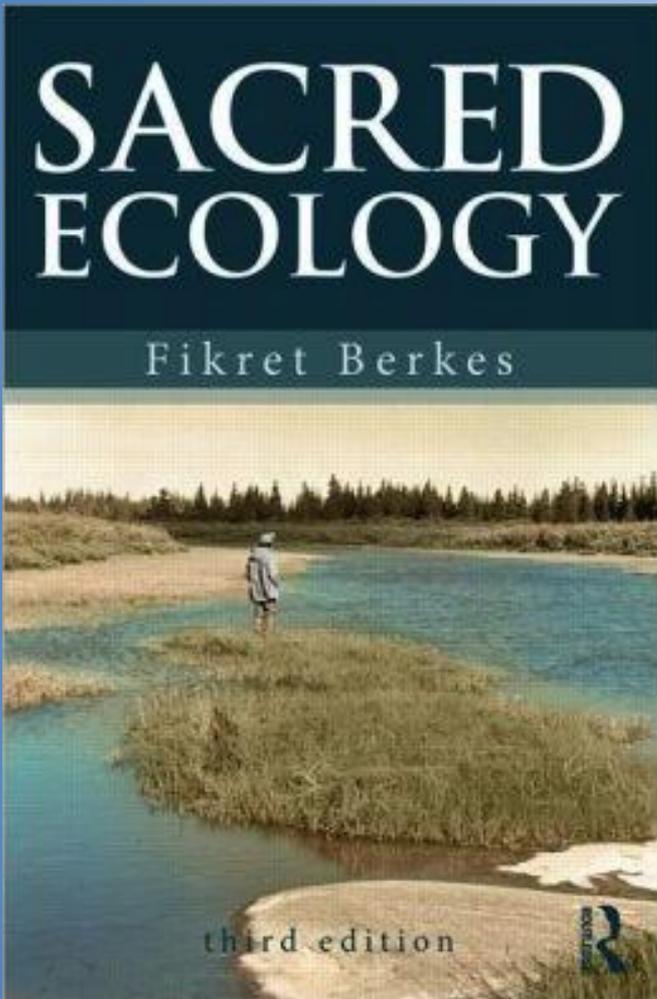


Traditional Ecological Knowledge and its Application to Ecological Management

Anne Grant
Kelsey Patterson
Abbey Dufoe

APPLIED ECOLOGY
Vicki Watson
December 5, 2013



“A cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.”

(Berkes, 2012, 7)





**Traditional Ecological
Knowledge**

Holistic and Humanistic

**Ethno Science
Human Ecology**

**Rational Knowledge
Non-linear Nature**

**Non-literate Cultures
Interconnected Earth Systems**

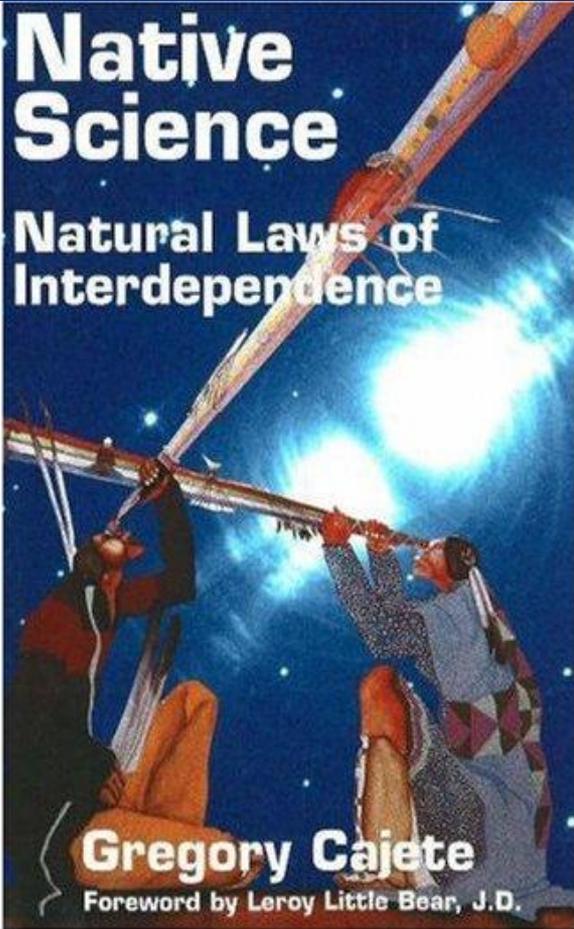
**Complex Interrelationships
Social-Ecological**

Native Science

Natural Laws of Interdependence

Gregory Cajete

Foreword by Leroy Little Bear, J.D.



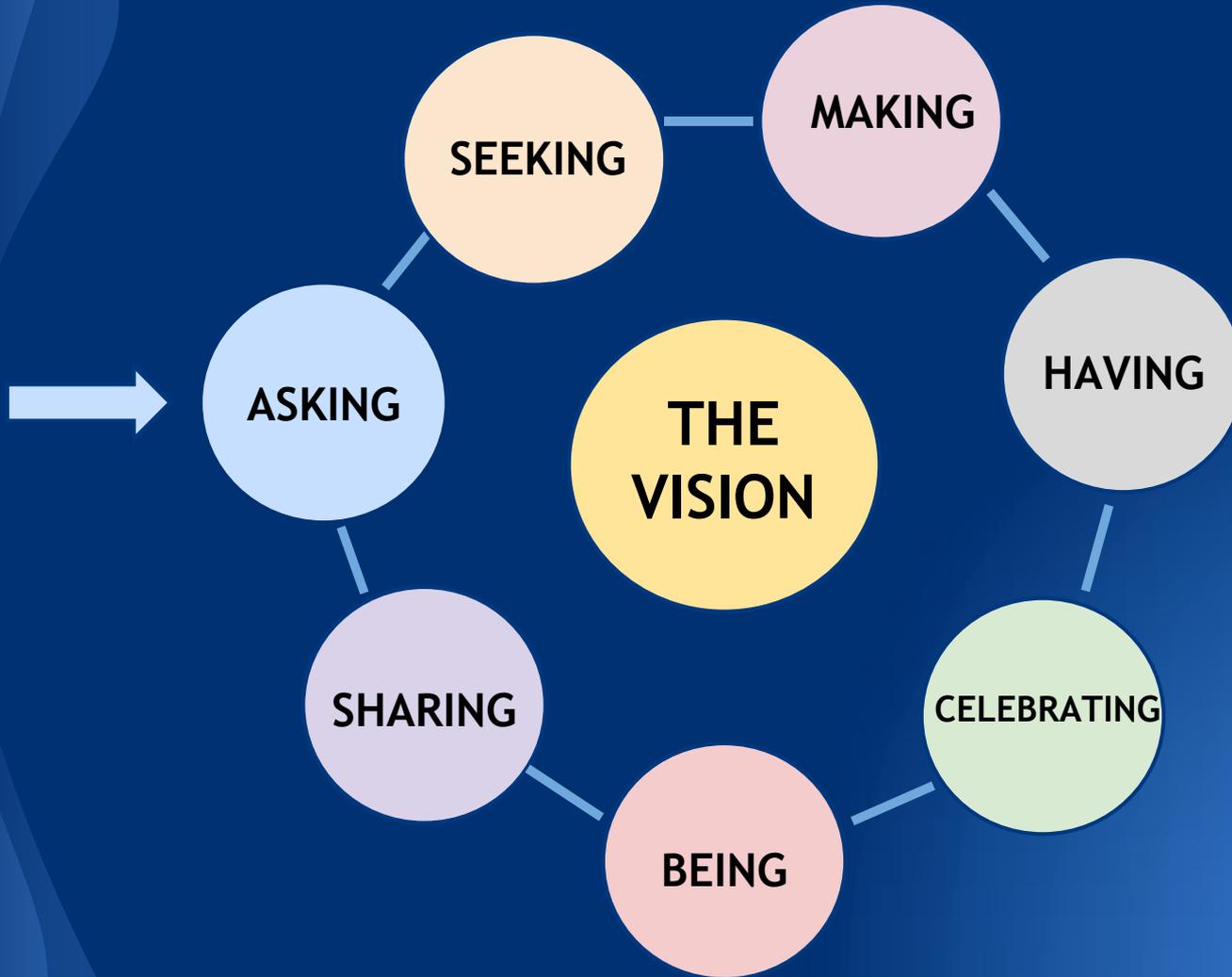
LOOK TO THE MOUNTAIN

AN ECOLOGY OF INDIGENOUS EDUCATION



“Native Science is used as a metaphor for Native Knowledge and creative participation with the natural world in both theory and practice.”

(Cajete, 2000, 14)





“It (TEK) is born of long intimacy and attentiveness and can arise wherever people are materially and spiritually integrated with their landscape.”

(Kimmerer, 2000 quoted in Egan et al. 2011, 265)

SOCIETY FOR ECOLOGICAL RESTORATION INTERNATIONAL

HUMAN DIMENSIONS OF ECOLOGICAL RESTORATION

Integrating Science, Nature, and Culture



Edited by
Dave Egan, Evan E. Hjerpe, and Jesse Abrams

Reclaiming the Honorable Harvest

Never Take First One

Ask Permission

Listen for the answer

Take Only What You Need

Use Everything You Take

Be Grateful

Minimize Harm

Share What You've Taken

Reciprocate the Gift





In **RED ALERT: Saving the Planet with Indigenous Knowledge**, Daniel R. Wildcat says in all Indigenous societies and North American traditions, “the recognition of practical knowledge and their goals is based on an acknowledgement and respect...**an attentiveness to the Sacred**,” in the world around us. (2009)



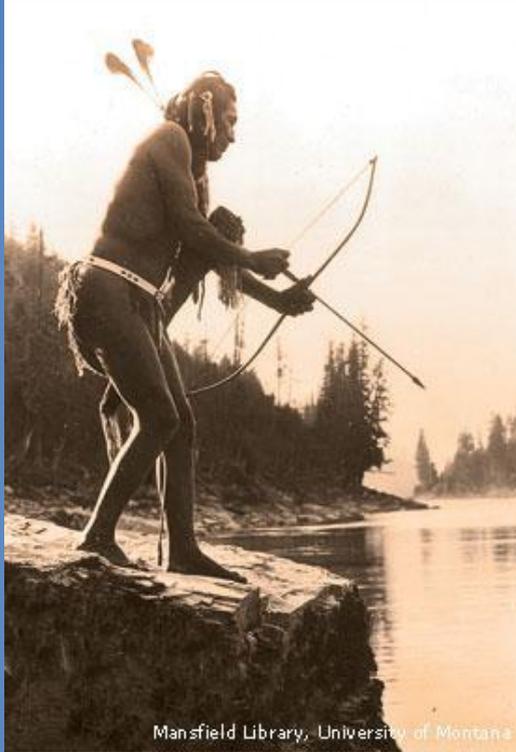
“We are living through the closing chapters of the established and traditional way of life. We are in the early beginnings of a struggle to remake our civilization. It is not a good time for politicians. It is a time for prophets and leaders and explorers and investors and pioneers, and for those who are willing to plant trees... to sit under.”

Walter Lippmann

Case Study: Restoration of the Jocko River

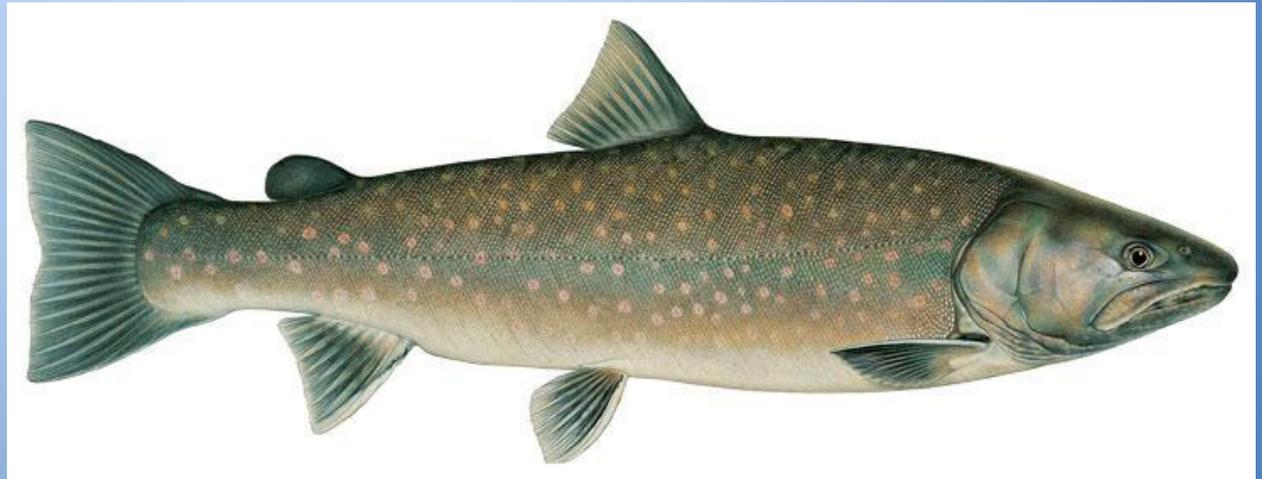


Importance of Bull Trout



Mansfield Library, University of Montana

- Salish and Pend d'Orielle people, importance to tribal way of life
- Damaged watersheds, decimated fish populations
- Tribal solution



Who Is Involved?



West Water
Consultants, Inc.



What Is Being Done?

Jocko River Master Plan

Watershed Restoration Process:

- Assessment
- Protection
- Passive Restoration
- Active Restoration
- Monitoring







Goals:

- Re-establish connectivity with historic floodplain
- Restore native plant communities to riparian, wetland, and floodplain areas
- Improve instream and floodplain habitat conditions
- Utilize and evaluate restoration tools that will be applicable for future work



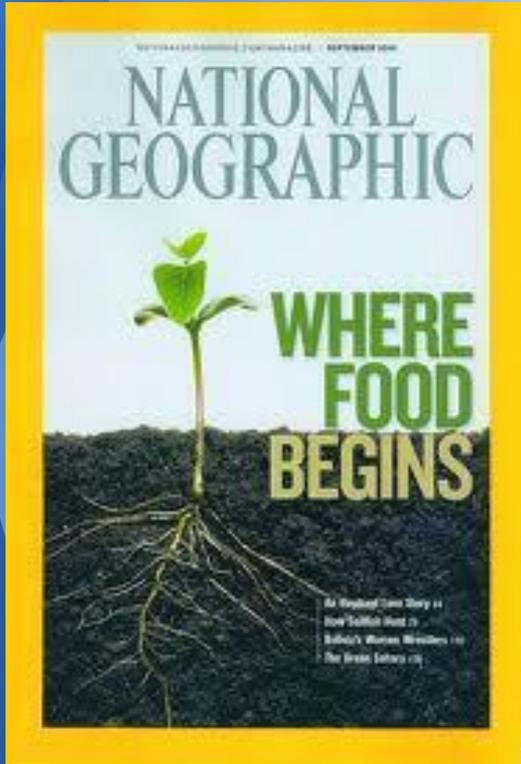
The Jocko and TEK Education



Explore The River: *Bull Trout, Tribal People, and the Jocko River*

- Interactive DVD
- *Bull Trout's Gift*
- Field Journal
- K-12 Curriculum

Journalism - Sources



- Native Americans/Indigenous people
- Scientists who study TEK/ Ecology
- Person with a conflicting view
- USFWS/Government officials in agencies

Creating the story

- Pre-reporting
- Reporting
- Writing



Journalistic Coverage



Climate Change
and Indigenous Peoples



- National Geographic's News Watch: Climate Change and Indigenous Peoples Blog
- Various Indian Reservations and what they do

BIGGEST ISSUE: CLIMATE CHANGE



“Through the increasingly popular anthropological method of collecting TEK in climatically vulnerable areas, scientists and anthropologists have slowly recognized indigenous groups as possessors of information critical to the study of climate change” - National Geographic (Voices of