## Selected quotes from farmers at three Indiana focus groups

Bartholomew, Lake, and Tippecanoe Counties Spring 2014

\*Each color represents different focus groups.

Thoughts on what ecosystem services are:

1	A firm that manages ecosystems
2	Advice to ensure that practices are sustainable and economic
3	Practices that enhance water quality I guess
4	Use of practices to maintain the land
5	uhm I guess my first thought would be services for water quality. You know, so like water
	testing, and things like that.
6	I would say, having to do with just protecting your ecosystem in your area, preventing
	degradation of your local ecosystem.
7	Just management of the ecosystem and anything that goes along with it.

## Thoughts on what benefits farmers see themselves as providing:

1	Food, Fuel, fiber
2	Open spaces, you name it. These people right here are the prime for society. I mean just top notch people.
3	Well we are caretakers of what we're given and we really do strive to believe that we're leaving it better than how we found it.
4	We're in charge of, well in charge is a strong word but you're given that land and I think you have a moral obligation and you are making it a better place than when you got it whether it's the uh your parents retire and hand it on or you purchased it I really believe we want to see better for all of society through whatever we do
5	Well I mean, you know uhm now we're feeding society but we're providing habitat for wildlife and we're also providing uhm the carbon you know the ability to relieve carbon from burning fossil fuels and that stuff. And for their quality and we have to pay crazy amount of money now for tractors and trucks because of the whole EPA diesel fuel situation they came up with. We're definitely leaving the soil in better condition then what we did back in the 70s. I mean my grandpa's 93 and he tell me stories about farming the hills only they make sure they farm is so the water would run off. When he started farming the land we're on now in the 30s and 40s, the erosion was really going rampant and he did everything he could to try to stop the erosion and put in practices to stop that her put in terracing he did system drainage and tile grid systems in the 40s and all of the sudden people think that's something new and like, they'd been doing it in the 30s and 40s.
6	food; that's the main one; We all got to eat right?
7	But along with that being good stewards of the land and providing uhm future generations for instead of just using it and abusing it to get what we can get, we gotta take care of what we got.
8	I think we're educators to the public, the general public, who don't know exactly what we do
9	we're kind of keeping heritage alive
10	Recreation, I mean hunting hiking, all the above.
11	I would say water management just cleansing of your water before it goes into the ground table; there's a lot of areas around here that there's issues with water quality just because of what humans have done and that the ground couldn't quite handle what we put on it

Thoughts on wording of Millennium Ecosystem Service Assessment Framework (i.e., definitions):

1	I think we kind of have to be careful on the regulation piece because regulation is imposed, is
	somebody imposing their will on something we have to do so do we feel it's important for
	someone to regulate that, uhm or impose their wills of views on farmer. We get a little sensitive
	when it gets on that stuff.
2	Yea you throw out the word regulation and your automatic thought is what is some agency trying
	to do to be not what benefit is it helping piling on or that air compressor regulates the air
	pressure. You use regulation now, everyone jumps the wall, first so it's almost a nasty word to
	use. As far as another word something might be a better word to describe, soften that up a little
	bit. Erosion control, that's what the vegetation is doing it holding that, those kind of terms to be
	used are less. Everyone feels like you don't know what's going to come next I feel like.
3	I think I would use something like self-regulation or you know because I agree with these guys,
	you see regulation, you think the governments telling you what to do but if you say I can control
	the flow of water than buffered systems than I think I'd accept that terminology better than
	immediately thinking the governments telling me how to do it.
4	Buffering would probably be a better way to use as a choice of words than
5	[flood] protection instead
6	the wording on this definition I thought most everyone pretty much straightforward and not a big
_	unknown or gray area, I mean I thought it was pretty straightforward
7	Like ecosystems when you put the word services after it afterwards, now it gives it a whole
0	different meaning you know
8	Well I think some people would be radicals, picking everything apart; genetic resources, I mean
	you know genetic engineering, just a can of worms that some people don't understand. And
	climate change. That's another thing that's probably overrated, you can't really change much
0	there but Al Gore's making a living of it.
9	Just judging by, all of the farmers I've met, just traveling the country, every single one of them is
	different, some would have problems and some wouldn't. You just, it depends on how close
	minded certain individuals are, which is very prevalent and I know just trying to talk to people
	it's a lot of, oh my grandpa didn't do it this way so I mean I don't know if you guys have found that hy doing this but there's a lot of that that goes an in this industry.
10	<ul><li>that by doing this but there's a lot of that that goes on in this industry.</li><li>I guess uhm, the only thing I saw that may not apply to like Indiana, could be like landslides.</li></ul>
10	We're not so hilly here that a landslide is a big deal, so I mean when you think of landslide, you
	think of California, or you think of someplace else. I think maybe, I don't know something more.
11	Something not so dramatic. It makes you think, oh well, we don't have too much here, but it's
11	more of a bank stabilization type of thing. We're more concerned about how the creeks are
	getting out and you know, all of that. Which I guess has to do with the flood regulation but
12	I'd say more on the erosion is uhm, preservation of top soil. More so than landslides in this area.
12	I had thought on that work regulation and regulating sometimes what farmers hear that word, it's
15	kinda scary. You know like if we don't do it this way now, the government may regulate us and
	you know and anyone doesn't like to be told you can do this much or that much. It's like
	rationing out like during WWII, like you can only get a gallon of milk. And I think you can cap
	that word, there have to be regulations but you know.

Thoughts on ranking services from least important to most important:

1	
1	Well obviously they're all pretty important, I mean that's, it's kind of a hard list to value each one
2	yea each you know a lot of them is a I guess I vote for them based on sustainability and you know uh recreation, no its nice, it's not a necessarily a part of our sustainability here on the planet where I'm in the camp you know erosion control and freshwater and drinking water, those things are pretty important to human like so. Yea food and water, I obviously can live very long without either of those so it's ranked pretty high. I would have put those two as one and climate as number three. You can't product food if your climate is out of whack. You gotta maintain you ecosystem to feed everyone. And the aesthetic, actually all the cultural ones, that's yes they're nice but they're not necessarily they're kind of like great to have but I don't need it.
3	Well let's talk about how terminology means different things to different folks. When I read climate, I'm thinking Indiana cropland. I guess I went over to global warming and all that here and now but so I ranked it way down and my last one was recreation so that's great all these are wonderful things Indiana cropland can provide part of the reasons all of the other ones can be high but why I thought that was the one was because it impacts with what say any of us can do affects climate taken beyond. If we're talking about climate then I'd using a different term.
4	I chose food and water, those are the basics you know I figured if there is enough pressure to put more food on the table, the rest of it erosion and whatever we'll figure that out. There is a demand for food. Recreation last because if people spend their leisure time based on the characteristics of the natural landscape.
5	you roll your windows down drive you smell the corn pollinating coming out. There is a beauty to that. We all appreciate, well love it, well when forced to pick it becomes, that's not the reason we farm. We all love it, don't get us wrong those are all important but when you're forced to pick they're not as important to people as I think about our community leader somebody eatin and I'm not saying the car plant is a bad thing for our area but I can hear about blank in our area saying how empty it was, an empty corn field and that hill going up there with the windmill and the barn, you know I wish they had a picture of that beautiful farm and they show the smoke stacks, we each growing up now. They were saying about how beautiful it is now. Some people don't realize that was one of the highest hills in the county. They talk about the grounds and how they need to be developed.
6	Gotta eat
7	Well erosion and freshwater provision are tied together, Yea they're pretty similar
8	Well it was about the same, it's always important to have clean water, you know from all the waters for everybody, for streams and lakes and ponds and rivers
9	I actually had fresh water. Because you know the two basic things you gotta have
10	What I want is I want food and freshwater. And then I went down to culture after that to the general public, people like to recreation, they like to see movies, they like to enjoy life, they need a safe place to live, and aesthetics you know, you want the good life. And I guess I farm so I'm involved in erosion but I don't really care how the 70 inch TV works as long as it works,. And so you know that's kind of the way I was lookin at it.
11	It's like, when we were going around, in a natural disaster what's two things they want, for the people that's displaced? Food and water, and water first
12	Not only do you need it to live, but you need it to continue producing the foods, the freshwaters. and necessities to continue producing kind of go hand in hand with each other.
13	Well I know it goes back to their understanding and how well they're educated. You talk to a farmer their very well-versedon practices and erosion control and that kind of stuff because it's something that's pertinent to them whereas the general public, they aren't as concerned about it. They aren't as concerned about nutrient management, they can go out there and put 300 lbs of

	nitrogen on their half acre lawn and they don't think anything about it because they got nice green grass. It's not pertinent to them on a small basis as to what kind of fertilizer they're putting on, yet when you talk to a farmer applying fertilizer putting that much on, economically doesn't make sense, doesn't make sense for the environment so it's a lot of this what they understand.
14	So maybe recreation is going to be lower on the list because hey we might have fun working and you know if we wanted to take a vacation, we're going to do something totally different, yeah we're going to go to the farm show. You know but people who aren't living on farms or relying on the land to make their income, their thinking in totally different terms so the beauty of a park is maybe more important to them than it is to farmers
15	I think it definitely depends where you live at. Like here in the Midwest, you're concerned about food and freshwater. If you go to areas say that are more similar to Brown County where farmland is not that large then it maybe more of the aesthetics the cultural side but if you somebody lives in a flood way where it's going to be more about flood regulation, erosion control so it's definitely based on your geography.

Thoughts on flower diagrams of intensive versus restored ag landscapes<sup>1</sup>:

1	So basically that's saying that in the pursuit of food we're giving up these other things
2	Well the you know any farm magazine you pick up they're talking about cover crops and no till
	so there's kind of a push back for a more holistic approach to farming and go back to nature.
	Your freshwater or the quality of your water your climate your aesthetics, some people may say it
	looks like crap but a lot of people like green stuff out in the field. So I think there's kind of a shift
	back to its not without its challenges
3	organic matter creation and those kind of things that are actually sustainable and are going to
	have a direct impact on the farming operation. You know fresh water this great but it doesn't
	have an economic impact on a farm, I'm not discounting validity but it's hard to tie and economic
	value to that on a farming enterprise. It's a long term, yea
4	So well look at it that way, crop variety is a monoculture, so you don't have the diversity of
	material to pull from but if you're looking at biotechnology it's probably sped up. It depends on
	which one you going to use It depends on the description so there's some confusing there
5	well you're talking about those factors if one influenced the others well, it'd be really
	independent. It would be really, depending on the situation, cause or result. Uhm when our land
	will have a different effect if you change one parcel of land vs a different parcel of land I guess.
6	yea, the tradeoff makes sense.
7	I just don't see how it could be so one sided with the natural you know I know I it just seems like
	it's not a lot of food and a lot of wonderful everything else. It might be more of like some in the
	75% in the recreation. I mean how you are for recreation other than hunting. You're not doing
	anything for a growth of a forest you know you can't play ball or something.
8	On the other hand the extreme case of the cropland you have a high food provision but then again
	you have dropped down to 50% sense of place but for a farmer, if they look at a wonderful crop
	ground, that is our sense of place that is beautiful for us.
9	I think you can definitely see the tradeoff, you lose a forest and gain crop I mean you are going to
	lose some but you will gain some in food production
10	A time scale of what you're looking at will be important

<sup>&</sup>lt;sup>1</sup> Foley, Jonathan A., et al. 2005. Global consequences of land use. *Science*, 309(5734): 570-574.

Thoughts on evaluating ecosystems on their farms:

1	I'll be the odd man out with the vegetable production a lot of stuff it extremely heave tillage and I don't like that I want to see more no till in the vegetables incorporating more into the cover crops I would like to see all the erosion control would ideally increase for me because I hate seeing the till it drives me nuts, I see it around me house there is see corn right outside my back door on 500some acres that has been no till for 20 years and its mobile plow for 4 years and I have black snow on my farm. And it's something I'd like to see not just on my farm but other farms too round the area so with the vegetable side I would want more no till it's just, with all of the vegetables its extremely difficult to incorporate all of that so
2	As for aesthetics I'd always like to see higher there's always something on the farm that doesn't look the way it should, pile or junk or whatever that just doesn't and you pull in and it's an eyesore to you and other may not notice but to you and it's always on the bottom of the list because producing something is more important, the aesthetics doesn't gain money at the end of the day. So at the end of the day, this ideal so economic considerations are out
3	Not that any of us is willing to abandon protecting the environment and order to go after 100% food production. I mean that's not what we're about we are looking at this being here for the future generations to do more than we are and that is important to us that can't be stated in a graph that is our nature of how we produce its trying to balance all of those things, the give and takes and I think kits hard to put it in the numbers but end of the day that's what we're striving for. At least in this room. I don't think I mean don't get me wrong there are people that are about \$7 corn high commodity prices people viewpoints somehow the farm and where they prioritize their process. When you look at prices of cost and production what's going to give and take make an order to be surviving to produce. So that fence row that's been sitting there harmonious beautiful environment collecting erosion, wind erosion and all of that now is a economic burden and needs to be taken out so that we can raise our corn on that, whatever half acre. So there's a point where we all change our mindset in our practices to an extent and I think it takes some consideration and really understanding, it's hard to stick to your goals it tempting, it's a temptation.
4	in the no till thing we can give up a little bit of yield. In that sense it's given up by savings of fuel and labor and those things it's a little easier to justify so we've proven that we will do that, so kind of question your asking is maybe if we incorporate cover crops into that would we find the value enough to sacrifice the erosion and the yield. And I'd say in my opinion is yes
5	I'd say it's a little bit different. It's just like in industry you have the good ones and you have the bad ones. It's always the bad ones that make the media, farming can get a bad name to the general public because they see guys that are driving the bottom dollar that are out to destroy everything they have in order to make buck. And that's not the case for the group of farmers but there is the bad, unintended even. That's what makes the news that's what forms people's opinions unfortunately. That's what the large, corporate type are concerned about, the bottom dollar, unfortunately that's the way it goes in terms of marketization and farming. Yea I don't think we're segregating ourselves from farmers in general but there are always some outliers in general so we're not trying to put ourselves on a pedestal.
6	Some of them I'm not sure you're going to impact that drastically but like the aesthetics and the recreation because if you're still using it for cropland it's still not going to have space for recreation, it's still cropland you need crop because that's why you vary some of them and the fact that, but I was looking specifically at the crop way itself.
7	I mean there's a lot of variables that I can't control in terms of you know water and how much rain we get or even as far as we take water control and erosion control and stuff like that we don't grab it soil particles, that washes away or even using drainage tile or those three other water systems it's not a 100% no matter how perfect the situation can make it

8	Well currently right now I'm trying to do everything I can to deal with erosion when it comes to
	recreation and aesthetics Its side benefit. Food provision I'm trying to bring in the greatest
	breaker for food. I guess there's not really anything I'd wanna change
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	breaker for food. I guess there's not really anything I'd wanna change
10	To me a beautiful open crop space, someone else would call it boring. Some people say going
	down I-65 seeing nothing but corn is boring but I see beauty.
11	One of my farms does [agro-tourism] so my recreation was pretty high because people come out
	to visit and that's their recreation.
12	You're kind of focused on living and your overwhelmed on that and you forget other stuff
13	deer and turkey and everything else can wreak havoc on crop ground but at the same time it's a
	food source and we have to manage it.
14	I guess what I was unsure about was the climate regulation. That's not something I ever think
	about. Of course when you're in the summer when its 110degrees I don't think what am doing to
	cause this. Its mother nature again that's something I never thought about.
15	Okay for the erosion prevention my thoughts were okay on one of my farms we practice no till
	and we have waterways and we're doing all those things to prevent erosion. On the other farm we
	till and we don't have water ways and we don't plant cover crops so if I can try to bring that to
	the other farm to the way that is beneficial I think that would help prevent. Its just talking
	everyone into it

Thoughts after looking at a map of croplands in Indiana:

1	To me it says if we don't protect our ecosystems we need to protect our farming. It's what you said, few people representing a large landmass, yea when we go to government regulation we typically have the smallest voice so we have most of the resources yet we're the ones that get slapped the hardest
2	Well Indiana is pretty much the highest in terms of agricultural crop land. Especially for our size it's very high
3	[the map is] saying basically that Indiana farmers provide a majority of the ecosystem services.
4	It didn't change the fact that it needs to be more important or less important, it's that it's important.
5	That might make them want to change their practices. Farmers are closed minded people we don't know if you guys realized that. It's hard to get them to change believe me
6	We're a big player in the game, the most important player in the game.
7	My thing is that 2% of the population is farmer and we're responsible for you know 60% 70% of the state you know. When you look at the acreage that's covered the yellow and then the 2% of the percent's states population takes care of the world population and the US population.
8	10% of the population sure feeds a lot of people.