

**EXHIBIT “50”**

Federal Interagency Floodplain Management Task Force  
Public Listening Session

# 50 Years of Floodplain Management: Concepts & Actions

Crystal City  
May 10, 2010



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Water Policy Collaborative, University of Maryland

## Gilbert Fowler White 1911-2006



...the human race is a family  
that has inherited a place on the  
earth in common ... its  
members have an obligation to  
work toward sharing it so that  
none is deprived of the  
elementary needs for life, and  
...all have a responsibility to  
leave it undegraded for those  
who follow.

1975

# 1940 -1960s

# Early Floodplain Management

- Pre-40s – Flood Control
- 1942 - Gilbert White Dissertation - Human Adjustment
- 1958 – White et al - Floodplain Occupance

The University of Chicago

## HUMAN ADJUSTMENT TO FLOODS A GEOGRAPHICAL APPROACH TO THE FLOOD PROBLEM IN THE UNITED STATES

A DISSERTATION SUBMITTED TO THE FACULTY  
OF THE DIVISION OF THE PHYSICAL SCIENCES  
IN CANDIDACY FOR THE DEGREE OF DOCTOR  
OF PHILOSOPHY

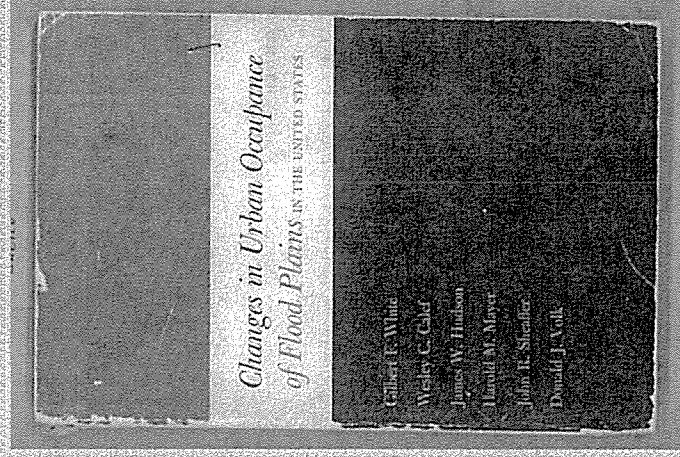
DEPARTMENT OF GEOGRAPHY  
JUNE, 1942

*Research Paper No. 27*

By

GILBERT FOWLER WHITE

CHICAGO, ILLINOIS  
1945



**Jim Goddard**

# 1940 -1960s Early Floodplain Management

- 1959 - Senate Select Committee Water Resources
- 1960 – USACE authorized floodplain services program (Sec 206 FCA) –maps and advice
- 1962 – President Kennedy policy – comprehensive planning; Senate Document 97
- 1965 – Water Resources Planning Act
  - Comprehensive Planning
  - **Water Resources Council - Cabinet Coordinating Body**
  - Principles and Standards (P&S) – 4 accounts



# 1966 Federal Focus on Floodplains

- 1966 – Report: *A Unified National Program for Managing Flood Losses* (House Document 465)
  - Improve basic knowledge about the flood hazard; better coordinate and plan;
  - Initiate a program of technical information and services and move ahead with studies aimed at a practical national program for flood insurance;
  - Adjust, through executive action and legislation, Federal flood control policy to sound criteria and changing needs.

**FLOODS ARE AN ACT OF GOD;  
FLOOD DAMAGES RESULT FROM ACTS OF MEN**

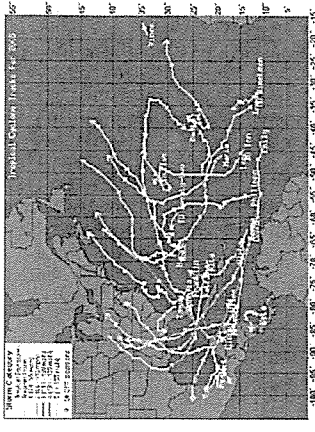
# 1966 Federal Focus on Floodplains

- 1966 - EO11296 *Evaluation Of Flood Hazard In Locating Federally Owned or Financed Buildings, Roads, and Other Facilities, and In Disposing of Federal Lands and Properties*
- Executive agencies shall :
  - » *provide leadership in encouraging a broad and unified effort to prevent uneconomic uses and development of the Nation's flood plains*
  - » *lessen the risk of flood losses in connection with Federal lands and installations and federally financed or supported improvements.*



# 1968 National Flood Insurance Act

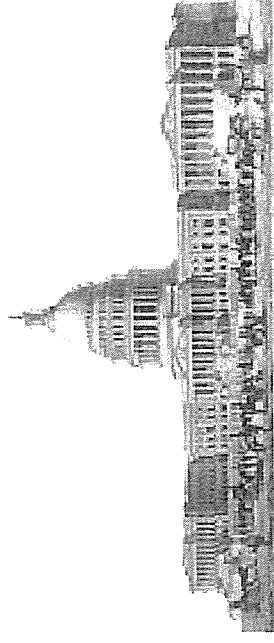
- **Sec 1301:** the objectives of a flood insurance program should be **integrally related to a unified national program for flood plain management** and, to this end, it is the sense of Congress that within two years following the effective date of this chapter the President should **transmit to the Congress for its consideration any further proposals necessary for such a unified program...**
- **Sec1317** :...consult with other departments and agencies of the **Federal Government, and with interstate, State, and local agencies** having responsibilities for flood control, flood forecasting, or flood damage prevention....



Assigned  
to Water  
Resource  
s Council

# 1976 WRC: *Principles and Standards*

- Process for evaluation of water projects
- Four Accounts
  - National Economic Development (NED)
  - Environmental Quality (EQ)
  - Regional Economic Development (RED)
  - Other Social Effects (OSE)



1975

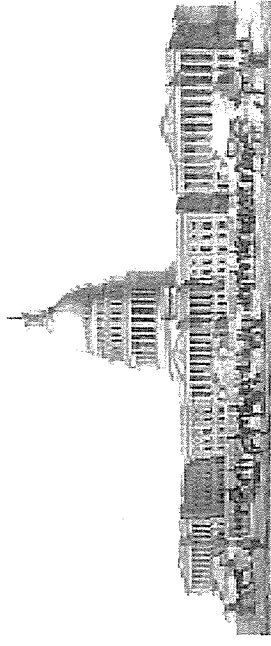
**GAO** *National Attempts to Reduce Losses  
from Floods by Planning for and Controlling  
Uses of Flood-Prone Lands*

- **Federal agencies do not adequately evaluate flood hazards in their programs.** Many of the agencies do not have or properly implement their flood-related procedures.
- Executive Order 11296 has had limited effect in reducing flood losses due lack of implementing procedures and, among agencies that do have procedures, limited compliance

1976

*WRC: A Unified National Program for  
Floodplain Management*

- Conceptual framework for floodplain management
- Recommended improving floodplain management and programs as a prerequisite to federal expenditures for the modification of flooding or reducing the impact of flooding



1976

WRC Establishes Federal Interagency  
Floodplain Management Task Force

- Succeeds the Floodplain Management Technical Committee.
- Members: TVA; Agriculture, Army, Commerce, Energy, HUD, Interior, Transportation, EPA, FEMA (1979)
- States represented by Association of State Floodplain Managers (observers).
- Provide continuity of communication between member agencies on issues related to floodplain management.

1977

*Executive Order 11988, Floodplain  
Management*

May 24

- Revokes and supersedes Executive Order 11296
- Adds focus on natural environment
- Re-emphasizes agency responsibilities
- Directs Federal agencies to determine flood hazards and to avoid developing or modifying the flood plain wherever possible

1978

*WRC: Guidelines for Implementing  
Executive Order 11988 – Floodplain  
Management*

- Guidance for federal agencies in preparing regulations and procedures for implementing EO.
- Describes ways government agencies are to avoid supporting development in floodplains when a practicable alternative exists.
- **Adds critical actions in 500 year floodplain**

1979

*WRC: A Unified National Floodplain  
Management Program (Revision)*

1982

WRC Zero Funded

- OMB transfers responsibility for Unified National Plan to FEMA
- FEMA becomes Chair of FIFMTF

1983

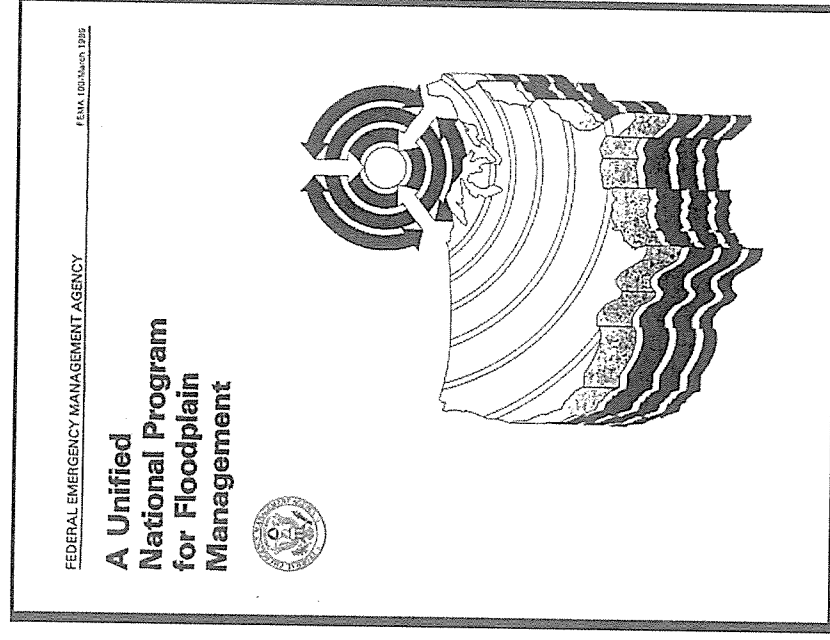
WRC: P&G Replaces P&S

- National economic development replaces NED and environmental quality as objective of water resources development

1986

FIFMTF: *A Unified National Program  
for Floodplain Management*

- Establishes two goals for floodplain management:
  - reduce loss of life and property from flooding
  - reduce loss of natural and beneficial resources from unwise land use.
- Recommends evaluation of floodplain management activities and periodic reporting of progress.



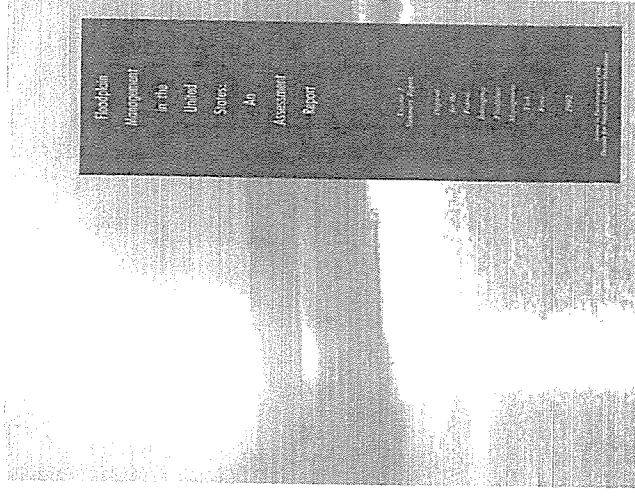
1987 FIFMTF initiates assessment of nation's program for floodplain management.

1992 FIFMTF submits assessment report.

- Provides national condition report (programs and structures)

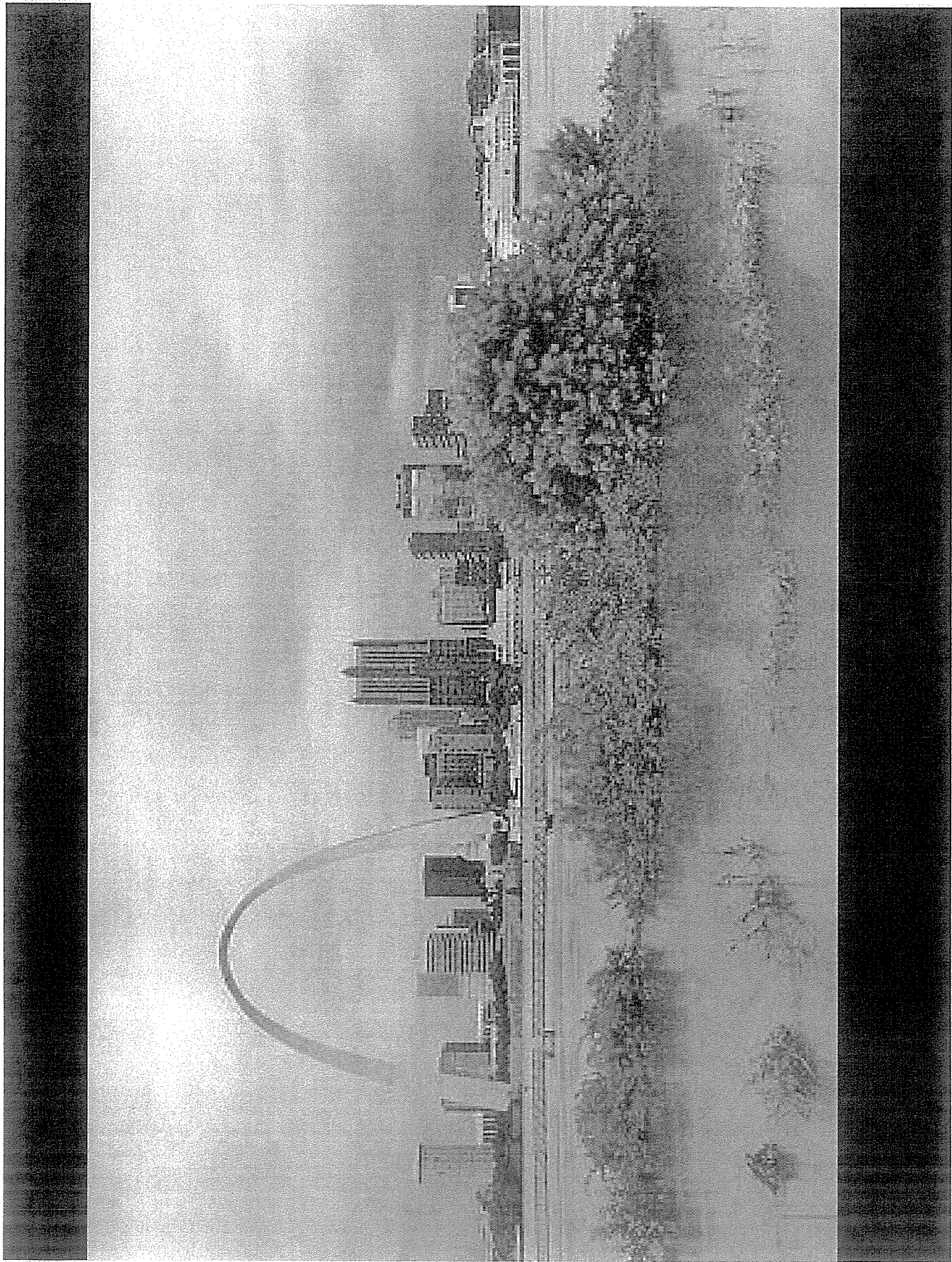
- Notes that:

*“...while considerable progress has been made over the past two decades, the Unified National Program is neither unified nor national.”*



# 1978 - 1994 FIFMTF Products

- \* *Nonstructural Floodplain Management Study: Overview*, (White, 1978).
- \* *Floodplain Acquisition: Issues and Options in Strengthening Federal Policy*, (Kusler, 1978).
- \* *Improved Formulation and Evaluation of Nonstructural Elements for Water Resources Plans in Flood Hazard Areas*, (Shabman, 1979).
- \* *Options to Improve Federal Nonstructural Responses to Flood*, (Platt, 1979).
- \* *Economic Aspects of Wildlife Habitat and Wetlands*, (Midwest Research Institute, 1979).
- \* *Emerging Issues in Wetland/Floodplain Management - Supporting Materials for a Report of a Technical Seminar*, (Kusler, 1979).
- \* *Emerging Issues in Wetland/Floodplain Management - Summary* 1980).
- Report of a Technical Seminar Series*, (Kusler, 1979).
- \* *Sources of Wetlands/Floodplain Research Information*, (1980).
- \* *Workshop Report on Bottomland Hardwood Wetlands*, (National Wetlands Technical Council.) \*
- Nonstructural Measures in Flood Damage Reduction Activities*, (Galloway, 1980).
- \* *The Influence of Regulations and Practices on the Implementation of Nonstructural Flood Plain Plans*, (CME Associates, Inc., 1980).
- \* *An Assessment of Storm Surge Modeling*, (Hydrology Committee, 1980).
- \* *State and Local Acquisition of Floodplains and Wetlands*, (Field Associates, 1981).
- \* *Analysis of Methodologies Used for the Assessment of Wetland Values*, (USA Waterways Experiment Station, 1981).
- \* *Floodplain Management Handbook*, (Owen, 1981).
- \* *Cooperative Flood Loss Reduction: A Technical Manual for Communities and Industry*, (Owen, 1981).
- \* *Evaluating the Effectiveness of Floodplain Management Techniques and Community Programs*, (1985).
- \* *Further Advice on Executive Order 11988, Floodplain Management*, (1987).<sup>1</sup>
- \* *Protecting Floodplain Resources: A Guide for Communities* (1994)



1994

EOP Interagency Floodplain  
Management Review Committee  
*Sharing the Challenge*

- Oversight by Administration Floodplain Management Task Force – CEQ, OMB, Agriculture
- Called for:
  - Floodplain Management Act which establishes a national model for floodplain management, clearly delineates federal, state, tribal, and local responsibilities
  - Executive Order defining the responsibility of federal agencies to exercise sound judgment in floodplain activities
  - Increased coordination of federal and federal-state-tribal activities

1994-5

FIFMTF: A Unified National

*Program for Floodplain Management*

- Recommended four goals:
  - Formalize a national goal-setting and monitoring system;
  - Reduce by at least half the risks to life and property and the risks to natural resources of the nation's floodplains;
  - Develop and implement a process to "encourage positive attitudes toward floodplain management;"
  - Establish a nationwide, in-house capability for floodplain management.
- *Sharing the Challenge* and the UNP reinforce each other by the commonality of their findings and recommendations.

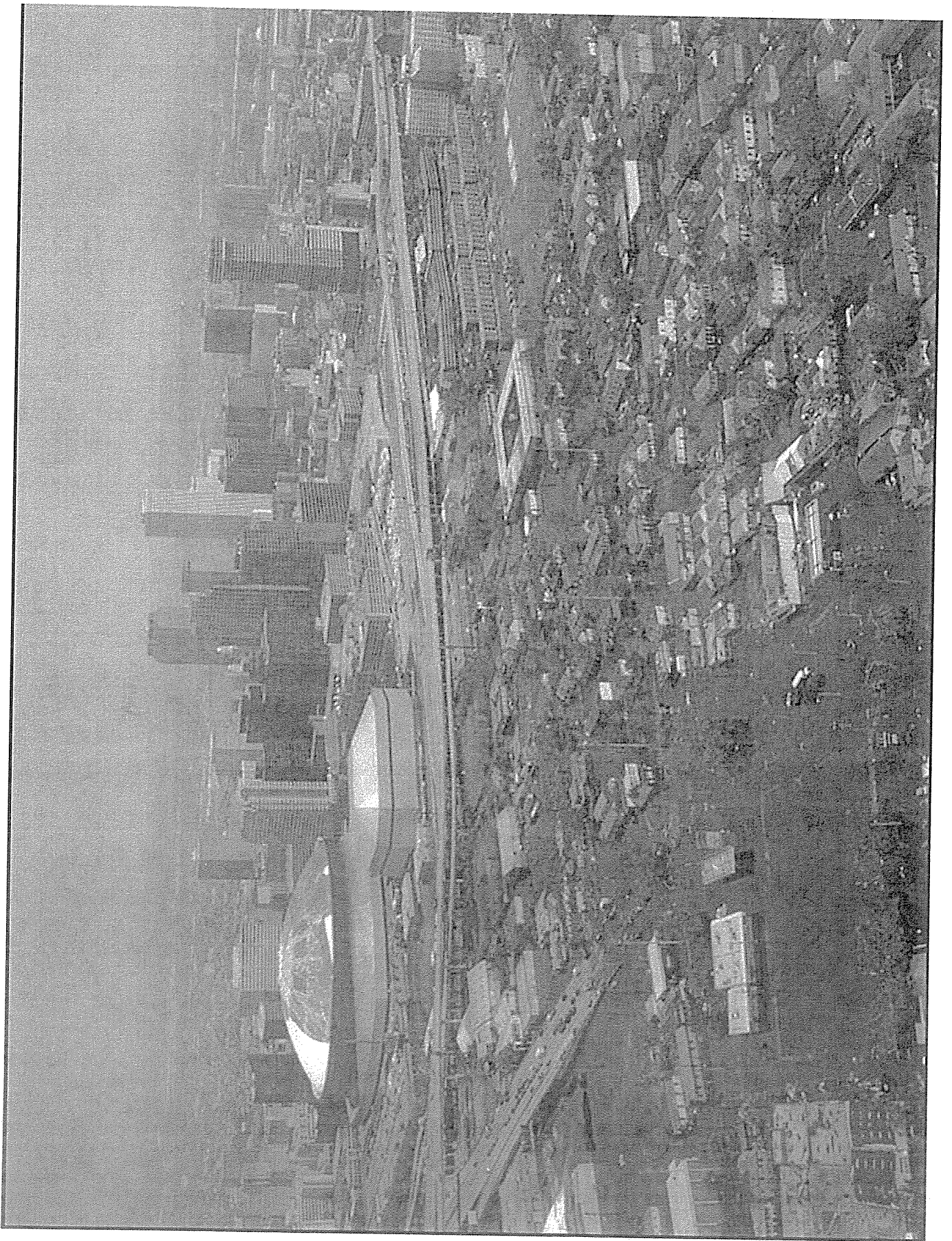
**Forwarded to Congress by President**

## 1995-2001

- FIFMTF – Dormant (last meeting 1997)
- Chair retires
- *FEMA*
- *Project Impact* Building Disaster-Resistant Communities
- Implementation of National Flood Insurance Reform Act of 1994
- Administration focus on *Sharing the Challenge*
- Agriculture-led TF under EOP
- 1997 Levee Guidance
- Draft Revision to EO
- NBF

## 2001-2005

- Map Modernization





## 2005 -2009

- Pre-Katrina
  - Intergovernmental Flood Risk Management Committee (with ASFPM and NAFSMA)
  - Interagency Levee Policy Committee
- Post Katrina - Ad-Hoc Coordination (FEMA - Corps Led)
  - Post Disaster Teams (Katrina; Midwest)
  - National Committee on Levee Safety
  - Silver Jackets
  - Map Modernization & Risk Mapping -RiskMAP
  - Revised EO 11988
  - Informal activation of FIFMTF (2008)

Where Are we Today?

# The Players and Drivers in in Floodplain Management

## SOME COMPONENTS OF THE FEDERAL FRAMEWORK FOR FLOODPLAIN MANAGEMENT

The Clean Water Act of 1972 • Coastal Barrier Resources Act (1982) • Coastal Zone Management Act of 1972 • The Dam Safety Act (1986) • The Disaster Relief Act of 1974 • The Disaster Relief and Emergency Assistance Amendments of 1988 • The Emergency Wetlands Resources Act of 1986 • The Endangered Species Act of 1973 • Executive Order 12127 (1979) • Executive Order 12148 (1977) • Executive Order 12296 (1966) • Executive Order 11988 (1977) • Executive Order 11990, Protection of Wetlands • The Federal Crop Insurance Act (1980) • The Federal Insecticide, Fungicide, and Rodenticide Act • Federal Interagency Floodplain Management Task Force established 1975 • The Federal Land Policy and Management Act of 1976 • Fish and Wildlife Coordination Act of 1958 • The Flood Disaster Protection Act of 1973 • The Food Security Act of 1985 • House Document 465, *A Unified National Program for Managing Flood Losses* • The Housing Act of 1961 • The Housing and Urban Development Act of 1969 • The Housing and Community Development Act of 1977 • The Housing and Community Development Act of 1987 • The Land and Water Conservation Fund Act (1964) • The National Dam Inspection Act of 1972 • The National Environmental Policy Act (1969) • The National Flood Insurance Act (1968) • The National Forest Management Act of 1976 • The National Historic Preservation Act (1966) • The North American Waterfowl Management Plan (1986) • OMB Memorandum, "Nonstructural Flood Protection Measures and Flood Disaster Recovery," (1980) • The Omnibus Budget Reconciliation Act of 1981 • The Reservoir Salvage Act of 1960 • The Safe Drinking Water Act of 1974 • The Soil and Water Resources Conservation Act of 1977 • The Tax Reform Act of 1986 • United States-Mexico Boundary Treaty of November 23, 1970 • The Water Bank Act (1970) • Water Pollution Control Act Amendments of 1972 • The Water Quality Act of 1987 • The Water Resources Development Act of 1974 • The Water Resources Development Act of 1986 • The Water Resources Development Act of 1990 • Water Resources Planning Act of 1965 • The Watershed Protection and Flood Prevention Act of 1954 • The Wild and Scenic Rivers Act of 1968 • Flood Control Act of 1917 • Rivers and Harbors Act of 1930 • Flood Control Act of 1936

# The Changing Scene 1996-2009

- Resistant
- Government Responsibility
- Reactive
- Projects
- Structural
- Flood Insurance Rate Maps
- Economic Focus (P&G)
- Resilient
- Shared Responsibilities
- Anticipatory
- Comprehensive Plans
- Best Solution
- Risk Maps
- Multi-Objective Focus (New P&G)

## **2007 Gilbert F. White Forum**

Intensified development in high-risk areas accompanied by climate and weather changes will bring increased potential for frequent flood disasters, and for large, Katrina-like catastrophes as well.



## **FLOODPLAIN MANAGEMENT 2050**

A Report of the 2007 Assembly of the  
**Gilbert F. White National Flood Policy Forum**  
Washington, D.C.

# 2009

- No Agreed Framework for Federal Floodplain Management
  - » Unified National Program Dormant – no action on goal attainment
  - » 15 years old
- Many *Sharing the Challenge* Actions Incomplete
- Limited Coordination Among Federal Agencies
- Many Federal Agencies Unfamiliar with EO 11988 Provisions
- On the Table:
  - EO Revision
  - P&G Implications
  - Program Coordination
  - New Initiatives (Silver Jackets, Risk Mapping/Management)

Thank You for Your Attention