
Online Lesson Series:
Cultural Landscapes



2021

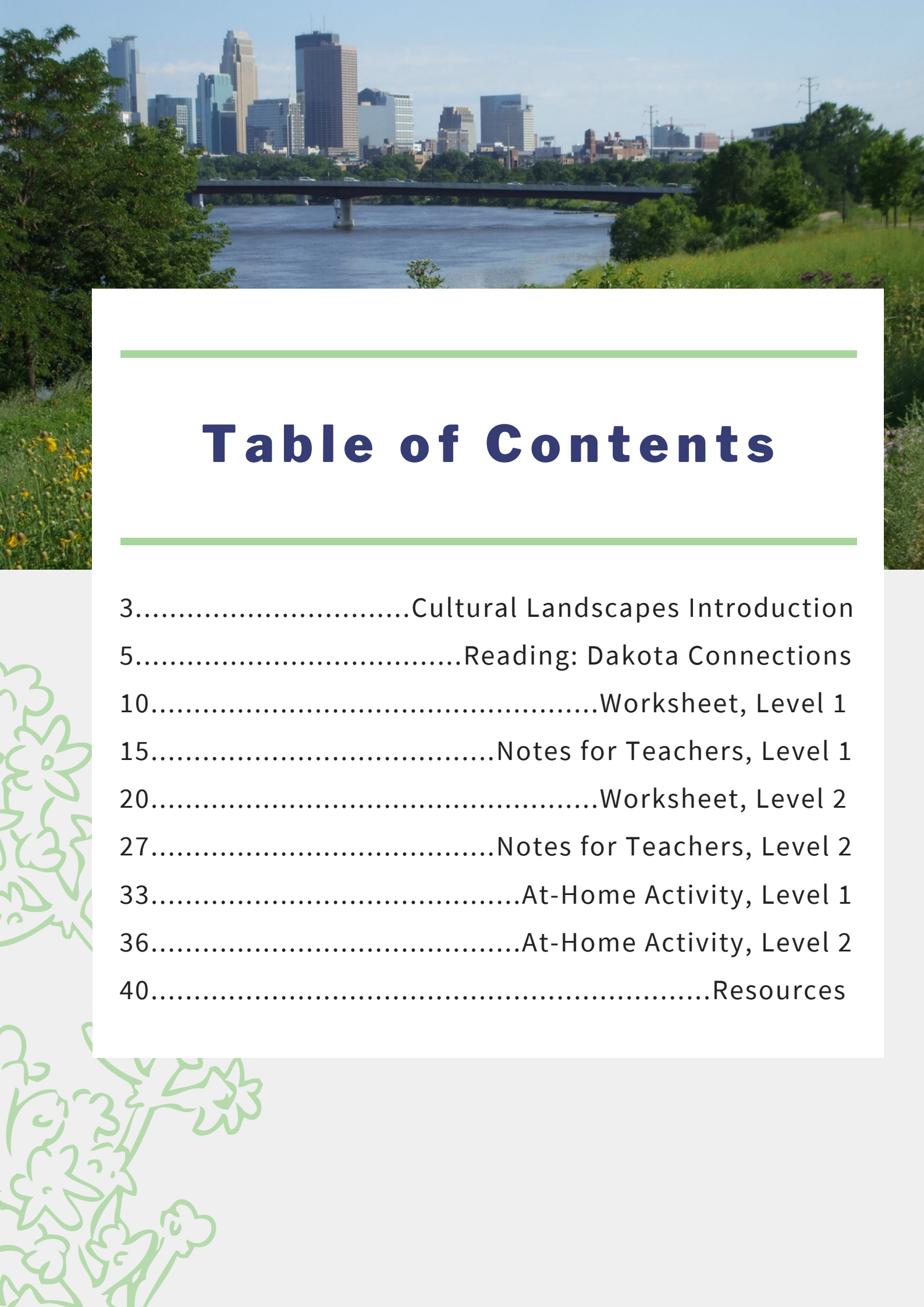


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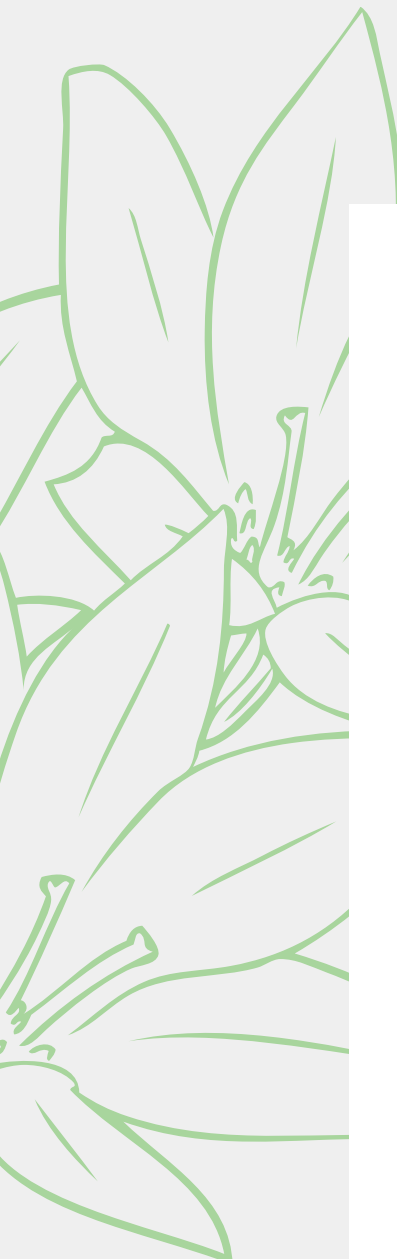
Introduction

Friends of the Mississippi River (FMR) engages people to protect, restore, and enhance the Mississippi River and its watershed in the Twin Cities region. If you live in the Twin Cities, you are on the ancestral homelands of the **Dakota people (Očhéthi Šakówin)**. The Dakota are a **Native nation**, a self-ruling area and group of people, comprised of four bands, **Bdewakantunwan, Sisitunwan, Wahpetunwan** and **Wahpekute**, and have lived in present-day Minnesota and western Wisconsin for countless generations and thousands of years. Their historical territory and homelands extend as far south as Missouri, north into present day Canada, west in Montana and east to Illinois.

Located in the center of the Twin Cities is **Bdote**, a sacred site of Dakota origin stories, where **Haha Wakpa** (the Mississippi River) and **Mnisota Wakpa** (the Minnesota River) meet. There are other sacred sites in the Twin Cities that you may have already visited, including **Wakán Tipi** (Carver's Cave) and **Eháŋna Wičháhapi or Maká Pahá** (Indian Mounds Park burial mounds), that are central to Dakota history and spirituality.

For thousands of years before **colonization** (the act of settling among and asserting control over Indigenous people who are the original or pre-colonial inhabitants of specific places), the Twin Cities metro area was a place of travel, ceremony, hunting, fishing and gathering. The Dakota lived and moved according to the seasons and their seasonal needs. Then and now, the Dakota people's relationship with the land is influenced by and reflected in **traditional lifeways** such as the practice of harvesting maple syrup from maple trees in early spring, summer ceremonies and gatherings of the people, fall and winter hunting for deer and fish, and wild rice harvesting,

After Europeans began to colonize this area, Native nations like the Dakota negotiated with the United States government to maintain their connection to the lands and affirm their rights while granting the U.S. certain privileges on Dakota homelands



through **treaties** (formal agreements between sovereign nations). When the land was not given to the U.S. government by Native Americans, it was often forcefully and violently stolen.


Across the U.S., colonization killed an estimated 56 million Native Americans between **1492** — the year European colonizers first arrived in the Americas — and 1600. Both the state of Minnesota and the United States government carried out **genocide** against Native Americans including the Dakota; they killed and removed Native Americans from their homelands with the intention of destroying their peoples and cultures.

Fort Snelling, a military station in Minnesota, was built and completed by European colonizers in 1825 on the bluffs overlooking Bdote. It was used as the base of operations for United States soldiers during the Dakota War of 1862, and it housed a **concentration camp** (a type of prison with harsh conditions for removed peoples) of Dakota people as they were forced from their homelands after the war.

It is important to remember that the United States is built on stolen labor and land. The same tactics employed against Native Americans were used to colonize and take advantage of other groups of people across the world. For example, colonizers stole and used Black people Indigenous to Africa as free labor for hundreds of years during the slavery of African and African American peoples.

Despite centuries of colonial theft and violence, Minnesota land is still Indigenous land, and people who are not Indigenous are guests here. Indigenous peoples worldwide continue to protect and strengthen their relationships with one another and their **more than human kin**, the plants, animals and natural features of their homelands.

In the following lesson, you will learn ways you can build your relationship with the natural world around you while recognizing the dedication and importance of Indigenous cultures within our communities. Even though we all have different ways of connecting with nature, we can respect and celebrate the many ways people honor and take care of the land where we gather, live, learn, work and play.



Cultural Landscapes: Dakota Connections and Water Stories

Meet Keeli Siyaka and Crystal Norcross



Keeli Siyaka — Keeli (Sisseton Wahpeton Dakota) was born and raised in the Twin Cities and is an Environmental Justice educator at Lower Phalen Creek Project. Keeli reminds us that pollution, oil and chemical spills happen here and that we need to continue to fight to protect our water in the Twin Cities metropolitan area.

Crystal Norcross — As a parent, community organizer, board chair of Oyate Hotanin, steward of Mounds Park Cemetery, and a member of the Dakota community, Crystal (Sisseton Wahpeton Dakota) stresses the importance of education and appreciation for the history of the land and water we interact with.

How are Keeli and Crystal connected to land and water?

Crystal: “My first experience was when I realized what those mounds were. I was 12 years old. I went to the school Mounds Park, down the street. We went to an Indigenous Day Parade and I got interviewed. He [the interviewer] started asking me... about the day and the events.

I was having fun and whatever, you know kid things. And then they asked... about the significance of the mounds. And I said you know, our ancestors are buried there. And that's when it clicked like, wait, those are my relatives.

And it still did not fully click that it was like a cemetery till later on. But that was my instance of, right then and there, like hold on. I need to look more into this. Because why are we in a park? Why is this here?”



The burial mounds at Indian Mounds Park in St. Paul at sunset.

Keeli: “Traditionally, it would have been silly to name a lake after a person, you know? It's more along with the features.

Now that there's a precedent with Bde Maka Ska [which translates to White Earth Lake]. I guess they just really paved the way for the reclamation of names.

By erasing [names] ... you erase our stories. And I think by bringing those back, it helps serve not only the Dakota community, but the community as a whole. We were saying our names are named after the natural features of that place. And I think that helps foster better respect for that place.”

Connecting to Land and Water: Names Are Stories

“We were saying our names are named after the natural features of that place. And I think that helps foster better respect for that place.” - Keeli Siyaka

Imagine what your neighborhood, town or city looked like before Europeans arrived. Ecologists and scientists restore habitat back to its original habitat as much as possible and oftentimes add species and make changes that make the habitat stronger to weather human activity and climate change.

The organization Keeli works for, Lower Phalen Creek Project, is restoring a creek known as Phalen Creek that once connected Wakáŋ Tipi (pictured below) to nearby city parks and lakes like the Trout Brook Nature Preserve and the chain of Lakes in St. Paul, including Lake Phalen and White Bear Lake, which were places where Dakota people harvested wild rice.

Read and reflect on the following Dakota names for the sites and places and waterways we steward as residents of the Twin Cities.

Bdote (the confluence of the Minnesota River, left, and the Mississippi River, right) — where two waters come together



Bdote (Photo: Tom Reiter for FMR)

Mni Sota Makoce (Minnesota) — land where the waters reflect the skies, or cloudy waters



The headwaters of the Mississippi River in Itasca State Park, northern Minnesota.

Haha Wakpa (Mississippi River) — river of the falls



St. Anthony Falls on the Mississippi River in Downtown Minneapolis was a natural waterfall for thousands of years before flour mills destroyed the rock beneath the river.

Imnizaska (St. Paul) — white rock bluffs along the river



Wakáŋ Tipi (Carver's Cave) — dwelling place of the sacred



*Historical photo of Wakáŋ Tipi Cave, which is not visible or accessible now.
(CrediT: Minnesota Historical Society, photographer Edward A. Bromley)*

Eháŋna Wičáhapi or Maká Pahá (Indian Mounds Park) — burial mounds



How has colonization had an impact on your relationship to land and water?

Keeli: “It is all connected, our water is connected and our lives are connected.” Trout Brook Nature Sanctuary and Lower Phalen Creek in St. Paul were once connected to the larger chain of lakes, including White Bear Lake and Lake Phalen. The industrialization and rapid urbanization of St. Paul severed those natural waterways and disrupted the lakes and creeks that allowed Dakota people to harvest wild rice.

Crystal: “Language is kind of the base of everything and makes you realize how deep within the land and where we are, who we are, it is.”

The Dakota language is Siouan in origin, representing the connection between the Dakota people and the other Sioux tribes branches like the Lakota and Nakota. Crystal and Keeli both mention their frustration with the dominant society’s dismissal of the wisdom of Native elders and their storytelling as a way of documenting their history and language.

Their stories and experiences are a reminder of the importance of raising up Indigenous voices in our communities and resisting the colonialist narrative that is often included in our history lessons.

How do you take care of the land? How can others take care of the places they call home?

Crystal: “I want to take better care of the [burial] mounds. I want them, you know, to be handled better. And so that's what was my main base of me running for Community Council. I just want to take better care of the park. And I would say a park, but in my head I'm like, it's the cemetery.”

One way to make a change in your community is to advocate for or speak up about the things that are important to you. Crystal did just this in Mounds Park by raising awareness about the history of the burial mounds and the respect with which they should be treated. Crystal made the decision to run for City Council because she noticed an issue in her community and wanted to change the ways people were taught about and treated the mounds.



Crystal: “I decided every year after Fourth of July, I'm just gonna come and clean up because it was like that every year. I still do that to this day, actually, even with my kids. ... I got to teach my kids this stuff. I know that this is gonna go further beyond me.”

At any age, there are ways to make a difference in your community and find ways to connect with the natural spaces around you. One of these ways is volunteering with local organizations like Friends of the Mississippi River to pick up trash and remove invasive species from the land and water.

Three young people pose for a picture at the park that holds the burial mounds where Crystal has been picking up trash for years. (Photo: Tom Reiter for FMR)

Cultural Landscapes:

Level 1

1a. Either in class or at home, find someone to talk with for five minutes. Take turns thinking about and sharing your answers to the following questions:

- i. What is a place outdoors near you that you love? Why do you love it?
- ii. Do you think humans are part of nature? Why or why not?
- iii. Do you think humans should be responsible for taking care of nature? Why or why not?

1b. After your discussion, write about what you shared with your partner and what you learned from them. Did you have the same answers or different answers to the questions? Did you change your mind after talking to them, or have your answers stayed the same?

2a. How do Dakota names help you understand what a place is? Draw or write about a place we've talked about in this lesson. Use the photos on pages 6, 7 and 8 to help you create your drawing.

2b. Think of a place that you enjoy or go to often. What would you name this place if its name described what it looked or felt like to be there? Write down the old name and your new name for this place, and explain what your new name means.

3. The landscape of the area where you live has changed over time. Looking at the photos to see what some Twin Cities places look like now, draw or write about how you imagine these places or the area where you live looked before European colonization.

4. Think about a place near the Mississippi River, another river, or a body of water that is important to you. What does it make you think about? How do you feel when you are there? Write the name and draw a picture of your place inside the circle below. Write down words that describe your connection to water in the box around your drawing.

My water place is:

5. Both Keeli and Crystal are stewards, or caretakers, of the places they call home by stepping up to be leaders in keeping their sacred places clean and keeping their cultural stories alive. Name three places that you take care of or want to take care of, and three ways you already take care of them or ideas about how you might take care of them in the future.

Place 1:

How do you/will you take care of this place?

a.

b.

c.

Place 2:

How do you/will you take care of this place?

a.

b.

c.

Place 3:

How do you/will you take care of this place?

a.

b.

c.

Cultural Landscapes: Notes for Teachers Level 1

1a. Either in class or at home, find someone to talk with for five minutes. Take turns thinking about and sharing your answers to the following questions:

- i. What is a place outdoors near you that you love? Why do you love it?
- ii. Do you think humans are part of nature? Why or why not?
- iii. Do you think humans should be responsible for taking care of nature? Why or why not?

1b. After your discussion, write about what you shared with your partner and what you learned from them. Did you have the same answers or different answers to the questions? Did you change your mind after talking to them, or have your answers stayed the same?

Encourage students to take the full five minutes (if not longer) for these discussions. These questions are meant to introduce students to the concept of stewarding land because of our deep connections to it — both culturally and physically.

It's also meant to showcase how everyone interacts with nature and the outdoors differently, and that is OK! While some might spend time fishing or camping leading them to want to take care of the forest or a lake, others might play soccer, have family barbecues in the park, walk their dog around the block or watch birds from their living room window. No matter how we interact with nature or why we want to take care of it, all of us are important parts of preserving land and waters for the future.

2a. How do Dakota names help you understand what a place is? Draw or write about a place we've talked about in this lesson. Use the photos on pages 6, 7 and 8 to help you create your drawing.

Encourage your students to use their imagination, even if they have not been to these places; what might "river of the falls" be?

You could also include more Dakota names or other Indigenous place names for places that might be more familiar to your class. Practice saying some of the names out loud using video recordings of the pronunciation (see the Resources below).

Examples:

- Bdote (the confluence of the Minnesota and Mississippi rivers) - where two waters come together: Two different rivers flow together into one, mixing the water of each one into a new river.
- Mni Sota Makoce (Minnesota) - land where the waters reflect the skies, or cloudy waters: In Minnesota, there are many lakes and rivers. The water often reflects the sky on a calm day.
- Haha Wakpa (Mississippi River) - river of the falls: The Mississippi River has a waterfall in downtown Minneapolis.
- Imnizaska (St. Paul) - white rock bluffs along the river: There are many bluffs and steep hills in St. Paul along the Mississippi River.
- Wakáŋ Tipi (Carver's Cave) - dwelling place of the sacred: This cave is sacred for the Dakota people because spirits live in the cave.
- Eháŋna Wičháhapi (Indian Mounds Park) - burial mounds: There are people buried in the mounds here. It is a cemetery for the Dakota people.

2b. Think of a place that you enjoy or go to often. What would you name this place if its name described what it looked or felt like to be there? Write down the old name and your new name for this place, and explain what your new name means.

This question aims to get students thinking creatively about how they connect to an outdoor place that they know well.

Examples:

- White Sands Beach - "Hill of white sand at the river's edge"
- T-ball/baseball diamond at the park - "Flat sand square for running"
- Sledding hill at the park - "Slippery snow hill where children play"
- Backyard fort - "Small wooden shelter for kids only"

3. The landscape of the area where you live has changed over time. Looking at the photos to see what some Twin Cities places look like now, draw or write about how you imagine these places or the area where you live looked before European colonization.

Students can draw or write here, or both. Before there were buildings, streets and sidewalks here in Minnesota, there were different kinds of forests, prairies and wetlands. If students need more support, have them think about any old trees in their neighborhood; can they imagine where this tree lived before there were houses and shops here?

4. Think about a place near the Mississippi River, another river, or a body of water that is important to you. What does it make you think about? How do you feel when you are there? Write the name and draw a picture of your place inside the circle below. Write down words that describe your connection to water in the box around your drawing.

adventure *sunrise*
bonfires *exploring* *meditation*
celebration *friends*
bike rides *calm*
love *eagles*
beauty *joy*
wonder *reverence*
quiet *wildlife and birds!*
peaceful *nature*

My water place is:
White Sands Beach
on the Mississippi River



5. Both Keeli and Crystal are stewards, or caretakers, of the places they call home by stepping up to be leaders in keeping their sacred places clean and keeping their cultural stories alive. Name three places that you take care of or want to take care of, and three ways you already take care of them or ideas about how you might take care of them in the future.

Even the simplest of actions can make a big difference! Encourage your students to pick up trash, refrain from littering, talk to their parents, friends and family about not littering, and clean the storm drains on their street.

More information about pollutants can be found in the FMR lesson *Our Waters* and in the Resource section below.

Other ideas for stewarding an area might involve putting sand down in the winter instead of salt, walking instead of driving, planting trees or other plants, making wildlife habitat, etc.

Examples:

Place 1: My yard

How do you/will you take care of this place?

- a. I will pick up trash
- b. I will clean leaves out of the storm drains
- c. I won't litter

Place 2: The park I go to with my family

How do you/will you take care of this place?

- a. I will pick up trash
- b. I will be nice to the plants there
- c. I will tell my friends about why it is important to not litter

Cultural Landscapes: Level 2

1a. Either in class or at home, find someone to talk with for five minutes. Take turns thinking about and sharing your answers to the following questions:

- i. What is a place outdoors near you that you love? Why do you love it?
- ii. Do you think humans are part of nature? Why or why not?
- iii. Do you think humans should be responsible for taking care of nature? Why or why not?

1b. After your discussion, write about what you shared with your partner and what you learned from them. Did you have the same answers or different answers to the questions? Did you change your mind after talking to them, or have your answers stayed the same?

2. Think about a place near the Mississippi River, another river, or a body of water that is important to you. What does it make you think about? How do you feel when you are there? Write the name and draw a picture of your place inside the circle below. Write down words that describe your connection to water in the box around your drawing.

My water place is:

3. Dakota names not only describe what a place is like, but also connect the Dakota people to their stories, culture and traditional ways of being. What connects you to place and your ancestors? Are there words, traditions and skills old and new that you continue to use or practice? How are they connected to place in your culture(s)?

4a. Be an advocate for your places! From banning pollutants to passing strong rules to guide local riverfront development, many of FMR's victories are thanks to our strong base of advocates. Letters are an important, even critical, way to influence legislation. Your voice is essential in creating change and protecting natural places.

The first step is to identify an issue that is important to you. What would you like to see happen at the places you love in your neighborhood? Is there a larger issue that impacts more than just your neighborhood that you'd like to address?

You can find information about what bills the Legislature is working on and express your approval or disapproval of different bills or aspects of bills. You can find more information about the Minnesota Legislature at www.openstates.org/mn.

There is also a list of vocabulary and resources on the last page of this worksheet.

Write about the issue(s) you are interested in below.

4b. The second step is to find the representatives that represent you on the issue you're interested in. For local issues, you can contact your city council and mayor. For more widespread issues, you might contact the state governor and the legislators that represent you in the state or in the country.

If you don't already know your representatives, go to www.openstates.org and type your home address in under "Find Your Legislators." You can also visit your city's website to learn more about the mayor and city council members.

Write the names of your representatives, what they do below, and who might be good to contact to address the issue you've chosen to pursue. Don't forget to write down their contact information! If you're going to send an email, get their email address, and if you're going to send a handwritten letter, write down their mailing address.

4c. Use the following template and a notebook or computer to write and send a letter to your representatives encouraging them to care for nature that is important to you.

Dear [Representative/Senator/Council Member],

- Explain who you are:

I am a future voter in your district, and I attend _____ school in _____ city.

- Write a brief description of your issue or the specific bill you want to support and what it will do:

I am writing to ask your support of _____.

This bill would _____.

- Explain why you care and why they should care:

I care about this issue because _____. You should care about this because _____.

- Who else supports it:

This bill is supported by a broad coalition of _____

- State your main point again in a new way:

_____ is important because _____. We need to take action now because _____.

- Closing

Thank you for your time [Representative/Senator/Council Member]

Sincerely, _____

Vocabulary

- Advocacy — public support for a particular issue or policy
- Coalition — a group that has made an alliance for shared action, often a temporary alliance of political parties or organizations that may have a wide range of political opinions
- State Representatives — part of the legislative branch of government along with State Senators who, once elected, create and vote on bills that make new laws or change old ones
- City Council Member — part of the legislative branch of city government who create policies and look to the city's goals and major projects ranging from community growth to land use to finances and strategic planning
- Policy — rules or framework created by a group to achieve long term goals
- Bill — a proposed law to be considered by members of government

Resources

- An example of a letter FMR wrote about Eháŋna Wičháhapi (Indian Mounds Park) can be found here:
www.fmr.org/sites/default/files/fmrletterindianmoundspark0719.pdf
- Find more ways to get involved in advocacy on the FMR website here www.fmr.org/advocate
- Find information about your representatives and active bills here www.openstates.org

Cultural Landscapes: Notes for Teachers Level 2

1a. Either in class or at home, find someone to talk with for five minutes. Take turns thinking about and sharing your answers to the following questions:

- i. What is a place outdoors near you that you love? Why do you love it?
- ii. Do you think humans are part of nature? Why or why not?
- iii. Do you think humans should be responsible for taking care of nature? Why or why not?

1b. After your discussion, write about what you shared with your partner and what you learned from them. Did you have the same answers or different answers to the questions? Did you change your mind after talking to them, or have your answers stayed the same?

Encourage students to take the full five minutes (if not longer) for these discussions. These questions are meant to introduce students to the concept of stewarding land because of our deep connections to it — both culturally and physically.

It is also meant to showcase how everyone interacts with nature and the outdoors differently, and that is OK! While some might spend time fishing or camping leading them to want to take care of the forest or a lake, others might play soccer, have family barbecues in the park, walk their dog around the block, or watch birds from their living room window. No matter how we interact with nature or why we want to take care of it, all of us are important parts of preserving land and waters for the future.

2. Think about a place near the Mississippi River, another river, or a body of water that is important to you. What does it make you think about? How do you feel when you are there? Write the name and draw a picture of your place inside the circle below. Write down words that describe your connection to water in the box around your drawing.

adventure *sunrise*
bonfires *exploring* *meditation*
celebration *friends*
bike rides *calm*
love *eagles*
beauty *joy*
wonder *reverence*
quiet *wildlife and birds!*
peaceful *nature*

My water place is:
White Sands Beach
on the Mississippi River



3. Dakota names not only describe what a place is like, but also connect the Dakota people to their stories, culture and traditional ways of being. What connects you to place and your ancestors? Are there words, traditions and skills old and new that you continue to use or practice? How are they connected to place in your culture(s)?

Words, traditions and skills, no matter how small or "normal" seeming are important! Encourage your students to embrace their own culture rather than taking from or idolizing other traditions that might seem "exotic" or new to them. It is also important for students to recognize that other people's traditions aren't "weird" because they are different; oftentimes many cultural traditions and celebrations honor similar ideas.

One example is celebrating Christmas with a Christmas tree; the tree reminds some of nature, or perhaps the ornaments on the tree remind others of their ancestors, past and present, as they decorate the tree with ornaments from their grandparents or they make new ornaments each year.

A second example is speaking another language at home that is an important part of someone's culture. Certain words may not be translatable into English but are important or unique to someone's culture and may be tied to the place where the language or dialect evolved.

Another example is the re-telling of stories from someone's parents, grandparents, or great-grandparents that remind people where they come from.

There is no wrong answer here! You may even encourage students to share what they wrote about and create a space of respectful curiosity for learning about and honoring different cultures, practices and traditions.

4a. Be an advocate for your places! From banning pollutants to passing strong rules to guide local riverfront development, many of FMR's victories are thanks to our strong base of advocates. Letters are an important, even critical, way to influence legislation. Your voice is essential in creating change and protecting natural places.

The first step is to identify an issue that is important to you. What would you like to see happen at the places you love in your neighborhood? Is there a larger issue that impacts more than just your neighborhood that you'd like to address?

You can find information about what bills the Legislature is working on and express your approval or disapproval of different bills or aspects of bills. You can find more information about the Minnesota Legislature at www.openstates.org/mn.

There is also a list of vocabulary and resources on the last page of this worksheet.

Write about the issue(s) you are interested in below.

Have students focus on brainstorming ideas; what issues do they care about? If they don't have anything specific, like reducing the litter at a park or trail in their neighborhood or creating habitat for pollinators, have them read about bills on the Open States website and choose one to focus on.

This question builds to the action of writing a letter to representatives. Keep this in mind as students are brainstorming and choosing an idea, issue or bill to move forward with in the next section.

Point students towards the resources on the last page of the worksheet for more ideas and information.

4b. The second step is to find the representatives that represent you on the issue you're interested in. For local issues, you can contact your city council and mayor. For more widespread issues, you might contact the state governor and the legislators that represent you in the state or in the country.

If you don't already know your representatives, go to www.openstates.org and type your home address in under "Find Your Legislators." You can also visit your city's website to learn more about the mayor and city council members.

Write the names of your representatives, what they do below, and who might be good to contact to address the issue you've chosen to pursue. Don't forget to write down their contact information! If you're going to send an email, get their email address, and if you're going to send a handwritten letter, write down their mailing address.

You can encourage your students to find and write down the names and titles of all of their local, state and national representatives if you have time. Or, you can focus on the representatives that would make the most sense for the issue they picked in part a.

One way to narrow in on specific representatives is by thinking about who is impacted by the chosen issue. Is it people in a neighborhood, the whole state, or the whole country? If a student is focusing on a bill, who is voting on the bill? Smaller groups of people will be most affected by local government, like the city council and the mayor of where you live. Larger issues that affect larger groups of people will most likely be statewide or national issues.

4c. Use the following template and a notebook or computer to write and send a letter to your representatives encouraging them to care for nature that is important to you.

Have students type or write their letters; if handwritten, you will need to provide envelopes and stamps for your class. Emails work just as well for contacting representatives, and the appropriate contact information should have been recorded in part b. If not, you can use the Open State or your city's website to find contact information.

Don't forget to have students send in their letters! This is the most important part. You can use this activity to talk about advocacy, democracy and other topics around how students can make an impact in their community.

Cultural Landscapes: At-Home Activity

Materials

- Plastic grocery bags or garbage bags
 - Gloves
 - Pencil or pen
 - Paper or notebook
- Watch or way to keep track of time
- Optional: A trash picker/grabber claw

Directions

1. Write or draw in your notebook: How much trash and litter do you see in your neighborhood on an average day?
2. Write or draw in your notebook: What kinds of pollutants do you think exist in your neighborhood? Make a list of the different kinds.
3. Trash clean-up and data collection: With the help or permission of an adult, go outside with your notebook, a plastic bag, watch or timer and gloves. You can stay in your yard, on your block or go to a nearby park that you can access easily over the coming weeks.
4. Wearing gloves, start picking up trash in the area you have selected. In your notebook, write down what kinds of trash you find, how much,


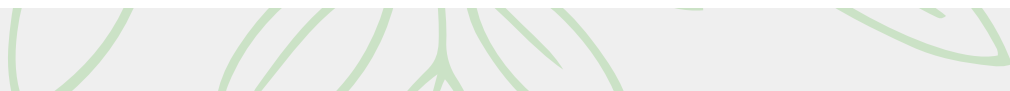
and any other notable information about what you find. Set a timer for 20 minutes, or more depending on how much time you'd like to spend collecting data. Your notebook could look like this:

Type of litter	Number
Plastic bags	
Straws	
Candy/food wrappers*	
Take out containers	

**most candy wrappers I found near the rec center*

5. Next to your data, make a section for observations. Here, write down the date, how long you collected trash, the time of day, the weather, and anything else that is interesting about your location. If one day there were a lot of leaves because it is fall, or if one day there is snow, make sure to have this information in your observation.

6. Return to collect data at the same location for the same amount of time every week for at least one month — longer if you can! Make sure to collect the same data and observations each time you go.

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7. Write in your notebook: After one month of collecting litter, how do you feel? Look at the data you have collected from your trash pick-ups. Have you noticed any change in the area where you have been picking up trash, or in the kind of trash you're finding? Why might this be?
8. Write in your notebook: What have you noticed about the trash you pick up? Where do you think it comes from?
9. Write in your notebook: Your work has made an impact. What do you think would happen if more people picked up trash? Do you see anyone else picking up trash?
10. Take action! How can you get more people to start picking up trash? How can you be a steward to the neighborhood? Invite friends to pick up trash with you, and ask your adult friends and family to do their part. How big of a difference can you make? See the Resources section for more ideas on how to have an impact in your neighborhood.
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Cultural Landscapes: At-Home Activity

Materials

- Plastic grocery bags or garbage bags
 - Gloves
 - Pencil or pen
 - Paper or notebook
- Watch or way to keep track of time
- Optional: A trash picker/grabber claw

Directions

1. Write in your notebook: How much trash and litter do you see in your neighborhood on an average day?
2. Write in your notebook: What kinds of pollutants do you think exist in your neighborhood? Make a list of the different kinds.
3. Trash clean up and data collection: With the help or permission of an adult, go outside with your notebook, a plastic bag, watch or timer and gloves. You can stay in your yard, on your block or go to a nearby park that you can access easily over the coming weeks.
4. Wearing gloves, start picking up trash in the area you have selected. In your notebook, write down what kinds of trash you find, how much,

and any other notable information about what you find. Set a timer for 10, 20, 30 minutes or more depending on how much time you'd like to spend collecting data. Your notebook could look like this:

Type of litter	Number
Plastic bags	
Straws	
Candy/food wrappers*	
Take out containers	

*most candy wrappers I found near the rec center

If you don't find a lot of litter, keep track of other pollutants in the area. How many cars do you see? Are there busy streets, and how many? If not, do many of the people who live here own vehicles? Pollutants in this case could be the number of cars per minute for 10 minutes, looking for oil spills from vehicles, or any other factor about a pollutant that you can measure.

Other pollutants could be from businesses in the area (What businesses are in the area and what do they do? What waste do they produce?), yard waste (lawn clippings and leaves), pet waste (Lots of dogs in the neighborhood? Do owners pick up their dog waste?), salt in wintertime, chemicals used on lawns and gardens; the list is endless! Come up with your own data to track and use in this activity.

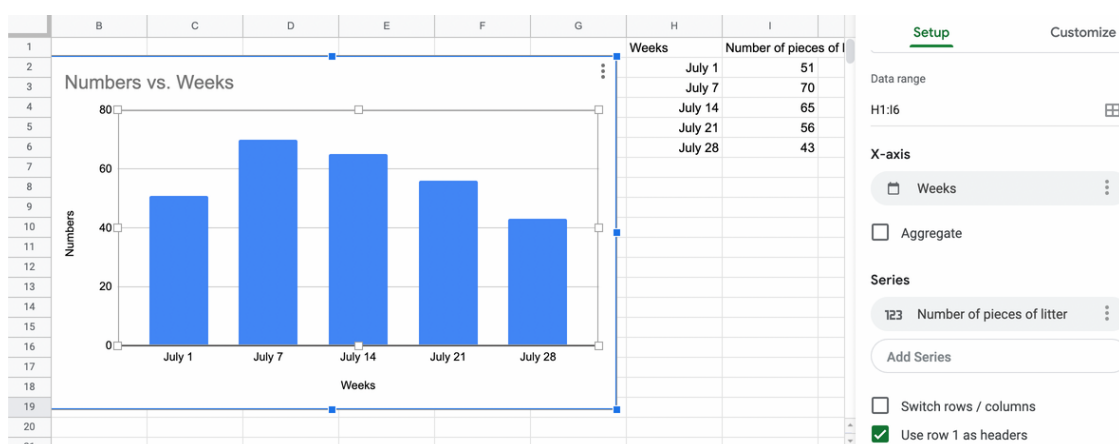
5. Next to your data, record the date, how long you collected data, the time of day, the weather, and anything else that is notable about your location. If one day there were a lot of leaves because it is fall, or if one day there is snow, make sure to have this information in your observation.

6. Return to collect data at the same location for the same amount of time every week for at least one month — longer if you can! Make sure to collect the same data and observations each time you go.

7. After one month, start looking at your data — what patterns do you see? Is there more trash to pick up when the weather is warmer, or after snowmelt? Are there certain kinds of trash you find in August that you don't find in November? Why might this be? In your notebook, write down any patterns or hypotheses about the pollution in this area.

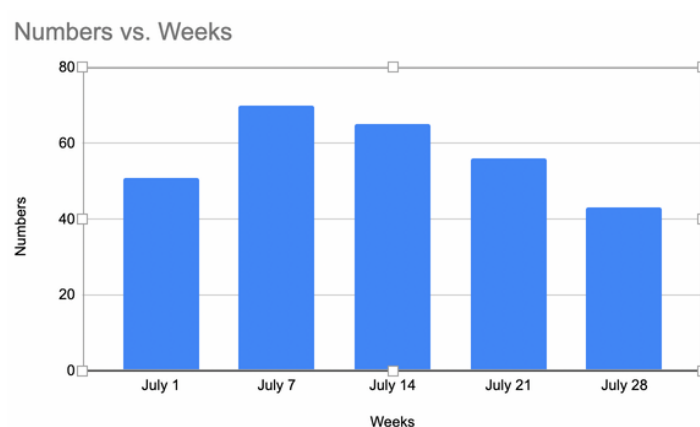
8. The longer you collect data, the better!

9. Make your data into a graph. You can use graph paper, or a spreadsheet on your computer (Microsoft Excel or Google Sheets both work). What is the best way to show your findings? Start with the numbers you tracked.



10. Now that you are the expert on litter and pollution in your area and have your data set up so it is easier to understand in a graph, what do you think could be a solution to the problem you have been studying? Write down your ideas in your notebook.

In the example graph, we collected litter in the nearby park for five weeks. We noticed a big jump in the number of pieces of litter on July 7 compared to July 1. Why might this be?



In the U.S., the 4th of July is a national celebration that involves a lot of fireworks and barbecues in the park. This could explain more litter in the park. What do you think?

11. Take action! You have data to show that your solutions to litter and other pollutants could be beneficial to the neighborhood. Contact your city parks and recreation office, city of public works department, businesses, schools and neighbors to make your solutions a reality.

See the Resources section for more ideas on how to have an impact in your neighborhood.

Cultural Landscapes: Resources

- **Art and Water**

- FMR worked with Indigenous Roots to create and install a water quality-themed mural near a storm drain in St. Paul's East Side. Read our interview with Dakota artist Thomasina Topbear: www.fmr.org/stewardship-updates/fmr-fifth-water-quality-mural-celebrates-community-connections-water

- **Adopt-A-Drain**

- Keep your neighborhood clean and protect local waterways by adopting a storm drain in your neighborhood: www.adopt-a-drain.org

- **Storm Drain Stenciling Program**

- Ask your city about their storm drain stenciling program. Using paint and stencils, volunteers mark storm drains with a reminder message, "Keep 'em Clean, Drains to River (Lake or Creek)!" and distribute educational door hangers to neighborhood homes and businesses.

- **Trash Pick Ups**

- The Mississippi River is the Twin Cities' largest contributor to the drinking water supply. Cigarette butts, plastic bags and other litter make it difficult and expensive for municipal water services to filter pollution here and downstream. They also introduce toxins that can be impossible to remove. The best way to protect drinking water is to remove remove litter and pollutants before they make it into the river.

- **Dakota Names & Pronunciations**

- The Shakopee Mdewakanton Sioux Community on YouTube www.youtube.com/watch?v=O_ntqsnY0Yc
- Dakota Wicohan has a wide range of language programs and educational resources. Visit their website www.dakotawicohan.org and find more information about Dakota Place Names in their lesson (meets 6th grade social studies standards) that offers more resources and further reading. www.dakotawicohan.org/wp-content/uploads/2017/03/L6-Dakota-Place-Names-1.pdf

- **Advocacy Resources**

- An example of a letter FMR wrote about Eháŋna Wičháhapi (Indian Mounds Park) www.fmr.org/sites/default/files/fmrletterindianmoundspark0719.pdf
- Find more ways to get involved in environmental advocacy on the FMR website www.fmr.org/advocate
- Find information about your state and national representatives and active bills here www.openstates.org
 - City of Minneapolis representatives
 - City of St. Paul representatives

- **Environmental Stewardship Institute (ESI)**

- ESI fosters a diverse next generation of environmental leaders through an immersive career pathway program focused on local river issues and interdisciplinary professional development in the environmental field: www.fmr.org/ESI

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