

Investigations into the development of the Snake River Plain

Effects/Animation

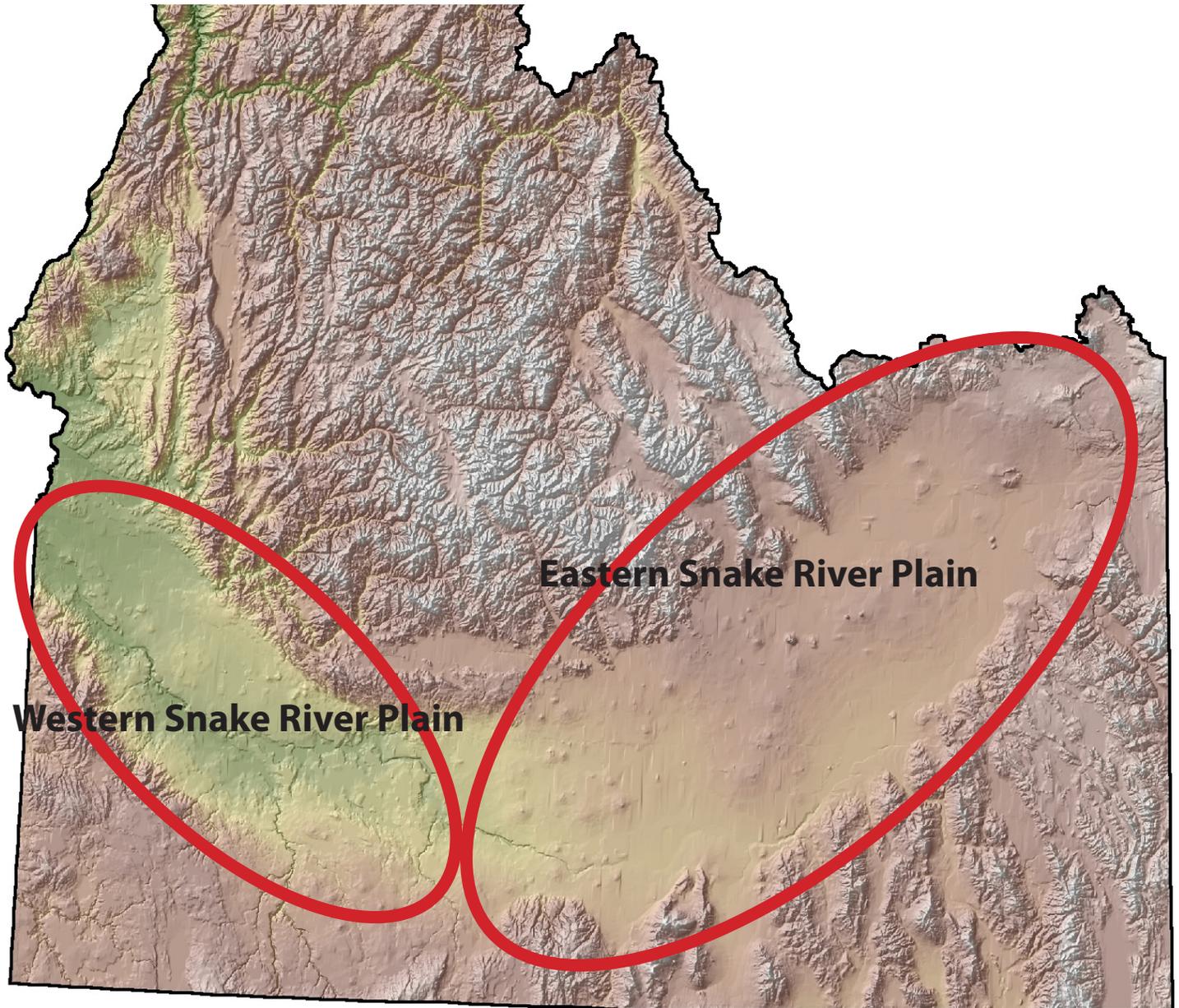
Scene starts with the background image of the western US. A few seconds in the title "Investigation into the development" appears and the narration starts (see script).

As the narration begins an inset map of the Western Snake River Plain comes in from the right, including labels for the Boise Foothills, Owyhee Mountains, and location of Boise.

Script

Hi all, Ander Sundell from the College of Western Idaho here. Welcome to a quick overview of the geology of the Western Snake River Plain. After watching this video you should have a solid background of the geology that we will see on our upcoming Geology 101 field trip. A portion of this trip was borrowed from the trip "Geology Across and Under the Western Snake River Plain, Idaho: Owyhee Mountains to the Boise Foothills" Spencer Wood, 2004

Keep in mind that a trip that explores the entire Geologic History of Idaho would take a lifetime. This trip is intended to highlight some of the features that we will see on our trip. If you would like to learn more about the geology of Idaho, the Digital Atlas of Idaho, curated by Dr Paul Link, Idaho State University and others, is a great place to start.



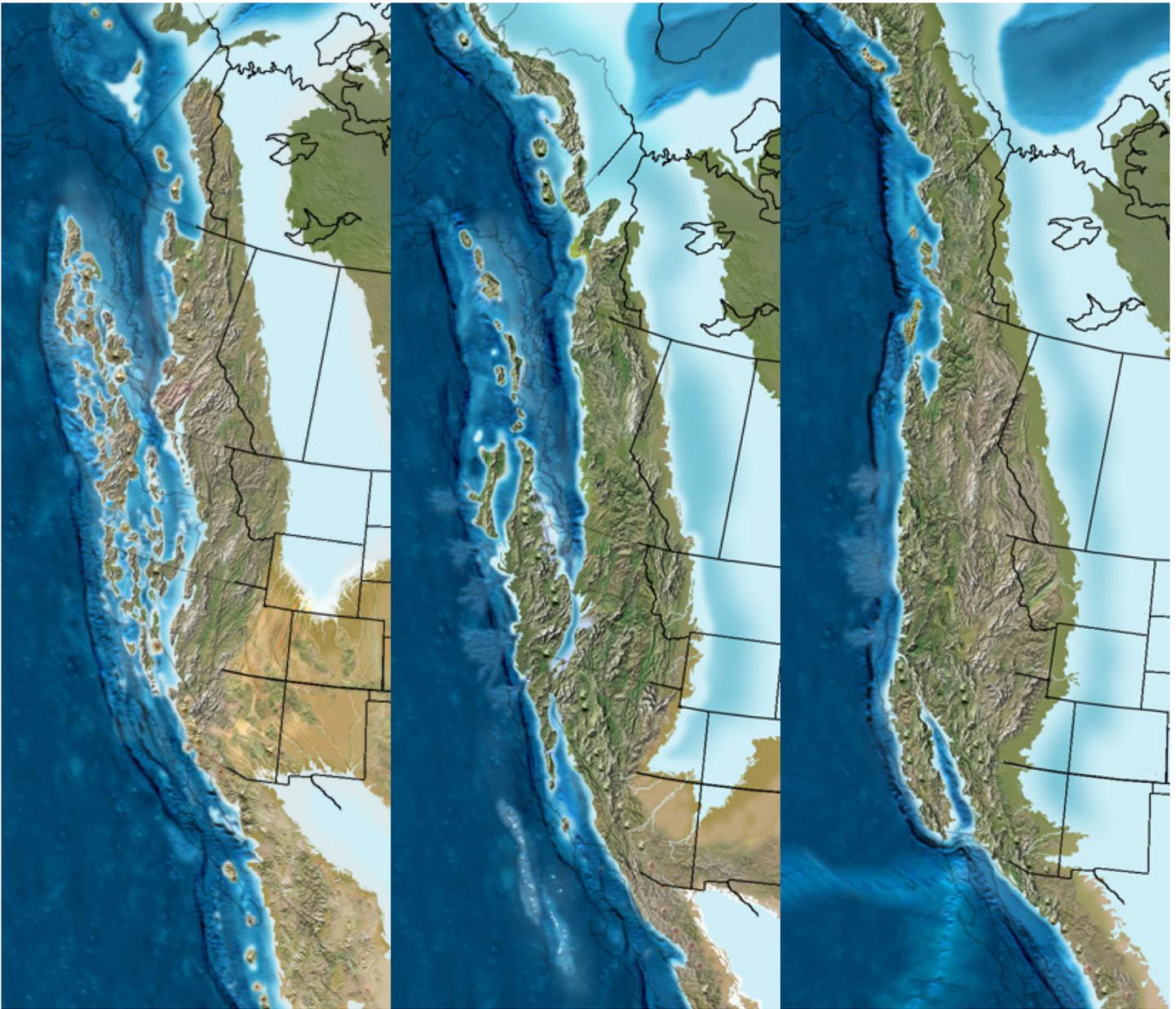
Effects/Animation

Scene Starts with a full image of the state of Idaho, then zooms to the southern portion. The figure will have two circles “drawn” during the narration that highlight the Western Snake River Plain and the Eastern Snake River Plain. As the circles are drawn the respective labels appear.

Script

Before we get started we need to talk about the Geography to the Snake River Plain. The plain is roughly sixty miles wide and extends from the East end of the state to the Western end. Some people say that it is the “smile” of southern Idaho.

The eastern Snake River Plain, I will just use the ESRP acronym from here, was formed by the passage of the Yellowstone hot-spot, the Western Snake River Plain (WSRP) was formed by regional “basin and range” extension. We will talk about this in more detail later in this video. For now we are going to have to back the clock up a bit.



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Effects/Animation

Either have the Cretaceous paleogeography maps appear side by side (as shown) or have them fade into one another. As they appear the age and period fade in over the maps. Images will be annotated following the narration.

Script

As I mentioned before we are not going to be discussing the entire geologic history of Idaho, we are just going to be concerned with features that we will see on the trip. To begin our discussion we will examine the western continental margin during the early Cretaceous. At this time (just as today) the west coast was characterized by a subduction zone, the Farralon plate (now split into the Juan de Fuca and Cocos plate) was subducting under the North America plate.

This subduction coupled with the docking of many smaller landmasses (the process of accretion) with the North American Continent. You can see that in the early Cretaceous Idaho was "beach front property" and by the late Cretaceous a significant volume of crust was accreted onto the margin. All the way back in our lecture about plate tectonics we learned that there were some specific processes that typically accompany subduction....

Placeholder, animation of subduction zone here

