## **OBJECTIVES**

## Students will:

• Create a landuse plan for Alberta's Future

## MATERIALS

Projector and Speakers Student Worksheet Video Links Internet Connection

## **OVERVIEW**

Part A: Set goals

Part B: Changes for 2050 Part c: Management Practices

Part D: Analysis

Part E: Extension: Landuse Planning in Real Life





TIME REQUIRED

90 min

## **PART A: Setting Goals**

Goto <u>www.albertatomorrow.ca</u> and sign in. It is highly recommended that you complete the lesson plan "Yesterday, Today and Tomorrow, before this one.

- 1. Click on "Create New Scenario" Choose "Landuse Plan"
- 2. Choose your study area, and then click "Next" (Remember, the smaller the study area the harder it is to see change.)
- 3. You are seeing the current land use. Use this legend:

Landscape Type/ Landuse	Color	
Orange	Agriculture	
Yellow	Natural Grassland	
Blue	Water	
Light Green	Wetland	
Dark Green	Forest	
Purple	Urban	
Grey	Industry and Transportation	
White	Alpine and Exposed	

- 4. What you see on the indicator dials are the levels as of 2020. Your first job is to set goals for 30 years from now. Move the goal slider to where you want the indicator to be in the year 2050. (if you are unsure of what the indicator is measuring, click on it and watch the video) Remember to set realistic goals.
- 5. Record Current values and your goals: on Chart 1 and Chart 2
- 6. Click "Next"

## Part B: Changes for 2050

You will now decide how you will reach your goals by changing the landscape.

7. Click on "changes"



- 8. Choose the landscape type or landuse you wish to add in the future.
- ie, if you want to have more grassland in the future, click on the yellow grassland icon and then click on the map where you want to increase grasslands in the future.

Remember, the simulator will only allow that change to be made if it is possible to change the current landscape type/landuse to what you want.

- 9... Record the change you requested on Table 2
- 10. Click "Run Scenario" and then click "Play"
- 11. Record whether you reached your goals or not (the goal dot will be green if you reached your goal, yellow if you got close, and red if you didn't reach your goal.)

## Part C: Management Practices.

Now click on Management PracticesWatch the management practice video. You must make a decision on how much industrial activity you want in the study area and what management practices you wish to use from this year on.

- 12. Move the Industrial Activity slider to the level you wish to see moving into the future. Record your level.
- 13. Choose which Management Practices you wish to use. Record this on Chart 3

If you still have not reached your goals, you can go back and change your goals by clicking on individual goals, or go back and make more changes to the landscape by clicking on landscape changes.

#### Part D: Analysis

14. How would you summarize your future plan? What were you trying to achieve?

15. Were you able to reach your goals? Why or Why not?



16. List at least 2 WOWs you got from creating your own future plan. What surprised you? What was difficult to do?

17. How will going through this process impact your actions/expectations/wants?

18. If you could talk to some experts, list 2 questions you would like to ask them.

#### Part E: Extension

Alberta has a Landuse Framework that makes landuse plans for the 7 regions of Alberta. Go to <a href="https://landuse.alberta.ca/Pages/default.aspx">https://landuse.alberta.ca/Pages/default.aspx</a> and find the landuse plan for your area. Suggested Research:

- Which of the 7 landuse regions do you live in?
- What is the purpose of the landuse framework?
- What is the status of the landuse plan for your area?
- What is cumulative effects management?
- How did Alberta Tomorrow illustrate cumulative effects management?



CHART 1: Dials	2020	My Goal	Result
Natural Landscape			
Grizzly Habitat			
Fish Habitat			
Water Quality			
Biotic Carbon Storage			
Greenhouse Gases			
Population			
GDP			
Oil and Gas Production			
Forestry			
Agriculture			
Water Consumption			

CHART 2: Area	2020	Change Requests	Result 2050
Agriculture			
Grassland			
Water			
Wetlands			
Forests			
Urban Area			
Industry			
Alpine			

Chart 3	Management Practices Used	Results	Comments
First attempt			
Second attempt			
Third attempt			