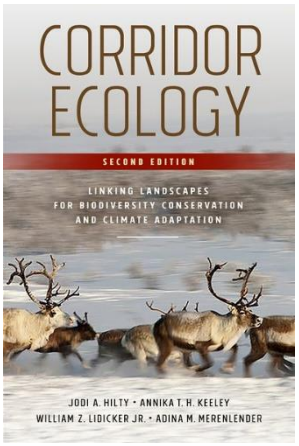
Stakeholder Engagement Meeting

Role Playing Activity



Lessons Created by Loni Cantú with the support of the Yellowstone to Yukon Conservation Initiative

Based on ideas from Hilty et al. 2019. Corridor Ecology: Linking Landscapes for Biodiversity Conservation and Climate Adaptation. Island Press.

Overview

In this activity, students will investigate a scenario where high rates of wildlife-vehicle collisions are afflicting the local community. Students will role play different community interest groups in a mock stakeholder engagement meeting to evaluate a proposed wildlife crossing structure as a solution to the high rates of wildlife-vehicle collisions on the highway each year. Students will discuss the costs and benefits of wildlife crossing structures and analyze the various perspectives of this “real life” issue.

Student Learning Targets

Students will be able to communicate, inquire, and listen to diverse perspectives and identify opposing and similar perspectives from various stakeholder/interest groups.

(See appendix for curriculum alignment)

Time Requirements

1-2 hours

Suggested Audience

Middle or High School

The Situation

Read with Students

The local region experiences over 300 wildlife vehicle collisions every year. Experts have proposed a wildlife crossing structure to be built over the highway (name local highway) where wildlife collisions are the highest. Wildlife crossing structures are overpasses or underpasses combined with fencing to guide animals. They provide safe passage for large animals that cross roads in order to access food, mates, and vital habitat resources. The nature of the vehicle-wildlife incidents in our local community leads experts to believe that a wildlife overpass and fencing are necessary to guide animals safely across the highway and save both human and animal lives. The project would have a price tag of about 5 million dollars.

According to Parks Canada, highway fencing in Banff National Park, Alberta, Canada has reduced wildlife-vehicle collisions by more than 80 percent. Collisions with elk and deer have decreased by more than 96 percent. A 17-year study of the effectiveness of wildlife-crossing structures has confirmed crossings by 11 different species including grizzly and black bears, wolves, coyotes, cougars, moose, elk, deer, bighorn sheep, and even wolverines, which are elusive creatures, sensitive to habitat changes.

Wildlife crossing structures make it easier and safer for wildlife to move between otherwise fragmented habitat patches. They give species the ability to disperse across the landscape, and thus increase gene flow. This results in a higher genetic diversity within wildlife populations. Conversely, isolated and small habitat patches limit animals’ ability to move or disperse across

their normal ranges, which creates genetic inbreeding and decreases the numbers of breeding individuals, leading to species extinction and biodiversity loss.

Locally, the overpass is being proposed to facilitate movement across a highway located between two protected areas (accessible to the public), and near to a large conserved private property. The area is a seasonal migratory pathway for elk (can substitute for local animal of interest/endangered species). Every year hundreds of elk travel across the roads to access their calving and summer feeding grounds. The proposed overpass will allow elk safe passage to their seasonal sites, and will benefit a diversity of other animals as well.

The town has now announced a public comment process to hear the perspectives of local community members, interest groups, and stakeholders. At the end of the comment process, a vote will be made to see if the wildlife crossing structure will move forward to the development and implementation phases.

Note: This mock stakeholder engagement meeting is framed as an ideal situation, and in real life all perspectives may not be heard. Also, a single stakeholder group may express various perspectives, interests and values, so the positions expressed in the role-playing cards are hypothetical and don't represent one stakeholder/interest group exactly.

Instructions for Teacher

Mock Stakeholder Engagement Meeting Activity

1. Read the situation to the entire class

2. Group students in teams of 2-4 and assign their stakeholder roles using the role-playing description cards. Note: Allow students to choose their role if you believe it will lead to greater engagement but ensure you have at least one group of every role. See **Role Description Cards** for all the Roles) Say:

"During this role-playing activity I will represent the mediator of the meeting, which means I will be the unbiased go-between of the groups. I will take notes, summarize the discussion, and announce the voting decision made at the end of the meeting."

"Each team will represent a different stakeholder/interest group and present their position on wildlife crossing structures at our local public comment process. You will need to research more information about your stakeholder position to back up the information you present to the class. You will have 2-5 minutes to present your group position which should clearly reflect whether or not you would like to have a wildlife crossing structure in your town. Your team should use persuasive techniques. Then I will allow 2-5 minutes for each group to respond to another group position, or message, if they so choose. This means that during each group presentation you need to focus and listen to their message so you can make a counter argument. At the end of the meeting, we will anonymously vote on whether we would like to adopt an overpass and wildlife fencing for the town. Remember you should present your position and vote based on your stakeholder's perspective not your own personal values and views. Any questions?"

Note: You can display or give a copy of the steps of this stakeholder engagement meeting for the class to remember. Say:

"You will now have 1 hour (or assign this part as homework) to research with your team more information about your stakeholder's position."

Note: Remind students that everyone should be equally responsible for researching information and speaking during the meeting. If one team member researches and speaks on behalf of the entire group, a clear reason needs to be given to the mediator during research and presentation. You will evaluate your fellow team mates on how well they contributed to the team at the end (see appendix for team evaluations). Say:

"You can choose to use props or other resources, if they will strengthen your argument while presenting your position during the public comment period."

3. After students have practiced and prepared their statements, start the mock meeting. Say:

"I, the town mediator, am hosting this meeting to gather local perspectives, interests, and concerns about the proposed wildlife crossing structure. We want to ensure the best possible solution and response is made to address the high rates of wildlife vehicle collisions on the highway. This is an issue that impacts our entire community, so the town has requested this meeting of interest groups and stakeholders to come to the best solution to this issue."

"The stakeholders present are as follows:"

4. Introduce the stakeholder groups you have assigned

"You will now have 2-5 minutes to present your position, we will start with_____(choose a group you would like to go first, the order of perspectives shouldn't matter. Ask each group to present their position.)

5. Once every group has presented their position, ask each group to make either a counter-position, or ask for further clarification. **Note**: this part may get heated so ensure that students are being respectful, aren't attacking students with their retorts, and use appropriate language.

6. Try to ensure each student is taking turns talking. Students can write a brief reflection on their respective team member participation, in the research and presentation, at the end of the activity.

7. Encourage students to keep notes so they don't interrupt groups that have the floor, and they can keep track of their rebuttals.

8. After students have presented their positions and heard all perspectives (this should not last longer than 20-30 minutes) the stakeholders will make an anonymous vote about the wildlife crossing structure. You can ask students to raise their hands with their eyes closed, or fill out voting ballets (example in the appendix).

Role Description Cards

Distribute cards to students. Students may refer to card during role playing activity but should research their roles beyond the depth of the description. Students can choose to represent a specific organization based on these general groups.

Environmental/Conservation Group

- Supports wildlife crossing structure
- Willing to support a fundraising campaign to access more funds for the conservation project
- Animals need to move and/or disperse freely through the landscape and recolonize areas to be part of viable populations.
- Already worked with private land holder to create a conservation easement, to protect the wildlife corridor and restrict development on the private land adjacent to the highway, where the crossing structure is proposed to be built

For more information:
https://www.pc.gc.ca/en/pn-np/ab/banff/info/gestion-management/enviro/transport/tch-rtc/passages-crossings

https://y2y.net/work/how-protect-connect-inspire/transportation-folder/wildlife-crossing-structures-and-fencing

Development Group

One option is to be a real estate development group that wants to build more housing on the private lands adjacent to the corridor and does not want the new wildlife fencing and crossing structure in front of their property. (could change this to other types of private landowners)

- Does not support wildlife crossing structure, but instead agrees with transportation group's proposed instillation of wildlife crossing signage
- Owns the private land near to the proposed overpass
- Does not want crossing structure for fear it will limit their development opportunities
- Business and economic interests are the top priority
- Large employer and provider of jobs in the community – large community support
- Claim they will build affordable housing (social benefit)
- Argue that roads are not harming the wildlife or ecosystem, and are necessary for humans

For more information:
https://www.reca.ca/about-reca/

https://www.naiop.org/en/Connect/National-Forums/About-and-Apply/Forums-Groups

Animal Road Crossing Designers

Team of engineers, ecologist, and architects

- Strong supporter of wildlife crossing structures
- Interested in developing the crossing structure and can do it at much cheaper rates
- Believes we can come to a solution and reduce human-wildlife conflict
- Cost benefit analysis in support of wildlife crossing structure (http://www.highwaywilding.org/d_costs.php)
- Wildlife crossing structures improve safety, reconnect habitats, restore wildlife movement, and have demonstrated success globally

For more information:
https://arc-solutions.org/who-is-arc/

https://www.ail.ca/wildlife-crossings-and-fish-passages/

Hunting Group

- This group keenly wants to have safe passage for wildlife, as they don't want to see their potential trophy or game meat laying in waste on the roadside

Fore more Information:
https://www.nwf.org/Magazines/National-Wildlife/2019/June-July/Conservation/Habitat-Corridors

https://www.citylab.com/life/2018/07/wildlife-crossings-bridges-tunnels-animals-roads-highways-roadkill/566210/

Indigenous Perspective

- Connection and value in the sacred rights of wildlife
- Believes in our responsibility to care for, live in harmony with, and respect the natural world.
- Supports wildlife crossing structures as part of maintaining cultural heritage
- Strong connection to traditional land and water use practices and wants to ensure the protection of traditional values and indigenous histories
- Traditional Ecological Knowledge
- Indigenous rights

For more information:
http://www.learnalberta.ca/content/aswt/

http://csktnrd.org/wildlife/projects/wildlife-crossing

Recreational Group

Types of recreationalists in this group include: snowmobilers, mountain bikers, and hikers

- Recreational users do not want the overpass because of fear public access will be restricted to protect wildlife
- The fencing extending along the highway could impair access to favorite trails
- Main interest is for more mountain biking and hiking trails in the proposed wildlife crossing area

For more information:
http://bowvalleysport.ca/about-bow-valley-true-sport-recreation-council/

https://www.adirondackalmanack.com/2015/09/how-the-adirondack-forest-preserve-was-motorizeds.html

Local Community Members

Could split up these perspectives into multiple teams

- Has a friend who was severely injured in a wildlife collision and doesn't want to see more people getting injured in the community
- Wants a solution, but doesn't want to increase tax dollars to build crossing structure
- Believe the tax dollars could be better spent in revitalizing the downtown area to bring more economic interests to the town
- Some local community members want the affordable housing promised by the real estate development group
- Some local community members are strong supporters of the wildlife crossing structure, some are strong opponents

For more information:
https://www.rmotoday.com/local-news/wildlife-overpass-design-to-go-ahead-1572244

https://www.postregister.com/news/local/fremont-voters-to-advise-on-overpasses/article_4d333c33-96c8-51bc-8384-4f12c74dd673.html

Transportation

- Transportation strategy is to support long-term social, economic, and environmental sustainability
- Unsure if the transportation budget can cover the expense of a wildlife crossing structure, and may need investment or funding at the federal level or private dollars
- Proposes the solution of installing wildlife crossing signs instead of structure to save money in the transportation budget for new highways and maintenance projects
- Uncertain about supporting wildlife crossing structures, but could be convinced

For more information:
https://www.transportation.alberta.ca/ABTransStrategyFAQ.htm

http://roadsandwildlife.org/

Other stakeholder or interest group in the area? (encourage students to think of local stakeholders that might impact wildlife corridors in your area)

Conclusion

After students have voted, present the outcome to the class. Then ask students to step out of your stakeholder roles and take a few minutes to reflect and write down their thoughts about the stakeholder engagement meeting. Ask them to write their concerns, but also explain what worked well. Consider the following questions (**Note**: Display questions for class to see):

1. Did some teams have a difficult time gathering research or information?
2. What could have made the meeting flow better?
3. Who had the most difficult role?
4. Which stakeholder group had the least just or fair outcome based on their role playing values/perspective?
5. Could a more just or fair outcome have been achieved or a better process been followed?

The teacher should go through the reflection process with the class and provide a summary of the meeting to the students.

At this time positive reinforcements could be made with “shout-outs” or acknowledging students who gave good arguments and defenses.

Appendix

Team Evaluations

Rank your team members and yourself on a scale of 1-5.
1 = Did not contribute
2 = Contributed very little
3 = Contributed a reasonable or average amount
4 = Contributed more than average
5 = Contributed a lot more than anyone else/did most of the work.

Team Members Name	Research Acquired:	1-5	Contribution(s) to Presentation:	1-5	Contribution(s) to Rebuttal:	1-5	Total
3-5 pts = 70-75 6-8 pts = 80-85 9-11 pts = 90-95 12-15 pts = 96-100							

Voting Ballets

Proposition: Wildlife Crossing Structure over the local highway.

Yes

No

Common Core Standards

ELA SL.5.1 SL.5.1a SL.5.1b SL.5.1d SL.5.3 SL.5.4 RI.5.3 SL.6.1 SL.6.1a SL.6.1b SL.6.1c SL.6.1d SL.6.3 SL.6.4 SL.7.1 SL.7.1a SL.7.1b SL.7.1c SL.7.1d SL.7.2 SL.7.4 SL.8.1 SL.8.1a SL.8.1b SL.8.1c SL.8.1d SL.8.2 SL.8.4 RST.6-8.2 RST.6-8.8

Alberta Standards

High School Career and Life Management (CALM)

Health literacy, critical thinking, effective communication, self-directed learning and responsible citizenship

P9. demonstrate and apply effective communication, conflict resolution and team-building skills • examine methods of communication, barriers to communication and strategies to enhance communication • describe the stages of conflict, strategies for negotiating conflict, and issues and difficulties in resolving conflict

Natural Resources and Wildlife courses

Present alternatives and consequences associated with one or more issues involving air, water, soil, land, hydrocarbon, mineral, forest and/or wildlife use in Alberta

7.1 define and give examples of multiple use, conservation and sustained yield within the context of water, soil and land use

7.2 present the results of research on an issue involving water, soil or land use in an industry by:

7.2.1 identifying major viewpoints and stakeholders

7.2.2 distinguishing among facts, opinions and beliefs

7.2.3 outlining alternatives and consequences

7.3 explain the issue by analyzing information gathered