

2-1-2011

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

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## Recommended Citation

Merem, Edmund; Twumasi, Yaw; Wesley, Joan; and Robinson, Benetta, "Regional Assessment of Tsunami Hazard Management Plans: The Case of the US Pacific Northwest" (2011). *DRU Workshop 2011 Presentations - Disaster Resistant University Workshop: Building Partnerships in Mitigation*. Paper 20.  
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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 –

- 1 Have a permanent DRU advisory committee
- 2 Drainage 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
- 4 Safe floor area set aside – second floors ... safeguarded shelter

- 5Prioritization of campus buildings through evaluations
- 6Future 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)
- 7Data must be reformatted to make available for public safety agencies use
- 8Revision of university operating procedures
- 9Emergency Warning System instituted / implemented (in progress)
- 10Business continuity plan implementation (documents reside in Sharepoint) ... mandatory direct deposit for employee payroll
- 11DRU education – course development in progress ... student orientation and location of emergency plans / brochures – an educated student body is a safer student body.
- 12DRU hazard mitigation projects – in conjunction with DRU course ... observance of National Preparedness Month – in September ...
- 13Increased use of online learning –web-based learning tools (Blackboard/Sharepoint) – the only university to have a fall 2005 semester
- 14Mental 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