IAIA Conference: November 6-9, 2008 Calgary, Alta. Ronald Jones October 5, 2008.

<u>Theme Forum:</u> Advancing the Assessment and Management of Cumulative Effects to Sustain Healthy and Productive Aquatic Ecosystems - Strengthening Institutions, Science and Practice

<u>Title:</u> Adaptive co-management: practical lessons from ACM to assess and mitigate cumulative effects in a tropical floodplain.

Abstract: (80 words)

Global freshwater ecosystems are undergoing profound anthropogenic change. Ecosystem characteristics and livelihoods are severely altered due to cumulative effects.

Adaptive co-management is promoted as an iterative process to develop sustainable aquatic resource management institutions.

Results from Beel Mail, Bangladesh show how opportunities and challenges in developing cumulative effects assessment and resource institutions require effective leaders; engaging diverse stakeholder groups and fostering community-based fisheries. Challenges include empowering local solutions, integrating beyond top-down management and recognizing the multiple and cross-scale origins of cumulative effects.

Biography:

Ron Jones is an aquatic ecologist with a background in both environmental biology and natural resources management. He has deep interest in the application of interactive governance mechanisms to the development of sustainable aquatic resource management institutions spanning issues in both temperate systems and tropical developing countries.

This presentation will detail key drivers of social and ecological change and resulting cumulative effects (CE) at Beel Mail and how the dynamics of participation show the strengths and weaknesses of a co-management approach in assessing and where possible, dealing with CEs. This study also shows why the process of building difficult diverse cross-scale linkages can facilitate the mitigation of cumulative effects. However the tendency of local authority to capitulate to state/political intervention and top-down, science heavy management must be tempered with methods to strategically foster local technical and institutional innovation. Therefore, any transdisciplinary CE assessment must be aware that those who hold differential power will attempt to define the assessment and data collection process and the means of mitigation or in some cases resist any remedial action from "external" agents.