

FISHERMEN'S NEWS

The Advocate for the Commercial Fisherman



Pacific Coast Federation of Fishermen's Associations

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EBFM: Not Just Another Dirty Word BY ZEKE GRADER AND TIM SLOANE

ZEKE GRADER GREW UP IN FORT Bragg, California, the son of William Grader Sr., a prominent fish buyer. Zeke spent most of his time with his dad, in and around the fish house. Zeke was often lucky enough to be able to drive with his father down the coast in a big box truck to pick up or deliver fish at the ports and towns that break up the drive down Highway 1.

When Zeke was about four years old, his father put him in the truck and they started south from Fort Bragg, headed for Moss Landing to pick up a load of sardines. Zeke was happy to go along for the ride, sandwiched between his father and uncle, and being tossed around the truck on the tight curves of the old highway.

They didn't get too far out of Mendocino County when they came to a curve that would forever change Zeke's way of interacting with the world.

As the truck dug in for the turn, the sun caught Bill Grader's eyes just as a car careened around the corner from the opposite direction, barreling across the yellow line. Bill screamed a mild profanity at the top of his lungs as he spun the wheel of the big truck, and the Grader boys swerved onto the shoulder, coming to a stop on a sliver of dirt just wide enough to keep the truck out of the Pacific.

Zeke was impressed.

It wasn't the near-death experience. Zeke was probably too small to see over the dashboard, let alone to understand how close they came to their doom.

What captured his attention was that word. It was the way his father delivered it, heartfelt, angered, passionate. It was the sound of it, rolling at first and then ending with a staccato punctuation of the sentiment it was meant to convey. And it was the reactions he got when he started to say it: amused guffaws from his uncle, and the admonition from his father that he'd better not repeat the word in better company.

So of course, four-year old Zeke took to saying it all of the time. On the truck ride all the way to Moss Landing and back, at school to impress his friends, and hanging around in the fish house to prove his moxie to the fishermen.

He just had no idea what it meant.

Dirty Word of the Week?

When nonprofits and the government throw around the phrase "ecosystem-based fisheries management," we get the notion that they're acting at least a bit like Zeke did when he came back from that trip with his dad. It's a catchy phrase, and saying it conveys upon the speaker an air of authority, simply because it sounds important.

But just because the latest talking head says the phrase, it doesn't mean

he or she fully understands what it means, particularly to fishermen. And when the powers that be start spouting off important-sounding phraseology, fishermen get justifiably wary. Why should anyone trust a concept whose viability lies entirely in the catchiness of the phrase used to describe it? That's whistling in the dark.

The "concept" of EBFM popped up about thirty years ago, but the reality is that eggheads and managers were just putting a flashy name to something the fishing community had understood for a long time. And maybe more to the point is that fishermen engage in ecosystem-based fisheries management (EBFM) every day.

Defining EBFM

To put it academically, "EBFM" is supposed to represent a decision-making process that takes into account multiple variables that could influence the outcome of a proposed course of action.

To put it realistically, think about the decisions that dictate whether you go fishing on any given day.

It's never as simple as: "I don't have fish, so I'm going fishing." Before you haul gear out to your boat, you take a look at the weather and ocean conditions, you ask around to find out if there's a bite, and where it might be, and



you look into the ex-vessel price. You decide how much fuel you'll need, how much food you'd have to buy, and whether you'll need crew. All of these things have to fall into place before it's worth it to make the trip.

At the same time, it shouldn't be as simple for the regional Fishery Management Councils to just say: "There aren't many fish, so we have to shut down the fishery." That's ignoring a significant number of variables that could be contributing to the stock's declines, variables that should also be considered by the Council.

And that's the point of EBFM: looking at all of the potential influences on the health of a target stock before deciding what to do with it. It's as simple as that, and we can sum it up in these basic principles: (1) consider habitat; (2) consider the food web; (3) consider human impacts (fishing and non-fishing), and; (4) use the right data to plan accordingly.

Basically, EBFM tries to account for the fact that fish and fishermen are just two small points in a massive, interconnected ecological system. EBFM will take into account fishing impacts, like effort and the effects of bycatch, but it will also look at upwelling, water temperatures, water quality, currents, natural availability of prey, abundance of predators, health of the nursery, and the like.

This is because the status of that whole system affects the abundance of fish. Just as you understand that fuel has to be at a reasonable price to make it worthwhile to leave port, fisheries managers operating under EBFM principles would have to understand that the variables mentioned above all play an important role in whether a fishery is sustainable and worthwhile.

This represents a major departure for most of the regional Councils, which since the beginning of regulation under the Magnuson-Stevens Act (MSA) have managed most fisheries as if fishing were the only variable affecting stock abundance. We all know this is patently untrue.

Take Klamath River coho, a fishery that's been closed for years. As that stock continues to decline in the absence of fishing, it has become abundantly clear that habitat loss and drastically reduced streamflow are the major influences on the coho's abundance. Similarly, the National Marine Fisheries Service (NMFS) acknowledged this year that West Coast sardines declined because of ocean conditions, and not overfishing as some environmental groups would have had the public believe.

Under a true EBFM approach, fishery managers would not only take ocean conditions and habitat destruction into account when setting the season, but they'd also take what action they could to rectify those problems.

Why EBFM?

The most compelling upside to EBFM is that it goes a long way toward ensuring the long-term sustainability of the fisheries. At PCFFA, we have always stood by the principle that we should not sell tomorrow's fishing opportunity for today's profit. EBFM reinforces that principle by making sure that all of the moving parts contributing to stock abundance

are protected along with the target stock itself.

West Coast fishermen have recognized the need for all-encompassing protections since as far back as the early 1970s. At that time, the California Department of Fish & Game (CDFG) was proposing a larger herring quota. As counterintuitive as it may seem, the proposal was met with resistance from a number of herring gillnetters.

Those herring fishermen also spent their summers trolling for salmon. It was clear to them that increasing the herring quota could impact the availability of salmon food. They insisted that CDFG make sure there were always enough herring to support the salmon fishery. Those fishermen argued for a lower quota because they understood the interconnectivity of the ecosystem supporting the salmon fishery.

Fast forward to 2015, when salmon fishermen worked cooperatively with the Pacific Fishery Management Council to develop a Chinook season that took into account the impacts of drought on salmon survival. Understanding that the impacts on both winter- and fall-run Chinook were severe, fishermen accepted a more restrictive winter-run control rule that cut in to some fall-run fishing opportunity.

In both cases, fishermen were protecting their fishing opportunities both this year, and into the future. They were doing so by considering the impacts of the larger ecosystem on the availability of fish. No one called it EBFM at the time – it was more likely just called "smart" – but that's exactly what it was.

Possible Bumps in the Road

The problems with EBFM are not inherent in the philosophy itself, but in its implementation. Accordingly, they are surmountable through legislation, regulation or funding.

In order to properly implement EBFM, we need good quality and an ample quantity of fisheries and ecosystem data. Because it's all about understanding interconnectivity, we need to have an accurate scientific understanding of what those connections are. We also need to know how much each connection will impact the abundance of fish -- whether protecting prey species or habitat, for instance, will result in more catchable fish.

Fishery Management Councils should, and sometimes do, make use of existing data to start putting EBFM approaches in place. Adequate data is available in some cases. When the PFMC closed the west coast sardine fishery this year, they employed EBFM principles. Managers and fishermen understood that the stock was going through a cyclical decline due to ocean conditions. That closure ensured fishing opportunities in the future.

However, recognizing that data is scarce in other fisheries, we renew our call for a dedicated "Fisheries Trust Fund" to support the research needs of the fishing community should EBFM become the status quo for fisheries management. The Trust Fund should be federally-funded and dedicated exclusively to providing the rigorous scientific backbone necessary to ensure robust fisheries into the future.

A second impediment to fully realizing EBFM is the



fisheries agencies' lack of authority to restrict activities outside of fishing that will impact ecosystem health. It makes little sense to impose a management scheme that might restrict fishing because of human actions that are unrelated to fishing, if the managers have no power to deal with those non-fishing impacts.

Fishermen already bear the brunt of onshore pollution, water diversions, and habitat loss that result from industry, agriculture, and the like. We call on Congress and NMFS to give the Regional Councils authority to restrict those activities that significantly impact stock abundance. This could take the form of a notification and consultation standard, similar to that under the Endangered Species Act – but could also carry more force.

A final concern is that the very fact of including additional variables in determining allowable catch could result in more restrictive fisheries in the short term. While this may be a difficult reality, it is also the very purpose for managing stocks in the first place: to make sure that we don't fish them out of existence. Adding habitat considerations and the availability of prey species into the mix bolsters our opportunity to fish down the road, and is much more likely to result in higher long term stock abundance than we would see without considering those factors.

Final Thoughts

When after a time Zeke came to learn the literal and colloquial meanings of that word he had learned in his father's truck, it became an important weapon in his arsenal. He would say the word to grab attention when he needed it, or to convey to the intended listener that they were out of line. But he stopped throwing it around lightly when he came to understand its power.

We hope that fisheries managers, environmentalists, and fishermen will stop throwing "EBFM" around in the same way. It's an important concept for fisheries, because it has the potential to protect stocks. In so doing, it protects the fishing way of life. But EBFM will never be a cure-all just because it has a flashy name. It's a concept that needs to be understood, agreed upon, and responsibly implemented in order to realize its potential benefits. **EN**

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