

# Relative Effects

*Commentary by*  
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I got bad news several months ago when I met with a business colleague of mine at my family's Colorado-based ranch headquarters.

My corrals and working pens, which were constructed more than 40 years ago by my grandfather, had a problem: there was a ditch that ran right through the center of them, and that ditch, which has carried water to the surrounding pastures and fields for more than a century, could potentially be contaminated by the manure produced by my calves and cows in these corrals.

"You're an 'AFO,'" remarked my colleague. "You'll probably have to do something in the next few years to protect the water in that ditch and to keep your livestock out of it."

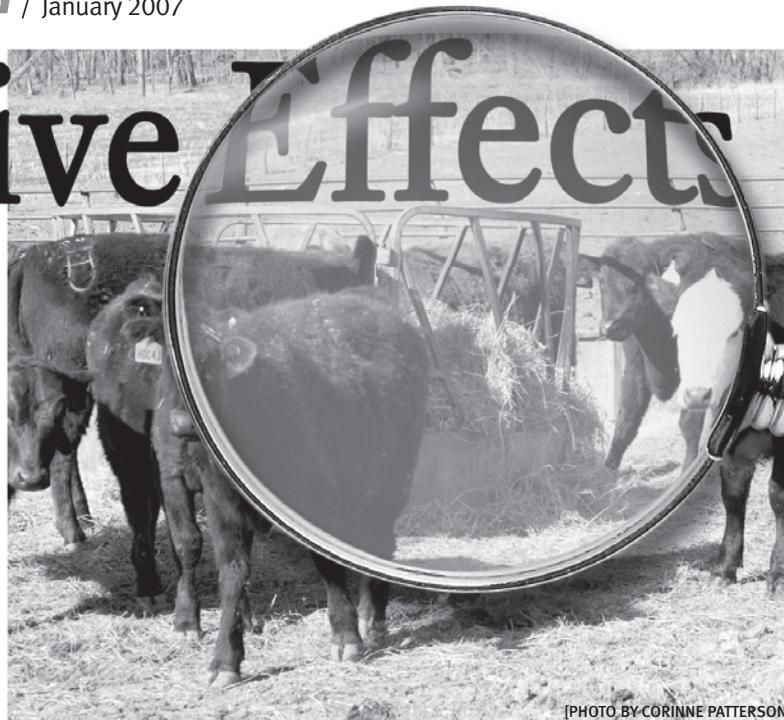
I'd heard of CAFOs — concentrated animal feeding operations where there's ongoing feeding of livestock — but I didn't realize that small operators like myself could face in the future many of the manure and wastewater management challenges of much larger feedlots.

## Nonpoint sources

An AFO, or animal feeding operation, is generally considered any facility where livestock are confined for 45 days out of the year where the area of confinement is void of vegetation and groundcover.

That fit my facility — and thousands of others around the country — to a "T."

My working and feeding corrals totaled about three acres. I have about 100 feet of bunk space, some sheds, a scale house and a chute. My grandpa used to feed 50-60 heifer calves through the winter here. On the east end of the facilities we had a small 4-H pen where we kept a



[PHOTO BY CORINNE PATTERSON]

couple of steers around for beef. And we'd keep a sick cow or calf around for a month or two in the summer, until the animal's health improved.

Now that my grandfather has passed away, the usage of the facility has decreased. Even so, I fed a half dozen yearling bulls from December to the end of March, which could be just enough to raise a red flag.

In fact, what surprised me more than anything else is that government agencies typically don't scrutinize the actual livestock numbers in your AFO; they look at the relative effects of those animals on neighboring streams, lakes and waterways.

So, if just one of your cows poops in your ditch, and someone who doesn't like livestock sees it, you could have a problem on your hands.

Furthermore, the potential violators could be almost any type of livestock — llamas, goats, sheep, horses or pigs.

Regulators consider farms like mine "nonpoint-source polluters," and it's becoming increasingly important that small farms and ranches take a look at their manure management practices.

"Where problems occur for ranchers and farmers is when a neighbor or passerby reports their facilities to a state or federal agency," my colleague said. "If they see your cows standing in your corrals up to their knees in mud, you could get reported."

## Making changes

I figure the information I got that day will go a long way in the coming years as I tear out the old corrals and build new ones. Admittedly, when the original corrals were built, no one was thinking about protecting water from manure. There were fewer people in the valley then, and most of the people who lived here were raising cattle, too.

We'll probably start this fall either diverting the ditch from its traditional path through our corrals to the hayfield to the south. If we can't get sufficient "fall" for the waterway, we will most likely place culverts through the corrals in key places to prevent any contact with manure and water.

In addition, we'll install some automatic waterers throughout the facility, so cattle and horses don't have to wade into the ditch to get

If you raise cattle, your facilities could soon come under environmental scrutiny.

a drink. That could be a big long-term benefit for us anyway, since we spend a lot of cold winter days chopping through the ice in the ditch so our cattle can get a drink.

We've already rebuilt some fences, and changed the way cattle move through the facility. The ditch is less exposed, and we can move cattle from one pen to another without having to cross any waterways. We've got plenty of rocks, something we may pile into a 30-yard berm on the west end of the corrals to control runoff in event of a big rainstorm.

## Not alone

Ultimately, the lesson for me is that no livestock operation — no matter its size — is immune to efforts by regulators to change livestock management practices. I suspect there will be many other small farms and ranches, just like mine, that will be investing considerably to improve their corrals and working facilities to protect the environment.

"The best thing you can do right now is to get ahead of this issue," my colleague told me. "By doing some things now — and documenting the changes you've made — you will go a long way in heading off any problems you might have with regulators in the future. If you wait and sit idly by, the downside of this may be much greater."

## Are you a CAFO or an AFO?

There are three main types of cattle operations.

1. First, there are pasture operations, consisting of pastures, stubble fields and rangeland where cattle are grazed and not confined. These are not considered animal feeding operations and are not regulated, except in a few cases.

2. The second group includes small-scale animal feeding operations (AFOs) that confine animals for more than 45 days a year in lots, but have a capacity of fewer than 1,000 animal units (AU). Most cattle operations potentially could be considered an AFO.

3. The third group, concentrated animal feeding operations (CAFOs), includes operations with capaci-

ties of 1,000 AU or more and smaller operations that are specifically designated as CAFOs. Either way, CAFOs are always regulated.

The Environmental Protection Agency (EPA) has the authority to regulate all CAFOs. In most cases, they delegate their authority to individual states. The states then administer their own livestock permit programs. Most cattle producers prefer it that way. They like having face-to-face interaction with regulators.

"States are also allowed to create their own environmental rules that are more strict than EPA's regulations, but not less," says Tom Brink of Brink Inc., an environmental consulting firm. "That's why, in some

states, a producer that preconditions 300 calves in a pen for 45 days can be considered a CAFO."

Adds John Etheredge of Habil Engineering, "The first step is to get a copy of the regulations from your respective state regarding AFOs and CAFOs," he says. "Realize that these regulations are meant to be very precise, so they are going to be harder to understand at first. Spending an hour or two of effort in understanding these regulations will go a long way when you start to ask questions and when you start to hire environmental and engineering services."