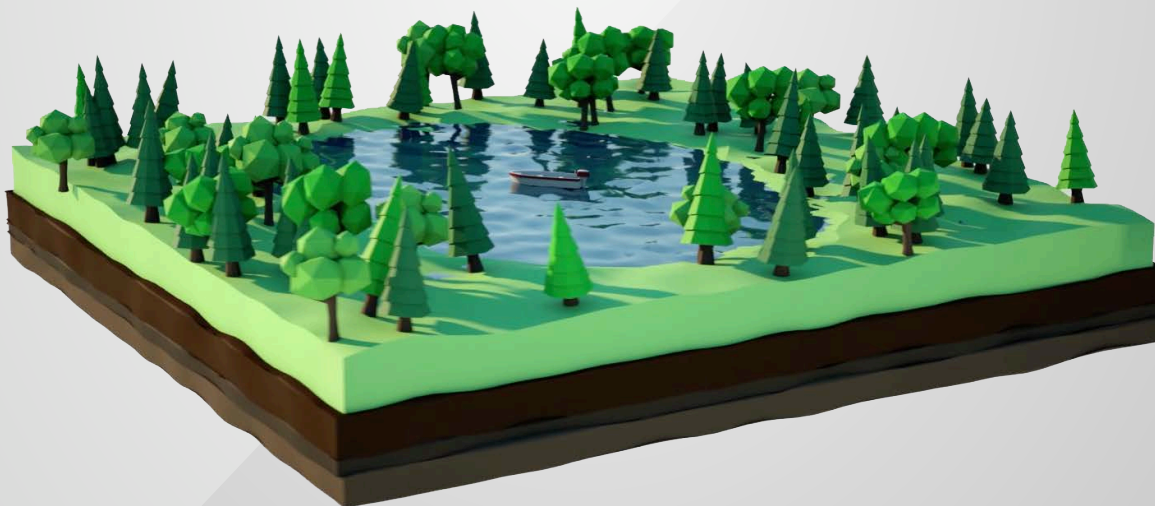


LESSON PLAN:

 **Ojibwe Translation of
Researching Climate Change**



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IISD Experimental Lakes Area

IISD Experimental Lakes Area (IISD-ELA) is the world's freshwater laboratory. A series of 58 lakes and their watersheds situated on the traditional territory of Treaty #3 in Northwestern Ontario, Canada, IISD-ELA is the only place in the world where scientists can research on and manipulate real lakes to build a more accurate and complete picture of what human activity is doing to freshwater lakes. The findings from over 50 years of ground-breaking research have rewritten environmental policy around the world—from mitigating algal blooms to reducing how much mercury gets into our waterways—and aim to keep fresh water clean around the world for generations to come.

Lesson Plan: Ojibwe Translation of Researching Climate Change

June 2021

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Acknowledgements

We are grateful for the following individuals who have been part of this translation project, the ones whom we now proudly call friends. We thank Elder Nancy Jones for her infinite wisdom, Elder Don Jones for his generous teachings, Jason Jones for his endless dedication toward the revitalization of Anishinaabemowin, and Bruce Townsend for his profound understanding of science. We thank Emma Bruyere, a high school student who shares our passion for the Ojibwe language and is the voice of the video. We thank Joel Gendron for his amazing skills in audio/video editing. Last but not least, we thank all the Elders and youth who were part of the many meetings and evaluation processes. In and of itself, this work is a story of all these individuals creating, sharing, learning, and connecting.

We also thank our generous funders for making this project possible.

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Introduction

This Ojibwe lesson plan is compiled based on IISD-ELA's video on researching climate change. The video explains what climate is, what climate change is and its impact on boreal lakes, particularly on fish populations, and what has been done in a real-world scenario. You can find both English and Ojibwe versions of the video [here](#).

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The Translation Process

The translation of this video took three full-day sessions. We began each meeting with a blessing from the Elders as well as food and tobacco offerings. We presented the video and its transcript in English at the first meeting, with an in-depth explanation of the research. The language experts translated and interpreted the video content by going through the English transcript sentence by sentence. After the transcript was fully translated, a full-day roundhouse meeting was held, including Elders and youth, to evaluate the final work. Many teachings were shared during these meetings in terms of both traditional knowledge and scientific concepts.

How to Use This Lesson Plan

This lesson plan consists of a full transcript, sentence breakdown, grammar indicators, new words created, and suggested learning activities. We recommend that you include the video in your learning experience to practice listening and speaking skills while at the same time learning about scientific research on mercury. Learning never ends, so have fun with it!

Video Transcript

Ojibwe

Eni-aanji-izhiwebak

Ji-gikendamang ge-izhi-gikendamang aaniin ge-izhi-biinitooyang nibi? Ando-naanaagajigaadeg gidakiiminaang gaa-wanichigewaad omaa gidakiiminaang. Gaawiin biindig danakiiziiwag agwajiiing babaa-**naanaagajichige**, onaanaagadawaabandaan, nanandotam omaa gidakiiminaang. Ezhi-baatayiinakin zaaga'iganiin naanimidana ashinishwaaswi gii-bakigidinaawaa ji-naanaangajitoowaad enigokwaag manidoo **inaakonigewaki** (Treaty #3) gii-miinaawag awi'igoowiziwin ji-naanaandawaabiwaad. Gakina awiya odapenimon nibi wenji-bimaadiziyang, ezhi-oko-**naanaagajichige** yang. Gegoo noongom ezhi-mookinaagwakin **gegooyan, wegimaawaadizi** waad ge-onji-wiiji'inangwaa **gegooyan**. Naa onowe aanind gaa-**naanaagajichigewaad, eni-aanji-izhiwebak**.


Aaniin eni-ayi-izhiwebak? Eni-ayi-**inaabishinang** eni-ayi-izhiwebak owe apii gii-ayaaying. Ezhi-bebakaanag **baabiitoogoodeg** giizhik ezhiseg inanaamowin gaye ezhi-bebakaanakin ezhiwebak.

English

Climate Change

Want to know how we help keep our water clean? IISD Experimental Lakes Area (or IISD-ELA) studies the impacts of human activity on our environment, only we don't conduct our experiments in a lab; we conduct them on entire ecosystems. IISD-ELA is a collection of 58 lakes in Northwestern Ontario, Canada, set aside for scientific research. It's the only lab of its kind in the world. Because all life depends on water, we study changes to the environment that impact our freshwater resources. Evidence from real-world ecosystem experiments helps governments make better decisions and helps protect our water and planet. Here are some of the things we research. Climate change.

What is climate? Climate is the weather you expect to see based on the time of year and where you are in the world. The gases in our atmosphere help keep our climate balanced by regulating temperature and precipitation.



Green words are new words created during the translation process.

Aaniin **eni-aanji-izhiwebak**?

Bashkwada'igewin, boodawemagak—**mitigoo-inanaamowin** miziwe baashkine'aabide. Nawaj geyaabi ani-bashkine'aabide, ani-**onzaamiyaabawaa** miziwe. Miziwe ani-aanji-izhiwebad, ani-baate miziwe gaye ani-gisinaa gaye gimiwang.

Wegonen dash wenji-maji-izhiwebak? Gaye wiinawaa omaazhitoonaawaa awesiinyag gaye bebaamaashiwaad owe gii-aayaanji-izhiwebak aanike. Zaaga'iganiin ani-iniinaagamin nibi zaaga'igan mii iwe gimiwanzinon gaye gii-zoopisinook, onzaam niibiwa **biindaate**wan zaaga'iganiin gaye ani-giizhoogamin.

Aaniin wenji-giikendamang? Nibi isa mii iwe gimiwanzinon gaye gii-zoopisinok. **Eni-aanji-izhiwebak naabida**, ando-gikendaasowaad gii-kiba'igaade ezhiwebakiban gii-izhichigaade ji-meshkojijiwang iwidi zaaga'iganiikaaning. Niso-nobaniin ziibiin noongom idash bezhigwan ziibi gaa-**giiwitaajiwang** gaa-izhijiwang zaaga'iganiikaaning, awashime aabita bakaan izhijiwang maagizhaa 80%. Gii-ani-iskade noongom eta 74 **inigokogamaa** nawaj iko 388 gii-**inigokogamaaban**. Gii-kakijiwang **metaboode** gakina gegoo wiinakamig aniibiishan. Mii idash wenji-wiinaagamig zaaga'igan. Nitiing gaa-izhinaagwak gaawiin **naagamichigemagak**. Giishpin nawaj **agaasiinak** gaawiin naagamig nawaj daa-ani-biinaagamin, nawaj ji-ani-giizhoogamizan giizis zaaga'igan.

What is climate change? Deforestation, large-scale agriculture, and the burning of fossil fuels—such as coal, oil, and natural gas—are releasing carbon dioxide and other greenhouse gases into our atmosphere at an alarming rate. The increased amount of gases in our atmosphere trap more heat than usual, which makes the earth's overall temperature warmer. This is altering weather patterns around the world, so that some places are becoming warmer and drier than usual while others are becoming cooler and wetter.

Why is it a problem? These rapid changes to our environment can be difficult for plants and animals to adapt to. The boreal lakes around IISD-ELA are predicted to get lighter in colour because of a decrease in precipitation, allowing sunlight to penetrate further into the lakes and warming them up.

How do we know? To mimic decreased precipitation resulting from climate change, researchers built a diversion channel and dike on an experimental lake. It went from having three upstream lakes to none, reducing how much water enters it by 80%. That lake's watershed went from being 388 hectares to 74 hectares, which means that less water flowed over less land to get into that lake. As water flows over land, it picks up little bits of leaf litter, dirt, and other organic material. This breaks down in the lake into dissolved organic carbon, or DOC. DOC is what gives lakes a tea-coloured look. With less DOC, the colour of the water may get lighter, which allows sunlight to penetrate deeper into the lake. This makes the warm layer at the top of the lake extend deeper.

Aaniin dash ge-anishkaagwad dimii-giigoon? **Dibishkoo** Namegosag **dimiindanaadizi** ji-ani-minogid. Odimiinizha'ogon giizhoogamin nibi. Nawaj **agaasiinad** mitaamig wenji-bagidinaamod. Biinish igo dagwiinawi izhaawag ge-onji-bimaadiziwaad. Ogowe gaa-**naanaagajichigewaad** omikaanaawaa wendanjigewaad giigoonyag, **agaasiinad** wenji-bagidanaamowaad onzaam giizhoogamin, ani-zanagad ini ezhi-wiiyawaawaad. Nawaj ani-zhaagwaadiziwag ji-wawanookewaad. Owe dash nawaj ani-agaashiinwag.

Aaniin waa-izhichigewaad owe gii-**eni-aanji-izhiwebak**? Miziwe enigokwaag gidakiiminaan giizisoong gaa-onji-miinigooyang gaye noodin noongom geyaabi gaa-aayaabajitooyang. Nawaj bangii gegoo ezhichigeyang nawaj bangii enaabajichigeyang gegoo, mino-bimi-ayaawin idash bimoseyang, bimaagiwebishkigeyang **maama'ookamang** odaabaaning. IISD-ELA, niibiwa gidaabajitoomin giizisoong gaa-onji-miinigooyang omaa gaye endanankiiyang! Parising gaa-gii-dazhi-ozhichigaadeg inakonigewin, gaa-gii-**tangibii'igaadeg** 2015, gegaa go gakina awiya ogii-taagibii'aanaawaan inakonigewinan jibwaa-ayaagin waasiganibimidebimibizowinan, eko-niizhing selsiiyasing ji-naazhigaagiban.

What this means for cold-water fish. Lake trout require cold, well-oxygenated water to survive and grow. As the warm layer of water extends deeper, the lake trout are forced deeper into the lake too. At the bottom of the lake, oxygen levels are too low for the trout. If the warm upper layer meets the low-oxygen lower layer, the trout will have no ideal habitat left. Our researchers found that in order to capture their prey, trout will spend time in water that is too warm or has too little oxygen, but it is hard on their bodies and uses more energy. This leaves less energy for growth and reproduction. Because of this, we have found that on average, the trout have actually become smaller in size.

What is being done about climate change? Across the globe, renewable energy, such as solar and wind, is being increasingly used. There are campaigns aimed at reducing the amount of water, food, and energy resources we use, as well as promoting the use of more sustainable forms of transportation such as walking, cycling, and public transit. At IISD-ELA, we use solar energy to power much of our scientific equipment and even some of our buildings! The Paris Agreement on Climate Change, signed in 2015, has almost all countries signed up to keep a global temperature rise this century less than 2 degrees Celsius above pre-industrial levels.

Gaa-anokiitamowaad IISD-ELA
ogowe endone'igewaad wenji-
nisidotamang ezhinaagwakin waa-izhi-
gwayakochigewaad omaa gidakiiminaang
nawaj gegoo ji-ani-minochigeyang.
Ge-onji-biinichigaadeg nibiikaang
omaa gidakiiminaang gaye weweni ji-
biinaagaming ge-ani-mino-ayaayang.
Geyaabi anooj gikendang omaa daanginan
www.iisd.org/ela.

Research at IISD Experimental Lakes Area
helps us understand the effects humans have
on the environment, enabling us to take
meaningful action and make better decisions,
keeping our water and ecosystems clean and
healthy. To find out more, visit www.iisd.org/ela.

Sentence Breakdown

► Climate change

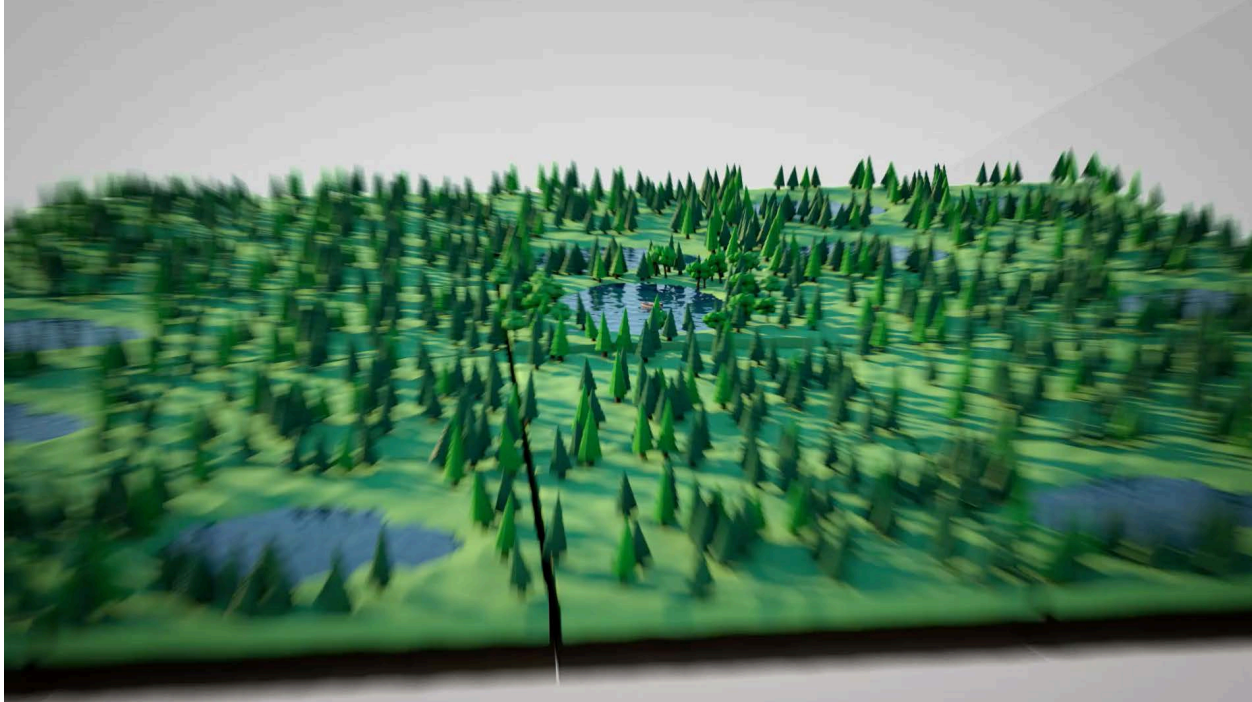
Eni-aanji-izhiwebak

eni-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way (under initial change)
aanji-	<i>pv4 (lex)</i> change
izhiwebad	<i>vii</i> 1 it is a certain weather condition 2 it happens a certain way

► Want to know how we help keep our water clean?

Ji-gikendamang ge-izhi-gikendamang aaniin ge-izhi-biinitooyang nibi?

ji-	<i>pv1 (tns)</i> in order to; that; so that
gikendan	<i>vti</i> know it; know about it; find it out; realize it
ge-	<i>pv1 (tns)</i> [future tense prefix under initial change]
izhi-	<i>pv3 (rel)</i> in a certain way; so; there; thus; to a certain place
gikendan	<i>vti</i> know it; know about it; find it out; realize it
aaniin	<i>adv (inter)</i> how; in what way; why
ge-	<i>pv1 (tns)</i> [future tense prefix under initial change]
izhi-	<i>pv3 (rel)</i> in a certain way; so; there; thus; to a certain place
biinitoon	<i>vti</i> know it; know about it; find it out; realize it
nibi	<i>ni</i> water

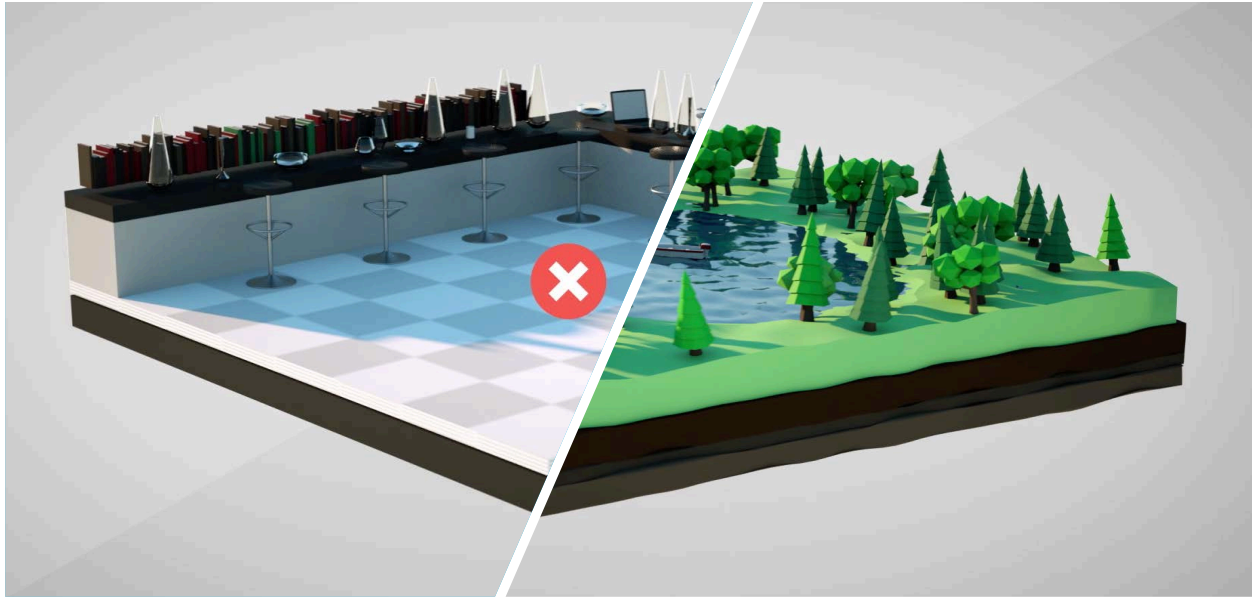


- ▶ IISD Experimental Lakes Area, or IISD-ELA, studies the impacts of human activity on our environment.

Ando-naanaagajigaadeg gidakiiminaan gaa-wanichigewaad omaa gidakiiminaang.

IISD Experimental Lakes Area *ni* a place name

ando-	<i>pv4 (lex)</i> look for; seek
naanaagajigaade	<i>vii</i> is being preserved; respected; studied; analyzed
aki	<i>ni</i> 1 earth; land; ground 2 a country; a territory 3 moss
gaa-wanichigewaad	<i>na-v (prt)</i> those ones that make things wrong or make mistakes
omaa	<i>adv (loc)</i> here
aki	<i>ni</i> 1 earth; land; ground 2 a country; a territory 3 moss



► Only we don't conduct our experiments in a lab; we conduct them on entire ecosystems.

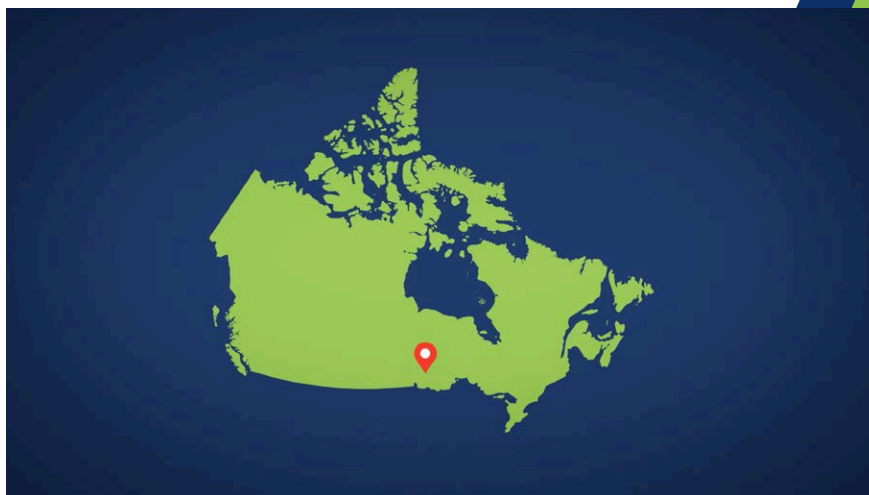
Gaawiin biindig danakiiziwag agwajiing babaa-**naanaagajichige**,
naanaagadawaabandaan, **nanandotam** omaa gidakiiminaang.

gaawiin	<i>adv (neg)</i> no; not
biindig	<i>adv (loc)</i> inside; indoors
danakii	<i>vai</i> s/he lives; dwells in a certain place
agwajiing	<i>adv (loc)</i> outside; outdoors
babaa-	<i>pv2 (dir)</i> going about; going around
naanaagajichige	<i>vai</i> s/he pays careful attention; guards; s/he takes care of; preserves; respects; studies; analyzes
naanaagadawaabandan	<i>vti</i> s/he watches carefully; observes
nanandotam	<i>vai2</i> s/he seeks
omaa	<i>adv (loc)</i> here
aki	<i>ni</i> 1 earth; land; ground 2 a country; a territory 3 moss

- ▶ IISD-ELA is a collection of 58 lakes in Northwestern Ontario Canada set aside for scientific research.

Ezhi-baatayiinakin zaaga'iganiin naanimidana ashinishwaaswi gii-bakigidinaawaa ji-naanaangajitoowaad enigokwaag manidoo inaakonigewaki (Treaty #3) gii-miinaawag **awi'igoowiziwin** ji-naanaandawaabiwaad.

ezhi-	<i>pv3 (rel)</i> in a certain place; in a certain way; so; there; thus (under initial change)
baatayiinaad	<i>vii</i> 1 there is much of it 2 they are many; there are many of them
zaaga'igan	<i>ni</i> a lake
naanimidana ashi-nishwaaswi	<i>adv (num)</i> fifty-eight
gii-	<i>pv1 (tns)</i> [past tense prefix]
bagidin	<i>vta</i> 1 set h/ down; offer; release h/ 2 allow h/
ji-	<i>pv1 (tns)</i> in order to; that, so that
naanaagajitoon	<i>vti2</i> pay close attention to it; guard; take care of; preserve; respect; study; analyze it
enigokwaag	<i>ni-v (prt)</i> it is a certain size; is so big
manidoo	<i>na</i> a manitou; a spirit; god
inaakonigewaki	<i>ni</i> Treaty #3 territory
gii-	<i>pv1 (tns)</i> [past tense prefix]
miizh/miiN	<i>vta</i> give (it) to h/
awi'igoowiziwin	<i>ni</i> that which being lent to by someone
ji-	<i>pv1 (tns)</i> in order to; that; so that
naanaagadawaabi	<i>vai</i> s/he watches carefully; observes



- ▶ (It's the only lab of its kind in the world) because all life depends on water, we study the impact of contaminants.

Gakina awiya odapenimon nibi wenji-bimaadiziyang, ezhi-oko-naanaagajichigeyang.

gakina	<i>adv (qnt)</i> all; every
awiya	<i>pron (indf)</i> somebody; someone; anybody; anyone
odapenimon	<i>vai + o</i> s/he depends on (it); s/he relies on (it)
nibi	<i>ni</i> water
wenji-	<i>pv3 (rel)</i> because; for a certain reason; from a certain place (under initial change)
bimaadizi	<i>vai</i> s/he lives, is alive
ezhi-	<i>pv3 (rel)</i> in a certain place; in a certain way; so; there; thus (under initial change)
oko-	<i>pv4 (lex)</i> bunched together; in a group
naanaagajichige	<i>vai</i> s/he pays careful attention; guards; s/he takes care of; preserves; respects; studies; analyzes

- ▶ Evidence from real-world ecosystem experiments helps governments make better decisions and helps protect our water and planet.

Gegoo noongom ezhi-mookinaagwakin **gegooyan**, **wegimaawaadizi**waad ge-onji-wiji'inangwaa **gegooyan**.

gegoo	<i>pron (indf)</i> something; anything
noongom	<i>adv (tmp)</i> now; today; nowadays
ezhi-	<i>pv3 (rel)</i> in a certain place; in a certain way; so; there; thus (under initial change)
mookinaagwad	<i>vii</i> it is appearing
gegooyan	<i>pron (indf)</i> all things
wegimaawaadizi	<i>vai</i> s/he is being a leader (under initial change)
ge-	<i>pv1 (tns)</i> [future tense prefix under initial change]
onji-	<i>pv3 (rel)</i> because; for a certain reason; from a certain place
wiji'	<i>vta</i> 1 help h/ 2 play with h/
gegooyan	<i>pron (indf)</i> all things



▶ Here are some of the things we research, climate change.

Naa onowe aanind gaa-**naanaagajichigewaad**, **eni-aanji-izhiwebak**.

naa	<i>pc (emph)</i> well!
onowe	<i>pron (dem)</i> these (inanimate plural)
aanind	<i>adv (qnt)</i> some
gaa-	<i>pv1 (tns)</i> [past tense prefix under initial change]
naanaagajichige	<i>vai</i> s/he pays careful attention; guards; s/he takes care of; preserves; respects; studies; analyzes
biiwaabikowaabo gaa-waawaageshkaag	<i>ni-v</i> mercury
eni-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way (under initial change)
aanji-	<i>pv4 (lex)</i> change
izhiwebad	<i>vii</i> 1 it is a certain weather condition 2 it happens a certain way

▶ What is climate?

Aaniin eni-ayi-izhiwebak?

aaniin	<i>adv (inter)</i> how; in what way; why
eni-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way (under initial change)
ayi-	<i>pv4 (lex)</i> I don't remember what; a thing
izhiwebad	<i>vii</i> 1 it is a certain weather condition 2 it happens a certain way

▶ Climate is the weather you expect to see based on the time of year and where you are in the world.

Eni-ayi-**inaabishin**ang eni-ayi-izhiwebak owe apii gii-ayaaying.

eni-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way (under initial change)
ayi-	<i>pv4 (lex)</i> I don't remember what; a thing
inaabishin	<i>vai</i> s/he looks at the weather
eni-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way (under initial change)
ayi-	<i>pv4 (lex)</i> a thing
izhiwebad	<i>vii</i> 1 it is a certain weather condition 2 it happens a certain way
owe	<i>pron (dem)</i> this (inanimate singular)
apii	<i>adv (tmp)</i> at the time; then; when
gii-	<i>pv1 (tns)</i> [relative tense]: while; as
ayaa	<i>vai</i> 1 s/he is (in a certain place) 2 [with a lexical preverb] s/he is in a state or condition 3 [with a preverb] s/he moves a certain way



- ▶ The gases in our atmosphere help keep our climate balanced by regulating temperature and precipitation.

Ezhi-bebakaanag **baabiitooodeg** giizhik ezhiseg inanaamowin gaye ezhi-bebakaanakin ezhiwebak.

ezhi-	<i>pv3 (rel)</i> in a certain place; in a certain way; so; there; thus (under initial change)
bebakaan	<i>adv (man)</i> all different
baabiitooode	<i>vii</i> it is an atmosphere; ozone; (reduplication with initial vowel change)
giizhik	<i>na</i> day; heaven; sky
ezhiseg	<i>ni-v (prt)</i> that which is happening in a certain place, climate
inanaamowin	<i>ni</i> breath; uses h/ voice a certain way; utters a certain way
gaye	<i>adv (conj)</i> as for; also; too; and
ezhi-	<i>pv3 (rel)</i> in a certain place; in a certain way; so; there; thus (under initial change)
bebakaanad	<i>vii</i> it is all different
ezhiwebak	<i>n-v (prt)</i> that which happens a certain way

▶ What is climate change?

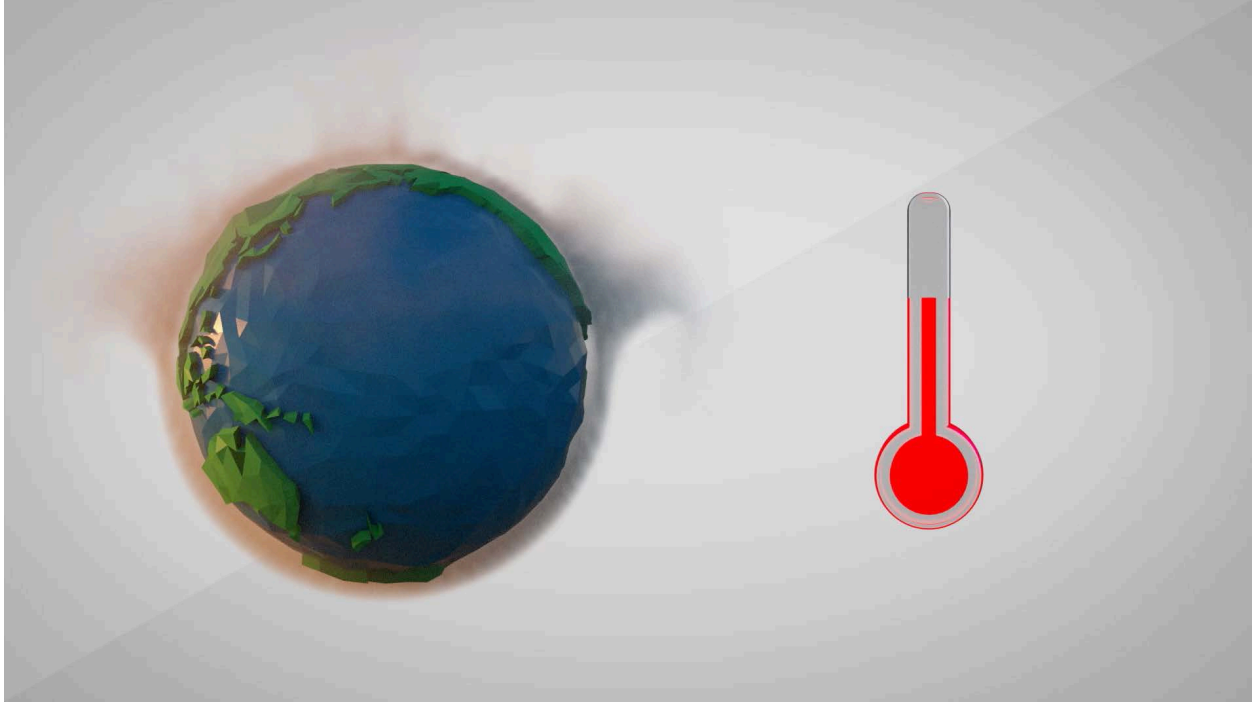
Aaniin **eni-aanji-izhiwebak**?

aaniin	<i>adv (inter)</i> how; in what way; why
eni-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way (under initial change)
aanji-	<i>pv4 (lex)</i> change
izhiwebad	<i>vii</i> 1 it is a certain weather condition 2 it happens a certain way

▶ Deforestation, large-scale agriculture, and the burning of fossil fuels—such as coal, oil, and natural gas—are releasing carbon dioxide and other greenhouse gases into our atmosphere at an alarming rate.

Bashkwada'igewin, boodawemagak—**mitigoo-inanaamowin** miziwe baashkine'aabide.

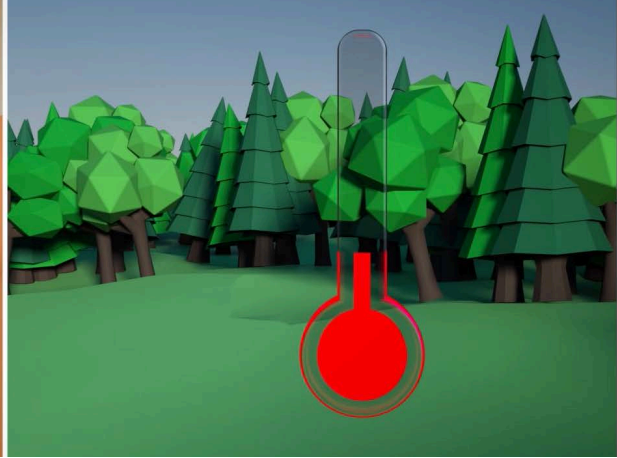
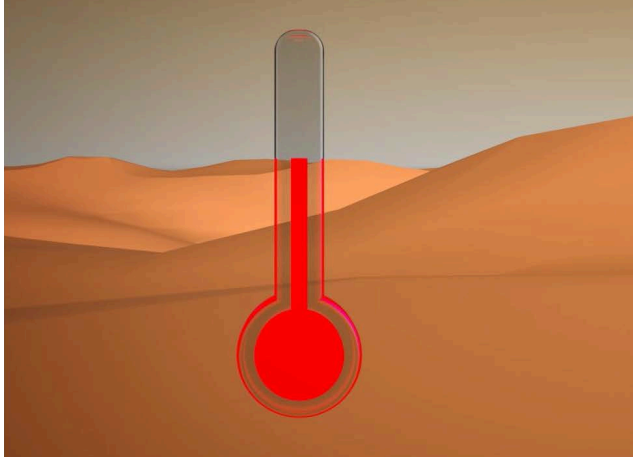
bashkwada'igewin	<i>ni</i> clears something off object; deforestation
boodawemagak	<i>ni-v (prt)</i> the thing builds a fire
mitigoo-inanaamowin	<i>ni</i> carbon dioxide
miziwe	<i>adv (loc)</i> all over; everywhere
baashkine'aabide	<i>vii</i> there is greenhouse gases or mist in the air



- ▶ The increased amount of gases in our atmosphere trap more heat than usual, which makes the earth's overall temperature warmer.

Nawaj geyaabi ani-bashkine'aabide, ani-**onzaamiyaabawaa** miziwe.

nawaj	<i>adv (deg)</i> more
geyaabi	<i>adv (tmp)</i> still; yet
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
baashkine'aabide	<i>vii</i> there is greenhouse gases or mist in the air
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
onzaamiyaabawaa	<i>vii</i> it is too warm
miziwe	<i>adv (loc)</i> all over; everywhere



- ▶ This is altering weather patterns around the world, so that some places are becoming warmer and drier than usual while others are becoming cooler and wetter.

Miziwe ani-aanji-izhiwebad, ani-baate miziwe gaye ani-gisinaa gaye gimiwang.

miziwe	<i>adv (loc)</i> all over; everywhere
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
aanji-	<i>pv4 (lex)</i> change
izhiwebad	<i>vii 1</i> it is a certain weather condition 2 it happens a certain way
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
baate	<i>vii</i> it is dry
miziwe	<i>adv (loc)</i> all over; everywhere
gaye	<i>adv (conj)</i> as for; also; too; and
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
gisinaa	<i>vii</i> it is cold (weather)
gaye	<i>adv (conj)</i> as for; also; too; and
gimiwan	<i>vii</i> it rains



▶ Why is it a problem?

Wegonen dash wenji-maji-izhiwebak?

wegonen	<i>pron (inter)</i> what
dash	<i>adv (conj)</i> but; and; and then; then
wenji-	<i>pv3 (rel)</i> because; for a certain reason; from a certain place (under initial change)
maji-	<i>pv4 (lex)</i> bad
izhiwebad	<i>vii</i> 1 it is a certain weather condition 2 it happens a certain way

- ▶ This is altering weather patterns around the world, so that some places are becoming warmer and drier than usual while others are becoming cooler and wetter.

Gaye wiinawaa omaazhitoonaawaa awesiinyag gaye bebaamaashiwaad owe gii-aayaanji-izhiwebak aanike.

gaye	<i>adv (conj)</i> as for; also; too; and
wiinawaa	<i>pron (per)</i> they; them
maazhitoon	<i>vti2</i> do something wrong to it
awesiinh	<i>na</i> a (wild) animal
gaye	<i>adv (conj)</i> as for; also; too; and
bebaamaashiwaad	<i>na-v (prt)</i> the ones who are the flyers
owe	<i>pron (dem)</i> this (inanimate singular)
gii-	<i>pv1 (tns)</i> [relative tense]: while; as
aayaanji-	<i>pv4 (lex)</i> change (reduplication of aa); also “aanji-”
izhiwebad	<i>vii</i> 1 it is a certain weather condition 2 it happens a certain way
aanike	<i>adv (pred)</i> as it is done; as it goes

- ▶ The Boreal lakes around IISD-ELA are predicted to get lighter in colour

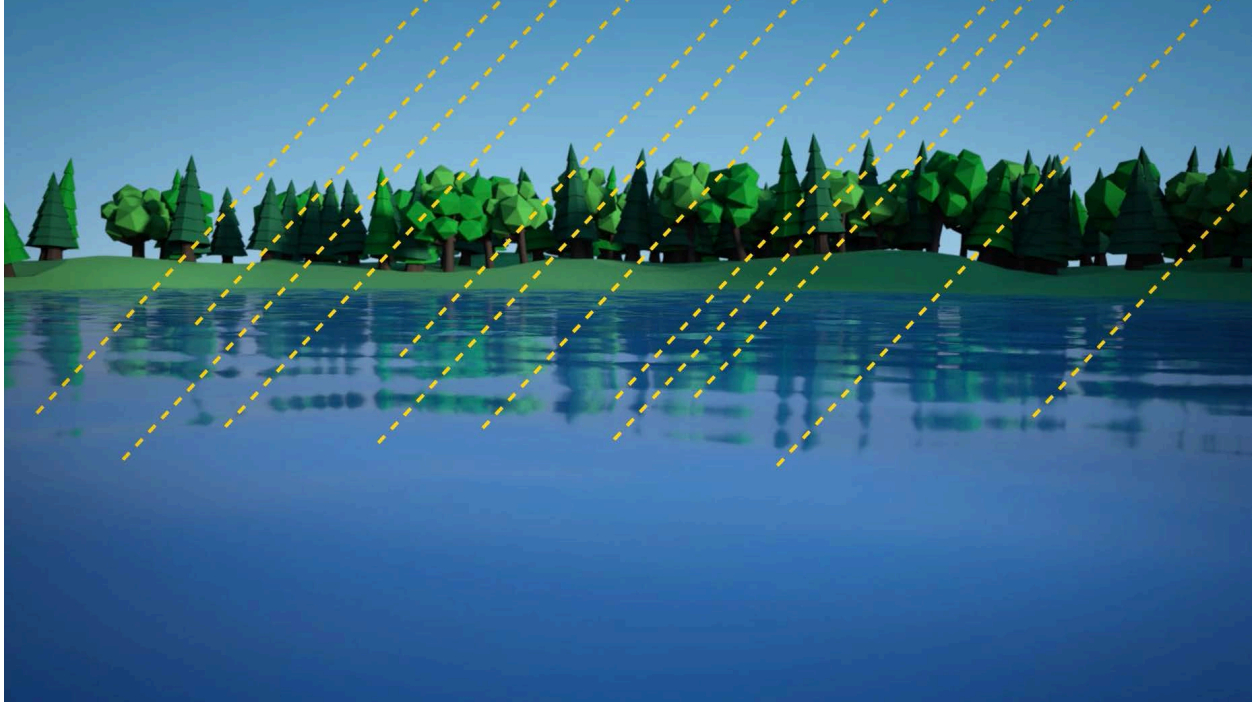
Zaaga'iganin ani-iniinaagamin nibi zaaga'igan

zaaga'igan	<i>ni</i> a lake
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
iniinaagamin	<i>vii</i> it (a liquid) is dirty; is polluted
nibi	<i>ni</i> water
zaaga'igan	<i>ni</i> a lake

- ▶ because of a decrease in precipitation,

mii iwe gimiwanzinook gaye gii-zoopisinook,

mii	<i>adv (pred)</i> it is thus that...; it is that...
iwe	<i>pron (dem)</i> this (inanimate singular)
gimiwan	<i>vii</i> it rains
gaye	<i>adv (conj)</i> as for; also; too; and
gii-	<i>pv1 (tns)</i> [past tense]: -ed; was; did
zoogipon	<i>vii</i> it snows



- ▶ allowing sunlight to penetrate further into the lakes and warming them up.

onzaam niibiwa **biindaate**wan zaaga'iganiin gaye ani-giizhoogamin.

onzaam	<i>adv (qnt)</i> 1 Too; too much; excessively 2 because (of an excess or an extreme condition or event)
niibiwa	<i>adv (qnt)</i> a lot; many; much
biindaate	<i>vii</i> inside the sunlight; inside the light
zaaga'igan	<i>ni</i> a lake
gaye	<i>adv (conj)</i> as for; also; too; and
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
giizhoogamin	<i>vii</i> it (liquid) is warm

▶ How do we know?

Aaniin wenji-giikendamang?

aaniin	<i>adv (inter)</i> how; in what way; why
wenji-	<i>pv3 (rel)</i> because; for a certain reason; from a certain place (under initial change)
gikendan	<i>vti</i> know it; know about it; find it out; realize it

Note: The way the Elders translated this part below is through interpretation rather than sentence-by-sentence translation. Therefore, the order of some of the Ojibwe sentences does not follow the English ones.

▶ To mimic decreased precipitation resulting from climate change,

Nibi isa mii iwe gimiwanzinoon gaye gii-zoopisinok.

nibi	<i>ni</i> water
isa	<i>pc (disc)</i> [emphatic]
mii	<i>adv (pred)</i> it is thus that...; it is that...
iwe	<i>pron (dem)</i> this (inanimate singular)
gimiwan	<i>vii</i> it rains
gaye	<i>adv (conj)</i> as for; also; too; and
gii-	<i>pv1 (tns)</i> [past tense]: -ed; was; did
zoogipon	<i>vii</i> it snows

▶ researchers built a diversion channel and dike on an experimental lake.

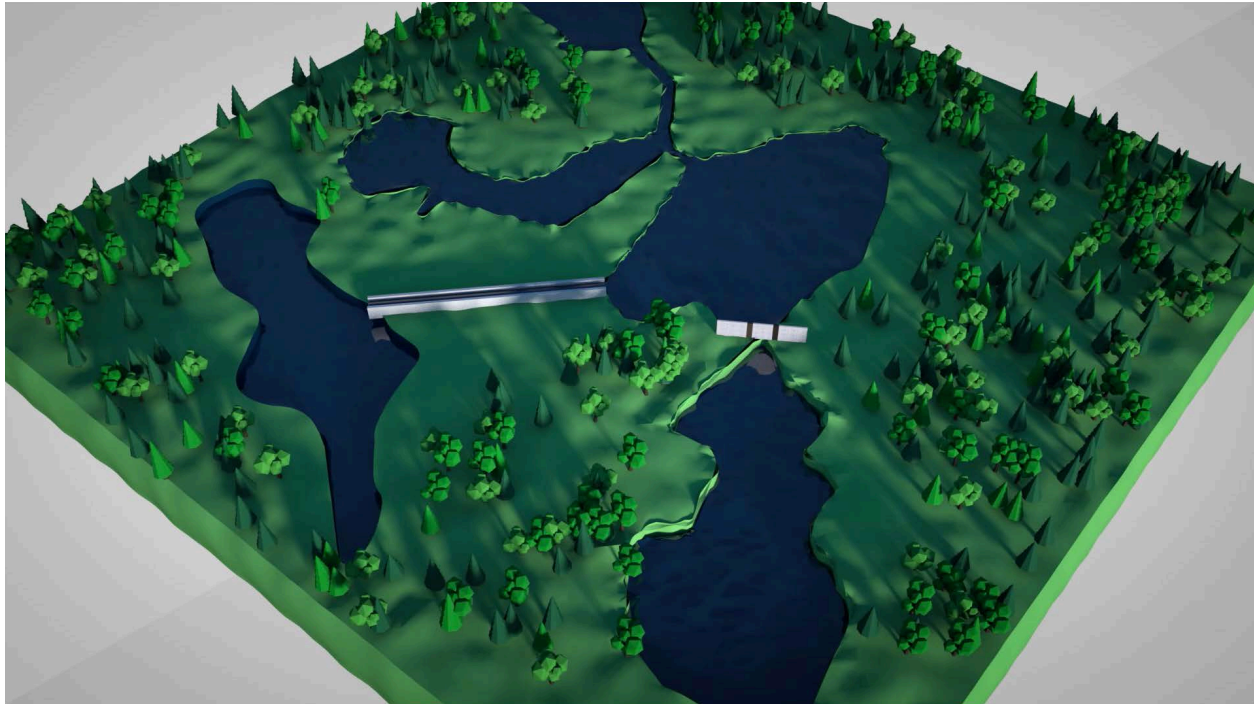
Eni-aanji-izhiwebak naabida, ando-gikendaasowaad gii-kiba'igaade

eni-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way (under initial change)
aanji-	<i>pv4 (lex)</i> change
izhiwebad	<i>vii</i> 1 it is a certain weather condition 2 it happens a certain way
naabida	<i>adv (man)</i> same; equal; alike; also “daabida”
ando-	<i>pv4 (lex)</i> look for; seek
gikendaaso	<i>vai</i> s/he knows; is smart; is intelligent; is educated
gii-	<i>pv1 (tns)</i> [past tense]: -ed; was; did
giba'igaade	<i>vii</i> it is stopped up; plugged; blocked (by someone); “they” stop it up; plug; block it

▶ which means that less water flowed over less land to get into that lake.

ezhiwebakiban gii-izhichigaade ji-**meshkojjiwang** iwidi zaaga'iganiikaaning.

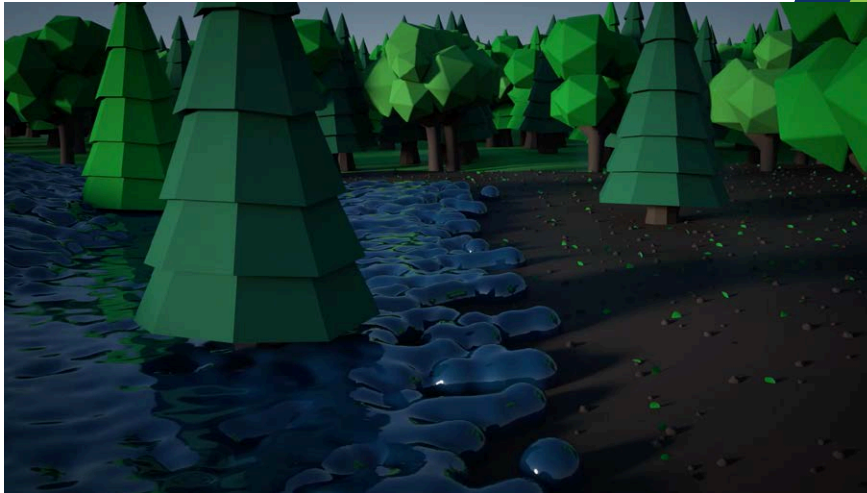
ezhiwebak	<i>ni-v (prt)</i> 1 it is a certain weather condition 2 it happens a certain way
gii-	<i>pv1 (tns)</i> [relative tense]: while; as
izhichigaade	<i>vii</i> it is made a certain way (by someone); “they” make it a certain way
ji-	<i>pv1 (tns)</i> in order to; that; so that; future tense and modal (in unchanged conjunct verbs)
meshkojjiwan	<i>vii</i> it is exchanging water flows
iwidi	<i>adv (loc)</i> over there
zaaga'iganiikaaning	<i>adv (loc)</i> place of many lakes



▶ It went from having three upstream lakes to none,

Niso-nobaniin ziibiin noongom idash bezhigwan ziibi

niso-noban	<i>vii</i> it is three upstream
ziibi	<i>ni</i> a river
noongom	<i>adv (tmp)</i> now; today; nowadays
idash	<i>adv (conj)</i> but; and; and then; then
bezhigwan	<i>vii</i> it is one; it is the only one; it is the same
ziibi	<i>ni</i> a river



▶ as water flows over land,

gaa-**giiwitaajiwang** gaa-izhijiwang zaaga'iganiikaaning,

gaa-giiwitaajiwang *ni-v (prt)* that which flows around (something)

gaa-izhijiwang *ni-v (prt)* that which flows a certain way; flows to a certain place

zaaga'iganiikaaning *adv (loc)* place of many lakes

▶ reducing how much water enters it by 80%.

awashime aabita bakaan izhijiwang maagizhaa 80%.

awashime *adv (deg)* much more

aabita *adv (num)* half

bakaan *adv (man)* different

izhijiwang *vii* it flows a certain way; flows to a certain place

maagizhaa *adv (man)* maybe; I think that...; perhaps; maybe

▶ That lake’s watershed went from being 388 hectares to 74 hectares.

Gii-ani-iskade noongom eta 74 **inigokogamaa** nawaj iko 388 gii-**inigokogamaaban**.

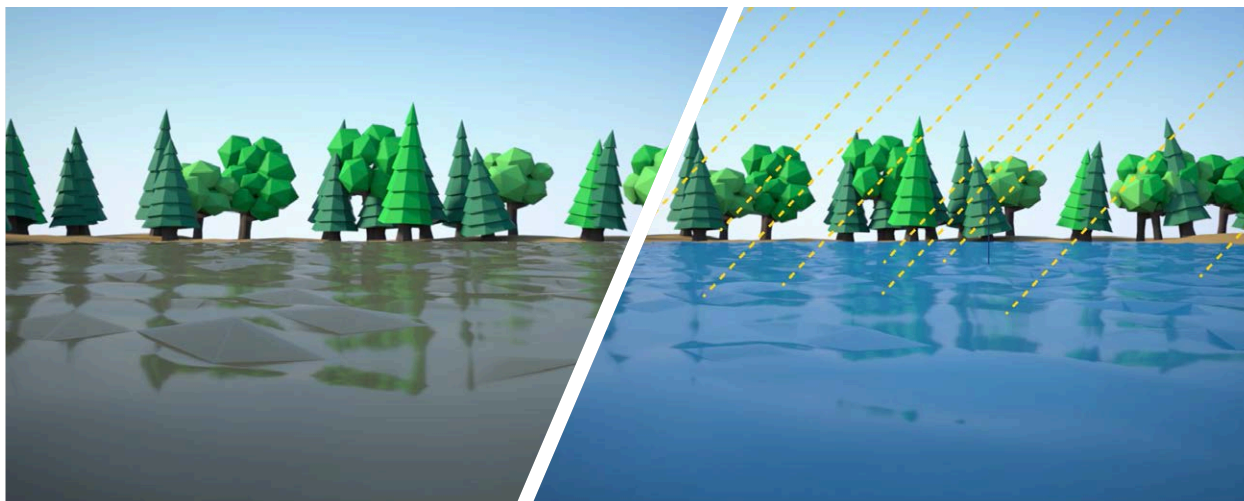
gii-	<i>pv1 (tns)</i> [relative tense]: while; as
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
iskade	<i>vii</i> it goes down; dries up (of a body of water)
noongom	<i>adv (tmp)</i> now; today; nowadays
eta	<i>adv (deg)</i> just; only
74	<i>qnt (num)</i> seventy-four
inigokogamaa	<i>vii</i> is a hectare
nawaj	<i>adv (deg)</i> more
iko	<i>pc (asp)</i> used to; formerly; previously; some time ago; it was the custom to
388	<i>ant (num)</i> three-hundred and eighty-eight
gii-	<i>pv1 (tns)</i> [relative tense]: while; as
inigokogamaa	<i>vii</i> is a hectare of water; (“-ban” ending means probably or indefinite)



- ▶ it picks up little bits of leaf litter, dirt, and other organic material. This breaks down in the lake into dissolved organic carbon, or DOC.

Gii-kakijiwan **metaboode** gakina gegoo wiinakamig aniibiishan.

gii-	<i>pv1 (tns)</i> [relative tense]: while; as
gakijiwan	<i>vii</i> it is a waterfall
metaboode	<i>vii</i> wears down; is worn (from abrasion); also “mechiboode”
gakina	<i>adv (qnt)</i> all; every
gegoo	<i>pron (indf)</i> something; anything
wiinakamig	<i>vii</i> it is dirty ground
aniibiish	<i>ni</i> 1 a leaf 2 tea



- ▶ With less DOC, the colour of the water may get lighter,

Mii idash wenji-wiinaagamig zaaga'igan.

mii idash	<i>adv (conj)</i> and then
wenji-	<i>pv3 (rel)</i> because; for a certain reason; from a certain place (under initial change)
wiinaagamig	<i>vii</i> it (a liquid) is dirty; is polluted
zaaga'igan	<i>ni</i> a lake

- ▶ DOC is what gives lakes a tea-coloured look.

Nitiing gaa-izhinaagwak gaawiin **naagamichigemagak**.

nitii	<i>ni</i> tea (the drink)
gaa-izhinaagwak	<i>ni-v (prt)</i> the thing that has a certain appearance
gaawiin	<i>adv (neg)</i> no; not
naagamichigemagak	<i>ni-v (prt)</i> that which is making the liquid do something

- ▶ (With less DOC, the colour of the water may get lighter) which allows sunlight to penetrate deeper into the lake.

Giishpin nawaj **agaasiinak** gaawiin naagamig nawaj daa-ani-biinaagamin,

giishpin	<i>adv (gram)</i> if
nawaj	<i>adv (deg)</i> more
agaasiinad	<i>vii</i> it is in a small state/condition
gaawiin	<i>adv (neg)</i> no; not
naagamig	<i>vii</i> [irregular verb] it (a liquid) is a certain way; also “inaagamin”; (inaagami - stem)
nawaj	<i>adv (deg)</i> more
daa-	<i>pv1 (tns)</i> modal preverb of possibility; necessity; or obligation: can; could; should; would; might; must
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
biinaagamin	<i>vii</i> it (a liquid) is clean

- ▶ This makes the warm layer at the top of the lake extend deeper.

nawaj ji-ani-giizhoogamizan giizis zaaga'igan.

nawaj	<i>adv (deg)</i> more
ji-	<i>pv1 (tns)</i> in order to; that; so that; future tense and modal (in unchanged conjunct verbs)
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
giizhoogamizan	<i>vti</i> warm it (something liquid)
giizis	<i>na</i> sun; moon; a month
zaaga'igan	<i>ni</i> a lake

▶ What this means for cold-water fish?

Aaniin dash ge-anishkaagwad dimii-giigoon?

aaniin dash	<i>adv</i> (inter) why
ge-	<i>pv1 (tns)</i> future tense (in changed conjunct verbs, under initial change)
anishkaagwa	<i>vai</i> s/he proceeds to move
dimii-giigoon	<i>ni</i> deep water fish

▶ Lake trout require cold, well-oxygenated water to survive and grow.

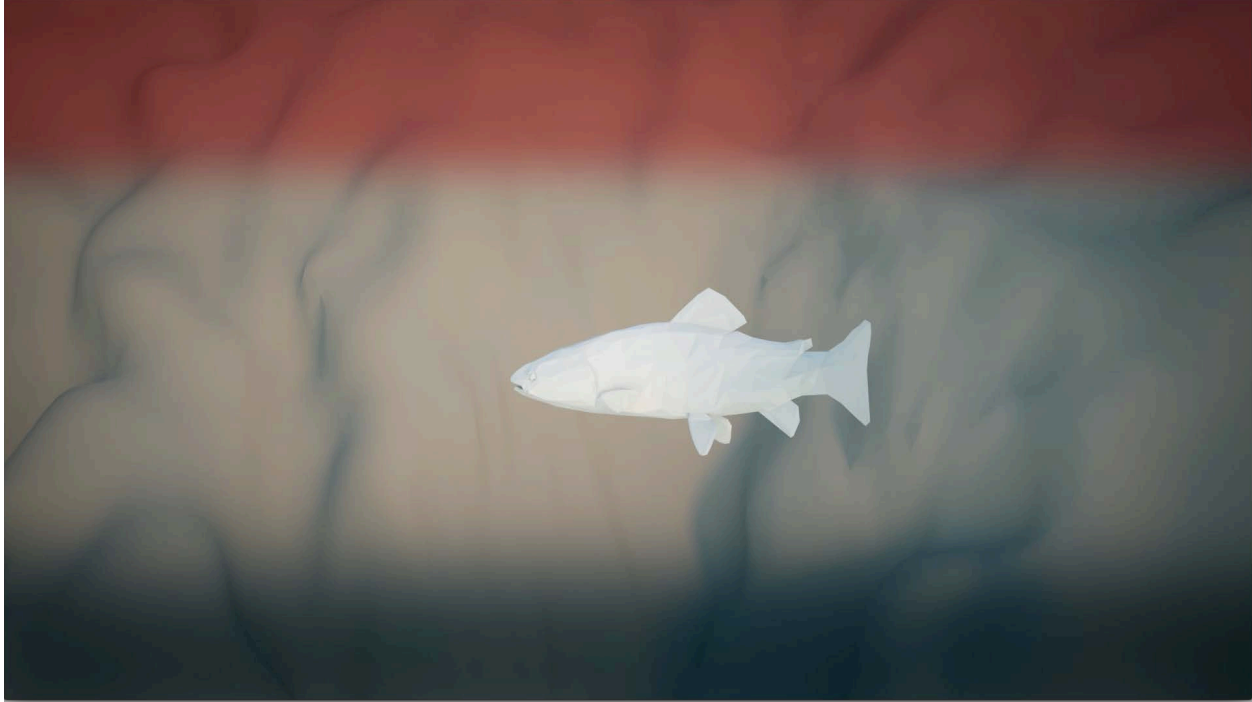
Dibishkoo Namegosag **dimiindanaadizi** ji-ani-minogid.

dibishkoo	<i>adv (man)</i> directly; equal; even; just like; seems like
namegos	<i>na</i> trout
dimiindanaadizi	<i>vai</i> s/he is being in the deep water
ji-	<i>pv1 (tns)</i> in order to; that; so that; future tense and modal (in unchanged conjunct verbs)
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
minogi	<i>vai</i> s/he, it (animate) grows well

▶ As the warm layer of water extends deeper, (the lake trout are forced deeper into the lake too.)

Odimiinizha'ogon giizhoogamin nibi.

dimiinizha'ogon	<i>vii</i> it forces (someone) deeper
giizhoogamin	<i>vii</i> it (liquid) is warm
nibi	<i>ni</i> water



▶ At the bottom of the lake, oxygen levels are too low for the trout.

Nawaj **agaasiinad** mitaamig wenji-bagidinaamod.

nawaj	<i>adv (deg)</i> more
agaasiinad	<i>vii</i> it is being small
mitaamig	<i>adv (loc)</i> right on the bottom of a lake or river; also “mitaamik”
wenji-	<i>pv3 (rel)</i> because; for a certain reason; from a certain place; (under initial change)
bagidinaamo	<i>vai</i> s/he offers; releases; allows

- ▶ If the warm upper layer meets the low-oxygen lower layer, the trout will have no ideal habitat left.

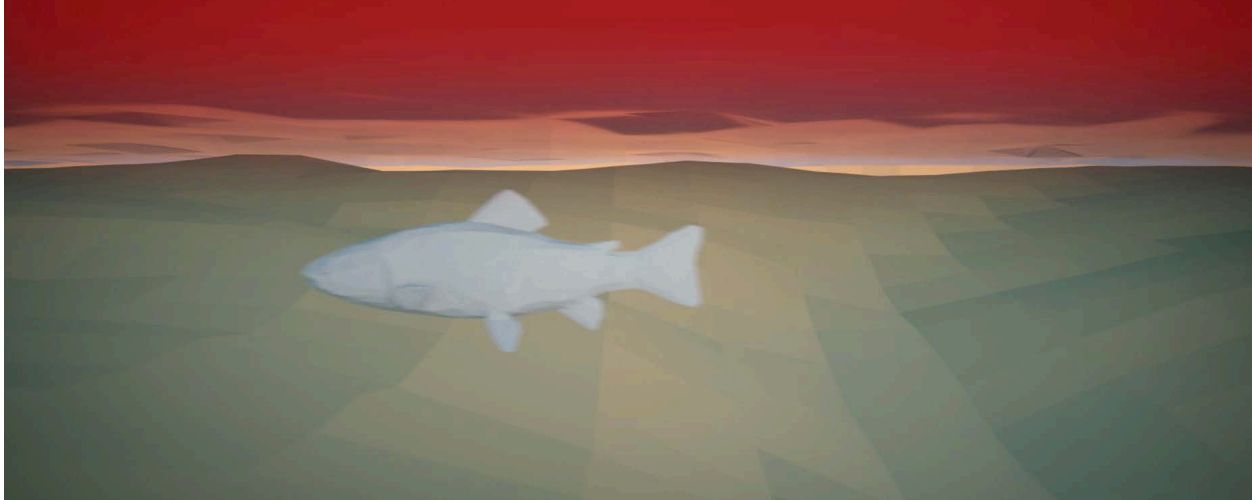
Biinish igo dagwiinawi izhaawag ge-onji-bimaadiziwaad.

biinish	<i>adv (gram)</i> until; up to
igo	<i>pc (emph)</i> [emphatic word]
dagwiinawi	<i>vai</i> s/he is a member; belongs to a group
izhaa	<i>vai</i> s/he goes to a certain place
ge-	<i>pv1 (tns)</i> future tense (in changed conjunct verbs, under initial change)
onji-	<i>pv3 (rel)</i> because; for a certain reason; from a certain place
bimaadizi	<i>vai</i> s/he lives; is alive

- ▶ Our researchers found that in order to capture their prey,

Ogowe gaa-naanaagajichigewaad omikaanaawaa wendanjigewaad giigoonyag,

ogowe	<i>pron (dem)</i> these (animate plural)
gaa-naanaagajichigewaad	<i>na-v (prt)</i> the ones who pay close attention to things; take care; preserve
mikan	<i>vti</i> find it
wendawenjigewad	<i>na-v (prt)</i> the ones who are hunting
giigoonh	<i>na</i> a fish



▶ trout will spend time in water that is too warm or has too little oxygen,

agaasiinad wenji-bagidanaamowaad onzaam giizhoogamin,

agaasiinad *vii* it is being small

wenji-bagidanaamowaad *na-v (prt)* the reason one would make an offering

onzaam *adv (qnt)* **1** too; too much; excessively **2** because (of an excess or an extreme condition or event)

giizhoogamin *vii* it (liquid) is warm

▶ but it is hard on their bodies and uses more energy.

ani-zanagad ini ezhi-wiiyawaawaad.

ani- *pv2 (dir)* coming up to in time; going away; in progress; on the way

zanagad *vii* it is difficult; hard (to do or manage)

ini *pron (dem)* that (animate obviative); those (animate obviative)

ezhi-wiiyawaawaad *na-v (prt)* that which is being their bodies

- ▶ This leaves less energy for growth and reproduction.

Nawaj ani-zhaagwaadiziwag ji-wawanookewaad.

nawaj	<i>adv (deg)</i> more
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
zhaagwaadizi	<i>vai</i> s/he is weak in power; is ineffective
ji-	<i>pv1 (tns)</i> in order to; that; so that; future tense and modal (in unchanged conjunct verbs)
wawanooke	<i>vai</i> s/he makes eggs; also “waawanooke”

- ▶ (Because of this, we have found that on average,) the trout have actually become smaller in size.

Owe dash nawaj ani-agaashiinwag.

owe	<i>pron (dem)</i> this (inanimate singular)
dash	<i>adv (conj)</i> but; and; and then; then
nawaj	<i>adv (deg)</i> more
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
agaashiinh	<i>vai</i> s/he, it (animate) is small; also “agaashiinyi”



▶ What is being done about climate change?

Aaniin waa-izhichigewaad owe gii-eni-aanji-izhiwebak?

aaniin	<i>adv (inter)</i> how; in what way; why
waa-izhichigewaad	<i>na-v (prt)</i> that which they will intend to do
owe	<i>pron (dem)</i> this (inanimate singular)
gii-	<i>pv1 (tns)</i> [relative tense]: while; as
eni-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way (under initial change)
aanji-	<i>pv4 (lex)</i> change
izhiwebad	<i>vii</i> 1 it is a certain weather condition 2 it happens a certain way

▶ Across the globe, renewable energy, such as solar, and wind is being increasingly used.

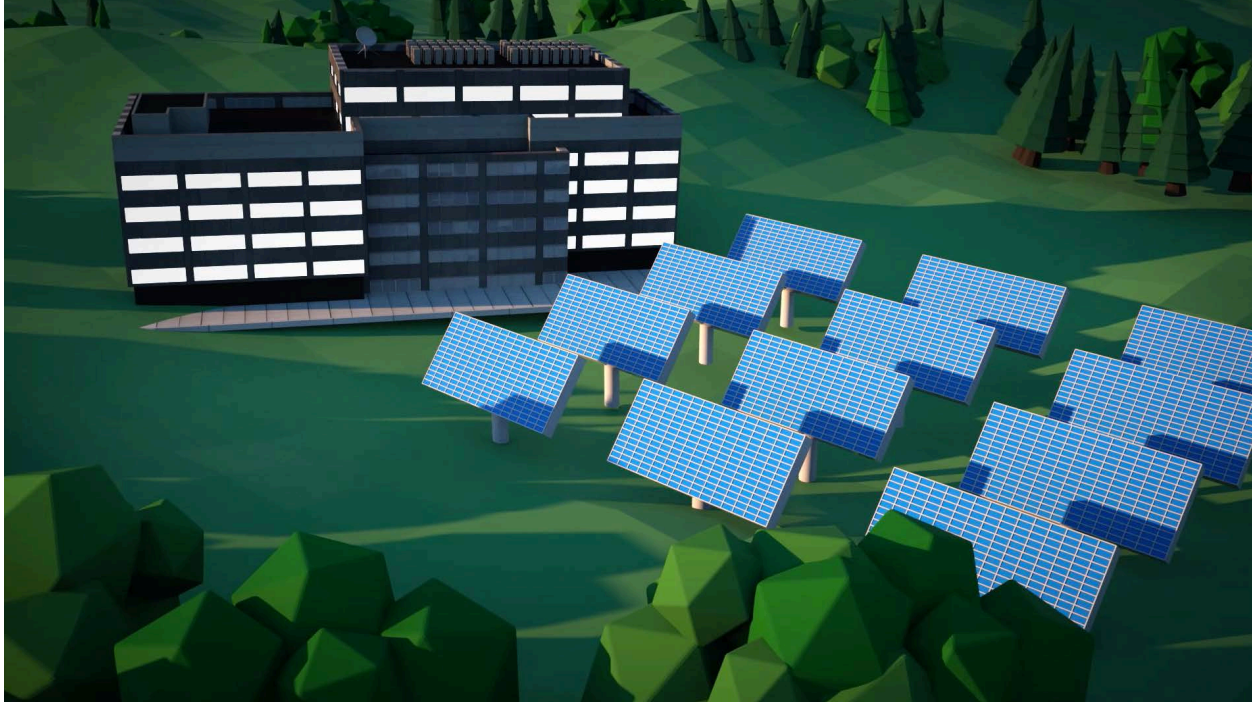
Miziwe enigokwaag gidakiiminaan giizisoong gaa-onji-miinigooyang gaye noodin noongom geyaabi gaa-aayaabajitooyang.

miziwe	<i>adv (loc)</i> all over; everywhere
enigokwaag	<i>ni-v (prt)</i> that which is a certain size
gidakiiminaan	<i>ni</i> our earth (including person you're talking to)
giizis	<i>na</i> sun; moon; a month
gaa-onji-miinigooyang	<i>na- v (prt)</i> that reason things were given to us (inclusive)
gaye	<i>adv (conj)</i> as for; also; too; and
noodin	<i>vii</i> it is windy; there is a wind; the wind blows
noongom	<i>adv (tmp)</i> now; today; nowadays
geyaabi	<i>adv (tmp)</i> still; yet
gaa-aayaabajitooyang	<i>na-v (prt)</i> that which we use; reduplication of "aabajitoon"

- ▶ There are campaigns aimed at reducing the amount of water, food, and energy resources we use, as well as promoting the use of more sustainable forms of transportation such as walking, cycling, and public transit.

Nawaj bangii gegoo ezhichigeyang nawaj bangii enabajichigeyang gegoo, mino-bimi-ayaawin idash bimoseyang, bimaagiwebishkigeyang **maama'ookam**ang odaabaaning.

nawaj	<i>adv (deg)</i> more
bangii	<i>adv (qnt)</i> a little; a little bit; few
gegoo	<i>pron (indf)</i> something; anything
ezhichigeyang	<i>na-v (prt)</i> that which we do (inclusive)
nawaj	<i>adv (deg)</i> more
bangii	<i>adv (qnt)</i> a little; a little bit; few
enabajichigeyang	<i>na-v (prt)</i> that which we use in a certain way
gegoo	<i>pron (indf)</i> something; anything
mino-bimi-ayaawin	<i>na</i> that good thing that goes along
idash	<i>adv (conj)</i> but; and; and then; then
bimose	<i>vai</i> s/he walks along
bimaagiwebishkige	<i>vai</i> s/he is biking
maama'ookam	<i>vai</i> s/he travels
odaabaan	<i>ni</i> 1 something dragged or pulled as a means of conveyance: a wagon 2 a car; an automobile; a vehicle



- ▶ At IISD-ELA, we use solar energy to power much of our scientific equipment and even some of our buildings!

IISD-ELA, niibiwa gidaabajitoomin giizisoong gaa-onji-miingooyang omaa gaye endanankiiyang!

IISD-ELA	<i>ni</i> IISD-ELA, place name
niibiwa	<i>adv (qnt)</i> a lot; many; much
aabajitoon	<i>vti2</i> use it
giizis	<i>na</i> sun; moon; a month
gaa-onji-miinigooyang	<i>na- v (prt)</i> that reason things were given to us (inclusive)
omaa	<i>adv (loc)</i> here
gaye	<i>adv (conj)</i> as for; also; too; and
endanankiiyang	<i>na-v (prt)</i> place where we dwell; live (inclusive)



- ▶ The Paris Agreement on Climate Change, signed in 2015, has almost all countries signed up to keep a global temperature rise this century less than 2 degrees Celsius above pre-industrial levels.

Parising gaa-gii-dazhi-ozhichigaadeg inakonigewin, gaa-gii-**tangibii'igaadeg** 2015, gegaa go gakina awiya ogii-taagibii'aanaawaan inakonigewinan jibwaa-ayaagin waasiganibimidebimibizowinan, eko-niizhing selsiiyasing ji-naazhigaagiban.

paris	<i>ni</i> Paris, place name
gaa-gii-	<i>pv1 (sub)</i> the one that/who (past)
dazhi-	<i>pv3 (rel)</i> in a certain place; of a certain place; there
ozhichigaade	<i>vii</i> it is made; built; formed (by someone); “they” make; build; form it
inaakonigewin	<i>ni</i> a law; a ruling; an agreement
gaa-gii-	<i>pv1 (sub)</i> the thing that (past)
dangibii'igaade	<i>vii</i> it is being signed; also “daangibii'igaade”

Parising gaa-gii-dazhi-ozhichigaadeg inaakonigewin, gaa-gii-tangibii'igaadeg 2015, gegaa go gakina awiya ogii-taagibii'aanaawaan inaakonigewinan jibwaa-ayaagin waasiganibimidebimibizowinan, eko-niizhing selsiiyasing ji-naazhigaagiban.

gegaa	<i>adv (deg)</i> nearly; almost
go	<i>pc (disc)</i> [emphatic word]
gakina awiya	<i>pron (indf)</i> everybody; all of them (a set of beings or animate things)
gii-	<i>pv1 (tns)</i> [relative tense]: while; as
dangibii'an	<i>vti</i> sign it
inaakonigewin	<i>ni</i> a law; a ruling; an agreement
jibwaa-	<i>pv1 (tns)</i> before
ayaa	<i>vii</i> 1 it is (in a certain place) 2 [with a lexical preverb] it is in a certain state or condition 3 [with a preverb] it moves a certain way
waasiganibimidebimibizowin	<i>ni</i> gasoline; (“bimibizo-” means s/he speeds; goes along “win-” means turns verb to noun)
eko-niizhing	<i>adv (loc)</i> the second
selsiiyasing	<i>ni</i> Celsius
ji-	<i>pv1 (tns)</i> in order to; that; so that; future tense and modal (in unchanged conjunct verbs)
naazhigaa	<i>vii</i> it is lower; decrease

Note: The way the Elders translated this part above is through interpretation rather than sentence-by-sentence translation. Therefore, the order of some of the Ojibwe sentences does not follow the English ones.

- ▶ Research at IISD Experimental Lakes Area helps us understand the effects humans have on the environment, enabling us to take meaningful action and make better decisions,

Gaa-anokiitamowaad IISD-ELA ogowe endone'igewaad wenji-nisidotamang ezhinaagwakin waa-izhi-gwayakochigewaad omaa gidakiiminaang nawaj gegoo ji-ani-minochigeyang.

gaa-anokiitamowaad	<i>na-v (prt)</i> that which they work at something
ogowe	<i>pron (dem)</i> these (animate plural)
endone'igewaad	<i>na-v (prt)</i> that where they find things
wenji-nisidotamang	<i>na-v (prt)</i> the reason we understand it (inclusive)
ezhinaagwakin	<i>ni-v (prt)</i> those things that appears/looks a certain way
waa-izhi-gwayakochigewaad	<i>na-v (prt)</i> those ones who do this correctly/properly in a certain way
omaa	<i>adv (loc)</i> here
gidakiiminaang	<i>nid</i> our earth (inclusive)
nawaj	<i>adv (deg)</i> more
gegoo	<i>pron (indf)</i> something; anything
ji-	<i>pv1 (tns)</i> in order to; that; so that; future tense and modal (in unchanged conjunct verbs, under initial change)
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
minochige	<i>vai</i> s/he does things well; does a good job

▶ keeping our water and ecosystems clean and healthy.

Ge-onji-biinichigaadeg nibiikaang omaa gidakiiminaang gaye weweni ji-biinaagaming ge-ani-mino-ayaayang.

ge-	<i>pv1 (tns)</i> future tense (in changed conjunct verbs, under initial change)
onji-	<i>pv3 (rel)</i> because; for a certain reason; from a certain place
biinichigaade	<i>vii</i> it is cleaned (by someone), “they” clean it
nibiikaa	<i>vii</i> there is (a lot of) water
omaa	<i>adv (loc)</i> here
gidakiiminaang	<i>nid</i> our earth (inclusive)
gaye	<i>adv (conj)</i> as for; also; too; and
weweni	<i>adv (man)</i> properly; correctly; carefully
ji-	<i>pv1 (tns)</i> in order to; that; so that; future tense and modal (in unchanged conjunct verbs)
biinaagamin	<i>vii</i> it (a liquid) is clean
ge-	<i>pv1 (tns)</i> future tense (in changed conjunct verbs, under initial change)
ani-	<i>pv2 (dir)</i> coming up to in time; going away; in progress; on the way
mino-	<i>pv4 (lex)</i> good; nice; well
ayaa	<i>vai</i> 1 s/he is (in a certain place) 2 [with a lexical preverb] s/he is in a state or condition 3 [with a preverb] s/he moves a certain way

▶ To find out more, visit www.iisd.org/ela.

Geyaabi anooj gikendang omaa daanginan www.iisd.org/ela.

geyaabi	<i>adv (tmp)</i> still; yet
anooj	<i>adv (qnt)</i> all kinds; various; carelessly; abusively
gikendan	<i>vti</i> know it; know about it; find it out; realize it
omaa	<i>adv (loc)</i> here
daanginan	<i>vti</i> touch it (with hand)

Glossary

AA

- aabajitoon** *vti2* use it
aabita *adv (num)* half
aaniin *adv (inter)* how; in what way; why
aaniin *dash adv (inter)* why
aanike *adv (pred)* as it is done; as it goes
aanind *adv (qnt)* some
aanji- *pv4 (lex)* change
aayaanji- *pv4 (lex)* change (reduplication of aa); also “aanji-”

A

- agaashiinh** *vai* s/he, it (animate) is small; also “agaashiinyi”
agaasiinad *vii* it is being small
agwajiing *adv (loc)* outside; outdoors
aki *ni* **1** earth; land; ground **2** a country; a territory **3** moss
ando- *pv4 (lex)* look for; seek
ani- *pv2 (dir)* coming up to in time; going away; in progress; on the way
aniibiish *ni* **1** a leaf **2** tea
anishkaagwa *vai* s/he proceeds to move
anooj *adv (qnt)* all kinds; various; carelessly; abusively
apii *adv (tmp)* at the time; then; when
awashime *adv (deg)* much more
awesiinh *na* a (wild) animal
awi'igoowiziwin *ni* that which being lent to by someone
awiya *pron (indf)* somebody; someone; anybody; anyone

ayaa *vai* **1** s/he is (in a certain place) **2** [with a lexical preverb] s/he is in a state or condition **3** [with a preverb] s/he moves a certain way

ayaa *vii* **1** it is (in a certain place) **2** [with a lexical preverb] it is in a certain state or condition **3** [with a preverb] it moves a certain way

ayi- *pv4 (lex)* a thing

B

- baabiitoogoode** *vii* it is an atmosphere; ozone; (reduplication with initial vowel change)
baashkine'aabide *vii* there is greenhouse gases or mist in the air
baatayiinad *vii* **1** there is much of it **2** they are many; there are many of them
baate *vii* it is dry
babaa- *pv2 (dir)* going about; going around
bagidin *vta* **1** set h/ down; offer; release h/ **2** allow h/
bagidinaamo *vai* s/he offers; releases; allows
bakaan *adv (man)* different
bangii *adv (qnt)* a little; a little bit; few
bangii *adv (qnt)* a little; a little bit; few
bashkwada'igewin *ni* clears something off object; deforestation
bebaamaashiwaad *na-v (prt)* the ones who are the flyers
bebakaan *adv (man)* all different
bebakaanad *vii* it is all different
bezhigwan *vii* it is one; it is the only one; it is the same

biinaagamin *vii* it (a liquid) is clean
biindaate *vii* inside the sunlight; inside the light
biindig *adv (loc)* inside; indoors
biinichigaade *vii* it is cleaned (by someone), “they” clean it
biinish *adv (gram)* until; up to
bimaadizi *vai* s/he lives, is alive
bimaagiwebishkige *vai* s/he is biking
bimose *vai* s/he walks along
boodawemagak *ni-v (prt)* the thing builds a fire

D

daa- *pv1 (tns)* modal preverb of possibility; necessity; or obligation: can; could; should; would; might; must
daanginan *vti* touch it (with hand)
dagwiinawi *vai* s/he is a member; belongs to a group
danakii *vai* s/he lives; dwells in a certain place
dangibii’an *vti* sign it
dangibii’igaade *vii* it is being signed; also “daangibii’igaade”
dash *adv (conj)* but; and; and then; then
dazhi- *pv3 (rel)* in a certain place; of a certain place; there
dibishkoo *adv (man)* directly; equal; even; just like; seems like
dimii-giigoon *ni* deep water fish
dimiindanaadizi *vai* s/he is being in the deep water
dimiinizha’ogon *vii* it forces (someone) deeper

E

eko-niizhing *adv (loc)* the second
enaabajichigeyang *na-v (prt)* that which we use in a certain way
endanankiiyang *na-v (prt)* place where we dwell; live (inclusive)
endone’igewaad *na-v (prt)* that where they find things
eni- *pv2 (dir)* coming up to in time; going away; in progress; on the way (under initial change)
eni-aanji-izhiwebak *ni-v (prt)* climate change
eni- *pv2 (dir)* coming up to in time; going away; in progress; on the way (under initial change)
enigokwaag *ni-v (prt)* it is a certain size; is so big
eta *adv (deg)* just; only
ezhi- *pv3 (rel)* in a certain place; in a certain way; so; there; thus (under initial change)
ezhichigeyang *na-v (prt)* that which we do (inclusive)
ezhinaagwakin *ni-v (prt)* those things that appears/looks a certain way
ezhiseg *ni-v (prt)* that which is happening in a certain place, climate
ezhiwebak *ni-v (prt)* **1** it is a certain weather condition **2** it happens a certain way
ezhi-wiiyawaawaad *na-v (prt)* that which is being their bodies

G

gaa- *pv1 (tns)* [past tense prefix under initial change]
gaa-aayaabajitooyang *na-v (prt)* that which we use; reduplication of “abajitoon”

gaa-anokiitamowaad *na-v (prt)* that which they work at something

gaa-gii- *pv1 (sub)* the one that/who (past)

gaa-giiwitaajiwang *ni-v (prt)* that which flows around (something)

gaa-izhijiwang *ni-v (prt)* that which flows a certain way; flows to a certain place

gaa-izhinaagwak *ni-v (prt)* the thing that has a certain appearance

gaa-naanaagajichigewaad *na-v (prt)* the ones who pay close attention to things; take care; preserve

gaa-onji-miinigooyang *na- v (prt)* that reason things were given to us (inclusive)

gaa-wanichigewaad *na-v (prt)* those ones that make things wrong or make mistakes

gaawiin *adv (neg)* no; not

gakijiwan *vii* it is a waterfall

gakina *adv (qnt)* all; every

gakina *awiya pron (indf)* everybody; all of them (a set of beings or animate things)

gaye *adv (conj)* as for; also; too; and

ge- *pv1 (tns)* [future tense prefix under initial change]

ge- *pv1 (tns)* future tense (in changed conjunct verbs, under initial change)

gegaa *adv (deg)* nearly; almost

gegoo *pron (indf)* something; anything

gegooyan *pron (indf)* all things

geyaabi *adv (tmp)* still; yet

giba'igaade *vii* it is stopped up; plugged; blocked (by someone); “they” stop it up; plug; block it

gidakiiminaan *ni* our earth (including person you’re talking to)

gidakiiminaang *nid* our earth (inclusive)

gii- *pv1 (tns)* [relative tense]: while; as

gii- *pv1 (tns)* [past tense]: -ed; was; did

giigoonh *na* a fish

giishpin *adv (gram)* if

giizhik *na* day; heaven; sky

giizhoogamin *vii* it (liquid) is warm

giizhoogamizan *vti* warm it (something liquid)

giizis *na* sun; moon; a month

gikendaaso *vai* s/he knows; is smart; is intelligent; is educated

gikendan *vti* know it; know about it; find it out; realize it

gimiwan *vii* it rains

gisinaa *vii* it is cold (weather)

go *pc (disc)* [emphatic word]

I

idash *adv (conj)* but; and; and then; then

idash *adv (conj)* but; and; and then; then

igo *pc (emph)* [emphatic word]

IISD Experimental Lakes Area *ni* IISD-ELA, place name

iko *pc (asp)* used to; formerly; previously; some time ago; it was the custom to

inaabishin *vai* s/he looks at the weather

inaakonigewin *ni* a law; a ruling; an agreement

inaakonigwaki *ni* Treaty #3 territory

inanaamowin *ni* breath; uses h/ voice a certain way; utters a certain way

ini *pron (dem)* that (animate obviative); those (animate obviative)

inigokogamaa *vii* is a hectare of water; (“-ban” ending means probably or indefinite)

iniinaagamin *vii* it (a liquid) is dirty; is polluted

isa *pc (disc)* [emphatic]
iskade *vii* it goes down; dries up (of a body of water)
iwe *pron (dem)* this (inanimate singular)
iwidi *adv (loc)* over there
izhaa *vai* s/he goes to a certain place
izhi- *pv3 (rel)* in a certain way; so; there; thus; to a certain place
izhichigaade *vii* it is made a certain way (by someone); “they” make it a certain way
izhijiwan *vii* it flows a certain way; flows to a certain place
izhiwebad *vii* **1** it is a certain weather condition **2** it happens a certain way

J

ji- *pv1 (tns)* in order to; that; so that; future tense and modal (in unchanged conjunct verbs, under initial change)
jibwaa- *pv1 (tns)* before

M

maagizhaa *adv (man)* maybe; I think that...; perhaps; maybe
maama'ookam *vai* s/he travels
maazhitoon *vti2* do something wrong to it
maji- *pv4 (lex)* bad
manidoo *na* a manitou; a spirit; god
meshkojjiwan *vii* it is exchanging water flows
metaboode *vii* wears down; is worn (from abrasion); also “mechiboode”
mii *adv (pred)* it is thus that...; it is that...
mii idash *adv (conj)* and then
miizh/miIN *vta* give (it) to h/
mikan *vti* find it
mino- *pv4 (lex)* good; nice; well

mino-bimi-ayaawin *na* that good thing that goes along
minochige *vai* s/he does things well; does a good job
minogi *vai* s/he, it (animate) grows well
mitaamig *adv (loc)* right on the bottom of a lake or river; also “mitaamik”
mitigoo-inanaamowin *ni* carbon dioxide
miziwe *adv (loc)* all over; everywhere
mookinaagwad *vii* it is appearing

N

naa *pc (emph)* well!
naabida *adv (man)* same; equal; alike; also “daabida”
naagamichigemagak *ni-v (prt)* that which is making the liquid do something
naagamin *vii* [irregular verb] it (a liquid) is a certain way; also “inaagamin”; (inaagami - stem)
naanaagadawaabandan *vti* s/he watches carefully; observes
naanaagadawaabi *vai* s/he watches carefully; observes
naanaagajichige *vai* s/he pays careful attention; guards; s/he takes care of; preserves; respects; studies; analyses
naanaagajigaade *vii* is being preserved; respected; studied; analyzed
naanaagajitoon *vti2* pay close attention to it; guard; take care of; preserve; respect; study; analyse it
naanimidana ashi-nishwaaswi *adv (num)* fifty-eight
naazhigaa *vii* it is lower; decrease
namegos *na* trout
nanandotam *vai2* s/he seeks; (reduplication of “nandotam”)

nawaj *adv (deg)* more

nibi *ni* water

nibiikaa *vii* there is (a lot of) water

niibiwa *adv (qnt)* a lot; many; much

niso-noban *vii* it is three upstream

nitii *ni* tea (the drink)

noodin *vii* it is windy; there is a wind; the wind blows

noongom *adv (tmp)* now; today; nowadays

O

odaabaan *ni* **1** something dragged or pulled as a means of conveyance: a wagon **2** a car; an automobile; a vehicle

odapenimon *vai + o* s/he depends on (it); s/he relies on (it)

ogowe *pron (dem)* these (animate plural)

oko- *pv4 (lex)* bunched together; in a group

omaa *adv (loc)* here

onji- *pv3 (rel)* because; for a certain reason; from a certain place

onowe *pron (dem)* these (inanimate plural)

onzaam *adv (qnt)* **1** Too; too much; excessively **2** because (of an excess or an extreme condition or event)

onzaamiyaabawaa *vii* it is too warm

owe *pron (dem)* this (inanimate singular)

ozhichigaade *vii* it is made; built; formed (by someone); “they” make; build; form it

P

paris *ni* Paris, place name

S

selsiiyasing *ni* Celsius

W

waa-izhichigewaad *na-v (prt)* that which they will intend to do

waa-izhi-gwayakochigewaad *na-v (prt)* those ones who do this correctly/ properly in a certain way

waasiganibimidebimibizowin *ni* gasoline; (“bimibizo-” means s/he speeds; goes along “win-” means turns verb to noun)

wawanooke *vai* s/he makes eggs; also “waawanooke”

wegimaawaadizi *vai* s/he is being a leader (under initial change)

wegonen *pron (inter)* what

wendawenjigewad *na-v (prt)* the ones who are hunting

wenji- *pv3 (rel)* because; for a certain reason; from a certain place (under initial change)

wenji-bagidanaamowaad *na-v (prt)* the reason one would make an offering

wenji-nisidotamang *na-v (prt)* the reason we understand it (inclusive)

weweni *adv (man)* properly; correctly; carefully

wiiji' *vta* **1** help h/ **2** play with h/

wiinaagamig *vii* it (a liquid) is dirty; is polluted

wiinakamig *vii* it is dirty ground

wiinawaa *pron (per)* they; them

Z

zaaga'iganiikaaning *adv (loc)* place of many lakes

zaaga'igan *ni* a lake

zanagad *vii* it is difficult; hard (to do or manage)

zhaagwaadizi *vai* s/he is weak in power; is ineffective

ziibi *ni* a river

zoogipon *vii* it snows

#

388 *ant (num)* three-hundred and eighty-eight

74 *qnt (num)* seventy-four

New Words

A

agaasiinad *vii* it is being a small amount

agaas small

iinad amount or number verb

awi'igoowiziwin *ni* that which being lent to by someone

awi' lend (it) to h/

igoow someone unknown

izi s/he, it (animate) is in a state or condition

win noun forming final

B

baabiitoogoode *vii* it is an atmosphere; ozone

baa is reduplication of first syllable; under initial change

biitoo extra layer

agoode it hangs; is suspended (a got pushed out by “oo”)

biindaate *vii* inside the sunlight; inside the light

biind in; into; inside

aate it is in the light

D

dangibii'igaade *vii* it is being signed; also “daangibii'igaade”

dang touch; contact

bii' through writing

igaade it undergoes action by (someone)

dibishkoo *adv (man)* directly; equal; even; just like; seems like

Note: adverbs are rarely able to break down further.

dimiindanaadizi *vai* s/he is being in the deep water

dimiind deep water

aad way of being or life; character; nature

izi s/he, it (animate) is in a state or condition

E

Eni-aanji-izhiwebak *ni-v (prt)* climate change

eni- *pv2 (dir)* coming up to in time; going away; in progress; on the way (under initial change)

aanji- *pv4 (lex)* change

izhiwebad *vii* **1** it is a certain weather condition **2** it happens a certain way

G

giiwitaajwan *vii* it flows around something

giiwitaa around something

jiwan it flows

gegooyan *pron (indf)* all things

Note: adverbs are rarely able to break down further.

I

inaabishin *vai* s/he looks at the weather

in thus; in a certain direction; in a certain manner

aabi s/he looks; has such vision; has an eye is such a state or condition

shin s/he falls; lies; treads; contacts; hits on something

inigokogamaa *vii* is a hectare of water

inigok such a size

gam liquid body of water

aa it is in a state or condition

M

maama'ookam *vai* s/he travels

Note: some words have unknown word parts that aren't known by our team yet, like this one.

meshkojjiwan *vii* it is exchanging water flows

meshko exchange

jiwan it flows (reduplication of first syllable “ji,” adds emphasis)

metaboode *vii* wears down; is worn (from abrasion); also “mechiboode”

meta wear away; worn away

boode it is sawn; abraded

mitigoo-inanaamowin *ni* carbon dioxide

mitig tree

in thus; in a certain direction; in a certain manner

anaamo breathe; use the voice

win noun forming final

N

naabida *adv (man)* same; equal; alike; also “daabida”

Note: adverbs are rarely able to break down further.

naagamichigemagak *ni-v (prt)* that which is making the liquid do something

naagami be a liquid

chi cause it to be or to act; make it

ge h/ acts (on an unspecified object)

magad it does the action

naanaagadawaabandaan *vti* s/he watches carefully; observes

naanaagadaw examine; attend closely to

aabandan look at it

naanaagajichige *vai* s/he pays careful attention; guards; s/he takes care of; preserves; respects; studies; analyses

naanaagad examine; attend carefully to

ji cause it to be or to act; make it

ge h/ acts (on an unspecified object)

nanandotam *vai2* s/he seeks; (reduplication of “nandotam”)

nando seek; look for

t hear it

am turns verb to *vai2* which usually means it’s a feeling or action with the mind verb

O

onzaamiyaabawaa *vii* it is too warm

onzaami too much

y glide connector of two word parts when one word part ends in a vowel and the next word part starts with a vowel

aabaw warm

aa in a state or condition

W

wegimaawaadizi *vai* s/he is being a leader (under initial change)

wegimaa a boss; a chief; a king (under initial change from “ogimaa”)

w glide connector of two word parts when one word part ends in a vowel and the next word part starts with a vowel

aad way of being or life; one’s character or nature

izi s/he, it (animate) is in a state or condition

Grammatical Indicators

Resource credit to [The Ojibwe People's Dictionary](#)

Abbreviations

pv1 (tns): tense/mode preverb; one of a positional class of adverbs of tense and mode

pv1 (num): quantitative preverb; preverb indicating specific number

pv1 (sub): subordinating preverb; preverb serving as subordinator

pv2 (dir): directional preverb; one of a positional class of preverbs of location and direction

pv3 (rel): relative preverb; one of a positional class of preverbs relating the verb to other sentence or discourse elements

pv4 (lex): lexical preverb; manner; quality; and quantity preverbs

vii: inanimate intransitive verb; verb with an intransitive stem; an inanimate subject and no object

vai: inanimate intransitive verb; verb with an intransitive stem; an inanimate subject and no object

vai + o: animate intransitive verb with object; verb with an intransitive stem; an animate subject and an object

ni: noun inanimate; noun of the inanimate gender that is not obligatorily possessed

na: noun animate; noun of the animate gender that is not obligatorily possessed

na-v (prt): animate participle; animate gender nominalized verb; noun-like verb

ni-v (prt): inanimate participle; inanimate gender nominalized verb; noun-like verb

adv (qnt): quantitative adverb; adverb specifying generally how much or how many

adv (tmp): temporal adverb; adverb specifying time or duration

adv (deg): degree adverb; adverb specifying degree or intensity

adv (number): number adverb; adverb specifying number

adv (pred): predicative adverb; adverb serving as a predicator

adv (inter): interrogative adverb; adverb asking questions

adv (gram): grammatical adverb; grammatical function word not falling into other categories

adv (loc): locational adverb; adverb specifying location

adv (conj): conjunctive adverb; adverb connecting words; phrases; clauses; or sentences

adv (man): manner adverb; adverb specifying a way or manner

adv (pred): predicative adverb; adverb serving as a predicator

adv (neg): negative adverb; adverb with negative meaning

pc (disc): discourse particle; particle serving as a discourse marker

pc (emph): emphatic particle; particle marking emphasis

pc (asp): aspectual particle; particle with aspectual function

pron (dem): demonstrative pronoun; pronoun identify which one relative to positions

pron (indf): indefinite pronoun; pronoun of indefinite reference

pron (per): personal pronoun; personal pronouns identifying participant roles

vta: transitive animate verb; verb with a transitive stem and an animate object

vti: transitive inanimate verb; verb with a transitive stem; and an inanimate object; and a characteristic set of inflections

vti2: Class 2 transitive inanimate verb; verb with a transitive stem; and an inanimate object; and a different characteristic set of inflections

vti3: Class 3 transitive inanimate verb; verb with a transitive stem; and an inanimate object; and a different characteristic set of inflections

Lesson Planning Form

LESSON PLAN:	
UNIT: Listening	THEME: Sentence Structure
NAME:	DATE:
TIME:	CLASS: Any

OVERALL MINISTRY EXPECTATIONS:
Listening to sentences in the writing system used in the program.

SPECIFIC MINISTRY EXPECTATIONS:

ORAL COMMUNICATION:

LISTENING: Listen to sentences in the writing system used in the program.

GRAMMAR/LANGUAGE CONVENTION AND YOUR VOCABULARY COVERED:
Climate change video from [IISD Experimental Lakes Area](#)

LIST MATERIALS AND RESOURCES:

TIME:	
First 7 minutes	Introduction of lesson and how to complete it. Explain that it will be a listening exercise in which learners will listen to the audio on the right of each page (tapping the speaker).
Next 35 minutes	Class will listen to each audio on each page and put them in the proper order. Remind learners that these are the words before anything is added to them. They must put them in the proper order, as they hear them. The teacher can help explain the letter added to each audio sentence. This is a long assignment and may take several sessions to complete.

EVALUATION: How do I evaluate the learners?
Review each slide, making sure that each sentence is put in the proper order. Reveal the top section of the audio to see if learners were correct in audio slide.

SELF EVALUATION:
What worked well this time? What would I change next time?

