

## ADDITIONAL SUGGESTED ACTIVITIES

*These materials are part of EPA Report #EPA/600/R-16/006.*

These are potential activities that could be completed once students have completed the general case study assignment and are familiar with the case study concepts.

Additional Suggested Activities (detailed in pages below)		Estimated Time Required
1.	Advanced Topics for Class Discussion	45 minutes
2.	Opinion Piece	Homework
3.	Policy Brief/Memo	Homework
4.	Role Play or Debate	45 minutes
5.	Make a Map, Tell a Story	90 minutes+
6.	Use EnviroAtlas to inform a local decision	90 minutes+

### 1. Advanced Topics for Class Discussion

These questions (and potential responses for instructors) were developed to help guide in-class discussion about this case study. Other options include modifying or adding questions that address topics covered in class or asking students to submit possible discussion questions after reading. *This discussion would likely require one 45-minute class session.*

- **What does Canton’s City Council need to consider when deciding where to invest in a greenway pilot section?**

*As with many long term decisions and investments, competing interests may play a role. These can include financial considerations, such as sources of funding and the projected lifetime benefits of the project; time and resources invested, predicted benefits of the choice made, and any requirements (i.e. laws/regulation, or funding requirements) that need to be met. Additional issues may also include public support, precedent set by other communities or projects, and overarching city goals. These factors may impact the council’s ability to garner support and aid in identifying possible tradeoffs or alternatives.*

- **Should the location of the pilot section be determined by scientific data or public opinion?**

*Both need to be a consideration. Utilizing data in the decision-making process helps to ensure that public opinion is not simply a reflection of who is speaking loudest or most adamantly. How ensure equal representation of all stakeholders, including those who may benefit from the proposal but might be unaware of its existence, may be achieved is a primary consideration.*

- **How does the city's financial situation affect its ability to successfully implement its plans?**

*The city currently only has enough funding for a pilot section even though a complete greenway network has been proposed and identified in the city planning process. This means that it could be a while before other sections are completed and linked together. Completing a cost/benefit analysis of the proposed section along with alternatives may be a method used to support an opinion. In addition to funding, considerations of current infrastructure (highways, etc.) that may increase costs associated with construction may impede plans for the “best” pilot route.*

- **What role does current public opinion on sustainability play in determining the results of the proposal?**

*Sustainability is currently a “hot” topic across the country and around the world. Ideas of sustainability are the foundation of Canton’s greenway plan. What might happen if public opinion regarding sustainability sways? Consider financing, political support, etc. Are there*

other frames of thought that could support greenway development (i.e. public health, community engagement, climate adaptation, etc.)

- **What role would collaboration play in this development?**

*The greenway plan calls for a long term investment of both time, money, and human resources. Collaboration may serve as a mechanism to reach stakeholders and secure support and buy-in that will endure. How could this collaboration be facilitated?*

- **(If students were not assigned an alternative role) Do you think the proposed section would change had a different department or office received the grant? How and/or why?**

*The proposed pilot section was determined based on the goals of the Parks and Recreation Department. Priorities are likely to be different based on interests (i.e. environmental, social, and economic) and scale (i.e. department, city, region).*

- **What other information/data would be useful?**

*As the case is discussed or students tackle a project on their own, additional data sets or information may be helpful. Additional data on budget and finances, information on any existing trails, data on greenway/trail usership (i.e. demographics, preferred design features, barriers to use), and information on other planning projects or developments that could affect greenway access may aid in final selection of a pilot section. While an opinion can be formed from the data provided, asking students to recognize the limitations of available information and solutions to address these limitations can aid in developing critical thinking skills essential for solving complex problems.*

- **Why might you want to avoid constructing a greenway in an area where habitat is well-connected?**

*Connectivity is an essential component of ecological integrity. If an area of core habitat is intersected or interrupted by the placement of a trail there could be negative consequences for the biota in that area.*

- **The benefits of greenways are explicit in the case. What might be some arguments against creating one?**

*Identifying counterarguments and determining how they may be addressed is an important component to pushing an agenda forward. Some disbenefits of a greenway could include: safety (i.e. injury, crime), spread of invasive species, disease transmission (i.e. lyme disease), and edge effect (presence of more common species and not more uncommon species).*

## 2. Opinion Piece

An opinion piece could be written as a submission to a newspaper or as a blog post. This task would require participants to take a stance in support of or against the proposal and

justify their arguments. Also, due to limitations in word count, concise writing techniques must be utilized. *This would be an individual task to be completed as a homework assignment before or after discussing the case in class.*

- EXAMPLE: Writing a letter to the editor/opinion piece <http://ctb.ku.edu/en/table-of-contents/advocacy/direct-action/letters-to-editor/main>
- EXAMPLE: Writing Lesson - Better Blogs [http://www.educationworld.com/a\\_lesson/better-blog-writing.shtml](http://www.educationworld.com/a_lesson/better-blog-writing.shtml)

### 3. Policy Brief/Memo

Utilizing a Brief or Memo writing assignment enables a direct tie in to a policy based discussion. Students need to write formally and concisely, supporting their stance by citing theory and additional resources. *This would be an individual task to be completed as a homework assignment after discussing the case in class.*

- EXAMPLE: The Policy Brief- Instructions <http://policyinstitute.ucdavis.edu/files/Policy-Institute-Policy-Brief-Instructions.pdf>

### 4. Role Play or Debate

Assign participants roles that are represented in the narrative. Examples of possible roles include: city council members, representatives from various city departments and offices, citizen groups (i.e. neighborhood associations), scientists, special interest groups (i.e. conservation, recreation, business, etc.). The activity demonstrates the multifaceted nature of decision-making requiring the identification of trade-offs and negotiating solutions. *This would primarily be an in-class activity that fosters interaction and teamwork and would likely require two or more 45 minute class sessions.*

EXAMPLE: What is a public hearing? How do you conduct one? <http://ctb.ku.edu/en/table-of-contents/advocacy/direct-action/public-hearing/main>

### 5. Make a Map, Tell a Story

Have the students use the EnviroAtlas Interactive Map or other software to create a map that substantiates their opinion. *[The students should use the Tampa, Florida community, as all maps in this case study are from the Tampa area.]* The map could be: the data layer they feel is most important, an overlay of the data layers they feel best inform their choice, or a data layer that ties into other course curricula in some way. Encourage the use of cartographic principles in this assignment (i.e. directional arrow, labels and headings,

symbology and legend, source information, etc.). This assignment brings technology and a spatial component into the decision-making process. This can be done as a team or individual assignment in class or as homework. *This activity would likely require two or more 45 minute class sessions.*

EXAMPLE: National Education Association - Teaching with Maps

<http://www.nea.org/tools/lessons/teaching-with-maps.html>

## 6. Use EnviroAtlas to inform a local decision

After discussing the case study in class, particularly how the information presented can be used and what additional data might be beneficial, pose a local or regional situation or issue for them to explore. Task the students with developing materials to inform stakeholders or draft position papers on the topic. This could be done in teams or as individuals. *This activity would likely require two 45 minute class sessions and additional time outside of class. The Map Guidance document could be useful in getting students started with the Interactive Map to explore other maps for their decision context.*

EXAMPLE: Resources on how to use EnviroAtlas including a demonstration video and use cases <http://www.epa.gov/enviroatlas/how-use-enviroatlas>

## Additional Readings and Resources

- Eco-Health Relationship Browser: The Browser is a tool that visually illustrates linkages between ecosystems, ecosystem services, and human health. A growing body of evidence demonstrates that ecosystems can provide protection from natural and man-made hazards, and promote healthful behaviors.  
<http://www.epa.gov/enviroatlas/enviroatlas-eco-health-relationship-browser>
- Great summary website on the benefits of greenways:  
<http://www.americantrails.org/resources/benefits/>
- Jennifer R. Wolch, Jason Byrne, Joshua P. Newell, Urban green space, public health, and environmental justice: The challenge of making cities ‘just green enough’, *Landscape and Urban Planning*, Volume 125, May 2014, Pages 234-244, ISSN 0169-2046, <http://dx.doi.org/10.1016/j.landurbplan.2014.01.017>  
<http://www.sciencedirect.com/science/article/pii/S0169204614000310>
- Sustainability Planning Toolkit: A guide written by ICLEI: Local Governments for Sustainability to aid cities and counties in developing sustainability plans.  
[http://portal.hud.gov/hudportal/documents/huddoc?id=20399\\_iclei\\_sustainabil.pdf](http://portal.hud.gov/hudportal/documents/huddoc?id=20399_iclei_sustainabil.pdf)

- Greenways have been completed in many cities and counties. Two examples with resources such as trail maps, a description of the greenway development process and historical context are:
  - Capital Area Greenway Trail Systems - Raleigh, NC:  
<http://www.raleighnc.gov/parks/content/PRecDesignDevelop/Articles/CapitalAreaGreenwayTrailSystem.html>
  - Greenways for Nashville - Nashville, TN:  
<http://www.greenwaysfornashville.org/greenways/>