Community Planning for Flooding & Erosion Hazards

Dillingham August 9, 2006

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Mitigate the Reduce public & private sector losses & damage from flooding & erosion;

Provide coordination & technical assistance to communities;

and

Answer questions & provide training on the National Flood Insurance Program (NFIP)
A Snapshot of...

- The National Flood Insurance Program
  - Dillingham, Togiak & Lake & Peninsula Borough

- No Adverse Impact Floodplain Management

- Resources: Mapping, Erosion Rate Assessments
Purpose of the National Flood Insurance Program (NFIP)

- Provide a better form of assistance to flood victims - Availability of Flood Insurance
- Promote sound floodplain management to guide future development
- Prevent damage to new construction
- Don’t worsen the flood hazard for existing construction
- Mapping the flood risk
In exchange for adopting and enforcing a Flood Damage Prevention Ordinance, federally-backed flood insurance is made available to property owners throughout the city or borough.
A Team Effort

Public

Building Officials, Planners, Public Works, Engineers, State and Federal Agencies

Private

Property owners, Lenders, Insurance agents, Builders, Surveyors, Engineers
Alaska Costs of Flood Disasters

- $158+ Million spent on flood disasters last 20 years
- 67 flood-related disasters, affecting 100+ communities
- $2.3 Million average State expense per flood disaster
- Recent Bristol Bay Area Flood Disasters: Spring 2002, Fall 2005
What is Influencing the Trend?
Increased Property at Risk

Current policy:

- Promotes intensification in risk areas
- Ignores changing conditions
- Ignores adverse impacts impacts to existing properties
- Undervalues natural floodplain functions
Today’s Floodplain

Floodplain Before Filling
Today’s Floodplain
Is Not Necessarily Tomorrow's Floodplain

If large areas of the floodplain are filled, then there will be an increase in the land area needed to store flood waters. This means your home or business may be impacted.
Permitting Development

Development
Any man-made change to improved or unimproved real estate in a regulatory floodplain including:

Buildings or other structures, filling, grading, paving, mining, dredging, excavating or drilling
General Standards

- Flood resistant materials
- Properly anchored
- Utilities elevated
- Water and sewer line backflow protection
- Adequate drainage
Need to examine how you measure success....
Ekwok 2002 Spring Flood High Water Mark
Ekwok High Water Elevation Mark
Ekwok HWM 2002 Tesoro Building
New Stuyahok
No Adverse Impact Explained

NAI is a concept/policy/strategy that broadens one's focus from the built environment to include how changes to the built environment potentially impact other properties.

NAI **broadens property** rights by protecting the property rights of those that would be adversely impacted by the actions of others.
Activities that could adversely impact flood damage to another property or community will be allowed only to the extent that the impacts are mitigated or have been accounted for within an adopted community-based plan.
Local government - Local Decision makers are the key

- Develop and adopt No Adverse Impact language into community-based planning
- Adopt No Adverse Impact strategies/activities
- Educate citizens on the “Good Neighbor Policy”
Community Activities that can Incorporate NAI:

- Hazard Identification
- Education and Outreach
- Planning
- Regulations and Standards
- Mitigation Actions
- Infrastructure
- Emergency Services
Hazard Identification

- Use a comprehensive mapping approach
- Consider Reflecting future conditions
- Identify hazards not mapped by FEMA
Floodplain Mapping...issues to consider

- Flood heights increase with development, more years of data
- Ice Jam Heights, Erosion Zones
- Don’t map in a vacuum
- Get Support of the development community
Erosion Management Policy needs to be developed
Channel Migration... a key concept
Reg’s and Development Standards . . .

- FREEBOARD consider more restrictive standard +1’, +2’ better yet!
- Accounts for future increase in flood stages
- Significantly lowers flood insurance rates
- Subdivision Standards - minimal protection easily overlooked
  - Consider requiring ANY Size development to develop flood data
  - Preliminary Plats that don’t meet “provide adequate drainage” adversely impact others
Consider impacts of maintenance, repair and new construction

Consider individual and cumulative impacts

Mitigate while not transferring the problem elsewhere
Bridges & culverts - What are the standards??
Actions Your Community Can Take

- Define “adverse impact”, based on your community’s unique condition
- Evaluate your hazards and programs
- Identify existing adverse impacts in the floodplain and throughout the watershed
Actions Your Community Can Take...

- Restrict Critical and Hazardous Materials from floodplains especially areas with high velocity or significant depths
- Consider Setbacks for Erosion
- Adopt more restrictive standards based on local conditions/concerns (Mudslides, Debris, Ice Jams, etc.)
Many changes occur in response to actual or perceived crisis
CONCLUSION

Current Approaches Create Future Disasters

If we continue to encourage at-risk development and ignore the impact to others, can we accept the consequences...

...and, are you willing to pay for it?