<u>Hazard Mitigation Strategy for Federal Disaster #1181:</u> 1997 Southeast Michigan Tornadoes and Flooding

The objective of mitigation is to reduce future disaster losses through acquisition and relocation of hazard-prone property, structural retrofitting, mitigation education of community officials and residents, wise land use and land development practices, prudent use of resources and funding, and encouragement of National Flood Insurance Program (NFIP) implementation and compliance, to name just a few measures that have been successful.

To assist communities in southeast Michigan in their recovery from the severe storms that struck the area on July 2, 1997, (so that the rebuilt environment is safer and has a reduced risk from wind and flood damage), the following objectives must be accomplished: acquisition and relocation or retrofitting and floodproofing (including elevation) of substantially-damaged structures located in special flood hazard areas; structural retrofitting of wind-damaged structures with wind clips, fasteners and other bracing materials; structural modifications to water and sewer infrastructure to prevent flood damage; and urban forestry education.

Every effort should be made to include structural wind retrofitting in the repairs and reconstruction done under the Temporary Housing Program, the Individual and Family Grant Program, and the Public Assistance Grant Program. In addition, home and business owners should be strongly encouraged to use the available funding under the Small Business Administration's Disaster Loan Program to incorporate structural wind mitigation measures in the repair/reconstruction of their damaged structures. Appropriate flood mitigation measures should also be undertaken on those public facilities and infrastructure that incurred damage from flooding. All of these programs have the ability to institute immediate, permanent mitigation measures on damaged structures and public infrastructure.

The mitigation strategy for promoting and achieving mitigation of the hazards from this disaster will be focused in the following areas:

- Community mitigation education and outreach.
- Coordination with other disaster assistance programs.
- Community-administered structural retrofitting education and grant programs.
- Enhancement of urban forestry programs and practices.
- Mitigation project development.
- National Flood Insurance Program mitigation opportunities and promotion.

Community mitigation education and outreach

- Provide mitigation information in Disaster Recovery Information Centers.
- Provide mitigation information by mail (upon request) as a follow-up to the Disaster Recovery Information Centers (ongoing).
- Coordinate mitigation activities with the ongoing Community Relations Outreach Program (on-going).
- Coordinate with professional associations for groups such as building code officials and insurance companies for development of wind resistant building codes.

Coordination with other disaster assistance programs

- Coordinate with Individual Assistance (IA) Program staff to ensure that appropriate structural wind engineering measures are allowed and specified for homes being repaired under the Minimal Repair Program.
- Coordinate with IA Program staff to ensure that appropriate mitigation measures are allowed and specified for recipients of IFG grants to prevent further damage to their homes from wind (such as removing trees that are in danger of falling onto the structure, providing additional bracing or tarping for damaged roofs and walls, etc.).
- Coordinate with SBA staff to ensure that appropriate structural wind engineering measures are allowed and specified for homes being repaired under the SBA Disaster Loan Program (using the 20% mitigation provision).
- Coordinate with appropriate state and local officials to ensure that structural wind engineering measures are allowed and being implemented for homes being repaired under voluntary agency disaster relief and recovery programs.
- Coordinate with Public Assistance (PA) Program staff to ensure that appropriate structural wind engineering and floodproofing measures are allowed and specified for public buildings and infrastructure being repaired under the Public Assistance Grant Program.

Community-administered structural retrofitting education and grant program

• Invite communities to establish and administer a locally-based structural retrofitting program that would provide public education on proper wind engineering techniques and components, and provide grants to individual home and business owners

wishing to retrofit their structures to reduce future wind damage. The program could be implemented and administered by an existing local department, such as the building, planning or public works department, who would be responsible for disbursing grants, monitoring work, providing technical assistance, and prorating on program status to the State.

Enhancement of urban forestry programs and practices

- Develop and provide guidance materials to forestry, public works, utility and other appropriate local departments on proper urban forestry techniques and practices.
- Conduct workshops for home and business owners, design professionals and other interested parties, on proper tree selection and urban forestry techniques and practices.
- In communities without an urban forestry program, encourage local officials to establish a program.

Mitigation project development

- Information from the Preliminary Damage Assessment (PDA) will be used to help identify and select the communities which should be contacted concerning the possibility of mitigation opportunities under the Hazard Mitigation Grant Program (HMGP) and other state and federal programs.
- Review the potentially damaged structure inventory from the PDA, concentrating primarily on those structure that may have been substantially damaged.
- Review the NFIP State Coordinator's information concerning the flood hazard identification and participation status of communities in the NFIP.
- Coordinate with the Michigan Jobs Commission and other appropriate state agencies concerning communities with a substantial investment of state financial resources.
- Whenever possible, incorporate mitigation projects into larger, ongoing or planned community projects (as long as the larger project will be completed in a timely manner and mitigation benefits can be fully retained) (on-going).

Upon identification of communities suitable for mitigation, local officials will be contacted to determine the level of local interest in partnering toward recovery that will reduce the community's risk to future severe storms and flooding. The Mitigation Team will be activated and conduct site visits with communities the commit to development of projects and implementation of appropriate mitigation measures. The Mitigation Team will function as a technical resource to the community to help identify the problem that should be addressed by the mitigation measure and identify financial assistance opportunities through Federal, State and private-sector programs.

NFIP Mitigation Opportunities and Promotion

- MDEQ staff will provide technical assistance to local floodplain administrators as needed (on-going).
- MDEQ staff will, as needed, conduct NFIP briefings to inform local floodplain administrators of NFIP responsibilities (ongoing).
- FEMA will mail letters to affected communities regarding immediate substantial damage determinations (not applicable for this disaster).
- FEMA will identify priorities for possible enforcement actions (on-going).
- MDEQ, EMD, and FEMA will review repetitive loss data for potential acquisition sites.