

# Should Batterson Park be Reopened?

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## INTRODUCTION

In the recent years, Batterson Park has been getting fewer visitors. Currently, a lack of funding for the maintenance of Batterson, and a low number of park visitors, has led to the closing of the park to the general public. The boat house has undergone structural damage, and garbage litters the shore of the Batterson Park Pond (Fig 1A).

In this project, we seek to show why Batterson park should be restored back to its original state as a state park. Our main goals include to:

1. Understand the water quality of Batterson Pond; and
2. Show that despite Batterson's closing, the park provides an invaluable resource for the community.



Figure 1. A: Garbage along Batterson Park Pond's shoreline; B: Collecting water quality measurements with an Ubante TDS meter; C: Map of Batterson Park Pond sampling sites.

## MATERIALS AND METHODS

### Water Quality Measurements

- Location: Batterson Park, New Britain, CT
- Between October 2018 and January 2019, water quality was sampled at 3 sites in Batterson Park Pond.
- Sites included the Avon Crew boat launch (Area 1), the state public boat launch (Area 2), and the pond's northern corner (Area 3) (Fig 1C).
- Water was collected in jars (Fig 2B), and pH test strips and an Ubante TDS meter (Fig 2A) were used to test total dissolved solids (TDS; ppm), conductivity ( $\mu\text{S}/\text{cm}$ ), and temperature ( $^{\circ}\text{C}$ ).
- Due to inaccessibility of other sites because of ice, only Area 1 was sampled in January.



Figure 2. A: Ubante TDS Meter for water quality testing; B: pH strips and jar used to collect water samples

Testing water quality parameters can show how polluted a water source is. We're testing the quality of Batterson Park Pond to see if it can be used for recreational purposes.

### Water Quality Parameters of Drinking Water (1)

pH	6.0-8.5
Conductivity	50-1,500 $\mu\text{S}/\text{cm}$
Total Dissolved Solids	0-1000 ppm

## RESULTS

- The average water temperature was  $19.2^{\circ}\text{C}$  ( $\text{SD} = 1.5$ )
- The mean conductivity was  $432.1 \mu\text{S}/\text{cm}$  ( $\text{SD} = 28.5$ ) at area 1;  $442.3 \mu\text{S}/\text{cm}$  ( $\text{SD} = 33.4$ ) at area 2; and  $439.2 \mu\text{S}/\text{cm}$  ( $\text{SD} = 23.7$ ) at area 3 (Fig 3).
- The mean TDS was 203.3 ppm ( $\text{SD} = 13.6$ ) at area 1; 207.4 ppm ( $\text{SD} = 15.9$ ) at area 2; and 207.8 ppm ( $\text{SD} = 12$ ) at area 3 (Fig. 3)
- pH was 7 at all areas.
- All measures of water quality at area 1 had lower values when tested during January.

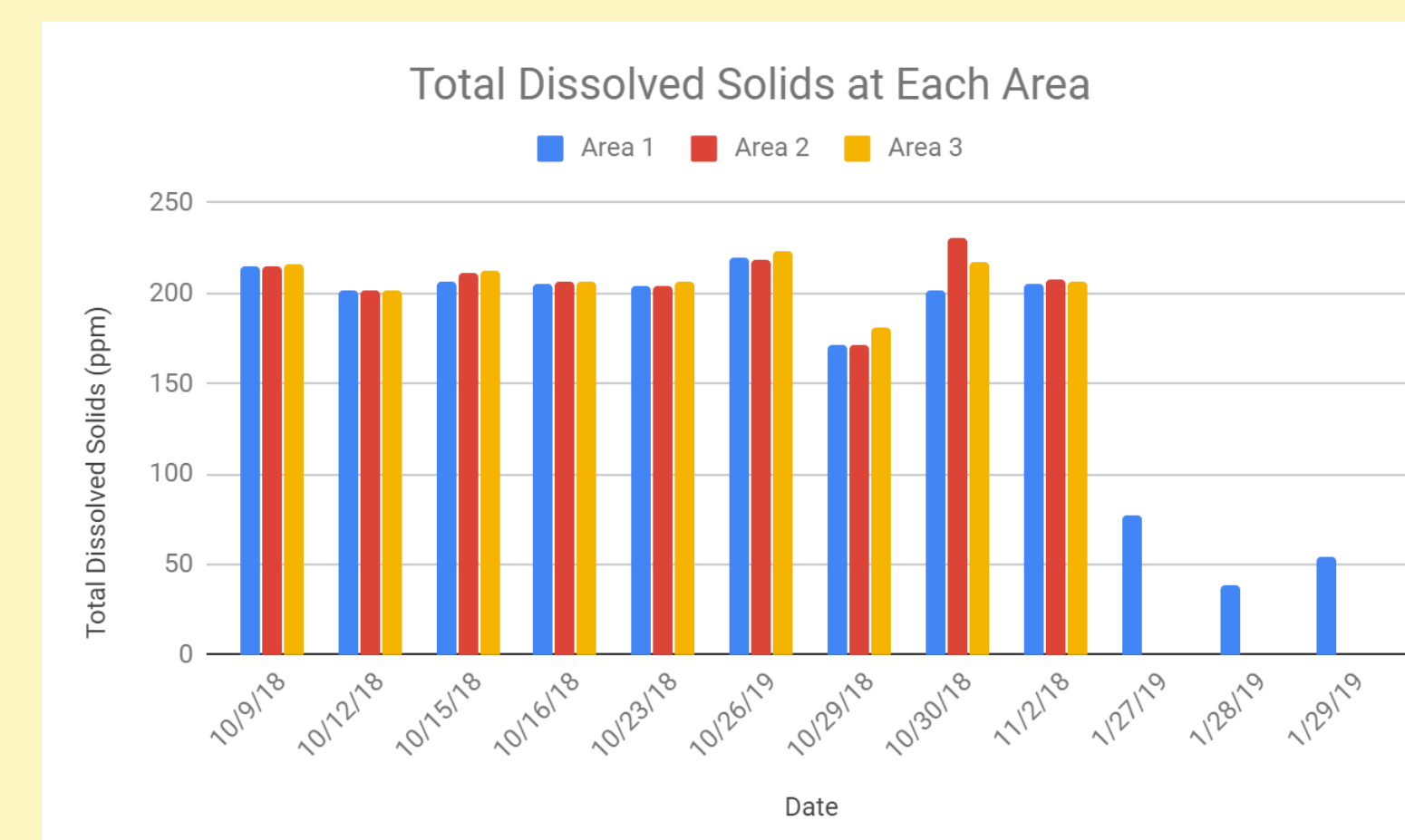
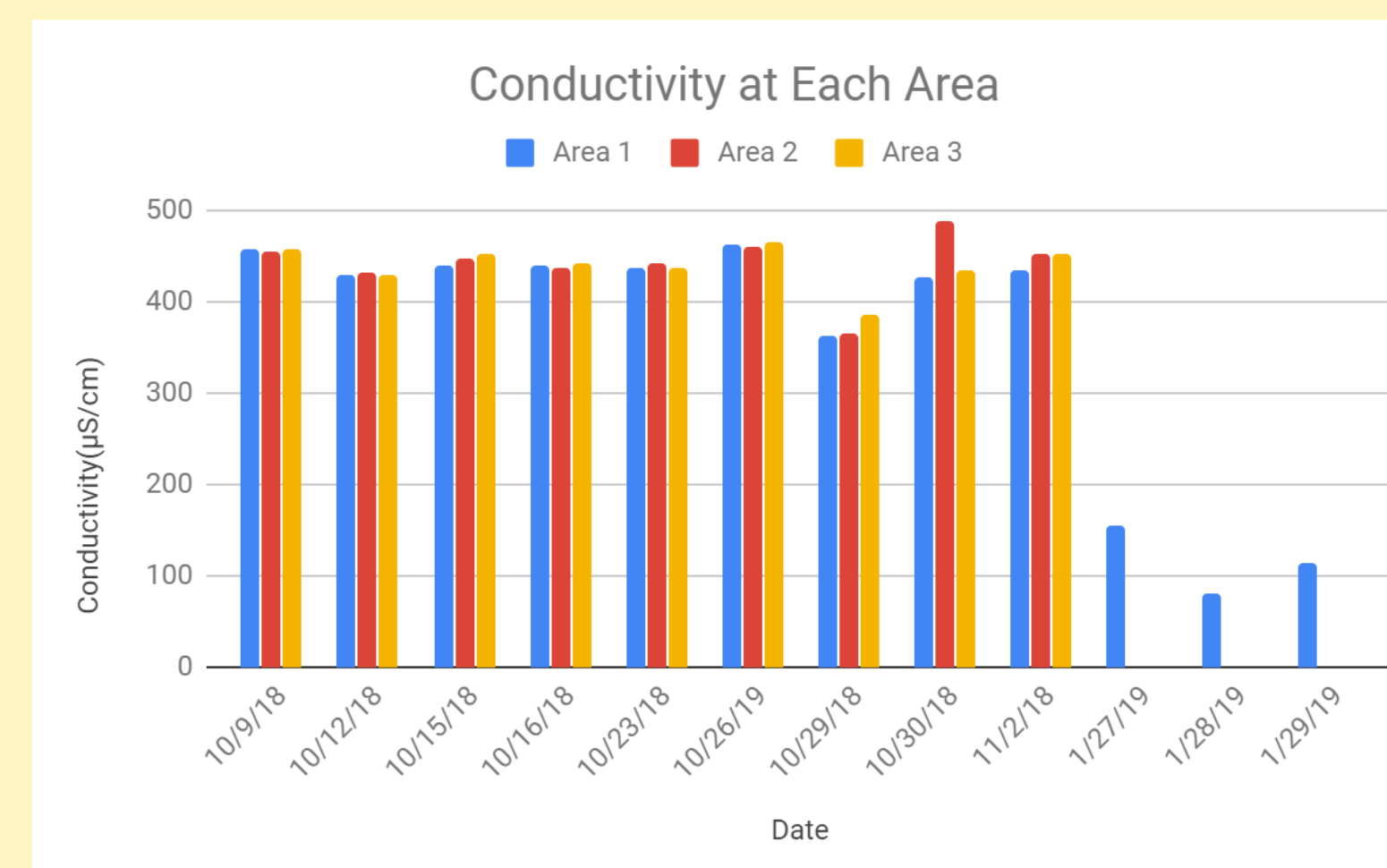


Figure 3. Conductivity at Batterson Park Pond by area and sample date (top left) and average by area (top right); Total Dissolved Solids by area and sample date (bottom left) and average by area (bottom right).

## POTENTIAL FOR COMMUNITY RESOURCE

The concentration of TDS and conductivity in the water at Batterson Park Pond is acceptable, when compared to the EPA's drinking water standards (1). Batterson Park Pond's water quality is conducive for a healthy ecosystem.

As such, we recommend that Batterson Park and the Pond be developed to facilitate more recreation. The pond is already used the Avon High School crew team, and could be further utilized by the community if its facilities were improved. Batterson Park holds the record for highest carp population, which makes it a great spot for fishing.

Batterson's beauty is going to waste. If the park were to be cleaned up and re-opened to the public, it could become a popular spot once again. There is clearly demand for Batterson to be improved and the findings shown in this study provide evidence for why Batterson Park should not be neglected.

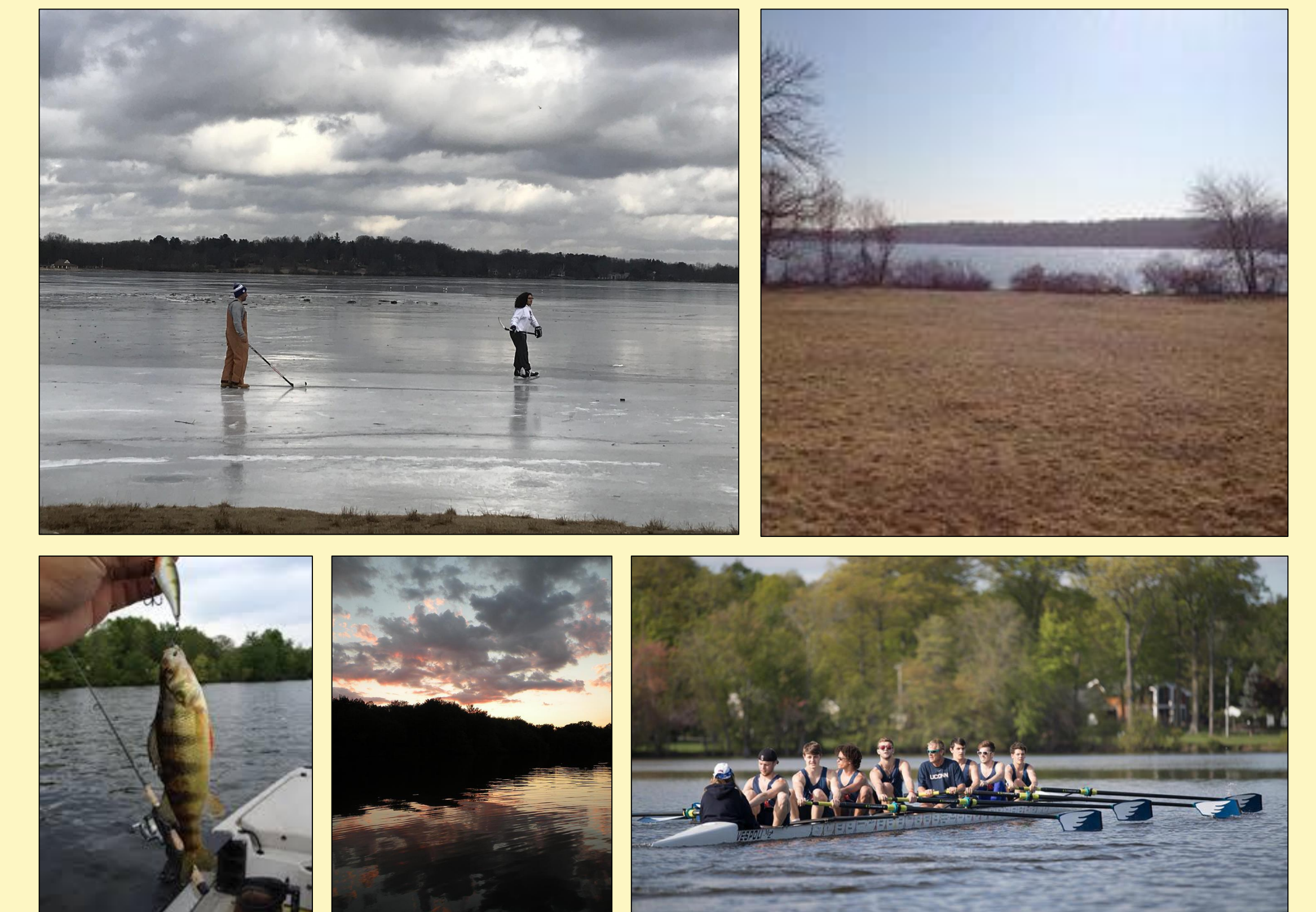


Figure 4. The many recreational opportunities that Batterson Park can offer to the community.

## ACKNOWLEDGEMENTS

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## REFERENCES

1. U.S. Environmental Protection Agency." EPA, Environmental Protection Agency, [www.epa.gov/](http://www.epa.gov/)