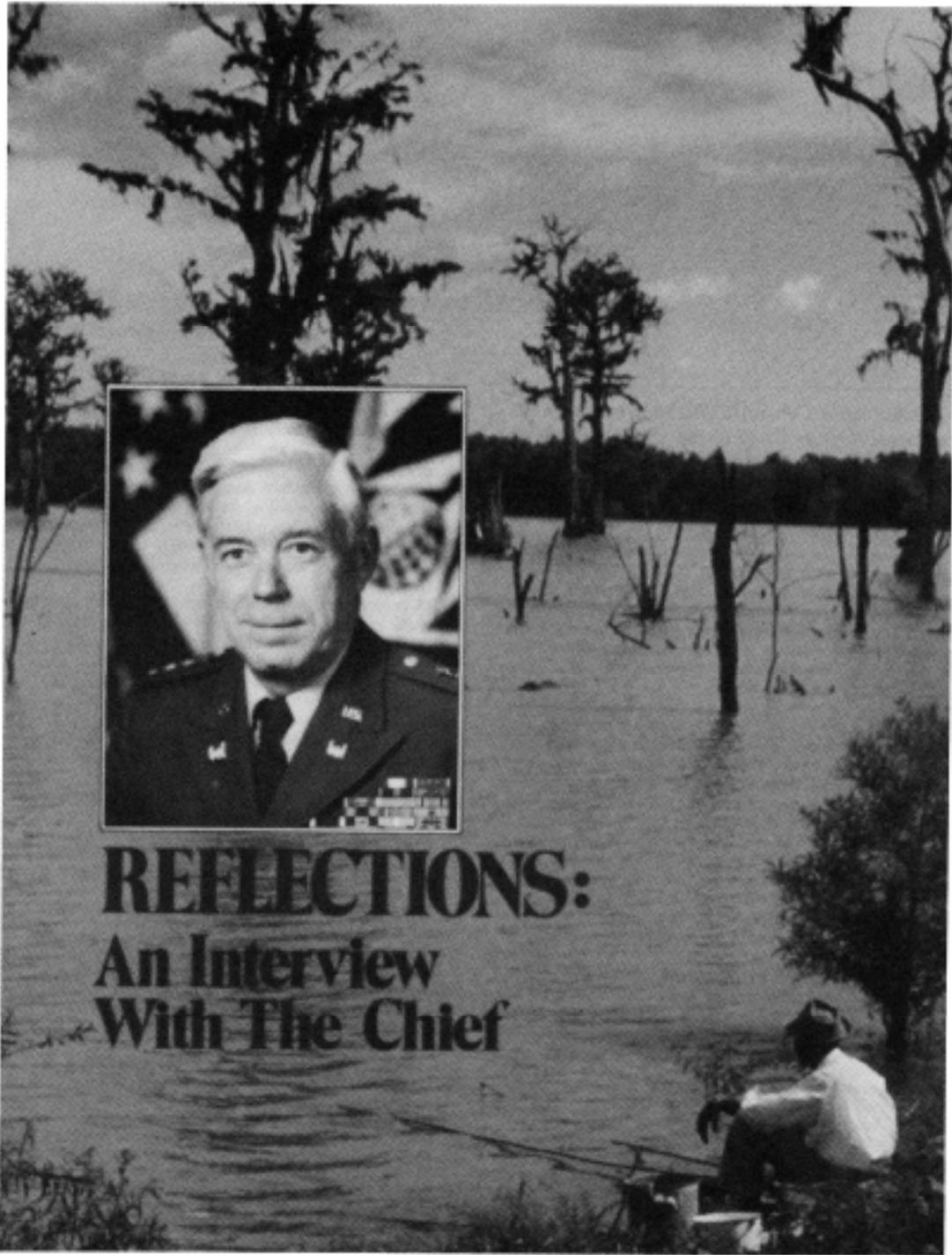

Appendix F
“Reflections: An Interview with the Chief”
Water Spectrum
Fall 1980



REFLECTIONS:
An Interview
With The Chief

Lieutenant General J. W. Morris retired in September as Chief of the U. S. Army Corps of Engineers. Ann Hoffnar of the Corps' Civil Works Directorate talked with the general for *Water Spectrum* readers prior to his departure.

General Morris, from your days as Division Engineer, Missouri River Division, through your days as Chief of Engineers- this roughly corresponds to what you've called the "decade of the environment"-what do you see as the Corps' greatest achievements in the area of environmental protection?

Probably the greatest achievements are not as much related to specific projects-although there are many of those-as to our change in direction, so that we could accommodate national environmental objectives. Changing a large organization is always difficult but we changed our policies and set up the mechanisms to incorporate environmental law into our operations. Environmental planning is now part of our daily business. We have biologists, fish and wildlife experts and scientists from other related fields on our team. Without these changes we could never have moved in the direction that the country wanted to go.

General Morris, in 1975 you told us at *Water Spectrum* that protection of the wetlands must be given high priority. Didn't this turn out to be a bigger task than we anticipated?

The answer is generally yes. Of course, by 1975 we were pretty well aware of what this job was going to involve. When the Federal Water Pollution Control Act Amendments passed in October 1972, we were given increased responsibility, under Section 404, for regulating construction or any other development of the wetlands through a permit process. You may remember our traditional definition of navigable waters was quite restricted. The new law and subsequent court cases broadened "navigable waters"

to include all the waters of the United States. This, in effect, increased our authority to grant permits many fold. At first we really didn't anticipate the complexity of the program. Its size-based on sheer numbers of permit cases-is staggering and many of the cases are quite controversial and complex. Among our most difficult permit decisions were to deny the permit for development on Marco Island, Florida and to approve the permit for a refinery at Newport News, Virginia. There have been many other difficult decisions.

It's been a good program though; I wouldn't want to let the magnitude of the work be misconstrued. I think we've handled it well. The Corps has earned a reputation as fair and thorough throughout government and private industry as well as the environmental community.

You've said that the 80s are going to be a decade of conservation. To our agency of course this primarily means water conservation. I've heard several definitions. Do you have one that's really satisfactory?

Yes, my Civil Works staff has come up with a definition which makes sense to me. It simply says that water conservation is any beneficial reduction in water use or in water losses. Both reduction in use and loss make water for other uses. It's a rather short and I think useable definition.

In his water policy the President has stressed conservation. I believe the Corps has now worked out a plan of action to implement the President's policy. Can you tell me something about it?

Yes, early in his tenure I had an interview with the President. We talked about the future of the Corps and its programs. One of the last things the President said was "I wish you would develop a water conservation program." This request was never put in writing but when you get a request like that from the President it's usually enough. So we have worked very hard in this area since that conversation. First we surveyed the literature and then developed our definition of water conservation. We developed a plan



Art Klein, a Permits investigator in Buffalo's Regulatory Functions Branch, examines plant life in a Niagara County, New York wetland.

of action for integrating conservation measures into five Civil Works program areas: planning, design and construction, reservoir regulation, operation and maintenance, and regulatory activities. We sent the plan to our field offices in May of 1979 and this May we sent an updated version. Our water conservation program is a solid one that addresses water conservation as part of our own use of water and of our planning for future water needs of the public. We are drawing up contingency plans to make existing Corps projects responsive to short-term water shortages during droughts. We are also considering water conservation in our permit program's public interest review.

Up to the present time the role of the Corps has been limited primarily to water supply as a part of multiple purpose Federal projects. In 1975 you talked about planning for water supply. Will conservation be enough? Do you see our role in water supply increasing in the 80s?

I don't think conservation will be enough. In my talk down in New Orleans earlier this year I said that developing a water conservation plan is just a first step. That done, we will find that our needs still exceed our present supply. Therefore, we'll need to store excess water in time of plenty so that it will be available for shortages. The question then becomes "who's going to develop water supply?" Congress has already selected the Corps of Engineers to study water supply in the northeast United States and I'm of the view that the Corps is probably the best agency, but not the only one, to do it nationwide. I've thought for some years now that we should be given a charter by the congressional authorization committees to undertake a national water supply study. I believe the appropriations committees would be willing to provide the money, but there is a preceding question which relates to authority to make the study. Water supply is certainly in somebody's future; I would hope it will be the Corps'.



Corps park ranger talks with children.

You told the Water Resource Congress in New Orleans in February-I think the same speech you just referred to-that it was time for water resources developers to get back to work. How does this jibe with today's stress on conservation and our country's money problems?

It relates directly to conservation because in that speech I said we can't really get back to work until we have integrated conservation into our water planning, just as we integrated environmental criteria. We've got to be able to demonstrate to the people that we've observed conservation measures. The nation's current economic difficulties are another matter. I suspect that we risk being delayed more by money than anything else, but I foresee a fairly large investment in the water program. There's much to be done. I believe the necessary conservation measures, and our economic problems will affect *when*, not *if*, we resume developing water resources.

Our decision to maintain a minimum fleet and contract out some of our dredging marks a new era in water resources development. It must have made you nostalgic when the dredge *Essayons* was retired.

It did. The *Essayons*, though, was retired for two reasons; one, she's not really sea-worthy any more, and the cost to fix her up was prohibitive. And two, we do have a new larger dredge coming into service very soon. Our fleet is changing though because the dredging industry is putting the hopper dredge business into the national private enterprise system.

I think the program that put dredging out into the competitive arena is already proving to be a good idea. Though it was painful for our people to give up those missions, the taxpayers are now getting a lot more dredging for their money because of competition. The government fleet wins some dredging contracts and the private industry fleet wins some but in each case the

lowest price gets the job. The accumulated savings are mounting every year by millions of dollars.

Energy is clearly a high priority. How do you expect the new national emphasis on energy to affect Corps programs.

It already has. We are fortunate that we were able to get a couple of studies going four years ago-before the energy crunch worsened. Those studies will soon be available. One of them, the National Waterways Study, has to do with water transportation, which indirectly affects energy because so much of the cargo transported is coal and other energy products. The



The Essayons.

other study is of hydropower, which of course has a direct impact. We are looking at all the potential large and small scale dam sites in the country. I think the study is going to prove we can at least double our hydropower output. We are assessing all forms of hydropower potential: lowhead, pumpback, run-of-river, major power projects, and additions to existing projects. It's going to be a most helpful study.

The Corps has studied, as you said, the nation's waterways and its hydropower resources. Do we need a national flood management study?

Well, we need to at least identify the major flood problems in the United States. Some people seem to



Lock #1 on the Green River, Louisville District.

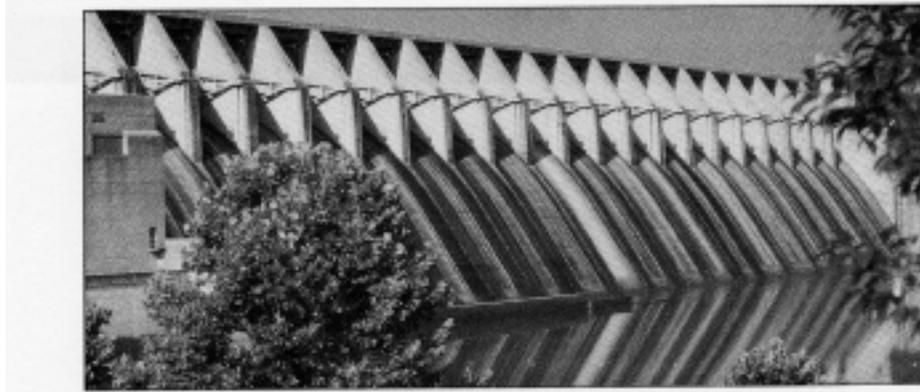
believe that there are few real flood problems left. This is not the case, and a worthwhile effort could be made to describe the extent of the major flood problem areas and the best means to deal with them. We have perhaps ten or twenty places in the country where people are literally sitting on a powder keg, and they are going to get hurt unless we do something about it.

We hear a lot about non-structural solutions to flood problems now. Is this the solution of the future?

Non-structural measures alone cannot solve all our problems. However, non-structural solutions are considered in every situation we encounter-flood control as well as other water resources projects. We seldom develop a plan that is totally non-structural or totally structural. We integrate both methods on a case-by-case basis.

What about the results of our dredged material research program? Did they provide the guidance you expected and was it worth 30 million dollars?

It was worth \$30 million; in fact it's paid for itself already. The study was targeted at a national attitude that all dredged material is polluted and automatically bad. This study was started back in the very early 70s and what it's done, if it's done nothing else, is proven to the world that most dredged material is *not* bad. As a matter of fact, a very high percentage of it is useable material and really a national asset. If it did nothing else, that valuable goal was accomplished. In addition we learned some new techniques for storing dredged material: how to handle it, what kind of dredges to use and many other things. In the Great Lakes alone we saved over \$20 million right off the bat since we didn't have to build dikes to contain dredged material.



Clark Hill Dam, Savannah District, has a generating capacity of 280,000 kilowatts.

The Corps is involved in two major cooperative programs: the National Program of Inspection of Non-Federal Dams and EPA Construction Grants Program. Is this team work approach working?

Well yes, of course we work with other agencies on everything we do. In the EPA grants program our two agencies are working together, using Corps talents in construction management and EPA grants authority, to provide the people water quality and pollution control structures. It seems to be working quite well. We have written a new agreement with EPA which will give us more authority than in the past to manage construction, but it's still their program. I'm sure of one thing, it's certainly paid for itself and the public is getting better facilities now that the Corps is involved. We're a lot more confident that the money is being spent the way it was intended, too. The inspection of non-Federal dams is primarily our program, though we work cooperatively with state agencies. Some states have more capability to do dam inspections than others. The Corps has developed training programs to assist states. There is no other way to go in government except through cooperation between the agencies which have interest and responsibility. If we've learned one thing in the last ten years it is that no agency can, by its own drive, push a project through the system.

What about the Corps overseas activities? Do they detract from our domestic programs? Are they really an asset to the nation and the Corps?

Yes, they are. We wouldn't be there if they weren't. We participate only at the State Department's request, and every place we've been we have made friends for the Corps and the nation. Our involvement and presence often serve to reduce tension. In our arena we've improved our ability to do business. Benefits come to us because overseas activities have allowed us to keep some of our talents sharp. We've learned a great deal. In addition, during a period of a somewhat diminished public works program here in the United States, overseas activities have assisted us in keeping

our work force stabilized. We attract better young professionals to the Corps by the very fact we do the overseas work. We are in tough competition for the best talent, and our work in the Mideast, Israel, and China is a drawing card. This is a hard point to sell though; I'm chastised often by Congress because they fear the foreign program is detracting from the continental one. Really, though, there is very little conflict between use of our manpower domestically and overseas. When we take people out of jobs in the United States and send them overseas, there is some small, short-term adverse effect on the place they leave. But they come back, armed with new engineering experience and insight. So if you can exclude the initial adverse impact, in the long run the overseas program is good for us and for the nation.

I see that conservation will be in our future. And we will probably see some changes in our navigation programs and some increase in hydropower production. It's likely that we will be given an expanded mission in the area of water supply. Do you see other changes in the 80s?

The major change I expect in the Corps in the near future is improved planning of our operations and maintenance work. We plan for water resources development on a regional and even a national basis—assessing present and future needs, costs, benefits, and alternatives. Now we need to begin planning more carefully for the operation and maintenance of our established program. Planning for O&M we call it. Half of the money appropriated to the Corps each year is used for O&M, which covers managing recreation sites, dredging rivers, disaster recoveries and many other things.

Our planning needs to be broken down into our day to day business of cutting grass and painting and our long-term maintenance—major repairs to buildings, locks and dams, replacement of generators. Our long-term maintenance costs can be forecast and need to be planned.



McDowe// Exhibit Plaza at Scottsdale, Arizona is part of the Indian Bend Greenbelt floodway. The floodway provides open space for recreation in non-flood times.

An important part of our O&M is our recreation program. It involves both short and long-term maintenance planning as well as planning for activities. This program has been expanding rapidly in recent years. We now host over 400 million visits each year at our projects and we expect that number to grow in the future. The expansion is partly due to the energy crunch-many Corps lakes are located in areas of high population density-and partly due to our increased awareness of public needs. We now provide more facilities, and ones which are more diversified, at our projects than ever before. The atmosphere is a reflection of our new management policies. The managers we now put in charge are people who know how to deal with the public. Some of them are Corps-trained, either at our new facility at Huntsville Division or through a Huntsville-monitored University program. Years ago, we weren't so sophisticated. If our construction engineer was nearing retirement we'd say "Well, look Joe, why don't you just stay here and run the project? You built it so you know how it works." He did know how it worked and he could keep it working, but he wasn't necessarily good at dealing with visitors. Our managers are a different sort today; they are skilled at working with people.

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Don't our managers have to be pretty well versed in the field of wildlife management?

Yes, We have developed reservoir management plans aimed at maintaining the balance between use of the land for recreation and preservation of land for wildlife. This is an area in which we have done a great deal of planning and have asked the help of other agencies and the general public. We have not solved all our problems. We still have things to learn about habitat needs of some wildlife species. And, we are still negotiating to insure public access to Corps land in some projects. There are other management problems, but viewed as a whole, we have a recreation/resource management program of which we can be proud.

We've built quite a few visitor's centers recently, haven't we? I'm sure these enhance our ability to greet the public.

Yes. I am very pleased with our visitor information facilities. We have regional facilities located near population centers which present regional and Corps history, depict local archaeological and wildlife features, and show locations of projects in the area. We also have smaller centers for individual projects which explain the project and provide the visitors with information about the recreation facilities available for use.

We have a rather large emergency operations function too. Is this function considered Corps operations and maintenance work, or is our work now directed by the new Federal Emergency Management Agency ... FEMA?

Well, it's a little of both. We don't always work through FEMA. If there is a flood, I have the authority as Chief of Engineers to direct our people to fight it. We don't have to wait for anyone. In fact, the Division Engineer in charge in the area of flooding has the authority. We can divert funds from other public works projects and then later go to Congress to request their replacement. Once the flood is over, if there has been a lot of damage, the governor can ask



Dredged material provides habitat for Royal and Sandwich tern colony, Cape Fear River North Carolina.

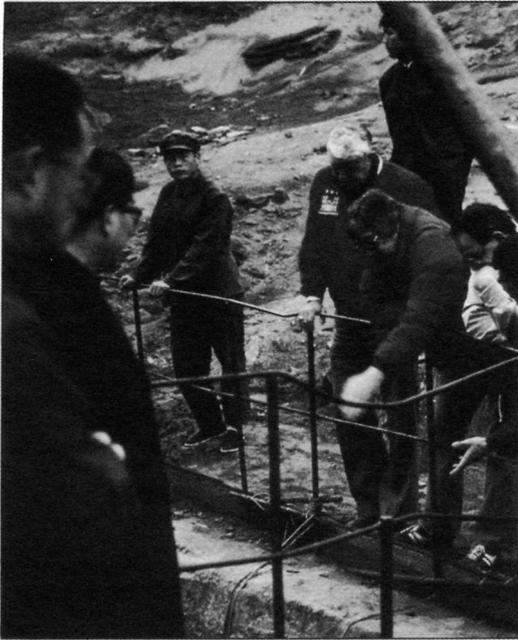
the President to declare the area to be a national disaster. If the President does so, the director of FEMA has the responsibility to provide whatever relief is needed. If the work requires engineers, FEMA will pay us to do it. So the distinction is whether the emergency is declared to be a national disaster by the President.

Our emergency work is not only with flood problems but also with tornadoes, hurricanes, blizzards-and even volcanic eruptions. We enjoy a fine reputation for efficiency and responsiveness. Apart from money funded by FEMA the Corps spends about \$44 million annually on disaster relief. The year we had Agnes we spent \$80 million. This year, with Frederic, flooding in

California, and Mt. St. Helens we expect to spend over \$250 million.

It is our emergency operations functions which would most closely align with our mobilization assignments in case of war, is it not?

That's true. In the final analysis the Corps of Engineers is an Army unit which must support the total Army during wartime. Our work during national disasters keeps us in training. We are very serious about our mobilization mission and are right now evaluating our capabilities. If we are ever asked to mobilize, we want to be ready.



The Chief and other members of the U.S. delegation on a recent tour of China.

We've talked about the Corps program as it stands today, how it got there, and how it might look in the future. But, to sum up, if I held you to one word could you find one which would characterize the Corps during your term as its Chief?

If I can use just one word, it will have to be "survival." That was the critical challenge. President Carter announced during his campaign that he was going to re-orient the water resources program. He specifically mentioned the Corps of Engineers. After his inauguration he developed a list of projects which he wanted to discontinue—the famous "hit list" of

early 1977. At the same time the President appointed a group to analyze the organization of the Executive Branch to propose improvements in several areas, including water resource management. I felt that the future of the Corps of Engineers in water resource management was in jeopardy. If we were to survive as an institution, we would have to prove our worth as the nation's finest engineering and construction management organization. This challenge caused us to evaluate ourselves carefully to find and eliminate our weaknesses and to capitalize on opportunities for strengthening our base and our performance. Ninety eight percent of our projects passed the President's project review. And because of conscientious and objective work in programs such as dam inspection, regulation of wetlands, and others, we were able to convince Administration leaders that the Corps not only should remain in the water resource business but should be given greater responsibilities. So—the bulk of my tenure as Chief of Engineers has to be identified with all of those things related to "staying-in-business."

General Morris, you are retiring now after a full career with the Corps of Engineers climaxing with your assignment as its Chief. How do you feel about your years with the Corps?

I've loved every minute of it. The Corps' work in water resources development is vital to the nation—to its economy and its security. We can be justifiably proud of our past performance and with the National Waterways Study and other important planning studies, the Corps will go on to do even better work. But, you know, the Corps alone can't be fully responsible for developing and managing the nation's water resources, just as we can't take full credit for our accomplishments. In the final analysis, we take our orders from and set our course according to the public we serve. I've thoroughly enjoyed working with the public and with Corps people—managers and laborers alike. I'm sure the Corps will continue to have an important role to play in the development of water resources in the United States and in support of the total Army. ■