**Bedrock Geologic Map Unit Description and Geomorphological Implications**

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**Introduction**

The bedrock geologic map of Saratoga National Historical Park, New York, was produced by De Simone Geological Investigations in 2015 and is available at the National Park Service’s Geologic Resources Inventory (GRI) program. The map provides a detailed view of the bedrock geology and its role in shaping the landscape of the park. It has been produced using high-resolution data and integrates various geologic and topographic information.

**Geologic Settings**

The park is situated in the Hudson Lowland, a region characterized by a series of parallel valleys and uplands. The geology of the area is dominated by the Taconic orogenic event, which occurred approximately 450 million years ago. The forested areas in the Hudson Lowland are primarily composed of shale and graywacke, while the uplands are dominated by sandstone and limestone.

**Geologic Structures**

The park's bedrock geology is characterized by a series of prominent uplands and lowlands. These features are the result of the Taconic orogenic event, which uplifted and folded the rock layers. The geologic map highlights the following geologic structures:

1. **Folded and Torned Ridges** - These structures are characterized by the presence of folded and uplifted rock layers, indicating the movement of the Earth's crust during the Taconic orogenic event.
2. **Thrust Faults** - These faults are characterized by the movement of one block of rock over another, resulting in the formation of prominent ridges and valleys.
3. **Flysch** - Flysch is a type of sedimentary rock that was deposited from eroded sediments in deep water. It consists of layers of shale alternating with layers of graywacke.

**Geomorphic Implications**

The geologic structures and features of the park have significant implications for the landscape and human history.

1. **Landscape Evolution** - The geologic structures have played a crucial role in the evolution of the landscape. The folded and thrusting of the Taconic orogeny has created a series of parallel valleys and uplands, which have been shaped by subsequent geological and climatic events.
2. **Human Settlement** - The geologic features have also influenced human settlement patterns in the area. The availability of water, the presence of fertile soil, and the topographic diversity have all contributed to the development of the region.

**Future Research**

Further research is needed to fully understand the geologic and geomorphic processes that have shaped the landscape of Saratoga National Historical Park. This includes the study of the geologic history of the region, the impact of human activities on the landscape, and the effects of climate change on the geologic and geomorphic processes.

**Conclusion**

The geologic map of Saratoga National Historical Park is a valuable resource for understanding the geologic and geomorphic processes that have shaped the region. It provides a detailed view of the bedrock geology and its role in shaping the landscape of the park. Further research is needed to fully understand the geologic and geomorphic processes that have shaped the landscape of Saratoga National Historical Park.