
NFIP Reform:

Phase II Report



FEMA

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I. Overview

Background and Purpose

In performing its mission, the Federal Emergency Management Agency (FEMA) believes it is important to continually seek input from its many stakeholders on how its programs can be more efficient and effective at meeting the needs of the public. To this end, FEMA has engaged in a comprehensive reform effort to address the concerns of the wide array of stakeholders involved in the ongoing debate about the National Flood Insurance Program (NFIP). The effort is comprised of three phases designed to engage the greatest number of stakeholders and consider the largest breadth of public policy options. Phase I focused on the capture and analysis of stakeholder concerns and recommendations. During the second Phase, FEMA performed additional analysis of existing data and identified a set of evaluation criteria. In Phase III, a portfolio of public policy alternatives will be developed and evaluated using the evaluation criteria, and the resulting recommendations will be reported (see Figure 1 below for a graphical outline of this process).

Figure 1. NFIP Reform Process



Phase I commenced with the NFIP Listening Session held November 5-6, 2009 in Washington, DC. The goals of this Listening Session were to engage invited stakeholders from Federal, state, local and tribal governments, associations, non-profits and the private sector, to hear about the key issues facing the program, to identify common understanding between groups and to document the diversity of opinions concerning the optimum operation of the NFIP. In addition to the comments received during the Listening Session, FEMA also opened a comment period via the web for the public to submit additional comments for inclusion in the reform effort.

Phase II began in March 2010 with the formation of the NFIP Reform Working Group comprised of a cross-section of Federal Insurance and Mitigation Administration (FIMA) Directorate staff. The Working Group was tasked with identifying and analyzing options for the future state of the NFIP. This Phase II effort incorporated the recommendations and themes resulting from the NFIP Listening Session and web comments. In addition, the group comprehensively reviewed prior evaluations of the NFIP including the Call for Issues Status Report (1998-2000), The Evaluation of the National Flood Insurance Program Final Report and other reports conducted by the American Institute for Research (2006) and several reports by the Government Accountability Office (GAO). The approach and outcomes of this phase of the NFIP Reform effort is described in the remainder of this Report.

II. Phase II Design

The NFIP Phase II Working Group was formed in early March 2010 to design and deliver Phase II of the NFIP Reform effort. The Working Group had eight permanent members from across the three Divisions of the FIMA Directorate. The members brought a wide-range of knowledge and expertise to the Working Group spanning organizational units and experience with the NFIP. Dr. Sandra Knight, Deputy Federal Insurance and Mitigation Administrator, Mitigation, served as the Project Sponsor and Edward Connor, Acting Administrator, Federal Insurance and Mitigation Administration, served as Program Executive. Michael Grimm served as the NFIP Reform Program Manager and led the Working Group.

The Working Group met on a weekly basis from March 10, 2010 through May 3, 2010. The weekly meetings were facilitated by Coray Gurnitz Consulting, a public sector organizational consulting firm.

The Working Group established several validation points with FIMA, FEMA and Department of Homeland Security (DHS) leadership throughout Phase II. FIMA Directors and Deputy Directors from HQs and Regions contributed directly to the development of the Phase II outputs. Additional input from internal and external stakeholders will be solicited in Phase III.

III. Phase II Approach

Policy Analysis Framework

The Working Group chose a policy analysis framework to guide the NFIP Reform effort. Policy analysis employs systematic inquiry and evaluation to assess policy alternatives. The policy analysis process allows public decisions to be made in a structured, defensible, and credible manner. Key aspects of this approach include; systematically applied social science research, attention to values and political aspects, the utilization of multiple research methods, and a future-focused orientation.

There are several benefits to the policy analysis framework in the context of public decision-making. First, it reduces uncertainty and provides information for decision makers in the public arena. Second, it provides a systematic evaluation of the full life-cycle of policy reform beginning with the technical, economic and political viability of alternative policies, moving to strategies for implementation, and ending with the consequences of policy adoption. Finally, policy analysis presents a framework for thinking critically about problems and solutions.

The basic steps to the NFIP policy analysis, adapted from *Basic Methods of Policy Analysis and Planning* by Patton and Sawicki, are as follows:

Step 1: Define the Problem

The foundation for an efficient and effective outcome from the policy process requires a well-defined problem statement. The “problem statement” is a meaningful definition of the problem so that it is amenable to systematic research. When crafting this definition, the analyst must frame the problem situation into a practical, manageable, and actionable framework for analysis, in such a way that eliminates any ambiguity for future references.

Step 2: Determine Evaluation Criteria

Once the problem has been defined, the next step is to determine evaluation criteria. The criteria are specific statements about the problem that will be used to evaluate alternative policies or programs. Criteria can be weighted to indicate importance (e.g. cost, net benefit, effectiveness/efficiency, equity, ease of implementation, and political acceptability).

Step 3: Identify Alternative Policies

In Step 3, feasible policy alternatives are developed. Ultimately, alternatives should include policy options already proposed by key political actors, and alternatives that may be superior to those under political discussion. One common alternative is the status quo, suggesting that to do nothing new is a potential option, and allowing the analysis to explore the implications if this were the case.

Step 4: Evaluate Alternative Policies

In Step 4, each policy alternative is analyzed based on its satisfaction of the evaluation criteria. Additional data is collected to analyze the different levels of influence including the economical, political and social dimensions of the problem. Quantitative and qualitative analyses can be employed to measure the benefits and costs for each alternative, including an analysis of the “unintended consequences” of each policy alternative.

Step 5: Distinguish Between Alternative Policies

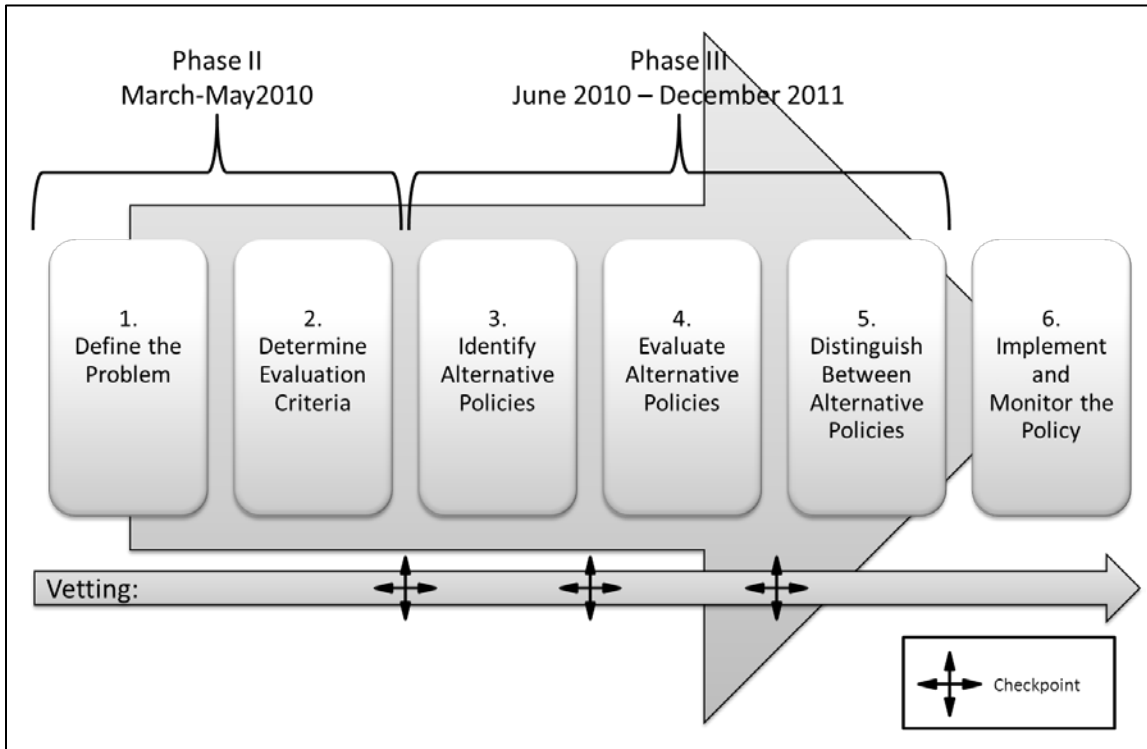
The results of the evaluation of alternatives presents the degree to which criteria are met by each option. In Step 5, the alternative policies are distinguished from each other. In this step of the policy analysis, numerical results combined with expertise are used to decide on a recommended policy. Mixing two or more alternatives is a very common approach in this step of the policy analysis.

Step 6: Implement and Monitor the Policy

In the final step, the policy implementation is monitored to ensure it is executed as designed. This step helps to assure continuity, and determine whether the policy is having the intended impact. Policy evaluation is critical to ensure the chosen policy alternative remains appropriate and effective.

The diagram on the next page depicts the six steps of the policy analysis framework combined with the Working Group timeline for Phases II and III.

Diagram 2. Policy Analysis Framework



IV. Phase II Outcomes

Step 1: Problem Definition

The first step in the Policy Analysis framework requires that the problem be well-defined in practical terms to set the basis for the analytical process that follows. In order to complete this step in the process, the Working Group relied on a substantial body of knowledge to augment their existing expertise. The Working Group collected and reviewed a comprehensive library of materials describing the history of the program, the program’s philosophy and the current commentary regarding the NFIP. This background reading helped to set the foundation for the group’s understanding of the program and identify many of the challenges facing the NFIP today. The complete list of materials leveraged during this step can be found in Appendix A.

The NFIP Working Group began developing the problem statement by brainstorming a list of words and phrases that characterize the feedback FEMA has received over the NFIP’s programmatic history. Once collected, these words and phrases indicated a need for dissecting the problem statement into elements by stakeholder group. The stakeholder “viewpoints” provided the Working Group with a set of lenses by which to understand the NFIP and the associated policy issues.

The stakeholder viewpoints were analyzed in the framework of a logic model. While logic models are not a traditional tool used in policy analysis, the concepts of inputs, throughputs, outputs and outcomes which comprise standard logic models, were critical for understanding the concerns of each stakeholder group. *The NFIP Reform Logic Model* helped the Working Group to identify the overlaps between

stakeholder groups as well as the tensions points that naturally exist between various stakeholders. Ultimately the stakeholder view points and tension points were represented in the following diagram:

Diagram 3. Stakeholder Viewpoints



Once the stakeholder viewpoints had been fully analyzed, the logic model was expanded to include an initial list of criteria by which each stakeholder group might assess the NFIP.

The final stage of the Problem Definition step required the Working Group to document a concise, actionable statement reflecting the policy problem. The following problem statement was developed by the Working Group:

NFIP Reform Problem Statement:

People in the United States live in risky areas that are vulnerable to natural hazards. Flooding continues to be the number one source of damages from natural hazards in the US. Since NFIP's inception in 1968, national flood damages continue to increase significantly. Responsibility for flood risk and consequence management is segmented across the Federal, State, and Local governments.

Current national flood policy needs to be reconsidered. We are seeking an effective, sustainable way to help people and communities mitigate and recover from disasters. As there is a growing public debate over individual choice and accountability versus social responsibility, we are seizing an opportunity to reshape our National policies.

The problem statement above will be used throughout Phase III to solicit input from internal and external stakeholders regarding the challenges facing the NFIP.

Step 2: Evaluation Criteria

The next step in the Policy Analysis Framework requires the establishment of evaluation criteria. As described above, these criteria define the dimensions of the problem as stated in the problem statement. The evaluation criteria serve as a compass for the policy analysis process; setting the direction by which the proposed policy alternatives are scored and evaluated.

The Working Group began the development of evaluation criteria by reviewing the stakeholder viewpoints captured in the logic model. The Working Group identified several requirements shared across multiple stakeholder groups. These commonalities were documented as a set of guiding principles; concepts that could be agreed upon by the majority of NFIP stakeholders and serve as the foundation for any proposed policy solution. The NFIP Reform Guiding Principles are provided below:

- Protect lives, property, environmental and cultural assets
- Motivate people to voluntarily participate in reducing society's risk
- Make the best use of public resources
- Ensure selection of an adoptable and sustainable policy
- Consider notions of equity with regard to risk and socioeconomic status
- Recognize and consider the governance and responsibility of states, communities and tribes as a means to achieve sustainability and resiliency

The guiding principles serve as a necessary, but not sufficient set of criteria for evaluating proposed policies as they do not possess a directional nature. The Working Group utilized the guiding principles to develop a list of evaluation criteria. For each criterion, the Working Group identified an associated spectrum of values. For a sub-set of the criteria it was clear which end of the spectrum would be preferred. For others, the Working Group collected input from FIMA and FEMA leadership to understand their preferred direction. See Appendix B for a copy of the evaluation criteria worksheet.

The results of this analysis were aggregated and incorporated as the final set of evaluation criteria.

- Cost of flood is borne by individuals
- Individuals incur costs of increased risk gradually
- Assistance is provided to those who cannot afford the cost of flood
- Minimize exposure to flood hazards
- Maximize natural and beneficial functions of the floodplain
- Efficiency - Maximize the societal benefit/cost ratio
- Administrative feasibility
- Political acceptability

The final task in Step 2 was to begin weighting the evaluation criteria to reflect their relative priority. The Working Group selected a pair-wise comparison method to allow stakeholders to weight the criteria. Pair-wise comparison is a process in which participants compare entities in pairs to determine which element in each pair is preferred. The individual results are then aggregated to produce a weight for each entity. The Working Group also asked participants to identify the strength of their preference using a 1-9 rating scale. During Phase II the Working Group collected data from the FIMA Headquarters

and Regional Leadership Team. A copy of the pair-wise comparison worksheet used in this step can be found in Appendix C.

The results of this exercise, are presented below:

Table 1. Phase II Pair-wise Comparison Results

Criteria	FIMA HQ Leadership n=9	FIMA Regional Leadership n=9	FEMA	External Stakeholders	Other
Minimize exposure to flood hazards.	18%	21%			
Cost of flood is borne by individuals.	16%	20%			
Maximize natural and beneficial functions of the floodplain.	16%	18%			
Efficiency - Maximize the societal benefit/cost ratio.	13%	9%			
Individuals incur costs of increased risk gradually.	11%	14%			
Administrative feasibility	10%	6%			
Political acceptability	9%	3%			
Full assistance is provided to those who cannot afford the cost of flood.	8%	9%			

To Be Collected In Phase III

As indicated in the table above, the Working Group will continue to collect weighting data via pair-wise comparison throughout Phase III to ensure representation by a varied stakeholder base. The weights will be used as multipliers when evaluating the proposed policy alternatives in Phase III.

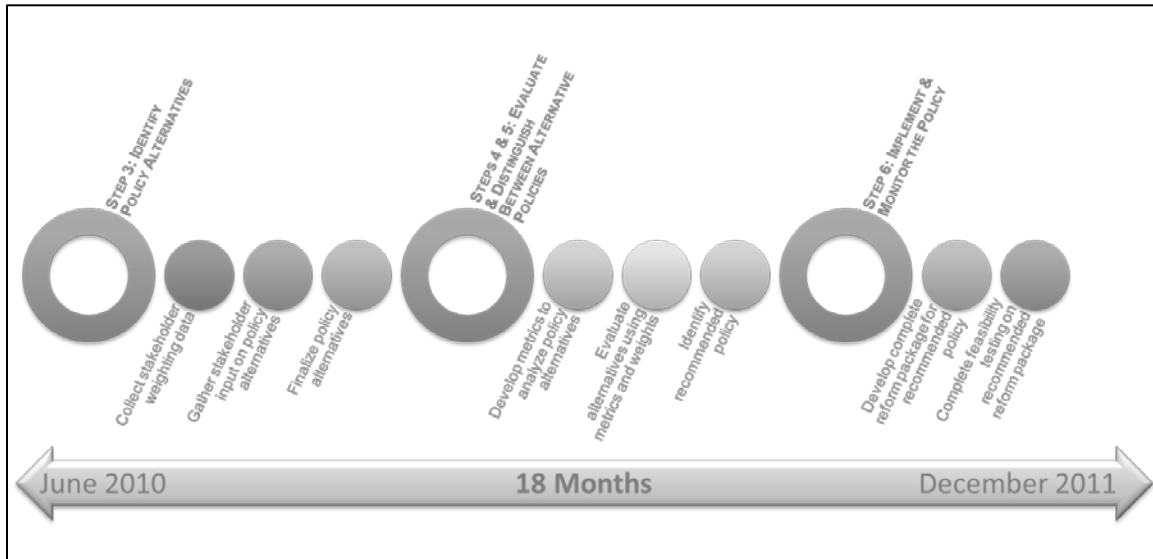
V. Next Steps: Phase III

Following the validation of Phase II outcomes by DHS, FEMA and FIMA leadership, the NFIP Reform effort progressed into Phase III. The Working Group participated in a two-day off-site event to design the approach for Phase III in June, 2010. This design for this phase of the effort includes three steps; 1) Develop reform packages, 2) perform analysis and 3) vet results and prepare legislation and regulations.

The first step (Develop Reform Packages) aligns with Step 3 in the Policy Analysis Framework. During this step the Working Group will identify and develop the set of policy alternatives that will be considered in the reform effort. During Step 2 (Analysis), the Working Group will evaluate the proposed policy alternatives and score them using the evaluation criteria and weighting described above. The policy alternative with the highest score, or a combination of high-scoring elements from several of the alternatives, will become the recommended NFIP Reform policy. This recommendation will be further developed into a full reform package including proposed legislative, regulatory and administrative changes during Step 3. This final package will be submitted to FIMA, FEMA and DHS leadership as the final deliverable of the NFIP Reform Working Group.

During the off-site the following timeline was created and later validated with Agency leadership.

Diagram 4. Phase III High-Level Timeline: 18-month View (as of June 2010)



A critical element for Phase III will be the Stakeholder Engagement effort. The Working Group is in the process of conducting a Stakeholder Analysis to assess the requirements of the NFIP Reform stakeholders and identify key sources of input. Throughout Phase III the Working Group will reach out to the identified stakeholders to ensure the NFIP Reform effort incorporates the opinions of its diverse stakeholder base and ultimately succeeds in recommending a policy that addresses the concerns of the nation.

VI. Appendix

Appendix A: NFIP Reform Background Materials List

Appendix B: NFIP Reform Evaluation Criteria Worksheet

Appendix C: NFIP Reform Pair-wise Comparison Worksheet

Appendix A – NFIP Reform Background Materials List

Document	Author	Year
FEMA NFIP Financial Stabilization Project	Deloitte & Touche	2000
IIABA Recommended Improvements to the NFIP	Independent Insurance Agents and Brokers of America (IIABA)	2010
The Evaluation of the NFIP - Final Report	American Institutes for Research (AIR) (on behalf of FEMA)	2006
The Evaluation of the NFIP - Final Report - Recommendations from the Individual Reports	AIR (on behalf of FEMA)	2006
The Evaluation of the NFIP - Performance Assessment and Evaluation Measures for Periodic Use by NFIP	AIR (on behalf of FEMA)	2006
Summary of GAO Recommendations	FEMA (based on GAO Reports)	current
GAO Report 09-271 (High Risk Series)	US Government Accountability Office (US GAO)	2009
Synopsis of Insurance and Other Programs of Financial Assistance to Flood Victims Report	STARR (requested by FEMA)	2009
GAO Report 09-420R (Proposed Changes to NFIP)	US GAO	2009
GAO Report 09-20 (Options for Addressing the Financial Impact of Subsidized Premium Rates on the NFIP)	US GAO	2009
The NFIP's Market Penetration Rate (Executive Summary)	RAND Corporation (for FEMA)	2006
Insurance and Other Programs for Financial Assistance to Flood Victims	US Department of Housing and Urban Development (HUD)	1966
The NFIP Outside the Box	Gilbert F. White National Flood Policy Forum (Mike Buckley)	2010
A Matrix of Options to Provide Rate Relief for Structures Newly Mapped into the SFHA	FEMA	2010
Mexico is Offering Bonds to Cover a Major Quake	New York Times	2006
Encouraging Adaptation to Climate Change: Long Term Flood Insurance	Resources for the Future (Howard Kunreuther and Erwann Michel-Kerjan)	2009
Listening Session Web Comments	FEMA	2010
CRS Report - Background Challenges Financial Status	Congressional Research Service (CRS)	2009
CRS Report - Side-by-Side Comparison of Flood Insurance Reform Legislation in the 110th Congress	CRS	2008
CRS Report - Mandatory Flood Insurance Purchase in Remapped Residual Risk Areas Behind Levees	CRS	2010
CRS Report - Midwest Flooding Disaster: Rethinking Federal Flood Insurance?	CRS	2008
CRS Report - Federal Flood Policy Challenges: Lessons from the 2008 Midwest Flood	CRS	2008
WMO Report - Economic Aspects of Integrated Flood Management	World Meteorological Organization /Associated Programme on Flood Management (APFM)	2007

Appendix A – NFIP Reform Background Materials List

Document	Author	Year
Reforming the National Flood Insurance Program	Resources for the Future (Carolyn Kousky)	2010
How the NFIP, Insurance Law and Climate Change Could Cause the Perfect Storm	Andrew K. Gordon and Jess R. Booth	2009
FEMA's New Flood Maps Go Too Far Some Cities Say	Lynn Thompson, Seattle Times	2010
Value of Properties in the NFIP	Congressional Budget Office (CBO)	2007
Effects of Disclosure of Flood Liability on Residential Property Values	Stephen Yeo Risk Frontiers-NHRC Macquarie University	
Testimony from J. Robert Hunter, before the Senate Committee on Banking, Housing and Urban Affairs	J. Robert Hunter, Director of Insurance for the Consumer Federation of America	2005
Phase 1 Report	FEMA	current
GAO Report 07-285 (Climate Change: Financial Risks to Federal and Private Insurers in Coming Decades are Potentially Significant)	US GAO	2007
Can Security Markets Save the Private Catastrophe Insurance Market?	Jaffee and Russell	1998
Reducing Hurricane and Flood Losses through Insurance and Mitigation (Wharton Research for FEMA on Insurance and Mitigation)	The Wharton School of the University of Pennsylvania (for FEMA)	2010
An Estimate of the U.S. Population Living in 100-Year Coastal Flood Hazard Areas	Journal of Coastal Research	2010
FEMA's Coastal Population Study: Comments on Data Accuracy, Current Initiatives, and Future Risk	Journal of Coastal Research	2010
Myths and Facts about the National Flood Insurance Program	FEMA	2010
National Disaster Fund - Catastrophe Funds	http://www.protectingamerica.org/ ; Obama (Op-Ed)	2010
Fleecing of America Story - Very Sloppy Journalism	Dale Lehman	2010
Reducing Flood Losses: Is the 1% Chance (100-year) Flood Standard Sufficient?	Gilbert F. White National Flood Policy Forum	2004
Market Failure in Information: The National Flood Insurance Program	James Chivers and Nicolas E. Flores	2002
Guarding People and Property Against Natural Hazards	U.S. Commission on Ocean Policy	2004
The Role of Insurance and Regulation in Reducing Losses from Hurricanes and Other Natural Hazards	Howard Kunreuther	1995
Disasters and Public Policy: Can Market Lessons Help Address Government Failures?	Erwann O. Michel-Kerjan The Wharton School of the University of Pennsylvania	2007
Policy Analysis for Natural Hazards: Some Cautionary Lessons from Environmental Policy Analysis	Matthew D. Adler The Wharton School of the University of Pennsylvania	2006

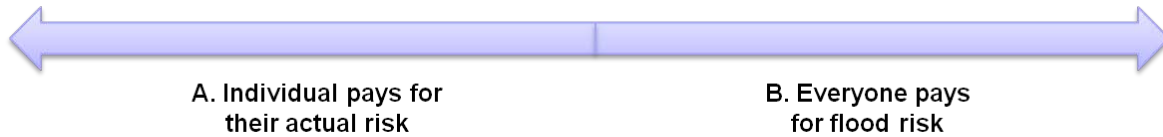
Appendix A – NFIP Reform Background Materials List

Document	Author	Year
Impacts of Insurance Status on Economic Welfare of Homeowners in Hazard Prone Areas: The Affordability Challenge	Ch. 11 from "At War with the Weather: Managing Large-Scale Risks in a New Era of Catastrophes"	1999
Policy Analysis of Alternative Programs: Comparing the Status Quo with A true Competitive Insurance Market	Ch. 13 from "At War with the Weather: Managing Large-Scale Risks in a New Era of Catastrophes"	1999
Equity Analysis and Natural Hazards Policy	Matthew D. Adler, University of Pennsylvania	2005
Ecosystem Goods and Services: Definition, Valuation and Provision	Thomas C. Brown, USFS; John C. Bergstrom, University of Georgia; John B. Loomis, Colorado State University	2006
The Impacts of Natural Disasters: A Framework for Loss Estimation (Executive Summary)	National Research Council	1999
Challenges Facing the Insurance Industry in Managing Catastrophic Risks	Paul Kleindorfer, Howard Kunreuther	1999
The Complementary Roles of Mitigation and Insurance in Managing Catastrophic Risks	Paul Kleindorfer, Howard Kunreuther	1997
Regulation and Markets for Catastrophe Insurance	Paul R. Kleindorfer and Robert W. Klein	
No Matter What, We Pay for Others' Bad Habits	Sandeep Jauhar, M.D. NY Times	2010
Strategies for Better Protection against Catastrophic Risks	Howard Kunreuther, Robert Meyer and Erwann Michel-Kerjan The Wharton School of the University of Pennsylvania	2007
A Very Clear Blue Line: Behavioral Economics, Public Choice, Public Art and Sea Level Rise	Marc Poirier	2007-2008
Assessing Hurricane and Flood Risks and Reduced Losses from Mitigation Measures	Howard Kunreuther and Erwann Michel-Kerjan	2009
Flooding the Market: The Distributional Consequences of the NFIP	J. Scott Holladay Jason A Schwartz	2010
Can property insurance companies in hurricane-prone areas sustain their operations?	Dr. Robert W. Klein Wharton Risk Management and Decision Processes Center of the University of Pennsylvania	2010
FIFM-TF Listening Session Summary Report	Federal Interagency Floodplain Management Task Force	2010
NFIP Financial Stabilization Project (2008 Update)	Deloitte Consulting	2009
Committee Testimony - National Flood Insurance	House Financial Services Committee — Subcommittee on Housing and Community Opportunity	2010
Huge Losses Put Federal Flood Insurance Plan in the Red	Thomas Frank, USA Today	2010

NFIP Reform Evaluation Criteria

Allocation of Cost Criteria

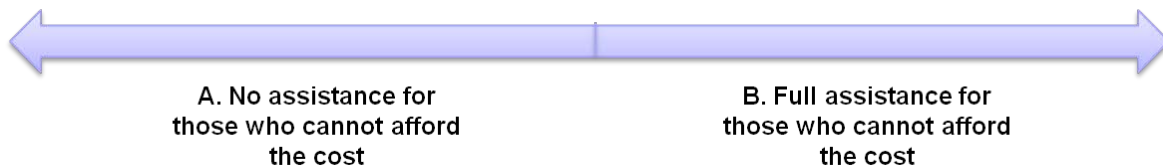
1. Who pays for those vulnerable to flood risk?



2. How quickly should individuals incur the cost of increased risk?



3. To what extent should the public assist to make the cost of flood affordable?



Program Effectiveness Criteria

4. To what extent should the policy limit individual choice on land use and building practices?



5. Minimize exposure to flood hazards.

6. Maximize natural and beneficial functions of the flood plain.

Additional Criteria

7. Efficiency - Maximize the societal benefit/cost ratio

8. Administrative feasibility

9. Political acceptability

NFIP Reform Pair-wise Comparison

Instructions:

- 1) Review the pair of criteria in each row on the "Pair-wise Comparison" tab.
- 2) Decide which of the criteria in the pair is more important to you. Input an A or B in the "More Important" column to indicate your preference.
- 3) Select the intensity with which you prefer your chosen criterion based on the scale below. Indicate your response in the "Intensity" column.

The Fundamental Scale for Pairwise Comparisons		
Intensity of Importance	Definition	Explanation
1	Equal importance	Two elements contribute equally to the objective
3	Moderate importance	Experience and judgment slightly favor one element over another
5	Strong importance	Experience and judgment strongly favor one element over another
7	Very strong importance	One element is favored very strongly over another; its dominance is demonstrated in practice
9	Extreme importance	The evidence favoring one element over another is of the highest possible order of affirmation

Pair-wise Comparison:

Criteria		More Important	Intensity
A	B		
Cost of flood is borne by individuals.	Individuals incur costs of increased risk gradually.		
Cost of flood is borne by individuals.	Full assistance is provided to those who cannot afford the cost of flood.		
Cost of flood is borne by individuals.	Minimize exposure to flood hazards.		
Cost of flood is borne by individuals.	Maximize natural and beneficial functions of the floodplain.		
Cost of flood is borne by individuals.	Efficiency - Maximize the societal benefit/cost ratio.		
Cost of flood is borne by individuals.	Administrative feasibility		

Appendix C – NFIP Reform Pair-wise Comparison Worksheet

Criteria		More Important	Intensity
A	B		
Cost of flood is borne by individuals.	Political acceptability		
Individuals incur costs of increased risk gradually.	Full assistance is provided to those who cannot afford the cost of flood.		
Individuals incur costs of increased risk gradually.	Minimize exposure to flood hazards.		
Individuals incur costs of increased risk gradually.	Maximize natural and beneficial functions of the floodplain.		
Individuals incur costs of increased risk gradually.	Efficiency - Maximize the societal benefit/cost ratio.		
Individuals incur costs of increased risk gradually.	Administrative feasibility		
Individuals incur costs of increased risk gradually.	Political acceptability		
Full assistance is provided to those who cannot afford the cost of flood.	Minimize exposure to flood hazards.		
Full assistance is provided to those who cannot afford the cost of flood.	Maximize natural and beneficial functions of the floodplain.		
Full assistance is provided to those who cannot afford the cost of flood.	Efficiency - Maximize the societal benefit/cost ratio.		
Full assistance is provided to those who cannot afford the cost of flood.	Administrative feasibility		
Full assistance is provided to those who cannot afford the cost of flood.	Political acceptability		
Minimize exposure to flood hazards.	Maximize natural and beneficial functions of the floodplain.		
Minimize exposure to flood hazards.	Efficiency - Maximize the societal benefit/cost ratio.		
Minimize exposure to flood hazards.	Administrative feasibility		
Minimize exposure to flood hazards.	Political acceptability		
Maximize natural and beneficial functions of the floodplain.	Efficiency - Maximize the societal benefit/cost ratio.		

Appendix C – NFIP Reform Pair-wise Comparison Worksheet

Criteria		More Important	Intensity
A	B		
Maximize natural and beneficial functions of the floodplain.	Administrative feasibility		
Maximize natural and beneficial functions of the floodplain.	Political acceptability		
Efficiency - Maximize the societal benefit/cost ratio.	Administrative feasibility		
Efficiency - Maximize the societal benefit/cost ratio.	Political acceptability		
Administrative feasibility	Political acceptability		