Regional Assessment of Tsunami Hazard Management Plans: The Case of the US Pacific Northwest

Edmund Merem  
*Jackson State University*

Yaw Twumasi  
*Alcorn State University*

Joan Wesley  
*Jackson State University*

Benetta Robinson  
*Jackson State University*

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Wednesday, February 16, 2011

Workshop Session III

Time of Session: 3:30-5:00pm

Session Title: Mitigation Program Assessment

Speakers: Edmund Merem, Jackson State University (presented on his behalf and colleagues):
Yaw Twumasi, Alcorn State University (not present)
Joan Wesley, Jackson State University (not present)
Benetta Robinson, Jackson State University (not present)
Timothy De Palma, Florida Atlantic University
Amanda Green, The University of New Orleans

Room: 204
Head Count: 13

Note Takers: Carrie Beth Lasley and K. Brad Ott

Notes:

[Presented via Powerpoint] –

Edmund Merem gave self introduction and posed the question … Why study this –

Pacific Northwest is along the “Ring of Fire” –

- Research objectives
  - background and issues
  - Plan evaluation criteria
- Methodology ...

Objectives of the research –

- analyze current issues in tsunami hazard management planning
- assess risks posed in the Pacific Northwest … half of America's population travels to these areas – in addition to residents
  - To evaluate local plans
  - Identify mitigation measures
Design a decision support tool for policy makers

Background information issues –

- (see powerpoint)
  - limitations of local planning – trying to actualize face challenges of funding and awareness
- questions of why? – importance of threat

Indian Ocean before/after – 2004 Tsunami

loss of life could have been avoided had global alert systems been synchronized

Earthquake causes tsunami –

Table of largest earthquakes in the U.S. History

Summary of Plan Evaluation Criteria –

- Factual basis – based on facts, public education and compliance
- Goals and Objectives – clear; shaped by local realities
  - Policies, tools and strategies – i.e., zoning, mapping of utilities, hazardous waste sites, critical infrastructure, vulnerable populations etc...
  - Intergovernmental coordination – very important, know which relationships interlock, not just political leadership (though knowing the leadership struggles can address problems in advance)
- Plan implementation – breakdown of specific tasks to actualize plans of action

Study area and justifications –

- 460 cities from Alaska to California – major populations (include Hawaii)
- potential disruptiveness on the economy and life, broke down by populations

Relative Tsunami risk (Gulf Coast low) …

Cascadia Subduction Zone

Computer simulation of aftermath – Pacific Ocean into the Columbia River (like storm surge) …

examples of impacts – 1964 Alaska earthquake; …

Generic Plan Assessment – Factual basis

Goals and Objectives – an example of Portland, Oregon; example of Hilo, Hawaii

Intergovernmental collaboration examples – challenge of moving beyond localities – a major weakness … Only Oregon and California have truly begun widespread education and mitigation measures – but both still long way to go …

Recommendations – key one: promote a regional approach
Questions of Edmund –
Unidentified male /citing the example of Indian Ocean photo – was this permanent damage?
Edmund Merem =yes …

Carrie Beth – the plans that incorporated tsunamis – did they address bay impacts?
Edmund Merem =it is still a work in progress; San Francisco Bay for example – challenges

“Pre-Disaster Planning at Florida Community Colleges: A Comparison of FEMA Guidelines to Processes and Practices”

Timothy De Palma, Florida Atlantic University

[Presentation with PowerPoint]

Intro – his dissertation research (successfully defended) …

Background event – March 2000 Homeland Security planning began – then accelerated with the 9-11 attacks – pre-disaster evaluation planning

Hurricanes

University violence

Statement of the problem –

State of Florida community colleges key to workforce training … 28 community colleges business officers surveyed … mixed-method research design …

Conceptual lens – DRU model offers a comprehensive 4-phased approach to pre-disaster planning:

1. organization of resources 2. 3. 4.

2. Research questions

Phases of DRU development and implementation

Limitations of study – findings might vary on timing of surveys

Study Significance –
response to Presidents' Commission on Campus safety and FEMA

Analysis of research questions – including actual implementation
“Alpha” and “Beta” localities – confidentiality preserved

involvement of stakeholders – on campus and in the larger community … example of Sheriff’s office having advance building plans to know where to go during crisis

Mitigation planning – back up of data, back-up generators …

Make-up of advisory teams – challenge of becoming pro-active versus reactive

Identification of hazards, limitations in responses and planning

Summary of findings – goals and objectives / involvement of internal and external stakeholders … no formula was to fund mitigation actions (i.e. no cost-benefit analysis)

Adoption of Mitigation Plan

Measuring effectiveness of mitigation actions – lack of follow-up

Communicating mitigation planning (was internal but not external – lacking public awareness)

Conclusions –

• Conduct stakeholder inventory
• appoint project managers
• limitation of plan implementation even if plans are in place

University mitigation plan adoption varied – lack of a project manager often the difference between whether a plan is adopted or left on the shelf

follow-up recommendations

recommendations for future research – assessment:

1. Private institutions
2. Questions of Timothy De Palma –

Unidentified female / what differences might be between a four-year institution and community college level?

Timothy De Palma = not part of study

Unidentified male / what is the difference between implementation? Do they see it as a financial issue-loss of revenue?
Timothy De Palma = having a designated manager is key; …

Unidentified male / in your research – was there institutional memory utilized?

Timothy De Palma = only antidotal – varying experience

Unidentified male / (comment) sometimes doing this kind of planning is like selling life insurance – “I feel pretty good today – so I won't be dying soon; motivation for mitigation is not organic – just have to because of funding or responsibility/requirements – reinforcing “planning fatigue”

Timothy De Palma = agreed

“After Katrina: Assessing the UNO DRU Initiative”

Amanda Green, The University of New Orleans
[PowerPoint presentation]

Introduction and her background – Business manager for the College of Sciences; Masters Student in MPA; long-time civil servant; Katrina survivor … Hazards track unfolded – introduction in abstract

DRU implementation at UNO history – funding from FEMA … rather than contracting with an outside entity – use in-house expertise … research team (CHART and others) and Advisory Committee – various campus stakeholders … focus groups and stakeholder interviews provided content and areas of research …

15 hazards were identified … cut straight over to goals and strategies –

1.protect lives of student and faculty, staff at UNO
2.safeguard infrastructure
3.restoration of operations
Strategy response – in parts (list) …

UNO Hazard Mitigation Plan was adopted by FEMA in 2006

recounting experience of Katrina – UNO becoming site of reception for evacuees from more flooded areas – impacts on campus

Action items –

1Have a permanent DRU advisory committee
2Drainage system evaluation of environs – impact of drainage/pumping out … reliance on city for drainage, with campus monitored … parts of campus safeguarded (raising parking lots, etc)
3
4Safe floor area set aside – second floors … safeguarded shelter
Prioritization of campus buildings through evaluations

Future development and construction for DRU compliance (limitation – items must be put through the state of Louisiana Office of Facility Planning and Control … much stronger guidelines must be strengthened beyond state guidelines

Data must be reformatted to make available for public safety agencies use

Revision of university operating procedures

Emergency Warning System instituted / implemented (in progress)

Business continuity plan implementation (documents reside in Sharepoint) … mandatory direct deposit for employee payroll

DRU education – course development in progress … student orientation and location of emergency plans / brochures – an educated student body is a safer student body.

DRU hazard mitigation projects – in conjunction with DRU course … observance of National Preparedness Month – in September …

Increased use of online learning – web-based learning tools (Blackboard/Sharepoint) – the only university to have a fall 2005 semester

Mental health and violence prevention – just added as an DRU action item … re-establish the UNO workplace violence committee …

Plan and prepare – review and recover …

Questions of Amanda Green –

Unidentified male / How was UNO able to get back as the only university open for fall 2005 discussion amongst group (other UNO participants lead)

(Ken D’Aquin, University Computing Center, UNO) Comment: “A huge part of what you are exists in social media and computers …”

challenges of Katrina aftermath and recovery …

Unidentified male / question about Blackboard – were most faculty able to adapt?

Response: yes

Unidentified male / (question-comment) challenge of disaster recovery – emotional level needs to be dealt with