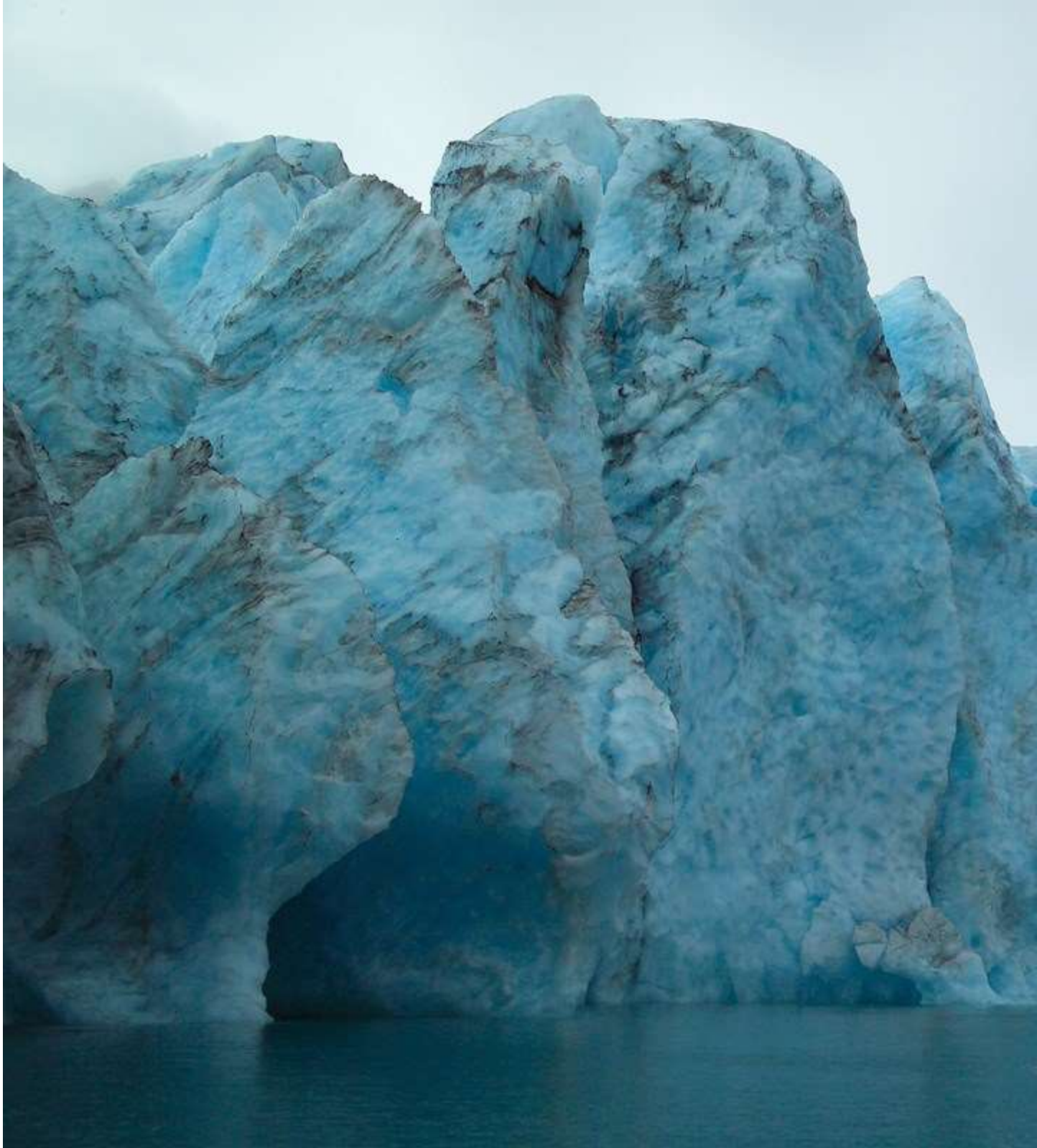


Glaciers and Glacial Landforms



A view of the blue ice of Pedersen Glacier at its terminus in Pedersen Lagoon (Kenai Fjords National Park, Alaska)

NPS Photo/Jim Pfeiffenberger

Glaciers are **moving bodies of ice** that can **change entire landscapes**. They sculpt mountains, carve valleys, and move vast quantities of rock and sediment.

In the past, glaciers have covered more than one third of Earth's surface, and they continue to flow and to shape features in many places.

Glaciers and the landscapes they have shaped provide invaluable **information about past climates** and offer **keys to understanding climate change today**.

Types of Glaciers

Many different kinds of glaciers have affected our National Parks, whether they are present today or sculpted the landscape in the past. They include:

- **Ice Sheets**
- **Ice Fields and Ice Caps**
- **Cirque and Alpine Glaciers**
- **Valley and Piedmont Glaciers**
- **Tidewater and Freshwater Glaciers**
- **Rock Glaciers**

Glacier Ice Features

Active glaciers often have distinct features that are associated with the flowing, melting ice. You can see many of these features in parks with glaciers. Look for:

- **Crevasses**
- **Icefalls**
- **Seracs and Icebergs**
- **Glacier Ice Caves**
- **Tarns**
- **Jökulhlaups**

Glacier Landforms

Past glaciers have created a variety of landforms that we see in National Parks today, such as:

- **U-shaped Valleys, Fjords, and Hanging Valleys**
- **Cirques**
- **Nunataks, Arêtes, and Horns**
- **Lateral and Medial Moraines**
- **Terminal and Recessional Moraines**
- **Glacial Till and Glacial Flour**
- **Erratics**
- **Glacial Striations**
- **Paternoster Lakes**
- **Kettles**
- **Drumlins**
- **Outwash Plains and Eskers**