



Pacific Institute  
for Climate Solutions  
Knowledge. Insight. Action.

## Climate Insights 101 Questions and Discussion Points Module 2, Lesson 4: Adaptation

Available at: <http://pics.uvic.ca/education/climate-insights-101>

1. It may seem surprising that there are ways of increasing the benefits from actual or expected climate change. One example is that farmers can plant crops that take advantage of increased “growing degree days”. Can you think of another example? (Ref. slide 2)
2. Adaptation is partly about how the decisions we make for our communities today will impact future generations. Poor decisions made now can be very expensive to fix later. Many areas of our lives are affected, including the infrastructure of our cities and towns. What would be some examples of infrastructure in your own town that need to be taken into consideration in adapting to climate change? (Ref. slide 2)
3. Planning used to be based on notions of climate stability but now there is no “normal” climate anymore. Consider where you live or where you grew up. What changes in climate have you observed over the past decade or longer? Have there been more extreme weather events and if so, what kind? (Ref. slide 3)
4. Climate “risk” is a function of three factors. What are they? (Ref. slide 6)
5. The “capacity to respond” and act on climate hazards involves both financial and technical considerations. Discuss what some of these financial and technical factors might be. (Ref. slide 6)
6. What does “exposure to the hazard” mean and explain why this can be less than straight-forward when assessing risk? (Ref. slide 8)
7. Reducing risk means trying to reduce both exposure and vulnerability by building capacity and strengthening infrastructure and ecosystems. In parts of the BC interior where it is hot and dry in the summer some populations are always at risk of forest fires. The fire of 2003 in Okanagan Mountain Provincial Park turned into a firestorm, burning most of the trees in the park and forcing the evacuation of 27,000 residents. 60 fire departments, 1,400 armed forces troops and 1,000 forest fire fighters tried to control the fire. What lessons were learned from this disaster? Go to the following article and discuss what you read and learn from the text and photographs.

<http://blogs.theprovince.com/2013/08/16/kelowna-10-years-after-the-fires/> (Ref. slide 10)

8. Referencing the previous discussion point, discuss why local context is so important when planning and implementing adaptation strategies such as “FireSmart” principles. (Ref. slide 10)

9. How a community participates and responds to extreme weather events depends largely on six factors. How many of these can you name? (Ref. slide 14)

10. Vancouver and Victoria are known as wet cities in the winter but water supplies in both places are being affected by climate change. What is changing in Vancouver’s winter precipitation that needs to be considered when planning long-term water needs for this growing city? (Ref. slide 15)

11. Planning for climate adaptation needs to take into consideration which three important factors? What are the first three steps in the planning cycle? (Ref. slide 18)

12. It’s estimated that the planning process for adaptation will likely need to be repeated every five to ten years because knowledge, practice and public values are changing rapidly. What are “public values”? Discuss how public values may be changing. Where do you see evidence of this? (Ref. slide 18)

13. The BC government has a climate adaptation policy. What are its three strategies? (Ref. slide 20)

14. What are some of the measures being undertaken in coastal communities with regard to sea level rise? (Ref. slide 21)

15. What is the projected sea level rise by the end of this century? (Ref. slide 21)

16. How is adaptation being considered in the agriculture and food sectors? (Ref. slide 21)

17. Give some recent examples of extreme weather events and how their cleanup costs indicate the need for climate adaptation. (Ref. slide 22)

18. Another response to climate change is mitigation – which largely depends on reducing what? (Ref. slide 23)

19. It’s been said that adaptation to climate change must occur “in the face of a moving target” What does this mean? (Ref. slide 23)

20. How many examples of adaptation in BC can you name? (hint: there are six) (Ref. slide 25)

21. The municipality of Delta, BC contains both extensive sub divisions and farmland. Why is Delta particularly at risk for climate change and what tough decisions will have to be made regarding use of the land? Discuss from the point of view of a developer and from a planner with the municipality. (Ref. slide 26)

22. Delta has worked with CALP (Collaborative for Advanced Landscape Planning) on concerns about sea level rise and has produced four possible adaptation scenarios. Review scenario four (“individual household adaptation”) and discuss how it might impact you, if you lived in Delta. (Ref. slide 26)

23. The Prince George area has two major concerns with climate change: forests and flooding. What did the city do to reduce the risk of flood damage by the two rivers? The mountain pine beetle has decimated many stands of trees in Prince George’s community forest and this poses at least two serious threats. What are they? (Ref. slide 27)

24. New and revised forestry policies are now in place in Prince George. Name two of them. (Ref. slide 27)

25. Given what you’ve learned in this lesson about what adaptation is and why it’s needed, what would you say to a person who said to you: “We need to stop climate change – not adapt to it!”