

# Using Google Earth to Become Aware of Environmental Change

*A Classroom Activity Based on Dr. Seuss' The Lorax*

## Instructions

1. Open Google Earth
2. To experiment with the fly feature, type your home address in the **fly to** box. Zoom in and look around. Locate the yellow peg person (located above the zoom slider on the right side of screen). When you click on the icon and hold it over the satellite image, all roads with street view turn blue. Place the peg person on the satellite image to examine the area at street level. It will seem as if you are walking down the street. Click the **exit photo** in the upper right hand corner of the screen to exit the street view mode.
3. **Zoom out** until you can see your city. Can you find any familiar landmarks? Zoom out again until you can see the whole Earth on your screen.
4. Under the layers section on the left hand side of the screen, **click** on the  in front of **Global Awareness**. Click to select the Earthwatch Expeditions layer as well as the UNEP: Atlas of our Changing Environment layer.
5. **Minimize** the Google Earth Screen and open your internet browser. Visit [www.earthwatch.org](http://www.earthwatch.org). What do you discover about this organization? What is the main focus of this group?

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Now visit [www.unep.org](http://www.unep.org). (United Nations Environment Programme) What do you discover about this organization? What is the main focus of this group?

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Return to Google Earth and choose one additional environmental organization layer to add to the map. Use Google to research this organization. Describe what you discover about this organization. What is the main focus of this group?

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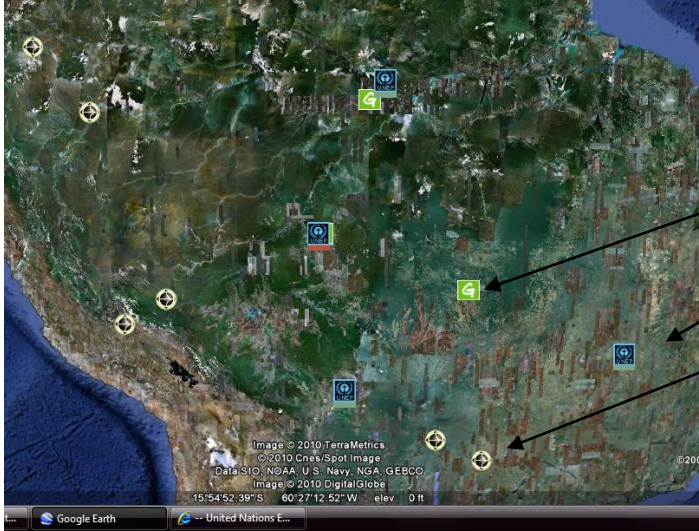
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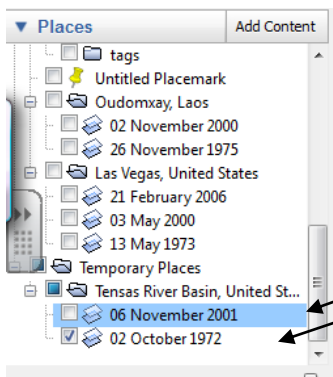
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6. With these three layers turned on, **zoom** into a continent of your choice. What do you notice as you zoom closer? You should see icons indicating specific locations where these organizations are working to improve the environment.



These are examples of icons that will show up on your screen. Each icon indicates a location where work is in progress.

7. **Turn off all layers except for the Atlas of the Changing Environment layer. Click** on one of their icons on the map. A window should pop up explaining an environmental issue in that specific location.
8. Read the description below the pictures and click on the link that reads “Overlay images in Google Earth.” Once the image appears on the screen, look at the left hand side of the screen to find the **Places** tab. Under the temporary places tab, you can click to see a photograph of the area from different years. This allows you to see the change that has taken place over the years.



Use your mouse to choose the year of the photograph you want to display. What changes do you observe?

9. Select three different icons from the Atlas of Our Changing Environment layer. In the chart below, record your observations based on the before and after photos of each of the three locations.

| Location (city, country, & continent) | Description of the Environmental Problem | Years the images were taken | Changes observed in the images | Predictions for this place in the future. |
|---------------------------------------|--|-----------------------------|--------------------------------|---|
|                                       |  |                             |                                |   |
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10. Go to the **Global Awareness** layer in the side panel. Turn on the three layers you had on in Step 5 (Earthwatch Expeditions, UNEP: Atlas of our Changing Environment, and a layer of your choice). Click on **one icon** on every continent to learn more about environment issues facing people in different parts of the world. Record information about each issue in the table below.

| Continent  | Environmental Issue(s) | Countries Impacted | Environmental Organization | Organizational Strategies | Ways People can Help |
|------------|------------------------|--------------------|----------------------------|---------------------------|----------------------|
| Africa     |                        |                    |                            |                           |                      |
| Antarctica |                        |                    |                            |                           |                      |
| Asia       |                        |                    |                            |                           |                      |
| Australia  |                        |                    |                            |                           |                      |

| Continent     | Environmental Issue(s) | Countries Impacted | Environmental Organization | Organizational Strategies | Ways People can Help |
|---------------|------------------------|--------------------|----------------------------|---------------------------|----------------------|
| Europe        |                        |                    |                            |                           |                      |
| North America |                        |                    |                            |                           |                      |
| South America |                        |                    |                            |                           |                      |

11. Once you have explored an issue on every continent, pick the issue you think is the most important. Be prepared to share the environmental issue, the organization working for change, strategies the organization is using to improve the environment, and ideas about things we could do to help.