[2] *Nanwakolas Council, Campbell River, Canada*
[3] *Coastal First Nations - Great Bear Initiative, Vancouver, Canada*
[4] *The Nature Conservancy-Canada, VICTORIA, Canada*

A description of the planning process used to develop four sub-regional plans and a regional action framework. Key components of the paper will be the Memorandum of Understanding and collaborative partnership, Terms of Reference, the governance framework, the ecosystem-based management (EBM) framework, plan outputs and timeline, stakeholder engagement, science advisory committee, and an overview of the multi-jurisdictional policy environment where the planning took place.

Contributed session oral presentation:

Moving to implementation: priorities, funding and identifying benefits

Steve Diggon [1], Charles Short [2], John Bones [3], Karen Topelko [2]

[1] *Coastal First Nations - Great Bear Initiative, Gabriola Island, Canada*
[2] *Province of British Columbia, Victoria, Canada*
[3] *Nanwakolas Council, Campbell River, Canada*

A description of the process of moving to implementation of the plan including selection of and creation of a Trust, identifying short- and long-term implementation priorities, securing funding partners as well as the immediate benefits of the plan in terms of improved decision-making for economic development, working relationships, coastal tenure discussions, and marine conservation.

Wednesday, 23 August - C3 (180) - 11:00 - 12:30

Connectedness in social-ecological systems: the key to effective adaptation to global change in coastlines

Contributed session - Multi-level governance and biosphere stewardship

Chair/s: Christo Fabricius

Planners, policy makers and civil society are scrambling for solutions to the wicked problems of global change in coastlines, which they do not fully understand and are ill prepared to deal with. Knee-jerk and myopic responses, taken in isolation without thinking of the consequences on systems outside the focal scale, are common. This raises three linked questions: 1) how do maladaptations that transfer vulnerability arise?; 2) what are their consequences?; and 3) how can the unintended negative consequences of maladaptations be avoided?

Contributed session oral presentation:

Multiple methods for multiple mindsets about risk and adaptation

francois bousquet [1], Tara Quinn [3], Clara Therville [1], Chloe Guerbois [4], Raphael Mathevet [5], Sandrine Dhenain [2]

[1] *CIRAD, Montpellier, France*
[2] *IRSTEA, Montpellier, France*
[3] *University of Exeter, Exeter, United Kingdom*

[4] *Nelson Mandela Metropolitan University, Port Elisabeth, South Africa*
[5] *CNRS, Montpellier, France*

The MAGIC research team worked across three different coastal contexts in South Africa, United Kingdom and France. We investigated on the stakeholders' mind-sets about risk associated with climate change and adaptation. The aim was to test through a comparative approach how connectedness between people, and their connectedness with coastal ecosystems, indeed shape people awareness and risk perceptions and influence the way they frame adaptations. This has important consequences for the responses they then implement. Different methods were used to study: - How administration, technicians, elected people and managers frame adaptation to climate change in coastal areas. Interviews were conducted at institutional levels. Two opposing frames emerged across the three different sites: the command and control VS living with the risk frames. On one hand nature is considered as hostile and actions need to be taken to control the risk. On the other hand the variability of nature is accepted and the focus is on actions to reduce the consequences of this variability. - How relationship with place may shape experience of risk in contexts where a variety of groups show constrasted attachment to place. Environmental psychologists have developed several concepts - place meaning, place attachment, sense of place - to study people's relationship with place and have demonstrated that relationship with place influences attitudes and place related behaviors. We conducted extensive survey at each place and found that groups that hold different types of attachment are more sensitive to particular risks and types of adaptations. To conclude we describe these results through a typology of the environmental stewardship approaches which distinguishes 4 main types of stewardship (reformist, adaptive, sustainability and transformative stewardship). This presentation will be complemented with speed talks which focus on the different methods we used.

Contributed session oral presentation:

Facing global changes with resource over-appropriation and under-provision of public services: Exploring robustness-fragility trade-offs in three coastal areas

Ute Brady [1], John M. Anderies [1], Olivier Barreteau [2], Clara Therville [3], Katrina Brown [4], Christo Fabricius [5], Larissa Naylor [6]

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[2] *IRSTEA, Montpellier, France*
[3] *CIRAD, Montpellier, France*
[4] *University of Exeter, Penryn, United Kingdom*
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Coastal systems are special cases of coupled infrastructure systems (CIS). Here, system fragilities that exist elsewhere are magnified due to the unique features of the coastal natural infrastructure which exhibits a concentration of resource scarcity within a densely linked CIS in the vicinity of several key thresholds (e.g., salt vs freshwater). Accordingly, coastal regions warrant special attention and can provide early insights into other systems of intertwined human and natural infrastructure. In order to better understand the characteristics of such CIS, existing common pool resource (CPR) theories and methodologies were applied to the comparative analysis of coastal vulnerability to global change in three regions: Cornwall, Britain; Languedoc, France; and Eden District, South Africa. Utilizing an interdisciplinary, collaborative approach, we iteratively "translated" local research findings from the three systems into the Robustness Framework and applied the design principles of long-enduring CPR governance systems before comparing the outcomes. We found that: (1) the density of