

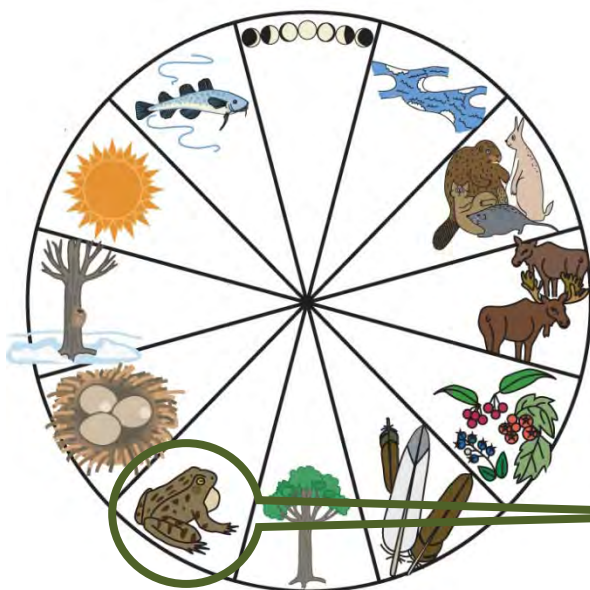
VISUALIZING HOLISTIC THINKING AND TRANSFORMATIVE LEARNING FOR ENVIRONMENTAL MANAGEMENT - pattern transformation

- 2004
- community outreach

In 2004, Integrative Science personnel were beginning to contribute to a newly formed collaborative process for environmental management in Cape Breton – a process known as “CEPI” for “collaborative environmental planning initiative”. As part of the Integrative Science contributions, Canada Research Chair Cheryl Bartlett asked artist Basma Kavanagh to create a playful, innovative visual to encourage people to think holistically and to consider the power of transformative learning.

The visual focus chosen was to show how the Island of Cape Breton could be seen to shape shift into a frog, an animal that is both a cultural symbol of transformation and a biological manifestation of transformation: the life journey of a frog is from the tadpole stage in a water environment to the adult stage capable of life both on the land and in the water and finally back again to the water for reproduction.

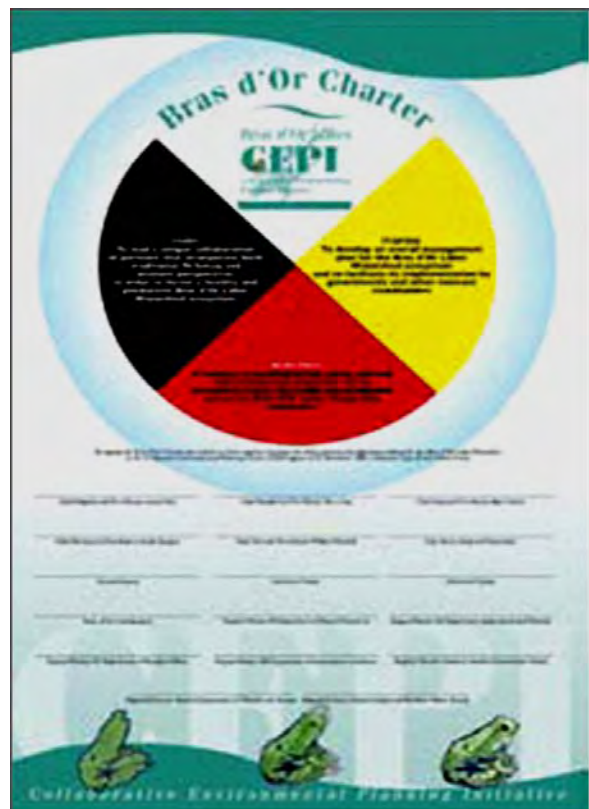
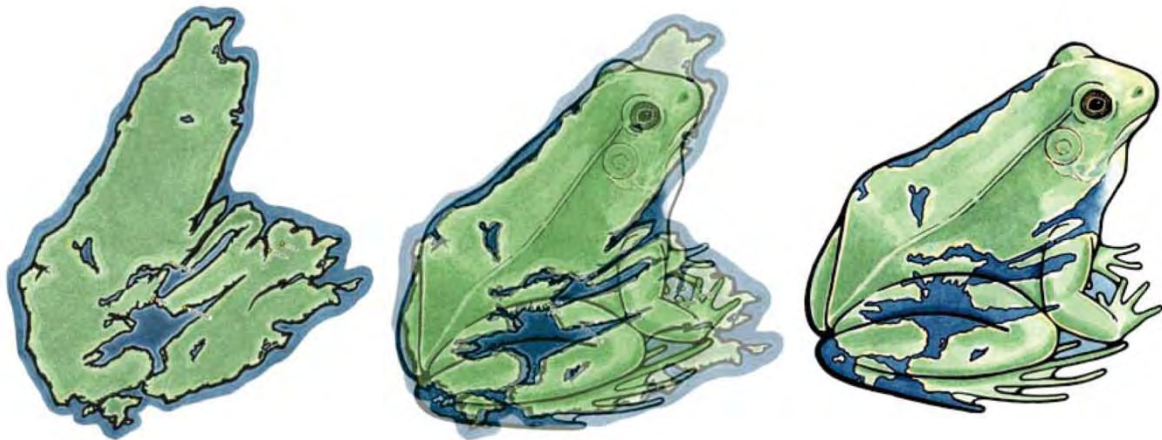
We felt that a frog would be all the more appropriate because of the known vulnerability of this type of organism to environmental change and to pollutants.



Additionally, frogs are a key eco-reference for the Mi'kmaw people because one of the moon cycles within the year is known as Sqoljuiku's, for “frog croaking time”, which approximates to the month known as May (see activity “Mi'kmaw calendar” for additional explanation).

**Sqoljuiku's ...
the moon cycle of
“frog croaking time”
in the Mi'kmaw calendar**

The visual that Basma created to show the transformation of the Island of Cape Breton into a frog is shown below. Personnel in Integrative Science were delighted when Basma's visual was featured on the charter created to formalize CEPI. It was signed by all Mi'kmaw chiefs in Unama'ki – Cape Breton plus various municipal, provincial, and federal government officials. It is also shown below (and enlarged on the next page). The last page in this document features the hand-out that Integrative Science personnel distributed broadly, both within CEPI and in other educational and/or collaborative venues.



Bras d'Or Charter



VISION
 To lead a unique collaboration of partners that incorporate both traditional Mi'kmaq and western perspectives in order to foster a healthy and productive Bras d'Or Lakes Watershed ecosystem

PURPOSE
 To develop an overall management plan for the Bras d'Or Lakes Watershed ecosystem and to facilitate its implementation by governments and other relevant stakeholders

OBJECTIVES
 A balance of environmental, social, cultural and institutional objectives will be pursued to ensure the health and sustainable use of the Bras d'Or Lakes Watershed ecosystem

By signing this Bras d'Or Charter, we commit to work together to pursue the vision, purpose and objectives outlined for the Bras d'Or Lakes Watershed by the Collaborative Environmental Planning Initiative. (CEPI) Signed on 23 November 2005 at Eskasoni, Cape Breton, Nova Scotia.

 Chief Wagmatcook First Nation—Lester Peck	 Chief Membertou First Nation—Terry Paul	 Chief Eskasoni First Nation—Blair Francis
 Chief We'koqma'q First Nation—Sandy Googoo	 Chief Pottotek First Nation—Wilbert Marshall	 Cape Breton Regional Municipality
 Victoria County	 Inverness County	 Richmond County
 Town of Port Hawkesbury	 Deputy Minister, NS Department of Natural Resources	 Deputy Minister, NS Department of Agriculture and Fisheries
 Deputy Minister, NS Department of Aboriginal Affairs	 Deputy Minister, NS Department of Environment and Labour	 Regional Director General, Atlantic, Environment Canada
 Regional Director General, Department of Fisheries and Oceans	 Regional Director General, Indian and Northern Affairs Canada	





CAPE BRETON – UNAMA'KI

... showing our Island as the living organism "Frog" to remind us that healthy life requires healthy water, land and air and that transformation and interconnectedness are essential understandings in our collaborative human journey.

Artwork by Basma Kavanagh