CWEMF 2014 - Hugo B. Fischer Award Acceptance Speech – by DJE

Thanks

I look forward to this conference every year. At other non-modeling based conferences, I feel like a fish out of water. Here, this feels like home, and I am truly honored and humbled to receive this award.

Now it's been brought to my attention that Lee Bergfeld and Walter Bourez took the lead in nominating me for this award. As most of you know, Lee and Walter are my bosses at MBK Engineers....They sign my checks.....Occasionally they feed me meals....And I consider both to be friends....Lee and Walter, thank you for doing this.

Of course, it is not likely that CWEMF took their support at face value.....Let's be honest, I wouldn't have. They're a little biased. I'm their modeler. Of course, they like what I do.

So it warmed my heart when Marianne explained to me that there were others who either wrote in or voiced their support for my nomination. These are people who I have worked with for several years developing and applying models. People who I have worked with on various water supply problems throughout the state. They know my strengths and weaknesses. And these are people for whom I have great respect. And that is what makes this award so sweet.

During my career, I have had the pleasure of working with several Hugo B. Fischer Award recipients, and I would just like to call out a few who have influenced my career or my life significant ways:

Francis Chung – the leader and visionary of DWR's modeling support branch where I received my CalSim education

Walter Bourez – who to me is a giving boss, a talented engineer, and a skillful consultant

Armin Munevar – one of the original CalSim developers and the person who first persuaded me to come to the Modeling Support Branch. Without him I likely

would have spent the last 13 years in DWR's Division of Safety of Dams. No offense to the DSD, but I'm glad I went to the Modeling Support Branch.

Can Dogrul – one of my best friends who I met at UC Davis. We ran a hydrologic experimental site in the Lake Tahoe Basin for a few years and spent many long days digging equipment out of snow. Now those were good times.

Nancy Parker – I cannot say enough nice things about Nancy Parker. I have worked for several years with her developing and applying CalSim and CalLite. She's a true professional and a joy to work with.

Of course, I could talk about my experiences with previous Hugo B. Fischer Award winners all night.

There's Russ Brown and our work on Delta Wetlands

John DeGeorge and sailing in the San Francisco Bay (for which I give him a lot of extra credit)

And there's Jay Lund. I'm sure that more than a few of you have taken classes from Jay. I took a water resources modeling course where every student was required to contribute a component to this massive spreadsheet model. This was many years ago and I'm a little fuzzy on the details, but there is one thing I remember vividly. Jay said, "People pay a lot of money for this stuff." And when he said stuff, he was referring to modeling. Isn't that funny, I spend several months in Jay's class and that's my take away quote. "People pay a lot of money for this stuff."

Now I'll admit, when I was in my 20s, I was clueless. And I will proceed to enumerate the ways, but first I want to talk about some of the good decisions I made in my 20s. I can count them on one hand. Actually, I take that back. I can count them on 2 fingers.

- 1. Proposed to Christine Hall who is now my wonderful wife Christine Easton.
- 2. Entered the Water Resources Program at UC Davis.

Without one or the other, I would not be standing here.

So back to the take away quote, "People pay a lot of money for this stuff." Like I said, I was clueless in my 20s, and that quote was like a bell going off in my head. I'm not sure exactly how I interpreted it then. But let's just say, at the time, I was a poor graduate student in search of decent wage. My interpretation now is most definitely different. It is less need based, and more big picture oriented. And it goes something like this:

People pay a lot of money for this stuff = Modeling has real social value Modeling has real social value.

Now I know I'm preaching to the choir, but bear with me. In my 20s, I perceived modeling as more of an academic exercise. This perception was mostly due to a lack of experience in real world matters. That is no longer the case. I am absolutely confident that modeling has real social value.

So I'd like to focus my following comments to the younger modelers in the audience. The ones who are in their 20s. And if they are on the same career path that I was, they might be in their 30s. This isn't intended for the higher ups: You already have a clear view of the big picture. No this is focused on the modelers in the trenches. The ones who haven't had the time and experience in this business to understand where the tools and applications they are developing fit into the grander scheme of things. All I will say is hone your skills, do your homework, and most importantly talk to those modelers and engineers and hydrologists and operators who have been around for a while. They contain a wealth of information that can't be found in a book. And it can't be googled either. You do this, and the models you create, and the analysis you produce with those models will help shape the future of our communities and will help shape the future of our state. And if that doesn't get you excited, I don't know what will.

That brings up the question, what is modeling at its most fundamental level? It's simply a means of communication. Of course, it allows us to communicate complex ideas for which there is no better way to communicate. But in the end, it is communication. And as a form of communication, it is useless as a solitary

exercise. The community with which you communicate defines the usefulness of your model. And I have been blessed with a supportive modeling community.

I have been working with Erik Reyes since I started at DWR 13 years ago. Whenever I have questions about the intent of some code in CalSim and whether it is resulting in the expected response, he is the first person I turn to.

Nazrul Islam had a vision for the CalLite model. He has largely implemented that vision. I am so grateful that he invited me to assist in its implementation.

Hoa Xie and Kevin Kao have spent countless hours developing the new generation of WRIMS - which is conveniently named WRIMS 2. This is a significant advancement for the platform on which we run CalSim. The tools they have developed and the technical support they provide have helped me immeasurably.

When I want to know how the real world works and how my model measures up, I call Aaron Miller. He is a true expert at SWP operations.

Then there are DWR's counterparts at Reclamation: Nancy Parker and Tom Fitzhugh. Whenever I want to talk shop, they always pick up the phone. And I greatly value their input and advice.

I would be remiss not to mention Kristin White. Kristin is new to California. She comes here by way of Klamath Falls and Reclamation's Klamath Basin Area Office. And she and Jason Phillips were instrumental in formulating the operations criteria included in the latest Biological Opinion for the Klamath Project. I got to play a small role in the model development for the Biological Assessment. And it was a pleasure to work with someone who is so capable.

And there is the Contra Costa Water District. Lucinda, Deanna, Leah, Marguerite, and Matt. They gave me the opportunity to work on the Los Vaqueros Expansion Model. I consider the end result to be one of my proudest achievements as a modeler. And I could not have done it without their support or the benefit of their expertise. I am grateful for both.

At MBK Engineers, we work closely with many other consultants. For me, it is primarily with Andy Draper at MWH and Armin and Rob and Chandra and Derya

from CH2MHill. We work together at times, and sometimes we compete. But we all know that we're dependent on each other. I would not hesitate to call them for help and advice, and I hope they feel the same about me.

And finally, Walter and Lee. Walter and Lee are extraordinary catchers that stop all my wild pitches. They tell me when I'm full of it, and help make it better. For that I am thankful.

So this is my modeling community. And it is my modeling community that has allowed me to thrive. All I can hope is that my work, my assistance, and my communication has helped you to thrive too.

Thank you very much.