

# Image 1 Before



Photo found at <https://www.vintag.es/2017/08/before-urbanization-heres-what-new-york.html>.  
Website credited photos from E. Sanderson, *Manhattan: A Natural History of New York City* (NY: Abrams, 2009).

# Image 2 After



Photo found at <https://www.vintag.es/2017/08/before-urbanization-heres-what-new-york.html>.  
Website credited photos from E. Sanderson, *Manhattan: A Natural History of New York City* (NY: Abrams, 2009).

# Before Observations

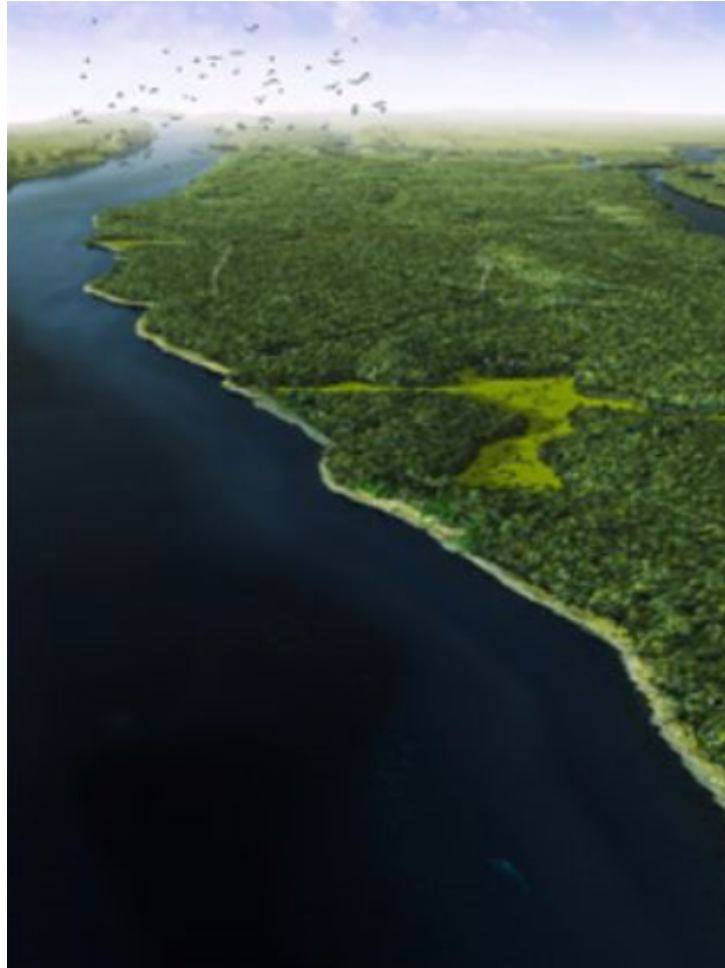


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List your observations:

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# Before Observations



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List 5 observations:

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_
4. \_\_\_\_\_  
\_\_\_\_\_
5. \_\_\_\_\_  
\_\_\_\_\_

## Before Observations



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Website credited photos from E. Sanderson, *Manhattan: A Natural History of New York City* (NY: Abrams, 2009).

List your observations:

1. One thing that I notice is \_\_\_\_\_.
2. Another thing that I notice is \_\_\_\_\_.
3. I see \_\_\_\_\_ in the picture.
4. I see \_\_\_\_\_ in the picture.
5. Before humans changed the land, it looked like \_\_\_\_\_  
\_\_\_\_\_.



## After Observations



Photo found at <https://www.vintag.es/2017/08/before-urbanization-heres-what-new-york.html>.  
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List your observations:

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## After Observations



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List 5 observations:

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_
4. \_\_\_\_\_  
\_\_\_\_\_
5. \_\_\_\_\_  
\_\_\_\_\_

## After Observations

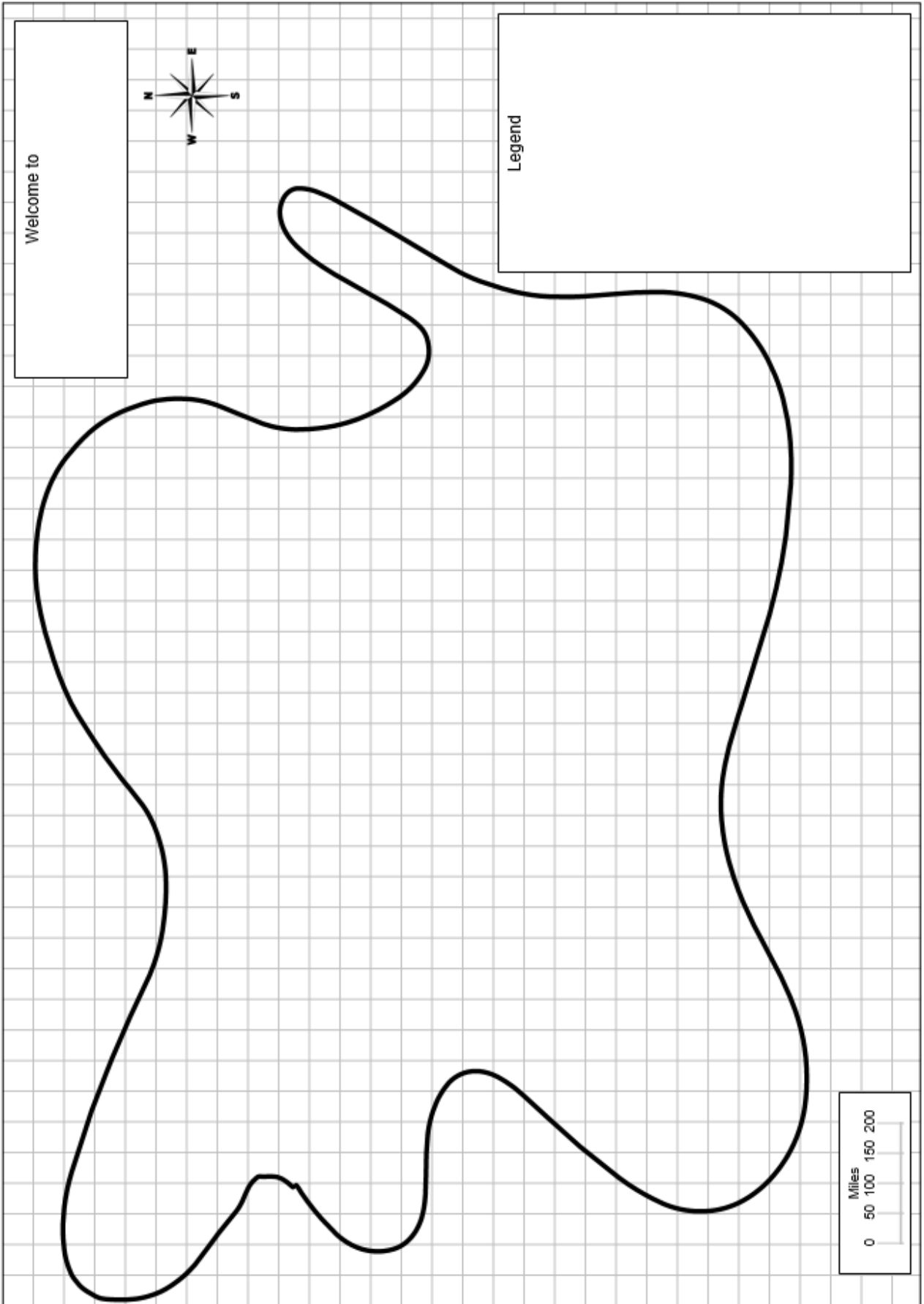


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List your observations:

1. One thing that I notice is \_\_\_\_\_.
2. Another thing that I notice is \_\_\_\_\_.
3. I see \_\_\_\_\_ in the picture.
4. I see \_\_\_\_\_ in the picture.
5. After humans changed the land, it looks like \_\_\_\_\_  
\_\_\_\_\_.





## Activity Cards

<p>Change: Tornado occurs. Impact: Destroyed ___ x 100 miles of farmland or desert habitat/climate. Type of Impact: Natural</p>	<p>Change: New homes are being built. Impact: Destroyed ___ x 100 miles of forest. Type of Impact: Human-caused</p>
<p>Change: New homes are being built. Impact: Destroyed ___ x 100 miles of forest. Type of Impact: Human-caused</p>	<p>Change: New homes are being built. Impact: Destroyed ___ x 200 miles of forest. Type of Impact: Human-caused</p>
<p>Change: A new coffee company wants to start a coffee bean farm. Impact: Destroyed ___ x 300 miles of forest. Type of Impact: Human-caused</p>	<p>Change: Hurricane occurs. Impact: Destroyed ___ x 100 miles of homes. Type of Impact: Natural</p>
<p>Change: Hurricane occurs. Impact: Destroyed ___ x 100 miles of homes. Type of Impact: Natural</p>	<p>Change: New business is built. Impact: Destroyed ___ x 100 miles of rivers or water source. Type of Impact: Human-caused</p>
<p>Change: New homes are being built. Impact: Destroyed ___ x 200 miles of desert. Type of Impact: Human-caused</p>	<p>Change: New business is built. Impact: Destroyed ___ x 200 miles of rivers or water source. Type of Impact: Human-caused</p>
<p>Change: A new shopping center is being built. Impact: Destroyed ___ x 100 miles of forest. Type of Impact: Human-caused</p>	<p>Change: New business is built. Impact: Destroyed ___ x 100 miles of rivers or water source. Type of Impact: Human-caused</p>
<p>Change: Pollution from exhaust fumes occurs. Impact: Pollutes ___ x 1000 miles of arctic habitat. Type of Impact: Human-caused</p>	<p>Change: Earthquake occurs. Impact: Destroyed ___ x 100 miles of homes. Type of Impact: Natural</p>
<p>Change: Pollution from exhaust fumes occurs. Impact: Pollutes ___ x 100 miles of arctic habitat. Type of Impact: Human-caused</p>	<p>Change: Drought occurs. Impact: Destroyed ___ x 200 miles of forest. Type of Impact: Natural</p>

<p>Change: Tornado occurs. Impact: Destroyed ___ x 50 miles of homes and farmland. Type of Impact: Natural</p>	<p>Change: New homes are being built. Impact: Destroyed ___ x 10 miles of wetlands. Type of Impact: Human-caused</p>
<p>Change: Sink hole appears. Impact: Destroyed ___ x 50 miles of desert. Type of Impact: Human-caused</p>	<p>Change: New homes are being built. Impact: Destroyed ___ x 200 miles of forest. Type of Impact: Human-caused</p>
<p>Change: A mall/shopping center is built. Impact: Destroyed ___ x 50 miles of desert. Type of Impact: Human-caused</p>	<p>Change: Hurricane occurs. Impact: Destroyed ___ x 10 miles of homes. Type of Impact: Natural</p>
<p>Change: Monsoon flooding occurs. Impact: Destroyed ___ x 50 miles of homes. Type of Impact: Natural</p>	<p>Change: Oil/Fossil fuels are taken out of the ground. Impact: Uses ___ x 50 miles of rivers or water source. Type of Impact: Human-caused</p>
<p>Change: New homes are being built. Impact: Destroyed ___ x 20 miles of water source. Type of Impact: Human-caused</p>	<p>Change: Oil/Fossil fuels are taken out of the ground. Impact: Ruins ___ x 20 miles of rivers or water source. Type of Impact: Human-caused</p>
<p>Change: A new shopping center is being built. Impact: Destroyed ___ x 10 miles of desert or forest. Type of Impact: Human-caused</p>	<p>Change: Roads/Highways are built. Impact: Ruins ___ x 10 miles of rivers or water source. Type of Impact: Human-caused</p>
<p>Change: Pollution from factory occurs. Impact: Pollutes ___ x 10 miles of a water source. Type of Impact: Human-caused</p>	<p>Change: Earthquake occurs. Impact: Destroyed ___ x 10 miles of homes and. Type of Impact: Natural</p>
<p>Change: Pollution from exhaust fumes occurs. Impact: Pollutes ___ x 10 miles of forests. Type of Impact: Human-caused</p>	<p>Change: Roads/Highways are built. Impact: Destroyed ___ x 20 miles of forest. Type of Impact: Human-caused</p>

<p>Change: Wind Farm is built. Impact: Uses ___ x 50 miles of desert or forest. Type of Impact: Human-caused</p>	<p>Change: Farmland is being created. Impact: Destroyed ___ x 10 miles of wetlands. Type of Impact: Human-caused</p>
<p>Change: Solar Farm is built. Impact: Uses ___ x 10 miles of desert or forest. Type of Impact: Human-caused</p>	<p>Change: Farmland is being created. Impact: Destroyed ___ x 10 miles of grasslands. Type of Impact: Human-caused</p>
<p>Change: Solar Farm is built. Impact: Uses ___ x 25 miles of desert or grasslands. Type of Impact: Human-caused</p>	<p>Change: Farmland is being created. Impact: Destroyed ___ x 20 miles of desert. Type of Impact: Human-caused</p>
<p>Change: A dam is built. Impact: Uses ___ x 25 miles of desert and water source. Type of Impact: Human-caused</p>	<p>Change: Oil/Fossil fuels are taken out of the ground. Impact: Uses ___ x 50 miles of rivers or water source. Type of Impact: Human-caused</p>
<p>Change: A dam is built. Impact: Uses ___ x 20 miles of water source. Type of Impact: Human-caused</p>	<p>Change: Oil/Fossil fuels are taken out of the ground. Impact: Uses ___ x 20 miles of rivers or water source. Type of Impact: Human-caused</p>
<p>Change: A business is built Impact: Pollutes ___ x 10 miles of water source or river. Type of Impact: Human-caused</p>	<p>Change: Roads/Highways are built. Impact: Destroyed ___ x 10 miles of grasslands. Type of Impact: Human-caused</p>
<p>Change: A mine (coal, uranium, diamond, etc.) is dug. Impact: Uses ___ x 10 miles of a water source. Type of Impact: Human-caused</p>	<p>Change: Earthquake occurs. Impact: Destroyed ___ x 10 miles of homes and. Type of Impact: Natural</p>
<p>Change: A mine (coal, uranium, diamond, etc.) is dug. Impact: Pollutes ___ x 20 miles of a water source. Type of Impact: Human-caused</p>	<p>Change: A mine (coal, uranium, diamond, etc.) is dug. Impact: Uses ___ x 50 miles of a water source. Type of Impact: Human-caused</p>



<p>Change: Wind Farm is built. Impact: Uses ___ x 10 miles of mountains. Type of Impact: Human-caused</p>	<p>Change: Farmland is being created. Impact: Destroyed ___ x 10 miles of wetlands. Type of Impact: Human-caused</p>
<p>Change: Solar Farm is built. Impact: Uses ___ x 10 miles of mountains. Type of Impact: Human-caused</p>	<p>Change: Farmland is being created. Impact: Destroyed ___ x 10 miles of forest. Type of Impact: Human-caused</p>
<p>Change: Solar Farm is built. Impact: Uses ___ x 25 miles of desert or water source. Type of Impact: Human-caused</p>	<p>Change: Farmland is being created. Impact: Destroyed ___ x 20 miles of desert or forest. Type of Impact: Human-caused</p>
<p>Change: A dam is built. Impact: Destroyed ___ x 25 miles of mountains and vegetation. Type of Impact: Human-caused</p>	<p>Change: Oil/Fossil fuels are taken from the ground. Impact: Uses ___ x 20 miles of land, lakes and rivers. Type of Impact: Human-caused</p>
<p>Change: A dam is built. Impact: Destroyed ___ x 20 miles of vegetation and water source. Type of Impact: Human-caused</p>	<p>Change: Oil/Fossil fuels are taken from the ground. Impact: Uses ___ x 50 miles of land, lakes, and rivers. Type of Impact: Human-caused</p>
<p>Change: A business is built. Impact: Uses ___ x 250 miles of water source or river. Type of Impact: Human-caused</p>	<p>Change: Roads/Highways are built. Impact: Destroyed ___ x 10 miles of mountains. Type of Impact: Human-caused</p>
<p>Change: A mine (coal, uranium, diamond, etc.) is dug. Impact: Destroyed ___ x 10 miles of a mountains and vegetation. Type of Impact: Human-caused</p>	<p>Change: Earthquake occurs. Impact: Destroyed ___ x 10 miles of homes and. Type of Impact: Natural</p>
<p>Change: A mine (coal, uranium, diamond, etc.) is dug. Impact: Uses ___ x 20 miles of a mountains and vegetation. Type of Impact: Human-caused</p>	<p>Change: A mine (coal, uranium, diamond, etc.) is dug. Impact: Uses ___ x 50 miles of mountains and vegetation. Type of Impact: Human-caused</p>

## Recording Sheet

Name(s) \_\_\_\_\_

Change: _____ _____ Impact: _____ _____ Type of Impact: _____	Change: _____ _____ Impact: _____ _____ Type of Impact: _____
Change: _____ _____ Impact: _____ _____ Type of Impact: _____	Change: _____ _____ Impact: _____ _____ Type of Impact: _____
Change: _____ _____ Impact: _____ _____ Type of Impact: _____	Change: _____ _____ Impact: _____ _____ Type of Impact: _____
Change: _____ _____ Impact: _____ _____ Type of Impact: _____	Change: _____ _____ Impact: _____ _____ Type of Impact: _____
Change: _____ _____ Impact: _____ _____ Type of Impact: _____	Change: _____ _____ Impact: _____ _____ Type of Impact: _____

Name \_\_\_\_\_ **Option One Rubric**

<b>Rubric Score for Identifying Human and Natural Impacts</b>	<b>Rubric for Explaining the Impacts</b>
1. Students are able to identify one natural/human-caused impact.	1. Students can explain one change on their maps.
2. Students are able to identify two natural/human-caused impacts.	2. Students can explain two changes on their maps.
3. Students are able to identify three natural/human-caused impacts.	3. Students can explain three changes on their maps.
4. Students are able to identify four natural/human-caused impacts.	4. Students can explain four changes on their maps.
Score	Score

Comments:

Name \_\_\_\_\_ **Option Two Scoring Guide**

<b>Requirements</b>	<b>Points Possible</b>	<b>Points Earned</b>
Real-world location identified.	5	
2-4 changes have been identified.	10	
The changes are correctly identified as human or natural.	10	
The impact on people, animals, plants, and the natural environment are identified.	25	
Total Points Possible	50	

Comments: