

330 -- Public Outreach Strategy Implementing the Floodplain Management Plan 1999 - 2000 Annual Evaluation

The Hillsborough County Public Outreach program is a community-wide effort and includes participants from all jurisdictions. This report provides an evaluation of this program and the Strategy designed to implement public outreach tasks associated with the Floodplain Management program. The following evaluation is associated with tasks performed over the preceding 12-month period. Guiding goals that provided direction in which to implement the strategy are:

**Inform residents about the flood hazard and flood protection methods,
Inform residents about the availability and desirability of flood insurance, and
Inform residents about the County's flood warning system and safety precautions.**

The following is Hillsborough County's evaluation of public outreach projects implemented through the CRS Strategy. This report identifies projects that have, and have not, been implemented with assigned resources. Additionally, the Strategy projects and programs have been decided to remain the same for the coming year with an emphasis on those projects that were not completed over the preceding 12 months.

Outreach Committee and Strategy: The County's outreach program has been undertaken to bring together a strategy to best advise property owners (business and residential) about hazards and potential mitigating activities associated with building in the floodplain. Activities have been undertaken to reduce the risk from potential flooding to properties throughout the county. There have been additional efforts to assist repetitive flood-loss properties through requesting funds through various mitigation grants from the State and Federal governments. Through the use of these funds during this calendar period, the County was able to permanently reduce the number of repetitive flooded structures and lots (12 homes and 15 lots). Additionally, the County is preparing to elevate five structures with a potential of receiving funding to perform an added seven.

Hillsborough County has established a Public Outreach Community Rating System, Outreach and Education Team, consisting of members of the County's Local Mitigation Strategy Committee that report to the longtime established county-wide Disaster Recover Committee. Other team members consist of representatives from: each of the County's jurisdictions; a person from outside of the community that is experienced in floodplain management -- a neighboring county's CRS Coordinator; the County's Community Rating System Coordinator; the Director of the County's Emergency Management Office; and representation from the University of South Florida's Geography Department (which is greatly involved with hazard mitigation within the County). A change in membership did occur in the preceding 12 months. The change was associated with a member from the private sector (structural engineer) relocating "out of state." The replacement in membership is with a Board member from the Greater Tampa Bay Builders Association. The change in membership will not effect the functionality of the Committee, but will serve to further educating the local building community.

The County's outreach strategy has been undertaken to advise property owners (business and residential) about

hazards and potential mitigating activities associated with building in the floodplain. Minimum activities to notify residents and businesses of flood hazards (and mitigation) and severe-weather warning systems were conducted during the reporting period.

These activities have been undertaken to reduce the risk from potential flooding to properties throughout the county. There have been added efforts to assist repetitive flood-loss properties through requesting funds through FEMA's hazard- and flood-mitigation assistance programs and HUD's community development block grant disaster assistance. These funds will be added to County funds to assist with specific projects. Additionally, actions have been carefully balanced with the rights of the land owners, the ability of the County to finance various activities and the potential benefits of those activities. Considering these variables, the County has undertaken programs or tasks illustrated in the remaining sections of this evaluation report.

Flood Hazard, Safety and Protection Measures: The County is active in providing information regarding hazard/flood-warning systems and avenues to mitigation against various hazards. This has become a joint program effort between the Public Safety, Planning and Growth Management and Public Works Departments. Information is disseminated through a variety of forums that include teaching a course at the University of South Florida Small Business Development Center, annual business Emergency Preparedness Seminar sponsored by the Greater Tampa Bay Chamber of Commerce and various sponsored training programs through professional business groups.

As a regionally designated Project Impact Community, the County, State and FEMA have sponsored informational public announcements, public relations ceremonies and training programs regarding hazard mitigation to Bay area builders/contractors, developers, building/hazard mitigation officials and interested citizens. Educational courses provided over the past 12 months have included: National Flood Insurance Program Elevation Certificates, Increased Cost of Compliance, Florida at Risk, Disaster Preparedness and Assistance, Local Implementation of CRS programs, and implementing Hazard Mitigation and Flood Mitigation grant programs.

Prepared and circulated material was distributed at commercial Home Shows, seminars, neighborhood meetings and meetings established with individual property owners with respect to being prepared for flooding disasters. Information disseminated included illustrating measures included in the following:

What to do before a flood:

1. Keep a battery-powered radio tuned to the local station and follow emergency instructions,
2. Turn off all utilities at the main power switch, close off any gas valves,
3. Move valuables such as documents, papers and jewelry, to higher elevations or take them with you when you evacuate,
4. Fill sanitized bathtubs, sinks and plastic bottles with clean water, and
5. Bring outdoor belongings inside;

Safety measures during and after a flood:

1. Do not drive through a flooded area,
2. Do not walk through flooded areas,

3. Stay away from downed utility lines,
4. Watch for animals, especially snakes,
5. If your structure is damaged by flood, call your insurance agent who handles your flood insurance policy,
6. Make sure your building has not been structurally damaged before reentering it,
7. Keep power off until an electrician has inspected the system,
8. Clean up right away. Flood waters carry sewage and toxic chemicals, and
9. Use caution on wet surfaces to prevent falling.

Flood protection and warning activities remained unchanged (systems work well). Areas tested and used during severe thunderstorm periods and during the emergency response period for Hurricane Gordon are included the following:

1. Flood Warnings issued through National Weather Service for flood watch or warnings with the county's Emergency Management Office initiating respective activities that are associated with the threat and per the County's Comprehensive Emergency Management Plan.
2. Flood response systems were tested through the EOC in the preceding 12 months and implemented on September 16, 2000 due to Hurricane Gordon. With respect to localized flooding during the previous year, localized flooding did occur to some roads and to several homes. Both Public Works and Planning and Growth Management Departments responded to reports and took appropriate actions. Localized street flooding required placing signs at respective sites until stormwater receded. Structure flooding was due to a property owner filling in a swale in an area outside of the designated Special Flood Hazard Area. County staff responded to flooding complaints and issued a violation to the property owner illustrating corrective action to be taken. The Roads and Streets Department was available to furnish sandbags to County residents at maintenance stations located throughout the County when the demand was present.

The preceding 12 months weather events did present circumstances in which voluntary evacuation was deemed necessary. Additionally, the EOC did test operations with respect to opening shelters and coordinating emergency procedures through "Table-top" exercises with the Sheriff's Office, the Red Cross, Emergency Medical services and other agencies as required to accomplish a safe evacuation.

3. County staff considered fiscal constraints with respect to implementing stormwater projects. The County is approximately 40% complete with stormwater projects voted into place through a referendum in 1998. Projects associated with drainage basin master plans assisted greatly in the County becoming a FEMA Cooperating Technical Community (CTC). This CTC partnership has provided the opportunity for the County to have Flood Insurance Rate Maps updated within two years.

Additionally, consideration was given to fiscal constraints experienced by the County. Programs associated with floodplain management activities conducted through County departments and managed through various regulations, a Floodplain Management Plan and through mitigation grant programs received continued funding through the previous fiscal year and are recommended for approval through the coming fiscal year as well.

4. Planning and Zoning - Through the regulatory/review activities of the Planning and Growth Management Department, the preservation of open space and the restriction of development in the floodplain was a continued priority. The County's Land Development Code (LDC) was updated twice with respect to the Flood Damage Control regulations, which were:
 1. clarification with respect to new or substantially improved structures within COBRA zones. The intent is to clearly illustrate that Federal flood insurance will not be available for such structures.
 2. Clarification with respect to vents for structures permitted below the "BFE" when a design professional is not selected for the designing of the structure.

The County's development regulations offer protection to persons and property through the Land Development Regulations and plan-review processes. Regulatory processes through agencies under the Board of County Commissioners have worked well in identifying areas of conservation and preservation for the benefit of protecting persons and property that serve to provide watershed storage areas and buffer areas to flood high-hazard areas. These regulations have also served to protect surrounding properties to a greater extent than provided naturally. For example, the County requires a greater amount stormwater retention post-development than was present pre-development (County Land Development Regulations, 1998).

Additionally, in the preceding 12 months the County provided 43 zone-change actions within the Special Flood Hazard Area, which is 13% of total approvals provided County-wide (see map attached). Zoning approvals (including variances to zoning regulations) did not authorize deviation from the Flood Damage Control Regulations that are used to enforce minimum standards under the National Flood Insurance Program. The County has delegated authority of reviewing requests to deviate from standards identified within the Flood Damage Control Regulations to the Hillsborough County Building Board (Part 9 of the Land Development Code). During the preceding 12 months, the Building Board reviewed 10 requests to deviate from County minimum standards (approvals granted: 3, 2 partial approvals associated with Pre-FIRM structure). It must be noted that the Building Board has not allowed a deviation from regulations that is contrary to minimum standards listed in 44 Codes of Federal Regulations.

Regulations enforced through the Planning and Growth Management Department and the Environmental Protection Council have restricted and manage development activity in the floodplain by limiting wetlands encroachment and preserving open space. This process continues through primarily limiting impervious surface and preservation of critical upland habitat and wetland areas with development approvals.

5. Stormwater management continues to be enforced through the Land Development Code. This process ensures that all new development retains and attenuates for its stormwater impacts. Specifically, the Stormwater Technical Manual is used to regulate all development, whether it is located within or outside of the floodplain. The year was accentuated by a tropical cyclone named Gordon; thus, the Stormwater Management Section of the Public Works Department did have an opportunity to evaluate a flooding event to determine effectiveness of recently constructed projects (over the last 12 months) and identify potential additional projects or improvements. Improvements associated with coastal and riverine areas assisted in expediting storm tide from flooded areas, which played a role in minimizing flood damage. Storm surge

damage associated with Hurricane Gordon was as follows:

- Structures flooded: 25,
- Structure Type: 22 residential (areas of flood damage are repetitive flood loss areas), 3 commercial,
- Number w/Flood Insurance: 19, and
- Approximate damage value: \$284,000 (does not account for lost wages or lost business).

One particular area in which stormwater capital improvement projects was begun through the use of HMGP grant funds was the 132nd and Taliaferro Streets. Through the use of grants funds, County acquired 10 homes (two more to be acquired) and three additional lots. This neighborhood flooded during a minimal rain event (3 to 3.5 inches). Although respective structures have not been demolished at this time, claims due to flooding are request of the past.

6. Drainage System Maintenance - The County continued to take the appropriate actions to maintain the County's stormwater management systems. The Water Department, through maintenance programs funded by its operating budget, maintained stormwater conveyance systems to ensure that flooding impacts are minimized when significant flooding events occur. Systems are working, which is illustrated through fewer complaints recorded for known flood areas. Systems will require multiple rainy seasons to actually prove success to the maintenance program.
6. Acquisition - The County's Planning and Growth Management Section aggressively pursued flood mitigation grants. At the end of this reporting period, the County has acquired 10 and 12 lots associated with a repetitive flood loss neighborhood. Added to this, the County is working to elevate five structures located in riverine, inland and coastal areas. These programs provide direct assistance to residents that were/are in constant danger of flood damage.

The County has set aside funding and develop a Hazard Mitigation Program that provides for the acquisition of properties that have experienced repetitive losses due to flooding. Additionally, through land acquisition purchases by the Environmental Land Acquisition Program, the County shall continue to remove property located in the floodplain from the impacts of development. The continuing impact of this program on flood mitigation is important because the removal of property located in the floodplain and its preservation as resource-recreation areas maintain storage capacity and that removes floodplain area from potential development. A complimentary benefit is the acquisition of adjacent uplands as open space that further reduces the introduction of impervious surfaces that can contribute to flooding problems.

8. Building Elevation - Through the enforcement of the County's Floodplain Ordinance (Flood Damage Control Regulations) and in conjunction with its participation in the National Flood Insurance Program's Community Rating System, structures located in floodplains will continue to be identified for elevation to mitigate for their location in flood-prone areas. The County views this activity as a major contribution toward mitigating impacts of flooding. Successes are identified through the tracking of new structures within the SFHA. Volume is considered and is tracked through the requirement of elevation certificates. These structures are required to be placed above the BFE and if elevations are correct, flooding should not occur during a one percent

probability storm event.

9. Insurance - The County actively participate in the National Flood Insurance Program. A major contribution to this effort is the recognition that a full-time staff member manages the Community Rating System program. As part of the program, it is recognized that a major emphasis is placed on the education of those property owners who are located in the floodplain and that they should secure flood insurance. Flood Insurance Rate Maps indicate that 22,000 structures and a total of 38,000 parcels are located in the Special Flood Hazard Area. The County is a member in the NFIP, and encourages participation by citizens in obtaining flood insurance to assist in recovering from flooding disasters through obtaining flood insurance (insurance is one of several techniques identified).

The County also aggressively pursues capital projects that relieve flooding and potential flooding problems to property owners through a stormwater capital improvements program to the amount (over a five year period) of approximately \$100 million. Added to this amount, is an approximate \$10 million program to better define stormwater drainage patterns through completing 17 drainage basin master plans.

Because of the work between multiple agencies and aggressive plans to reduce flooding risks within the County, the County requested and received a reduction in the NFIP CRS rating. This rate reduction for property owners within Hillsborough County amounts to between \$400,000 and \$500,000. This rate reduction is due to the reduction in risk associated with flooding. The total reduction in flood insurance premiums for Hillsborough County is between \$1.25 and \$1.5 million.

10. Coordination associated with emergency services during times of flooding worked as defined within the County's Comprehensive Emergency Plan and per 9G-7, FAC. Processes were tested and enacted during the preceding 12 months.
11. The County's Stormwater Program identifies projects that prioritize needs so that available funding is allocated to those projects that are most critical in alleviating flood impacts. Year to date program expenditures amount to \$44.5 million, which illustrates 44% of program completion.
12. Storm Sewers - The County, as part of its Capital Improvements Program (CIP) continuously provides funding for the reconstruction of obsolete storm sewer systems. This activity includes the replacement of storm pipes, manholes, end walls, culverts and conveyance systems. The CIP also provides funding for individual projects designed to alleviate flooding problems in specific locations in the County.
13. Retention - Each development, whether private or public, is required to meet the provisions of the Stormwater Technical Manual. Instead of providing reservoirs to store stormwater runoff, each project must provide on-site retention of its runoff and/or tie into the County's stormwater system. As part of the County's effort to retrofit its stormwater system, funding in the Capital Improvement Program is provided to acquire property and construct stormwater retention facilities to alleviate flooding impacts to roads and private property.
14. Map information - Residents, both existing and potential, can access information relating to the floodplains

at County Permit Services Centers and via the Internet through FEMA's Hazard Maps. Floodplain determinations can be requested that provide an official determination of whether a property is located, fully or partially, within a floodplain. Additionally, the County has mapped the floodplains on its Geographical Information System (GIS), and is actively working with FEMA to update County Flood Insurance Rate Maps. With respect to the FIRM update, the County has been obligated by FEMA a benefit of approximately \$700,000 to assist in this effort. The County currently is reviewing a task Agreement with FEMA to accomplish preliminary FIRM updates by 2002.

Flood zone and other flood mapping information is available through the County's Development Services Division or by calling the County's Stormwater Division of Public Works. This local information is currently publicized in flood insurance informational brochures located at the County Administration building and at public libraries. The preceding year illustrates 3,193 customers assisted in determining whether their properties were designated as within a Special Flood Hazard Area. In summary, customer service in this area is summarized as (designated person's assistance to customers, these numbers do not reflect assistance provided through other agencies or indirectly):

- Phone calls: 3,823,
 - Walk-ins: 340,
 - FAXES: 620, and
 - E-mails: 40.
- Total: 4,823.

Additional flood safety and protection information is available at the County's Public library -- cataloged for complete county distribution and physically located within the Resource Section. In addition, Federal Emergency Management Agency (FEMA) booklets and brochures outlining flood safety precautions and protection measures are also available at libraries and the County Administrative Building and selected Permit Service Centers.

15. Other flood protection measures primarily involve the elevation of pre Flood Insurance Rate Map (FIRM) structures or retrofitting them with second stories to meet the FIRM Base Flood Elevation (BFE) requirements. Information on other flood proofing techniques (such as the use of a berm, flood walls, etc) is mailed to property owners with repetitive flood-loss structures and to known flood prone structures on an annual basis.

Flood-related Public Information Activities: The County annually notifies repetitive loss property owners by mail about their flood risk. This information is accompanied with flood-protection methods that property owners may seek to reduce or eliminate respective "flood risk." General information about flood-protection financial assistance that may be available to eligible property owners is also included with the letter.

The County participated in the annual publication and distribution of the *Hurricane Guide for the Tampa Bay Region*. Hillsborough County's emergency management agencies participate in several Hurricane Awareness Seminars held at locations throughout the County.

Additionally, the County produced and distributed local and national flood insurance publications that address local

flood risks, the availability of flood insurance to County residents, mandatory flood insurance requirements, where to obtain more floodplain and mapping information, the County's floodplain regulations and how the National Flood Insurance Program works. This has assisted in increasing the awareness of county citizens.

Outreach Projects Implemented to Attain Goals {Associated documents have been included to this Section as attachments}:

1. Provided written notification to property owners that have experienced repetitive flood losses advising of flood hazards, methods of protection and any financial assistance that may be available to them for flood mitigation projects. Additionally, repetitive flood loss property owners were notified about Federal and State assistance through various grant programs.
2. Provided brochures and publications to property owners through media, mail and resource libraries at selected buildings throughout the county. Brochures and publications address local flood hazards, flood insurance, flood protection and mitigation, regulations, availability and location of flood mapping information, and the availability of the local flood resource library. The information is reviewed annually by the CRS Committee, which will be revised and “reprinted” as demand requires.
3. The Strategy included continuing to participate in the annual publication and distribution of the *Hurricane Guide for the Tampa Bay Region*.
4. Various members of the committee presenting at various business and neighborhood meetings regarding hazards facing residents and participated in Hurricane Awareness Seminars/Expos held throughout the County. An Expo was conducted in Apollo Beach at the beginning of Hurricane Season and staging booths at urban Home Depot stores were occupied to illustrate mitigation techniques and flood hazards to interested citizens.
5. Participated at two “Home Shows” located at the Tampa Bay Convention Center within a designated “Hurricane Alley” Home Show promoter area.
6. Provided educational information through media avenues, such as through newsletter/utility bill mail-outs.
7. The local Telephone Company continued to illustrate flood hazard areas within the local telephone book.
8. Provided two informational and educational training courses associated the hazard mitigation (includes NFIP and flood topics) program through USF’s Small Business Development Center.
9. Provided “mail-outs” to properties identified within the 100-year Floodplain. Funding assistance was provided through the Southwest Florida Water Management District. The project reached property owners of 38,000 parcels at a cost of approximately \$10,000.
 - Structures identified as a repetitive-flood loss structure by the Federal Emergency Management Agency were visited to verify information forwarded from FEMA. Information was unchanged from the previous year; however, work from the previous year did reduce the number of repetitive flood-loss structures identified for Hillsborough County.
10. Worked with the local Chamber of Commerce to review flood-protection programs and identify mitigation techniques to respective membership.
12. County staff provided the Main Branch of the County Library System with a complete copy of FIRM maps.
13. The County is the only jurisdiction that has an adopted Floodplain Management Plan. The Plan was evaluated (enclosed with this CRS Annual report) to determine success of implementation. The City of Temple Terrace is not a “Class C” community, Plant City is not participating in the CRS program, and the City of Tampa used

the adopted Local Mitigation Strategy to serve as the Floodplain Management Plan.

14. The following tasks were identified by the CRS Committee as areas to accomplish within the preceding 12 months. Tasks were to be completed through scheduled Hazard Mitigation and Flood Awareness semiannual notifications that presented or provided at:
 - C Displays at county Post Offices,
 - C Displays at specific county offices, such as the Tax Collector's office and Animal Shelters,
 - C Participation in various seminars, such as the Hurricane Conference and business meetings,
 - C Hazards Awareness (includes flood awareness) display at high traffic locations, such as shopping malls to promote flood safety, protection and knowledge about flood insurance and the CRS program.

Because of the emphasis placed on the contact to all property owners within the Special Flood Hazard Area and financial resource constraints, three of the four tasks listed above were not accomplished. The task completed was: "Participation in various seminars, such as the Hurricane Conference and business meetings." It is anticipated that other tasks obligations will be met in the next 12 month period.

15. Development of a media and education plan to meet the established public outreach goals. This task is currently being evaluated through the County's recently designed Project Impact Committee. The Project Impact designation was formally presented to the Tampa Bay area in January 2000. This designation provided an opportunity to bring together community leaders in education businesses and residents about hazards within the County (including flooding hazards). Currently, the Group formed a subcommittee to develop a strategy and business plan in addressing informational dissemination processes to educate the public. Two pilot areas have been targeted to test the process of educating citizens and businesses with respect to the use of mitigation techniques against known hazards.
16. The County sent four (not one) local government employees to the Emergency Management Institute (EMI) CRS Coordinator's training. Persons sent included the County's CRS Coordinator and three program implementation team members.
17. The County and the City of Tampa have initiated WEB based information with respect to providing flood protection information to residents. The County's WEB page is in a transition phase, with newer formats expected to be complete within three months. Additionally, two communities may not have resources to support this endeavor. If this becomes an area of opportunity, CRS County staff will pursue having flood-protection WEB-based topics illustrated through the county's Library WEB access page. This task was to be completed by 2001. The Committee is proceeding well.
18. The County has established NFIP resource libraries within three local permitting offices. Other offices will be populated with material by the year's end. This task was identified to be completed by 2001.
19. The task to identify an avenue for residents to locate floodplain information via a GIS or telephone is proceeding. Through the FEMA CTC process, the County is working to have an update performed to FIRMS in 2002. This process will also provide a digital FIRM to the County and its jurisdictions. It will be this process that will provide access to citizens to gain a better "picture" of their property location with respect to the Special Flood Hazard Area. Additionally, the County's Property Appraiser's office is currently providing a System through the County's intranet that allows individuals to show their specific property in this relationship. This process in conjunction with the digital FIRM will provide an avenue to meet this task.

The CRS Committee has met twice this year. Additionally, the CRS Committee met with CRS coordinators in a

regional meeting, which provided an opportunity for CRS Coordinators from around the State to meet the FEMA Region IV Mitigation Bureau Chief and a ISO representative that performs review for areas within the State. Additionally, the regional meeting provided an opportunity for CRS Coordinators to meet and discuss building and construction issues with a Contractor familiar with the program. Although the intent of the meeting was initially for regional CRS Coordinators, the session coincided with the Governor's Hurricane Conference, which provided an opportunity for many Coordinators an opportunity to participate.

The CRS Committee met initially to actively pursue methods to better illustrate to property owners and "to-be" property-owners potential flooding hazards within the county. Response to Hurricane Gordon illustrated persons that 76% of persons stricken by flood damage had Federal Flood Insurance coverage. Information given by a FEMA representative during a recent visit (after the Hurricane Gordon) identified this number is greater than periods associated with the No-Name and Tropical Storm Josephine events. The increase is attributed to an aggressive education program from the County to reduce flooding risks to its residents. Because citizen awareness is up, the CRS Committee will begin to review effectiveness of programs instead an approach to have multiple programs address flooding issues concurrently. The Strategy provides avenues for this approach while actively performing outreach programs to the community with respect to flood protection.

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