In Boomtown, all the land that is best for building has already been developed. The only options are to build on Green Hill, the Delta Wetlands, or the top of Seaside Cliff.

To help decide where to build new housing, the Boomtown City Council has asked local experts to visit the three possible building sites and report on their findings. In this activity, you will help prepare the Geologist’s Report. The City Council will discuss your report at their next meeting.

What is the geology of the three building sites?
### PROCEDURE

1. Read the Geologist’s Report on Green Hill on the next page.

2. With your group, review the report by identifying the following information:
   - the description and location of the landform
   - the role of earth processes in the area
   - the topographical changes and land stability over time
   - the potential geological problems for construction

3. To prepare for writing your own report, do each of the following steps with your group members.
   - **a.** Gather information about the geology at the Delta Wetlands and/or Seaside Cliff. Use what you have learned from other activities in the unit.
   - **b.** Complete Student Sheet 34.1, “Evidence for the Geologist’s Report,” by filling in the columns for your location(s). As an example, the Green Hill column is filled in already.

### ANALYSIS

1. Prepare for the City Council meeting by writing a report stating what you know about the geology of the site(s) you investigated in Procedure Step 3.

   In your report, include a summary of the relevant information on Student Sheet 34.1. An example of a report for Green Hill is on the next page.
Geologist’s Report: Green Hill

Green Hill is a 150-meter-high hill located next to the Rolling River in the western part of Boomtown. The land is steep on the west and south sides of the hill but it has a gentler slope on the east and north side. The east and south sides are covered with roads and homes. Green Hill is made up of loose, soft soil.

Erosion is the main earth process that affects this landform. The hill is eroded by the rainfall that runs down it. Eventually the sediments removed from Green Hill are carried down the Rolling River and deposited in the Delta Wetlands. Since the hill is at a higher elevation, there is little risk of flood on Green Hill.

The topographical maps of Boomtown show that the hill has been stable over the last 100 years, except for the area with houses. On that slope of the hill, there has been erosion in the twenty years since the houses and roads were built. The erosion may have been caused when the land was dug up to build the houses.

The biggest potential geological problem at Green Hill is erosion due to more building. Although the hill is eroded by rain instead of powerful ocean waves, the composition of the hill is less resistant to erosion than other places in Boomtown, so it may become a problem in the future.