

What are some Environmental Affects of the DAPL

Project Description

With the rise of the Standing Rock Protest it shed some light on the dangers of oil pipelines. One of the first things I researched was the amount of pipelines exist in the US, even though there has been a lot of environmental consequences that have recently showed itself. I wanted to look at the different ways the DAPL is going to affect the environment around North Dakota. With the Standing Rock Protest focusing on the idea of water! I wanted to look at specifically how the DAPL affects the bodies of water in or around the DAPL.

Methodology and Procedure Desired Results

Methodology of this project was through the use of ARCGIS and previous data on standing rock to highlight the surrounding environment of the DAPL. The environments focused on mainly deal with bodies of water, because of the importance of water in the Standing Rock Protest. I wanted to purposefully look at the long term effects that a pipeline could cause if it was built in this area.

The desired results of this project is to provide how the environmental bodies of water are being affected by the creation of the DAPL. The Standing Rock Protest showed the importance of water, especially to the culture of the Lakota people. and this project supports that idea by providing other real world consequences that might happen with the creation of the DAPL.

Future Research

Future research would have to deal with either the actual affects of the DAPL if it is fully constructed, what are the real ramifications of this pipeline 10 to 20 years from now. Especially looking at how the bodies of water such as the aquifers and missouri river are after 10-20 years with the pipeline installed. With the fairly unknown future of the DAPL, research should be done on the actual affects of pipelines on bodies of water specifically looking at other pipelines like Exxon's Silvertip Pipeline in Montana.

Environmental affects of DAPL

Adding a pipeline across North Dakota might effect the habitat for some animals in the area, if any complications happen with the pipeline. Looking at the Piping Clover it is apparent that some of its Critical Habitats are cross the Pipeline.

How DAPL affects Piping Clover Critical Habitats

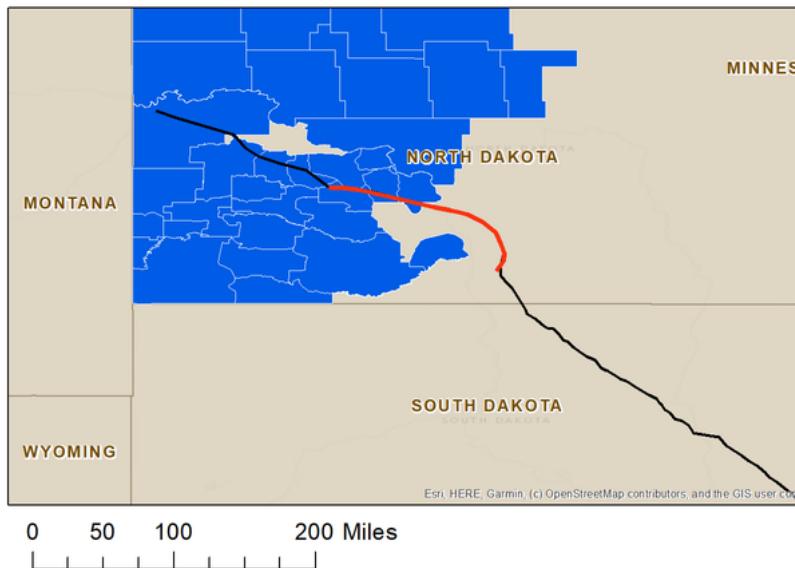


Legend

- Piping Clover Critical Habitat North Dakota
- DAPL
- DAPL 5 mile
- Proposed Route for Dakota Pipeline
- Original Dakota Pipeline
- USA States (over 1:3m)

Sources:
Standing Rock Dataset
ARCGIS Online North Dakota Critical Habitats
Brenden Lasola

How DAPL affects North Dakota Water Supply



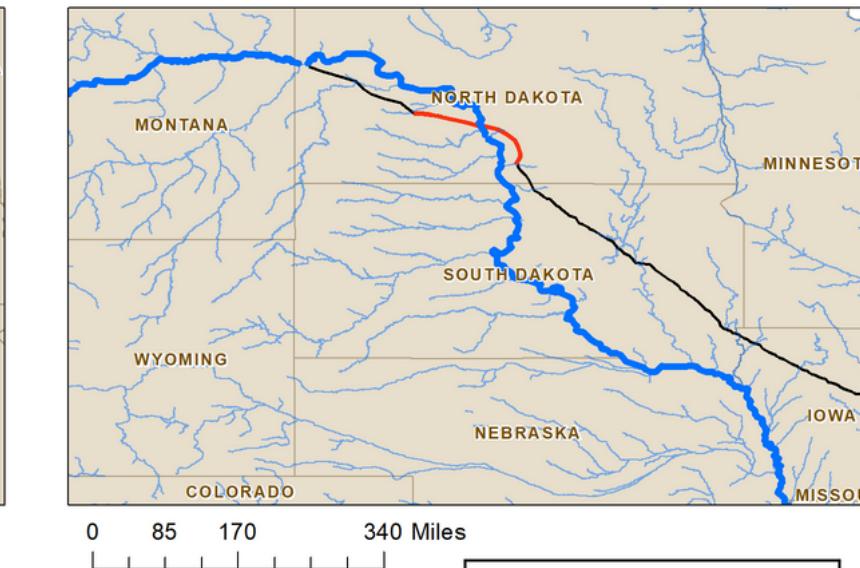
Legend

- Proposed Route for Dakota Pipeline
- Original Dakota Pipeline
- Water Supply Areas
- USA States (over 1:3m)

Sources:
Standing Rock Dataset
ARCGIS Online North Dakota Sensitive Regions
Brenden Lasola

The Missouri river is the longest river in the USA and is one of the bodies of water that is heavily affected by the DAPL. Looking at this map, it shows that the DAPL will not only affect the main missouri river but specifically looking at the different river basins that might be affected by any complications that might happen with the pipeline.

Bodies of Water affected by DAPL



Legend

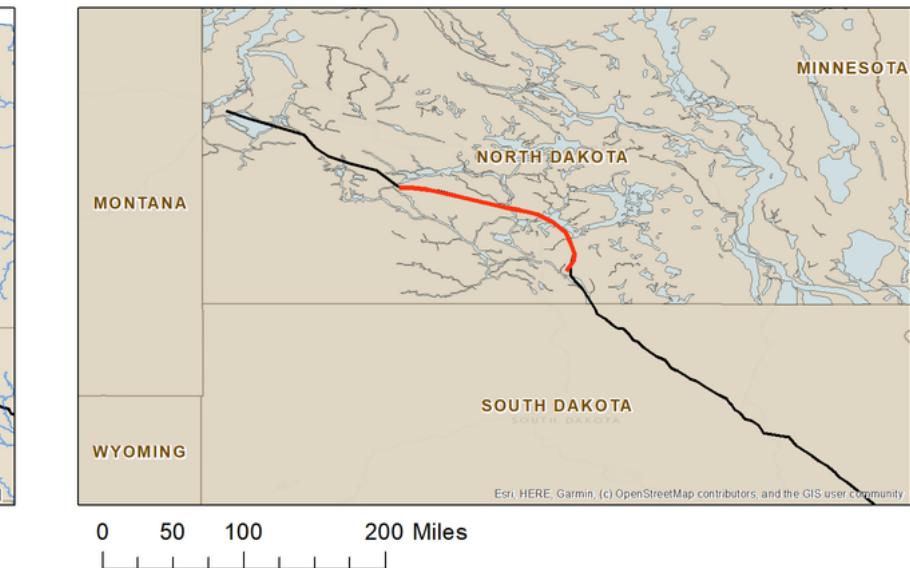
- Missouri River
- US Major Rivers
- Proposed Route for Dakota Pipeline
- Original Dakota Pipeline
- USA States (over 1:3m)

Sources:
Standing Rock Dataset
ARCGIS Online USA Major Rivers
Brenden Lasola

Sioux Falls

Aquifers are important natural resources especially for agriculture. North Dakota is filled with a vast landscape and agriculture is a way for its people to provide a living. Again, any complications with the DAPL might affect the water supply deep in these aquifers, which will then affect peoples lives

How DAPL affects North Dakota Aquifers



Legend

- Proposed Route for Dakota Pipeline
- Original Dakota Pipeline
- Aquifers
- USA States (over 1:3m)

Sources:
Standing Rock Dataset
ARCGIS Online North Dakota Sensitive Regions
Brenden Lasola