

Connecting People to Nature

By: Amy Boucher

Using interactive visualizations to tell the story of Tacoma's past, present, and apply Indigenous knowledge to guide us towards a sustainable future.

Overview of Research

PROBLEM

Humans relationship with nature has changed over time and impacted humans role in natural systems, as well has changed the environment.

QUESTION

What approach would be the most inspiring and impactful tool to restore distorted or broken connections to nature

RESEARCH

Examine Indigenous knowledge, and determine what values and principles could be applied to restore connections to the natural world.

Types of Interactive geospatial technologies that can convey these inspiring and impactful connections to nature here in Tacoma.

RESULTS

Apply interactive visualizations to create an engaging story map/atlas of Tacoma's past, & present, and future to re-connect people to nature

Literature Review

Themes

- 1. Sense of Place**
- 2. Indigenous Knowledge**
- 3. Environmental Issues and Social constructs**
- 4. Cybergateography**

Sense of Place

The importance of place and our understanding of the history creates a sense of place and influences our connection to it. (Glassberg)

Example: Waterlines Map

One goal of the project was to make this history accessible to a wide audience in hopes to engage the community in Seattle along the Duwamish River.

Coast Salish Place Names

http://www.burkemuseum.org/static/waterlines/images/maps-and-images/waterlines_map_medium.pdf

Village Sites
A. Salish
B. Nisqually
C. Puyallup
D. Duwamish
E. Suquamish
F. Skokomish
G. Hoh
H. Klallam
I. Nootka
J. Quileute
K. Makah
L. Cowlitz
M. Lewis and Clark
N. Nez Perce
O. Coeur d'Alene
P. Pendleton
Q. Shoshone-Bannock
R. Ute
S. Navajo
T. Apache
U. Comanche
V. Sioux
W. Lakota
X. Choctaw
Y. Cherokee
Z. Seminole

Waterplace Names

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Indigenous Science and Knowledge

1. Indigenous societies and knowledge systems have developed to sustain reciprocal relationships between culture and nature.
2. Indigenous science and Western science, can work together, a number ways exist to bridge the two paradigms (2 of 9 new approaches)
 - a. Participatory conservation planning aims for the use of complementary knowledge from Western science and local/Indigenous communities.
 - b. participatory environmental restoration uses both local/Indigenous knowledge and Western science.

(Johnson, J.T., Howitt, R., Cajete, G. et al. Sustain)



Yelm Jim's fish weir on the Puyallup River ca. 1885. Source:
<http://www.digitalarchives.wa.gov/Record/View/DAA73FC7A57E989D65B6DBEA419FC89E>

"FROM THIS VIEW, SCIENCE BECOMES ESSENTIALLY A STORY, AN EXPLANATION OF THE HOW AND WHY OF THE THINGS OF NATURE AND THE NATURE OF THINGS. THE HUMAN MIND AS AN EXTENSION OF NATURE AND AS CREATOR OF STORY BECOMES THE FERTILE GROUND WHERE MYTH, SCIENCE, AND OUR HUMAN PERCEPTION OF REALITY MEET." (CAJETE, 2000, P. 13)

Environmental Issues and Social Constraints

Contemporary ways people think about nature, all of which are not natural and are culturally constructed (Nash):

1. Nature as naive reality - is in language: the sense that we speak of the nature of something, what is really true.
2. Nature as moral imperative - the habit of appealing to nature for moral imperative, a secular deity in post-romantic age.
3. Nature as eden - encourages us to celebrate a certain landscape.
4. Nature as artifice, nature as self-conscious cultural construction - Olmstead example
5. Nature as virtual reality
6. Nature as commodity
7. Nature as demonic other, as avenging angel, as he return of the repressed-
8. Nature as contested terrain

Cybercartography

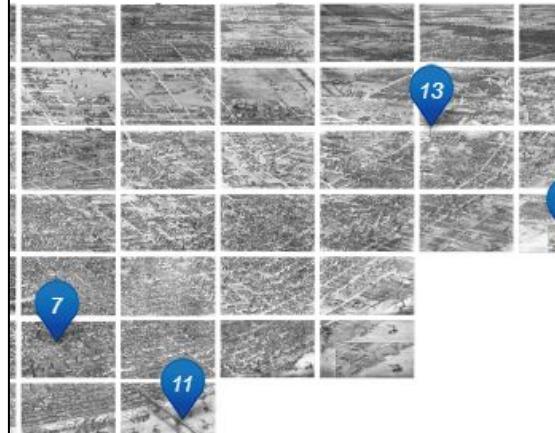
“Cybercartography is a new theoretical construct that focuses on “the organization, presentation, analysis and communication of spatially referenced information on a wide variety of topics of interest and use to society in an interactive, dynamic, multimedia, multisensory and multidisciplinary format.”

Interactive Atlas



<https://indigenouspeoplesatlasofcanada.ca/>

Interactive Story Map



<http://jarednielsen.com/pictorial-st-louis/index.html>

Pictorial St. Louis

Scroll ▾

The Great Metropolis of the Mississippi Valley: A Topographical Survey Drawn in Perspective A.D. 1875 by Camille N. Dry



[Source: Library of Congress](#)

"A popular cartographic form used to depict U.S. and Canadian cities and towns during the

Methods

Maximum Extent

Four areas of interest

1. Ecological, and geological history of the Tacoma area.
2. Historical relationship between humans and nature, and influence of economy.
3. Relational changes and their impacts.
4. Ways to reconnect with nature.

This part of the interactive map will be used with mostly static images alongside , and overlaid with topographical map layer to show how the gulches and delta's in Tacoma were formed.

This part will include audio and visual account of local tribal members sharing their indigenous knowledge.

This part will include maps analyzing the environmental changes over time in Tacoma.

Water flowed beneath the glacial t y. m.

This part will include videos, & maps that identify opportunities to for people to connect with nature.

Results of Research

The interactive story map will engage with people in creative and innovative ways, that will engage all their senses. This will strengthen their sense of place, and connect them to nature in more intimate way, thus instill a greater role in taking stewardship over the land and or being more ecologically minded.

The project is a way to honor the First People whom were here before the area was colonized, and bring forth healing and reconciliation for the past.

Lastly, it will highlight opportunities for people to connect to their local nature in Tacoma.



People Connecting to Nature:

Nature Walks at Swan Creek, Students Planting Camas at Oak Tree Park, High School Students Serving their Community at Wapato Lake Park Caring for Natural Areas.