Unit 04 Monocline Explained: Capital Reef National Park

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We're at Capitol Reef National Park, home of the famous Waterpocket Fold. In the background, we can see it. We can see the layers dipping this way from the west, and you can't really see the layers on that side. This is a classic monocline, and it's a 100-mile long flexure in the Earth's crust. And Dave going to help show us how it formed.

This is the Earth's crust. And then 50 to 70 million years ago compressional stress came from the west and caused a bulge. And rocks on the west side were lifted up on along a thrust fault about 7,000 feet higher than rocks on the east side. Later, uplift during the uplift of the Colorado Plateau about 15 to 20 million years ago left it susceptible to erosion and the top part was eroded off. and you got many of the geological features you'll find in the park, like monoliths, and canyons, and arches.

The reason the Waterpocket Fold got it's name is when the younger layers up here were eroded, softer layers beneath were exposed and formed small basins in which water gathered in, which provided a water source for early settlers.

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