

Kelly Savoie ([00:00](#)):

Hello, Clear Skies Ahead listeners. This is Kelly Savoie, and I'm hoping you can take a moment of your time to rate and review our show wherever you listen to podcasts. We have produced over 100 episodes, and you can help us reach even more individuals that will benefit from the diverse experiences shared by our guests. Thanks so much for listening, and I hope you enjoy this new episode.

Welcome to the American Meteorological Society's podcast series, Clear Skies Ahead: Conversations About Careers in Meteorology and Beyond. I'm Kelly Savoie, and I'm here with Emma Collins, and we'll be your hosts. We're excited to give you the opportunity to step into the shoes of an expert working in weather, water, and climate sciences.

Emma Collins ([00:53](#)):

We're happy to introduce today's guest, Ellen Mecray, founder and principal at Aeolus Climate Strategies in Falmouth, Massachusetts. Welcome, Ellen. Thanks so much for joining us today.

Ellen Mecray ([01:02](#)):

Thanks, Emma, and thanks, Kelly. It's awesome to be here.

Kelly Savoie ([01:05](#)):

Ellen, could you tell us a little bit about what sparked your interest in science and how it influenced your educational path?

Ellen Mecray ([01:12](#)):

It's such a great question because my science path is a little windy. I started out thinking I was going to be an international economist, and I don't know why I dreamed that up as a career. But when I went to Colgate University, the economics department was just not a good fit. And I thought, "What do I do?" And so my dean said, "Why don't you just read the course catalog and see if there's something interesting?" I was like, "Oh my gosh, there's an oceanography class here in the geology department." And I then started down this really long path about geology and oceanography and what we call the wet side of geology or soft rock geology, thinking about sedimentary rocks. And they had this fabulous geology department at Colgate. And so I kind of fell into it that way literally by reading the course catalog. But if you go a little bit deeper than that, you'll see that...

([02:10](#)):

I mean, I grew up by the ocean, so oceanography made sense on so many levels. Also, geology, my father was a geologist, and so we went on a lot of trips like the Grand Canyon. If any geologist or budding geologist has ever rafted the Grand Canyon, it's kind

of like, "Oh, I have to be a geologist." So it was great that it was in the geology department and that's what I ended up studying. And also geology is a very systems level thinking, which is kind of like "if this, then maybe this", or "if perturb this situation, is there something else that gets impacted?" I would say geology is really where it got me to start thinking about possibilities, and open questions, that science has. So that was my path.

Kelly Savoie ([02:53](#)):

That's interesting. Did you go to get advanced degrees in a similar science or did you switch?

Ellen Mecray ([03:01](#)):

Oh, so it turns out that oceanography was one class in an undergraduate level, so you do need to go to graduate school. So I then went to the University of Rhode Island for oceanography and studied geological oceanography, which was just sort of in line, but more of an applied science, an applied piece of geology. So there I was looking at paleo climate work and studying sediment cores in lakes and looking at varved sediment sequences in lakes, and then that's really how I started in on the climate pathway.

Emma Collins ([03:34](#)):

So what opportunities did you pursue inside or outside of school that you knew would be beneficial to securing a job in your profession?

Ellen Mecray ([03:42](#)):

Well, so I think the coolest part about geology is the field work. Everybody loves being out in the field. I remember taking a chemistry class and he was like, "Oh, you geologists, all you do is sit around campfires." I was like, "Hey, that's fun."

Emma Collins ([03:55](#)):

What's wrong with that?

Ellen Mecray ([03:57](#)):

So it was really fun to do field work. That was a huge experience and one that I think was really required when you would look at a field like geology. And then for oceanography, I did a lot of summer internships, to try to..so in college I applied for a National Science Foundation grant called the SURFO Partnership, which was Summer Undergraduate Research Fellowship in Oceanography. And so I did that at the University of Rhode Island. And so it sort of was a natural path where I spent the summer there doing a

project. And then after that, my advisor there was like, "I want you to apply to grad school here."

Kelly Savoie ([04:37](#)):

When you were in school, did you have a certain type of career in mind that you wanted to pursue? What was your first job and how did you end up where you are now?

Ellen Mecray ([04:51](#)):

My first job was teaching, actually. I went to a boarding school where you didn't- the only reason I went to a private school was because you didn't have to have a teaching certificate, so I didn't have a whole bunch of other education classes I had to take, but I had already been in a master's program in oceanography, and then I went to teach and I taught high school chemistry and environmental science. The reason why I did that is because I was like, "Do I need to do a PhD and really think about the teaching aspect? Maybe I should see if I like teaching." I taught for three years, and during those seasons, I would teach all school year, and then in the summers I was still doing research. So it made sense to go back to the University of Rhode Island and continue research. Then I also, at that point, went to the US Geological Survey and did research and internships with them in the summers while I was teaching.

([05:52](#)):

Each piece that I took led to the next piece. So it was, undergraduate, I went to the University of Rhode Island and did a fellowship, then I went to the University of Rhode Island. And then in the summers when I was teaching, I was working at USGS and then they're like, "Hey, we want to hire you." So I started in on my federal career working for the US Geological Survey in Woods Hole, Massachusetts.

Kelly Savoie ([06:13](#)):

Oh, wow. And what type of work were you doing there?

Ellen Mecray ([06:16](#)):

I started out in my internship working in the sediment lab, which is basically sifting sediments into different sizes and then assessing how much of each grain size there was. I was there for almost a decade, and during that time I became the lab manager, so I was responsible for running the chemistry and geochemistry labs. I did all sorts of things there. I was working with chemicals. I was in field work again, which meant I was going out on ships and taking sediment samples and sediment cores all around the New York bite area, the Long Island Sound, the Gulf of Maine, Lake Champlain, so mostly New England lakes and coastal areas. Yeah, that's kind of where I had that experience at USGS. Then I was kind of thinking about management and I was like, "What do I do to

figure out if I like that aspect of the science?" I did a leadership program within the US Geological Survey and they called it Leadership 101, and I just loved that.

(07:32):

I loved it. I loved thinking about how we behave in front of people. I like thinking about how we're good to one another, how to be a good supervisor.

(07:44):

I took some courses at USGS doing that, and then I taught the program at USGS, and then during one of my leadership details or a time to try different jobs, I tried a job at NOAA. It's so funny how this happens, but so I was doing a three or four month detail, they call it, working for the Director of NOAA, the Administrator. I walked in and they said, "Well, what line office are you with?" I was like, "I'm not in a line office. I work for another agency." They said, "Oh, well, that'd be really cool. What do they do at USGS around water, for example?" I was like, "Oh, we do a lot of stuff around hydrology and water." I would go with the Administrator through the program coordination office in NOAA to a lot of his briefings on the Hill, and we would talk about how NOAA's reporting on climate science, how NOAA's doing in terms of the water program and hydrology and the weather service.

(08:46):

Then after that summer, they were like, "We want you to come over to NOAA."

Kelly Savoie (08:49):

Oh wow.

Ellen Mecray (08:50):

Again, I just sort of fell into that next one after a summer experience.

Kelly Savoie (08:55):

USGS is like, "Gee, why do we allow people to try these positions at other...?"

Ellen Mecray (09:01):

"Why did we send you on a detail and then think we might not get you back?" Yeah. And it's funny that actually, I want to sort of allay that myth because I tell a lot of mentees about doing details as an opportunity while you're in federal service to try different jobs. And there's a kind of a misconception that when you do a detail, you're going to go take a different job. It worked that way for me, but it doesn't have to. I think doing details is a great way to broaden your experience. I think it's a great way to just try something new if you're feeling a little stale, and it's wonderful to come back to your existing job having had that experience in a detail. I did do some of those as well where I went back into

service into my same job, but I had some management experience and was able to build my resume that way.

Kelly Savoie ([09:54](#)):

When you do a detail like that, who covers your job at the other organization? Do they have a temporary person?

Ellen Mecray ([10:02](#)):

Yeah, so that's actually part of the leadership experience is being able to say and being able to ask for help. So being able to say, "I'm going to go and have this other experience," and you have to sell it to your existing boss, you have to sell it to your new boss, you have to work with the new office, and you have to work in conjunction with your old office to make sure that they still can count on you if you need it. And you can also lift somebody else up into a leadership position while you're gone, so they have an opportunity to do a detail into your spot. So it's a nice way to rotate and get people to have different experiences.

Kelly Savoie ([10:38](#)):

I wish all jobs were like that.

Ellen Mecray ([10:41](#)):

I know, I know. I love that part of the government.

Emma Collins ([10:45](#)):

So could you walk us through, if there is such a thing, a typical day on the job as the founder of Aeolus Climate Strategies?

Ellen Mecray ([10:52](#)):

Oh, so Aeolus Climate Strategies started out because Aeolus was the name of a sailboat that I used to sail on, and it just was the Greek god of the wind. Wind is always very difficult in weather and climate. People always want to know about wind, and I was like, "Oh, well, Aeolus is a great name for that." But what do I do on a day-to-day? It's a wonderful balance actually. Being outside of federal service was really super scary at first, and I call it 60 to zero, like a race car, except in reverse. We were suddenly stopped. When we suddenly stopped, I thought, "Well, I have so many people that I work with, and my network is so broad that I really want to keep working with the people that I worked with, both on the ground in different states, but also in different industries." That was really foundational for me when I set up this business.

([11:51](#)):

Day-to-day, it's a balance between working with my clients on specific contracts, calling my network and talking about other potential contracts and potential ideas and where the field is going, and so I have a lot of just open-ended calls. I also volunteer some of my time, so I sit on several nonprofit boards that meet sometimes during the day, and so I take an hour or two for those. I also volunteer with the National Academies of Science, Engineering and Medicine, working with their earth observing groups.

([12:28](#)):

I am writing some papers with those guys, with the National Academy. So yeah, it's kind of a blend of the volunteer work and I also work with AMS on several committees. And so yeah, that's a volunteer situation. So yeah, I don't have to cover every hour of my day in terms of contract work, but obviously that helps, but it is a nice blend. I think it's a nice balance between being able to take care of my family and being able to take care of my work and also sort of scratching the itch on supporting other people. So on Monday, I had a lunch meeting with a graduate student here in town and thought, "Well, she's looking for what sort of work she could do." And so I do some mentoring as well. I talk to a lot of people all day long in a nutshell.

Kelly Savoie ([13:22](#)):

Yeah, it sounds nice. It sounds flexible. Now that you've worked in both the government and private sectors, what are some of the advantages or disadvantages to pivoting from one to the other? I'm sure there's advantages and disadvantages to both.

Ellen Mecray ([13:38](#)):

Yeah. I spent almost 29 years in federal service as a civil servant, and I think we sometimes lose track of what a civil servant is, that we rarely use that term. And civil service is about really giving of yourself and just making things better for people, for everyone, every citizen. And what that means is it's not highly paid, but it's really developing long-term trust. So just a short story about working in federal service was about really deep diving into some of the communities with whom I worked. So communities like towns at the state and town level, but also working with different industries. I had somebody in the insurance industry say to me, "Have you ever met somebody that stayed with us as long as Ellen has stayed with us?" And it's because we had that luxury in federal service to work with a group of people for 15 years, and that I really love.

([14:44](#)):

When I left, I felt like I was leaving my family. I described it as the Rolling Stones are breaking up. It was like "the band is breaking up." I mean, we have

Kelly Savoie ([14:58](#)):

That's devastating.

Ellen Mecray ([14:59](#)):

Well, I know. It was because I had so many colleagues and friends from every agency in the federal government. We all worked collaboratively. We worked together, we solved problems on the ground together. We worked with, say, the city of Boston or the city of Charleston, South Carolina, and we were doing this work together, EPA, Army Corps of Engineers, NOAA, US Geological Survey, all of us in the natural sciences, figuring out problems together. So that is, I think, one of the greatest parts about working in federal service. I developed a lot of trust over those years, and that thankfully has crossed over into the private arena. I mean, I'm very honored that a lot of the people that I worked with in the time I was in government have come with me and still talk with me. They mentor me. I learn new things every single day about how to run this business, but I also am working every single day with people on the ground as well as the different sectors that I developed relationships with.

([16:06](#)):

It's pretty great.

Emma Collins ([16:07](#)):

It sounds wonderful, and it sounds like you met some really great people along the way. So what are some strategies you use for communicating complex climate information to diverse groups of stakeholders?

Ellen Mecray ([16:18](#)):

That's the best part about my job. I loved doing that when I was at NOAA, and I love doing that now. And people are saying, "Oh, will you come and speak?" I'm like, "Absolutely. It's the favorite part of my job." I think part of it is just that I'm so extroverted. I love talking to people. I really feel alive when I'm in front of a group. And then how do I speak? I really speak personally. I offer a lot of stories. I talk about how things have changed over my lifetime, and I see nodding heads about how people's own observations of the natural world have changed in their own lived experience. I think that's a big part of how I communicate. It helps to show graphs that show definite trends. I have a lot of those, so I do have to point out the axes and show an XY plot, but I think it's also just about sharing the fact that you can be a scientist that knows their content really well and also can speak to audiences.

([17:20](#)):

Not everybody is like that, so it's sometimes a rare breed. I say some people should be let out of their offices and some people shouldn't be let out of their offices. That's okay.

But when I communicate, it's really about telling those stories and thinking broadly about what kind of impact it's going to have. I also have had a lot of - I've lived in a lot of places, and so I have a lot of experience working with people in different types of communities, different parts of the region that I was working in. So the Eastern region when I was at NOAA was South Carolina to Maine, including Ohio and West Virginia on the Western side. So I had 16 different states, and I think I visited every single one of those states and had stories around friends and cousins and families and everything that has happened to me in that state.

([18:09](#)):

And so that really helps to think about the changes that we've seen over time.

Kelly Savoie ([18:14](#)):

What type of advice do you have for individuals looking to start their own business? As you've started yours, have you discovered some things as you went along that you wish you would've known about sooner?

Ellen Mecray ([18:26](#)):

The beginner's mind has been so awesome. I tell everybody, every day I'm learning something new and every day I'm open to learning something new. It's so broadening and so energizing to think "I have no idea how to write that contract" and "I think I need a lawyer" and "oh, I need an..." In the government, we have all of those pieces, right? You have an HR office and you have a budget office and you have all this -

Kelly Savoie ([18:57](#)):

Attorneys and everybody.

Ellen Mecray ([18:59](#)):

Yes. I mean, you have this whole support system. And so when you're out on your own, it's really...I call a lot of friends that have started their own businesses. I have a very good friend of mine all the way back from high school that started her business 10 years ago, and she's been extremely helpful, sending me calculators and spreadsheets about how to do certain things, sending me language on legal contracts that she had set up. So that was very helpful. And then subsequently, I also work with other ex-feds, and we have a little community of practice with people that have started their own businesses to say, just kind of a safe space to ask the silly questions like, "What do I charge and what do I tell people that I charge? Is it the same as my federal hourly rate or is it a different thing?

([19:47](#)):

And “Do you charge by the day or by the hour or do you not charge by time and you charge by value?” Which is something that we've learned a lot about, is thinking about how we work with our clients and how we set rates based on the delivery of value to them. So it's been an amazing start.

([20:10](#)):

I think it's also about things like payroll and taxes and benefits and how all that fits together has been a huge learning experience for me, but very good. I think it's been working out really well. One of the most wonderful new developments that we have is that because I have so many friends that are in different parts of the federal space or were in different parts of the federal space, we have a lot of ex-federal friends out here. And so my business has actually been able to diversify because I'm bringing in my friends from Health and Human Services and US Department of Transportation and USAID. All these people have vast lived experience and can broaden who we work with. So that's been really exciting too.

Kelly Savoie ([20:57](#)):

Yeah. You have just a whole network of experts that you can just tap into, which is awesome.

Ellen Mecray ([21:03](#)):

Yeah. I think the main thing about Aeolus too is that the niche that we fill is about connecting science with industry, and that's what I put on my webpage. It's really how do we inject science into the scientists that are already on staff in these different industries and they need to understand how to navigate the federal space or they need to figure out where the best data are kept and what do they do with some of their private vendors? It's been really helpful to make those connections between academia and industry and scientists needing to put a use... they need to understand how the science is being used. That's a big question now from the National Science Foundation grants, and really, philanthropies. Everybody that's out funding science right now is looking for how they connect to industry. Who's using this science? And that's a large part of what I focused on when I was at NOAA and I'm still doing that.

Emma Collins ([22:01](#)):

From your experience, what is the job outlook for students looking to find positions in climate science these days? What types of organizations employ climate experts? Can you talk a little bit about that?

Ellen Mecray ([22:12](#)):

So that's where I spend a lot of time with my mentees, is asking "What is the future? What is the future for science?" I mean, we can hand wring and really kind of freak out or we can think to ourselves, it's a new space. It's opening that beginner's mind again and thinking "Where are the opportunities?" I've had a lot of students ask me about the insurance industry and the reinsurance industry and learning about an industry or even finance or, and I don't say "even finance", but also finance. Finance, corporate real estate, energy, insurance, reinsurance, brokers, real estate. So many of the sectoral engagements that I've had over the years have needed to understand that science, and be what Pew and others call science informed. So if you're science informed and you have a scientist that's a trained PhD in oceanography and working in polar climate, I think that that translates really well to a lot of the private sector industries that are out, curious about science, definitely still asking questions about a changing climate and are wondering where to turn.

([23:28](#)):

And so they can turn to some of our international partners, they can turn to sectoral groups. The states and communities are definitely still asking, so there's state jobs out there. It's just that when I talked to another woman, she had just finished college and she was asking should she go to grad school and then what's the job situation like? And she was not wanting to go into federal science. So first I was sad. I was like, "Oh, such a huge part about my lived experience." But then I was like, "Okay, let's hold that thought because it can bounce back and it can bounce back in a very different and very exciting new way." So I'm looking forward to that too. I mean, I'd go back to federal science in a heartbeat, and I think it is a good place. And it's also great to be able to infuse really trained scientists into some of these other industries.

([24:24](#)):

So I think we're really seeing an expansion there. And I'm happy to help. If any of your listeners hear this, I am so happy to help. If they call me, we can brainstorm this together and figure out what some of their passions are. I think that we can... it's tough. I get it. There's a really tough job market, but I think that we can just get creative.

Kelly Savoie ([24:44](#)):

Yeah. And that was my next question. A lot of these students do have the science expertise, but what can set them apart? What other types of skills do you think would be really valuable when they are applying for positions and the competition is tough?

Ellen Mecray ([25:04](#)):

Right. So it definitely is tough. I remember when I left college and my father asked if he wanted me to make some phone calls for him, and I was like, "No, no, no. I've got this on my own. I can do this. I'm going to find my own path." And I did because there were a lot

of wide open pathways. Now I think the networking is huge. Sending a cold resume or sending a cold cover letter when they don't know you is going to be hard. So I think the network is really powerful. I mean, we have things like LinkedIn and all kinds of other social media sources now that will send you wonderful, amazing careers. They sound great. I'll tell a short story about that one. But then you need that network. You need somebody to say, "Do you know somebody at this company?"

([25:49](#)):

Can you help me?" Also, when we do talk with people in the companies, the scientists that are in reinsurance or in the insurance companies or energy companies, they want to know that you can understand their industry and that they can train you to understand their industry, but they want those really strong analytical skills that you can show that you can learn a new system. You might not understand or have ever run a catastrophe model, but if you've run a model and you can learn how to run a catastrophe model, I think they're okay with that as long as you have the critical thinking skills, the writing skills, the power of expression. I think that if you can...and the other thing that I learned from one of the first days out of federal service, I talked to a colleague of mine that had also left federal service and he said, "Never make a call that says, will you offer me a job?" But instead make a call and say, "I have some ideas that I think would fit really well with your company."

([26:49](#)):

Can I just talk to you about them?" So being creative about how you approach I think is also really important. And then just my short story in terms of looking at cold resumes off the internet was my first job application was sent to an environmental engineer. I was like, "That sounds great. That sounds exactly like what I would do." And it turns out it was with a trash company. I was like, "Wow, they have really great titles for really different jobs." So I think it's really important that you do your research about where you're applying, and the title may sound interesting, but digging deep with other people that have been at that company to find out what the culture's like and get into some of those soft areas is really helpful to find if it's a good fit for you.

Emma Collins ([27:37](#)):

Well, we're so grateful for everything you've told us about your career. However, before you go, we always ask our guests one last fun question at the end of our show. So what is your all-time favorite movie?

Ellen Mecray ([27:49](#)):

So my all-time favorite movie is called *The Man From Snowy River*. It's a very obscure movie, and that's why I love this question because *The Man from Snowy River* is a fabulous horseback - adventure horseback - movie where he's riding this horse down

extremely steep pitches. It's got some Western geology in it, and it's just a really adventurous Australian-made film.

Kelly Savoie ([28:16](#)):

Oh, wow. I'm a pretty big movie buff, and I have not heard of that one before. How old is it? Is it.

Ellen Mecray ([28:23](#)):

Oh, it's an oldie. 80s maybe.

Kelly Savoie ([28:26](#)):

Okay.

Ellen Mecray ([28:28](#)):

So the quality might not be as good, but the substance is so good.

Kelly Savoie ([28:32](#)):

Well, I mean, sometimes those movies hold up.

Emma Collins:

Was it shot in Australia? Is it...

Ellen Mecray ([28:36](#)):

I think so. Yeah, I think so.

Kelly Savoie ([28:39](#)):

Well, that's going to be on my list because I thought I've seen everything, but I will keep a point of checking that out. Was there anyone famous, stars in it or was it just kind of like somebody just beginning?

Ellen Mecray ([28:58](#)):

I'm so bad with movie stars names. I have so many names in my head for corporate that I'm like, "Woo, I don't keep any stars in my head."

Kelly Savoie ([29:06](#)):

I'm going to look it up as soon as we get off this.

Ellen Mecray ([29:08](#)):

Awesome. Awesome.

Kelly Savoie ([29:10](#)):

Well, thanks so much for joining us, Ellen, and sharing your work experiences with us.

Ellen Mecray ([29:14](#)):

Yeah. Well, thank you guys so much for inviting me. This is really fun.

Emma Collins ([29:17](#)):

Well, that's our show for today. Please join us next time, Rain or Shine.

Kelly Savoie ([29:22](#)):

Clear Skies Ahead: Conversations About Careers in Meteorology and Beyond is a podcast by the American Meteorological Society. Our show is edited by Johnny Lay. Technical Direction is provided by Peter Killelea. Our theme music is composed and performed by Steve Savoie, and the show is hosted by Emma Collins and Kelly Savoie. You can learn more about the show online at www.ametsoc.org/clearskies, and you can contact us at skypodcast@ametsoc.org if you have any feedback or would like to become a future guest.