ARCTIC RISK MANAGEMENT NETWORK

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NORTH SLOPE BOROUGH RISK MANAGEMENT

Barrow AK 8.4.2015
ARCTIC RISK MANAGEMENT NETWORK (ARMNET)
ARMNET GOALS

WHO: RISK MANAGEMENT PRACTITIONERS AND RESEARCHERS LINKED ACROSS THE ARCTIC REGIONS OF CANADA AND ALASKA

WHY: TO IMPROVE RISK, EMERGENCY AND DISASTER PREPAREDNESS AND MITIGATION THROUGH COMPARATIVE ANALYSIS AND APPLIED RESEARCH

CURRENT PARTNERS: NORTH SLOPE BOROUGH (NSB) RISK MANAGEMENT, APPLIED RESEARCH IN ENVIRONMENTAL SCIENCES NONPROFIT, INC. (ARIES), CANADIAN RISK AND HAZARDS NETWORK (CRHNET)

FUNDING SPONSORS: US EMBASSY (OTTAWA), ARIES, AND NSB RISK MANAGEMENT, CRHNET, BENoit & ASSOCIATES
MISSION

ARIES IS A NON-PROFIT RESEARCH ASSOCIATION PROMOTING COLLABORATIVE RESEARCH, PUBLIC EDUCATION, AND PUBLIC OUTREACH DESIGNED TO ENHANCE CORPORATE AND COMMUNITY BASED DECISION MAKING.

WWW.ARIESNONPROFIT.COM
WORKING TOGETHER FOR A SAFER TOMORROW

PROGRAM:
APPLIED RESEARCH IN ENVIRONMENTAL SCIENCES NONPROFIT, INC. (ARIES)

SPONSOR:
DHS NATIONAL CENTER OF RISK AND ECONOMIC ANALYSIS OF TERRORISM EVENTS (CREATE) CENTER OF EXCELLENCE FOR SCIENCE AND TECHNOLOGY

DHS RESEARCH ASSOCIATES: ANNE GARLAND AND LLOYD MITCHELL, CO-PIs
CREATE MISSION

To improve our Nation’s security through research and development of advanced models and tools to evaluate the risks, costs and consequences of terrorism and natural and manmade hazards to guide economically viable investments in homeland security. (Strategic Plan 2012-2016)
"WORKING TOGETHER FOR A SAFER TOMORROW" RESEARCH FRAMEWORK (TRIBALLY INCLUSIVE GEOGRAPHIC AREA)
WORKING TOGETHER FOR A SAFER TOMORROW MODEL

DHS NATIONAL CENTER OF RISK AND ECONOMIC ANALYSIS OF TERRORISM EVENTS (CREATE)

ACTIVITIES

• OUTREACH EDUCATION
• INTEGRATED DISCIPLINES
• UNITIZED RESEARCH (TEAM)
• RESEARCH AND FIELD PROJECTS
• PRACTITIONER MODELS, TOOLS AND PRODUCTS
• RESEARCH TRANSITIONS
• NATIONAL CONFERENCE PRESENTATIONS AND PUBLICATIONS

HTTP://CREATE.USC.EDU/

AUDIENCES/PARTICIPANTS

• TIGA RELATED (TRIBALLY INCLUSIVE GEOGRAPHIC AREAS)
• MINORITY RELATED (AFRICAN AMERICAN, AMERICAN INDIANS, HISPANICS, LATINOS, CHICANOS)
CUMULATIVE REGIONAL INTEGRATED OPERABILITY SCORE (CRIOS) FOR TRIBAL INCLUSIVE GEOGRAPHIC AREAS (TIGA)

ACHIEVING REGIONAL, LOCAL, AND TRIBAL INTEGRATION TO REDUCE RISKS AND THE ECONOMIC IMPACTS OF DISASTER AND TERROR EVENTS

THE PROJECT ALIGNS WITH DHS SECRETARY NAPOLITANO FIRST ACTION DIRECTIVES OF JANUARY, 2009, RELATIVE TO STATE, LOCAL, AND TRIBAL INTEGRATION.

CUMULATIVE REGIONAL INTEGRATED OPERABILITY SCORE (CRIOS) FOR TRIBAL INCLUSIVE GEOGRAPHIC AREAS (TIGA)

• COLLABORATIVELY DESIGNED (2008) AND IMPLEMENTED BY A STUDENT PARTICIPANT TEAM OF APPLIED RESEARCH IN ENVIRONMENTAL SCIENCES NONPROFIT, INC. (ARIES), IN THE DEPARTMENT OF HOMELAND SECURITY (DHS CREATE) PROGRAM TITLED WORKING TOGETHER FOR A SAFER TOMORROW (WTST),

• APPLIES A THREE-STEP MODEL FOR MULTI-JURISDICTIONALLY DIVERSE REGIONS (TRIBALLY INCLUSIVE GEOGRAPHIC AREA OR TIGA) TO INTEGRATE EMERGENCY RESOURCES, SERVICES, AND CAPABILITIES

• WITH THE MANAGEMENT GOAL OF OPERATING COOPERATIVELY AS RESILIENT COMMUNITIES IN THE EVENT OF NATURAL DISASTERS OR FROM TERRORISM.
CRIOS 2007 (IPY) AND 2012-2015 NORTH SLOPE BOROUGH AK.

• Collaboration with the North Slope Risk Management and Local Emergency Planning Committee for risk assessment workshops IPY2007-2008

• Historical Ecology for Risk Management: Youth Sustainability (HERMYS) 2012

• Coastal Erosion Mitigation Study of Critical Infrastructure
  • Sea level rise
  • Storm Surge
  • Permafrost Calving
PROPOSED ARMNET ABSTRACT AND MODEL

THE ARCTIC RISK MANAGEMENT NETWORK (ARMNET) WAS CONCEIVED AS A TRANS-DISCIPLINARY HUB

- TO ENCOURAGE AND FACILITATE GREATER COOPERATION, COMMUNICATION AND EXCHANGE AMONG AMERICAN AND CANADIAN ACADEMICS AND PRACTITIONERS ACTIVELY ENGAGED IN THE RESEARCH, MANAGEMENT AND MITIGATION OF RISKS, EMERGENCIES AND DISASTERS IN THE ARCTIC REGIONS.
- TO ASSIST REGIONAL DECISION-MAKERS THROUGH THE SHARING OF APPLIED RESEARCH AND BEST PRACTICES
- TO SUPPORT GREATER INTER-OPERABILITY AND BILATERAL COLLABORATION
- TO FACILITATE NETWORKING, JOINT EXERCISES, WORKSHOPS, TELECONFERENCES, RADIO PROGRAMS, AND VIRTUAL COMMUNICATIONS (E.G. WEBINARS).
CLEARINGHOUSE FOR RISK REDUCTION PARTNERSHIPS

**MOST IMPORTANTLY, ARMNET IS A CLEARINGHOUSE FOR ALL INFORMATION RELATED TO THE MANAGEMENT OF THE FREQUENT HAZARDS OF ARCTIC CLIMATE AND GEOGRAPHY IN NORTH AMERICA,**

- **EMERGING CHALLENGES ARISING FROM CLIMATE CHANGE,**
- **INCREASED MARITIME POLAR TRAFFIC,**
- **EXPANDING ECONOMIC DEVELOPMENT IN THE REGION.**


*Most of the Arctic, like most of the world, is commonly owned. With ownership comes the obligation to manage our resources for the benefit of the total.*

*To do that, we must understand the reality, the richness, and the responsibility of the North.*

– Governor Walter J. Hickel, Founder Institute of the North
http://www.institutenorth.org/about/
PROPOSED ARMNET PLANS
WE NEED YOUR HELP AND INPUT!

OVERVIEW AND FEEDBACK

WHO:
ARCTIC EM, RM, AND SAR PRACTITIONERS
ARCTIC RESEARCHERS (DISASTER RISK REDUCTION)

HOW:
ARMNET PARTNERSHIPS AMONG PRACTITIONERS AND DISASTER RESEARCHERS

(PHOTO: UAA COASTAL ENGINEER AND NSB DISASTER COORDINATORS IMPACT ASSESSMENT AND CONSULT OF ERODED RESERVOIR AT PRUDHOE BAY)

WHAT:
ARMNET INFRASTRUCTURE

WHERE AND WHEN:
ARMNET LOGISTICS
ARMNET INFRASTRUCTURE

WHAT:
• EXISTING RESEARCH CONTENT
• GAPS IN RESEARCH THAT NEED TO BE FILLED

HOW:
• ACCOMPLISH RESEARCH
• APPLY RESEARCH WITH COMMUNITIES
• EMO AND SAR INVOLVED TO PROVIDE GUIDANCE AND PERMISSIONS

WHO:
• EMO AND SAR LIMITED TIME DOING THE RESEARCH
• PARTNER WITH DISASTER RESEARCHERS TO PLAN, DEVELOP RESEARCH FOCI
CURRENT CONTEXT

ARE YOUR RESEARCH NEEDS ON ARCTIC SAR/EM CURRENTLY BEING MET BY THE CANADIAN ACADEMIC/RESEARCH COMMUNITY?

NO __ SOMEWHAT __ ADEQUATELY __ COMPLETELY ___

COMMENTS:
CONTEXT

WHERE DO YOU CURRENTLY ACCESS RELEVANT RESEARCH/NEW INFORMATION ON ARCTIC SAR/EM/RM

ACADEMIC JOURNALS/PERIODICALS
NORTHERN ROUNDTABLE MEETINGS
BOOKS
TABLETOP EXERCISES
TRAINING EXERCISES
SAR/EM WEBSITES
ARCTIC CONFERENCES EG. ARCTICNET
CONSULTANTS
NATIONAL SAR/EM CONFERENCES

OTHER _______________________________________

COMMENTS:
CONTEXT

WHAT ARE THE BIGGEST OBSTACLES TO RESEARCH ON ARCTIC SAR/EM/RM

LACK OF EMO TIME

__ LACK OF FUNDING/RESOURCES
__ LACK OF RESEARCHERS/EXPERTS EDUCATED IN ARCTIC SAR/EM
__ NO COORDINATING RESEARCH BODY
__ LACK OF COMMUNITY RESOURCES/INTEREST

OTHER: _________________________

COMMENTS:
CONTEXT

RATE THE RESEARCH TOPICS RELATED TO ARCTIC RISKS AND HAZARDS THAT ARE OF GREATEST INTEREST/CONCERN TO YOUR REGION

(Scale of 0 – 3)

0 = No Interest  1 = Some Interest  2 = Strong Interest  3 = Critical Interest

FLOODING
CATASTROPHIC POWER FAILURE
FOREST/TUNDRA FIRE
STORM SURGE
COASTAL EROSION
PLANE CRASH
OIL SPILL
CHEMICAL SPILL
SHIP SINKING
TERRORISM
INFRASTRUCTURE FAILURE
EXTREME WEATHER
VANDALISM
RESUPPLY FAILURE/CUT OFF
EPIDEMIC
SAR INCIDENT
OTHER ____________

COMMENTS:
SUMMARY OF ASSESSMENT QUERIES

Please score each line according to the following scale:

0 = NOT LIKELY 1 = SOMEWHAT LIKELY 2 = LIKELY 3 = MOST LIKELY

__ COMPILING AND SYNTHESIZING EXISTING ARCTIC RISK/HAZARD RESEARCH
__ MATCHING EMO RESEARCH NEEDS AND EXPERTS
__ FACILITATING PAN-ARCTIC COLLABORATION IN NEW RESEARCH
__ FOSTERING THE EXCHANGE OF RESEARCH BETWEEN ARCTIC REGIONS
__ SUPPORTING PARTICIPATORY RESEARCH WITH THE INVOLVEMENT OF COMMUNITIES
__ NETWORKING EMOS/COMMUNITIES WITH COMMON RESEARCH INTERESTS
__ FACILITATING JOINT RESEARCH PROJECTS/FUNDING APPLICATIONS/TRAINING

OTHER:

COMMENTS:

COULD AN ARCTIC RISK MANAGEMENT NETWORK (ARMNET) SUPPORT YOUR EMO?
WHAT

**EMO AND SAR GUIDE AND DIRECT RESEARCHERS ABOUT GAPS**

- IN THE EMO AND SAR KNOWLEDGE BASE (DATA, METHODS AND TOOLS)
- ABOUT THE REGION AND COMMUNITIES HAZARDS (GEOGRAPHICALLY AND HISTORICALLY SPECIFIC)

SCORE WITH THE FOLLOWING SCALE:
0=NOT LIKELY 1=SOMEWWHAT LIKELY 2=LIKELY 3=MOST LIKELY

RESEARCHERS CAN ASSIST WITH GAPS ABOUT KNOWLEDGE BASE (DATA, METHODS AND TOOLS)
SCORE 0-3:
COMMENTS:

RESEARCHERS CAN ASSIST WITH GAPS ABOUT REGION AND COMMUNITIES HAZARDS (GEOGRAPHICALLY AND HISTORICALLY SPECIFIC)
SCORE 0-3:
COMMENTS:
WHAT

IF GAPS IN RESEARCH ARE FROM LACK OF DATA FOR DECISION MAKING, THEN SOURCES OF FUNDING ARE SOUGHT IN PARTNERSHIP WITH EMO AND SAR FOR

• NEW RESEARCH WITH ARCTIC COLLABORATIONS

• PARTICIPATORY RESEARCH WITH COMMUNITY ORGANIZATIONS INVOLVED

SCORE WITH THE FOLLOWING SCALE:
0=NOT LIKELY 1=SOMEWHT LIKELY 2=LIKELY 3=MOST LIKELY

• NEW RESEARCH WITH ARCTIC COLLABORATIONS
SCORE 0-3=
COMMENTS:

• PARTICIPATORY RESEARCH WITH COMMUNITY ORGANIZATIONS INVOLVED
SCORE 0-3=
COMMENTS:
HOW

RELEVANT RESEARCH AVAILABLE BUT NEED
DISASTER RESEARCHERS TO

• COMPILE AND SYNTHESIZE INFORMATION
  PER SITUATION

• NETWORK WITH ARCTIC RESEARCHERS

• PROVIDE USER FRIENDLY AND RELEVANT
  APPLICATIONS

SCORE WITH THE FOLLOWING SCALE:
0=NOT LIKELY 1=SOMewhat LIKELY 2=LIKEly 3=MOST LIKELY

• INFORMATION COMPILED AND SYNTHESIZED
  SCORE 0-3=

COMMENTS:

• NETWORK WITH ARCTIC RESEARCHERS
  SCORE 0-3=

COMMENTS:

• USER FRIENDLY AND RELEVANT APPLICATIONS
  SCORE 0-3=

COMMENTS:
HOW

EMO AND SAR CORRESPOND WITH DISASTER RESEARCHERS TO REVIEW OPTIONS ABOUT DECISION MAKING FOR

• COMMUNITIES

• REGION

• ACROSS REGIONS

SCORE WITH THE FOLLOWING SCALE:
0=NOT LIKELY 1=SOMewhat LIKELY 2=LIKELY 3=MOST LIKELY

• COMMUNITIES
SCORE 0-3=
COMMENTS:

• REGION
SCORE 0-3=
COMMENTS:

• ACROSS REGIONS
SCORE 0-3=
COMMENTS:
HOW

IF EMO AND SAR PREFER, DISASTER RESEARCHERS INCLUDE VISITS TO LEARN ISSUES AND RISK REDUCTION OPTIONS WITH

• EMO AND SAR

• COMMUNITY ORGANIZATIONS

• DEVELOP PARTICIPATORY RESEARCH AND COMMUNITY SERVICE LEARNING OPPORTUNITIES

SCORE WITH THE FOLLOWING SCALE:
0=NOT LIKELY 1=SOMewhat LIKELY 2=LIKELY 3=MOST LIKELY

• EMO AND SAR

SCORE 0-3=
COMMENTS:

• COMMUNITY ORGANIZATIONS

SCORE 0-3=
COMMENTS:

• DEVELOP PARTICIPATORY RESEARCH AND COMMUNITY SERVICE LEARNING OPPORTUNITIES

SCORE 0-3=
COMMENTS:
ARMNET LOGISTICS
WHERE AND WHEN

SCORE WITH THE FOLLOWING SCALE:

0=NOT LIKELY 1=SOMewhat LIKELY 2=LIKELY 3=MOST LIKELY

VIRTUAL HUB
RADIO PROGRAMS
CDS
DVDS
TELECONFERENCES
NEWSLETTER BRIEFS
RISKY BUSINESS ARTWORK/MUSIC
ROLE PLAYS
TABLE TOP EXERCISES
TRAINING SCENARIOS
APPLIED THEATER
WORKSHOPS AT CONFERENCES
ANNUAL TRAVEL AWARDS TO CONFERENCES

AMONG EMO, SAR, AND RESEARCHER PARTNERS, REDUNDANT AND INTEROPERABLE COMMUNICATIONS CAN INCLUDE THE FOLLOWING:

• VIRTUAL HUB (ANY TIME AVAILABILITY)
• RADIO PROGRAMS (REGULAR DISTRIBUTION SUCH AS PER MONTH)
• CDS (TELECONFERENCE RECORDINGS TO SHARE)
• DVDS (SHARING CASE STUDIES AND STRATEGIES)
• TELECONFERENCES (AS NEEDED OR ROUTINE)
• NEWSLETTER BRIEFS (VIRTUAL HUB, E-NEWSLETTERS AND MAIL)
• RISKY BUSINESS ARTWORK/MUSIC FOR SHARING ACROSS COMMUNITIES
• ROLE PLAYS (E.G, TELECONFERENCE, VIDEOS OR RADIO PROGRAMS)
• TABLE TOP EXERCISES (AMONG EMO, SAR AND RESEARCHERS)
• TRAINING SCENARIOS (AMONG EMO, SAR AND RESEARCHERS)
• APPLIED THEATER (LOCAL CREATIVE DRAMAS FOR RISK EDUCATION AND COMMUNICATION)
• REGULAR ARMNET WORKSHOPS AND RECEPTIONS AT FAVORITE CONFERENCES
• ANNUAL TRAVEL AWARDS FOR ARMNET PARTNERS (EMO, SAR AND RESEARCHERS) TO CONFERENCES

OTHERS?
ARMNET

WHY?

LIST YOUR REASONS ARMNET MIGHT BE VALUABLE FOR RISK REDUCTION

EXAMPLE: INCLUDE OR DISCUSS A SITUATION, SCENARIO, OR EMERGENCY EVENT WHICH WOULD BENEFIT FROM AN ASSOCIATION WITH ARMNET
ARMNET VALUE?

IS THIS INITIATIVE OF INTEREST TO YOU? ____

SCORE USING THE FOLLOWING:

0 = NO INTEREST    1 = SOME INTEREST    2 = INTEREST    3 = STRONG INTEREST

THANK YOU FOR SHARING YOUR SUGGESTIONS!!