INTEGRATING TRADITIONAL ECOLOGICAL KNOWLEDGE AND THE NEED FOR COLLABORATION BETWEEN THE INDIGENOUS COMMUNITY AND WESTERN SCIENCE METHODS

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KNOWLEDGE ALONE IS NOT ENOUGH.

THE WISDOM TO MAINTAIN RESPECTFUL RELATIONSHIPS AS A PART OF A WHOLE SYSTEM IS THE BASIS OF INDIGENOUS TEK





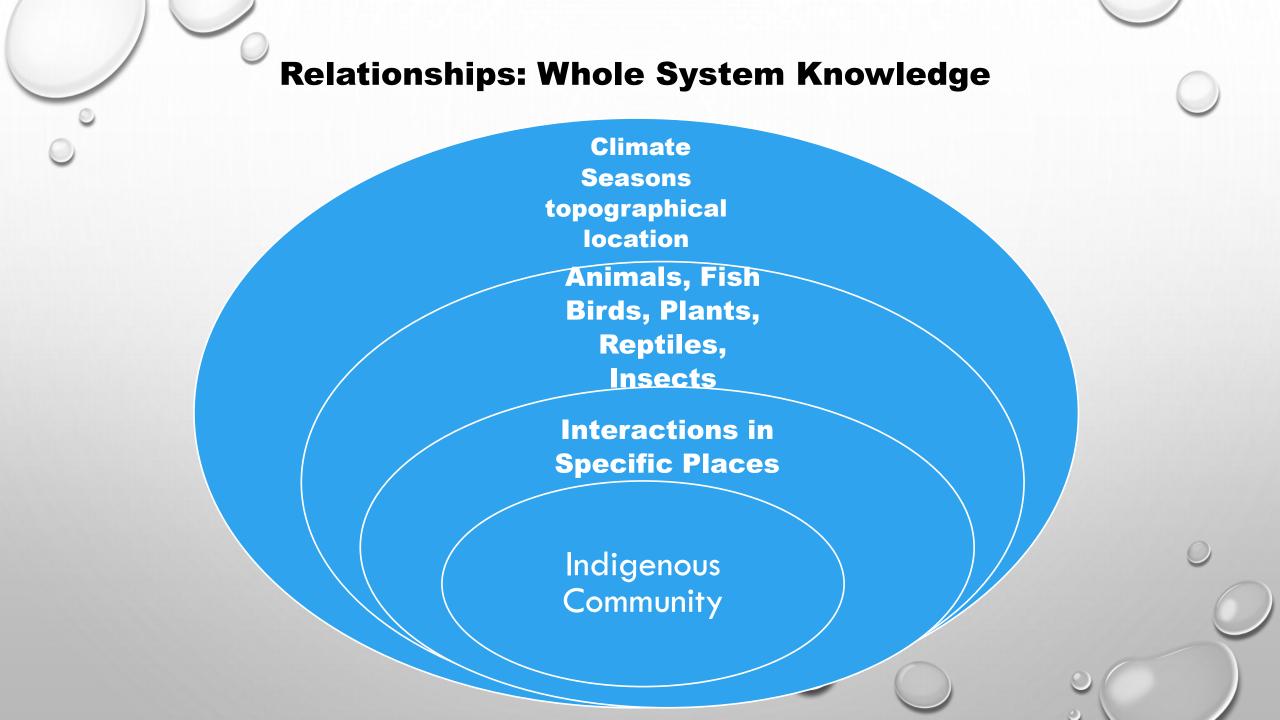
- INDIGENOUS TEK IS KNOWLEDGE BASED IN REAL LIFE PRACTICES AND USES NORMALIZED INTO EVERYDAY LIVING THAT MAY NOT SEEM TO BE TEK
- IT IS BASED IN A CULTURAL LONG-TERM RELATIONSHIP TO THE LAND STEEPED IN AN UNDERLYING ETHIC TO PROTECT THE REGENERATION OF PLACE
- INDIGENOUS TEK IS HELD IN THE DIRECT ANNUAL OBSERVATIONS OF ACTIVE USERS OF RIGHTS TO HARVEST, HUNT AND FISH AS WELL AS OBSERVATIONS OF ACTIVE FOOD PROCESSORS IN THE HOME.
- INDIGENOUS TEK ALSO CONTAINS LONG-TERM HISTORICAL DESCRIPTIVE DATA PASSED DOWN THROUGH ORAL COMMUNICATION OVER MANY GENERATIONS
- INDIGENOUS TEK HAS DIFFERENT RELATIONSHIP INFORMATION IN SPECFIC LOCATIONS FROM ELDERS, MEN, WOMEN AND YOUNG NEW KNOWLEDGE KEEPERS.

WOMEN'S KNOWLEDGE: FOOD HARVESTS, PRESERVATION AND CONSTANT OBSERVATIONS, ON QUALITY, QUANTITIES, SIZES, CHANGES AND DISEASES.

SOMETIMES NOT SEEN AS OR UNDERSTOOD AS TEK



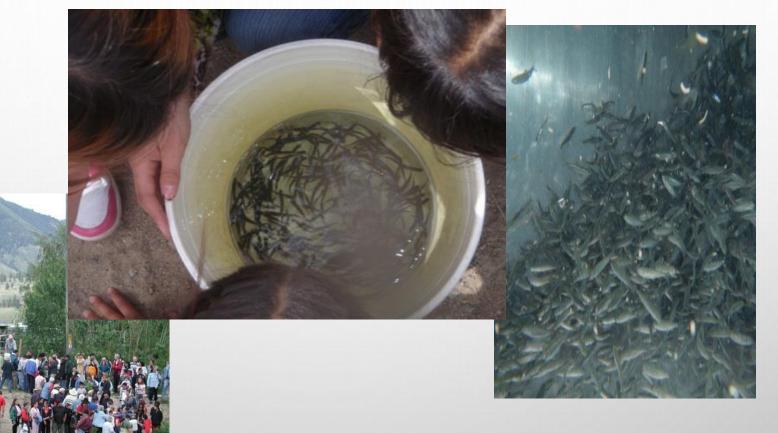






- TEK IS A WHOLE SYSTEM VIEW OF THE RELATIONSHIPS BETWEEN THE SPECIES IN A PLACE.
- TEK REPRESENTS A VIEW OF A PLACE A SYILX PERSON GREW UP IN, THEIR PARENTS AND GRANDPARENTS GREW UP IN, IN COMMUNITIES WITH PEOPLE THEY HAD DIRECT SHARING OF INFORMATION WITH OVER TIME.
- TEK REPRESENTS THEIR KNOWLEDGE THROUGH THEIR USE IN THEIR SPECIAL WAYS.
- TEK REPRESENTS WHAT THEY EXPERIENCE AND SHARE WITH FAMILY, COMMUNITY, AND NATIONS MEMBERS ON HARVESTS, ON BOUNTY, SCARCITY, ON CYCLIC DIFFERENCES AND OBSERVED CHANGES
- TEK REPRESENTS THE UNIQUE KNOWLEDGE OF EACH PLACE IN ITS RIGHTFUL CONTEXT.
- INDIGENOUS TEK IS ABOUT THE SPECIFICS REQUIRED BY EACH LOCAL PLACE AS A UNIQUE SYSTEM.

TEK IS INDIGENOUS COMMUNITY KNOWLEDGE. IT IS COLLECTIVE AND BASED IN TRADITIONS AND ACTIVE USE



IS NOW MOST USED IN PRO-ACTIVE INDIGENOUS FOOD & CULTURAL REGENERATION PROJECTS.

TRADITIONAL ECOLOGICAL KNOWLEDGE

- IN HISTORICAL AND CULTURAL PUBLISHED MATERIALS
 - HELD IN COMMUNITIES IN INFORMAL COLLECTIONS
 - REPORTS GENERATED BY COLLABORATIONS ON PROJECTS
 - ETHNO CULTURAL STUDIES WITH SCHOLARS
 - IN NARRATIVE STORY COLLECTIONS
- ORAL NARRATIVES OF CONTEMPORARY INDIGENOUS HARVESTER GROUPS —EXAMPLE FOR FISH, MOLLUSKS, AQUATIC PLANTS, AQUATIC MAMMALS.
- ORAL NARRATIVES OF LOCAL INDIGENOUS FOOD PROCESSER GROUPS
- ORAL COMMUNICATION WITH ELDERS & SPECIALIST AND YOUNG KNOWLEDGE HOLDERS
- MANAGEMENT DATA REPORTS ABORIGINAL FISHERIES BIOLOGISTS & COMMUNITY ADVISORIES.
- INDIGENOUS FOOD MAPS INCLUDING STORY MAPPING AND PLACE NAME MAPS
- ABORIGINAL SAR ASSESSMENTS & OTHER ENVIRONMENTAL ASSESSMENTS FOR DEVELOPMENT.

TEK Science is Necessary In-Depth Knowledge

TEK Members and Syilx Biologists discussing chinook salmon genetic traits for ATK gathering by the COSEWIC ATK Subcommittee for input to status listing review.



INDIGENOUS SPECIES TEK DATA CAN INCLUDE

ECOLOGY

- SPECIES OCCURRENCES
- SPECIES DISTRIBUTION
- HABITAT REQUIREMENTS
- POPULATION SIZES
- MOVEMENT PATTERNS
- MIGRATION ROUTES
- CHANGES OVER TIME
- ENVIRONMENTAL THREATS

BIOLOGY

- ■BODY CONDITION
- HEALTH INDICATORS
- DISEASE CYCLES
- SPECIES INTERACTIONS
- PREDATORS
- SYMBIOTIC HOSTS
- REPRODUCTION CYCLES
- CHANGES TO NORMAL SIZE & PHYSIOLOGY

THE 4 R'S INVOLVED IN KNOWLEDGE EXCHANGE

- RELATIONSHIP
- RESPECT
- RESPONSIBILITY
- RECIPROCITY





Courtesy J armstrong

INTELLECTUAL PROPERTY RIGHTS PROTECTION

OWNER RIGHTS MAY INCLUDE DIFFERENT LEVELS FOR PERMISSION TO ACCESS AND PROTECT

INDIVIDUAL,

KNOWLEDGE SPECIALIST,

FAMILY,

CLAN,

MEDICINE SOCIETY,

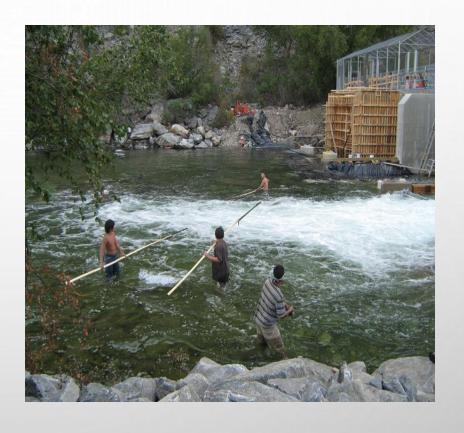
COMMUNITY,

NATION/LANGUAGE GROUP.

PROTECTION FILTERS FOR RISKS SUCH AS UNINTENDED SACRED OR CULTURALLY SENSITIVE INFORMATION

- PROTECTION FILTERS FOR RISKS IN SHARING WITH GOVERNMENT AS PUBLIC INFORMATION
- PROTECTION FILTERS TO ENSURE INFO ONLY FOR DESIRED PURPOSE
- PROTECTION FILTERS FOR LEGALLY SENSITIVE SITUATIONS.

INDIGENOUS ECOLOGICAL **KNOWLEDGE FOR US IS A** WAY OF KNOWING BASED IN CARING FOR THE GIFTS THAT THE WATER AND LAND GIVES FOR LIFE TO **CONTINUE IN THE WAYS IT** INFORMS WHAT WE DO AND HOW WE MUST BEHAVE.





- COMMUNITY ACKNOWLEDGES WHO KNOWLEDGE HOLDERS ARE
- COMMUNITY IDENTIFIES KNOWLEDGE HOLDER'S EXPERIENCE
- COMMUNITY SPECIFIES TYPE OF KNOWLEDGE & EXPERTISE
- APPROPRIATE PROTOCOLS OF EXCHANGE OF KNOWLEDGE
- APPROPRIATE ACKNOWLEDGEMENT IN REPORTS

EXAMPLE OF GOOD REASONS FOR INCORPORATING INDIGENOUS TEK

TEK DATA COMBINED WITH SCIENCE DATA FOR HIGHLY SUCCESSFUL OKANAGAN SOCKEYE RESTORATION WAS BASED FIRST AND FOREMOST IN GOOD TEK DATA APPLIED TO SCIENCE DATA COLLECTED BY THE SYILX ON SALMON AND OTHER FISH SPECIES.

COLLABORATIONS
WITH 8 FIRST
NATIONS
INCLUDING INTERBOUNDARY
COLLECTION OF
TEK COMBINED
WITH SCIENCE
DATA.

