

Traditional Ecological knowledge (TEK)  
Indigenous Knowledge (IK)  
Traditional Knowledge (TK)



## Levels of analysis From TEK



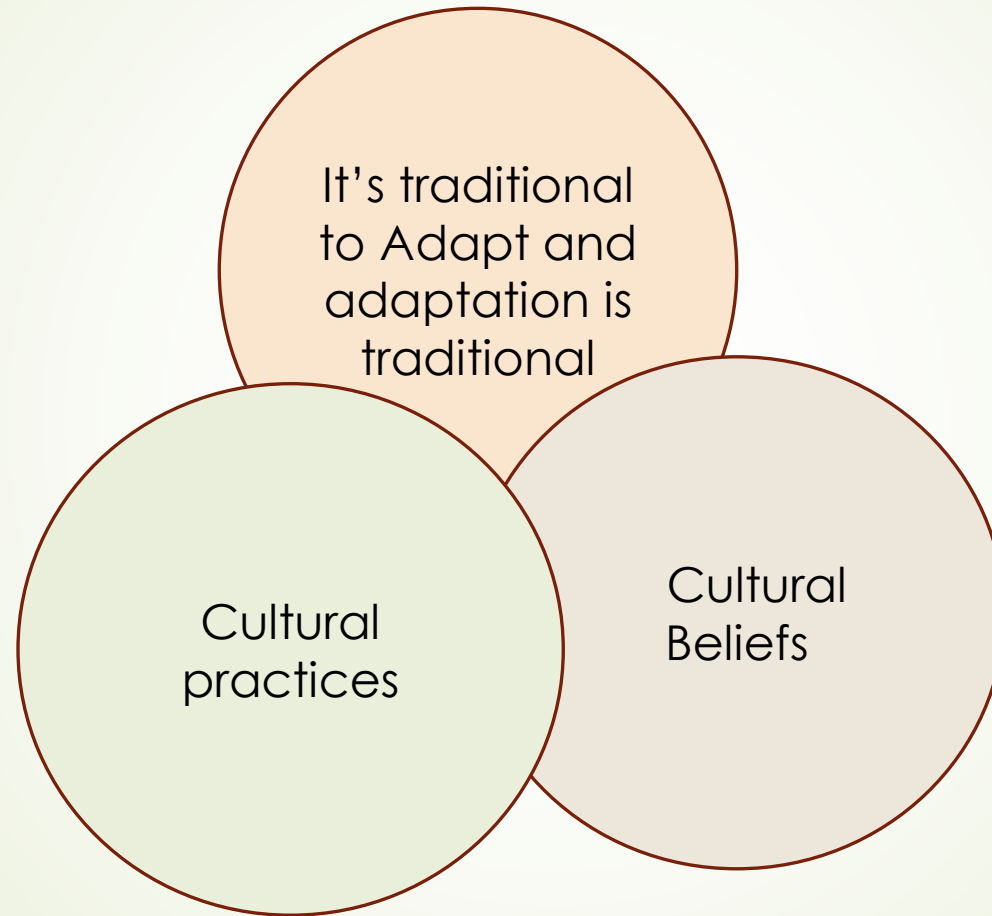
Local  
knowledge of  
Land and  
animals

Land and resource  
management

Social  
Institutions

World View

# The place in the middle is TEK





# Examples

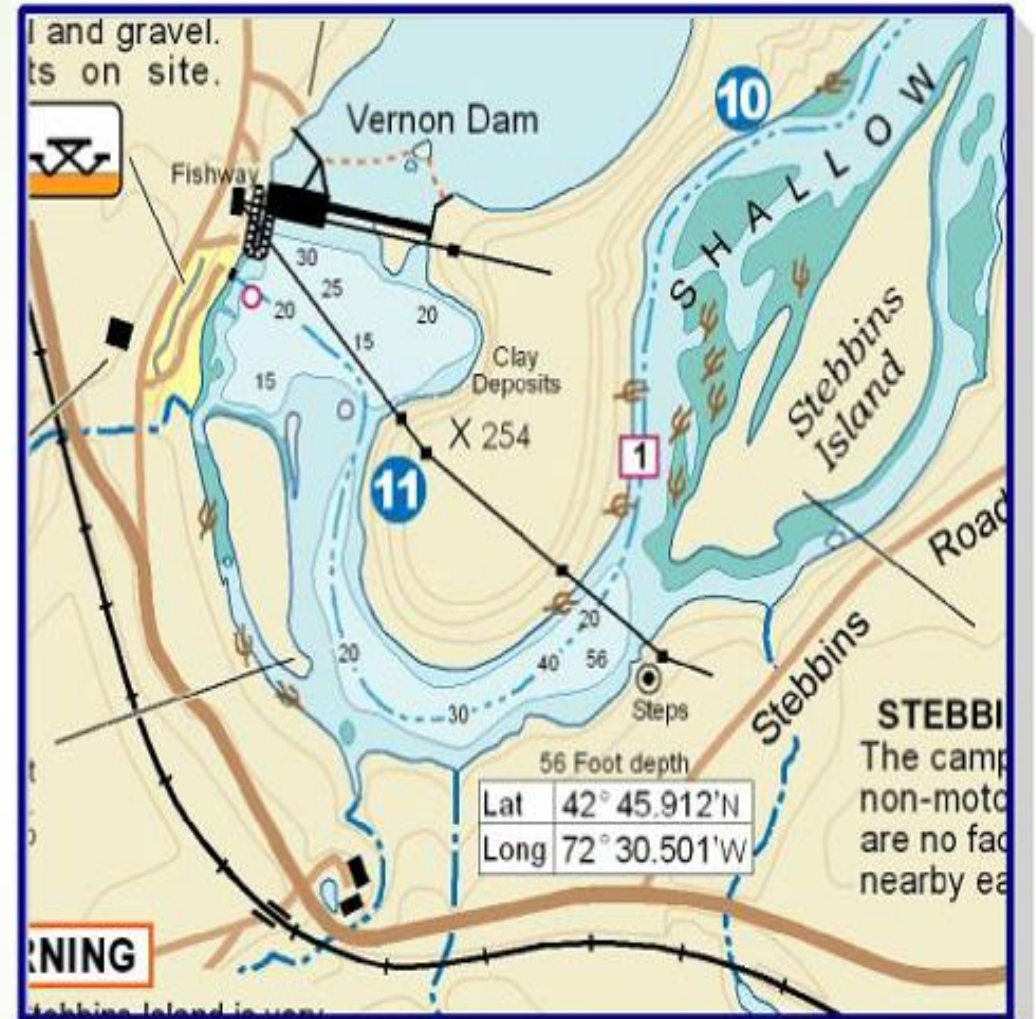


# Our Stories



There are 89 words in the Abenaki language for water. They are all connected to reading the land

Wazwabaghigan – the water returning on itself.  
Wazoliinebik – snow water




Detail of the Vernon Dam and Stebbins Island.



## Adaptation is critical

- ▶ Indigenous groups are projected to be among the most vulnerable in the face of climate change. This is in part because of their close ties with and reliance on ecosystem goods and services. Because of this, it is important that climate change impacts and adaptation strategies be examined through an understanding of Western science and place-based TEK together.



Multiple ways of knowing  
will allow us to solve the  
problems together.

### **Western Science**

Observation, prediction or hypothesis  
followed by testing.

### **Traditional Ecological Knowledge**

Observation, exploration and  
experience

Language

Sense perception

Emotion

Reason

Oral stories

Intuition

Blood Memory

- ▶ Fire- controlled burnings for forest management - using ground litter for fuel- controlled fires to reduce pests like mosquitoes
- ▶ Mari culture –the intentional management of marine resources – using seaweed, clam beds etc.
- ▶ Medicines and Health-Plant knowledge willow/aspirin, white cedar cure for scurvy
- ▶ Understanding the rivers need to be surrounded by forests – connections with clean water
- ▶ Conservation practices of resources/moving frequently-rotated fields every ten years and let them lay fallow for 15 to 40 years
- ▶ Chinampas- raised bed surrounded by canals for gardening filled with fish and birds flying above –irrigation methods
- ▶ Companion planting
- ▶ Cleared land for prairies and grassing
- ▶ Horticulture
- ▶ Astronomy/ connected to planting
- ▶ Coppicing
- ▶ Permaculture
- ▶ Terracing
- ▶ Phenology
- ▶ Seed saving
- ▶ Crop rotation
- ▶ Farming in microclimates
- ▶ Fertilization
- ▶ No till, no dig gardening
- ▶ composting





## UN/DESA Policy Brief #101

Indigenous peoples are the caretakers of the world's biodiversity and Cultural diversity.

Although they account for only 5% of the world's population they care for and estimated 25% of the earth's land surface. This land coincides with 80% of the planet's biodiversity and about 40% of all terrestrial protected areas and ecologically intact landscapes. Indigenous peoples matter.

- Climate change, deforestation, pollution, development and loss of diversity are serious threats to Indigenous peoples to their dependence on the environment and resources of the lands. They cause the lost of traditional knowledge, disintegrating traditional governance structures and their cultures. There must be a holistic perspective of Indigenous Peoples on Resource governance, land rights, mitigation of climate change, impact on the their environment and resilience-building through the use of their traditional knowledge.