Risk MAP Discovery Meeting
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Sitka Borough

July 5, 2013
Agenda

- Introductions
- Overview of Risk MAP
- Community Discussion
- Wrap Up
Introductions
How Risk MAP can help your community…….

Increase Community Resiliency

- Develop GIS data to capture community assets
- Capture or Develop Hazard Data
- Estimate Losses
- Develop Problem Statements

Tables and Maps of Community Assets
Maps & Data of Prevalent Hazards
Mitigation Plan Input
Potential Community Assets

- Agriculture and Food
- Banking and Finance
- Chemical
- Commercial Facilities
- Communications
- Critical Manufacturing
- Dams
- Defense Industrial Base
- Emergency Services
- Energy
- Government Facilities
- Healthcare
- Information Technology
- Nuclear Reactors, Materials and Waste
- Postal and Shipping
- Transportation Systems
- Water
Develop GIS data to capture community assets

Capture or Develop Hazard Data

Estimate Losses

Develop Problem Statements

- Flood
  - Existing Studies
  - USACE Studies
  - New FEMA Studies

- Wildfire
  - Alaska DNR – Division of Forestry

- Landslide
  - Alaska DNR - DGGS

- Earthquake/Tsunami
  - Alaska DNR - DGGS
  - USGS/NOAA
Develop GIS data to capture community assets.

Capture or Develop Hazard Data

Estimate Losses

Develop Problem Statements

Bathymetry

Tides

Wind

Waves

Wave Runup

Total Water Level
Develop GIS data to capture community assets

Develop Hazard Data

Estimate Losses

Develop Problem Statements

Table 12. Scenario Comparison of HAZUS Results for 2% annual chance flood

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Total Economic Loss</th>
<th>Economic Loss Ratio</th>
<th>Substantially Damage Buildings</th>
<th>Displaced Population</th>
<th>Debris (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 year Scenario</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>183,780cfs Discharge near Sedro-Woolley</td>
<td>$411.5 M</td>
<td>17.0%</td>
<td>144</td>
<td>13,820</td>
<td>76,645</td>
</tr>
<tr>
<td>Scenario A (Burlington Levee)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario B (Mount Vernon Levee)</td>
<td>$478.8 M</td>
<td>19.8%</td>
<td>135</td>
<td>10,368</td>
<td>79,697</td>
</tr>
<tr>
<td>Scenario C (Combined Levees)</td>
<td>$720.5 M</td>
<td>29.8%</td>
<td>143</td>
<td>19,363</td>
<td>117,875</td>
</tr>
</tbody>
</table>

Loss Category | Residential | Commercial | Industrial | Others | TOTAL

| Building Loss | $135.7M | $443.5M | $11.7M | $14.8M | $209.5M
| Content       | $86.2M  | $113.5M | $24.5M | $45.2M | $269.4M
| Inventory     | $0      | $4.7M   | $4.8M  | $5.5M  | $15.0M
| Subtotal      | $221.9M | $162.4M | $41.1M | $65.5M | $491.0M

| Business Interruption | $40K | $710K | $10K | $390K | $1.2M
|Relocation           | $440K | $280K | $0   | $0   | $720K
|Rental Income        | $180K | $190K | $0   | $0   | $380K
|Wage                 | $110K | $850K | $0   | $2.1M | $3.0M
|Subtotal             | $730K | $2.0M | $10K | $2.4M | $5.3M

| TOTAL                | $222.7M | $164.5M | $41.1M | $67.9M | $486.2M

Maps showing total economic loss for different scenarios and flood depth.
Review and analyze the results of the hazard loss estimations

- Identify areas with highest vulnerabilities on a map

Develop list of problem statements based on findings

- The manufactured home park is the most vulnerable area to flooding. This area floods each year. Flooding is caused by excessive rains
- The sewage treatment plant is located in the 100-year floodplain
- The lighthouse, of significant historic value, is threatened by erosion from coastal flooding. The rate of erosion is 5 feet per year.
How we can help

Mapping Needs
How we can help

Technical Support & Training

- NFIP Training and Technical Support
- Outreach Support
- Hazus Training and Technical Support
- Hazard Mitigation Planning Support

- …other training needs?
Community Discussion

- Determine areas of concern regarding natural hazards
- Discuss activities to mitigate natural hazard risk
- Identify flood study priorities
- Training needs
- Potential risk assessments
- Communication and public outreach
- Discuss additional data, resources, or funding that may be needed to implement solutions
- Relationship to mitigation plan
Review and Prioritize

- Top flood study priorities?
- Other top priorities?
- Overall number 1 priority?
Next Steps

- Draft discovery report within 2 months for your review
- FEMA will review and prioritize potential projects internally based on need and funding availability
- Notify Community of potential projects
- Draft Partnership Agreements with Communities
- Finalize Scopes of Works
- Share Scopes with impacted communities and Finalize Partnership Agreements
Sitka Borough Risk MAP Study Team

- Sally Russell Cox, Alaska DCCED, State RiskMAP Coordinator
- Taunnie L. Boothby, Alaska DCCED, State NFIP Coordinator
- Ann Y. Gravier, Alaska DHS, State Hazard Mitigation Officer
- Kristen Meyers, FEMA Mitigation Planner
- Ted Perkins, FEMA Engineer Lead
- Kelly Stone, FEMA Risk Analyst
- Karen Wood-McGuiness, FEMA NFIP Coordinator
- Fred “Sonny” Kunchick, FEMA HMA POC
- Emily Whitehead, Project Manager (STARR)
- Josha Crowley, Regional Service Center (RSC) Lead (STARR)
- Becca Croft, RSC Outreach/Training Coordinator (STARR)