on the state Fish and Wildlife Commission, [said](#) on the fly fishing company Orvis’ podcast this week.

“You’ve got to protect habitat if you want healthy fish,” he added.

Meanwhile, Gianforte is appealing to anglers and outdoor enthusiasts, inviting them to come enjoy “the last best place.”

“Whether you imagine yourself knee deep in a crystal clear mountain stream, or soaking in the splendor of a Montana sunset on a quiet



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