

Oral History Cover Sheet

Name: Karen L. Mayne

Date of Interview: October 18, 2017

Location of Interview: National Conservation Training Center,
Shepardstown, WV

Interviewer: Libby Herland

Approximate years worked for Fish and Wildlife Service: 30 years

Offices and Field Stations Worked, Positions Held: Worked in the Norfolk Division of the U.S. Corps of Engineers from 1974 – 1978 as a biologist. Joined the U.S. Fish and Wildlife Service in 1978 in the new Virginia Office as a GS-9 Fish and Wildlife Biologist. Promoted over time to Assistant Field Supervisor and Field Supervisor (Project Leader) in the Virginia Field Office, located in Gloucester Point, Virginia.

Most Important Projects: While at the Corps of Engineers, she worked on an environmental impact statement to locate an oil refinery in Hampton Roads. The permit was ultimately denied by the Corps of Engineers. With the U.S. Fish and Wildlife Service, Karen oversaw the development of all the programs of Ecological Services including review of wetland permits under the new Clean Water Act; dredging under the Harbors and Rivers Act; the establishment of in-stream flow regulations in Virginia; the contaminants programs which included oil spill response and restoration of damages to natural resources including a project where a chemical tanker spill affected endangered mussels and fish in southwest Virginia; endangered species; and Partners for Fish and Wildlife. She wrote the first jeopardy biological opinion for piping plovers for a project on Cedar Island in Virginia. Karen worked with Refuges to establish two national wildlife refuges – Eastern Shore of Virginia and Cedar Island, which is a unit of Chincoteague NWR.

Colleagues and Mentors: Karen's supervisors were Glenn Kinser, John Wolflin and Ralph Pisapia. Karen was mentored by Russ Earnest and Bill Ashe. In turn, she hired and mentored many great staff, including Gary Frazer who went on to become an Assistant Director in the Fish and Wildlife Service. She also supervised Cindy Otey Black, Don Kane, William Hester, Steven Zylstra, Susan Lingenfelter, John Schmerfeld, Cindy Kane, Roberta Hylton, Bridgett Costanzo, Will Smith, Dave Byrd, and Jessica Rhodes. She was co-located with the Virginia Fisheries Office which included Albert Spells, Gary Swihart, and John Galvez. She worked with Bob Miller, Walt Quist, and Bill Zinni on realty issues in Virginia. Karen was one of the first female project leaders in Ecological Services nationwide, along with Linda "Mike" Gantt and Nancy Kaufmann.

Brief Summary of Interview: Karen was the first female biologist working in the U.S. Corps of Engineers Norfolk District Office. She reviewed permits under the Rivers and Harbors Act

and the new Clean Water Act. In this capacity, she worked with other Federal agency staff including Marvin Moriarty from the Service's Annapolis Field Office, which also served as an area office. Karen was hired to staff the new Virginia Field Office (VAFO) with Marvin, who transferred to another position shortly after Karen's arrival.

Karen was almost always the senior staff person at the VAFO. She built the staff as program responsibilities expanded from wetland permit reviews to contaminants, endangered species, and the Partners for Fish and Wildlife program. Eventually, the Virginia Field Office separated from the Annapolis Field Office and became independent. Karen also established the southwest Virginia sub-field office which focused on endangered species protection.

Karen was involved in the early use of a new GIS system developed by the FWS' Slidell Louisiana office - MOSS (Map Overlay Statistical System) and early modelling to help determine likely impacts of dredging in harbors on marine resources. Karen and her staff worked on the first NPDES (National Pollutant Discharge Elimination System) permits and the first NRDA (Natural Resources Damage Assessment) projects in Virginia. In addition to some of the important projects mentioned above, Karen and her staff participated in several ecosystem teams, including two that were headed out of Region 4. She was also a coach in the Stepping Up to Leadership program for several years. Karen retired in 2008. She stays involved with the FWS Retirees Association and with her many friends who have both retired and are still actively employed with the Fish and Wildlife Service.

LIBBY: Hi, this is Libby Herland. I am on the Fish and Wildlife Service Heritage Committee. I'm the retired representative from Region 5. And I am sitting here today at the National Conservation Training Center on Wednesday, October 18, 2017. I'm with Karen Mayne who retired from the Fish and Wildlife Service from the Virginia Field Office. We are going to do an oral history and learn a little bit more about Karen and her great career she had with the Fish and Wildlife Service in Ecological Services. Karen, thank you for agreeing to do the oral history. It is a pleasure to talk to you.

KAREN: Thanks, Libby! I am glad to do it.

LIBBY: Yeah, this is fun. Alright! So, we start these oral histories off with a little information about you, so tell us a little bit about where you were born and your early influences in life and how you got into the conservation field.

KAREN: Well, I was actually born in Norfolk, Virginia where I currently live, but I didn't live there. My dad was stationed there with the Public Health Service when I was born, and my parents immediately moved back up to Maryland which is where they were from. So, I spent my childhood between Salisbury, Maryland and the western shore around the Hyattsville area. Predominately I lived on the eastern shore of Maryland in Salisbury.

LIBBY: When were you born?

KAREN: I was born in 1952.

LIBBY: And you graduated from high school.

KAREN: I graduated from high school in Salisbury, Maryland in 1970. I went to

college my first two years in Salisbury – what is now Salisbury State University. And after two years, I transferred to Old Dominion University in Norfolk, Virginia because that is where my first husband was stationed in the Navy during the Vietnam War. After I graduated from Old Dominion University, I went to work for the U.S. Army Corps of Engineers – Norfolk District. That was 1974. And I worked in the regulatory program. That was when the Corps' wetlands regulatory program was first getting started.

LIBBY: So, before we start talking about that, let's go back and learn a little bit more about what you studied in college and why did you study that?

KAREN: OK.

LIBBY: You know when you were obviously studying some kind of biology or something so...

KAREN: To back up, since you asked me how I got interested in the sciences to begin with. I guess I was always interested in the sciences from a little girl. I give my mother credit for my love of botany, which is my first love. When I was probably five or six, she let me plant some flowers in her flower garden. I thought that was a fun thing that got me interested in plants. And I remember my father – I had captured a box turtle and he drilled a little hole in its shell and tied it to a string in our back yard. That didn't last very long – the string burst - but for a few days I had a box turtle and I fed it lettuce. So, I have just always had an interest in science. In high school, I actually thought I was going to be going into medicine like my father. But, we started going down to the Florida Keys in the summer on vacation. We met an older couple who were into

snorkeling. And they taught my brothers and I how to snorkel and we all just fell in love with the coral and the things that you could see in that water that you couldn't see in the Chesapeake Bay. So, after that experience of learning how to snorkel, I had this dream of working with Jacques Cousteau – remember Jacques Cousteau – (laughing),

LIBBY: I did too!

KAREN: and I thought, “I’m going to go to work for Jacques Cousteau. I’m going to be a marine scientist.” When I started college, I did take a lot of marine science classes and as I continued at Old Dominion University I continued to take marine science classes too, but when I graduated there weren’t any jobs for marine scientists, and I wasn’t going to go work for Jacques Cousteau! So, I did get a job with the Corps of Engineers and that was through my – one of my professors at Old Dominion University worked with the Corps of Engineers on some contract work, so he knew they were hiring biologists. As I said, I was one of the first people in the regulatory program. That was 1974. And even though some of the environmental laws had kicked in a little bit before that, things were really taking off in the 70’s with the Corps. Then they only regulated salt marshes and tidal waters, so we didn’t have any inland work at that point. But, it was very interesting.

LIBBY: So, this is 1974?

KAREN: This is 1974. I was at the Corps from 1974 to 1978. I was the first female biologist/scientist at the Norfolk District. So that was a big deal. I had newspaper articles written about me. To me, I guess I always felt that I’m just one of the guys, so I didn’t feel it was anything special, but looking

back on it now, I realize now that I guess I was a trailblazer at the Corps of Engineers.

LIBBY: Now were there a lot of women in your class at college?

KAREN: In college I’d say it was probably a third women and two thirds men. At the Corps after I got there, they hired another woman a year or so later, then slowly – it was still mostly men but over time, there were a few women. I can’t remember exactly how many women were there when I left. I was only there about 5 years, and at that point, the Corps didn’t treat its scientists very well. It was an engineering organization and they didn’t know what to do with all us biologists. And so, we were pretty much all GS-5’s and 7’s.

LIBBY: I was going to ask you what grade level you started at.

KAREN: Yeah, GS-5’s and 7’s. I started as a GS-5 and at the time I think I was making something like \$7,500 a year in 1974, and I just thought that was a lot of money. We saw the engineers who were at our same age level get promoted and they were not promoting the biologists. In fact, I had a boss in the regulatory program, and we had asked – those of us in the regulatory program – had asked him for a meeting. We sat down and said “we think that we have the same training and education level as the engineers. We think we should be paid the same amount.” His exact words to us were “If you’re not happy here, go get a job somewhere else, because biologists are a dime a dozen.”

LIBBY: Oh, jeez! Wow.

KAREN: And actually, after that, we had a volleyball team during one of the Engineers’ Day, which is the birthday of the Corps of

Engineers, and we all put dimes on the back of our t-shirts. And there were no words, just a dime, and he was the only one who knew what it meant. But, it was shortly after that, that I decided I just didn't want to have a career with that agency. And in the meantime, because we were in the regulatory program, we worked with EPA, National Marine Fisheries Service, and Fish and Wildlife Service, so I knew all the different agencies. I actually knew Marvin Moriarty because he was working, even though he was out of the Annapolis Office, he was working in Virginia, and then eventually he moved to Virginia and opened an office co-located with Fisheries. So, when he got the approval for a second person in ES, his boss at that point was Glenn Kinser, and Glenn Kinser hired me. So, I came to work at the Gloucester Point – it was called Sub-Field Office at that point because it was under the Annapolis Office. About two months after I got there, Marvin left, so I was there by myself. As I said, pretty much all we did at first was just work on saltwater wetland issues with the Corps of Engineers.

LIBBY: So, when you were with the Corps of Engineers, you were working - just describe a little bit about maybe some of the projects you worked on or what your responsibility was there.

KAREN: I was in what they called – actually, I've forgotten the name of it – the Corps names have changed so much over the decades – but we were responsible when people applied for permits to either dredge, fill, piers, whatever in the tidal areas of Virginia. We would go out and look at the projects. We would come back and do an environmental review, and then decide whether we were going to allow the permit

to go on or not. (Conversation at this point with someone walking by). So that was the first thing.

LIBBY: Did you feel like you were – so how did you feel about that job? Did you like what you were doing...

KAREN: I really liked that job.

LIBBY: ... that you were doing a good thing for the environment, for the resources?

KAREN: Right, I felt I was actually accomplishing something by protecting wetlands. The other thing is that I was a pretty shy person, and when you go out and review permits, we also did enforcement, and if we found illegal activities in the wetlands, dredging, I had to shut down dredging a couple of times. You had to work with the landowners to say, "You can't do this anymore." So, I got over my shyness pretty quickly in that job.

LIBBY: Did anybody from the Corps of Engineers – how did they help you learn how to do your job? Did you have any guidance or any mentors in the Corps of Engineers?

KAREN: Well actually, I had one, actually two mentors. Mark Harrell was a person who had worked for the U.S. Coast Guard most of his career. When he got out of the Coast Guard, he came over to the Corps. His responsibility primarily was to look at the piers for their encroachment into the waterways – if it was going to be safe for navigation. But he had such a broad knowledge of the Chesapeake Bay and the waterways that he really taught me a lot about that. And then my own boss, Gene Cocke, he had been there a few years before I got there. But it was all a very new program. So, there weren't official training

programs, we just sort of made it up as we went along. But the one thing I think I could say is that because we had good education - everybody had a college education - we knew what we were doing. We knew the science, even if we didn't know exactly how to start the program. We knew our job was to protect the wetlands.

LIBBY: So, you were working under the Clean Water Act, which was relatively new?

KAREN: Right, and the Rivers and Harbors Act, which was an old act, but hadn't really been enforced except for the major harbors around the country. It was our job to balance protecting the natural environment and allowing economic development and navigation to go forward. So it really was a balancing act and, I don't know if I would use the word "compromise" but you always try to find a way to let whoever the permit applicant was have some of what they want, but they may not get all of it, so you try to explain to them why they couldn't fill out 20 feet in the waterway. So, it was an interesting time. I did that for about three years and then, there was an opening in another part of the Corps regulatory program which was working on the big projects - the EIS [Environmental Impact Statement] projects. The major project I worked on for that year was an application for a big oil refinery in the Chesapeake Bay in Hampton Roads. That was very controversial because, any time you want to put an oil refinery somewhere, there is a concern about oil spills. So, that was very contentious. I worked on it with another person - Bill Matthews - the two of us had lead responsibilities for putting the EIS together. The company that proposed the oil refinery had consultants, so we used their documents, but ultimately the EIS was the Corps'

document. We had a lot of environmental groups like the Chesapeake Bay Foundation and some local groups fighting us, and I will have to say that - and I am really proud of this - that the District Engineer that we had at the time ultimately recommended denial of the permits which was very unusual at that point.

LIBBY: Wow!

KAREN: The company that proposed it was fighting it up the line to the Corps division in New York and then headquarters in Washington, D.C. It was upheld. But the other thing that I think probably helped was that the market turned down. You know how oil and gas and coal - up and down and up and down - so I think the market downturn probably helped prevent it, because I think they would have ended up with a court case ultimately.

LIBBY: Did you have a lot of public opposition to that project? This was the first time you were involved with a project that wasn't just an individual applicant. There were other groups perhaps that were really involved.

KAREN: We had public hearings and they were packed. We had lots of letters. I remember one time having to collate all the letters we received - I can't remember now how many. There were hundreds of them. So yeah, it was pretty controversial.

LIBBY: That was great experience!

KAREN: (Laughing) Yeah, it was. So, I did that for about a year and that is when I got the job with the Fish and Wildlife Service. So initially my job with the Fish and Wildlife was very similar to what I did at the Corps of Engineers - reviewing the Corps permit applications, but the nice thing was

that EPA and National Marine Fisheries Service had enough money at that point that they sent staff to work with Fish and Wildlife to review the permits.

LIBBY: OK, so it is 2000...

KAREN: No, that would have been 1978.

LIBBY: 1978.

KAREN: Right.

LIBBY: And you got this job because you knew Marvin Moriarty who – what was his position in the Annapolis Field Office?

KAREN: Well, I think we all had the same title – we were just biologists. And so, he did permit reviews for Virginia. And also, at the time we had some transfer funds from the planning part of the Norfolk District Corps of Engineers to work on their big planning studies for their dredging projects and dams and things like that. So, Marvin also handled some of that.

LIBBY: Do they call that reimbursable agreements?

KAREN: They did, yes. Thank you. Transfer fund agreements, reimbursable agreements.

LIBBY: I remember that though. So those reimbursable agreements funded actually a lot of biologists....

KAREN: They did.

LIBBY: in the Fish and Wildlife Service for quite a long time.

KAREN: They did. I started doing mostly permit reviews when I came to the Fish and Wildlife Service, but quickly I took over those transfer funded projects as well. And I worked on some really big ones. I often say to myself that I think I got the equivalent of

several master's degrees working on these Corps projects because we actually did a lot of field work. We didn't have the resources to analyze everything, but we had contracts with Virginia Institute of Marine Science, Old Dominion University where we would get to go out with the Corps biologists, collect samples, and then we would send them off to the universities. We were trying to look at what the resources were in the Chesapeake Bay or out in the Atlantic Ocean for impacts from dredging or dredged material disposal. There were projects to deepen the entrance to the Chesapeake Bay and the Hampton Roads harbor, and one of the things – the questions about what technologies you used – I was involved in a geographic information system called MOSS that actually, the Fish and Wildlife Service developed down in Slidell, Louisiana. MOSS stood for Map Overlay Statistical System. I worked with the scientists down there. What we looked at was if the mouth of the Hampton Roads channels were dredged, how would it affect the salinity levels up in the James River and the Elizabeth River? We had a suite of species that we looked at, and models were developed and at the same time we had information on how the tides and the – I have lost the term – but how the tides and things would change if the channels were deepened. They put that all into the computer system and, back then, it was all the old DOS system, so it came out as all kinds of numbers and things that only the people in Slidell could crunch. It was a pretty involved project.

LIBBY: I bet.

KAREN: Unfortunately, though, because the MOSS system was developed by the Federal government, it was in the public

domain. ARC Info – I think that some people remember that term, or company - Arc Info developed a similar model, but it was in the private sector, so they could charge for it. And over time – I can't tell you the reason why - but Arc Info became THE company to go to for GIS systems and MOSS disappeared.

LIBBY: You were involved with GIS from the very beginning. Did you learn how to use it then?

KAREN: Not really. No, it was very complicated. I wasn't real computer literate. As I said, it was all DOS. It was a lot of numbers. I just relied on what the scientists and modeling experts down in Slidell, Louisiana told us, and then we worked again with the scientists at the Virginia Institute of Marine Science and Old Dominion University and we sort of crunched the numbers and pretty much came up with the decision that it wasn't going to have a significant impact or detectable impact, I should say, on the key species in the Hampton Roads and James River area. So, the project ultimately got approved.

LIBBY: So that's an example of really using science to inform your management decision.

KAREN: Correct.

LIBBY: And using models – that was a pretty early use of models in the Fish and Wildlife Service?

KAREN: Yes, in the early 1980's. That was early.

LIBBY: Wow. (Laughing).

KAREN: And, actually, I should say that even though we were using early models and GIS technology at the time, we would

have had one computer in our office. In fact, you know Ralph Pisapia, he was the regional head – the Assistant Regional Director of Ecological Services during that period. I remember him saying that each office only needed two computers. We needed one computer for the admin person to be able to type on, and then we needed one computer for all the biologists to share. It was out in our open area, and we would take turns. Looking back now, you wouldn't be able to do your job without a computer. Back then, all the reports I wrote for the Corps of Engineers originally, I wrote out long-hand.

LIBBY: Whoa!

KAREN: And the secretary had to type them all. (Laughing.) Again, thinking about how far we have come, just in one career.

LIBBY: Really wasn't that long ago.

KAREN: It wasn't! 80's, early 80's.

LIBBY: Oh my goodness!

KAREN: So those were the early years.

LIBBY: So, your title was – do you remember your title?

KAREN: No, I don't know.

LIBBY: Fish and wildlife biologist?

KAREN: Yeah, I think it was fish and wildlife biologist.

LIBBY: You got a promotion when you came to the Fish and Wildlife Service?

KAREN: When I came to the Gloucester Point Office, I was – at that point I was a GS-9 at the Corps of Engineers. I took a lateral to get out of the Corps of Engineers. But I was – I think I was only a 9 at the Gloucester Office for maybe one or two

years, and then I became an 11. But I stayed an 11 for a really long time.

LIBBY: So, tell us how you became an 11 and did your position and responsibilities change or was it more of a – that the position was a 9/11.

KAREN: Yeah, you are right. It was a 9/11.

LIBBY: Did you have to apply for the job?

KAREN: Yes, I had to apply for the job. So even though I knew Marvin and I knew Glenn, I guess they could have done a lateral re-assignment but I did apply for the job. Correct. So, you are right, the 11 came because it was a GS9/11. Over time, I said I was the only one there after Marvin left, but we hired interns and as the ES program expanded over the years, we started off as I said with the Corps of Engineers program but over time I think the next program we got was the environmental contaminants program. So, we hired somebody that was an environmental contaminants biologist and we started working on oil spill response and looking at state NPDES permits and water quality.

LIBBY: On the contaminants, was that brand new for the Fish and Wildlife Service to be doing that or just in your – to have someone in Virginia to do that work on that?

KAREN: You know, I think it was pretty new for the whole Service. Oil spill response had been going on for quite some time. Again, that was under the Clean Water Act and the Oil Pollution Act. But, there weren't a lot of staffing people for it. Then, we also expanded into reviews of the State NPDES (National Pollution Discharge Elimination System) because I think there was a realization that the contaminants in

the waterways were really affecting the fisheries and the wetlands and the birds that depended on the waterways. So that is how we expanded into that program. Then many years later, we got into NRDA – Natural Resources Damage Assessment – and working with EPA on the cleanup program.

LIBBY: Why don't you explain a little bit about NRDA and what that is and, if you can think of a couple projects or a project that would illustrate how the NRDA program benefitted resources in Virginia.

KAREN: Okay. Well, as I said, NRDA stands for Natural Resources Damage Assessment and Restoration. It's a program that Congress established to help fix contaminant problems that have been caused by industry and/or spills that have not been cleaned up. It can work on either very old projects that have been around for many years that just polluted – and it's usually waterways is what we got involved in but also land, or in the immediate aftermath of spills. The big project that my office worked on - that the NRDA biologists in our office worked on – was a big chemical spill out in the southwest part of Virginia in the Upper Tennessee River basin where we have a lot of endangered mussels and endangered fish. I can't remember the name of the chemical – it was a liquid. A tanker truck turned over and spilled all its contents in the river. The river was white for miles downstream. Big fish kill. So, we spent several years working with EPA, Justice Department and the State looking at that, figuring out what the impacts were, and then assessing the damages, trying to put a monetary value on the damages, negotiating with the responsible party which is in this case with the insurance company of the trucking company because the trucking

company was small, and their insurance company was left holding the bag so to speak -the responsibility for paying for it. So, there was a long period of negotiation between Justice, our solicitors in Massachusetts, and coming up with an agreement with the responsible party. Once that was worked out, and it was several million dollars as I recall, then we had a program to go through a restoration process. In that we brought in the State, local governments, and came up with a program to “restore” the river. Now how do you restore a river where all the mussels have been killed? Luckily the State of Virginia had a mussel hatchery program. It was just kicking off. They were just learning how to grow these very rare mussels in captivity. They actually started by growing some non-listed mussels to get their techniques down. By the time we settled on that project, they were actually able to rear some of the listed mussels. So as far as I know, and I have been retired now 9 years, that program is still going on. I think we have used up all the settlement money but there has been some other spills and some other – I’ll say “problems” - out there (laughing) with other projects and the funding has continued. A lot of that has gone to the State. That is just one example of a really big project.

LIBBY: So, who was the contaminants biologist that you hired? Was that the first person to work in your office after you, and you had an admin person? Who was that?

KAREN: We shared an admin person with the Fisheries Office that we were co-located with.

LIBBY: Albert Spells? Was he there?

KAREN: Well, Albert Spells, Gary Swihart, Jack Sheridan were the fisheries

people. And our joint secretary was Cindy Otey who is now Cindy Otey Black. And again, as the offices grew, the admin staff increased over time too. That was also a slow process. The first contaminants biologist was Don Kane. He was there for a couple of years before he left. And then – along the way we had a lot of summer interns - grad students from VIMS because we were located on the VIMS campus. Virginia Institute of Marine Science. So, we hired a lot of people for summer work or for working on these transfer-funded projects with the Corps. But I think the next biologist that was hired was William Hester. He did permit work – Corps of Engineers permit reviews. Ultimately, he specialized in the transportation projects. We actually hired Gary Frazer. (Laughing). He started his Fish and Wildlife Service career in the Gloucester Point Sub-Office.

LIBBY: He did wetland work?

KAREN: He did wetland reviews. We just barely got started in endangered species by the time he left. After that there has been a whole variety of people. I can’t even list all the people but our NRDA program, after Don Kane left, Steven Zylstra came in. And then we hired Susan Lingenfelter who is still there and is now the assistant supervisor for environmental contaminants. John Schmerfeld was our NRDA biologist. He just did a super job of working with these responsible parties – EPA, Justice Department, DOI Solicitors – to settle these projects. And then Cindy Kane was our NEPA person. She had actually worked for – not NEPA sorry, but NPDES – she actually worked for a state at one point, so she knew the NPDES program really well. So, we had a really good, I think,

environmental contaminants staff. Very strong program.

LIBBY: Of all the people – these folks – I don't know all of them, but I know some of them actually when I worked in Ecological Services too, but Gary Frazer of course went on to become Assistant Director. Right?

KAREN: Right, for Endangered Species. He was a supervisor out in the Columbia, Missouri office. He worked for the – he went to work in the Washington Office for a while as a staffer, and then he became the field supervisor in the Columbia – Columbus, Missouri – and then he came back to Washington and today is the Assistant Director for Endangered Species.

LIBBY: You hired him into the Fish and Wildlife Service?

KAREN: Yes, and what a good hire that was! (laughing)

LIBBY: That's great.

KAREN: So, in talking about the environmental contaminants program, that's a long evolution. That didn't all happen just at one time. The other programs that evolved were our endangered species program. We have a lot of endangered species in Virginia. And as I mentioned, there is a whole suite of aquatic species out in the southwestern part of the state. We opened up another office out in Abington, Virginia. That was headed by Roberta Hylton. She hired a staff out there that focused exclusively on endangered species issues. We had things like coal mining, they assisted with some of the spills out there, some of the permit reviews. So, they did a lot of work. It was really focused on endangered species. And then the other program that evolved over time was our

Partners for Fish and Wildlife which you know well because you were our regional coordinator at one point. That program was headed by Bridgett Costanzo. When she started she was the only person. But that program grew over time and Bridgett's staff ended up being Will Smith, Dave Byrd, and Jessica Rhodes – all of whom I think have left at this point except for Dave Byrd. But Bridgett was really good, with your help I should say, in bringing in a lot of grant monies to do habitat restoration. We focused mostly in the coastal plain – in coastal wetlands – and in the river systems that had aquatic listed species.

LIBBY: Very exciting!

KAREN: So, to go from a program that only had one responsibility and that was working with the Corps of Engineers to a program that expanded to every single aspect of Ecological Services was – I saw quite a change over the years.

LIBBY: You were in that office from 1978...

KAREN: 1978 until I retired in 2008. So, as you and I talked about, I am one of the few people that managed to stay at one station my whole career. And it wasn't due to lack of trying. You asked – you said one of the questions is "Who were your mentors?" Well, Russ Earnest and Bill Ashe I consider two important mentors - both of whom tried to get me to move, particularly Bill Ashe. Some of my promotions over time I think were held back with trying to encourage me to move. I fully expected to. I got a master's degree in organizational management from George Washington University and I did that as a night program while I was still employed with Fish and Wildlife. I did that in the mid-80's. I got

my master's degree in 1970- excuse me – 1986. I thought at that point I would move along and move up and around the country like everyone else did but I met my partner, Mark Hayes. He actually worked for the Corps of Engineers although we didn't know each other, so that sort of changed my career path. We stayed in the Norfolk area because of his son and his family. But I loved what I did, and I never felt like I was bored the whole time I was there. The programs kept evolving. There were new issues every year. The staff was wonderful. We had a really tight-knit office. So, up until I retired, I was having a good time.

LIBBY: You started off as a biologist and at some point, you became the project leader? Field supervisor?

KAREN: Yes, and that was sort of an evolution too. You had asked me to talk about being one of the first female ES project leaders. The first three of us were myself, "Mike" Gantt (Linda Gantt), and Nancy Kaufmann. I think there is a little bit of debate about which of us was first. I was actually the first person in charge of an ES office but because we were a sub-office under Annapolis, I didn't have the full title of field supervisor. I think Mike Gantt actually was the first one to be hired to have that title. I sort of evolved into the position over time.

LIBBY: Where did Mike work?

KAREN: Actually, I knew Mike because she was in the Annapolis Office when I was hired with Fish and Wildlife. She shortly thereafter went to the Washington Office. She was in the Coastal Zone Management program there for a while. Then eventually, she became the field supervisor in the Raleigh Field Office.

LIBBY: So, you are saying in the entire Fish and Wildlife Service?

KAREN: Ecological Services.

LIBBY: In Ecological Services – you, Mike Gantt and Nancy Kaufmann were the first three field supervisors.

KAREN: Right. We would go to national meetings. I don't think they still have national meetings. I have been told that dissipated with budget and other reasons, but we would have national ES project leader meetings every couple of years. It wasn't every year. First few I attended, Mike and Nancy and I were the only females there. (Laughing.) And that has changed over time. I think there is a pretty good mix. ES I believe was the first program to really bring in as many females as they did. I think because it was a newer program, I don't think it was as entrenched as perhaps Refuges and Fisheries were.

LIBBY: Who were your supervisors? You said that Russ Earnest and Bill Ashe were kind of your mentors.

KAREN: Right. Russ was in the Washington Office. I call him a mentor because during the Reagan years, it was a really tough time for the Fish and Wildlife Service. I want to talk about that compared to today. The Reagan administration really did not like the environmental programs and they brought in people in the Department of the Interior, Director of the Fish and Wildlife Service who really did not support what we did. So, it was a very difficult time as is today. Russ Earnest was one of those people as was Bill Ashe who stood up for what they knew was the right thing for the Fish and Wildlife Service to be doing. They let the people in the field know that "you

keep doing what you do. You do what you know is the right thing to do. Let us worry about the politics.” I feel like at that point in time, the field offices were sort of insulated from some of the things that went on. Not totally. There were things that didn’t happen because of politics, but ultimately, we made it through those years and I am hoping that today the things that are not being supported by the current administration – that will change in time. The career – the politicians come and go, and whether it is a Democratic or a Republican administration, we don’t always get done what we think should be done. But the career employees stay. They are the ones who make the difference.

LIBBY: Yeah, that’s true. Because we are doing the mission. We are following the laws and implementing the programs. We care. So, you worked - your supervisor was in Annapolis.

KAREN: Right, Glenn Kinser was in Annapolis. And he was there until 1988. And then, John Wolflin took over. They separated – Glenn was over both the Chesapeake Bay program office and the Ecological Services office. It was a combined program and a combined staffing. Ralph Pisapia felt that they needed to be separated. So, Glenn Kinser then ran the Chesapeake Bay program. It was separated physically from the ES office and John Wolflin came in as the ES supervisor.

LIBBY: Weren’t they in the same building though?

KAREN: They were for a while, not very long. And then they moved somewhere else. And then ultimately the Chesapeake Bay program was brought back under John

Wolflin and Glenn Kinser came out to NCTC as the head of the training division.

LIBBY: Right. Right. So, John Wolflin was your supervisor for a long time.

KAREN: He was. From 1988 until 2001. That’s when our office, the Virginia Field Office, was made independent from the Annapolis Field Office.

LIBBY: Was it – why did that split happen? Do you think it was based on workload?

KAREN: It was workload. We were pretty independent. We had a budget. The Regional Office assigned budgets at that point based on field offices so even though ultimately it was controlled through the Annapolis Office, we had a budget that I controlled. It just had to be ultimately within the Annapolis Office. So, I think our workload, our staffing – we were up to, I don’t know, 15 or so people at that point. John Wolflin really wasn’t doing much oversight, so Mamie Parker was the Regional Director at that point and she agreed that we were big enough and independent enough that we should stand on our own.

LIBBY: Was that something that you had been advocating for a while?

KAREN: For quite a long time, yes. And she was finally the Regional Director that listened. (Laughing).

LIBBY: Great!

KAREN: So, I give her a lot of credit for making Virginia a stand-alone office.

LIBBY: Yeah. So, I don’t know, what else do you think – can you think of some other projects that you guys worked on in the Virginia Field Office that are really, were

really controversial, were really difficult, maybe? It took a lot of courage to – I mean, you think about the country was really growing, and there were a lot of impacts on fish and wildlife, a lot of challenges.

KAREN: I don't know if I want to single out any one project, although there is one thing I want to talk about. But, everything that ES does is controversial. Whether it's working with endangered species, permit reviews, the NRDA program, it's all controversial. So, the people that work for Ecological Services have to be willing to understand all sides of an issue, be willing to – I hate using the word "compromise" because everybody thinks that's a dirty word – but in reality, we are not regulatory in most cases. We need to work things out with the project proponent and the other agency who is regulatory. So everyday was a challenge, but I think the people stood up to it. One of the areas that I am proudest of early in my tenure at the Virginia Field Office was getting the State to recognize that in-stream flow management was important. I know Clair Stalnaker is here with us for this meeting. He led a group of folks, both scientists and engineers out in Ft. Collins. They developed this methodology called "incremental flow" (pause) "in-stream flow incremental methodology." I took several training courses from them. Then we brought that back to Virginia, helped trained the Virginia State folks and the other agencies and actually some of the industry folks in Virginia. That ultimately led to Virginia developing its own in-stream regulations. I am really proud that the Service was able to take the lead in that, through training, not so much through coercion. Again, we were not regulatory, but we helped the State folks understand that you need to be managing your streams in a

way that both protects the natural resources that live in them and the industries that use them and the landowners that have riparian rights.

LIBBY: So how do you think, when – tell me a little bit how the work you did maybe was similar, or what kind of support you might have gotten from the other field offices in the other states.

KAREN: I am glad you brought that up because that is something I wanted to talk about. When I started with the Fish and Wildlife Service, ES was still pretty small and as I said it grew over time. One of the things that I think was very strong in Region 5 was we had annual biologists' meetings. We also had at least annual project leaders meetings in Ecological Services. That made us a really tight-knit group. People knew each other. People collaborated together. If you had a question, you weren't quite sure how to handle something, you could call somebody in another field office. Likewise, because ES had national project leaders meetings, I got to know people all over the country. People like Roger Banks. I don't know how many times I talked to him about mitigation banking and things related to that. People in other parts of the country with in-stream flow issues. So, it was very collaborative. I am sad if those kinds of meetings don't happen today. Certainly, events here at NCTC and training at NCTC, sort of makes up for that by bringing people from all over the country together. But collaboration is such an important part of what the Service has done during my tenure. I did not see that as much with the Corps of Engineers, EPA, or National Marine Fisheries at least early on, because they never had travel or training budgets. Fish and Wildlife – my entire career – supported

training. It supported us having these national and regional meetings. The collaboration and the exchange of scientific information was just really great.

LIBBY: I wonder how having NCTC here – of course this is a place where we can come and get some of this training – but that did change the importance, I don't want to say importance but the... a lot of that information used to be obtained at these project leader meeting or biologists meetings. Now people are just coming here. ES Basic Training - Ecological Services Basic Training – did you ever teach at any of those?

KAREN: I did. I did a couple of sessions where I talked about ES organization and its change over time. But that was a brief period. Then I became a coach with the Stepping Up to Leadership program. I think I did that three times. After those of us who did it several times, I think they put a limit on how often you could coach (laughing). But I loved that, seeing the people that were coming behind and how passionate they were.

LIBBY: Who do you think you kind of mentored or that you feel you helped them in some way in their career?

KAREN: Well I hope everybody on my staff. Like I said, I had an excellent staff, and they have all gone on to do great and wonderful things. I mean Gary Frazer is now Assistant Director. So, I am hoping all the people that were in my office and have gone on to do other things – I hope they consider me a mentor. I certainly tried to support them. And then in the Stepping Up to Leadership program, that's an official mentor. I can't say any one person in

particular, but there is a lot of people that I interacted with over the years.

LIBBY: I know you did – you were very well regarded when I was in Ecological Services, I know that for a fact. I felt like you were very open and receptive to me, to being a new person in the Fish and Wildlife Service.

KAREN: Well as we keep saying, we can't do it alone. You have to work with everybody else to make it happen. I think the last thing I want to talk about – one of the questions on the list is – what are you most proud of? And, I have to say it is something not even with Ecological Services. It was my involvement in the creation of several national wildlife refuges.

LIBBY: Ah! Yes!

KAREN: I will focus on two that both had their roots in Corps of Engineers permits. So, I'm sort of going full circle. The Eastern Shore of Virginia National Wildlife Refuge got its start because it was an Air Force base at the very tip of the Delmarva Peninsula. It was a coastal protection installation during World War II. The Air Force ended up with it. They were getting ready to surplus it. They were in talks with the General Services Administration about surplussing it. The county that it was in – Northampton County – was all chomping at the bit to get it. They were going to turn it into some sort of development. They had envisioned condominium projects and marinas and things like that. There was actually a developer who would come in - work with the county - who was coming up with these designs. Well about the same time it became more widely understood that that tip of the Delmarva Peninsula and the tip of Cape May were very important stopover

points for birds, raptors, passerines, migrating down through the fall. We subsequently learned it's an important part for monarch butterfly migration as well. So, I was working with the state and some ornithologists and the ornithologists were saying "We just can't lose this, it's so important." They'd been banding birds there for decades. It was their information that brought to light how important this area was. So, to make a very long story short, we – my office convinced Refuges and Realty in Massachusetts that this was worth protecting. And I have to say that it was sort of a struggle because it was an old Air Force base. There was a lot of buildings on it. There was some old World War II bunkers. It was all overgrown with dillweed and all kinds of invasives.

LIBBY: Who was the Chief of Realty at that time? Bob Miller?

KAREN: Bob Miller was the chief. But I have to say that working with him, Walt Quist, and a few other people, Bill Zinni - I think they very quickly came to see how important that was. I can't remember how many years it took, but it took several years.

LIBBY: What is the approximate time range or period?

KAREN: This would have been say from 1986 to maybe 1989 to 1990. We ultimately got it, and because it was already Federal land, it just transferred to us. But certainly, convincing the locals – the local government who thought they were going to have big development out of it, the watermen who used the boat ramp landing on the property that they were still going to get to use it – it was a long process to convince the locals that we would accommodate public use there.

LIBBY: Yeah, so, they were, - so that took a lot of courage.

KAREN: It did. Bill Ashe was the deputy Regional Director at that time. He was very supportive. It all came together. Then a few years after that, actually that time frame was earlier. I am going to say that was from the early 1980's to the mid-1980's, because after that, then I worked on another project. Up on Cedar Island, which is also on the Delmarva Peninsula, it's in Accomack County. That was a barrier island that had been subdivided in the 1950's with a plan to build a bridge out to it and turn it into another area like Ocean City, Maryland. Never happened because they could never get the money to build a bridge out there. So, it sat for years. But then it was inherited by the daughter of the man who had originally subdivided it, and her husband. They were real estate developers. They had this plan to re-initiate development of the island. But at this point, they knew that no one was going to build a bridge out there. So, they had a permit application with the Corps of Engineers to build a big pier at one end of the island and they were going to have a program where they would shuttle landowners by boat out to the island. Then, the landowners could go by their own vehicle down the beach to these houses they would build. We did a biological opinion on the piping plover which was a listed bird species that was on the island. We wrote the first jeopardy biological opinion on the piping plover for that.

LIBBY: Oh, was that the first jeopardy opinion for piping plovers ever?...

KAREN: Right.

LIBBY: ... for that project. Wow. That's history!

KAREN: Ultimately, the biological opinion was going to allow the pier with a lot of restrictions on where and when anybody could go up and down the beach cause that's where the piping plovers nest. So, it had a lot of restrictions on it. And, ultimately, the landowner – even though the Corps issued the permit – I think the landowners decided it just wasn't feasible for them, and at the same time, market fluctuations in housing. a few houses were built but then I guess people realized how expensive it was to build out there. There was no electricity, no water. So, they had to have everything brought out. And the island started eroding at a higher rate. All the barrier islands along the east coast erode or I should say move back – they don't really erode they just roll over, but we call it erosion. In the mid to late 1980's, it seemed like that was a period when erosion increased along that stretch and several houses washed into the Atlantic Ocean. Several houses had to be moved back further on their lots, and I think even one house was moved back to the mainland. Over time, this developer realized he wasn't going to make a lot of money. Fish and Wildlife Service worked with The Nature Conservancy and him to come up with an agreement for conservation easements and outright acquisition of property. Again, because that wasn't in Federal ownership, then Realty and Refuges had to go through the long process of getting the EIS, getting it approved by Congress, getting the funds, things like that. That took longer, but it ultimately happened. Today, Cedar Island is almost entirely in either Nature Conservancy or Fish and Wildlife ownership. There's still some property...

LIBBY: ...what refuge is it?

KAREN: It's part of Chincoteague. It's the Cedar Island unit of Chincoteague refuge. As well as Metompkin, which is the island to the north. Parts of that and parts of Wallops Island are units of Chincoteague.

LIBBY: That's a great story! So, I would like to just ask you about some of the - working with some of the other programs in Virginia in particular. I am thinking of the folks in Refuges and the folks from Fisheries. I know that you were co-located for a while?

KAREN: And still today. No, I take that back. Fisheries went through some budget problems back in the late 90's, early 2000's, they moved the Fisheries program over to Harrison Lake National Fish Hatchery. When I first started, everything was pretty stove-piped. We were co-located with Fisheries, so we had a good relationship with them, but the only interactions we had with Refuges was when they needed a permit from the Corps of Engineers to do something like dike maintenance.

LIBBY: When they asked for a permit!

KAREN: Right. But you know, my feeling always was you have to work with everybody. We were one agency. So very quickly I got to know all the refuge managers. We started having get togethers. One thing I will say is initially when I worked for Fish and Wildlife we still had area offices. Annapolis was also an area office, so they had a refuge, fisheries and ES staff there. John Green was the area manager. He was very good about having, again, annual meetings with all the project leaders. So, I did get to know all the other programs through the meetings that John Green had. I just realized how important our refuges were, that the things that the

Fisheries folks were doing were important, and hopefully vice versa. I mean there was a lot of times when there would be a project that might impact indirectly a refuge and ES would come in and oppose a permit application because of the impacts that it would have on a refuge. We worked very closely together. I was very proud of that. And ultimately, of course, we went into the Ecosystem Teams...

LIBBY: I was going to ask you about that.

KAREN: That, I'll put in quotes, "forced" the programs to work together. But in Virginia, and I think throughout the Chesapeake Bay, we didn't have to be forced to work together because we already had been doing that for years.

LIBBY: Were you in the Chesapeake Bay Ecosystem Team?

KAREN: Actually, Virginia was in several because we had the Upper Tennessee which was a Region 4 lead, so Roberta Hylton would go to meetings of that ecosystem team. The very southern part of Virginia is in the Albermarle-Pimlico Sound, so we also had to go to a team that was led by Region 4. Then we had the Chesapeake Bay ecosystem team and a little bit of the Delaware Bay. We had 5 ecosystem teams (laughing) in Virginia. A lot of meetings.

LIBBY: There was a time when there were a lot of ecosystem team meetings. Not too many of them still get together. Pretty much defunct now.

KAREN: I don't know what the landscape approach, but I think there are still teams associated with that but I think that they're not quite as extensive administratively. The ecosystem teams got very administrative. I think that led to their downfall.

LIBBY: I think so too. You had to write a plan. People had enough of planning. (Laughing.) Well that's great. Is there anything else? I know we can think it's about time to wrap up. Any last thoughts? Give me the year that you retired, again.

KAREN: 2008.

LIBBY: 2008. And, just maybe briefly what have you been doing since or how have you stayed connected with the Fish and Wildlife Service since you retired?

KAREN: Well, certainly the Retirees group is one way to stay connected. You know I have friends – that is one thing about the Fish and Wildlife Service I think – we make a lot of friends like you and I are friends. We stay in touch through emails, Facebook, telephone calls. I have a lot of Fish and Wildlife Service friends. Some of whom still work so I find out what is going on through the people that still work. I still have the Fish and Wildlife Service homepage as my internet. When I turn on my internet every morning, I see what is going on. Some people say, "Why do you do that?" but you know, I truly want to know what is going on in the Fish and Wildlife Service.

LIBBY: I didn't think about doing that. I think I will have to do that.

KAREN: I know it's a difficult period right now. But as I said earlier, they will get through it and they will survive.

LIBBY: Well, thank you Karen. It's been a real pleasure.

KAREN: Well thanks, Libby. I am glad that you were the person who worked with me on this.

LIBBY: Yeah. This was fun. Thank you so much and thanks for all the incredible work you did for all the years with the Fish and Wildlife Service.

KAREN: Well thank you!

This concludes the interview given on October 18, 2017. On October 19, 2017, Karen added another thought in a separate recording. That discussion follows:

LIBBY: Hi, this is Libby Herland, and I am with Karen Mayne again. It is Thursday, October 19. Karen had a few more thoughts she wanted to share with us.

KAREN: Yes, yesterday when I mentioned that Russ Earnest was one of my mentors, he was in the Washington Office. I believe his title was head of Ecological Services or some such title at the time. This would have been in the late 70's, early 80's. Russ came up with this saying that was a little odd, but it was "Save the Dirt." The ES staff around the country really picked up on that saying as a way of reminding ourselves that our job was to protect the natural resources. At that time, it was a lot of wetland issues, endangered species issues were in a different program. But all around the country, that became the mantra of the Fish and Wildlife Service for quite a long – I should say Ecological Services – for quite a long time. Save the Dirt! So, I just wanted to make sure that got recorded.

LIBBY: Right! Thank you!

KEY WORDS:

Biologists (USFWS), coastal environments, contaminants, dredging, endangered species, GIS, habitat restoration, legislation, mollusks, oil spills, restoration, rivers and streams, water pollution, wetlands, wildlife refuges