

## A Report on a Natural Hazard    L E V E L    1

**A**

### **Pine wood Alberta Tornado**

#### **Identification of hazard**

On July 15, 2000 in Pine Wood Alberta a large disaster happened to the people of the surrounding areas and of the local area of Alberta.

The local tourist area of Green Acres located just outside of Alberta had just finished eating their supper for the evening. It had been a very gorgeous day when the winds proceeded to pick up. A large quantity of hailstones started to drop from the sky, they were measured up to the size of golf balls. One local namely James Cooke stated "that the hail looked like a cement wall falling from the sky".

#### **Mechanisms causing the hazard**

This vibrant storm was caused when the mixture of cold air and warm air collided to form a funnel cloud. The sky changed from a beautiful blue to a greenish Grey. The wind was monitored at about 320 km per hour and was destroying everything in its site. The enormous funnel cloud was spotted by the locals and also by the tornado radar system. The tornado was a f3 on the Fujita scale, which is not a biggest tornado, but it was very unexpected which caused people to panic and literally run for their lives.

#### **Visual of tornado location**

See picture on next page.

#### **Impact of the hazard on the community**

By the time the storm had past it claimed 11 people, 136 people were hospitalized, and all most 450 trailers and motorhomes were tipped over and destroyed leaving the final estimate of damage at 12 million dollars. It also claimed a lot of people's dignity and it is like they have to start their lives over again.

#### **Short term preparation**

**B**

The people of Alberta could better prepare themselves if they look for the obvious signs such as if they sees a funnel cloud developing in the sky. They should leave as soon as possible, and not worry about their homes, and just try to keep their health and weal being.

#### **Justification**

This precaution will help them in the long run because they will know exactly what they are looking for the next time a tornado or any other hazard strikes in their local community.

#### **Long term**

In the long term people could build themselves shelters (such as a bomb shelter) were they could go if they sense any kind of danger. They could also pack themselves the basic necessities such as a flashlight, matches, candles, first aid kit, and some kind food

#### **Justification**

In the long run if you know there could be any sort of danger you will be more prepared. Therefore you can go on living your life without any or at least not as much fear. Also it helps not to worry about it too much because you never really know when a natural disaster will occur. So you should go on living your life to the fullest.

#### **Steps to deal with the aftermath**

Try and help every one involved in the clean up because people have to come together in time of crisis. Also you should try and rebuild because life just can't stop because of a disaster.

#### **Justification**

The key steps with dealing with the aftermath are always remembered that time heals all pain. The first couple months are the hardest, but you have to move on and try and clean up as much as you can and move on with your life. You have

LEVEL 1

**C**

to realize that stuff happens for a reason and maybe it will change your life in such a way that you never knew existed maybe for good or maybe for worst.

**D**

Bibliography

**CBC**

[www.Pinewoodlaketornado](http://www.Pinewoodlaketornado)

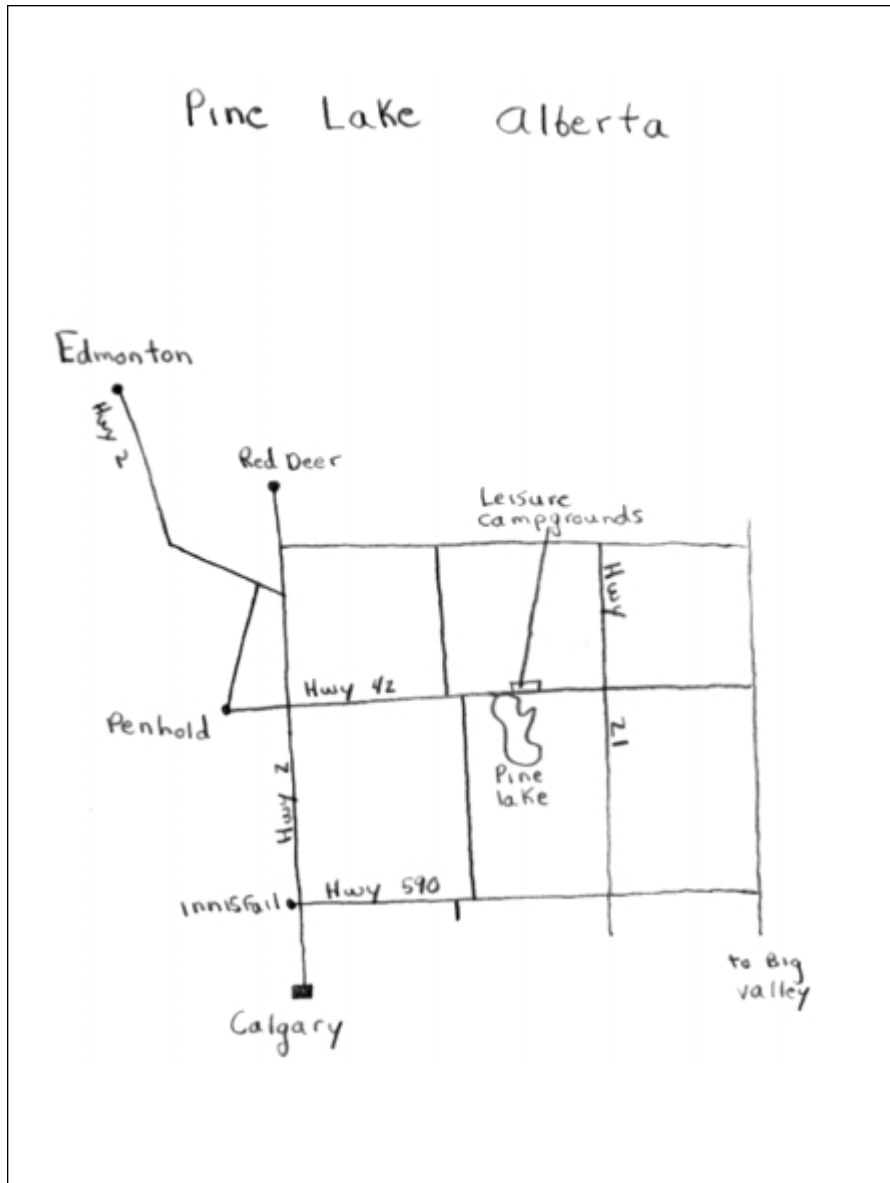
**Magazine article summary**

Pine lake natural disaster

**Geography text book**

Pine Lake Alberta tornado

## E

**Teacher's Notes****Knowledge/Understanding**

- The student identifies and describes the mechanisms of change as they apply to tornadoes in central Alberta with limited accuracy. Rather than fully exploring the mechanisms of change as they apply to tornadoes, the student briefly describes a single past event (e.g., "This vibrant storm was caused when the mixture of cold air and warm air collided to form a funnel cloud").

**Thinking/Inquiry**

- The student provides advice on short-term preparation that is of limited effectiveness. The student's only piece of advice is that "The people of Alberta could better prepare themselves if they look for the obvious signs such as if they see a funnel cloud developing in the sky. They should leave as soon as possible ...". The justification for this advice is weak (e.g., "they will know exactly what they are looking for the next time a tornado or any other hazard strikes in their local community").
- The student provides advice on long-term preparation that is of limited effectiveness. The student's advice (e.g., "In the long term people could build themselves shelters ... They could also pack themselves the basic necessities such as a flashlight, matches, candles, first aid kit, and some kind food") addresses the needs of individual households but not the needs of the community (as would, for example, a warning system).
- The student provides steps for dealing with the aftermath that are of limited usefulness. The advice is very general (e.g., "Try and help every one involved in the clean up because people have to come together in time of crisis") and does not address many aspects of the clean-up required after a tornado (e.g., administering to the injured and setting up relief shelters).

**LEVEL 1****Communication**

- The student writes a report that is limited in clarity and logical organization. Although the student organizes the report under headings, the headings are too numerous and are not always followed by relevant information (e.g., the tornado itself is described under “Mechanisms causing the hazard”). Errors in writing mechanics sometimes limit the clarity of the report (e.g., “The local tourist area of Green Acres located just outside of Alberta had just finished eating their supper ...”).
- The student uses a voice and language that are appropriate to a limited degree. Although the student uses some terminology appropriate to the topic (e.g., “funnel cloud”, “Fujita scale”), he or she does not adopt a formal tone or direct the report to the specified audience of government officials. Rather, the report is directed to individuals, and takes on the tone of an emotional appeal (e.g., “but you have to move on ... and move on with your life”).
- The student provides a visual that supports and enhances the written information to a limited degree. The map shows the location of Pine Lake, but it is not drawn to scale and is not entirely accurate.

**Application**

- The student evaluates the impact of the hazard on the local population with limited effectiveness. The student provides data describing the impact of the Pine Lake tornado itself, but does not discuss whether the region is prone to tornadoes and does not make a connection between the event described and the impact of possible future tornadoes in this region.

**Comments**

This work is representative of a level-1 performance. The student demonstrates a limited degree of achievement of the expectations in all four categories of knowledge and skills.

The result is a report that reflects limited research and that adopts a tone that is of limited appropriateness to the specified audience.

**Next Steps**

In order to improve his or her performance, the student needs to:

- conduct more research to provide further details on the mechanics of tornado formation and on the history of tornadoes in the chosen region;
- provide more effective advice on both short- and long-term preparations as well as more thorough and more practical advice on coping with the aftermath of a tornado;
- adopt a more formal tone and direct the writing style to the intended audience (i.e., government officials);
- edit the map for accuracy (i.e., scale and content);
- proofread the work carefully to eliminate spelling and/or typographical errors.