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Audio tour interview with $Ben\ Adamo$ STOP 3:

The Creek





JESIKAH MARIA ROSS INTERVIEWS BEN ADAMO

Cache Creek Nature Preserve • August 31, 2011



Stop 3: The Creek

Okay, so tell us where we are and what it's all like around you.

Okay, we're on the south side of the nature preserve and we're on the creek bank looking south and we're down in the creek itself so the area is full of rushes and reeds, tulles, cottonwoods, willows and it's green and cool down here because we're in the shade and it's really a greened up site.

And can you tell me what you hear both natural and maybe not so natural in the background?

Sure. Mostly right now, because there is a pretty good south breeze blowing, I'm hearing the wind in the cottonwoods and in the background occasionally we're hearing the airport at the Watts-Woodland Airport and some road noise from county road 94-B.

So what memories does being here at this spot on the creek bring back for you?

Well, being here right now at this site, it's difficult to imagine what it was like here in 1974, but if I was standing in the same place in 1974, none of these trees would be here at all. This whole area, even pre-mining at that time, was pretty barren. There wasn't this kind of growth or we wouldn't have been in here mining aggregate. You couldn't separate this type of vegetation from the aggregate and make specification materials. So this creek bottom was basically pretty much what was referred to in those days as a moonscape. It was really just bare gravel bars and very little vegetation. There were some spots of vegetation out here, primarily tamarisk and not a lot of that, but it was mostly just the gravel creek bottom without a whole bunch of vegetation in it and not much water although there was a thread of a stream in this area.

Did the mining companies have to come in and rip out the vegetation to be able to actually effectively mine the creek?

Well, the gravel companies did have to do some vegetation removal prior to the mining but there wasn't very much vegetation at all because if there had been the roots themselves, you wouldn't be able to separate from the gravel and one thing about roots, they don't float. So the equipment that we use to remove woody debris from the gravel itself doesn't work on that, so if there was heavy vegetation in any areas we avoided them because you couldn't separate the roots from the aggregate material.

That's interesting. So what do you love most about this creek?

Well, the interesting thing about the creek here at this location is the fact that it lends itself to the type of vegetation that we see here now and some of that, and we might get into a debate about this with some people, but actually I think some of it is enhanced by the fact that it was mined in the '70s and '80s. By lowering the creek bed, it's actually closer to the water table here so there's more water available for this type of growth and I think that's one of the things about this particular area with the availability of the water, this growth, this heavy growth that we see that's so beautiful is readily established.

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Can you tell me why Cache Creek is so full of gravel?

Well Cache Creek is full of gravel basically because it washed down here from the upper watershed between Clear Lake and here. The upper watershed is full of what they call bad land topography and that material slumps or slides off into the creek and during major flood events especially is washed downstream and in that washing or tumbling action, all the softer materials are separated from the harder materials. The harder and denser materials are heavier so the softer materials flush through this particular section of the creek and end up in the Yolo bypass and what's left behind here are the hard, denser, aggregates that are good for construction purposes.

You said it once, but I'm going to ask you for one more version. Can you tell me the process of how gravel gets into this part of the creek?

Okay, the gravel ends up in this part of the creek because it's washed from the upper part of the watershed where it's basically a badland topography which means that there's not a lot of vegetation up there. It's mostly rock and sand and dirt and so there's basic land slumping or slides up in the upper watershed that are gradually, through time, washed down during major flood events and that material is sorted and tumbled as it washes down the creek valley and the larger material falls out earlier, it's denser, heavier and harder and the smaller material is sorted naturally in the creek itself and the finest material ends up down in the settling basis as kind of a soil type material.

Great. Why is gravel so important in our lives?

Well gravel is one of the basic building materials that we use in modern day construction and we say "modern day construction," it could go back into the 1800s, but the basic building block that we use is concrete and asphaltic concrete for road surfaces today, so gravel is a basic part of our lives both sidewalks, schools, hospitals, highways, buildings. Some of the large warehouses that we see are built out of concrete.

How important of an industry is mining in Yolo County?

Well I think in Yolo County, the mining industry is next to agriculture as far as its production of both jobs and revenue.

Whoa. So it's like the number one or number two.

Number two or three, yeah. I think maybe the casino now might be and the university could be higher on the list, but the mining industry and of course that might be adjusted to our economic times right now, but historically through the last 30 or 40 years probably that's been true.

So when you started mining here it was like one of the top industries bringing in jobs and money and all that.

I think that at the time they put the ordinance in place in 1996 it was number three as far as job and revenue producing for the county.

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Wow. So how did gravel get mined out of this part of the creek? Can you walk me through some of the actual mechanical and technical processes? Maybe not nuts and bolts.

Sure. Well back when active mining was occurring in Cache Creek, the process was pretty simple. We would have to wait until the creek flows subsided because this is a stream that handles large flows in the wintertime, but it is what they refer to as a seasonal creek, so it does pretty much dry up in the summertime. So depending upon the season, you would wait until you were pretty certain that they wouldn't have any more big flood events and usually you would also want to wait until the water subsided out of the gravels and that generally happens sometime early May. So you had a season for mining operations in the creek from basically mid to late May through the first of November and we were required to be out of the creek by the 15th of November every year. So that was pretty much some of the permits that you had with Fish and Game and the Regional Water Quality Control Board required you to be out of the creek by that time. So it was a pretty short mining season in the stream.

And what we would do was the first process, first part of the process would be to construct a road for the scrapers down here so you would come through with a bulldozer and you'd put culverts in any places where there was still some stream flow and create crossings to get over the stream with culverts and pioneer a road in. And then you'd bring a motor grader in and blade that road off a little better using both a motor grader and paddle wheel scrapers. And once you established the road, you would bring the paddle wheel scrapers in and skim the gravel bars that were higher than the water. And so that was primarily the main way of mining in this and all up and down Cache Creek through 1996 was with paddle wheel scrapers and so various companies used different machines, but I think ultimately they favored Caterpillar either 623s or 633s which were self-loading paddle wheel scrapers.

Self-loading meaning they would scrape and then load it so you could take it out?

Self-loading being that they had an elevator or a set of paddles that would both, as you described, they would be scraping the ground and the paddle is pushing the material back up into the bowl so that they didn't have to be pushed with a dozer. So they were an independent piece of equipment that would both level and load at the same time and they are also self-unload at the plant either at the hopper or you could build what we call the surge pile so that you would have material to process when you couldn't get into the creek. So your mining window allowed you to do harvesting in the creek for a certain period of time between May and November, but you would build inventory or a surge pile that you could process both before and after that time.

That's how you could keep the -

Keep the plant going during the wintertime based on the weather.

Right and so why would fish and game want you out by the 15th of November?

Well, just historically when you start looking at weather patterns, there's a potential after the 15th of November for a big storm event that might bring a flood down so they just have a requirement that when you're working in the stream, you're out of the stream by November 15th.

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That makes sense, a health and safety thing.

Yeah.

Gotcha. So when you were mining this part of the creek with all the paddle wheelers --can you describe what it was like when you were driving one of those? Was there a bunch of them down here? I have a hard time in my mind imagining what you're telling me.

Sure. Depending upon the production demands and the size of the operation here at this particular site, we ran between two and three 633 scrapers in usually a shift. They would run eight to ten hours a day. And really I did a little bit of operating the scrapers myself and when you have a competitive group of operators, it was all about how many loads can we get today, and certainly the operation was interested in their load count, but it's just the competitive nature of people and when you have a good working relationship with your peers that we would do our best to get full loads and of course you couldn't cheat loads, you had to make sure you had good full loads, and get as many loads as you could in an eight or ten hour day.

How big were those paddle wheelers?

They're 33 yards of material per load so actually 30 yards of material per load and roughly this aggregate weighs about 1.6 tons per yard. So they were hauling a little over 50 tons per load of material. So you're looking at probably a cycle time, you get between ten and twelve loads an hour.

Oh my god! It sounds like moving the Titanic around.

Yeah, each rig was hauling probably between five and six hundred tons an hour.

Did you get like some prize, whoever won at the end of the day?

No, there was no prizes for the largest number of loads, but certainly management was always keeping track of the production so that was how you were tracking your inventory as far as what you were building and the surge and they had a target production for the year so you'd try to make sure you had enough material up there to process for the year.

I was thinking that whoever won would get the first round of beers bought for him or something like that!

It might be the other way around I guess, but the loser out of the bunch would be the one that would have to buy for everybody, but yeah, it was a bit of a different environment back in the 70's as far as what went on after work and before.

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Do you have a favorite funny story about driving one of those things? Did you guys ever cowboy? You probably can't drag race those things. I don't know. I know growing up on our ranch, if we had equipment like that we would do funny things. One that you can share quickly.

Again, there's probably lots of funny stories that I can't share that went on and we probably would get in more trouble today than we would then for even the ones I might be willing to share, but I think one that was always something that was in the back of mind is one of the Hispanic operators that was operating at the same time as I was when I was running the scraper in creek, there was a lot of tomato production around here at the same time as we were in here operating. We had ag fields all around us and he would go out there in the morning prior to work and he'd grab a few of the rotten tomatoes out of the row and he'd throw them up there in this machine and as we'd be driving down the haul road we'd pass each other and he would flip one out the side of the window and see if he couldn't hit either me or my machine with the tomato going the other way. So I got onto that pretty quick and then we had an ongoing little tomato war.

That would get you -

We would get fired today for doing something like that, but back then it was just something to keep your eyes open.

So you mentioned this, but I'm going to ask it again. Could you just say what this place looked like when you were mining it and what it looks like today? Give me a compare and contrast.

Sure. The site when it was mined in the '70s, even prior to the actual excavation itself, it was primarily just a gravel bottom creek with sandbars and spotty vegetation. And part of that mining process was removing the gravel bars and by doing that you lowered the elevation of the creek bottom and the water is closer to the surface here and as a result of that, this area has always been prone to having cottonwoods and willows wind born and the re-vegetation here is basically all natural because there really wasn't a lot of planting done by the companies. It wasn't required back in the early '70s and so all this vegetation that you're seeing in the stream itself is all natural re-vegetation. And so again, it's a change after the mining to what we see today that's really a lusher landscape than what there was here at least when I saw it in 1973.

And you mentioned earlier in one of your answers; you described how this part of the creek was mined up until an ordinance in 1996. Can you just tell me what was the ordinance and what change that made?

Well, the answer to your question is actually two part. As far as the mining at this particular location, stopped in about 1986, '87 in the stream and that was primarily because we had reached the bottom elevation that was approved for the county for the creek at this location. Because up and down the stream and not just here, that bottom elevation that was permitted by the county was being reached, the resource was running out and so the county, in 1996 created an off channel mining ordinance and they basically said you're done as an industry mining in the creek except for maintenance of flood capacity and now your activities will be outside of the floodway.

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Gotcha. How did you feel about that change at the time?

Well at the time that that change was proposed, I think the feelings were mixed. There was some feeling that obviously everybody always prefers business as usual. You knew what the constraints were on the in stream mining activities, but at the same time there was a recognition that that was somewhat finite and so there was very limited reserves remaining and so there had to be a move to different areas to mine. It is an non-renewable resource so we had to go where the material was and again, with the passage of SMARA, Surface Mining and Reclamation Act, you could design plans that would provide both your mining opportunities and some good reclamation opportunities and as long as you could put together a good plan that you could get approval on, you can move forward.

Now that this creek isn't in mining, what's the function of the creek?

Well I think either when it was in mining or now the function of the creek has always been the same. It's a water conduit for wintertime flows which might be flood flows and during the summer it's a route that the flood control district uses to divert water for agricultural purposes. So the secondary use of course is the one that we're enjoying here today which is a natural setting that the community appreciates. And certainly with the enhancements here at the nature preserve are that public benefit amenity that any water body creates for a community.

For you personally, what's so special about where we're at right now?

Well, for me personally, this particular site right here, this is one of those sites, there's a wetland here, there's an active stream flow by, you can hear the birds in the background, the noise, the wind in the trees. If you're looking for a nice, green water setting, I think that this is one of those places that's really ideal and if you're lucky you might see deer here, you could see beaver, muskrats, an untold number of different wild critters including bobcats and I understand even mountain lions, but it's close to Woodland and it's an opportunity for people to come out and see a natural landscape here that you can't see everywhere.