Temperatures have increased an average of 3.5 Celsius since 1975. Permafrost is melting and decrease in arctic sea ice. Accelerated rates of erosion. The future and well being of the community and residents are at risk.

- Climate change will cause permanent relocation
- Planned relocations part of the draft text on enhanced adaptation of LCA
- Permanent relocation requires new adaptive governance institutions
- Must be based in human rights doctrine

Climate Change in Alaska

Temperatures have increased an average of 3.5 Celsius since 1975. Permafrost is melting and decrease in arctic sea ice. Accelerated rates of erosion. The future and well being of the community and residents are at risk.
2003 US government report found 3 communities seeking to relocate in Alaska and 184 other communities are being affected by flooding and erosion.

2009 US government report found 12 seeking to relocate.
NEWTOK

SOCIAL-ECOLOGICAL CRISIS

- On-going ecological change
- Erosion Control – Tried and Failed
  - $1.5 million dollars spent 1983-1989
- Six extreme weather events
  - 1989-2006

NEWTOK TRADITIONAL COUNCIL

Documented erosion since 1983

Identified 6 potential relocation sites and evaluated habitability

Community voted 3 times to relocate

Acquired land for relocation in 2003.
NEWTOK’S RELOCATION CHALLENGES

- Newtok Planning Group
  - Ad hoc
  - 25 different federal, state, tribal and non-profit agencies
  - No mandate to relocate; no statutory guidance to relocate and no relocation funding
- Agencies lack technical, financial and organizational capacity to relocate communities
- Statutory barriers
  - Can not build school unless at least 10 children enrolled

CLIMIGRATION DEFINITION

- Permanent Community Relocation Due To On-going Ecological Change, caused by repeated extreme weather events and on-going ecological change
- Threatens lives
- Damages or destroys infrastructure, housing, health clinics and schools
ADAPTIVE GOVERNANCE RESPONSE BASED IN HUMAN RIGHTS

Relocation Policy Framework
* must be based in human rights
Dynamic adaptive governance response
Disaster relief
Hazard mitigation
On-going socio-ecological assessments
Relocation
Multi-level and multi-disciplinary response
Cross-scale collaboration

Relocation Policy Framework

- Guiding Human Rights Principles of Climigration
- Community-based and community-guided
- Living standards must not be diminished with the relocation
- Sustainable development
- Socio-cultural institutions must remain intact
- Customary communal rights to resources are protected
Dynamic Adaptive Governance Response

- DISASTER RELIEF
  Critical to adaptive governance framework to ensure relocation is only durable solution
  - TEMPORARY EVACUATION
  - EROSION/FLOOD CONTROL
  - REBUILD
  - RETURN

- Statutory framework needs to be amended to include gradual ecological processes

- Release funding for relocation

SOCIAL-ECOLOGICAL SIGNALS

- Repetitive loss of structure;
- Imminent danger to community;
- Community has no further ability to mitigate through flood protection, erosion control;
- Number of evacuation incidents;
- Socio-economic indicators;
- Scientific information regarding predicted sea level rise, erosion and flooding
CLIMIGRATION

Nation State government duty to protect
Continuum of Adaptation responses
• Complex social-ecological assessment to
determine whether permanent relocation
required
• Evaluate technology with climate
information and sociological impacts
• Ecosystem-Specific

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