



National Collaborating Centre
for Indigenous Health

Mentions and Measures: How are Indigenous Values Considered in Impact Assessments?

Presenters: Dr. Diana Lewis and Lara Durksen

Prepared by: Dr. Heather Castleden, Dr. Diana Lewis, Veronica Reitmeier, Lara Durksen, and Dr. Elana Nightengale

March 3, 2026

Health Impact Assessment Webinar Series

Introduction

Dr. Diana Lewis



Lara Durksen



Who's in the Zoom Room?

What best describes your current role?

- Student
- Research
- Government
- Community/Not for Profit Organization
- Indigenous Organization
- Private Sector
- Other

Outline

- Health Impact Assessment and ILCBPR
- Alberta Impact Assessment Process Case Study
 - Methods
 - Results
- Next Steps
- Conclusion

Health Impact Assessment (HIA)



Identify and analyze potential impacts on the health and well-being of a population



HIAs are voluntary within the Impact Assessment Act (2019)

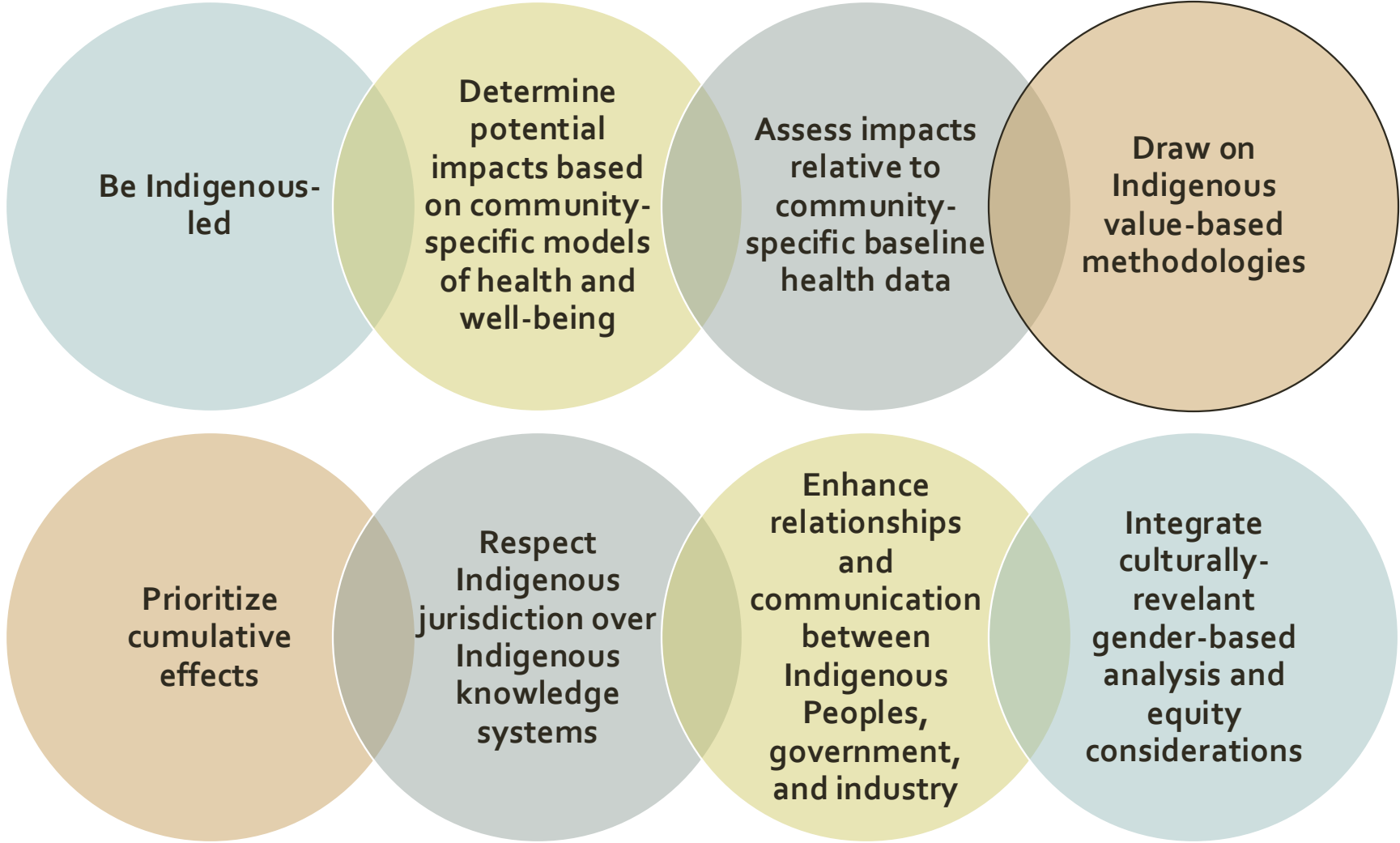


Comprehensive and engaged approach that emphasizes equity in the distribution of effects



Lack of guidance for practitioners on Indigenous-specific HIA processes

HIA Best Practices



ILCBPR and Drinking Tea

Based in relational ethics and accountability

Understanding the place and timing of research and community

Collaboration as an on-going process

Acts of refusal

Culturally relevant gender-based analysis

Data governance and sovereignty



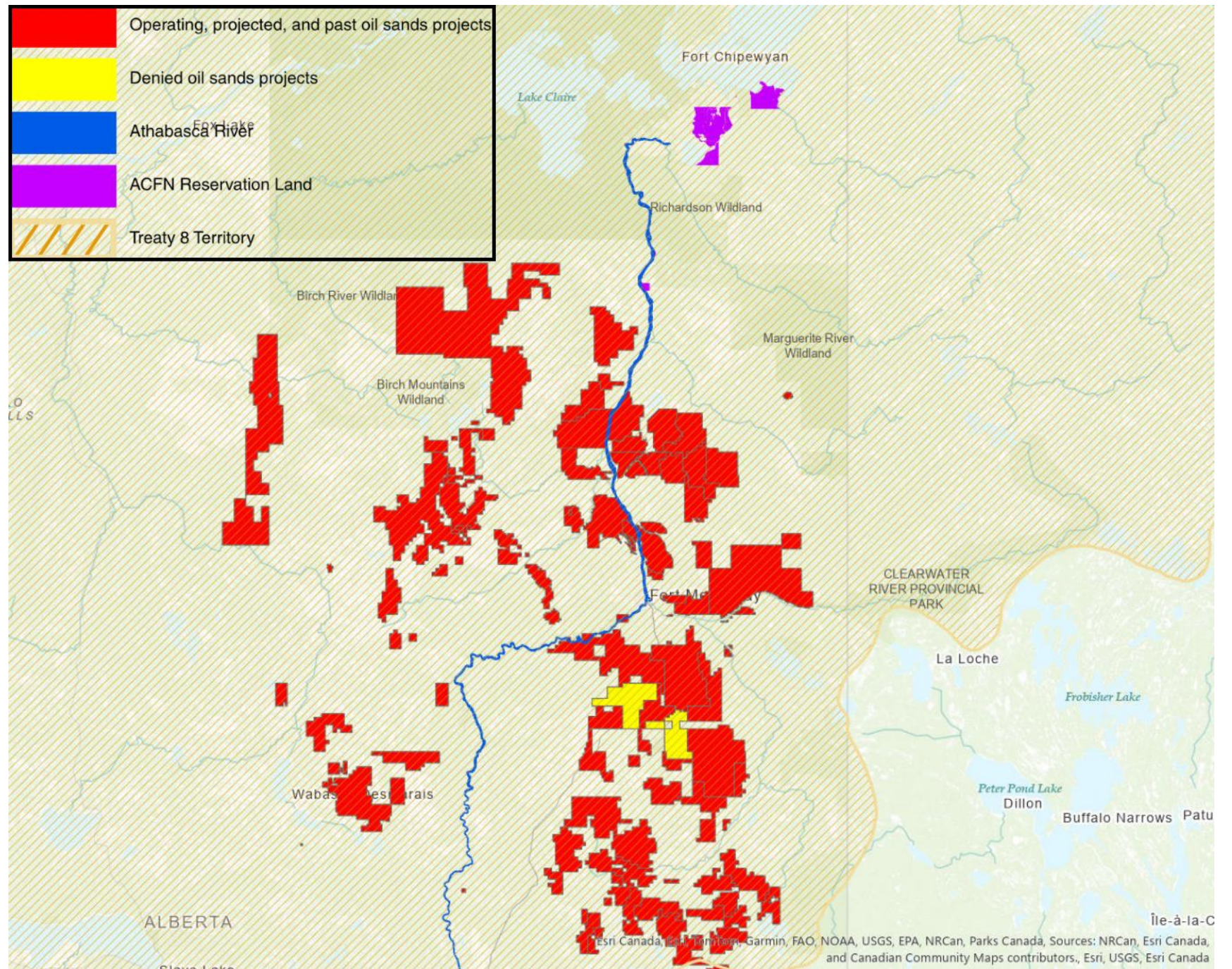
© *Journal of Higher Education Outreach and Engagement*, Volume 29, Number 1, p. 199, (2025)
Copyright © 2025 by the University of Georgia. eISSN 2164-8212

From Community-Based Participatory Research (CBPR) Involving Indigenous Peoples to Indigenous-Led CBPR: It Is More Than Just Drinking Tea

Diana Lewis, Heather Castleden, Ronald David Glass, and Nicole Bates-Eamer



Athabasca Oil Sands Development



Key Terms

Indigenous Value Components: Values, concerns, or impacts that the Indigenous participants of EIAs have specifically identified. Derived from broader concepts of value that are reflective of Indigenous peoples' knowledges and ways of being.

Economic Measures: Western indicators and impacts that are based in western ideas of value. They are tools used to assess economic activity and the impacts of a project (employment at the project site, purchased supplies, taxes paid, employment by association, spending of associated firms).

Data Collection

- 2017 NGTL System Expansion Project (**2017 NGTL**)
- Enbridge Pipelines Inc. - Line 3 Replacement Program (**EPL3**)
- Towerbirch Expansion Project (**TEP**)
- Trans Mountain Expansion Project (**TMEP**)
- Wolverine River Lateral Loop (Carmon Creek Section) (**WRLL**)
- NOVA Gas Transmission Ltd. - 2021 NGTL System Expansion Project (**2021 NGTL**)

5 National Energy Board
(NEB) reports
1 Canadian Energy
Regulator (CER) report

Ongoing Alberta Impact Assessments

Current Impact assessment by Review Panel in Alberta

- **Suncor Base Mine Extension Project**
 - **Start Date:** 2020-03-02
 - Transitioned to IAA 2019 on December 18, 2024
- **Amisk Hydroelectric Project**
 - **Start Date:** 2015-12-16
 - Transitioned to IAA 2019 on July 8, 2025

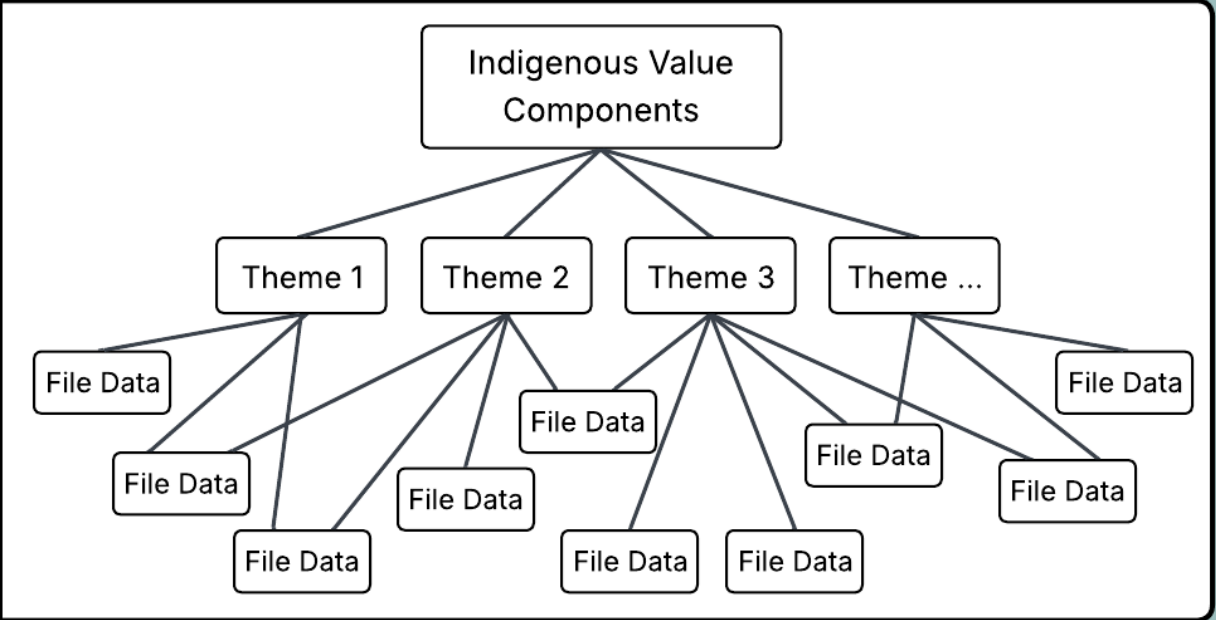
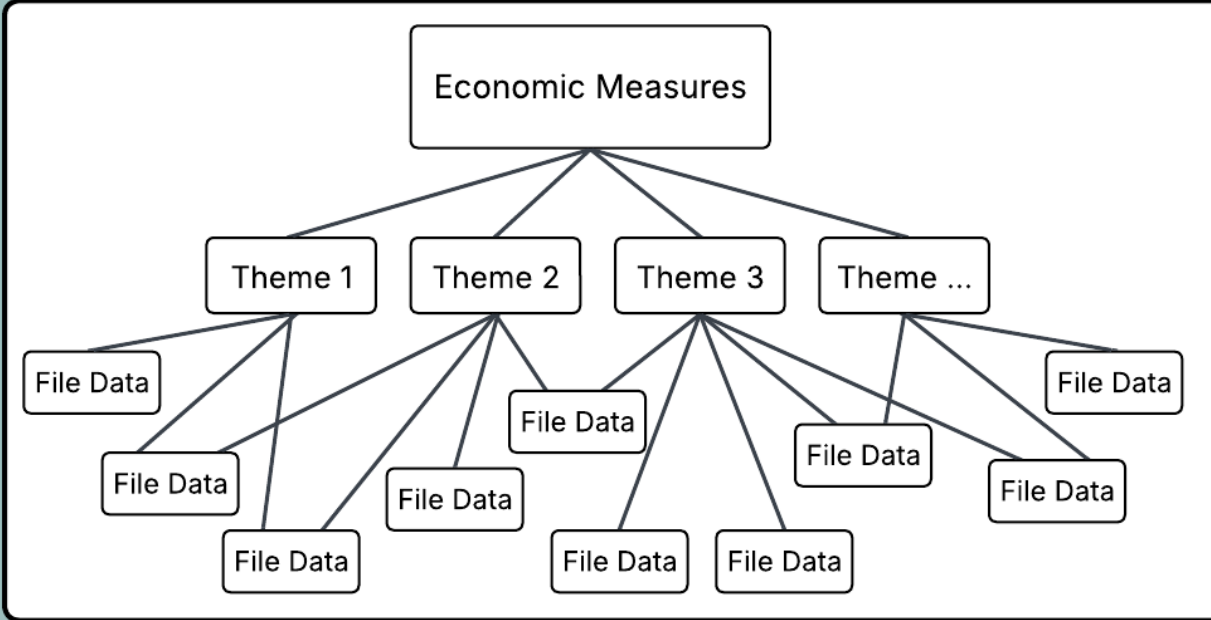
Alberta Projects in the Planning Phase for Impact Assessment

- **Mihta Askiy Data Center Project**
 - **Start Date:** December 29, 2025
- **Flipi Gas-Fired Generation Project**
 - **Start Date:** December 29, 2025
- **Beacon AI Centers Indus Project**
 - **Start Date:** December 29, 2025
- **Beacon AI Centers Heartland Project**
 - **Start Date:** December 29, 2025

Analysis

- Thematic
 - Researcher reads the raw data in a detailed manner, to identify themes, meanings, and understandings
- Inductive
 - Researcher reads the data without predetermined themes and allows the themes and concepts to be revealed during the analysis
- Informed by a literature review of:
 - Ecological Economics
 - Political Economy and Settler Colonialism
- Manual coding using NVivo (qualitative research software)

Analysis



Indigenous Value Components

- Traditional land use
- Water quality and aquatic life
- Wildlife well-being
- Treaty rights
- Hunting ability
- Community well-being
- Historical and traditional sites
- Medicinal plants
- Traditional and cultural significance
- Vegetation and soil health
- Traditional foods
- Wildlife habitat
- Loss of land
- Increased access by non-Indigenous users
- Economic opportunity
- Spiritual importance
- Employment
- Traditional knowledge in EIA
- Trap lines
- Funding and compensation
- Cost of supplemental foods

Economic Measures

- Oil demand
- Oil capacity and quantity
- Employment
- Benefits to business
- Negative costs
- Estimated economic generation
- Paid taxes
- Compensation
- Spending
- Lower capital costs

IVC Shared Connections

Community well-being
 Cost of supplemental foods
 Economic opportunity
 Employment
 Funding and compensation
 Historical and traditional sites
 Hunting ability
 Increased access by non-Indigenous individuals
 Loss of land
 Medicinal plants
 Spiritual importance
 Traditional and cultural significance
 Traditional foods
 Traditional knowledge in EIA
 Trap lines
 Treaty rights
 Vegetation and soil health
 Water quality and aquatic health
 Wildlife habitat
 Wildlife well-being

Community well-being			3	0	0	7	6	3	1	2	2	14	8	1	9	0	8	9	2	4	
Cost of supplemental foods	1		1	0	0	1	3	2	0	1	1	0	4	0	1	1	0		1	1	
Economic opportunity	3			2	1	0	0	0	0	0	1	0	2	0	0	0	0	0	1	0	
Employment	0		2		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Funding and compensation	0		1	1		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
Historical and traditional sites	7		0	0	0		7	2	4	6	12	13	2	1	11	2	6	2	1	2	3
Hunting ability	6		0	0	0	7		6	9	16	4	9	9	0	17	9	12	7	3	6	16
Increased access by non-Indigenous individuals	3		0	0	0	2	6		1	1	2	1	3	0	2	0	4	0	1	0	4
Loss of land	1		0	0	0	4	9	1		2	4	3	1	0	7	2	13	2	3	3	3
Medicinal plants	2		0	0	0	6	16	1	2		5	4	12	1	9	6	5	15	8	1	9
Spiritual importance	2		1	0	0	12	4	2	4	5		5	4	0	1	2	2	0	1	0	0
Traditional and cultural significance	14		0	0	0	13	9	1	3	4	5		5	0	12	2	9	3	4	2	7
Traditional foods	8		2	0	0	2	9	3	1	12	4	5		0	4	1	3	5	7	2	5
Traditional knowledge in EIA	1		0	0	0	1	0	0	0	1	0	0	0		0	0		0	0	0	0
Traditional land use	9		0	0	1	11	17	2	7	9	1	12	4	0		3	17	3	3	3	6
Trap lines	0		0	0	0	2	9	0	2	6	2	2	1	0	3		5	5	1	1	3
Treaty rights	8		0	0	0	6	12	4	13	5	2	9	3	1	17	5		3	3	0	5
Vegetation and soil health	5		0	0	0	2	7	0	2	15	0	3	5	1	3	5	3		7	4	12
Water quality and aquatic health	9		1	0	0	1	3	1	3	8	1	4	7	0	3	1	3	7		2	17
Wildlife habitat	2		0	0	0	2	6	0	3	1	0	2	2	0	3	1	0	4	2		15
Wildlife well-being	4		0	0	0	3	16	4	3	9	0	7	5	0	6	3	5	12	17	15	
Total	85	2	11	3	3	82	139	32	58	103	46	93	77	5	109	43	96	75	72	44	110

IVC Shared Connections – Economic value focus

Shows limited connection
between the western values
within the IVCs

	Economic opportunity	Employment	Funding and compensation
Community well-being	3	0	0
Cost of supplemental foods	1	0	0
Economic opportunity		2	1
Employment	2		1
Funding and compensation	1	1	
Historical and traditional sites	0	0	0
Hunting ability	0	0	0
Increased access by non-Indigenous individuals	0	0	0
Loss of land	0	0	0
Medicinal plants	0	0	0
Spiritual importance	1	0	0
Traditional and cultural significance	0	0	0
Traditional foods	2	0	0
Traditional knowledge in EIA	0	0	0
Traditional land use	0	0	1
Trap lines	0	0	0
Treaty rights	0	0	0
Vegetation and soil health	0	0	0
Water quality and aquatic health	1	0	0
Wildlife habitat	0	0	0
Wildlife well-being	0	0	0
Total	11	3	3

Question

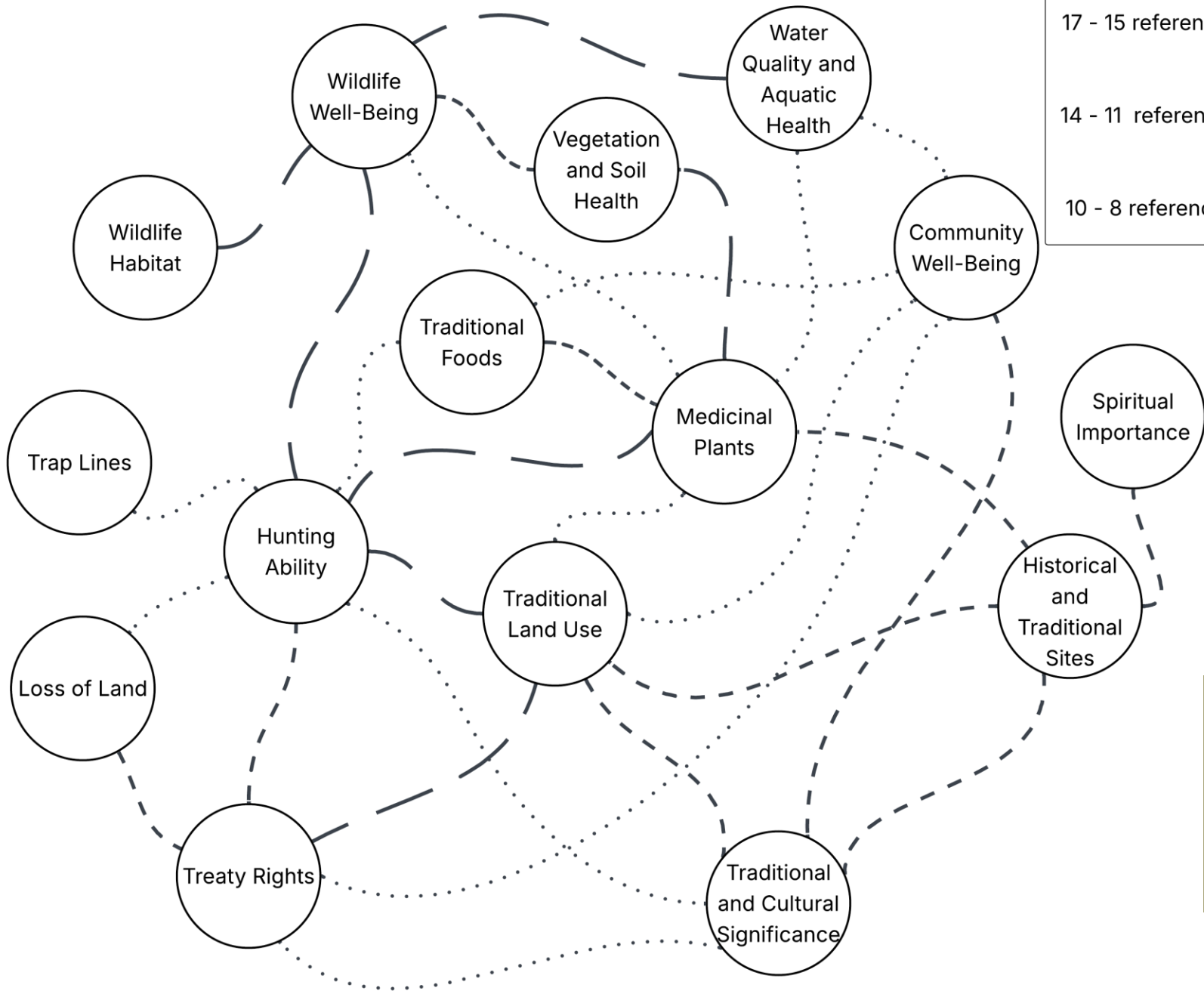
Do you understand the concept of “talking past each other”?

- Yes
- No

IVC Shared Connections

Shows high degree of interconnection between the IVCs

	Community well-being	Cost of supplemental foods	Historical and traditional sites	Hunting ability	Increased access by non-Indigenous individuals	Loss of land	Medicinal plants	Spiritual importance	Traditional and cultural significance	Traditional foods	Traditional knowledge in EIA	Trap lines	Treaty rights	Vegetation and soil health	Water quality and aquatic health	Wildlife habitat	Wildlife well-being	
Community well-being	1	7	6	3	1	2	2	14	8	1	9	0	8	5	9	2	4	
Cost of supplemental foods	1	1	3	2	0	1	1	0	4	0	1	1	0	1	1	1	1	
Historical and traditional sites	7	1	7	2	4	6	12	13	2	1	11	2	6	2	1	2	3	
Hunting ability	6	3	7	6	9	16	4	9	9	0	17	9	12	7	3	6	16	
Increased access by non-Indigenous individuals	3	2	2	6	1	1	2	1	3	0	2	0	4	0	1	0	4	
Loss of land	1	0	4	9	1	2	4	3	1	0	7	2	13	2	3	3	3	
Medicinal plants	2	1	6	16	1	2	5	4	12	1	9	6	5	15	8	1	9	
Spiritual importance	2	1	12	4	2	4	5	5	4	0	1	2	2	0	1	0	0	
Traditional and cultural significance	14	0	13	9	1	3	4	5	5	0	12	2	9	3	4	2	7	
Traditional foods	8	4	2	9	3	1	12	4	5	0	4	1	3	5	7	2	5	
Traditional knowledge in EIA	1	0	1	0	0	0	1	0	0	0	0	0	1	1	0	0	0	
Traditional land use	9	1	11	17	2	7	9	1	12	4	0	3	17	3	3	3	6	
Trap lines	0	1	2	9	0	2	6	2	2	1	0	3	5	5	1	1	3	
Treaty rights	8	0	6	12	4	13	5	2	9	3	1	17	5	3	3	0	5	
Vegetation and soil health	5	1	2	7	0	2	15	0	3	5	1	3	5	3	7	4	12	
Water quality and aquatic health	9	1	1	3	1	3	8	1	4	7	0	3	1	3	7	2	17	
Wildlife habitat	2	1	2	6	0	3	1	0	2	2	0	3	1	0	4	2	15	
Wildlife well-being	4	1	3	16	4	3	9	0	7	5	0	6	3	5	12	17	15	
Total	82	19	82	139	32	58	103	45	93	75	5	108	43	96	75	71	44	110



17 - 15 references= [Solid line]

14 - 11 references= [Dashed line]

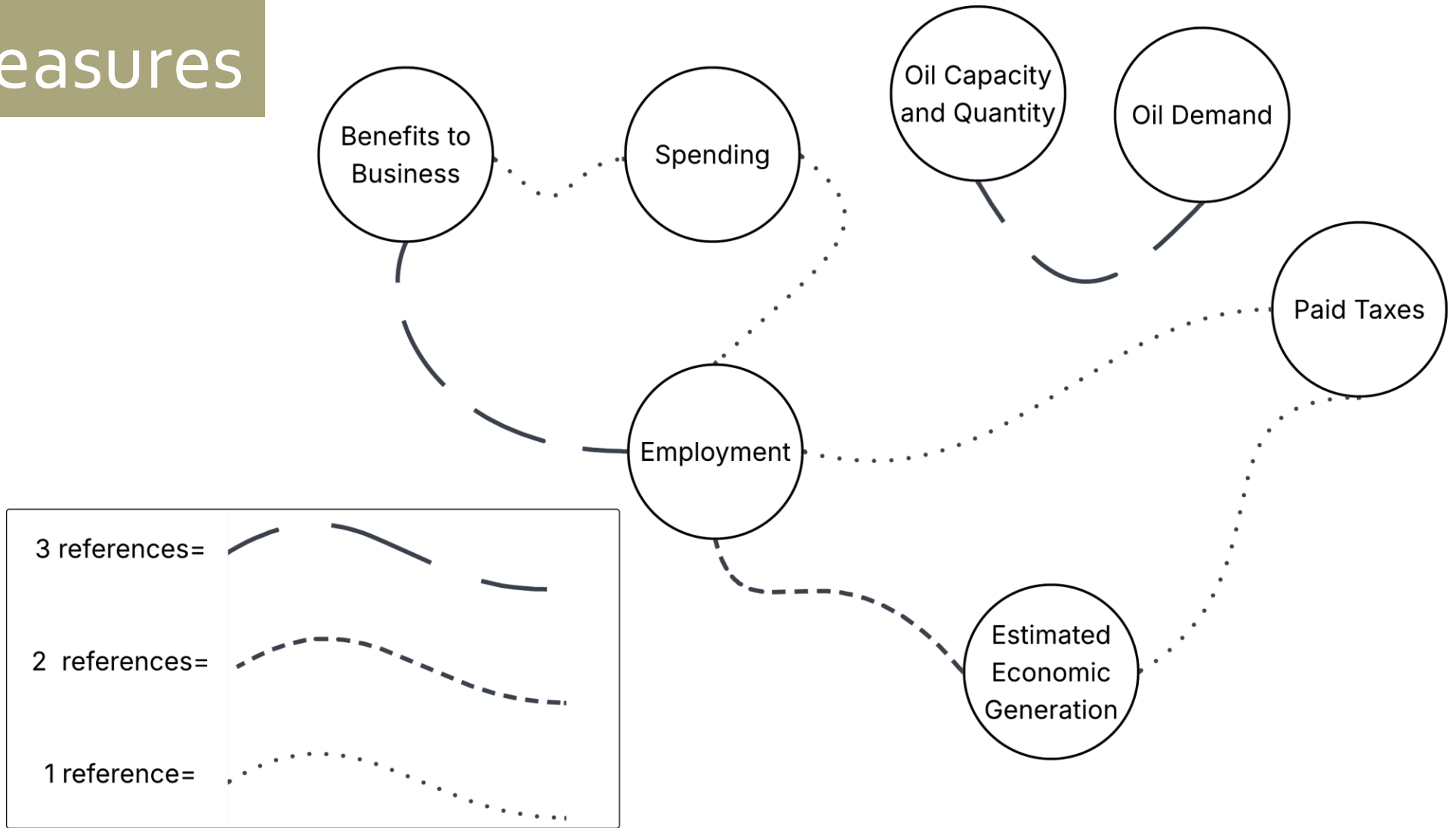
10 - 8 references= [Dotted line]

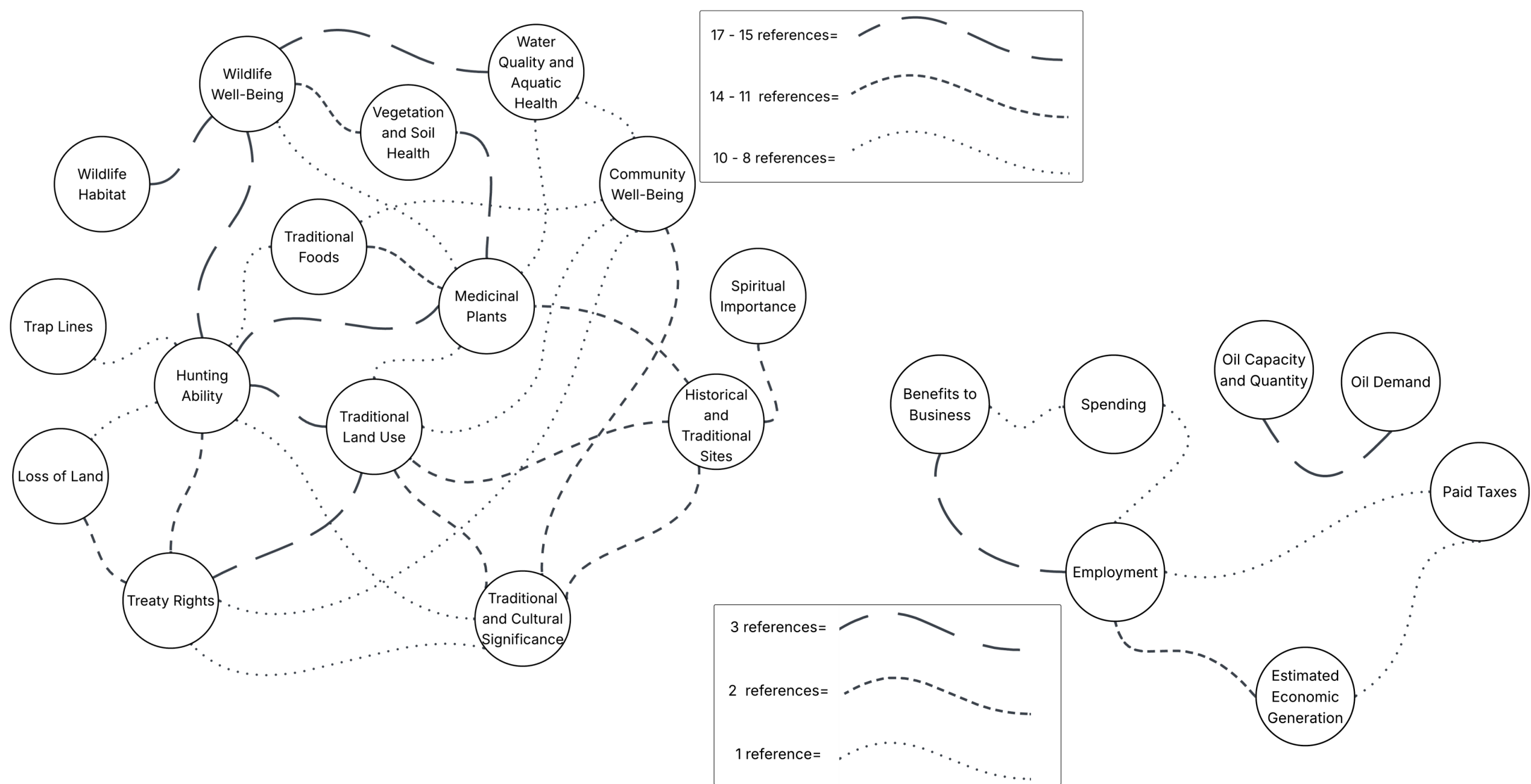
Relationships in IVCS

Economic Measures Shared Connections

	Benefits to business	Compensation	Employment	Estimated economic generation	Lower capital costs	Negative costs	Oil capacity and quantity	Oil demand	Paid taxes	Spending
Benefits to business	0	0	3	0	0	0	0	0	0	1
Compensation	0	0	0	0	0	0	0	0	0	0
Employment	3	0	2	0	0	0	0	1	1	0
Estimated economic generation	0	0	2	0	0	0	0	1	0	0
Lower capital costs	0	0	0	0	0	0	0	0	0	0
Negative costs	0	0	0	0	0	0	0	0	0	0
Oil capacity and quantity	0	0	0	0	0	0	3	0	0	0
Oil demand	0	0	0	0	0	0	3	0	0	0
Paid taxes	0	0	1	1	0	0	0	0	0	0
Spending	1	0	1	0	0	0	0	0	0	0
Total	4	0	7	3	0	0	3	3	2	2

“Relationships” in Economic Measures







(Source: <https://io.wp.com/garybasin.com/wp-content/uploads/2017/08/miscommunication.jpg?ssl=1>)

Question

Do you understand talking past each other is now?

- Yes
- No

Next Steps in Research and HIA

- **What's next for research**
- **Building on the research we do**

Upcoming HIA Webinars

March 31, 2026 – What is distinctions-based Health Impact Assessment?

Questions?

We'la'liog

Thank you

To read the full report, please visit the NCCIH website.