

A TRIBUTE TO JIM GODDARD  
(1906-1994)

Presented during the 18th Annual Conference  
the Association of State Floodplain Managers  
May 11, 1994, Tulsa, OK

Jim Goddard is inextricably woven in our Nation's history of floodplain management. His name stands as one of the true pioneers of management approaches in common use today, approaches that we employ without an understanding of the difficulties encountered and work required in gaining their acceptance.

To reach some understanding and appreciation for his important contributions, we need to consider them from a historical perspective. It was the early 1950's. The National Flood Insurance Program would not be created for another 15 years. The National Environmental Policy Act was also as far in the future. Congress had spent more than \$11 billion dollars since 1936 for flood control projects, mainly in response to major events in that decade. Even as these projects were being completed there were those who began to question the wisdom of over reliance on structural measures to control the paths of flood waters. Among the prominent voices was that of Gilbert White who, in a 1942 Doctor of Philosophy dissertation advocated "adjusting human occupancy to the floodplain environment."

By the 1950's some disturbing trends had developed. Because of the rapid growth of urban areas after WWII, the national flood damage potential was increasing faster than it could be controlled under existing flood protection construction programs. Wise land use management practices within flood prone areas, advanced by Gilbert White, seemed to many enlightened observers to be a neglected alternative to these programs.

This alternative was first applied on a broad scale by the Tennessee Valley Authority, a federal agency created by Congress in 1933. Working with state and local planners, TVA water resources engineers in 1953 embarked on a pioneering cooperative program to tackle local flood problems. Under this program flood damage prevention was considered a matter of adjusting the use of the land to the conditions existing in areas subject to flooding. Jim Goddard was selected to lead this new TVA venture. History would show that the agency could have not made a better selection. He would apply his leadership and considerable enthusiasm and energy, first to the task of working with state and local governments in the Tennessee River watershed to encourage consideration of the full range of policies and actions for ensuring wise use of flood-prone lands, and later in sharing the TVA experience nationally.

After only a few years of experience, TVA was convinced that this floodplain management assistance program had real merit and was suitable for national application. Under Goddard's leadership a little known report was prepared and submitted to Congress thirty-five years ago in 1959 proposing A Program for Reducing the National Flood Damage Potential. In transmitting the report TVA stated that "communities throughout the Nation are engaged in a new contest with their rivers and they are losing." "They will continue to lose unless steps are taken to provide a new perspective--and a new channel of action--with respect to floods." "TVA believes that local communities have the responsibility to guide their growth so that their future development will be kept out of the path of floodwaters." With the states and communities of the Tennessee Valley, TVA has developed a means of putting this proposition into action." "It is saving lives and property in the area while diminishing the future demands of the Nation for flood-relief and flood-control expenditures." "We believe the same results can be accomplished by adapting this experience to other areas throughout the United States." TVA went on to state that "it is essential that a working relationship be established between Federal agencies which can furnish and interpret the data [on storm probabilities and the behavior of floodwaters], and State and local bodies which can use it in preparing their development plans." Finally, the report recommended adoption of a new approach to the problem of flood-damage prevention--"adjusting the use of land to the flood hazards"-- to complement the traditional approach of controlling the extent of flooding by the construction of protective measures. This approach had first been advocated by Gilbert White a decade earlier.

Armed with this successful experiment and a report advocating a national flood plain management program, Jim Goddard fervently carried out extensive efforts to promote the floodplain management concept throughout the United States.

TVA files contain dozens of papers he and his staff prepared and presented during this period at regional and national conferences and others which were published in various periodicals. He also found time to serve as Chairman of the Flood Control Committee of the American Society of Civil Engineers' Hydraulics Division and as Chairman of its Flood Plain Regulations Task Force. As part of his extensive promotional efforts, he sought permission to reproduce and distribute every document he discovered pertaining to some aspect of floodplain management. Through this process, over two hundred different documents were reprinted and tens of thousands were distributed throughout the Nation from his office. Under his direction TVA supported a series of academic studies, such as Jack Sheaffer's analysis of flood-proofing, that were pioneering in the field of floodplain management and yielded information of national significance.

His involvement and contributions to floodplain management transcend the TVA experience. Gilbert White will share some of these with you in his tribute.

In recognition of these innumerable contributions, he, along with Gilbert, were honored by this Association in 1984 in being designated as its first Honorary Members. In further recognition of their contributions, the Association at that time named its highest award for distinction in floodplain management the Goddard-White Award.

While the TVA experiment would have been carried out, and adjusting human occupancy and use of the floodplain to the flood hazard would have emerged nationally as a needed alternative to flood control measures, their progress and success can be attributed in considerable part to the tireless efforts of Jim Goddard, starting some forty years ago. He indeed left his "footprint" on the floodplain management programs that evolved.

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A TRIBUTE TO JAMES E. GODDARD

All of you are aware of the White-Goddard Award, the Association of State Flood Plain Managers' most distinguished award.

However, not all of you have had the privilege of knowing or working with Jim Goddard. He was a multifaceted person. I will use four words to describe him: Gentleman, Educator, Leader, and Humanitarian. An elaboration on each of these characteristics will help the name, James E. Goddard, take on form and substance for you.

Mr. Goddard was always a gentleman. He portrayed this trait both in social circles and in professional endeavors. Jim listened to all opinions that were expressed. He recognized everyone who worked with him. They were his associates, irrespective of their rank or status.

Jim may not have appeared to be an educator in the traditional sense. He was not a member of any formal faculty. If he were here today he would correct me regarding the use of the word "educator."

Many times he told me that few people want to be educated. Rather they prefer to be informed, e.g., about flood plain information programs. Jim stimulated research efforts that were related to the development of floodplain management techniques, both by his funding and by his intellectual guidance.

From a personal perspective, he funded the original research in flood-proofing and provided guidance and stimulation to the effort. *while doing these things on a national level, Jim served as a member of his local school board*

From another perspective, I have seen Jim in action as Chief of the Local Flood Relations Branch when he convinced a local council, all firm believers in property rights, that appropriate use or wise use of the floodplain would be in the best interests of their community.

In reality, appropriate or wise use meant restricted use. Only an educator could achieve such success. Jim carried great expectations for his students (council members). He believed them to be intelligent and desirous of doing good. There is research which supports the results Jim achieved. For students perform at the level of their teacher's expectations.

What makes a leader? May I suggest that a leader is one who stays focused on his mission or objective. When obstacles are encountered, a leader does not dissemble, he does not blame others, he does not lament over insufficient data. Rather he uses all his energy to cope with the obstacles and thereby overcomes them. Jim epitomized these traits of leadership.

Water takes up space. For planning purposes, it cannot be compressed. During flood-planning efforts, the only choice is what space will the flood water occupy. During Jim's last

years, he observed that floodplain management must not discard structural measures. Sustainable floodplain management must integrate both structural and nonstructural measures. He believed choices had to be made regarding what space the water will occupy. When I think of this issue I am reminded of the University of Chicago's Campus. At the west end of the Midway is Lorado Taft's sculpture, named the Fountain of Time--a work which depicts humans trudging on. The inscription reads, "Time passes on, alas, it's we who pass, time stays the same." Jim has passed-- but time stays the same. The issue persists--what land will be allocated to store the flood waters.

As words of encouragement, may I quote Victor Hugo: "Invading armies can be resisted, but not an idea whose time has come." Now is the time to implement sustainable floodplain management.

Mr. Goddard was a humanitarian. He gave back to his society. He contributed to his alma mater. He strove to take care of his family. He cared for his sister when she was stricken with Alzheimer's. He was an active Rotarian, contributing to many programs that helped those less fortunate than he. He knew there were other things in life besides floodplain management. What a man!

(This tribute to James E. Goddard was prepared by John R. Sheaffer.)



# Memorandum

DATE: April 24, 1997  
TO: Larry A. Larson  
FROM: Jim Wright  
RE: ASFPM Annual Conference — Tributes to  
Distinguished "Pioneers"  
CC:

To summarize our recent discussion, for the record, here are the arrangements for the tributes:

Plenary Session 1 (Tuesday morning) — Introduction to tributes (Wright)

Plenary Session 2 (Wednesday morning) — Tribute to Jim Goddard (by Jack Sheaffer)

Awards Luncheon (Wednesday) — Tribute to Gilbert White (by Mary Fran Myers)

Plenary Session 3 (Wednesday afternoon) — Tribute to Tom Lee (by Jon Kusler)

Plenary Session 4 (Thursday morning) — Tribute to Jon Kusler (by Larry Larson)

JAMES E. GODDARD

(August 31, 1906 - March 17, 1994)

Jim Goddard is inextricably woven in our nation's history of floodplain management. His name stands as one of the true pioneers of management approaches in common use today, approaches that we employ without an understanding of the difficulties they encountered and the work they required in gaining acceptance.

Gilbert White planted the seed for the floodplain management concept in his 1942 thesis "Human Adjustment to Floods: A Geographic Approach to the Flood Problem in the United States." Jim Goddard fervently helped it grow. Starting in 1953, he was responsible for its subsequent application throughout the Tennessee River basin, and significantly contributed to its spread elsewhere. This was accomplished through his extensive efforts to promote the floodplain management concept nationally, and his consultation and direct work with other agencies such as the Corps of Engineers.

TVA files contain dozens of papers he and his staff prepared and presented at regional and national conferences in the 1950's and 1960's. In addition, he sought permission to reproduce and distribute every document he discovered on the subject during this period. Through this process, over two hundred documents were reprinted and distributed throughout the nation. Under his direction TVA supported a series of academic studies, such as Jack Sheaffer's analysis of flood-proofing, that were pioneering in the field of floodplain management and yielded information of national significance.

An account of his assistance in helping the Corps start its floodplain management services program in the mid-1960's is well documented in several publications. His seemingly inexhaustive activities continued for several decades and never ceased despite his "retirement" from federal service.

Goddard was born in the Land of the Hoosiers, in Farmersburg, on August 31, 1906. He attended Rose Polytechnic Institute in nearby Terre Haute and received a degree in civil engineering in 1928. After a brief period of employment with the Indiana State Highway Department he accepted a position with the Morgan Engineering Company in Texas, first on the Trinity River flood control project in the Dallas area, and later on a large irrigation project on the lower Rio Grande valley. After those experiences, he spent nearly two years with the United States Army Corps of Engineers in the New Orleans and Memphis Districts on the design and construction of flood control levees and bank protection for the Mississippi River. While in the New Orleans District he met another Corps employee, Miss Mildred Evelyn Jones, from the Village of Bonita, Morehouse Parrish, Louisiana. They were married on December 27, 1933. They have one son, James E. Goddard, Jr., who resides in Maryville, Tennessee.

In 1933 he joined the engineering staff of the newly created Tennessee Valley Authority. For three years he was the assistant director of the huge mapping program under which maps of the forty two thousand square mile Tennessee River basin were compiled and printed. During the next four years he was in charge of all field investigations and collection of data relative to support of the Authority's water resources planning and management activities.



During World War II he served five years in the U.S. Army's Engineer Intelligence, starting in 1941. His three and a half years of duty overseas in England, Africa, Italy, France and Germany included assignments as Deputy Engineer Intelligence Officer for European Theater for two and a half years and American Deputy Survey Officer of Allied Force Headquarters Staff in Africa and Italy. He entered military service as a Captain and held the rank of Colonel in the Corps of Engineers when he returned to civilian life.

He continued his previous responsibilities upon reemployment with the Tennessee Valley Authority. In its search for solutions to local flood problems and alternatives to flood control works, TVA was in an unique position to implement the "floodplain management" concept being advanced by Gilbert White and others. TVA had the data base and engineering capability to define the flood problem at any location in the Tennessee River basin. It had also carefully developed a good working relationship with state and local governments and organizations. Jim Goddard was selected to lead this new TVA venture started in 1953. History would show that the agency could have not made a better selection. He would apply his leadership and energy, first to the task of working with state and local governments in the Tennessee River watershed to encourage consideration of the full range of policies and actions for ensuring wise use of flood-prone lands, and later in sharing the TVA experience nationally. He retired from TVA in late 1966. During this period he found time to serve as Chairman of the Flood Control Committee of the American Society of Civil Engineering's Hydraulics Division and as Chairman of its Flood Plain Regulations Task Force.

The previous year Gilbert White had agreed to chair a Task Force on Federal Flood Control Policy at the request of the Bureau of the Budget to provide guidance in dealing with the nation's mounting flood losses. White enlisted Jim Goddard, and the two then hand-picked the remainder of the task force. In selecting members of the task force, they were looking to find the best lever to change thinking about ways and measures to deal with local flood problems within various federal agencies. The task force report "A Unified National Program for Managing Flood Losses" was issued in August, 1966. This document has been called the "Magna Carta of contemporary floodplain management planning."

In October Goddard was "loaned" to the Corps of Engineers by TVA to act as a consultant to help set up a new organizational structure to strengthen the Corps Floodplain Information Services Program. Goddard's grand plan for a Corps program never materialized because of that organization's culture at that time. However, he did leave his "footprint" on the expanded floodplain management services program that evolved. While with the Corps he was also involved in work on devising guidelines for defining flood hazards to be used by federal agencies and in providing guidance to the floodplain management activities of the Corps field offices.

After being with the Corps for nearly two years, Jim retired from federal service and moved to Tucson, Arizona in the late 1960's with his wife Mildred, where they continued to live. For the next two decades his work was principally that of a consultant to a number of governmental agencies, communities, and others who knew of his expertise. He also was a consultant to the United Nations, the United Nations Development Program and the Food

and Agricultural Organization, with assignments in the United States, Russia, Romania, Yugoslavia, Italy and Switzerland.

In this manner he remained involved in various floodplain management endeavors and served as a strong advocate and voice at the national level. He was a frequent participant in conferences and workshops where floodplain management issues and experiences were being discussed. His health finally placed limitations on his usual robust activities. He suffered a debilitating stroke in October 1992. At a time when it appeared he had made a major recovery and would soon be able to travel again, he had another stroke in the late spring of 1993. After that, he required total health care. He died of health complications at his home in Tucson on March 17, 1994, at the age of 87 years, 6 months.

In recognition of his innumerable contributions to floodplain management he, along with Gilbert White, were honored by the Association of State Floodplain Managers in 1984 in being designated as its first Honorary Members. In further recognition of their contributions the Association at that time named its highest award for distinction in floodplain management the Goddard-White Award.

A tribute to Jim Goddard and his contributions to floodplain management will be given during the 18th Annual Conference of the Association of State Floodplain Managers in Tulsa in May. A memorial is in the planning phase and information will be provided in the near future.

(Prepared by Jim Wright, using information from a number of sources.)

JAMES E. GODDARD

James E. Goddard is a native of the State of Indiana. He attended Rose Polytechnic Institute 1924-28, receiving his degree in Civil Engineering. After a brief time with the Indiana State Highway Department, he went to Texas with the Morgan Engineering Company, first on the Trinity River flood control project at Dallas, and later on a large irrigation project in the citrus belt of the Lower Rio Grande Valley. After those experiences, he spent nearly two years with the United States Army Corps of Engineers in the New Orleans and Memphis Districts on the design and construction of flood levees and bank protection for the Mississippi River. In 1933 he joined the engineering staff of the Tennessee Valley Authority. For three years he was the assistant director of the huge mapping program under which maps of the 42,000 square miles of the Tennessee River Basin were compiled and printed. During the next four years he was in charge of all field investigations and collection of data relative to hydraulics, hydrology, and meteorology. During World War II he served five years (1941 through 1945) in the United States Army. He served in Engineer Intelligence at Washington, D. C., for more than a year before he was sent overseas early in 1942. His 3-1/2 years duty overseas in England, Africa, Italy, France, and Germany included assignments of Deputy Engineer Intelligence Officer for European Theater for 2-1/2 years and American Deputy Survey Officer on Allied Force Headquarters Staff in Africa and Italy. He entered military service as a Captain and held the grade of Colonel in the Corps of Engineers when he returned to civilian life. Following World War II, he returned to the Tennessee Valley Authority where he was in charge of hydraulic field investigations. In 1953 he became Chief of Local Flood Relations, responsible for the cooperative program with states and local communities through which assistance is given communities in solving local flood problems. Because of his recognized leadership in the emerging field of flood damage prevention, he was appointed in 1966 to the Bureau of the Budget Task Force on Federal Flood Control Policy. As a result of the recommendations included in the Bureau of the Budget report, the Corps of Engineers has begun a new nationwide program for managing flood losses. As one of the recognized experts in this field, The Corps asked TVA to lend his services to head the new program. He retired from TVA in December 1966, and is presently serving as a consultant in flood plain management with the Corps of Engineers in Washington. He is a Fellow of American Society of Civil Engineers, and a member of American Society of Photogrammetry, Society of American Military Engineers, and local technical organizations. He served as Chairman of the Flood Control Committee of ASCE's Hydraulics Division and as Chairman of its Flood Plain Regulations Task Force. He has been active in local civic affairs, having served as a member of the Knoxville Board of Education, as President of the Knoxville Council of Community Services, and as Chairman of the Institutional Facilities Committee of the Knox Area Health Services Study.

12-15-92

Jim:

This is all the material I could find on Jim Goddard. Hope it is of some help, although I suspect you already have this info.

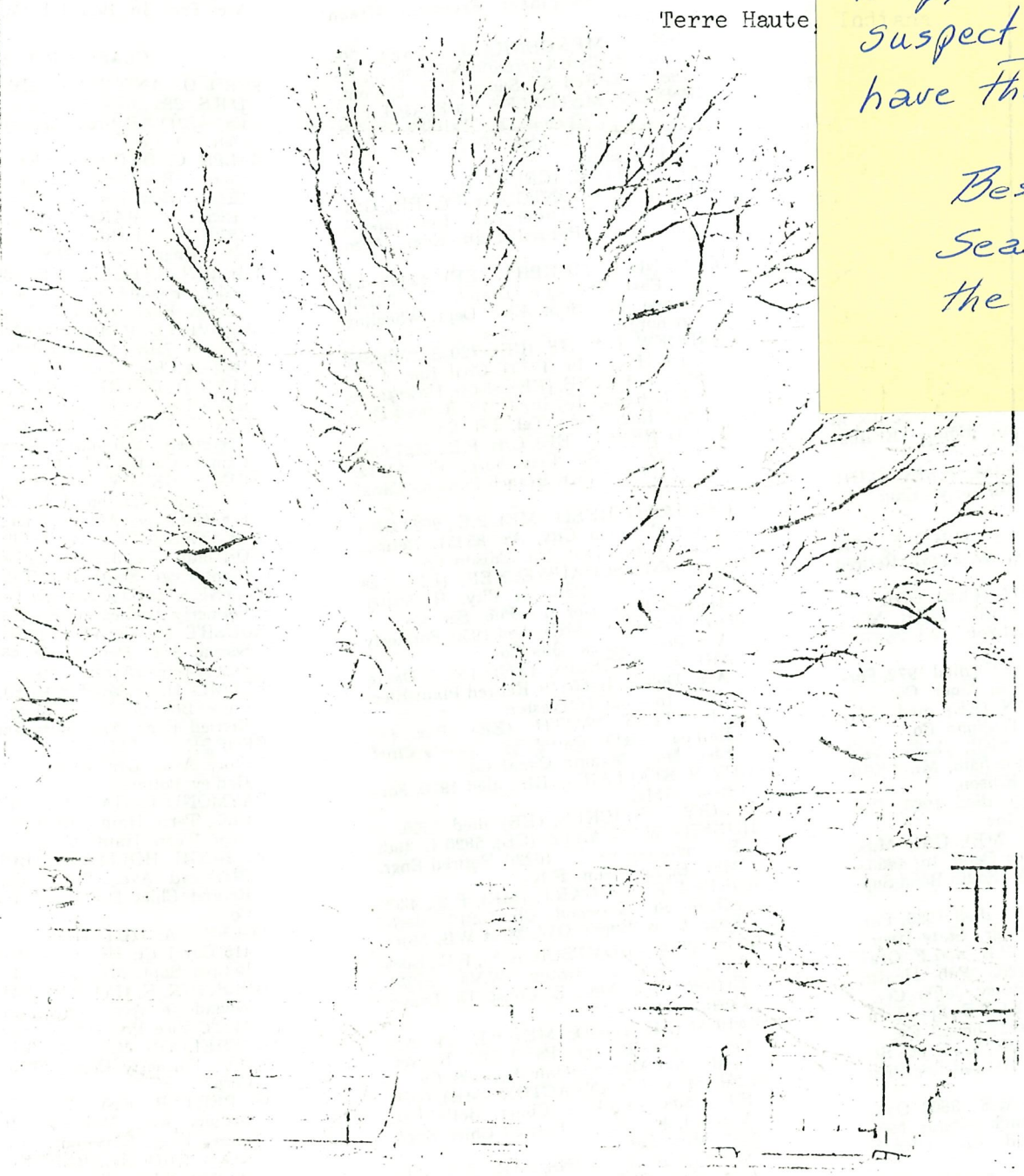
Best of the Holiday Season to you & the boys?



# Alumni Direc

Rose-Hulman Institute of Te

Terre Haute,



1973



JAMES E. GODDARD

Chief of Local Flood Relations  
Tennessee Valley Authority

James E. Goddard is a native of Indiana. He received his degree in Civil Engineering and his reserve commission in the Corps of Engineers from Rose Polytechnic Institute in 1928. For five years he was with private engineering firms and the Corps of Engineers working on irrigation and flood control projects. Since 1933 he has been with the Tennessee Valley Authority. During World War II he served five years in the Army in the engineer intelligence field, now holding the grade of Colonel in the Corps of Engineers. Since 1953 he has been Chief of Local Flood Relations, responsible for the cooperative program with states and local communities through which assistance is given communities in solving local flood problems. He is Fellow of the American Society of Civil Engineers, a member of the Society of American Military Engineers, the American Society of Photogrammetry, and local technical organizations. He is the Chairman of the Flood Control Committee of ASCE's Hydraulics Division and was Chairman of its Flood Plain Regulations Task Force.

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Tennessee Valley Authority

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March 16, 1994

Mr. A.J. Gray  
5108 Angeles Drive  
Knoxville, TN 37918

Dear Flash,

As discussed with you in a telephone conversation a few days ago, I am preparing a tribute to Jim Goddard for his pioneering efforts in floodplain management to be presented during the annual meeting of the Association of State Floodplain Managers. Their meeting this year will be held on May 9-12 in Tulsa.

There is a lot of meaningful history regarding the early years of the TVA demonstration of the floodplain management concept on a regional (watershed) basis. Your contributions, and perhaps those of many others, have not been adequately documented and publicized. The accounts that have been published are those from the Water Control Planning perspective (Local Flood Relations Staff) and from interviews with Jim Goddard, Bill Weathers, et al.

For these reasons, and to provide a more accurate and balanced account, I would like to meet with you sometime in early April to reexamine this history. To guide our discussions I would suggest the questions listed below. There are likely a number of other events, activities, points, and subjects you would offer. These are encouraged. I do not know enough of the early years to be able to ask all the right questions.

1. What were the events/situations that led to the initial TVA involvement in what we call today "floodplain management?"
2. What was the influence of Gilbert White's 1942 thesis Human Adjustment to Floods: A Geographic Approach to the Flood Problem in the United States in shaping the TVA thinking?
3. Who were those that were instrumental in selling the floodplain management concept to TVA management and the Board? What arguments/persuasion did they use? What obstacles did they have to overcome?

4. What TVA program did you represent at that time and what was your personal and your program's role in starting floodplain management in TVA?
5. What were the roles and influence of valley state planners in shaping and contributing to the early success of TVA's efforts? Were there other influences both within and outside the valley?
6. Why was Local Flood Relations placed in Water Control Planning?
7. How was Jim Goddard drawn into this activity? Why/How was he selected to head the program staff?
8. Who were instrumental in suggesting and preparing the 1959 report to the Administration proposing A Program for Reducing the National Flood Damage Potential? What were the reasons for preparing the report?
9. What, in retrospect, were some of the ingredients for the overall success of the TVA experiment?

I look forward, with much anticipation, to the journey that you are about to take me through this interesting history. In order to fully benefit from this endeavor, I would like to, as discussed with you in our telephone conversation, record our conversation on a cassette tape.

Please call me (632-4792), at your convenience, to arrange for a time and place to meet. Thank you very much, in advance, for this wonderful opportunity.

Sincerely,

James M. Wright

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## Former TVA civil engineer James Goddard dies at 87

James Elmer Goddard, a renowned TVA civil engineer who pioneered development of flood plain management that became national policy for flood damage prevention and water resources development, died Thursday in Tucson, Ariz. He was 87.

Born in Farmersburg, Ind., Mr. Goddard graduated with high honors from Rose Polytechnic Institute in Terre Haute, Ind., in 1928. Before he joined the newly created TVA in 1933, he was employed on flood control, irrigation and development projects in Dallas and Harlingen, Texas, and worked for the U.S. Corps of Engineers in Baton Rouge, La., and Cairo, Ill.

TVA special assignments included a presidential task force that recommended a national program for managing flood losses; the U.S. House of Representatives Appropriations Committee; and the U.S. Corps of Engineers to establish its Flood Plain Manage-

ment Services organization.

After early retirement from TVA in 1966, Mr. Goddard was a consultant to the Corps of Engineering Bureau of Reclamation, U.S. Water Resource Council, Federal Flood Insurance Administration, U.S. Soil Conservation Service and other federal agencies, states, cities and professional organizations.

Starting in 1941, Mr. Goddard served during World War II in the U.S. Army's Engineer Intelligence.

In late 1992, he suffered a debilitating stroke and another stroke in mid-1993.

He is survived by his wife of 60 years, Mildred Evelyn Jones Goddard; son, James Elmer Goddard Jr. of Maryville; and sister-in-law, Juanita Huckabay of Tallulah, La.

Graveside services were held Monday at Evergreen Cemetery in Tucson with military honors by the Fort Huachuca Honor Guard.

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March 30, 1994

Mrs Mildred Goddard  
1600 Calle El Cid  
Tucson, AZ 85718

Dear Mrs. Goddard:

I am enclosing some materials on Jim for your benefit. Information received from Evergreen Mortuary and Cemetery was used for an article that appeared in the Knoxville newspaper. The biographical sketch was sent to a number of publications received by the floodplain managers, of whom Jim was well known and held in the highest regard.

A tribute to him and his contributions to floodplain management will be given during the annual conference of the Association of State Floodplain Managers, to be held this year in May at Tulsa, Oklahoma. Among those participating in the tribute will be Gilbert White and myself.

I hope you are doing well. I will call you shortly to check on you. Think of anything I can do to be of further help.

Sincerely,

James M. Wright

EVERGREEN MORTUARY & CEMETERY  
3015 NORTH ORACLE ROAD  
TUCSON, ARIZONA 85705

Telephone (602) 888-7470  
F A X Telephone (602) 888-7830

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FACSIMILE TRANSMITTAL

TVA 632-4792 Page 1 of 2

TO: MR. JIM WRIGHT

DATE: 3-18-94

FROM: RON SHAFER

RE: NEWS STORY

GODDARD, James Elmer, 87, of Tucson, AZ died March 17, 1994. Survived by wife of 60 years, Mildred Evelyn Jones; son, James Elmer, Jr. of Maryville, TN; sisters-in-law, [REDACTED], [REDACTED], [REDACTED], [REDACTED], Juanita Huckabay of Tallulah, LA; granddaughter, Noel Lee Goddard. Mr. Goddard was a Civil Engineer, nationally known for his pioneering and development of flood plain management that became national policy for flood damage prevention and water resources development. He graduated in 1928 from Rose Polytechnic Institute with high honors, was employed on flood control, irrigation and development projects in Dallas and Harlingen, Texas, was with the Corps of Engineers in Baton Rouge, LA and Cairo, IL, and was with the Tennessee Valley Authority from 1933 to 1966. During that time his special assignments included two with the U.S. House of Representatives Appropriations Committee, one with a Presidential Task Force recommending a national program for managing

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flood losses, and one with the U.S. Corps of Engineers setting up its Flood Plain Management Services organization and program. He took early retirement from Federal Service at the end of 1966 to devote time as a consultant in the field of flood plain management that included structural flood control and non-structural flood damage prevention. Mr. Goddard served as a consultant to the Corps of Engineering Bureau of Reclamation, U.S. Water Resource Council, Federal Flood Insurance Administration, U.S. Soil Conservation Service and other Federal agencies, various states, cities and professional organizations. He also was a consultant to the United Nations, the United Nations Development Program and the Food and Agricultural Organization with assignments in the United States, Russia, Romania, Yugoslavia, Italy and Switzerland. Colonel Goddard served in the United States Army during World War II and retired as a Colonel with various honors, including those from three foreign countries (England, France, Holland). He was a member of the Rotary Club of Tucson, the Masonic Lodge, American Society of Civil Engineers and various other professional and civic organizations in Knoxville, TN and Tucson. He was a methodist. Graveside Services will be Monday, March 21, 1994, at 9:00 A.M. **EVERGREEN CEMETERY** with Military Honors by the Ft. Huachuca Honor Guard. Arrangements by **EVERGREEN MORTUARY & CEMETERY**, 3015 N. Oracle Rd., Tucson, AZ 85705

JAMES E. GODDARD

Jim Goddard is inextricably woven in our nation's history of floodplain management. His name stands as one of the true pioneers of management approaches in common use today, approaches that we employ without an understanding of the difficulties they encountered and the work they required in gaining acceptance.

Gilbert White planted the seed for the floodplain management concept in his 1942 thesis "Human Adjustment to Floods: A Geographic Approach to the Flood Problem in the United States." Jim Goddard fervently helped it grow. Starting in 1953, he was responsible for its subsequent application throughout the Tennessee River basin, and significantly contributed to its spread elsewhere. This was accomplished through his extensive efforts to promote the floodplain management concept nationally, and his consultation and direct work with other agencies such as the Corps of Engineers. TVA files contain dozens of papers he and his staff prepared and presented at regional and national conferences in the 1950's and 1960's. In addition, he sought permission to reproduce and distribute every document he discovered on the subject during this period. Over two hundred documents were reprinted and distributed throughout the nation. Under his direction TVA supported a series of academic studies, such as Jack Sheaffer's analysis of flood-proofing, that were pioneering in the field of floodplain management and yielded information of national significance. An account of his assistance in helping the Corps start its floodplain management services program in the mid-1960's is well documented in several publications. His seemingly inexhaustive activities continued for several decades and never ceased despite his "retirement" from federal service.

Goddard was born in the Land of the Hoosiers eighty-seven years ago. He attended Rose Polytechnic Institute in Terre Haute and received a degree in civil engineering in 1928. After a brief period of employment with the Indiana State Highway Department he accepted a position with the Morgan Engineering Company in Texas, first on the Trinity River flood control project in the Dallas area, and later on a large irrigation project on the lower Rio Grande valley. After those experiences, he spent nearly two years with the United States Army Corps of Engineers in the New Orleans and Memphis Districts on the design and construction of flood control levees and bank protection for the Mississippi River.

In 1933 he joined the engineering staff of the newly created Tennessee Valley Authority. For three years he was the assistant director of the huge mapping program under which maps of the forty two thousand square mile Tennessee River basin were compiled and printed. During the next four years he was in charge of all field investigations and collection of data relative to support of the Authority's water resources planning and management activities.

During World War II he served five years in the U.S. Army's Engineer Intelligence, starting in 1941. His three and a half years of duty overseas in England, Africa, Italy, France and Germany included assignments as Deputy Engineer Intelligence Officer for European Theater for two and a half years and American Deputy Survey Officer of Allied Force Headquarters Staff in Africa and Italy. He entered military service as a Captain and held the rank of Colonel in the Corps of Engineers when he returned to civilian life.

He continued his previous responsibilities upon reemployment with the Tennessee Valley Authority. In its search for solutions to local flood problems and alternatives to flood control works, TVA was in a unique position to implement the "floodplain management" concept being advanced by Gilbert White and others. TVA had the data base and engineering capability to define the flood problem at any location in the Tennessee River basin. It had also carefully developed a good working relationship with state and local governments and organizations. Jim Goddard was selected to lead this new TVA venture started in 1953. History would show that the agency could have not made a better selection. He would apply his leadership and energy, first to the task of working with state and local governments in the Tennessee River watershed to encourage consideration of the full range of policies and actions for ensuring wise use of flood-prone lands, and later in sharing the TVA experience nationally. He retired from TVA in late 1966. During this period he found time to serve as Chairman of the Flood Control Committee of the American Society of Civil Engineering's Hydraulics Division and as Chairman of its Flood Plain Regulations Task Force.

The previous year Gilbert White had agreed to chair a Task Force on Federal Flood Control Policy at the request of the Bureau of the Budget to provide guidance in dealing with the nation's mounting flood losses. White enlisted Jim Goddard, and the two then hand-picked the remainder of the task force. In selecting members of the task force, they were looking to find the best lever to change thinking about ways and measures to deal with local flood problems within various federal agencies. The task force report "A Unified National Program for Managing Flood Losses" was issued in August, 1966. This document has been called the "Magna Carta of contemporary floodplain management planning."

In October Goddard was "loaned" to the Corps of Engineers by TVA to act as a consultant to help set up a new organizational structure to strengthen the Corps Floodplain Information Services Program. Goddard's grand plan for a Corps floodplain management program never materialized because of that organization's culture at that time. However, he did leave his "footprint" on the expanded floodplain management services program that evolved. While with the Corps he was also involved in work on devising guidelines for defining flood hazards to be used by federal agencies and in providing guidance to the floodplain management activities of the Corps field offices.

After being with the Corps for nearly two years, Jim moved to Tuscon, Arizona in the late 1960's, where he continued his work, serving as a consultant. In this manner he remained involved in various floodplain management endeavors and a strong advocate and voice at the national level. He was a frequent participant in conferences and workshops where floodplain management issues and experiences were being discussed. Recently his health has placed some limitations on his usual robust activities.

In recognition of his innumerable contributions to floodplain management he, along with Gilbert White, were honored by the Association of State Floodplain Managers in 1984 in being designated as its first Honorary Members. In further recognition of their contributions the Association at that time named its highest award for distinction in floodplain management the Goddard-White Award.