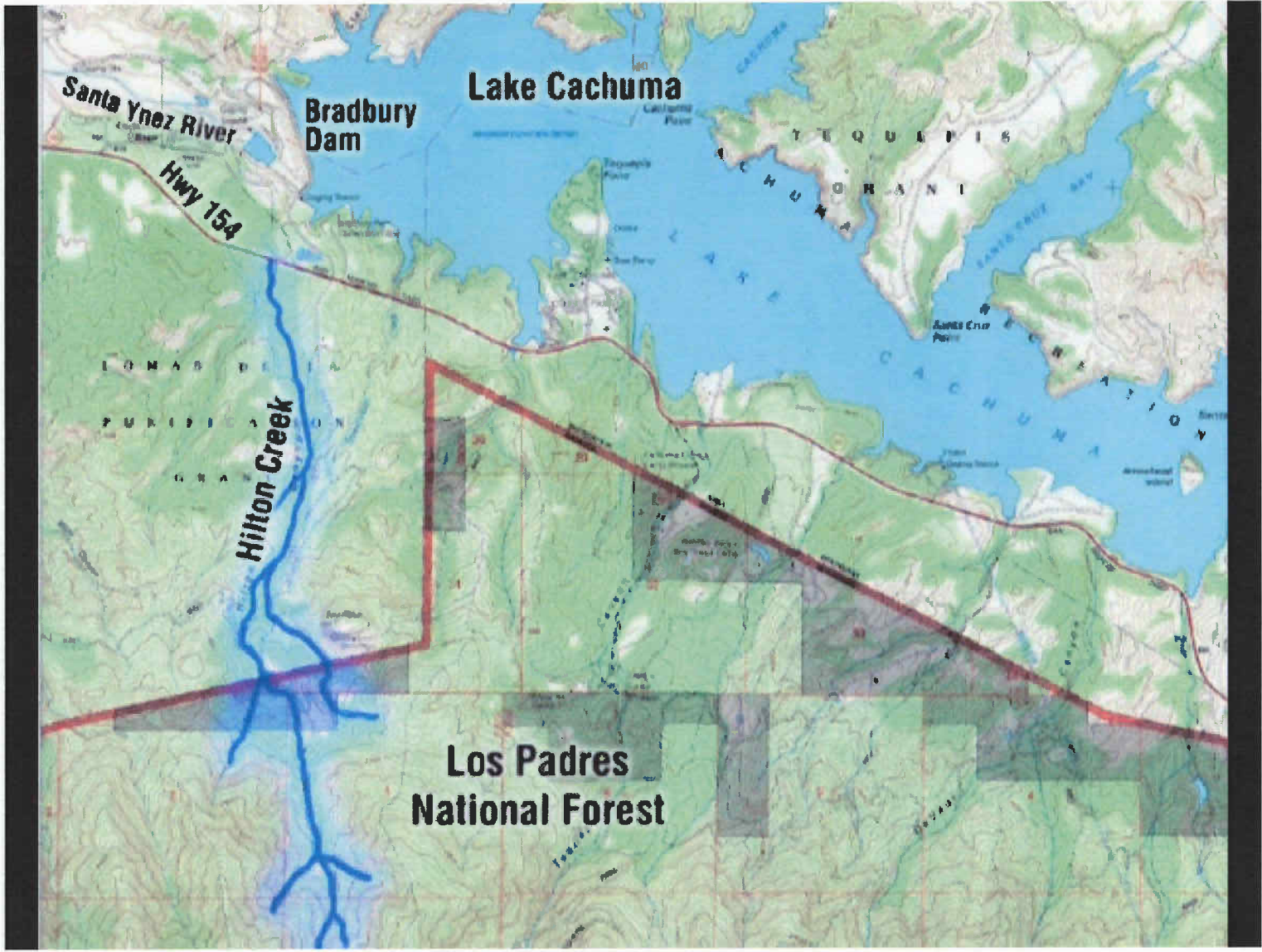
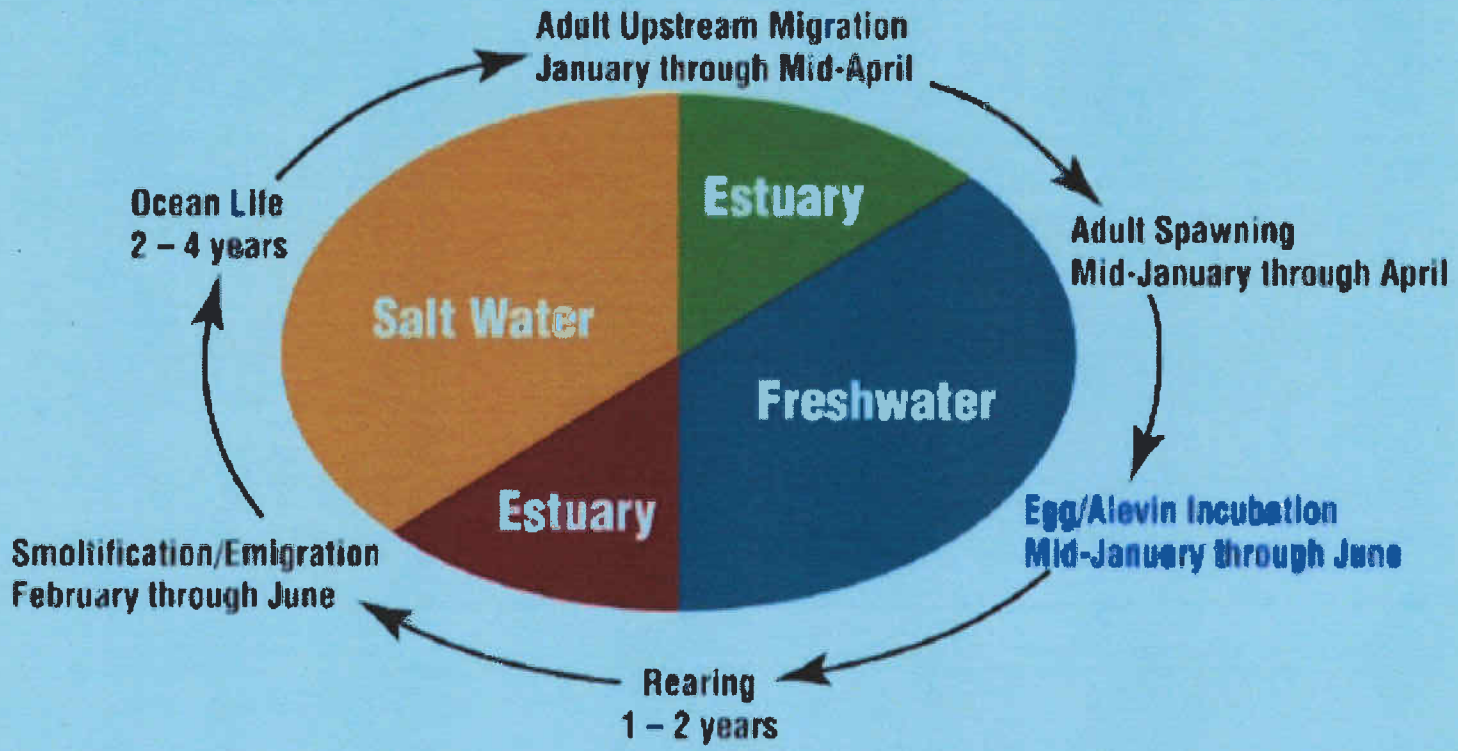


This video summarizes the physical habitat of Hilton Creek and identifies the needs of the steelhead during their various life stages. Based on this summary and the underlying research and surveys, this video also identifies the various characteristics present which make Hilton Creek unsuitable for steelhead above the Bureau of Reclamation's upper supplemental discharge point.





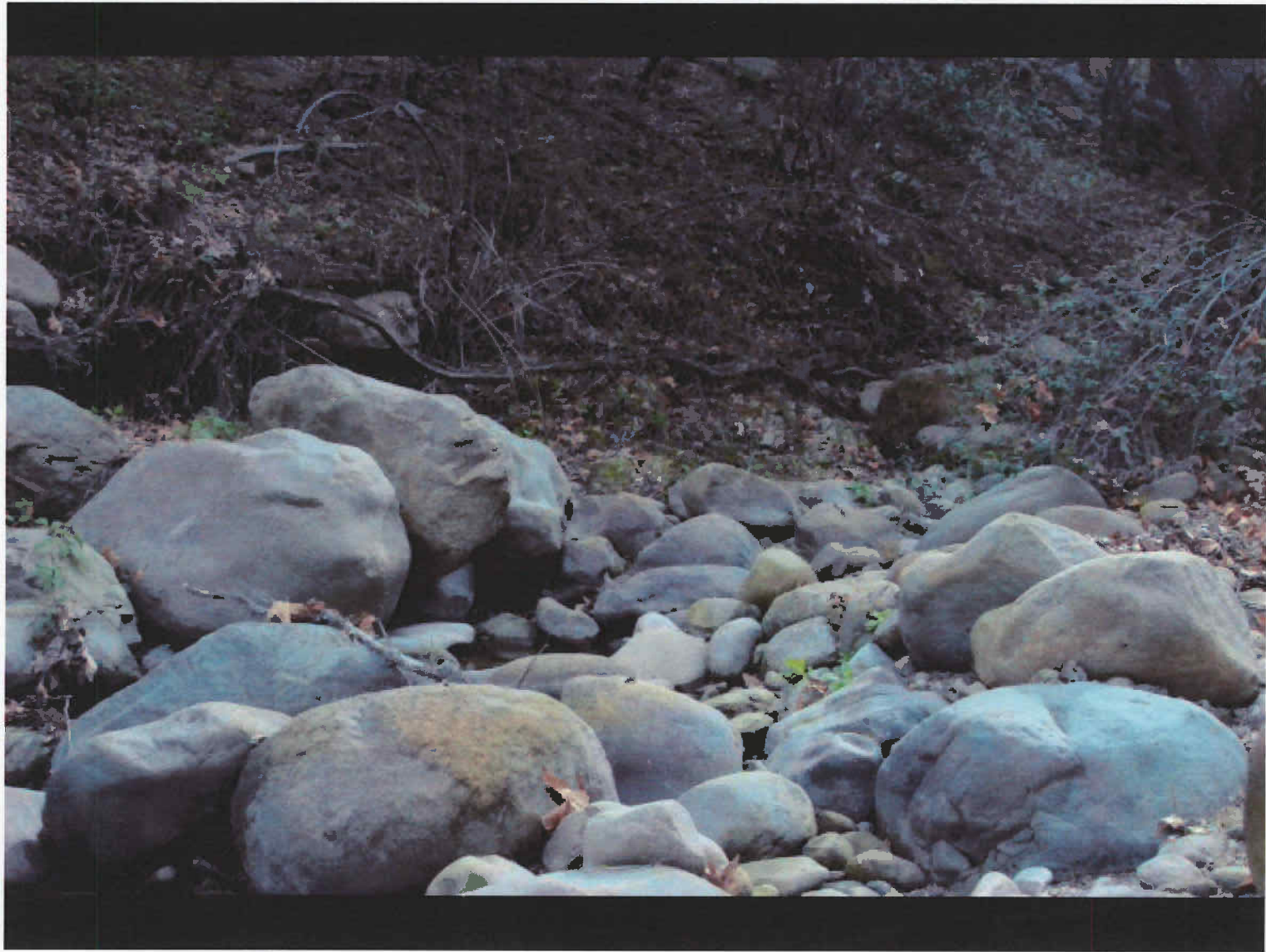



Life Stages of Steelhead

Rainbow or Steelhead?









We need to understand

> requirements

> conditions that limit
survival



Physical Requirements

- > Adequate water
- > Suitable spawning and rearing areas
- > Appropriate physical habitat
- > Adequate water temperature
- > Sufficient dissolved oxygen
- > Abundant food sources

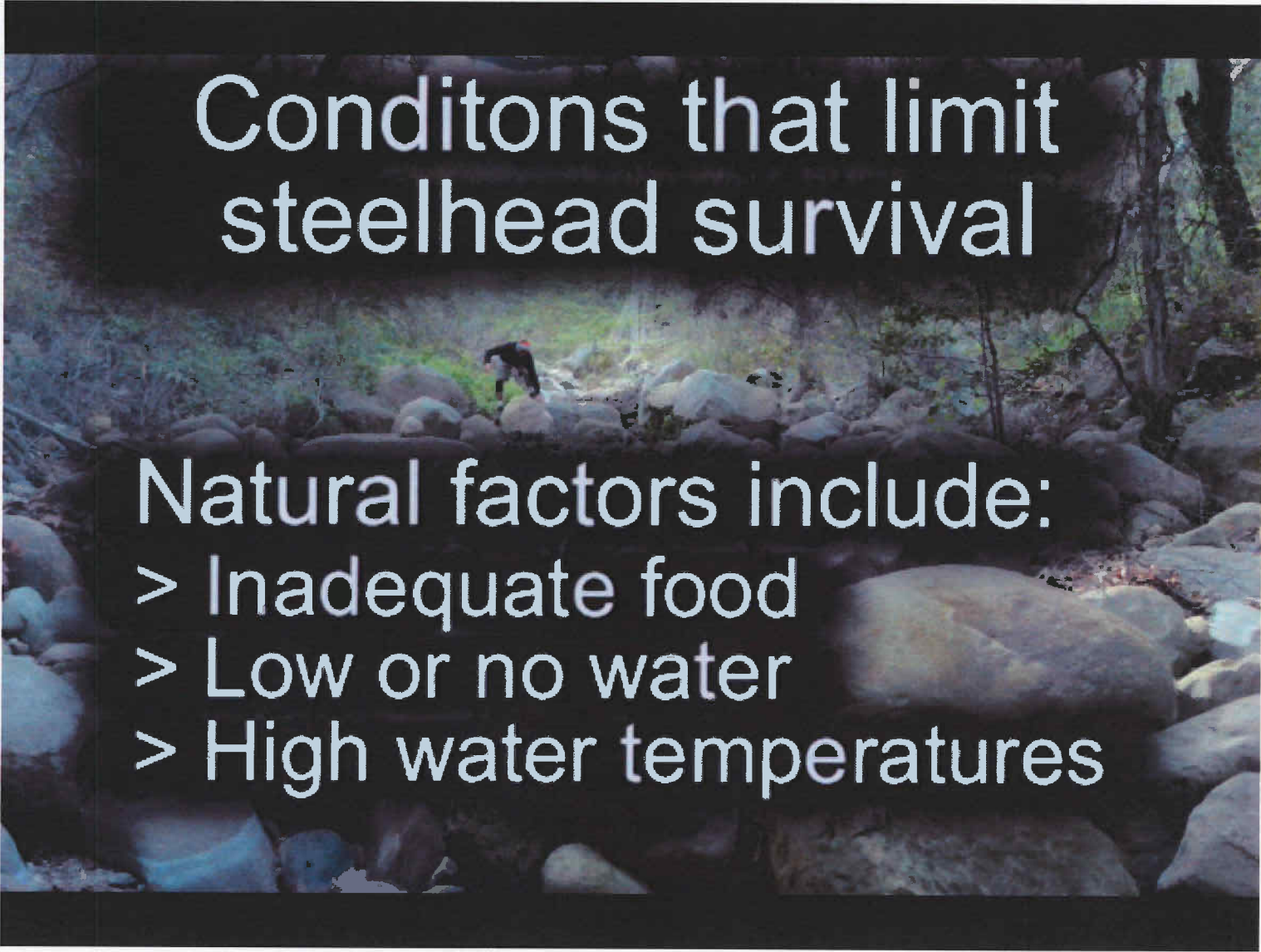


A photograph of a rocky streambed with a person in the background, used as a background for text.

Conditions that limit steelhead survival

Human factors include:

- > Impassible barriers
- > Lack of woody debris

A photograph of a person wading through a rocky stream. The person is wearing a dark jacket and a red cap, and is standing on a large rock in the middle of the stream. The stream is surrounded by trees and rocks, and the water appears to be shallow and clear. The background shows a dense forest with green foliage.

Conditions that limit steelhead survival

Natural factors include:

- > Inadequate food
- > Low or no water
- > High water temperatures

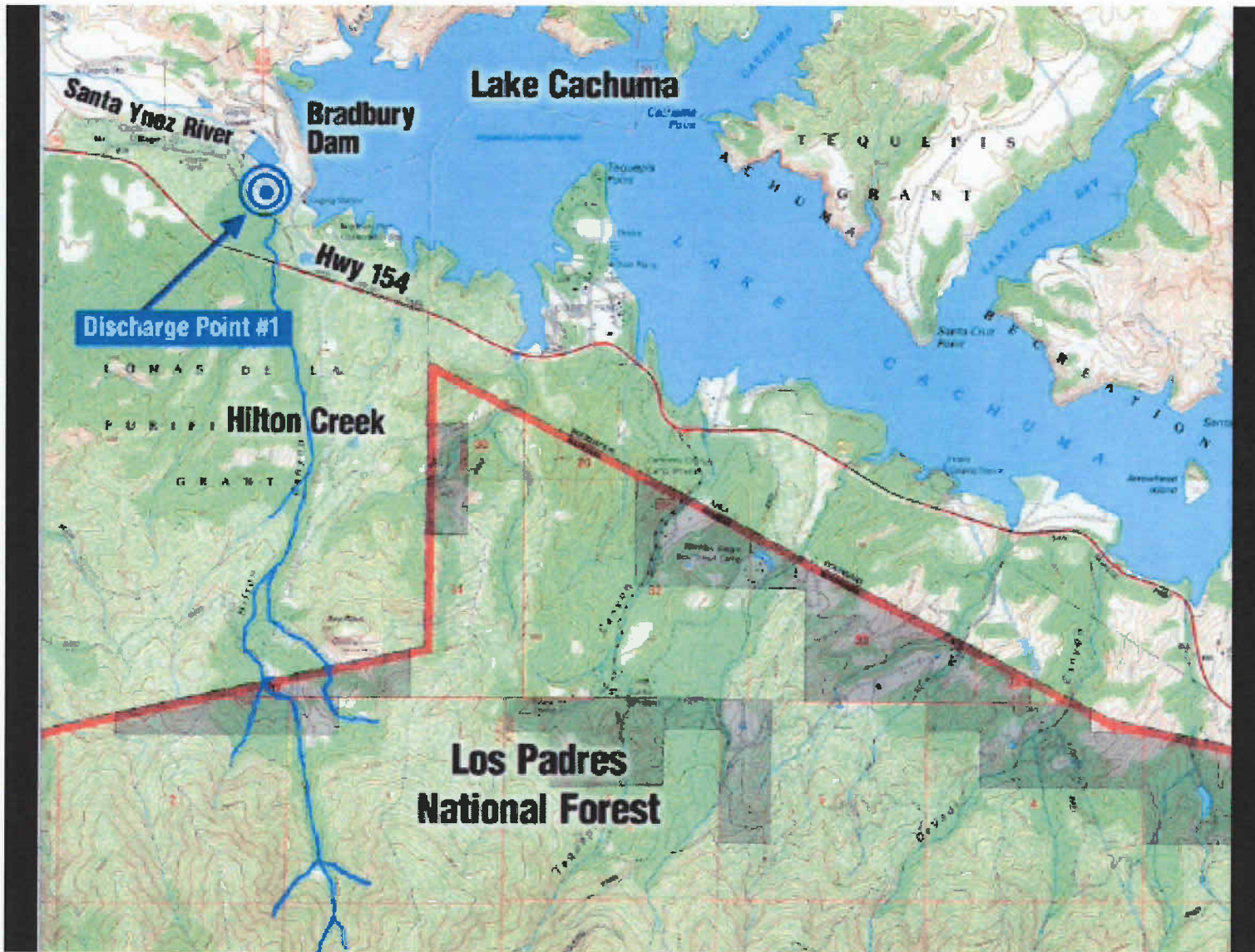


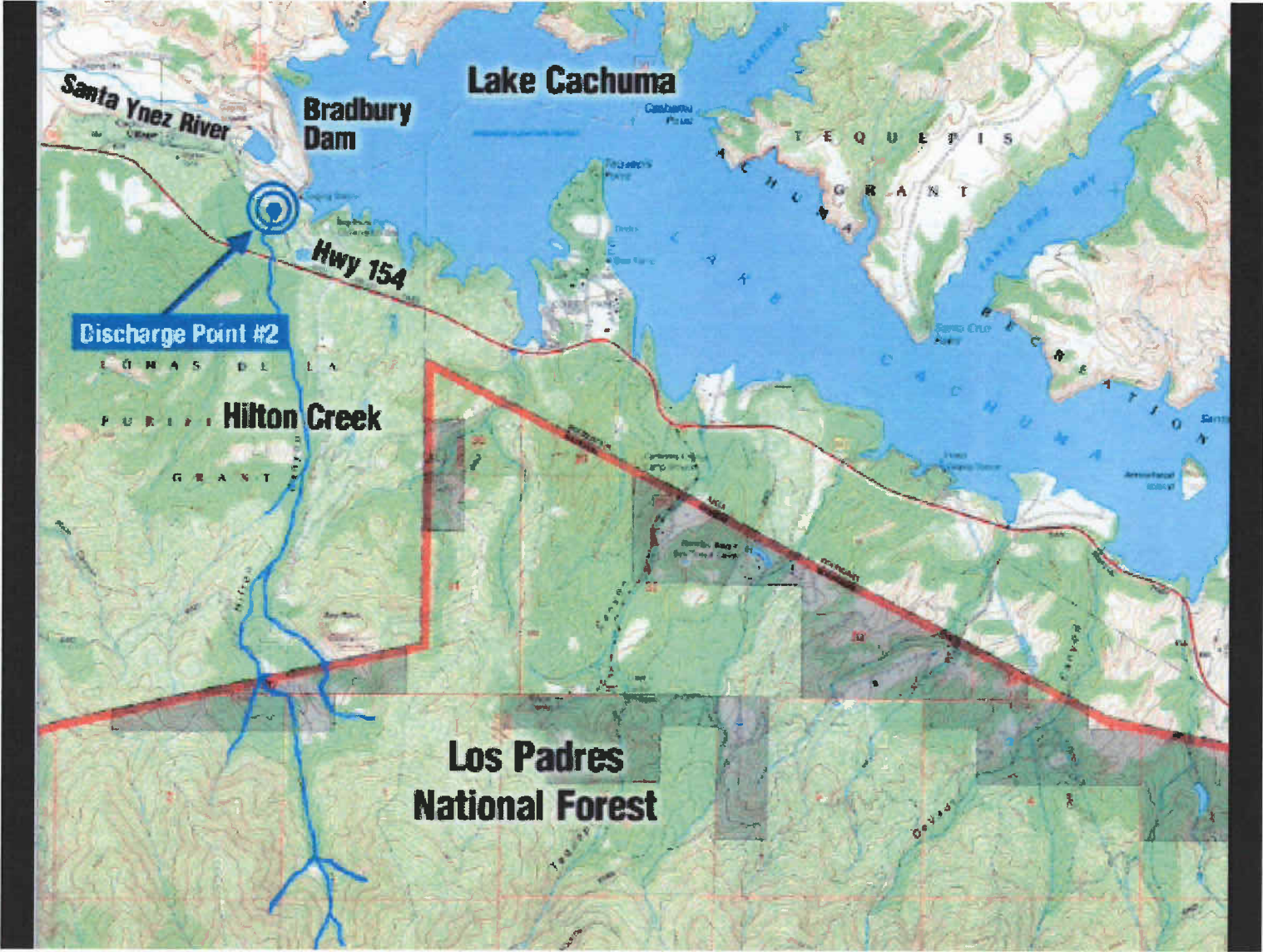
Physical Habitat for Steelhead

- > Adequate stream flows
- > Accessibility to habitat
- > Suitability of habitat

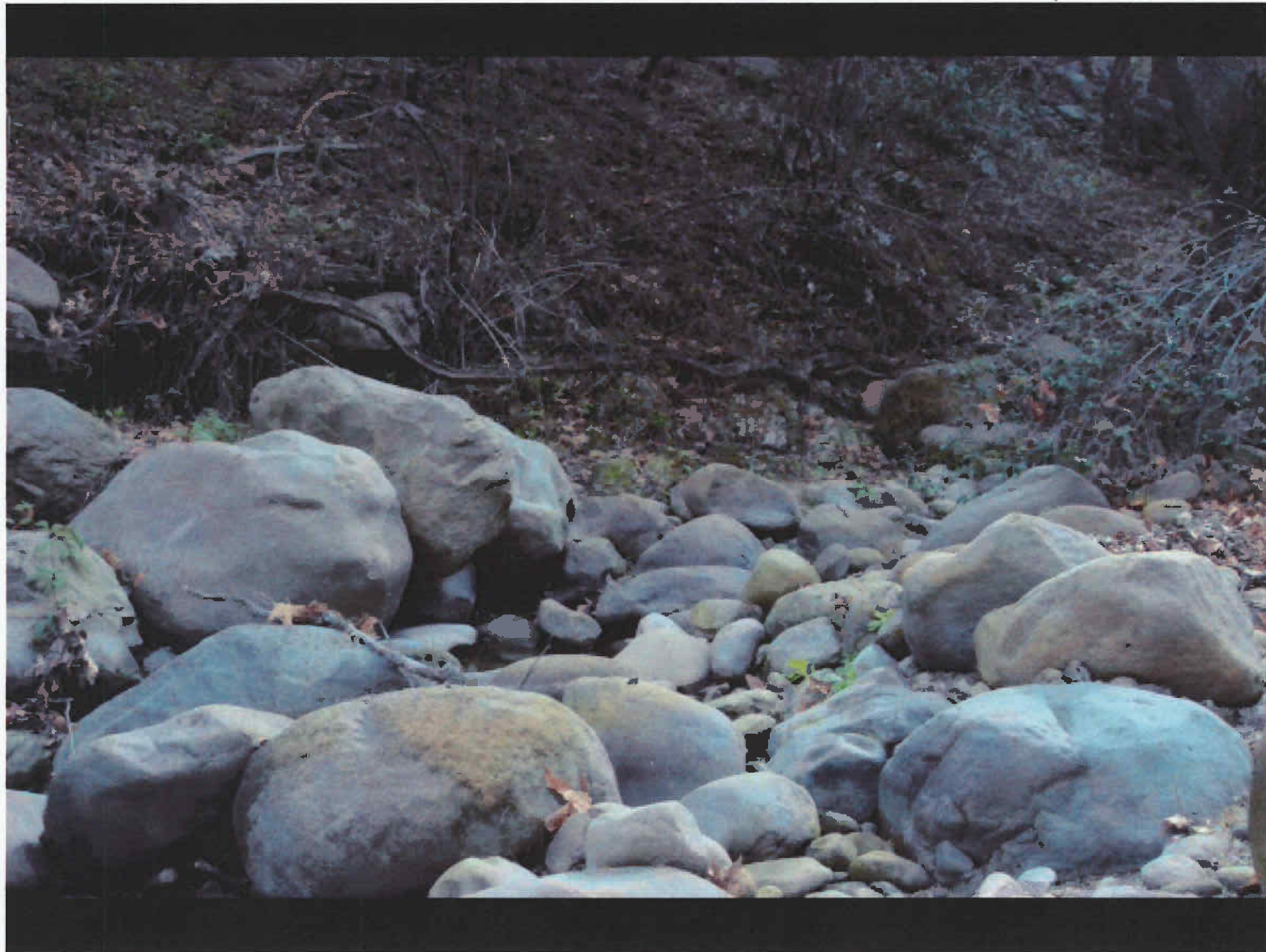
Adequate Stream Flows





















A photograph of a person standing in a rocky stream, surrounded by dense vegetation. The person is wearing dark clothing and holding a long, thin stick or pole. The stream is filled with large, smooth rocks. The background is filled with trees and bushes, some with yellow leaves, suggesting an autumn setting. The text is overlaid on the left side of the image.

Modifications will not:

> create habitat

> guarantee accessibility

- > habitat requires water
- > accessibility means fish can move



Suitability of Habitat







Hilton Creek

An Unsuitable Habitat for Steelhead

Developed by
A. A. Rich and Associates
Fisheries and Ecological Consultants

2003















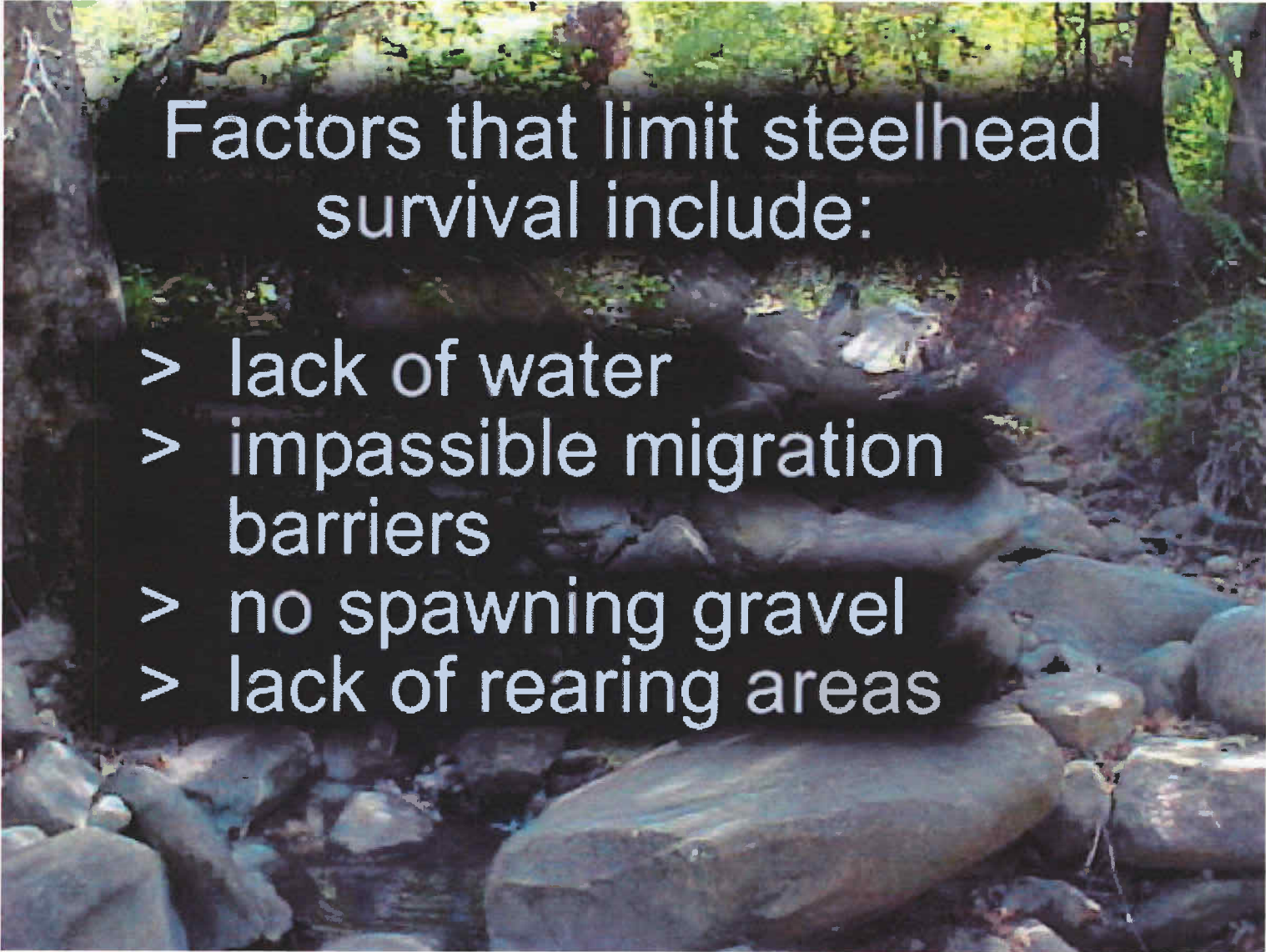






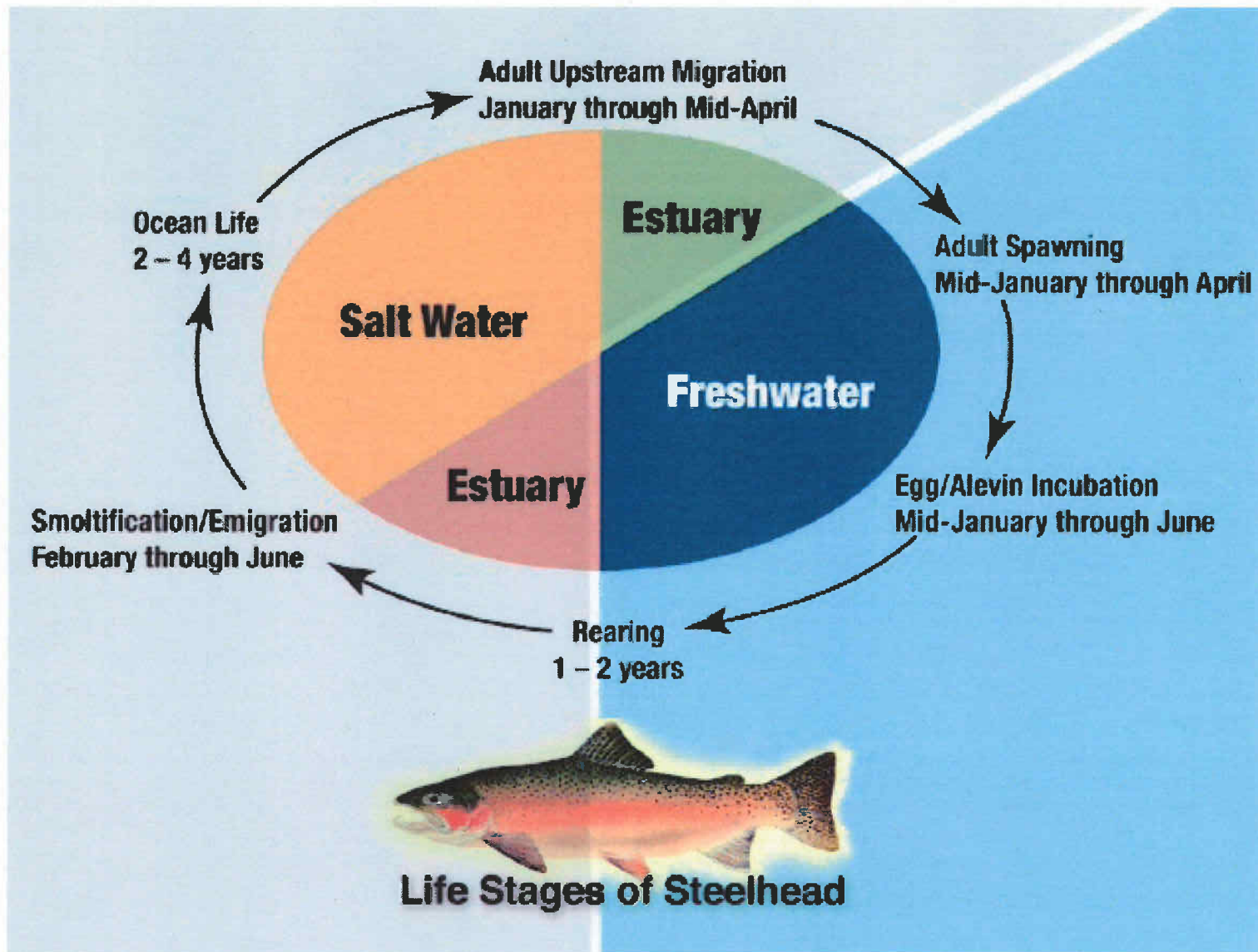


Viability of Habitat



Factors that limit steelhead survival include:

- > lack of water
- > impassible migration barriers
- > no spawning gravel
- > lack of rearing areas

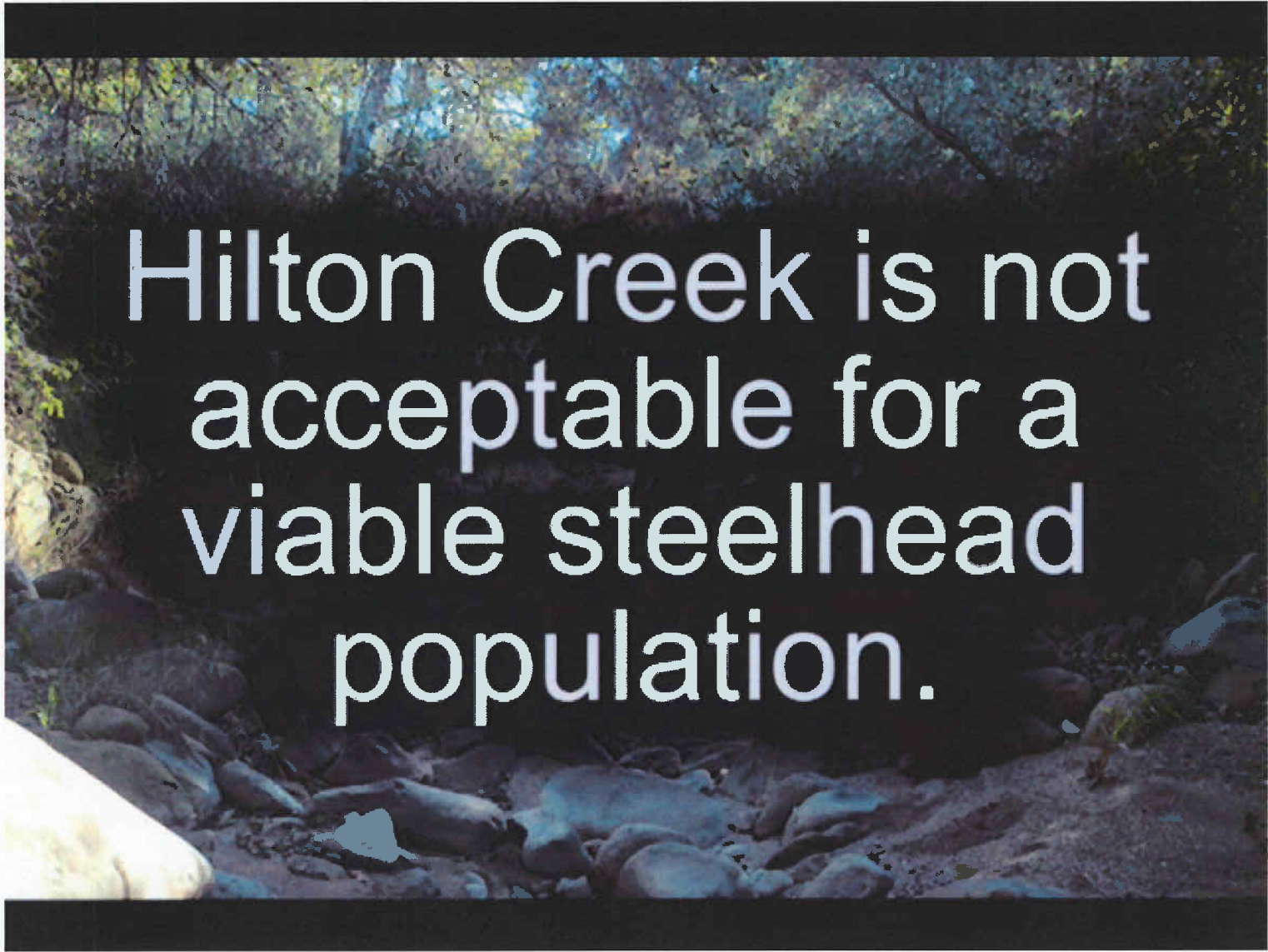


Life Stages of Steelhead







A photograph of a rocky stream bed in a forest. The stream is filled with large, smooth, light-colored rocks. The surrounding forest is dense with green trees and foliage. The text is overlaid in the center of the image.

Hilton Creek is not
acceptable for a
viable steelhead
population.

A photograph of a rocky stream bed in a forest. The water is shallow and clear, flowing over smooth, dark rocks. The surrounding forest is dense with green foliage. The text is overlaid on the upper portion of the image.

All video footage and photographs of Hilton Creek and the Santa Ynez River were taken by A.A. Rich & Associates on the following dates:

December 2001

June 2002

September 2002

February 2003

April 2002

July 2002

January 2003

May 2003



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Sources

- > California Fish and Game, Fillmore Fish Hatchery
- > Files related to Santa Barbara Court Case #1045423
- > Lower Santa Ynez River Fish Management Plan, Vol II
- > Santa Barbara Historical Society
- > Santa Barbara News Press