What’s up at Herring Cove?

(The changes started a long time ago... zoom to about 6000 years BP)

Coastal Science, History and Planning.

Mark Adams and staff from many NPS divisions
Longshore sand transport from ocean bluffs

Most sand dropped off near RPRS

Some sand goes around RP to HC

Sand deposited in Hatches spit unavailable to HC

Sand bypasses HC but accretes at Wood End

Longshore sand transport from ocean bluffs

Wood End overwashes / temporary channel, (1978, 1999, 2018) enhanced by the breakwater

HH Sand spit

HC north erosion hotspot
1836 shoreline
Then and now: maintaining the revetment until it was inundated.
The 1940s bathhouse was a concrete bunker built in response to the 1938 hurricane. It was structurally unsound, rusted and in the path of coastal retreat when it was removed.

Adaptive design for a new bathhouse.
The new design is modular set on pilings, ready to be moved in the coming decades.
Planning a new parking lot
Herring Cove north parking lot (existing - projected) designed for 3-5 feet/year of coastal retreat.

Parking lot to be moved 140 feet inland from previous location (on the current road layout – with the road rerouted inland). Contracting has been rapid for a Federal project but coastal retreat has outpaced planning. New lot will be partially paved with permeable materials.
Coastal management requires people management.
2018 Overwash/Breach at Wood End – survey locations
The overwash removed the primary dune revealing historical artifacts.
F.B.-SE.-Range. (1906)

This station marks the first beacon of the southeast range.

The beacon was erected during the latter part of 1906.

The beacon is 25 feet high. The top of the tripod is 12 feet above the top of the pier. The legs of the tripod are set in concrete piers, which extend below the surface of the ground. Each leg is bolted to three heavy iron shoes, which extend in and out of the pier.

Station Mark

A station mark consists of a piece of iron, two feet long, which is set in concrete and in the top of a concrete pier. The point of this nail projects 6 inches above the top of the pier. The distance from the top of the pier to the center of the concrete pier is 8.84 feet.

Standing in good

F.B. Fench, 1909.
Overwashed beaches tend to rebuild in quiet weather. Long shore sediment deposition will build a platform. Wind and beach grass will build dunes (subject to pedestrian trampling). The timeframe can be months or years depending on weather, sediment supply and disturbances.
Current road layout on 1836 Coastal Survey base map.