

## CE 37200: Environmental Impact Assessment

Homework 1  
Chapters 1-3  
Due: Feb. 11

1) Choose a book related to the topics of this course. Write a sentence showing an in-text citation to the book. Write a bibliography entry, in ASCE format, for the book.

2) A project involves the replacement of an old water treatment plant. Alternatives explored, in addition to the original proposal P, include A1: No build, A2: new plant with constructed wetland, and A3: new plant with fuel cells for waste-to-energy conversion. The impact categories and outcomes for each alternative are:

Water quality (nutrients discharged):

P: 1500

A1: 2000

A2: 1200

A3: 1500

Odor (European Odor Units):

P: 8

A1: 7

A2: 8

A3: 6

Energy (demand from utility):

P: 1000

A1: 500

A2: 700

A3: 400

Neighborhood property values:

P: 110

A1: 100

A2: 105

A3: 110

Use the scaling increments C

Water quality: 200 (more is negative)

Odor: 1 (negative)

Energy: 100 (negative)

Property values: 10 (positive)

Suppose that an incremental worsening in odor is twice as important as any of the other factors. Which alternative would have the best overall performance? Show your work.

3) Find the final EIS for the Second Avenue Subway. What was the lead agency, and what other agencies were involved? What alternatives were considered? List five significant impacts that were considered and briefly explain each.

4) Read the article at

<http://www.niagarafallsreporter.com/Stories/2013/Jan22/StateParksNotComplying.html>

(a) What is the State Parks Office position on whether environmental quality review is required for the work it's doing?

(b) What is the *Niagara Falls Reporter's* position?

(c) How does this case show a weakness in the way that the state EQR requirements are phrased?