



HITTING THE “EASY BUTTON” ON CONSERVATION PRACTICES

Featuring John Swanson

Water Resources Supervisor

DJ May:

Welcome to the Decode 6 podcast, where we take your questions about carbon and ecosystem services and match them to the experts with the answers. I'm your host, DJ May. This week we're talking about conservation. How do we hit the easy button on conservation practices? That is, how can you take a conservation idea and give it some traction with farmers and landowners? Our expert with the answers is John Swanson. He serves as water resources supervisor in Polk County, Iowa, where he leads both water quality and flood control projects. In recent years, John and his team have developed the batch and build method for private lands conservation, resulting in an increase of over 600% in the adoption of saturated buffers and bioreactors in agricultural fields. He's got some great tips and tricks that will help you help landowners make changes to their practices and improve conservation. Welcome, John. It's great to have you here.

John Swanson:

Yeah, excited to be here and talking about some fun projects we got going on here in Central Iowa.

DJ May:

Absolutely. Well, tell me, which practices are you trying to implement and how's it going?

John Swanson:

Yeah, so we've been working here in Central Iowa, like me personally, for over 10 years, and we've done a lot of focusing on nutrient reduction, specifically trying to treat tile drainage systems from corn and soybean fields. And lucky enough, for the last couple years we've really flipped the script and hit some real successes in the world of doing saturated buffers and bioreactors, which are two very specific strategic practices that target tile drainage systems, and they intercept that water and they filter it, removing the nutrients that we know here in Iowa, central Iowa specifically, we are a leading contributor to the Gulf hypoxic zone, the Gulf of Mexico. There's a lot of nutrients coming off the Iowa landscape. So we really focused our efforts on these practices over the last few years. What we did is we found for saturated buffers and bioreactors across the state, until about three years ago, there was only about 80 of them installed.

They're relatively new practices. A lot of looming questions from landowners about how they really work, a lot of misconceptions about them. To be quite frank, in Iowa we've had a lot of success with erosion based practices, where we have a mutual benefit between the landowner, the farmer, and the government, where we try and tackle that with them. We usually split the costs. For several years, myself included, we were trying to address this nutrient issue the same way. Well, the reality of these two practices is they're purely water quality. The farmer doesn't see an increase in yield, it doesn't fix an issue of theirs. So this idea of splitting the cost 50/50, it just wasn't working. So what we did differently was really we took a much more targeted approach. We brought the idea to landowners and we treated it more like a public improvement project.

We said, "We want to work with you, help install these on your land, group them together, try and reduce costs, improve efficiencies, and at the end of the day, just make things simpler across the board." And lo and behold, those techniques, when we put them all together, this term we developed, it's called the batch and

build process now. In my local area, we'd installed five of these structures over six years. Now we've installed over 125 in the last two years. So we're on a pace of over 50 a year that we foresee continuing.

Maybe the most exciting part is we're just one county here in Central Iowa. The model itself has really taken off like wildfire. We now have upwards of, I believe, 13 different counties are doing similar projects. And really, frankly, they're seeing the same levels of success. So as we keep going with that, we've now turned our attention to how do we take this new methodology of grouping and targeted outreach and simpler programs and apply it to other practices as well?

DJ May:

Yeah, that's fantastic. That's just a crazy increase from what, five to 50 a year? That's so impressive.

John Swanson:

Yeah, so five in six years to 50 a year for the last several years. To me, it's been a career changing experience. I get to a point where you sit down with a landowner, say, "What would it take to get you to install? How can we make this work for you?" And when we finally sat down and admitted to ourselves, "Maybe we're not doing this the right way." We put all of our programs aside and we just sat down and talked to our landowners and farmers and really figured out what the hurdles were. And then we put together a program based around addressing those hurdles. The hurdles might be as simple as they don't fully understand the practice, or they go in and talk to the government and every time they go in they get a different answer. Are you allowed to do these on CRP or not? What we learned was there's a lot of people out there sharing the wrong information. So it's been really a good experience.

DJ May:

Yeah. Well, give me some more detail. Talk me through the batch and build method. So you sit down and you talk with the farmers, that's one step. What happens next?

John Swanson:

Yeah, so if we were to just really simplify this batch and build method is, to kind of kick things off, you're working in a watershed. You may have different water quality impairments or maybe different practices you can do to address those. There may be flooding. But what we've found is like, "Okay, we're going to focus in on something." In our case, we're going to focus in on treating tile where we know most nutrients were coming from. That's what all of our research was showing us. And we want to do saturated buffers and bioreactors.

The next step for us was truly... we actually mapped out all the locations using the latest and greatest GIS tools, essentially giving us a hit list of fields. They say, "Don't call it hit list," but it's like, "It's our hit list. We want to get in and check out all these fields."

We found, we said, roughly 50 fields. We want to get into these fields, we want to go to the landowner and really simplifying the conversation with them next, was the next step. So we actually assigned every landowner a project manager, that through the course of the whole project, they were the only person they ever needed to talk to. They would get them answers. They would be the face of the project to really just, again, simplify the conversation.

Then we made a pitch to these landowners said, "Hey, we want to treat your tile. We want to treat every tile in your fields, but we got to get into your fields and see if this really works and ground truth it." We then had to learn how to survey more efficiently. We used to survey 10 sites a year. We got to a point where we're

surveying 10 sites a day, and we would call those landowners and we'd basically make a pitch, say, "We're going to take care of hiring the contractor for you. We're going to take care of all the money. You're not going to be taxed. We're just going to ask you to... At a certain point, you're going to own and maintain this when we're all said and done."

So we would go out and we'd say, "After we survey your field, we're going to get back to you in eight weeks, and we're going to tell you what will work in your field, and we're going to share some more details with you at that time." So we gave ourselves an internal deadline. We went out and surveyed every site, and that first year we surveyed about 150 sites. We learned that, through over the past couple years, you don't need to survey every site. Sometimes you just know sites aren't good sites. But those that worked, we would then go back to the landowner with very specific... and we were like, "Listen, this is what works in your field." We, at that point, would share the details of how the funding would work, and we'd have very specific requests. At that point, it's like we were sitting down with them at their kitchen table and we told them how we're going to take care of pretty much everything for them.

Our goal is to not... "Your drainage isn't going to be messed up. It's going to function the same." And usually our response was like, "Yeah, why wouldn't I do this?" And we're like, "Exactly. In this case, this is just an easy fit." Some landowners would be like, "I don't know, this is new to me." And we're like, "Hey, no worries. Let your neighbors do it first. We're not going anywhere." So then we really test those waters of grouping sites together. We started designing them in unison. We'd hire one engineer or do it internally, and we'd design them all at once. And then we basically figure out how to bid all these projects in groupings, because we were running into that sometimes it's hard to find a contractor to install a saturated buffer that costs four or \$5,000, but what if we had bid at 20 at a time, or 50 at a time?

We tested those waters and what we found was it, in fact, did work. Contractors were much more interested in bidding on these in groupings. They knew they were being hired by a government entity. And basically we were operating on behalf of all of our landowners. And then essentially we did just that. We had more control over the construction. Most landowners, some of them wanted to be more involved, some less involved, but basically we could take a lot of those pressures off the landowners and just simply deliver practices to their ground. We tore up their land a little bit, but we cleaned it up, reseeded it, and when we left, we made sure they were educated on how to maintain these practices, and boom, we saw this massive increase.

But again, the big things were simplify. Be very conscientious of landowner's times. We only called them when we needed their input on something. Unless they wanted more contacts. And then we always gave them expectations of when we would be in contact next and what the next step would be. I think we gained a lot of credibility with folks that maybe didn't like working with the government that much, but they saw we were serious and we were very focused. We were really focusing on, we told them exactly what we wanted do and we were just very clear about it.

DJ May:

Yeah, and the follow through is there too. I feel like that's big, coming back with that plan and sitting down.

John Swanson:

Absolutely.

DJ May:

Yeah.

John Swanson:

And now what we're at, we're like three years in, we've done over 100 projects. What we saw that first year was a lot like the classic landowners that we've worked with before, the very conservation minded were participating. Second year, third year, really, everyone's like, "Oh, John and his team, they're just normal folks. They're trying to do this project. They're trying to make a difference." I'm trying to make it easier for everybody. And we've just seen more and more folks that we honestly didn't think would ever work with us or come into our door. Honestly, outreach, pretty minimal. They're coming to us at this point, which my experience over a decade working in Central Iowa, that's crazy. We're no longer the government knocking on your door trying to talk you into doing something, but it's like, "Hey, we heard about you guys from our neighbors. We want to work with you. Let's figure out what works in my field." And we're like, "Yeah, that's awesome. Let's do it."

DJ May:

Yeah. Well, I'm glad you brought up that snowball effect with the conservation minded folks, the early adopters. People talk about it all the time, you have the early adopters and then the lag. But, I don't know, if you had to look back at what happened, do you think it's because you had those conservation minded folks that got onboard that it did snowball, like word of mouth?

John Swanson:

I think it was personal interactions. I think it was personal relationships. Once we got to the point where we could naturally build those relationships, what I found time and time again, is people are well intended. The problem is people are busy. Think about a farmer or landowner, they probably have a day job. They probably farm on the side. They have kids trying to go to soccer practice. In today's day and age, people are really busy. What we found the biggest hurdle, what we called it, was the hassle factor. People want to do conservation. Again, this is very clear, looking back. The problem was, it's a government program, everything was just too complicated. It was too much time and no clear answers.

So when we were able to simplify and target something, and not to say... we do other practices too, but to get started, we're like, "Let's do this one thing. Let's build a good relationship, and then we'll see where the relationship goes." But by helping streamline it, make conservation less of a hassle... I still firmly believe money wasn't the issue, and I really think it was just making things more convenient for folks so they can do the right thing and be part of the solution, but make it fit for their time.

DJ May:

Yeah. Yeah, I like that term, the hassle factor. I think that's great.

John Swanson:

Yeah. Yeah, I have a PowerPoint slide where I go through all the... All these little issues that, for one landowner, it might take one issue to be like, "Nope, too much of a hassle." For somebody who's super into this stuff and researches conservation every night, they might go through all the hassle in the world to get you to the finish line. So if you can take off every hassle off the table, then you sit at people's kitchen tables and they're like, "Why wouldn't I do this?" And you're like, "Exactly. Let's do it." And then it's just you got to have a relationship with them and then follow through with it.

DJ May:

Awesome. Well, I guess if you're going to summarize here, maybe we're not working with tile drainage, it's some other conservation practice. If you were starting a brand new thing today, what would be your first step, and then how would you carry it through to batch and build?

John Swanson:

Absolutely. For me, we started with tile drainage. We're now applying it to wetlands. We're applying it to urban soil quality restorations. We're applying it to cover crops, so it can be done. To me, the steps really are, just focus on what is your priority practice or your priority issue, and what do you want to focus on? If you're like, "Let's try and knock this one out of the park and then we can move on and do something else." So the first one is prioritize. Both prioritize your goals and your solutions and prioritize where you're going to work at. You got to find out what are the latest and greatest mapping tools, because you can't go into a landowner saying, "This might work in your field." You want to go in saying, "We feel strongly that this is going to work in your field, and we want to work with you. We think we have a good shot." Sometimes it's wrong. That's okay. But the closer you're going to be to having good sites mapped out, like when we're talking wetlands, incredibly site specific. So it varies by practice, but then create your hit list.

The next one is think about your team. Who's your team? Who's going to do the outreach? Who's going to be the face of the project? Who's going to design it? Who's going to manage the money? So build your team.

The last part is, is this idea of fiscal agent, and that is traditional conservation in Iowa is a landowner signs up for a conservation program. They hire the contractor, they have the work get done. They may or may not pay the whole amount, or they at least get an invoice. They then have to submit it back to the government and wait 30 days, or whatever it might be for their reimbursement.

That is not a convenient process. For a motivated landowner, they're going to go through it. But for a lot of folks, that's too much. So can you, as a local fiscal agent, you manage all the money. You could compile state, federal, local sources. You could hire one contractor to do multiple sites. Landowners may still pay a portion, but maybe they just write you a check for their portion and you manage all the money for them. Incredibly efficient if you do it right.

The last step will be come up with a funding strategy that is realistic for landowners, and then boom, go forth. You're going to have a couple headaches along the way no matter what, because that's just the world we live in. But if you can hide those headaches from landowners, don't make the landowners have to deal with those headaches, figure it out for them, and just simplify the process.

DJ May:

Yeah. Yeah. That's so true. Run interference for them and then make it look easy. Yeah. Great.

John Swanson:

Absolutely. We always joke in our team, it's like the mythical easy button for conservation, because if you do it right, the landowners and farmers are like, "That was really easy." And you're like, "Yeah, it was." But really you just took the work off their plate as a conservationist. It's easy for them, but it's really not easy no matter what. So you're just taking it off their plate.

DJ May:

No, that's fantastic. Any final thoughts, John, before we wrap up?

John Swanson:

I'd say, I know we may have a wide breath of folks listening today. Just Google Iowa batch and build. You'll find names, you'll find people, you'll find my contact. I'll tell you, as a person who has done a lot of different practices and worked with landowners, farmers, city folk, if you're talking private lands conservation, really take a deep dive into this and you can seriously get some practices on the ground by batching them together and building them all at once.

DJ May:

Awesome. Well, thank you so much for your time and for being here.

John Swanson:

Yeah, happy to share.

DJ May:

If you enjoyed this episode and want to learn more about John's team and their batch and build method of conservation, check out the show notes. And if you're interested in carbon and ecosystem services and want to dig deeper, come visit us at decode6.org. We'll see you there.