Chapter 3\_1 Notes (adapted)

**Learning About Ecosystems**

Traditional Ecological Knowledge

-Knowledge gathered by First Nations people about their HOME environments.

-Based on beliefs, cultures, and values

-Gathered over thousands of years of experience

-PEOPLE are PART OF the ENVIROMENT

-Everything made by The Creator

-All things have life, including rocks, trees, wind…

-All things are related (what you do to one thing impacts everything)

-Harmony and balance needed between all things

-Adds to our understanding of ecosystems

-Can provide people with different ways to care for the environment.

**Ecosystem Monitoring / Environmental Monitoring**

\*\*monitoring = watching and paying attention to\*\*

-Checking on and watching the condition of an ecosystem

-Comparing data over time to monitor changes and conditions

a) Physical monitoring

-Changes in the LANDSCAPE (hills, rivers, forests, lakes…) over time

-Use satellites, remote sensing, photographs, maps, surveys, traditional knowledge, etc.

b) Environmental monitoring

-Changes in CLIMATE and WEATHER PATTERNS over time

-Use weather stations, public records, satellites, traditional knowledge, etc.

c) Chemical monitoring

-Changes in the quality of the air/soil/water over time

-Testing water quality, air quality, soil conditions,…

-Use monitoring stations, instrumentation

d) Biological monitoring

-Changes in ORGANISMS (individual living things) and POPULATIONS over time

-Surveys, traditional knowledge, hunting data

**Methods of Monitoring**

BASELINE DATA

-This is what you begin with, your first record

-All future measurements are compared to this one to see change

Permanent plots

-study site kept over time

-year to year monitoring for many years

Annual survey

-done once a year, at the same time, done the same way

Environmental Impact Assessment

A written report that describes the impact on an environment of any proposed developments/changes in the environment.