

Analysis of the 1991 and 1992 Floodproofing Open Houses

Prepared by the

Illinois Association for Floodplain and Stormwater Management

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Analysis of the 1991 and 1992 Floodproofing Open Houses

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1. Background

After the Summer 1981 flood in the Chicago suburbs, the Illinois Department of Transportation, Division of Water Resources (DWR), prepared a hazard mitigation plan. One of the major recommendations was to provide information to floodplain residents about how they could protect themselves from future flood damage. The concept of a floodproofing open house was developed and then tested in June of 1982.

The Open House had two major parts: 1) a slide show to provide an overview of floodproofing, insurance, and other flood protection topics and 2) contractors and government staff available at tables to talk one-on-one with the attendees about their products, services or agency programs. All attendees received a copy of DWR's manual Protect Your Home from Flood Damage and handouts provided by the contractors and government agencies. Approximately forty people attended.

Ten more floodproofing open houses were conducted in the Chicago area following floods in 1982, 1983, 1986 and 1987. In 1987, a third aspect was added: a "mitigation table" where people could review their flood situation with an objective expert and receive advice on what to do and who at the open house could help. Otherwise, the ten open houses conducted later followed the same basic design as the original one.

After 1981, the open houses were conducted within two weeks of the flood to increase participation. It was assumed that people would be most interested in flood protection soon after the flood, so an early open house would have a larger and more receptive audience. The turnout varied, but several had over 100 attendees.

DWR contracted with the University of New Orleans to evaluate the effectiveness of the 1986 and 1987 open houses and other approaches to helping flooded homeowners. Financial support was provided by FEMA's Hazard Mitigation Assistance Program.

After a record flood in November 1990, the Butterfield Creek Steering Committee worked with several south suburban communities to host an open house. With support from DWR and the Illinois Association for Floodplain and Stormwater Management (IAFSM), a South Suburban Open House was held in May 1991. The lessons learned from the previous ones and the University of New Orleans study were considered in the planning.

Although it was held six months after the flood, the South Suburban Open House had a record turnout of 175 households (each household was represented by one to three people). Two weeks after it was held, a very heavy local storm flooded parts of the area. One year later, the south suburban Village of South Holland conducted its own open house. Approximately 150 households attended. In both cases, the attendees recorded their addresses.

There has been an increase in national interest in post-flood advice to flooded property owners. While some different approaches have been tried around the country, there has been relatively little evaluation of their effectiveness.

The 1991 and 1992 open houses were prime for evaluation because of their large turnout and the availability of the names and addresses of the participants. Because some of the area had flooded again, it would be possible to measure whether any flood protection measures installed pursuant to the first open house had worked.

2. Purpose

This paper is an evaluation of the 1991 and 1992 floodproofing open houses that were conducted in the southern Chicago suburbs. It is based on surveys sent to the participants that measured their attitudes toward the open houses and whether they implemented any flood protection measures.

Funds for this project were provided by the Federal Emergency Management Agency's Hazard Mitigation Assistant Program in cooperation with the Illinois Department of Transportation, Division of Water Resources and the Illinois Emergency Management Agency.

This paper was prepared by French & Associates under contract to IAFSM. The project design, the draft survey, and the draft of this paper were reviewed and critiqued by an advisory committee that included:

- Bill Powers, Hazard Mitigation Officer, FEMA, Region V
- Jan Horton, State Hazard Mitigation Officer, Illinois Emergency Management Agency
- Molly O'Toole, Chief, Flood Mitigation and Stormwater Programs, DWR
- Brad Brink, Chair, IAFSM
- Peggy Glassford, Village Manager, Village of Flossmoor, IL
- Chris Wuellner, Director of Public Works, Village of Homewood, IL
- Rich Zimmerman, Deputy Clerk, Village of South Holland, IL
- Rose Marie DeWitt, Flood Control Liaison Committee, South Holland, IL
- Dr. Shirley Laska, University of New Orleans

3. The Open House Survey

The South Suburban Open House was held on May 8, 1991, at the Homewood-Flossmoor High School. The South Holland open house was conducted a year later on May 14, 1992, at Seton Academy in South Holland. The survey was conducted in March and April 1993.

A draft questionnaire was prepared and circulated to the advisory committee for approval. The same form was used for attendees at both open houses, the only difference being the name and date of the open house. A copy of the survey questionnaire and the cover letter is included as Appendix A.

Legible names and addresses were obtained for 291 people (171 South Suburban/120 South Holland). Five of them were duplicates, i.e., they attended both open houses. These were

eliminated from the South Suburban list so the respondents would refer to the more recent South Holland open house.

A total of 286 (166/120) surveys were sent out. Seventeen (8/9) were returned as bad addresses, the addressee had moved or died, the respondent stated that he or she had not attended, or the respondent was a contractor or local official. There were 109 (62/47) surveys not returned. In the end, 160 (96/64) usable surveys were received for a return rate of 56% (58% South Suburban/53% South Holland).

4. Open House Attendance

4.1 Survey respondents: The 160 survey respondents represent approximately half of the total attendance at the two open houses. Sixty percent of the respondents attended the South Suburban Open House ("SS" in the figures) and 40% attended the South Holland open house ("SH").

The bulk of the survey respondents for the South Suburban Open House were from three communities, Homewood (31%), Flossmoor (28%), and South Holland (17%). The remaining 24% were from 11 other south suburban communities.

All attendees at the South Suburban Open House were asked to register and complete a registration form which included background information on their flood problems (Appendix B). Eighty-one percent of the attendees had been flooded in November 1990 and 76% had been flooded before then. Sixty-six percent had basement/crawlspace flooding and 7% had flooding in the first floor. Twenty-five percent of those attending had flood insurance.

The publicity for the South Holland Open House was directed to South Holland residents, but the open house was open to all. Attendees signed in with their name and address, but no data on their flood problems were collected. All but one of the South Holland open house survey respondents was from South Holland.

4.2 Open House publicity: Appendix C has a copy of the flyer used to publicize the South Suburban Open House. Several communities distributed these door to door in floodprone areas. Also in Appendix C is a copy of a local newspaper article publicizing the open house.

The South Holland open house was publicized through newspaper and newsletter articles and handouts distributed door-to-door. Examples are included in Appendix D.

Figure 1 shows the responses to question 2 of the survey, "How did you hear about the Open House?" The respondents could check more than one answer, so the number of responses ("n") is greater than the number of respondents.

These two open houses had more lead time than the previous post-flood open houses conducted by DWR. They were planned and publicized several months before they were held while the post-flood ones were held within two weeks of the flood and were publicized via electronic media and the large Chicago daily newspapers. It was surmised that the local publicity, which included flyers distributed door-to-door in some communities and articles in the local bi-weekly papers was the key to the larger turnout.

"How did you hear about the Open House? (Circle all that apply)"	<u>SS</u>	<u>SH</u>	<u>Tot</u>
a. Read about it in the newspaper	50%	34%	44%
b. Received a notice from the city/village government	26%	20%	24%
c. Heard about it on the radio or television	1%	1%	2%
d. Heard about it from a friend or neighbor	12%	25%	17%
e. Respondent was a local official or flood committee member	3%	16%	8%
f. Don't remember	7%	-	4%
Other	-	4%	2%
	n=118	n=76	n=194

Figure 1. Open House Publicity

Conclusion: The survey responses support the supposition that more lead time coupled with local publicity will bring in more people. Newspapers, local notices, and word of mouth were the major sources of information about the open houses, all of which need lead time. Of the 85 who read about the open houses in the newspaper, 62 listed that as their only notification. It may be that the respondents did not differentiate between a newspaper and the newsletters that many communities publish.

4.3 Decision to attend: Question 3 in the survey was open ended, "Why did you decide to go to the Open House?" All but 7% of the respondents answered it. The rest of the responses are summarized in Figure 2. While 6% of the respondents were contractors or village officials who went because they were involved in conducting the open house, their responses to the other questions are included in this analysis because most of them also had a flood problem.

"Why did you decide to go to the Open House?"	<u>SS</u>	<u>SH</u>	<u>Tot</u>
Had been flooded	22%	7%	16%
Have a basement flooding problem	36%	3%	23%
Have a sewer back up problem	5%	2%	4%
Want information on a specific topic	19%	50%	31%
Want help	3%	-	2%
Concerned about flooding in the area, came to help a neighbor, etc.	7%	17%	11%
Contractor, village official, etc.	1%	13%	6%
No response	6%	8%	7%
	n=96	n=64	n=160

Figure 2. Why Respondents Attended

Of those who listed basement flooding, several also mentioned sewer backup. Only three respondents (2%) wanted or expected to receive help for their problem. Several came to help a relative or neighbor and some stated that they were concerned about flooding in the area.

Not everyone was interested in floodproofing. Of those who stated they wanted more information, 11% stated that they wanted to know more about flooding in the area or what their community or the state were doing to reduce flooding.

The rationale for attending was quite different for the two open houses. Most of the South Suburban attendees stated that they came because they had a problem while most of the South Holland participants came for information. Either the South Suburban participants had more flood experience than the South Holland residents or the latter were more aware that the objective of the open house was to provide information. The latter possibility is supported by the fact that of the 16 South Holland residents who attended the South Suburban Open House, half stated that they came because they had been flooded.

Conclusion: People attended the open houses for one of two reasons: their houses had been flooded or they wanted information on a specific topic. The rationale for attending was different, apparently because of different publicity. The South Suburban flyer stressed "a self-help program to prevent flood damage" while the South Holland publicity used terms like "public information meeting." While only a few came expecting help, a good number were interested in what government agencies were doing about flooding.

5. Effectiveness of the Open Houses

Open houses can be judged to be effective if the attendees implement flood protection measures. The ultimate effectiveness can be told if the protection measures actually reduce flood damage in later floods. This section reviews the survey results to determine effectiveness of the open houses and the measures implemented by the attendees.

It should be noted that the South Holland respondents had one year to implement a measure while the South Suburban Open House attendees had two years. The latter also had a severe storm two weeks after the open house which may have provided an important reminder of the need for flood protection.

5.1 Flood protection measures taken: Question 5 asked the respondents what flood protection measures they had taken since the open house. Figure 3 shows that approximately 2/3 of the respondents implemented one or more flood protection measure since the open house. As expected, the rate of implementation was higher for the South Suburban participants (73% vs. 58%). The majority of those who implemented something, did more than one thing. One respondent undertook as many as seven projects.

Question 5 listed a variety of flood protection measures. The respondents were asked to identify all that they had implemented. Figure 4 shows the total number of respondents that checked each measure. Because there were many responses with multiple answers, "n" is greater than the number of respondents.

"Have you taken any flood protection measures since the open house?"

	<u>SS</u>	<u>SH</u>	<u>Tot</u>
Did nothing or no response	27%	42%	33%
Implemented one flood protection measure	29%	28%	29%
Implemented more than one flood protection measure	44%	30%	38%
	n=96	n=64	n=160

Figure 3. Implementation of Flood Protection Measures

As expected, most of the implemented measures dealt with basement or sewer flooding (measures a - f). It is interesting to note that every flood protection measure was implemented by at least three participants from each workshop. It is also significant that there are more cases of expensive measures, such as overhead sewers and backup valves (which cost \$3-\$4,000), than of the inexpensive measures, such as a standpipe.

"Have you taken any of the following flood protection measures since the Open House?
(Circle all that apply)"

	<u>SS</u>	<u>SH</u>	<u>Tot</u>
a. Installed overhead sewers	6%	4%	5%
b. Installed sewer backup valve	6%	7%	6%
c. Installed standpipe or sewer drain plug	7%	4%	6%
d. Installed or added a new sump pump	16%	18%	17%
e. Repaired or replaced a sump pump	12%	14%	13%
f. Waterproofed basement walls	13%	7%	11%
g. Regraded yard/built wall to keep water away from house	17%	12%	16%
h. Protected windows or window wells from flooding	6%	5%	6%
i. Bought flood insurance	4%	14%	8%
j. Obtained sandbags/made emergency action plan	2%	11%	5%
k. Other:			
Drain tile improvements	4%	-	3%
Sewer line improvements	1%	-	1%
Dry floodproofing	2%	-	1%
Raised building	1%	1%	1%
City fixed problem	1%	-	1%
Installed backup electrical power	-	1%	1%
Encouraged others to floodproof	-	1%	1%
	n=139	n=73	n=212

Figure 4. Floodproofing Measures Taken

The number that bought flood insurance is lower than expected. However, flood insurance may not be useful for the majority of the people concerned with basement and sewer backup flooding. There was a higher rate of insurance purchase for the South Holland attendees and South Holland does have a greater overbank flood problem than the other suburbs that were represented.

Dry floodproofing measures included raising a door, repairing a crack, and putting plastic and backfill around the house. It is surprising to see that two people raised buildings. One reported building a new garage above street level and the other reported raising the house and garage three feet.

Conclusion: The majority (67%) of the respondents later implemented one or more flood protection measure. These measures ranged from inexpensive to expensive, from minor alterations to major changes to the building. While it cannot be proven that the open houses were the only reason why the measures were taken, it is likely that they had a considerable impact on the property owner's decision.

5.2 Effectiveness of the measures: Were the measures successful? Some of the area was flooded after the open houses were held. However, it must be noted that the later floods were at least two feet lower than the 1990 flood, so some measures would not have been tested. Question 7 asked if the respondent's property had been flooded since they attended the open house. Forty-five percent of the South Suburban respondents and 8% of the South Holland respondents said "yes."

They were then asked if any of their flood protection measures helped prevent or reduce flood damage. Of the 48 respondents flooded since the open house, 10 (21%) did not report taking any flood protection steps. Nine (19%) installed their measures after the later flood.

There remained 29 respondents who had had a flood that tested their flood protection measures that they installed after the open houses. All but two of them attended the South Suburban Open House. Seventy-nine percent (23) stated that their measures helped prevent or reduce flood damage. Ten of these implemented one measure and the other 13 implemented multiple measures. As shown in Figure 5, a wide variety of measures was implemented.

Six of the respondents who had been flooded since they installed their measures (21%) reported that they still had flood damage. All six attended the South Suburban Open House which used a registration form that asked what type of flood problem they had. The measures they installed were evaluated in light of the source of flooding.

Four respondents had reported a sewer backup problem. However, the measures that three of them implemented did not relate to sewer backup protection: they repaired or added sump pumps and one of them regraded the yard. The fourth respondent installed a standpipe. However, she stated that she knew that her measures would not work for her type of flooding, but she could not afford what was needed (estimated at \$3,800).

"Have you taken any of the following flood protection measures since the Open House?"
 [Responses of the 23 people who had been flooded since the open house and the flood protection measure helped prevent or reduce flood damage. Several households installed more than one measure, so n>23.]

a. Installed overhead sewers	7%
b. Installed sewer backup valve	5%
c. Installed standpipe or sewer drain plug	3%
d. Installed or added a new sump pump	14%
e. Repaired or replaced a sump pump	14%
f. Waterproofed basement walls	15%
g. Regraded yard/built wall to keep water away from house	22%
h. Protected windows or window wells from flooding	5%
i. Bought flood insurance	1%
j. Obtained sandbags/made emergency action plan	5%
k. Other: Drain tile improvements	3%
	n=59

Figure 5. Successful Flood Protection Measures

A fifth respondent had a contractor install drain tile and waterproof the basement walls to stop a seepage problem. When the seepage reoccurred eight months later, the contractor returned and did some more work at no cost to the owner.

The sixth respondent was subject to surface flooding aggravated by filling next door. He regraded the yard and protected the windows but apparently still got flooded again.

In sum, of the six respondents who reported that their measures did not work, one is having the problem corrected under the contractor's guarantee. Four others did not implement what was needed for their reported flood problem, one because she could not afford to. It is not known why the sixth person's measure did not work.

Conclusion: Most of the measures implemented pursuant to the open houses proved effective in preventing or reducing damage during later floods. For some reason, five respondents who had their flood protection measures tested (17%) either implemented inappropriate measures or the measures did not work.

6. Conduct of the Open Houses

This section reviews the survey respondents' views on the open houses themselves. They were asked which activities proved most helpful and how they were helped. They also had an opportunity to comment on the conduct of future open houses.

6.1 What was helpful: Question 4 asked the respondents to score the open house's major activities. These scores are summarized in Figure 6. "A" being "very helpful" was given a score of 4.0 and "E," "not helpful" was given a score of zero. The number of respondents who scored each activity is shown followed by the average score for that activity. An activity with an average score of "C" or 2.0 or more would be judged helpful while one with a score of less than 2.0 would be considered as not helpful.

"The Open House included the following activities. On a scale of A to E, please circle how helpful these were to you, with A being very helpful and E being not helpful at all."

	SS		SH		Total	
	n	score	n	score	n	score
Received a handbook on flood protection	84	2.33	51	2.73	135	2.48
Saw a slide show on flood protection	75	2.25	37	2.59	112	2.36
Saw a video on floodproofing	69	2.29	31	2.45	100	2.34
Talked with contractors on their services or products	77	2.32	48	2.54	125	2.40
Talked with local gov't officials about flood protection	66	1.82	42	2.00	108	1.89
Talked with other gov't officials about flood protection	46	1.63	32	2.22	78	1.92
Talked with other homeowners who have been flooded	62	2.11	49	2.53	111	2.30

Figure 6. Helpful Open House Activities

The average scores do not accurately reflect the distribution. The South Holland scores had a normal distribution with the mode at A or B. However, the South Suburban Open House scores were bimodal, with modes at B or C and a second mode at E. For one activity, talking with local officials, one-third of the respondents scored the activity as "E - not helpful." However, it should be noted that most of the local officials were present to explain permit requirements, not to provide floodproofing assistance.

A check of those who stated that the South Suburban Open House activities were not helpful found no pattern. Only a few stated that many of the activities were not helpful, most singled out only two or three activities. These respondents were not concentrated in one community or area. Their comments at the end of the question also varied, including "got good ideas" and "more - more - more relevant news articles..." even though they scored some activities as not helpful.

Different handbooks were distributed at the open houses. Depending on the attendee's type of flooding, the registrars at the South Suburban Open House gave all attendees a copy of DWR's Protect Your Home From Flood Damage or Flooded Basements: A Homeowner's Guide.

South Holland had handouts at its table with the exhibits, not at the registration table. Most people picked up two local brochures and the draft to FEMA's Repairing Your Flooded Home which had been reprinted with a South Holland cover. Protect Your Home was at DWR's table and was also picked up by many participants. In both cases, the handbooks were felt to be the most helpful activity.

Two different videos were shown at the two open houses. At the South Suburban Open House, FEMA's "Best Build 3, Protecting a Floodprone Home" was shown. This 30 minute tape was not expected to be popular because many scenes were not pertinent to the shallow Chicago suburban flooding and sewer backup problems.

The Village of South Holland made its own video about what was being done to reduce flooding in the area. It was also not expected to be popular because it was an hour long and much of it was discussions by Village officials, not how-to illustrations.

However, the respondents' scores proved these expectations wrong. The videos rated as well as the shorter slide shows tailored to local conditions and almost as well as the handbook.

Question 4 also asked the respondent to describe how the open houses may have helped in other ways. Fourteen people (8 South Suburban/6 south Holland) responded. Two noted the benefits of talking to others with the same problem while two others felt the local governments should be doing more. Otherwise, the comments were varied and ranged from statements that they were glad they met certain local officials to "got answers" to "became active in the local floodplain committee."

Conclusion: The handbook, the slide show, the videos, talking with contractors, and talking with other homeowners were rated as most helpful. Talking with government officials was rated as less helpful. However, as noted later, many respondents wanted more information about government programs.

Figure 6 shows that the scores for the South Holland open house's activities were higher than for those implemented in the South Suburban Open House. Possibly there was a group of South Suburban respondents who are responsible for the second, low mode that brought the South Suburban Open House average scores down. Otherwise there is no explanation as to why one open house scored higher than the other on this question. Except for the handbook and the video, there was no significant difference between the activities.

6.2 How the open houses helped: Question 6 asked "How did the Floodproofing Open House help you?" As shown in Figure 7, only 12% of the respondents felt that the open houses did not help while 62% said they had been helped. The types of assistance people received are summarized in Figure 8.

As noted earlier, most of the government staff did not provide flood protection advice. Many of them were building officials who covered permit requirements. Officials from federal or regional agencies discussed flood control projects planned in the area. Therefore, they may not have helped the participants with flood protection ideas.

"How did the Floodproofing Open House help you?"			
	<u>SS</u>	<u>SH</u>	<u>Total</u>
Respondent did not answer	21%	33%	26%
Respondent was not helped	13%	9%	12%
Respondent was helped	66%	58%	62%
	n=96	n=64	n=160

Figure 7. Respondents Helped by the Open Houses

"How did the Floodproofing Open House help you? (Circle all that apply)"	<u>SS</u>	<u>SH</u>	<u>Tot</u>
a. Helped me better understand my flood problem	21%	15%	19%
b. Helped me better understand government flood programs	9%	17%	12%
c. Got flood protection ideas from the handbook	15%	20%	17%
d. Got protection ideas from the slide show or the video	13%	13%	13%
e. Got flood protection ideas from a government expert	7%	6%	7%
f. Got flood protection ideas from a contractor who was there	13%	14%	13%
g. Used the services/got materials from a contractor	5%	5%	5%
h. Showed me where to go for more information or help	9%	2%	7%
i. The Open House confirmed what I had planned to do	8%	6%	8%
	n=177	n=98	n=275

Figure 8. How the Open Houses Helped

Conclusion: All of the open houses' activities helped the participants. The lower score for local officials may be explained by the fact that their job was not to help people with flood protection ideas. Many of those with negative answers still recommended more open houses when they responded to questions 9 and 10.

6.3 Respondents' Recommendations: Question 8 of the survey asked if the respondents would recommend that more open houses be held in the future. As shown in Figure 9, 85% of those who responded to the question favored more open houses.

Question 9 asked the respondents to list two things that would improve future open houses and question 10 asked for other comments on the open houses or flood protection. Figure 10 shows those responses from both questions.

As shown in Figures 8 and 10, fears that contractors would prey on flood victims, would have an unfair advantage, and would make a lot of sales are not supported. Few contractors made sales and the respondents wanted to talk to more contractors in the future.

"Would you recommend that more open houses be held in the future?"	<u>SS</u>	<u>SH</u>	<u>Total</u>
Yes, in other areas	7%	8%	8%
Yes, later in this area	54%	55%	54%
Yes in other areas and later in this area	13%	9%	11%
No	16%	8%	13%
No response	10%	20%	14%
	n=96	n=64	n=160

Figure 9. Recommendations on More Open Houses

Not shown in Figure 10 are responses not related to open houses. These included 27 respondents (16/11) who felt that something else should be done by the local governments,

such as channel maintenance or stormwater management. Some of these were in addition to open houses, some of them instead of open houses.

Fewer than ten of the respondents wrote negative comments about holding open houses. The most hostile ones had a common theme:

"We don't need open houses. We know the things to do. What we need is something done to prevent flooding in the first place - taking care of the river."

"Stop goofing off and get to the Real Problem, The River."

"Don't insult my intelligence by talking and doing nothing."

"Please list two things that would improve future open houses?" and "Please give us any other comments you have on the Open House or flood protection."

	<u>SS</u>	<u>SH</u>	<u>Tot</u>
More information on specific floodproofing topics	13%	10%	12%
More on information on government programs	13%	18%	15%
More videos	6%	-	4%
More contractors	13%	10%	12%
Fewer contractors or sales talks	4%	3%	4%
More local officials	12%	15%	13%
More localized mitigation info/mit table staff	9%	3%	6%
Make sure people involved are more knowledgeable	3%	-	2%
More contacts with others who have floodproofed	1%	5%	3%
More space, (slide show and mitigation tables too crowded)	4%	3%	4%
Make things available for sale	-	3%	1%
Longer hours	-	3%	1%
Better publicity	7%	13%	9%
Repeat or hold more frequently	4%	3%	4%
No improvements needed, good job, etc.	10%	13%	11%
	n=69	n=39	n=108

Figure 10. Respondents' Recommendations

There were more positive comments than negative ones. Many of them complimented their local governments:

"The open house was a very useful source of information on the topic. It also allowed the community to voice concerns to government officials."

"There has been a lot of awareness and continued help since the open house."

"The best point: The video focused on local properties which we could identify with. That, plus the large attendance at the Open House, helped us realize we were not alone."

"It put me in direct contact with the exact person who handled these problems in my village. He called me very shortly afterward and made an appointment to view my property."

"Great idea."

7. Conclusions

Open houses should continue. As shown in section 5 the majority of the participants later implemented flood protection measures. Most of those measures worked for those properties that were later flooded.

This conclusion should be viewed in the context of an area subject to shallow overbank flooding, sewer backup, and basement flooding where protection measures are less expensive and less disruptive than other floodproofing measures, such as elevation and floodwalls.

A few revisions would improve future open houses. These include more contractors, more local officials, more or better staffed mitigation tables, more room, more information, and better publicity to attract more people.

In addition to acting as a vehicle to provide information, open houses facilitate interaction between floodprone residents and their local officials. The many positive comments show that residents appreciate the service from their local governments and the chance to talk to their local officials.

The earlier studies by the University of New Orleans concluded that self-help flood protection should be viewed by all as part of a larger community flood protection effort. Open houses should be publicized as one of several flood protection efforts of the community. Neither the publicity nor the conduct should communicate an attitude that the local governments are abandoning their residents.

These recommendations are incorporated into a separate report by IAFSM, How to Conduct a Floodproofing Open House.



Illinois Department of Transportation

Division of Water Resources
310 South Michigan Avenue/Room 1606
Chicago, Illinois 60604

February 26, 1993

~~Paul Ranz~~
1802 S. Duane Ave.
South Holland, IL 60473

Dear ~~Paul Ranz~~:

On Thursday, May 14, 1992, you attended the South Holland Floodproofing Open House at Seton Academy. Open Houses are one of several ways to provide people with information on ways to protect their properties from flooding.

The Illinois Department of Transportation, Division of Water Resources is evaluating how well the South Holland Floodproofing Open House worked. To do this, we need to know what the participants at the Open House have done about floodproofing since then.

Accordingly, we have prepared the attached questionnaire which is being sent to everyone who signed in at the Open House. In order to better help others who have been flooded, it is important that each questionnaire be completed and returned. It is very important that you complete the questionnaire even if you have done nothing about flooding since the Open House.

All questionnaires will be kept confidential. Each questionnaire has an identification number for mailing purposes only. This is so we can check your address off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire.

Please mail your questionnaire back by March 15. The survey results will be analyzed and a report will be prepared for the project sponsors. You can receive a copy of the report by writing "copy of report requested" with your name and address on the back of the return envelope.

We would be happy to answer any questions you might have. If you would like more information about this project, please call French Wetmore, Project Manager, at 708/747-5273 or me at 312/793-5745. Thank you for your help.

Sincerely,

Molly J. O'Toole, P.E.,
Acting Chief
Flood Mitigation Programs

Attachment



Illinois Department of Transportation

Division of Water Resources

South Holland Floodproofing Open House

Participants' Questionnaire

This questionnaire should be filled out by the person in your household who actually attended the Open House.

- Check here if you have moved into this address since May 1992 or the person to whom the letter is addressed no longer lives there. Do not answer the rest of the questions but please return this questionnaire in the enclosed envelope. Thank you for your help.

Please answer all of the questions. Try to select from the answers provided. If you wish to comment on any question or qualify your answers, please feel free to do so in the margins. Your comments will be read and taken into account.

Please return your completed questionnaire in the enclosed stamped envelope to French Wetmore, Project Manager, Illinois Association for Floodplain and Stormwater Management, 153 Nanti, Park Forest, IL 60466.

1. Do you remember going to the South Holland Floodproofing Open House at Seton Academy in May 1992? (Circle Yes or No)

Yes No If No, skip to question 5 on the next page.

2. How did you hear about the Open House? (Circle all that apply)

- a. Read about it in the newspaper
- b. Received a notice from the city/village government
- c. Heard about it on the radio or television
- d. Heard about it from a friend or neighbor
- e. Other: _____
- f. Don't remember

3. Why did you decide to go to the Open House?

4. The Open House included the following activities. On a scale of A to E, please circle how helpful these were to you, with A being very helpful and E being not helpful at all.

	Very Helpful				Not Helpful	Don't Know
Received a handbook on flood protection	A	B	C	D	E	DK
Saw a slide show on flood protection	A	B	C	D	E	DK
Saw a video on floodproofing	A	B	C	D	E	DK
Talked with contractors on their services or products	A	B	C	D	E	DK
Talked with <i>local</i> government officials about flood protection	A	B	C	D	E	DK
Talked with <i>other</i> government officials about flood protection	A	B	C	D	E	DK
Talked with other homeowners who have been flooded	A	B	C	D	E	DK

If helpful in other ways, please describe:

5. Have you taken any of the following flood protection measures since the May 1992 Open House? (Circle all that apply)

- a. Installed overhead sewers
- b. Installed sewer backup valve
- c. Installed standpipe or sewer drain plug
- d. Installed or added a new sump pump
- e. Repaired or replaced a sump pump
- f. Waterproofed basement walls
- g. Regraded yard/built berm or wall to keep water away from house
- h. Protected windows or window wells from flooding
- i. Bought flood insurance
- j. Obtained sandbags/made emergency action plan
- k. Other: _____
- l. Nothing - *If nothing, skip to question 8.*

6. How did the Floodproofing Open House help you? (Circle all that apply)

- a. The Open House helped me better understand my flood problem
- b. The Open House helped me better understand government flood programs
- c. I got flood protection ideas from the handbook distributed at the Open House
- d. I got flood protection ideas from the slide show or the video
- e. I got flood protection ideas from a government expert
- f. I got flood protection ideas from a contractor who was there
- g. I used the services of or got materials from one of the contractors
- h. Someone there showed me where to go for more information or help
- i. The Open House confirmed what I had planned to do
- j. Other: _____
- k. The Open House did not help me

7. Was your home or property flooded since the May 1992 Open House?

Yes No Don't know

If yes, did any of your flood protection measures help prevent or reduce flood damage?

Yes No Don't know Installed after flood

8. Would you recommend that more open houses be held in the future?

Yes, in other areas Yes, later in this area No

9. Please list two things that would improve future open houses:

10. Please give us any other comments you have on the Open House or flood protection.

Thank you for helping us evaluate the South Holland Floodproofing Open House. Please return your completed questionnaire in the enclosed stamped envelope by March 15. Mail it to French Wetmore, Project Manager, Illinois Association for Floodplain and Stormwater Management, 153 Nanti, Park Forest, IL 60466.



Illinois Department of Transportation
Division of Water Resources

May 8, 1991
Homewood/Flossmoor
High School

South Suburban Floodproofing Open House

REGISTRATION

This information is for the Illinois Department of Transportation, Division of Water Resources research only. It will not be used for private use or any other government programs.

Address of Property:

1. Was your home or property flooded in November 1990?
 Yes No
2. Did your home ever experience flooding at your home prior to 1990?
 Yes No
3. Do you have flood insurance?
 Yes No
4. If you were flooded in November 1990, how high did the water get?
 In yard only
 Water kept out of house by sandbagging, sewer valve or other protective measure

 In basement/crawl space: less than 2 feet
 In basement/crawl space: over 2 feet

 Over first floor: less than 2 feet
 Over first floor: over 2 feet
5. What do you feel was the cause of your flooding?
 Storm sewer backup
 Sanitary sewer backup
 Saturated ground/leaks in basement walls
 Flooded creek or river/overland flooding
 Other _____

Appendix C. South Suburban Open House Publicity

**SOUTH SUBURBAN FLOODPROOFING OPEN HOUSE
WEDNESDAY, MAY 8, 1991**

**A Self-Help Program
to Prevent Flood Damage from Overland Flow,
Sewer Backup, and Leaky Basements**

Sponsored by:
Illinois Assn. of Stormwater and Floodplain Management
Butterfield Creek Steering Committee
Illinois Dept. of Transportation/Div. of Water Resources
South Suburban Mayors and Managers Assn.

Who should attend?

South suburban residents who have flooding problems at their homes.

Why should you attend?

To put an end to flood damages at your home or property through some simple self-help methods.

What information is available at the open house?

- **Self-Help Ideas in Video:**

A slide program which is an introduction to floodproofing techniques will be presented along with the "Best Build" video on how to retrofit your home or property to protect against flood damage.

- **Information from Sponsoring Groups and Agencies:**

Representatives from sponsoring groups will help homeowners understand the causes of flooding and will provide one-on-one advice on how to prevent future flood damages.

- **Educational Pamphlets and Materials:**

Several free guides will be available to help you better understand how you can protect your home from flood damages.

- **Exhibits by Contractors:**

Contractors offering an array of services will be on hand to explain their products, including models of how these products would work in your home to help prevent flood damages.

- **Local Building Officials:**

Building officials from several participating communities will be present to explain how to get the necessary permits and assistance from your City or Village Hall.

- **Flood Insurance Expert:**

A representative from the agency that administers the National Flood Insurance Program will attend to answer your flood insurance questions.

When is the open house being held?

Wednesday, May 8, 1991, from 7 p.m. to 10 p.m.

Where is the open house being held?

Homewood-Flossmoor High School (South Building Cafeteria)
999 Kedzie Avenue, Flossmoor, Illinois
(A map locating the High School is shown on the reverse side of this announcement.)

For Further Information:

Call Molly O'Toole, IDOT/DWR, at 312-793-3123 or
Peggy Glassford, Village Manager, Flossmoor, at 708-798-2300.

Floodproofing open house at H-F High Wednesday

Homeowners plagued by flooding problems can get some important advice at a south suburban "floodproofing open house" Wednesday at Homewood-Flossmoor High School.

The workshop will begin at 7 p.m. and will offer expertise from a variety of private and public entities with knowledge in the floodproofing field.

"We want to help folks determine the specific causes of their flooding problems and provide them with safe, effective, practical ways to prevent them," Molly O'Toole, flood mitigation program manager of the Illinois Department of Transportation's Division of Water Resources, explained.

Other sponsors of the floodproofing workshop include the Butterfield Creek Steering Committee, South Suburban Mayors and Managers Association and the Illinois Association of Stormwater and Floodplain Management.

Also on the program will be professionals in water management, along with contractors and public works officials from several participating communities. A representative from Federal Emergency Management Agency, which administers the National Flood Insurance program, will also be on hand to answer questions about flood insurance.

An array of private contractors will exhibit products and services and suggest ways homeowners can combat flooding problems.

The program will begin with a slide presentation by French Wetmore of French and Associates of Park Forest that will include a discussion of the most common flooding problems and steps homeowners can take to protect their property from sewer backups and overland flooding.

"French's presentation will be followed by a video entitled 'Best Build.' It's major theme will be how to retrofit your home against flooding through the use of flood walls and berms, waterproofing your basement, and elevating structures," O'Toole said.

According to the Northeastern Illinois Planning Commission, flooding is causing more than \$200,000 in damages to south suburban homes and business and public establishments annually and the problem is expected to increase significantly as new homes, business areas and highways are constructed.



Star photo by Todd Panagopoulos

Pat Regan, local floodproofing contractor, will be one of the speakers at Wednesday's workshop.

You Are Cordially Invited
To A Free
**FLOODPROOFING AND SAFETY
OPEN HOUSE**

Thursday, May 14 at
SETON ACADEMY
16100 Seton Road (North Entrance)
South Holland, IL 60473
6:00 P.M. Until 10:00 P.M.

- ** Self-Help Ideas in Video
- ** Information from Sponsoring Groups and Agencies
- ** Educational Pamphlets and Materials
- ** Exhibits by Contractors
- ** South Holland Building Department
- ** Flood Insurance Expert

Presenting A Self-Help Program To Help You Prevent Flood Damage
From Overland Flow, Sewer Backup and Basement Seepage

Sponsored By:
The Flood Control Liaison Committee
of
The Village of South Holland
and other groups

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Longs - Size 38-60
Extra Longs - Size 4

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VINCE

**S.H.B.A.
Installation
Dinner**



The South Holland Busi-
ness Association (SHBA)
will hold its annual instal-
lation dinner on Thura-
day, May 28 at the House
of Lynwood. A social hour
starting at 6:30 p.m., with
dinner at 7:30 p.m. will
begin the evening; the en-
tertainer

FLOODPROOFING OPEN HOUSE

Thursday, May 14 at
SETON ACADEMY
6:00 P.M. Until 10:00 P.M.

and a

PUBLIC INFORMATION MEETING

With

The Flood Control Liaison Committee

Wednesday, June 17 at
THORNWOOD H.S. PERFORMING ARTS CENTER
7:30 P.M.

Be Sure To Read The Current Issue of *South Holland Today* for
Articles On "*The Flood Hazard In South Holland*" And
"*Flood Insurance In South Holland*"

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Business In South Holland. Extra Copies Are Available Free Of
Charge At The Municipal Building At 16226 Wausau Avenue.