



The BC Tomorrow Simulator

OBJECTIVE: To become familiar with BC Tomorrow's simulator.

Nov 20, 2020 Pro-d

OVERVIEW

- Part A: Login; Locate the Teacher resources
- Part B: Run a Historic scenario
- Part C: Run a Business as Usual Scenario
- Part D: Run a Land Use Plan

IMPORTANT Check to see if your browser supports BC Tomorrow's software. Open **Google Chrome** paste the link <https://get.webgl.org/> - a spinning cube will appear if it works.

PART A: Login

- 1) Open Chrome. Use www.beta.bctomorrow.ca login as teacher, create an account. You must have an email address to confirm your registration.
- 2) Find your school, choose the curriculum (course) that most closely matches what you teach.

PART B: Create a Historic Scenario

- 3) From the side or top menu, choose "**Scenario**"
 - a. "Create a new scenario;" choose the "**Historic**" Scenario.
- 4) Find your watershed. There are three levels: drainage basin, watershed, sub-watershed. For example, Pacific Drainage basin, Lower Fraser Watershed, South-Coast sub watershed. Users can down to their small, sub watershed or stop at a larger watershed. Larger watersheds will show more change.
 - a. **Watershed/study area:** _____
 - b. Give your scenario a title; describe what you would like to do. Click – "**Run scenario**"

Note It takes a little longer to run the first scenario in *any* watershed. So, **FOR PREP**, run a scenario for the watershed students will (likely) be using. Once the first scenario has been run, subsequent scenarios are faster.

The colors on the map represent landscape types/land use as follows:

Landscape Type/ Land use	Color
Agriculture	Orange/Red
Natural Grassland	Yellow
Water	Blue
Wetland	Light Green
Forest	Dark Green
Human Settlement	Purple
Industry	Grey
Alpine and Exposed	White

- i. Press **PLAY**. Watch the landscape change over time. List 3 (land use/indicator) changes that occur on the map:
 - i. _____
 - ii. _____
 - iii. _____
- ii. Complete Charts 1 and 2 for the year 1910 - 2020



- iii. Look at the **indicator dials** and **landscape** types. Complete the following observations while the simulator runs:
- when natural landscapes went down _____
 - when Timber production went up _____
 - when Agriculture went up _____
- iv. Create 3 more observations:
- _____
 - _____
 - _____

Part C: *The Business as Usual (BAU) Scenario*

The BAU is the case where we look into the future to see what the landscape **could** look like if we keep doing what we're doing and don't make changes. Watch the **indicators** and the **land use** changes.

- Go back to the dashboard; choose "Create a new Scenario"
 - Choose the **Business as Usual** Scenario.
 - Again, find a (your) Watershed and click "Run Scenario"
- Complete Chart 1 and 2 for the year 2050

Part D: *A Land Use Plan Scenario*

IT'S YOUR FUTURE. SEE WHAT YOU CAN DO!

Land use planning is like doing a scientific experiment. You create an idea based on your understanding (hypothesis), run a test (experiment – gather data), evaluate the data (use indicators), adjust your hypothesis/make changes to your plan/experiment and run more tests.

- Create a **NEW SCENARIO**. Choose "**LAND USE**;" again, choose your study area.
- Select **GOALS** - Set Environmental and Socio-Economic indicator goals – "**NEXT**"
- Select **CHANGES**. Here you "select" the **land use type** and place a pin in a suitable location.
 - Place a **pin** where you want things to change. For example, if you want to change the human settlement land-use, place a pin in a suitable location and use the slider to allocate the land use/landscape type.
 - Use **logic** when placing pins – human settlement will not have much of an impact on the indicators if you put it in a lake or at the top of a mountain!
 - Select other land-uses; place pins in suitable areas and adjust the sliders.
- RUN SCENARIO**. See how your ideas worked relative to your goals.
- EDIT your scenario**. Adjust your plan and re-run your scenario.
- Create a balanced plan using system thinking you would like to see for your area.
- Share your plan (with your friends, your teacher, your class, your family, the community).

Interconnectedness – For First Nations people, the concept of "Interconnectedness" is a core world view. In general, this mindset centers toward a fundamental belief that everything in the universe is connected. This all-encompassing world view embraces the idea that people are tightly connected to their communities, to their ancestors, to future generations, to the lands on which they live and to all of the animals, plants and even inanimate objects that reside on these lands.



Conclusions:

How might BC Tomorrow be used with your students (classes, Big ideas, Content, grades)?

- i. _____
- ii. _____
- iii. _____

CHART 1: Indicator Dials	1910 (%)	2020 (%)	2050 (%)	Overall trend
A. Environmental Indicators				
Natural Landscape				
Grizzly Habitat				
Fish Habitat				
Water Quality				
Biotic Carbon Storage				
Greenhouse Gases				
B. Socio-Economic Indicators				
Population				
GDP				
Energy				
Timber Production				
Agricultural Production				
Water Consumption				

CHART 2: Area (ha) - watershed/study area	1910 (ha)	2020 (ha)	2050 (ha)	Overall trend
Agriculture				
Grassland				
Water				
Wetlands				
Forests				
Urban Area				
Industry				