

PART ELEVEN

**REMEMBERING
JAMES E. GODDARD**

A TRIBUTE TO JAMES E. GODDARD (1906-1994)

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James E. Goddard is inextricably woven into our nation's history of floodplain management. He 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 1950s. The National Flood Insurance Program would not be created for another 15 years. The National Environmental Policy Act was just as far in the future. Congress had spent more than \$11 billion since 1936 for flood control projects, mainly in response to major events that occurred during that decade. Even as these projects were being completed, there were those who began to question the wisdom of overreliance on structural measures to control the paths of flood waters. Among the prominent voices was that of Gilbert F. White who, in a 1942 Ph.D. dissertation, had advocated "adjusting human occupancy to the floodplain environment."

By the 1950s some disturbing trends had developed. Because of the rapid growth of urban areas after World War II, the national flood damage potential was increasing faster than it could be controlled with existing flood protection construction programs. Employing wise land use management practices in floodprone areas, advanced by Gilbert White and others, seemed to many enlightened observers to be a neglected alternative to these construction programs.

This new alternative was first applied on a broad scale by the Tennessee Valley Authority (TVA), 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 floodprone lands, and later in seemingly inexhaustible efforts to share 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 35 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 been advocated by Gilbert White a decade earlier, and now had been put into practice and strongly endorsed by a federal agency.

Armed with this successful experiment and a report advocating a national floodplain management program, Jim Goddard fervently carried out extensive efforts for nearly a decade to promote the floodplain management concept throughout the United States. His efforts paved the way for creation of a floodplain management services program by the Corps of Engineers in the early 1960s, and showed the feasibility of a national flood insurance program.

TVA files contain dozens of papers he and his staff prepared and presented during this period at regional and national conferences and others that 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 200 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 floodproofing, that were pioneering in the field of floodplain management and yielded information of national significance.

Jim Goddard retired from the TVA in the mid 1960s to lend assistance to the creation or improvement of other floodplain management programs. His involvement and contributions to floodplain management transcend the TVA experience. He was a frequent participant in this Association's annual conferences and remained a strong advocate for floodplain management until his health failed him last year. He died at his home in Tucson on March 17, 1994, at the age of 87.

In recognition of his innumerable contributions, he, along with Gilbert White, were honored by the Association in 1984 by 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.

Although the TVA experiment would have been carried out, and adjusting human occupancy and use of the floodplain to the flood hazard would have emerged eventually as a needed alternative to flood control measures, the progress and success of both efforts can be attributed in considerable part to the tireless labors of Jim Goddard, starting some 40 years ago. He indeed left his "footprint" on the floodplain management programs that evolved from his pioneering work.

FURTHER TRIBUTE TO JAMES E. GODDARD

Gilbert F. White
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The Tennessee Valley Authority's position was central to much of Jim Goddard's contribution to the shaping of floodplain management, and from the TVA base he carried on his missionary work in a variety of local, state, and federal fields. Jim Wright has appraised those efforts admirably.

At least four other aspects of Jim's service deserve further specific mention: his encouragement of scientific research; his development of the floodplain information services of the Corps; his major role in national policy reviews; and his manner in carrying out all of those concerns.

When he took on his responsibilities at Knoxville there was only a small amount of scientific research relevant to floodplain management beyond the hydraulic and hydrologic studies basic to delimitation of floodplains and calculation of discharge, elevation, and return intervals of flood flows. Clearly, much more needed to be learned about land use and resources and about the technical and social conditions affecting the suitability of various adjustments to flood hazard. Jim gave support to a series of academic studies aimed at remedying some of the recognized deficiencies. His support always supplied enthusiastic encouragement and technical advice, sometimes involved arranging for use of study areas in the Tennessee Valley, and occasionally provided necessary funding and publication.

Especially notable was the first thorough examination of floodproofing, in the city of Bristol, Tennessee, by John R. Sheaffer (Sheaffer, 1960). Another was the investigation by Robert W. Kates of perception and choice with respect to flood hazard in LaFollette, Tennessee (Kates, 1962). A comparative examination of choice of floodplain use in six communities included one town in the Tennessee Valley (White, 1964). Likewise, the pioneering investigation of floodplain land use by Francis C. Murphy, a young engineer in the Corps of Engineers, included the regulatory experience of cities in the Tennessee Valley and throughout the nation (Murphy, 1958). The Murphy study was the first careful appraisal of the limited experience with regulations that affect channel encroachment, zoning, subdivisions, building codes, and related public policy.

The town of Chattanooga was among the 17 selected across the United States in 1957 to discover the extent to which urban floodplain use had changed in selected cities of the United States after enactment of the Flood Control Act of 1936 (White, 1958).

The "changes" study and the Murphy study of floodplain regulation provided a solid assessment of experience upon which the new Corps of

Engineers program to provide floodplain information to communities was partly based. When that program was launched by the Chief of Engineers, and Jim was invited to give directions, it was not supported with enthusiasm by any substantial number of Corps personnel. It was the first service program to be offered by the Corps, and Jim, as its first administrator, was obliged to practice large persistence and patience in order to assure participation.

In two influential reviews of national floodplain management policy, Jim played a major role. He helped organize and had an influential part in the completion of the Bureau of the Budget Task Force report in 1966 (U.S. Congress, 1966). He also was consistently helpful in the review committee that produced the *Action Agenda* based on the national assessment of 1992 (National Review Committee, 1992). His ideas were broader than a conventional structural approach, and his willingness to try new methods also ranged widely.

Any who worked with Jim knew from first-hand experience that he was consistently gracious and considerate in his dealings with others. Our daughters, who were quite young when he began visiting our Chicago household, were impressed by his courteous behavior. They happily put on their nice dresses when they knew he would be a dinner guest. One of them still affectionately describes him as "courtly." Whether dealing with generals or local officials or little girls across the dinner table, Jim Goddard always was a gentleman with a strong dedication to public service and with sensitive concern for his fellow humans.

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