

Sound Health for Sound Tribes: Can Tribal Eco-Cultural Preferences Be Identified and Accommodated?

*Developing a Tribal/Salmonids
Social-Ecological Systems Model*

*By: Jeffrey Paul Thomas
School of Marine and Environmental Affairs Masters Thesis
A Community on Ecosystem Services/ACES International Conference
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PUGET SOUND REGION: FEDERALLY-RECOGNIZED TRIBAL COMMUNITIES

Public Duty to Assess Endless Streams of Land Use Proposals

DUTY TO ASSESS RISKS (for good or bad)

- e.g. Salmon resources, Socio-cultural impacts

TRIBAL ASSESSMENT PRIORITIES

- ID: Cultural values and Well-being sustenance factors
- ID: Natural resource condition preferences
- Accurate, relevant natural resource values information
- Accommodating tribal eco-cultural preferences
- Address environmental justice or sovereignty concerns

RISK ASSESSMENT FRAMEWORKS – KEY GAPS

- Significance of current gaps?

TRIBAL ECO-CULTURAL PREFERENCES (ECPs)

- Need to enhance risk assessment factors
- Need to identify ECPs
- Need to accommodate ECPs
- Need to target high-quality natural resource conditions



SOUND HEALTH FOR SOUND TRIBES



INVESTIGATIVE RESEARCH PLANNING



INVESTIGATIVE RESEARCH RESULTS

Create New Framework and Model: To Portray –

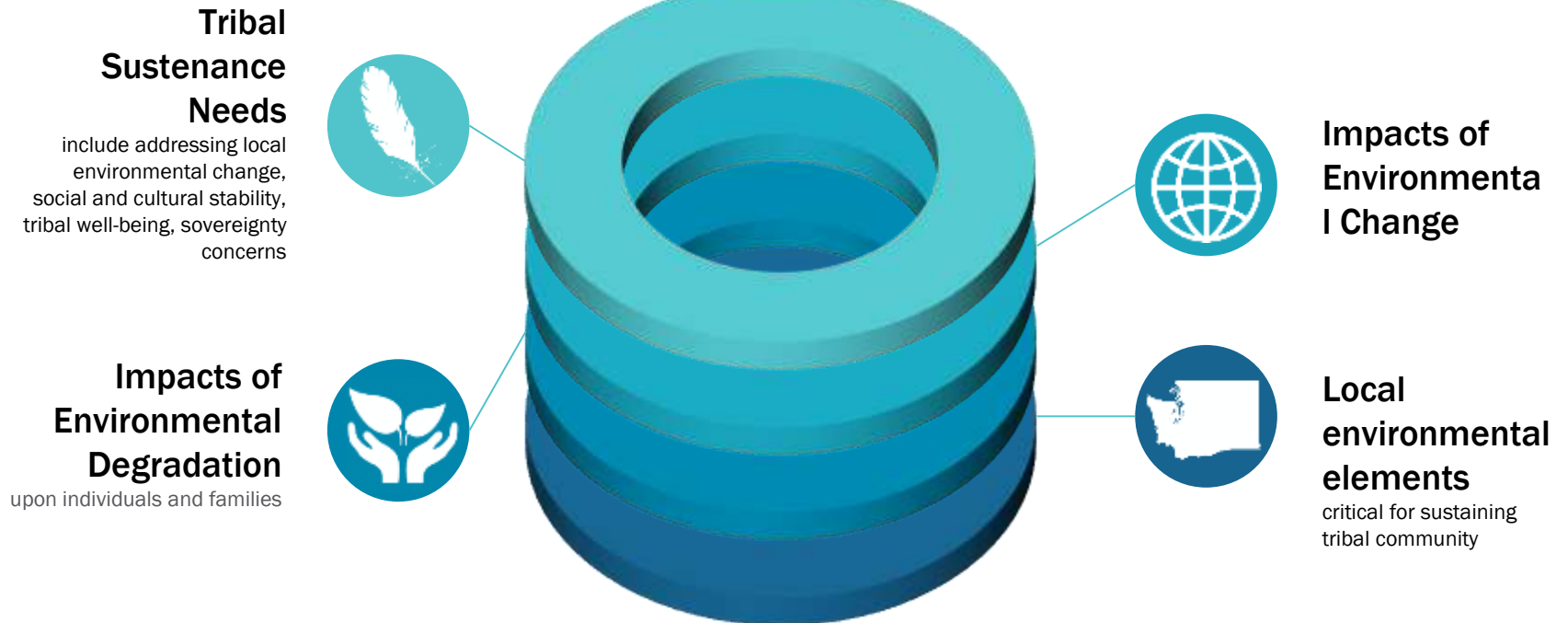
- **Tribal sustenance needs** - include addressing local environmental change, social and cultural stability, tribal well-being, sovereignty concerns
- **Impacts of environmental change**
- **Impacts of environmental degradation** - upon individuals and families
- **Local environmental elements** - critical for sustaining tribal community

Steps to Create Model:

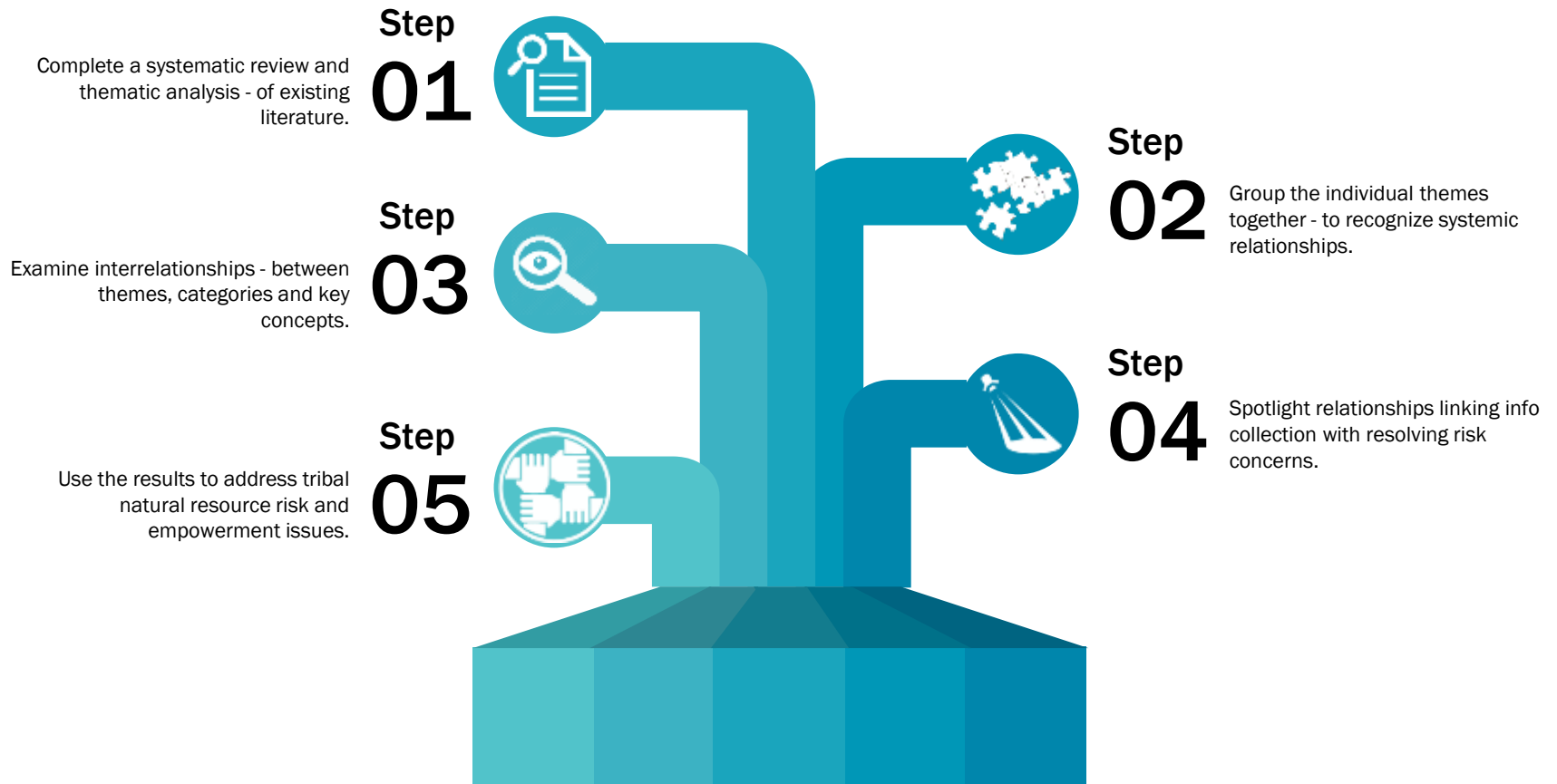
- 1 - **Complete a systematic review and thematic analysis** - of existing literature.
- 2 – **Group the individual themes together** - to recognize systemic relationships.
- 3 – **Examine interrelationships** - between themes, categories and key concepts.
- 4 – **Spotlight relationships linking info collection with resolving risk** concerns.
- 5 – **Use the results to address tribal natural resource risk and empowerment** issues.

INVESTIGATIVE RESEARCH RESULTS

Create new framework and model – to portray:



STEPS TO CREATE MODEL



METHODS: Thematic Synthesis and Model-Centered Analyses



01 “In Vivo” Concepts and Visuals – “Pool” and Analyze

Compile qualitative data

Visual formats, Critical factors, Key concepts and categories

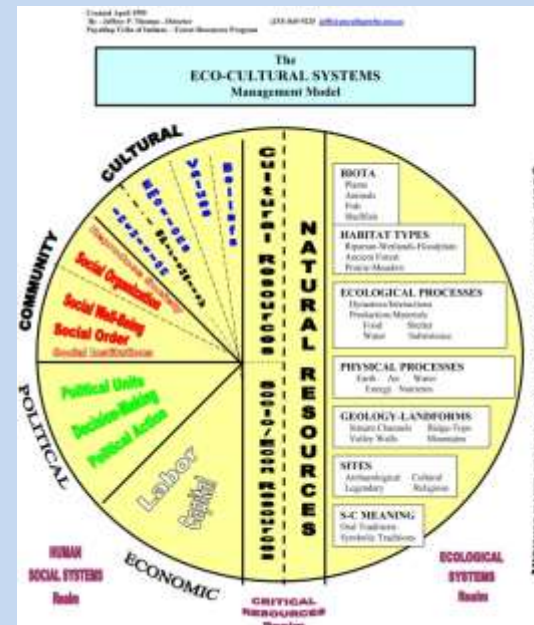
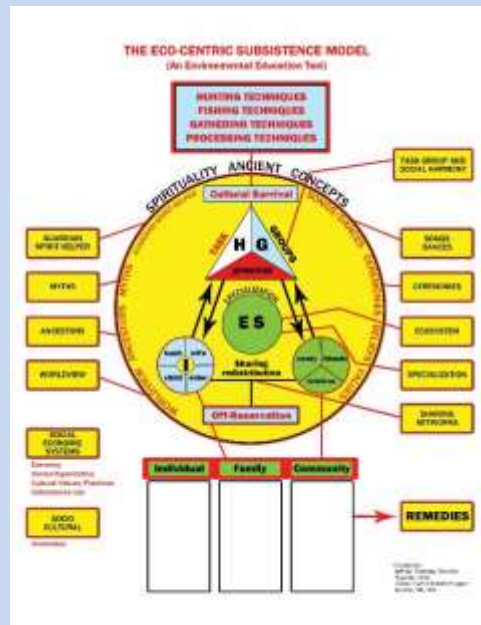
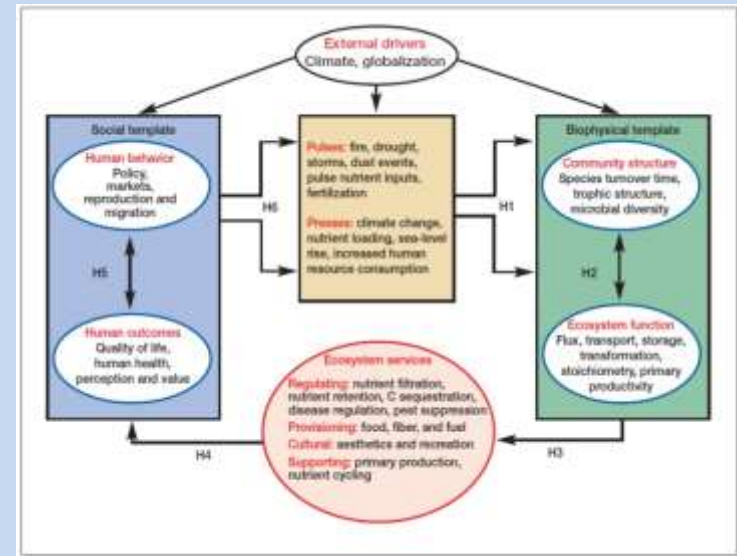
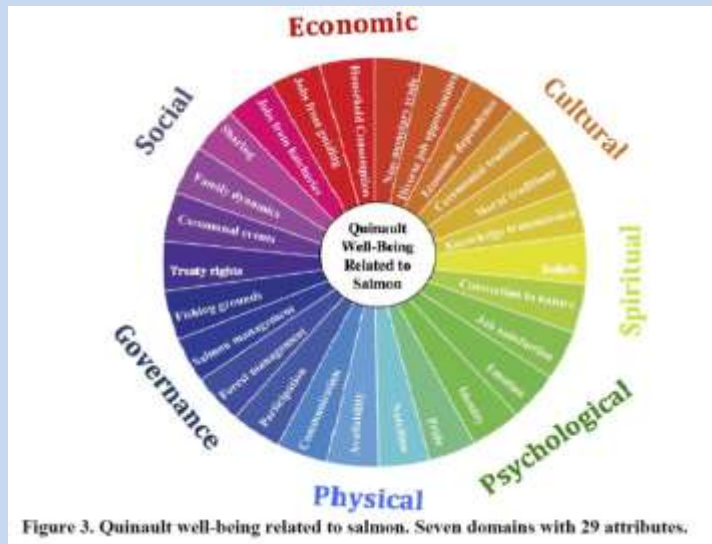
02 Themes and Categories

Inductively identified

Specific categories; 2-pronged assignment strategy

Represent inherent data groups

Model-Centered Analysis: Pool and Scrutinize Models for “Other Systematic Patterns”



(7) ORIGINAL MODELS - Picked for “synthesis” into a new model

Original Model (from raw data). Picked per inclusion criteria and complementary. Features most important to incorporate.



NEW MODEL - “Community Sustenance Dynamics” Structure and Relationships

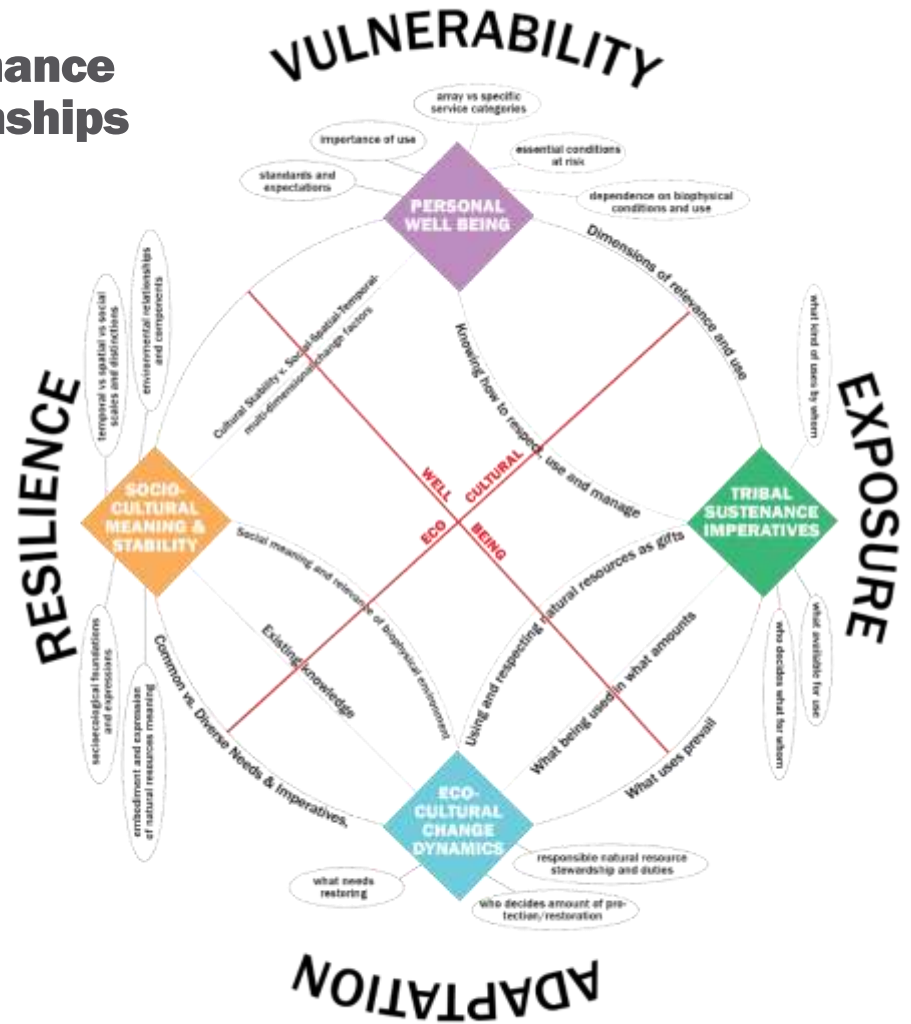
Current Model Representations – Pool Together and Synthesize

Main Goals

Visual formats
Critical factors
Themes and categories

Structure and Relationships

Diamond-shaped with Links
Pattern involving shared categories
2 (but not 3) themes linked by shared categories
Complementary, loop-like system of linkages



CSD Model categories that were generated via thematic synthesis procedures

- *Accumulated knowledge*
- *Social meaning and relevance of the biophysical environment*
- *Common vs. diverse needs and imperatives*
- *Using and respecting natural resource gifts*
- *What is being used in what amounts*
- *What uses prevail*
- Responsible natural resources stewardship and duties
- Who decides what amount of protecting/restoring
- What needs restoring
- *Cultural stability vs. social-spatial-temporal multidimensional change*
- Socio-ecological foundations and expressions
- Temporal vs. spatial vs. social scales and distinctions
- Embodiment and expression of natural resources meaning
- Environmental relationships and components
- *Dimensions of relevance and use*
- *Knowing how to respect, use and manage*
- Standards and expectations
- Importance of use
- Dependence on biophysical conditions and use
- Arrays vs. specific service categories, standards and expectations
- Essential conditions at-risk
- *What kinds of uses by whom*
- *What available for use*
- *Who decides what for whom*

Community Sustenance Dynamics - Basic Operations

Themes Interact in a Closed-System

Ensuring Sustenance

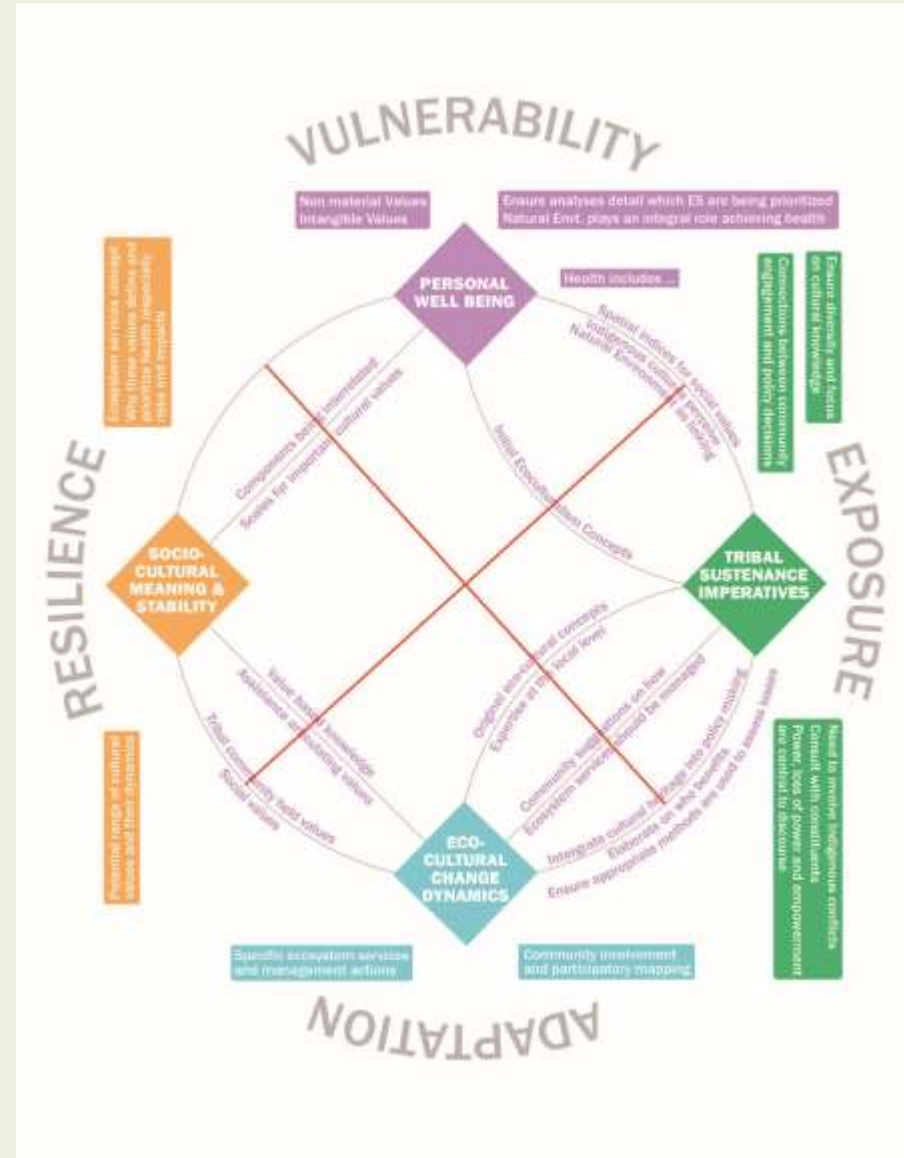
- May rely on links being addressed.
- Single and Interacting Theme operational perspective

In Vivo Concepts

- Represent central theme
- Examples of Factors-Relationships-Techniques to acknowledge

Holistic System

- Circular shape
- Encompasses all factors/relationships/metrics
- Loop-like and 2-way



COMMUNITY SUSTENANCE DYNAMICS (w/ Eco-Cultural center)

Theoretical Closed-Loop

Main themes inter-related by way of being related to each other.

Categories of Data

Matched with specific themes.
Themes have certain categories in-common
Categories link themes

Closed-Loop: Linking Themes Together

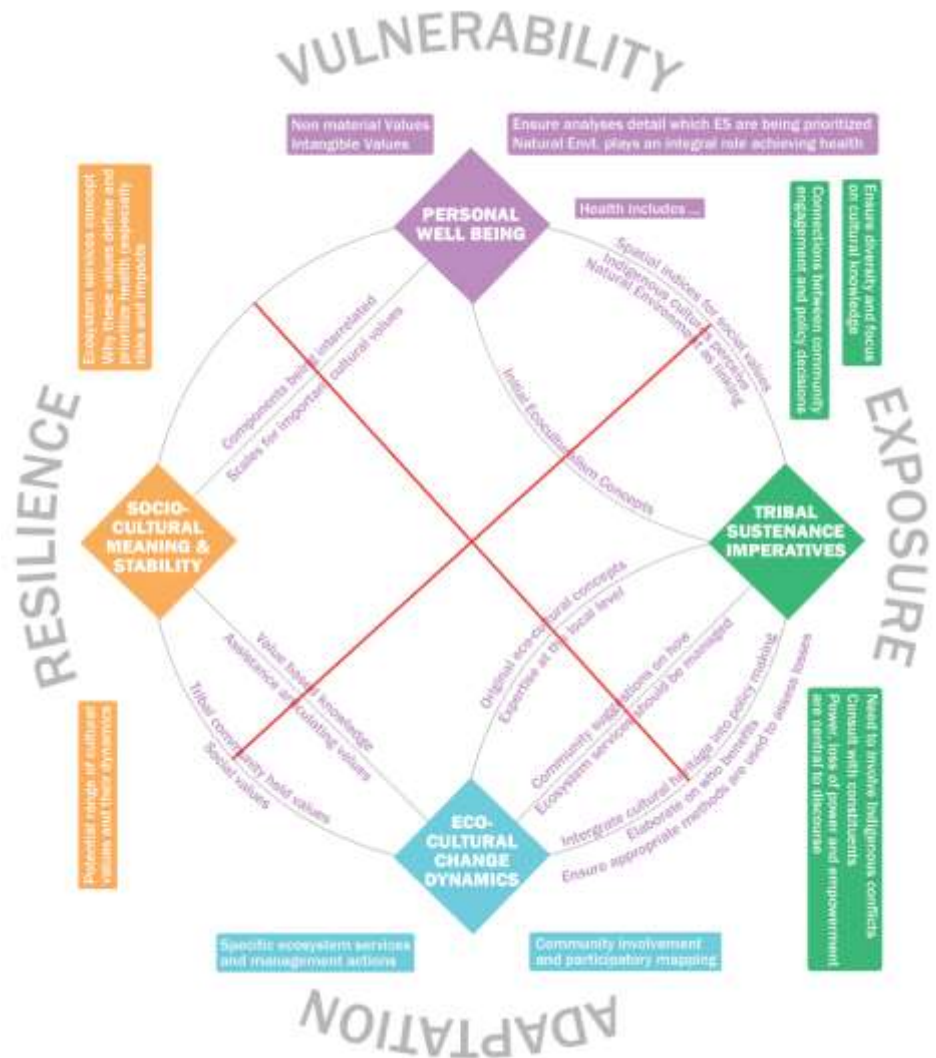
Core feature of Community Sustainance Dynamics

Adaptation to Environmental Change

Ability to Compile; Characterize; Balance; Foster
Ability to Embrace; Be Certain; Agree

Key Concepts as Variable Factors

Used to operate CSD model
Quantitative or Qualitative Data
Allow significance of potential KC to be assessed



COMMUNITY SUSTENANCE DYNAMICS

Modified “Medicine Wheel”

(w/ Eco-Cultural center)

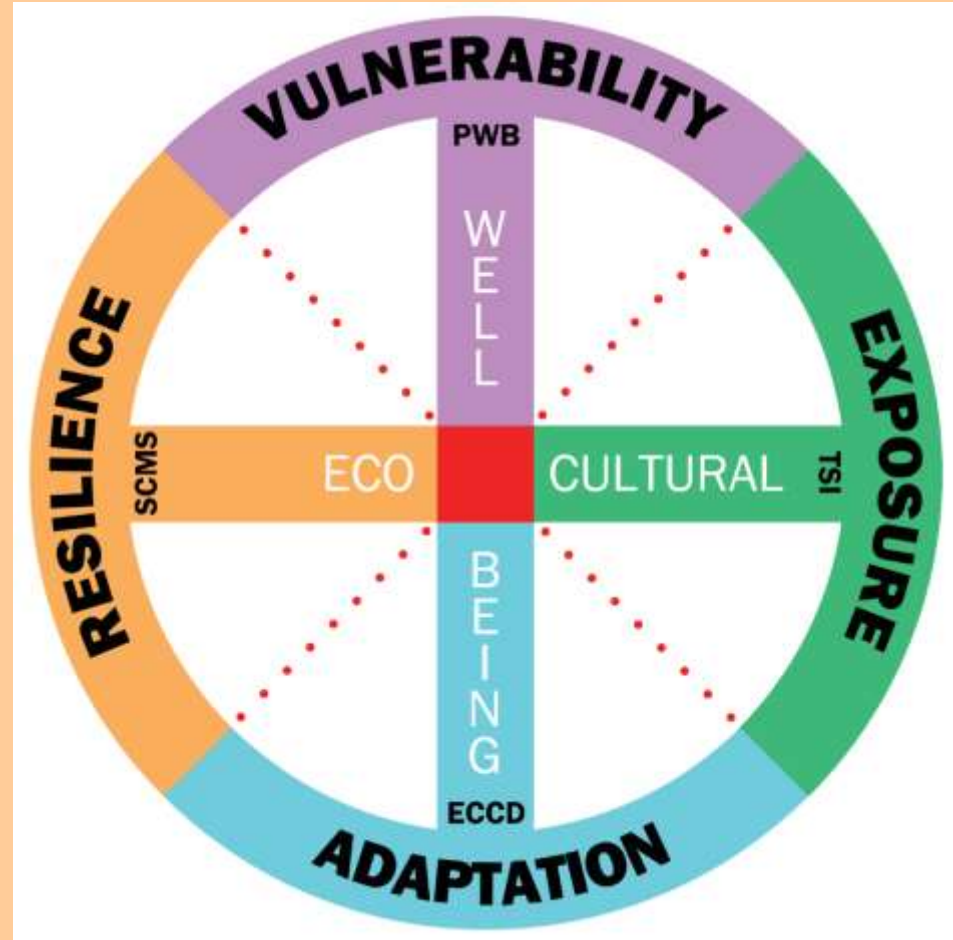
CSD Model = Modified Medicine Wheel
Underscores local community health and resilience.

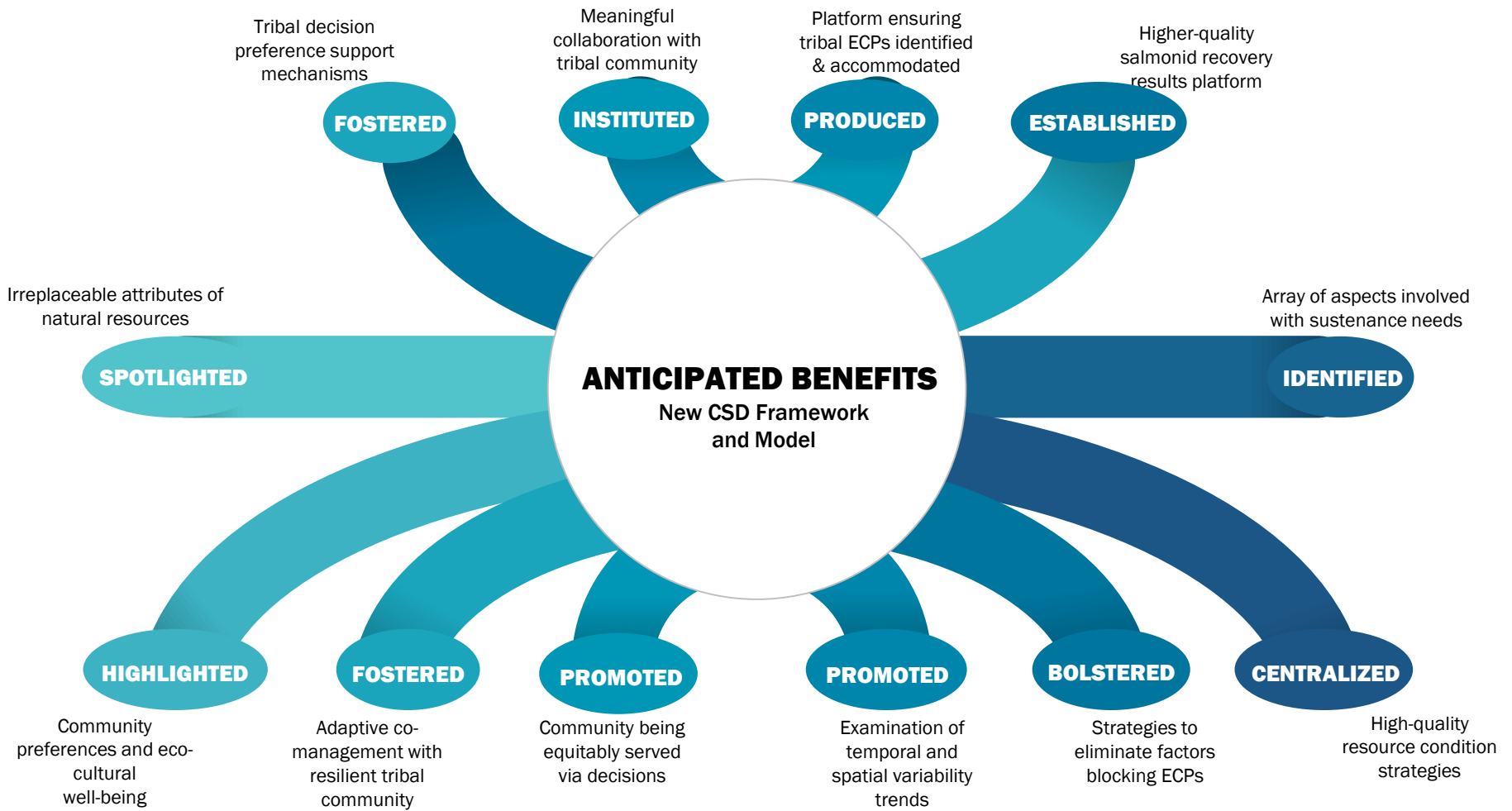
RESILIENCE = “Socio-Cultural Meaning & Stability” realm

VULNERABILITY = “Personal Well-Being” realm

EXPOSURE = “Tribal Sustenance Imperatives” realm

ADAPTATION = “Eco-Cultural Change Dynamics” realm





A COMMUNITY ON ECOSYSTEM SERVICES
International Conference
December 5-9, 2016 – Jacksonville, Florida

THEME:
ECOSYSTEM SERVICES AND HUMAN HEALTH

Tribal Voices are Needed!

Tribal Abstracts are Needed!

Please Submit Your Tribal Abstracts ASAP



Ecosystem Services Recap

SUPPORTING SERVICES:

Impacts on people are either indirect or occur over a long time.

PROVISIONING SERVICES:

Products obtained from the ecosystem.

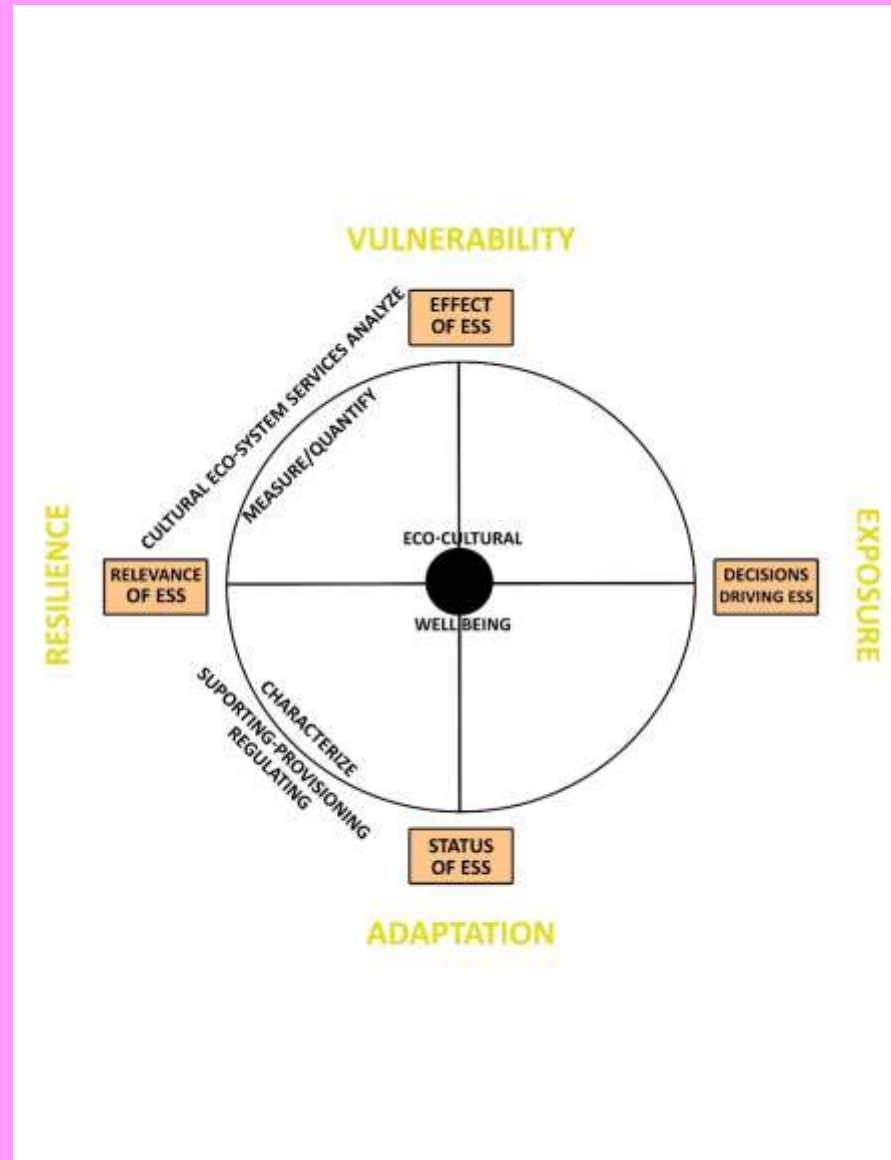
REGULATING SERVICES:

Benefits obtained from the regulation of ecosystem processes.

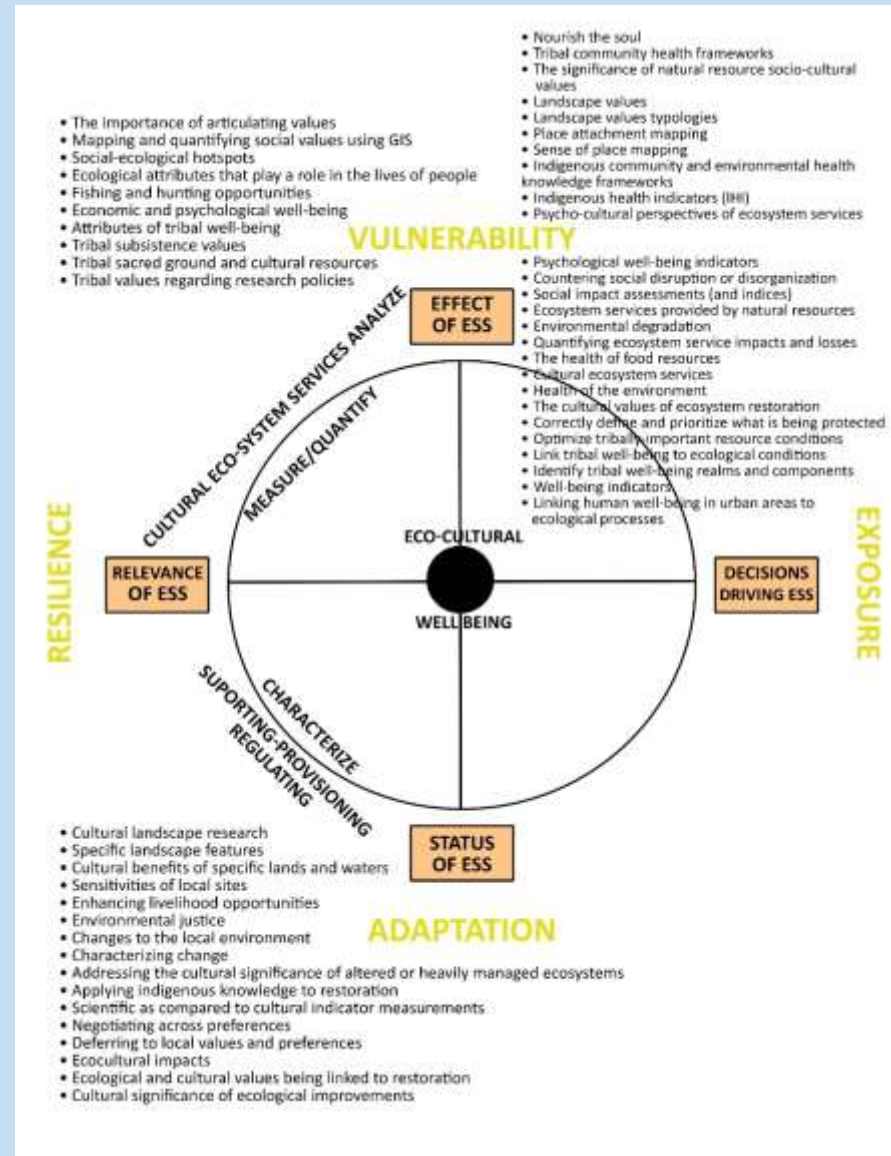
CULTURAL SERVICES:

Nonmaterial benefits people obtain from ecosystems via spiritual enrichment, cognitive development, reflection, recreation, aesthetic experiences.

Community Sustenance Dynamics Revised Medicine Wheel with Ecosystem Services Links



Community Sustenance Dynamics Revised Medicine Wheel with Ecosystem Services Links & CSD Key Concepts



Any Questions?

Please Contact:

Jeffrey P. Thomas, Master in Marine Affairs

Muckleshoot Tribe #887

Director/Timber, Fish & Wildlife Program

Puyallup Tribe of Indians

6824 Pioneer Way East

Puyallup, Wash. 98371

[253-680-5565/office](tel:253-680-5565); [253-405-7478/cell](tel:253-405-7478)

jeffrey.thomas@puyalluptribe.com