habitat in the balance
story resolution matrices

Module information summaries, arranged by topic area, are presented in this resource guide. Rationale, Choices, Points of view, and Consequences portions of each module provide the basis for an overview of the flow of the corresponding activity. See Guide 05 "instruction suggestions and ideas" for specifics about how this information can be used. There is a summary page of information in this guide on each of the following modules:

water: Allocation

This story is about using water from a freshwater system to supply the needs of a proposed commercial development. It is based on a real situation in a region where water is scarce. There is an issue because people do not agree about the source of water to allocate, or even if it should be provided.

Title:
> Who Will Provide the Water? Based on a case study from Alberta

Question:
> When there is a need for water in a place where water is scarce, what is involved in deciding where to get the water?

Statement purpose:
> Users are asked to imagine that they are preparing a statement for presentation at a public meeting.

Choices that can be selected:
> 1) do not allocate water to the Development,
> 2) pipe treated water from Calgary for the Development,
> 3) pipe treated water from Drumheller's supply for the Development, or
> 4) obtain water from the Western Irrigation District for the Development.

Points of view with Consequence summary for each choice:
> developers -- business people arranging for this commercial Development
> > 1) worst   2) fair   3) poor   4) good
> concerned citizens from Balzac -- long-time residents of Balzac
> > 1) poor   2) poor   3) fair   4) good
> Rocky View Municipal District council members -- elected to represent Balzac
> > 1) worst   2) fair   3) poor   4) best
> farmers -- landowners along the Western Irrigation District irrigation canal
> > 1) poor   2) worst   3) fair   4) best
> ranchers -- landowners along the Drumheller water supply route
> > 1) best   2) fair   3) worst   4) fair
> pipeline construction executives -- represent equipment operators, pipe fitters, etc.
> > 1) worst   2) poor   3) fair   4) best
> environmental activists -- are committed to protecting the natural environment
> > 1) best   2) poor   3) worst   4) fair
> Calgary waterworks officials -- manage water to Calgary and communities
> > 1) best   2) worst   3) fair   4) good
> Drumheller town managers -- administer services to their residents
> > 1) good   2) poor   3) worst   4) fair
> Western Irrigation District managers -- manage water supplied to the district
> > 1) poor   2) worst   3) fair   4) best

water: Contaminants

This story explores using limited funds to deal with chemical contaminants (also called pollutants) that impact a river. The story follows Becky as she observes excess or unwanted chemicals in the local waterway. The reason this is an issue is that people disagree about what action should be taken when excess chemicals are in their water.

Title:
> To Decide Funding for a Contaminant Issue - Impacts of chemical contaminants on waterways

Question:
> What is involved in deciding how to deal with a contaminated river, when funds are limited?

Statement purpose:
> Users are asked to imagine that they are preparing a statement for a government hearing.

Choices that can be selected:
> 1) fund the pulp and paper mill to create a constructed wetland,
> 2) upgrade the wastewater treatment plant to include tertiary treatment,
> 3) fund the stormwater drainage system to add a constructed wetland, or
> 4) finance the Resort services change toward conference and spa facilities.

Points of view with Consequence summary for each choice:

Resort at Crystal Shores managers -- manage the tourist Resort

1) good	2) fair	3) fair	4) best

Concerned citizens from Pleasant Cove -- live in a small community by the Resort

1) good	2) fair	3) poor	4) fair

Representatives of Copper City Citizens for Responsible Taxation -- a group opposed to unnecessary increases in taxes

1) best	2) fair	3) good	4) poor

Copper City Council members -- politicians who represent Copper City interests

1) good	2) best	3) fair	4) poor

Environmental Protection Council members -- environmental awareness group

1) good	2) best	3) fair	4) worst

Pulp and paper mill managers -- manage the pulp and paper mill

1) best	2) good	3) fair	4) worst

Copper City wastewater treatment plant managers -- manage wastewater system

1) fair	2) best	3) fair	4) poor

Copper City stormwater drainage system managers -- manage rain/snow system

1) fair	2) good	3) best	4) poor

water: Pontoons

This story is about what should be done with used pontoon structures that have become 'waste' and the impact their disposal might have on aquatic and terrestrial habitats. The community must decide on whether the pontoons should be sunk in the lake, reused, or recycled. There is an issue because people do not agree about the action to take with the obsolete structures once they are decommissioned.

Title:
>   What to do with Used Pontoons? Based on a case study from British Columbia

Question:
>   How best to dispose of used structures that may impact aquatic or terrestrial habitats?

Statement purpose:
>   Users are asked to imagine that they are preparing a statement for a public forum.

Choices that can be selected:
>   1) Sinking — tow the pontoons to the deepest part of the lake and sink them to bottom,
>   2) Recycling — haul the pontoons onto land and break them into useable components, or,
>   3) Reusing — tow the pontoons to another location and use them for another purpose.

Points of view with Consequence summary for each choice:
>   WRB Bridge project manager -- oversees all aspects of bridge work
>>   1) best   2) fair   3) good
>   City of Kelowna council member -- elected politicians representing the interests of Kelowna residents
>>   1) worst   2) good   3) fair
>   First Nation spokesperson -- local First Nation community representative
>>   1) worst   2) fair   3) good
>   British Columbia concerned citizen -- residents in and around Kelowna, B.C.
>>   1) worst   2) good   3) fair
>   Yacht club member -- active in boating activities on Lake Okanagan
>>   1) fair   2) poor   3) good
>   Responsible Taxation Association member – citizens opposed to unnecessary increases in taxes
>>   1) best   2) fair   3) poor

This module deals with a road that is crossed by wildlife in an ecologically important area. The user must choose an action that protects wildlife while allowing for safe use by people. There is an issue because people do not agree about the action to take concerning a local causeway (road), or even if anything has to be done.

Title:

How will People and Wildlife Cross? - Motorists and wildlife at crossroads: Based on a case study from Ontario

Question:

What action should be taken about a human transportation route that is crossed by wildlife in an ecologically important area?

Statement purpose:

Users are asked to imagine that they are preparing a statement for presentation at a community rally.

Choices that can be selected:

1) wider separate passageways (doubling the width of the causeway by adding to the road, adding a pedestrian path, and placing water and wildlife paths under the causeway),
2) scenic alternate pathways (constructing a separate pedestrian passageway through the marsh, placing wildlife paths under the causeway, and installing a gate to control water flow into the marsh), or,
3) existing shared crossings (monitoring car and wildlife road crossings along with marsh improvements).

Points of view with Consequence summary for each choice:

Mainland concerned citizen -- residents of Port Rowan and surrounding areas
    1) best   2) good   3) poor

Cottage association representative -- represent Long Point summer cottage owners
    1) poor   2) fair   3) best

Local amateur naturalist -- concerned about sustainable ecosystem use
    1) fair   2) best   3) good

Boating industry member -- represent commercial guides and marina owners
    1) poor   2) fair   3) best

Building company agent -- local business people who manage transportation routes
    1) best   2) good   3) fair

Recreational club delegate -- residents supporting fitness and outdoor activities
    1) good   2) best   3) worst

inhabitants: Arctic Inhabitants

This story explores the choices of whether to develop the natural gas and if so, how to transport it to Alberta. The issue takes into account the possible impact on plants and animals and their habitats as well as people in the North. There is an issue because people do not agree about which natural gas transportation plan will be best for the inhabitants, or even if any extraction should be done at all..

Title:
Natural Gas Development Impact on Arctic Life - Arctic inhabitants and natural gas development in the Northwest Territories

Question:
What action should be taken about development that could have an impact on the inhabitants of an Arctic environment?

Statement purpose:
Users are asked to imagine that they are preparing a statement for presentation at a steering committee meeting.

Choices that can be selected:
1) refuse to have the natural gas extracted at this time, which means development cannot proceed,
2) move natural gas by underground pipeline along the Mackenzie River valley, or
3) move liquefied natural gas (LNG) by ship from the port in Tuktoyaktuk.

Points of view with Consequence summary for each choice:
Elder concerned citizen – active residents of the Northwest Territories
1) good   2) fair   3) poor
World conservation organization member -- environmental activists
1) best   2) poor   3) worst
Ethical investment manager -- evaluate investment opportunities for clients
1) best   2) good   3) fair
Aboriginal Business Group member – business representatives of indigenous people
1) worst   2) best   3) good
Pipeline company executive – pipeline company manager
1) worst   2) best   3) good
Northwest Territories government official – work to develop a strong community
1) fair   2) best   3) good
Tuktoyaktuk council member -- elected politicians representing residents
1) good   2) fair   3) best
LNG ship company executive -- run liquefied natural gas (LNG) tanker companies
1) good   2) worst   3) best
Petroleum facilities executive -- manage companies that build natural gas facilities
1) worst   2) good   3) best

inhabitants: Transportation

This module examines several transportation alternatives that will connect coastal communities. The user must decide on the transport system that will meet his/her needs and those of the community. There is an issue because people do not agree about how to change the existing transportation system—whether to alter what exists, or to make more extensive changes.

Title:

What Transportation System is Acceptable? - Acceptable ways of connecting people and places

Question:

What transportation system would best resolve an issue of highway congestion for inhabitants in an area that is already developed?

Statement purpose:

Users are asked to imagine that they are preparing a statement for presentation at a public forum.

Choices that can be selected:

1) designate a High-Occupancy Vehicle lane on the existing highway,
2) build a straight toll road that crosses the inlet,
3) add a high-speed railway line alongside the highway, or
4) establish ferryboat travel between coastal ports.

Points of view with Consequence summary for each choice:

Rural Association representative – rural landowners concerned about rural land use
    1) fair   2) worst   3) good   4) poor
First Nations representative -- long-time residents of an aboriginal community
    1) best   2) poor   3) fair   4) worst
Whale Ridge administrator -- maintain contracts for the port operations
    1) fair   2) fair   3) poor   4) best
Construction company manager – work for locally owned road building businesses
    1) poor   2) best   3) good   4) poor
Commuter Association spokesperson – represent travellers who want comfortable, efficient transportation
    1) fair   2) worst   3) best   4) good
Cabotford Town representative -- own property and run small businesses
    1) best   2) worst   3) good   4) worst
Otterton Town representative -- officials of the Otterton town council
    1) fair   2) poor   3) good   4) best
Mapledale City representative – city council officials, represent regional matters
    1) fair   2) good   3) poor   4) poor

land: Spoiled Soil

This story deals with how land has been impacted by the extraction and processing of a mineral resource. The user examines the different choices of reclaiming the land and the affected soil. There is an issue because people do not agree about the action to take on fixing the damaged soil, or even if people need to do anything at all.

Title:

What to do about spoiled soil? - Based on a case study from Ontario

Question:

What is involved when a community responds to the identification of their soil as potentially unhealthy and toxic?

Statement purpose:

Users are asked to imagine that they are preparing a statement for presentation at a public forum.

Choices that can be selected:

1) Natural recovery -- let the soil repair itself by natural processes,
2) Clean and beautify -- remove dead matter and put in trees around public areas,
3) Treat and seed -- chemically repair and enrich the soil before seeding the entire area, or
4) Replace and replant -- remove the damaged soil then seed and replant the entire area.

Points of view with Consequence summary for each choice:

Middle-aged residents' representative -- contributors to the local economy
    1) good   2) poor   3) fair   4) worst

Re-greening Committee delegate – long-term city residents
    1) worst   2) best   3) fair   4) good

Greater Sudbury Council member -- elected to represent Sudbury
    1) poor   2) poor   3) best   4) fair

Sudbury District Health representative – Sudbury doctors, nurses and social workers
    1) poor   2) worst   3) good   4) best

Country Lands Association spokesperson -- speaks for rural landowners
    1) poor   2) worst   3) best   4) good

Tourism Association agent -- represent the travel industry
    1) worst   2) best   3) poor   4) fair

Metals industry representative -- business people who manage the extraction
    1) best   2) good   3) fair   4) worst

Keep Canadian Soils Healthy! representative -- environmental activist group
    1) poor   2) worst   3) good   4) best

Clean-shield company manager -- business employing people locally
    1) good   2) best   3) worst   4) poor

National Reclamation company manager -- business removes toxic materials
    1) worst   2) poor   3) fair   4) best

land: New Neighbours

This module explores a region that is inhabited by bears and people. The user must choose between regulating land use that favours recreational use by people or conservation of wildlife. There is an issue because people do not agree about which is best: keep the land regulated to protect the black bears while restricting human actions, or change the regulations so the movement of the bears is restricted in favour of humans.

Title:
> Unusual New Neighbours, Use by Wildlife or People - Deciding on land use favouring wildlife or people

Question:
> Should land use regulation favour wildlife conservation or human recreation?

Statement purpose:
> Users are asked to imagine that they are preparing a statement for presentation at a public forum.

Choices that can be selected:
> 1) keep wilderness land use regulation favouring conservation for wildlife, or
> 2) change to recreation land use regulation favouring development for people.

Points of view with Consequence summary for each choice:
> concerned citizens -- residents that want an active life
>> 1) fair   2) good
>
> conservationist – interested in conservation of wildlife and habitat
>> 1) good   2) worst
>
> land owner – land owners live in the municipality
>> 1) fair   2) best
>
> hunters – group of people that hunt wildlife
>> 1) best   2) poor