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2017 年 12 月 20 日，在 2017 年 12 月 20 日，
 2017 年 12 月 20 日，在 2017 年 12 月 20 日，
 2017 年 12 月 20 日，在 2017 年 12 月 20 日，

4. **DISSEMINATION.**
 (a) Give to the WHOLE community. There is good and bad information. There is also information that is false. You can say the
 (b) the whole.

[illegible]

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Village Inn.
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STAFFING CHANGES AND

Box 4 *Real-time
EPA Issues Replied
to by Sample Quality Co.
in June Letter to EPA
on 6/20/98*

PEOPLE LEAVE BY BUS
PAGE 2

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and Executive Vice Pres.
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President

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W. S. HALL, JR. & CO.
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1, 2, 4, 6, 17, 18, 19.

of the fact that the company is not a public company and is not subject to the same level of scrutiny as a public company. The company is a private company and is not subject to the same level of scrutiny as a public company.

W. H. HARRISON,
Architect, 1000 15th St. N.W.,
Washington, D.C.

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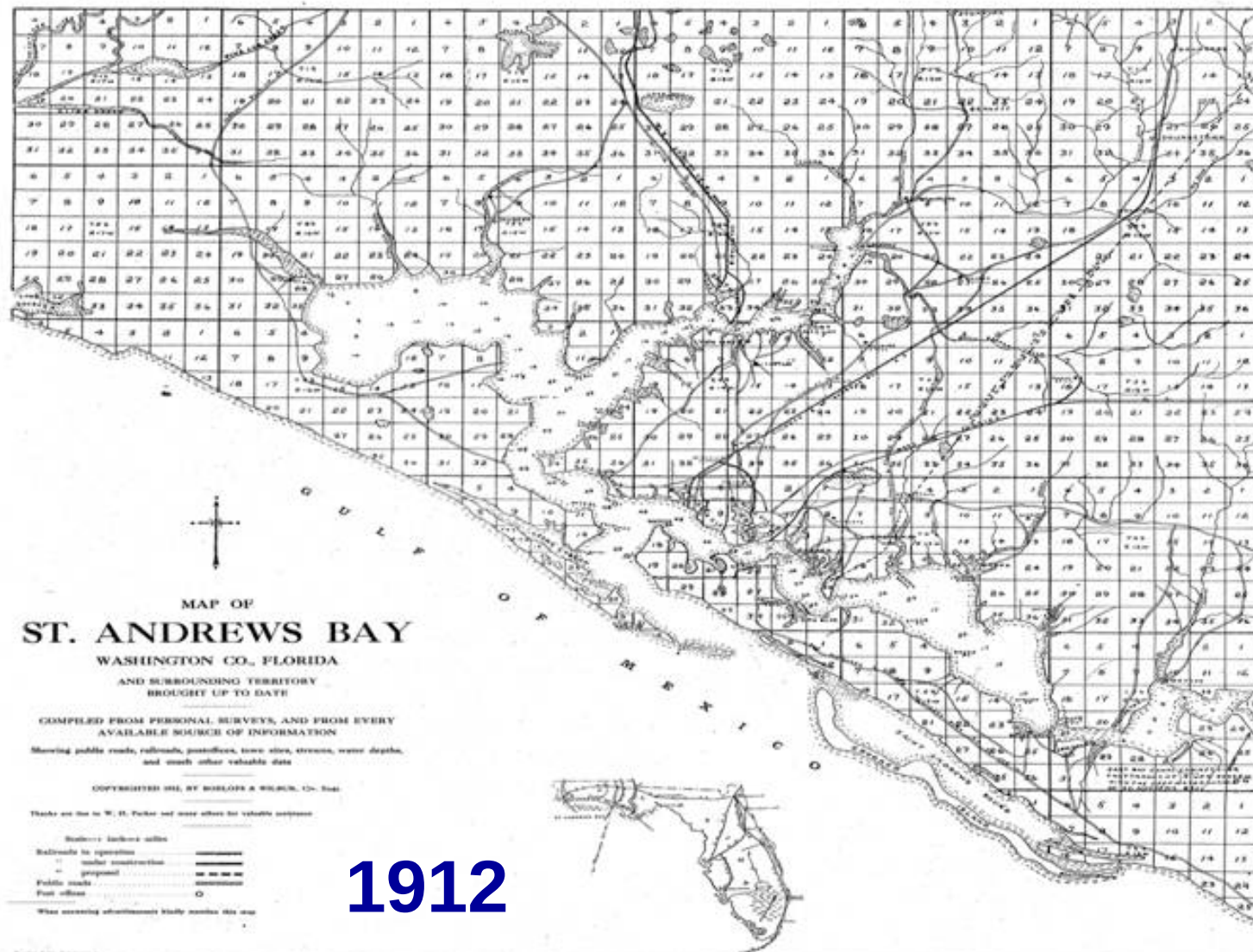
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...and the ...

[illegible]

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MAP OF
ST. ANDREWS BAY
WASHINGTON CO., FLORIDA

AND SURROUNDING TERRITORY
BROUGHT UP TO DATE

COMPILED FROM PERSONAL SURVEYS, AND FROM EVERY
AVAILABLE SOURCE OF INFORMATION

Showing public roads, railroads, postoffices, town sites, streams, water depths, and much other valuable data.

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Thanks go out to W. H. Parker and many others for valuable comments.

Statutory infrastructure	
Railways to operation	
- under construction	
- proposed	
Public roads	
Post office	○

When assessing administrative health status, this

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and larvae of *Staph. attenuatus* taken and reared in 100,000 Baco growing with wheat per day for at least 10 days. The larvae of *Staph. attenuatus* were found in all the above mentioned places. The larvae of *Staph. attenuatus* were found in all the above mentioned places. The larvae of *Staph. attenuatus* were found in all the above mentioned places.

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Plays of experience. Its
crafts work. Is. J. M. Fox
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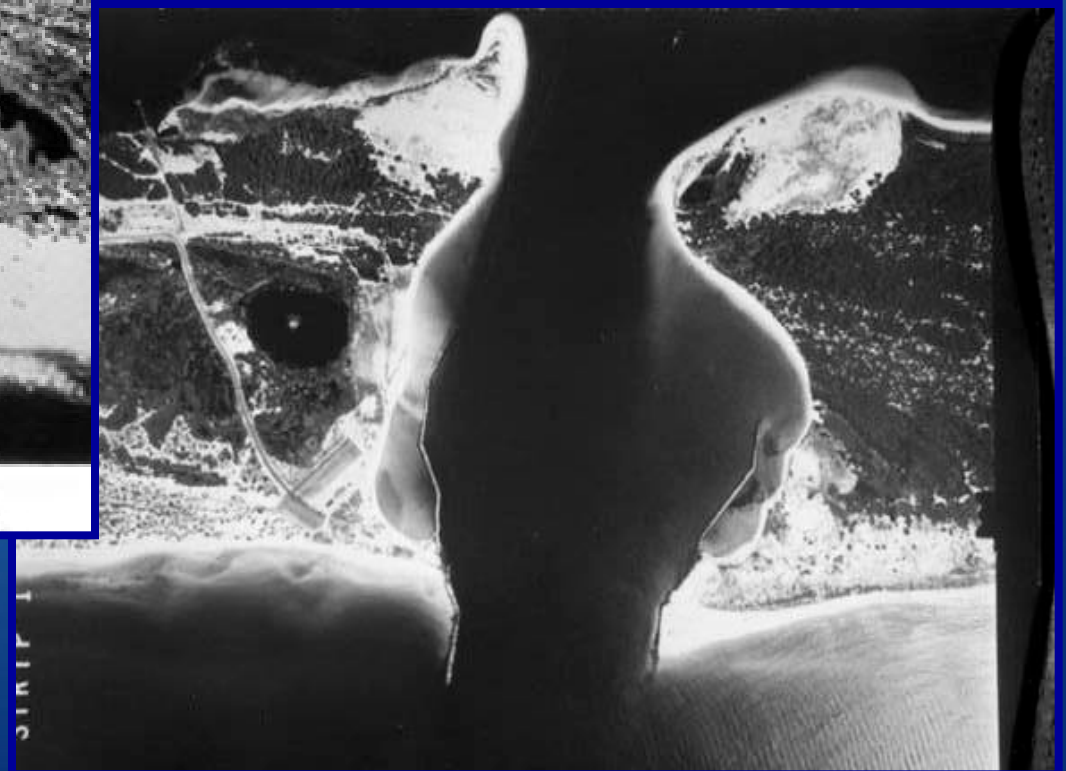


St. Andrews Bay Entrance Channel

1937



1934





St. Andrews Bay
Entrance Channel 1972

0 0

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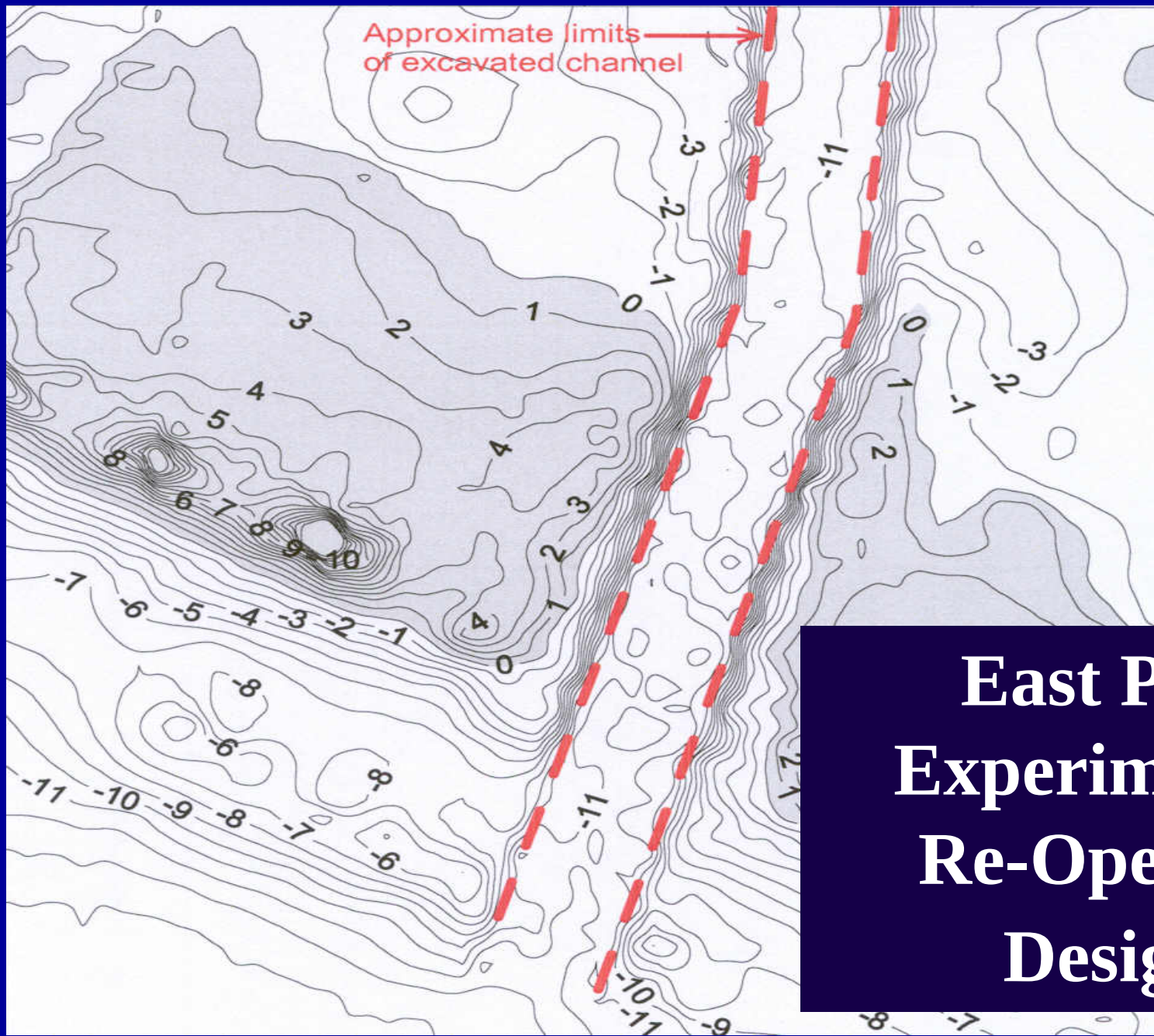
40 12000 1089-165

St. Andrews Bay
Entrance Channel 1990



St. Andrews Bay
Entrance Channel 1999

Approximate limits
of excavated channel



East Pass Experimental Re-Opening Design

An aerial photograph of a coastal waterway. A central, deep green channel runs vertically through the middle of the frame. On either side of this channel are large, irregularly shaped areas of light brown and tan sediment, likely sandbars or mudflats. These areas are separated by narrow, winding channels of water. The water in the central channel is a vibrant green, while the water in the surrounding areas is a darker, more muted green. The overall scene suggests a dynamic coastal environment with shifting sandbars and channels.

East Pass Experimental Channel

Monitoring Goals and Results

▶ Evaluate the response of St. Andrews Bay Entrance:

... No major hydrodynamic response at SABE

▶ Verify a theoretical “dual-inlet” system model:

... Model confirms

- historical decrease in East Pass stability with concurrent increase in size and stability of the Federal channel at SABE*
- prediction experimental East Pass channel may close because of insufficient size*

Monitoring Goals and Results

Continued

- ▶ Determine any water quality changes in Bay:
*... Generally beneficial to the eastern arm
of St. Andrews Bay behind Shell Island*
- ▶ Determine if the cut provides a natural divider
between the habitats of the St. Andrews Bay Beach
Mouse and the Choctawhatchee Beach Mouse:
*... Dune and vegetation restoration offered
protection to mouse habitat areas*
*... West Crooked Island mouse population
expanded eastward during the period*

Monitoring Goals and Results

Continued

► Provide qualitative and quantitative seagrass bed assessments:

... Overall percent cover did not change significantly at any of the sites

... Seagrasses that remained appeared to be very healthy.

Monitoring Goals and Results

Continued

► Determine/verify predicted shoreline response :

- ... Shorelines initially eroded as inlet expanded.*
- ... Accretional spit on the west now decreasing the erosion there, but deflects remaining channel to eastern shoreline, increasing erosion on that side.*
- ... Tropical Storms Hanna and Isidore masked cause-effect relationship*



December 2001

East Pass Results



July 2003



2004

Current Environmental Issues

- Mobile Army Corp of Engineers District
 - Conduct an Environmental Impact Study
 - Complete Environmental Related Tasks
 - Estimated Cost (2009) = \$760,000
 - Estimated Timeframe = 36 Months
- A Federal Permit cannot be issued until a Florida Regulatory Permit is obtained

Current Environmental Issues (Continued)

- Florida Department of Environmental Protection
 - Comply with Florida Coastal Zone Protection Act
 - Need Beach and Inlet Management Plan
 - Estimated Cost = \$100,000
 - Meet Coastal Zone Criteria
 - Be Hydraulically Stable Under Normal Condition
 - No Shoreline Stabilization
 - Restore Water Quality in disturbed coastal ecosystems
 - No Adverse Impacts
 - Provide a public benefit
 - Full Participant in Federal NEPA Process

Restoration Plan Goals & Objectives

- Economic Development and Job Creation
 - Recreation, public transportation and opportunities for wage improvements
 - Conserve and protect natural resources
 - Promote recreational Gulf fishing
- Environment
 - Improve and protect the St. Andrew Bay watershed
 - Improve and protect water quality
 - Protect seagrass beds
 - Preserve and restore dune systems and living shorelines
 - Contribute to the protection and recovery of protected species

Phase I – Environmental Studies

- Environmental Impact Statement = \$860,000
- Beach and Inlet Management Plan = \$140,000

