



Skagit Information Management Systems  
Analysis of Skagit Natural Hazard Mitigation  
Team Surveys

June 2007

## Introduction

Local building officials work to advance construction practices that ensure property owners the flood protection they need and maintain reasonable flood insurance rates. Today, many Federal Emergency Management Agency (FEMA) flood insurance decisions are being made without considering the effect on property owners. In some cases, flood insurance rates are increasing significantly, and benefits being paid for flood damaged structures as well as contents are frequently called into question by property owners. These policies and practices are concerning to residents of the floodplain and local building officials, both of whom are frustrated by rate increases when nothing has changed in construction code requirements.

In response to public concern, the Skagit Natural Hazard Mitigation Team has initiated a public outreach campaign. The goal of this campaign is to increase property owner understanding of the FEMA National Flood Insurance Program (NFIP), and to gain insight from residents affected by flood insurance program policies. Last fall, a survey was mailed to flood plain residents across Skagit County, inquiring about flood insurance coverage and sharing the following flood facts. The results of this survey will be used to provide local government agencies with information that can be used to guide future changes to local policies regarding construction in the flood plain.

### **Flood Facts:**

- The Skagit River is the third largest river in the western United States (of those rivers that empty into salt water), and 30% of Skagit County residents live in or near high-risk flood areas.
- Flood-related costs countywide far exceed \$10 million for flood response, recovery and reconstruction.
- Homes located in a high-risk flood area are close to 100% guaranteed to experience a flood that will cause at least some property damage, and a 26% chance of experiencing a devastating flood during the 30-year life of a mortgage.
- The same home has a 1 – 2% chance of catching fire, but we all have fire insurance.
- Flooding is the top natural disaster hazard in the U.S., but only 30% of Americans have flood insurance.

## Notes on the Surveys

The below is a basic overview of the surveys:

- 7,613 surveys were sent via US Postal Service bulk mail by the Skagit Natural Hazard Mitigation Team to Skagit River floodplain property owners.
- 492 surveys were returned for a reply rate of 6.46%.
- These surveys were sent with the intention – and quoting from the survey, “to provide local government agencies with information that can be used to guide future changes to local policies regarding construction in the floodplain. ***This survey will present a picture of where government policies need to be changed to be fair to the public.***”

## Surveys by City...

Below is a table of responses grouped by city (on the address – some of these are from outside any city limits).

<b>Tally of Surveys by City</b>			
<b>City</b>	<b>Surveys Returned</b>	<b>City</b>	<b>Surveys Returned</b>
Bow	20	Edison	1
Burlington	151	Hamilton	6
Cape Horn	1	La Conner	33
Clear Lake	5	Marblemount	10
Concrete	27	Mount Vernon	194
Conway	2	Rockport	8
Darrington	1	Sedro-Woolley	33

## Questions and Answers

Following is an explanation of each question and the responses provided by the 492 surveys returned. The numeric responses are included in a table below each explanatory paragraph.

As to question 1, when asked, “Do you have flood insurance”, almost 75% of the respondents indicated flood insurance ownership. However, of the 25% remaining, five (about 1%) did not respond and the rest indicated that they did not have flood insurance. There were also two comments noting location in areas of low risk: Being in a Zone C, or “areas of moderate or minimal hazard from the principal source of flood in the area” according to a FEMA handbook<sup>1</sup> and another comment mentioned living on a hill. Below is a table of responses:

<b>“Do You Have Flood Insurance?”</b>	
<b>Responses</b>	<b>Tally</b>
Yes	369
No	118
No Response	5

Question 2, “Is your property in a flood zone?”, had almost 85% yes responses. Almost 6% did not respond and 4% did not know. Most of the 13 comments posted were yes responses casting doubt upon placement in the flood zone specific to individual properties. Below is a table:

<b>“Is Your Property In A Flood Zone”</b>	
<b>Responses</b>	<b>Tally</b>
Yes	417
No	28
Don't Know	18
No Response	29

<sup>1</sup> National Flood Insurance Program: Answers to Questions About the NFIP. (pg. 31)

Question 3, “Did your lender require flood insurance or did you voluntarily buy it?” had about 21% of returned surveys having non-response. Almost 5% or 10 surveys claimed not knowing whether the flood insurance was required or voluntary. 17% percent of respondents claimed voluntarily purchasing flood insurance and 60% of respondents claimed their lender required purchasing flood insurance. However, three respondents answered *both* voluntary and required. Also, comments of note were made by eight respondents who voluntarily purchased flood insurance and did not have a lender, two comments by respondents paid cash, two comments noted condominium issues, and one respondent had flood insurance waived by resurvey. One respondent did say in one of the seven comments categorized under “other”: “Had no help got no insurance.”

<b>“Did your lender require flood insurance or did you voluntarily buy it?”</b>	
<b>Responses</b>	<b>Tally</b>
Voluntary	83
Required by lender	297
Don't Know	10
No Response	102

Question 4, “How was your coverage amount decided?” was a multi-choice question. Below is a table of affirmative responses, and many respondents affirmed more than one answer:

<b>“How was your coverage amount decided?”</b>	
<b>Potential Criteria</b>	<b>“Yes”</b>
“Insured the full amount of my home loan.”	129
“Same coverage as my homeowner’s policy.”	71
“Insure for the appraised market value”	65
“Insure 80% of my home’s replacement cost”	85
Insure <80% of home replacement cost <sup>2</sup>	3
“Got the maximum available of \$250,000”	63

Some respondents wrote comments to the side of the question. For instance, one respondent claimed an insurance policy of “\$177,000 - \$500 deductible” as other coverage (Q4g). Another respondent noted that they had a, “house valued at \$500,000. We paid for \$250,000, but only received \$42,000 because of no flood vents.” Eight other comments could be categorized as specific alternative insurance levels, two comments were business-related, and three were questions about respondents’ personal insurance policies such as if the policy covered 80% of the home replacement cost or what the maximum payout was.

Question 5, “Was an Elevation Certificate used to help determine insurance rate or coverage amount?” was arguably flawed because the only answers available on the survey were, “Yes”, “No” and “Don’t Know”<sup>3</sup> and therefore, there is arguably doubt to be cast upon the below results. Nevertheless, below are the responses:

<sup>2</sup> This category, less than 80% of home replacement cost, was created by Skagit Information Management Systems to respond to the surveys that noted such.

<sup>3</sup> Of course as with other questions somebody could not respond – hence the creation of a “No Response” category.

<b>Was an Elevation Certificate used to help determine insurance rate or coverage amount?</b>	
<b>Response</b>	<b>Tally</b>
Yes	138
No	130
Don't Know	114
No Response	110

For Question 5, the comments were a potpourri but several comments said the elevation certificate was “necessary for quote” and therefore setting a flood insurance level. Nevertheless, one comment was: “I was advised to get an Elevation Cert. by my agent but it was not needed nor helpful in determining my flood insurance.”

For Question 6, “Was your Elevation Certificate accepted or were you required to obtain a new one?”, the same problem arose of the appropriate answers not being into yes/no/don’t know. Below is a table of answers from the respondents:

Respondent: “This is not a yes/no question.”

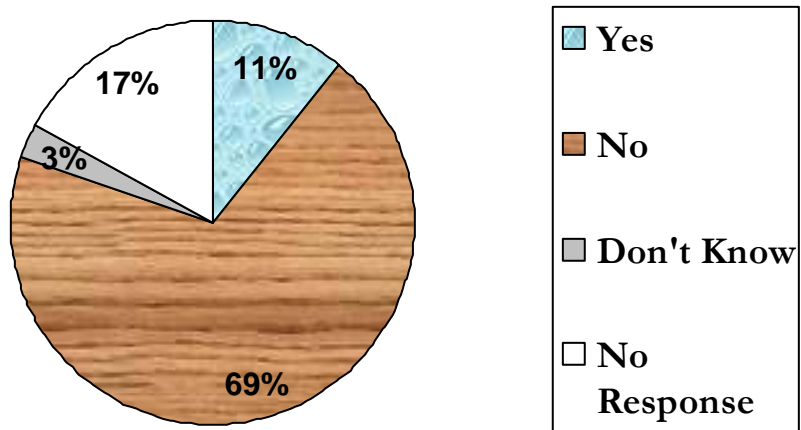
<b>Was your Elevation Certificate accepted or were you required to obtain a new one?</b>	
<b>Response</b>	<b>Tally</b>
Yes	136
No	51
Don't Know	115
No Response	190

As to comments, there were six “N/A” (not applicable) comments and three comments saying they lacked an elevation certificate. One observant respondent corrected the survey preparation team with: “This is not a yes/no question.”

For Question 7, “Have you ever been flooded?”, the responses are below, and also in a pie chart on the following page in order to illustrate proportions:

<b>Have you ever been flooded?</b>	
<b>Response</b>	<b>Tally</b>
Yes	53
No	342
Don't Know	13
No Response	84

### Percent of Respondents Being Flooded



One should also note again that 7,613 surveys were sent out, so readers should notice the small proportion of floodplain residents that have acknowledged being flooded (0.7% of those surveyed). This may be due to good  $\frac{53 \text{ respondents}}{7,613 \text{ surveys}} \times 100 = .07\%$  flood protection for the majority of floodplain residents (several respondents applauded the local diking districts' work). There are a multitude of other likely reasons for the low response rate such as privacy issues, a general perception by the citizenry of lack of influence over government policies, potential confusion from the survey questions, or complacency.

As such, and because some respondents either clicked no, don't know or did not respond to show lack of applicability; the below sub-questions are being tallied only for the affirmative answers:

Affirmative Responses to Flood Recovery Issues	
Question	Tally of Yes Answers
Have you ever made a flood insurance claim?	25
If yes, did you elevate your home?	10
If yes, were you satisfied with the claim?	13
If not satisfied, what problems did you have?	
Claim paid less than repairs cost me	7
Claim process was confusing/frustrating	8
Lack of local support with claims process	2
Took too long to get claim paid	3

Comments were written into the margins however of these questions. For "Have you ever made a flood insurance claim?", two of the five comments noted that the claim was filed with FEMA and of the other three, two discussed the 1921 flood event and the other said the last claim was filed in the 1970s. For, "Did you elevate your home", half of the four comments noted their house was already elevated and another comment said, "Would like to!!" The final comment to elevating your home said, "STUPID!!" As to, "claim paid less than repairs cost me", one comment was made that the claims "did not pay much". Finally, there was one general comment made by a



State Route 530 Concrete resident but not able to be pinned down to a particular question. The comment was, “I have never been flooded but don't know if my property has ever been flooded.”

There were also more comments when another question was asked as to flood insurance claims, namely “Other Problems?” 10 respondents did post responses, responses ranging from complaints regarding culverts along State Route 530 to “Conflicting information from FEMA & insurance company and town.” As one of the three respondents complaining about no coverage, this respondent from Fir Island wrote, “NEVER GOT ONE DIME! Dairy farm under 7 ft. of water 3 months of the farm, and still did not qualify!” Two respondents had no problems and four other respondents posted comments – including one “not happy with contents coverage” and another was, “Conflicting information from FEMA & insurance company and town.”

Question 9 inquired, “What would you change in the flood insurance program if you could?” An effort was made to categorize the 211 responses (and 297 non responses) to provide a statistical output of issues the comments raised. Overall, 581 comments (counting the 297 non responses) were categorized from 492 surveys as many response were multiple categories.

<b>Answers to “What would you change in the flood insurance program if you could?”</b>			
	<b>Tally</b>	<b>Counting “No Comment” Percentages</b>	<b>NOT Counting “No Comment” Percentages</b>
No comment/Don't Know	297	51.12%	
Cost on policyholders	69	11.88%	24.30%
Other	32	5.51%	11.27%
Questioning of maps	27	4.65%	9.51%
Risk, or the lack thereof	19	3.27%	6.69%
Increase coverage	18	3.10%	6.34%
Voluntary not mandatory	18	3.10%	6.34%
Insurance company trust	14	2.41%	4.93%
Dredging request	11	1.89%	3.87%
Payout impacting rate	11	1.89%	3.87%
Reduce coverage to loan amount	11	1.89%	3.87%
Transparency	11	1.89%	3.87%
Lack of general coverage	10	1.72%	3.52%
Contents coverage	8	1.38%	2.82%
Flood insurance a scam	8	1.38%	2.82%
Payout not impacting rate	5	0.86%	1.76%
Subsidizing others at greater risk	5	0.86%	1.76%
Paperwork	4	0.69%	1.41%
NFIP for free	2	0.34%	0.70%
Cleanup coverage	1	0.17%	0.35%
<b>Tallies</b>	581		
<b>Tallies Minus No Comment</b>	284		

With this question, there were many comments and observations made regarding a variety of issues. The most common concern was around cost. Another issue raised was concern around the FEMA flood maps.

Question 10 inquired as to, “Do you know there is a 30-day waiting period for flood insurance?” Below is a table of responses:

<b>“Do you know there is a 30-day waiting period for flood insurance?”</b>	
<b>Response</b>	<b>Tally</b>
Yes	90
No	81
Don't Know	23
No Response	298

Arguably, the majority of 298 no responses were from those who had flood insurance coverage and felt Questions 10 thru 13 were not applicable. Only three comments were made – one respondent was aware of the waiting period before receiving flood insurance, another noted being insured and another wrote, “I did not have a waiting period.”

**Fact:** 24% of respondents indicated having no flood insurance.

Question 11, “Will you voluntarily buy flood insurance knowing that you are at risk?” had only 75 respondents claim that if aware of the flood damage risk would purchase flood insurance compared to 90 respondents noting the contrary. Below is a table:

<b>Will you voluntarily buy flood insurance knowing that you are at risk?</b>	
<b>Response</b>	<b>Tally</b>
Yes	75
No	90
Don't Know	10
No Response	316

This question had nine comments saying in some fashion maybe they would purchase flood insurance if aware of the risk – most of these simply said “maybe” and as such their responses were put under “Don’t Know”. Two comments denied being at any risk, and two comments indicated at least a partial basis for any such decision is the cost.



Question 12, “If yes, do you know where to buy flood insurance?”, had the following responses:

<b>“If yes, do you know where to buy flood insurance?”</b>	
<b>Responses</b>	<b>Tally</b>
Yes	85
No	33
No Response	374

The question garnered three comments, one of which was a question mark, another was “before we got insurance” and the final said “FEMA”.

Question 13, “If no, why not [buy flood insurance if at risk]? (cost, difficulty in purchasing a policy, not personally concerned about damage from a flood, expect the government to pay for damages and rebuild your home, etc.)” was a short answer question in which several lines of blank space was provided for answers if one did not want to circle or underline these potential answers. As with Question 9, an attempt was made to categorize these comments for statistical analysis. The below table, using the 122 submitted comments (non-comments did not apply, although some who had flood insurance left comments), was created for that end:

<b>Comments responding to why not voluntarily purchase flood insurance</b>		
	<b>Tally</b>	<b>% of Tally</b>
Perceived lack of risk	47	38.52%
Cost	45	36.89%
Other	14	11.48%
Dikes provide sense of security	5	4.10%
NFIP a scam	3	2.46%
Elevation certificate a barrier	2	1.64%
Government will bailout floodplain residents	2	1.64%
Perceived lack of contents coverage	2	1.64%
Demand Dredging	1	0.82%
Lack of general coverage	1	0.82%
<b>Total Comments</b>	<b>122</b>	

Question 14 garnered 70 respondents requesting more information on flood insurance. Most of the eight comments were specific to properties.

Question 15, “Was your home built before or after 1981?”, was intended to be a benchmark for homes built after federal and state floodplain regulations became applicable to most areas of Skagit County. Owners of homes built before this date are eligible for lower flood insurance rates because their home is not assumed to be constructed to meet the minimum flood-proofing standards required after this date.

<b>“Was your home built before or after 1981?”</b>	
<b>Reponses</b>	<b>Tally</b>
After	159
Before	293
Don't Know	3
No Response	37

Five of the eight comments noted that home construction work was done before *and* after 1981. One of the comments noted the building was commercial, another said “moved and raised” and the final comment said, “(1930’s)”.

Question 16, “Do you have a basement?”, garnered the following answers:

<b>“Do you have a basement?”</b>	
<b>Responses</b>	<b>Tally</b>
Yes	60
No	382
No Response	50

Of the fourteen comments, most either wrote out how big the basement was or that the structure was partially a basement and partially a crawl space.

Question 16b or how much were basements below ground had only 33 responses of 60 affirmations of basements or about 6.7% of surveys. The average height was 6.37 feet.

Question 17 – regarding crawlspaces – is arguably a three-part question. Below is a table of responses to the first part:

<b>“Do you have a crawlspace?”</b>	
<b>Responses</b>	<b>Tally</b>
Yes	386
No	44
Don't Know	8
No Response	54

One should note however that some of the “Yes” responses were because of the structure having both a crawlspace and a basement. However, the second part of the question – above or below ground – was embedded into the question without a place to respond. As such, there were only 24 above ground affirmations notable on the surveys. The third part of the question – how deep the crawlspace is – which had a blank, got 160 responses with an average depth of almost 3.5 feet. All twelve comments were to the specifics of the respondent’s crawl space.

Question 18 – “Does your crawlspace have flood vents?” – got the following responses:

<b>“Does your crawlspace have flood vents?”</b>	
<b>Responses</b>	<b>Tally</b>
Yes	212
No	94
Don't Know	104
No Response	82

Thirty six comments were given and below is a table attempting to quantify the comments:

<b>Comments to crawlspace having flood vents</b>	
<b>Category</b>	<b>Comments</b>
Air Vents	15
Not to code	2
Can't ID Flood Vents	6
Other	13

Most of the “Other” comments were regarding specific property construction.



## APPENDIX ONE: SURVEY QUESTIONS & ANSWERS

*[Answers are in blue. Total # of surveys: 492]*

### *Flood insurance is NOT homeowners insurance*

<b>Do you have flood insurance?</b> (No response ("NR"): 5)	Yes	<u>369</u>	No	<u>118</u>	Don't know	<u>0</u>
<b>Is your property in a flood zone?</b> (NR: 29)	Yes	<u>417</u>	No	<u>28</u>	Don't know	<u>18</u>
<b>I'm Insured...</b>						
▪ Did your lender require flood insurance or did you voluntarily buy it? (NR: 102)	Required	<u>297</u>	Voluntary	<u>83</u>	Don't know	<u>10</u>
How was your coverage amount decided?						
• Insured the full amount of my home loan. (NR: 252)	Yes	<u>129</u>	No	<u>60</u>	Don't know	<u>51</u>
• Same coverage as my homeowner's policy. (NR: 287)	Yes	<u>71</u>	No	<u>78</u>	Don't know	<u>56</u>
• Insure for the appraised market value. (NR: 287)	Yes	<u>65</u>	No	<u>85</u>	Don't know	<u>55</u>
• Insure 80% of my home's replacement cost. (NR: 292)	Yes	<u>85</u>	No	<u>47</u>	Don't know	<u>68</u>
• Insure less than/< 80% of my home's replacement cost. <sup>4</sup> (NR: 342)	Yes	<u>3</u>	No	<u>82</u>	Don't know	<u>65</u>
• Got the maximum available of \$250,000. (NR: 276)	Yes	<u>63</u>	No	<u>99</u>	Don't know	<u>54</u>
▪ Was an Elevation Certificate used to help determine insurance rate or coverage amount? (NR: 110)	Yes	<u>138</u>	No	<u>130</u>	Don't know	<u>114</u>
▪ Was your Elevation Certificate accepted or were you required to obtain a new one? (NR: 190)	Yes	<u>136</u>	No	<u>51</u>	Don't Know	<u>115</u>
▪ Have you ever been flooded? (NR: 84)	Yes	<u>53</u>	No	<u>342</u>	Don't know	<u>13</u>
▪ Have you ever made a flood insurance claim? (NR: 83)	Yes	<u>25</u>	No	<u>381</u>	Don't know	<u>3</u>
• If yes, did you elevate your home?	Yes	<u>10</u>	No	<u>48</u>	(NR	<u>434</u> )
• If yes, were you satisfied with the claim?	Yes	<u>13</u>	No	<u>19</u>	(NR	<u>460</u> )
• If not satisfied, what problems did you have?						
- Claim paid less than repairs cost me	Yes	<u>7</u>	No	<u>13</u>	(NR	<u>472</u> )
- Claim process was confusing/frustrating	Yes	<u>8</u>	No	<u>12</u>	(NR	<u>472</u> )
- Lack of local support with claims process	Yes	<u>2</u>	No	<u>14</u>	(NR	<u>476</u> )
- Took too long to get claim paid	Yes	<u>3</u>	No	<u>14</u>	(NR	<u>475</u> )

<sup>4</sup> Everything but YES should be heavily discounted as Skagit IMS made this question up to track the comments of some respondents. All non-affirmative responses should be heavily discounted as they were based upon Skagit IMS interpretation.

*[Answers are in blue. Total # of surveys: 492]*

### I'm Not Insured...

▪ Do you know there is a 30-day waiting period for flood insurance? (No Response ("NR"): 293)	Yes	<u>90</u>	No	<u>81</u>	Don't know	<u>23</u>
▪ Will you voluntarily buy flood insurance knowing that you are at risk? (NR: 317)	Yes	<u>75</u>	No	<u>90</u>	Don't know	<u>10</u>
• If yes, do you know where to buy flood insurance? (NR: 374)	Yes	<u>85</u>	No	<u>33</u>	Don't know	<u>0</u>
• If no, why not? (cost, difficulty in purchasing a policy, not personally concerned about damage from a flood, expect the government to pay for damages and rebuild your home, etc.)						

I want more information, contact me at:

Name \_\_\_\_\_

Phone # \_\_\_\_\_

E-mail \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

### Crawlspaces on newer homes affect insurance rates. Tell us about yours.

▪ Was your home built before or after 1981? (NR: 37)	Before	<u>293</u>	After	<u>159</u>	Don't know	<u>3</u>
▪ Do you have a basement? (NR: 50)	Yes	<u>60</u>	No	<u>382</u>	Don't know	<u>0</u>
▪ Do you have a crawlspace? (NR: 54)	Yes	<u>386</u>	No	<u>44</u>	Don't know	<u>8</u>
▪ Does your crawlspace have flood vents? (NR: 82)	Yes	<u>212</u>	No	<u>94</u>	Don't know	<u>104</u>