Video Transcript: Farmer Greg Chamberlayne describes his flourishing floodplains and how he manages them.

So we're a family farming company, we're farming 590 hectares. We're about two miles north of Gloucester, farming alongside the River Severn and the River Leadon. We've got about 400 hectares of arable land and the rest is woodland and grassland. Soil types seriously vary. We've got really heavy clays, to some more silty clay loams. We have everything measured, and that helps us produce variable seed rate maps, or variable input maps, depending on the soil type. The best soil is nearest the river, and I am guessing that's from where soil's been deposited over generations of floods. We've probably got about 150 hectares of arable floodplain, and over the last ten years that's sort of decreased from arable to grassland. So we've got about 70% arable and 30% grassland.

[Caption on screen: Tell us about your arable floodplain].

With our arable floodplain, we run a spring arable rotation mainly, well, it was quite wide but we were having issues with some unreliable crops. So we were planting spring wheat, spring barley, peas, linseed and canary grass. But some of those crops started to have issues with weed burdens and the gross margins haven't looked great. If we have too many failed crops in a, on an arable floodplain field, we're looking at other options, so whether we can put them into a stewardship scheme and revert them back to grass.

[Caption on screen: How is the weed burden on your floodplain?]

We have issues with wild oats from spring planting year on, year on year, lots of cereals and not a lot of chemistry to act against it. Also, we're doing a lot of direct drilling, especially in the floodplain. So that's one reason why the wild oats is an issue, because we're trying to avoid ploughing as much as possible.

[Caption on screen: What changes have you made?]

We try and direct drill as much as we can, to avoid ploughing, and that's really helped, I've noticed in the last 2 or 3 years since we've been doing it, an improvement in soil structure and water holding capacity. I'm involved with the AHDB benchmarking our arable crops, and that's really what's led me to noticing that some of our crops, spring crops, aren't producing very good gross margins. And then looking at it more specifically field by field. Year on year, if I find an issue with a field, for example, these fields, last year they were arable, however, we've had a number of years where we have not been able to plant them just due to how wet the fields are. We've decided to put this block into grass and aim for improved habitat for wildlife. The main reason being if we wanted to plant it for arable, we were having to physically drain it or it was flooding in spring. We've introduced some infrastructure, so there's like a riverside bank alongside the River Leadon, and we've got two culverts that sort of go under the bank and into the river. What we've done is put in outlet flaps that you can wind open or closed, and that will then help control water. So at the moment, when we've got lots of water like we have now, those flaps will be fully open.

[Caption on screen: Tell us about your floodplain grassland].

So we a bit of hay but we largely graze any grass on the farm. It's all fairly, sort of, low quality grass. We've got some cattle and sheep, so we've got about 60 cattle, Herefordshire cattle and about 100 sheep. We sort of rotate these across the farm to help sort of manage our fields that we can't, that we no longer use for arable. Our livestock is also integrated into our

arable system. So naturally a lot of our grassland is in the floodplain. We have very little grassland out of the floodplain. So if we've got a winter arable block that is just sitting bare we will, well, we won't let it sit bare. We'll plant a cover crop. So that helps provide some forage for our, we graze our sheep and cattle across it through the winter to give them something to go at because yeah, as you can see some of this grassland is a bit wet [laughing], through the winter, and by grazing cover crops it helps us keep the keep the stock out longer. It's a very extensive way of grazing them, and we don't have to buy any, we buy very, very little forage in, so it's all sort of a self-contained system, as far as possible, as far as possible.

[Caption on screen: What information sources have you found helpful?] We mainly use FWAG for advice and guidance on our stewardship options, and advice for some of our floodplain work, but otherwise... I also use, well [laughing] I use... My grandad has a lot of information and you know, I've only been farming ten years, previous family members have been farming the land a lot longer. So I use them for advice.

[Caption on screen: What are your plans for the future of this floodplain?] I'm not sure, 100% sure what the future of the farm will look like. We are currently in talks about being part of a Landscape Recovery Pilot Scheme which is going to be called eelscapes, where we're looking at returning the land to what it originally was. But that's in the feasibility stage. So that could take quite a large proportion of our floodplain out of production. So we've a number of floodplains, and this one in particular, where we're putting some higher tier scheme options, we're sort of trying to have a range of habitat for the wildlife. So we'll have two fields of grassland followed by one in the middle that will remain sort of more natural regrowth the reason being that I've always noticed that the wildlife love the areas that just have a natural regrowth, they just love the soil structure and love grazing in the softer soil. So that's one of the main reasons we've sort of this year left one field not as grass, but left it with regrowth, and the regrowth produces seeds, they fall, leaves cover and I've sort of cut areas of cover, so that they've got a range of options, either cover or no cover, and they seem to really enjoy it.