

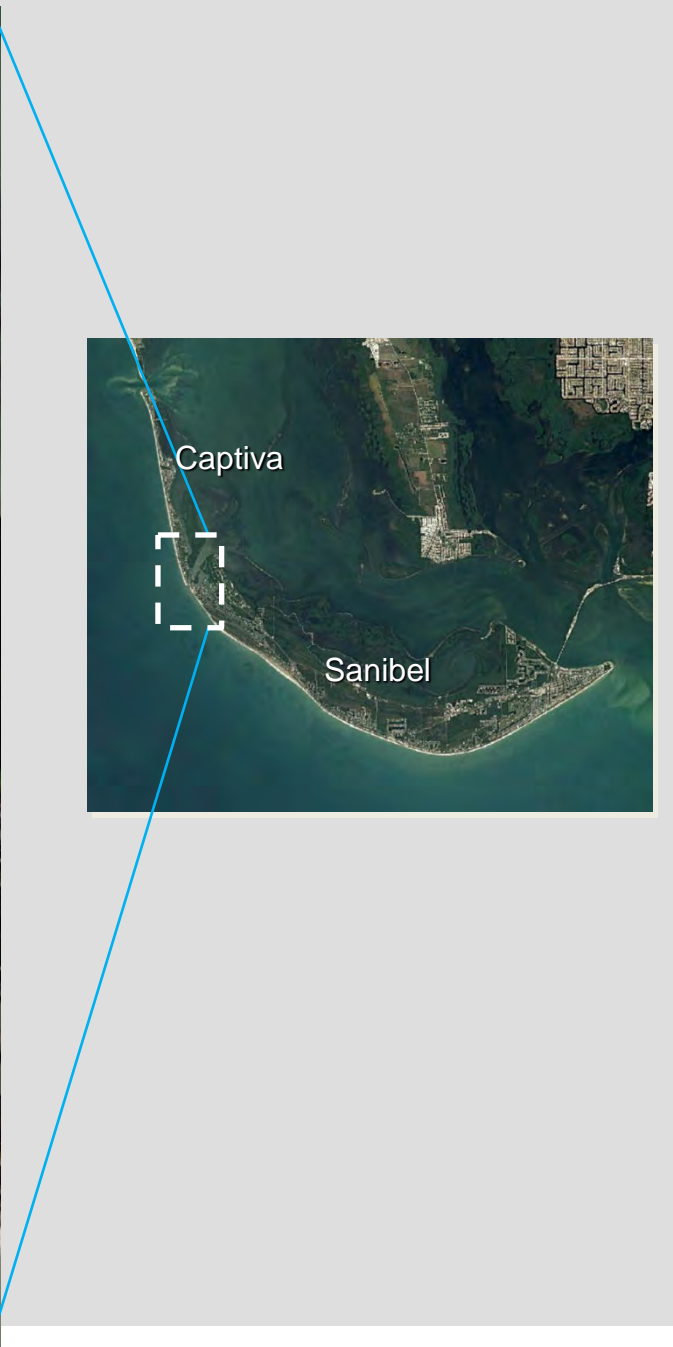
CITY OF SANIBEL ISLAND STRATEGIES TO MANAGE INLET DOWNDRIFT IMPACTS

2020 FSBPA
63rd Annual Conference



Presented By: Brett D. Moore, P.E., D.CE

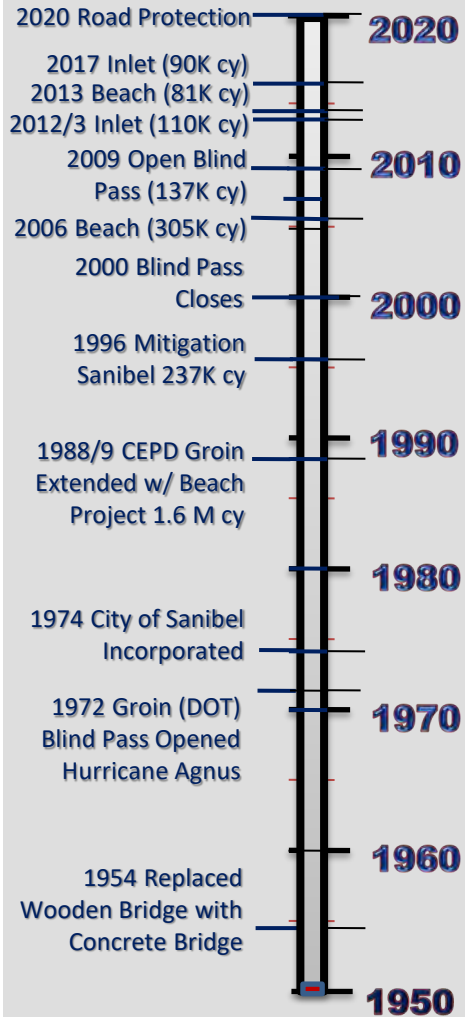
Humiston & Moore Engineers



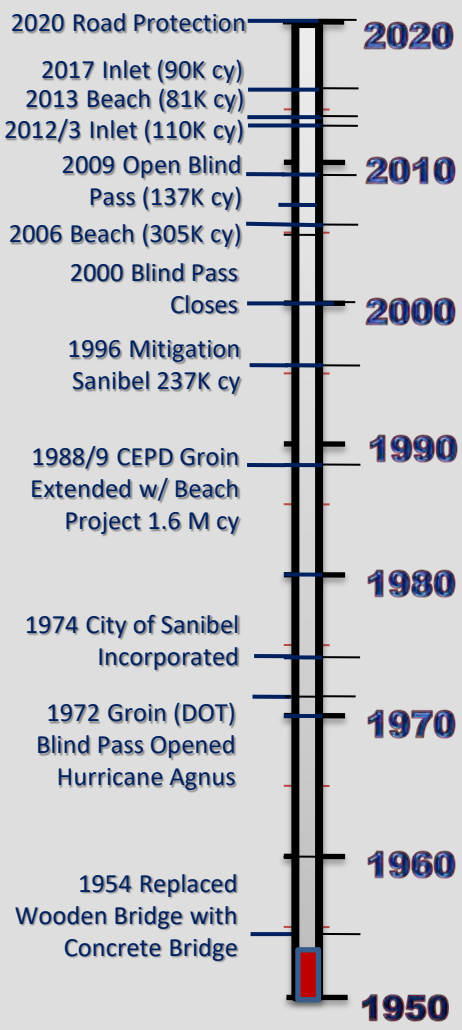
OUTLINE

- **EVALUATION OF DOWNDRIFT SAND DEFICIT – ALONG NORTH SANIBEL COASTLINE**
- **PAST MITIGATION STRATEGIES - SAND PLACEMENT**
- **2020 SHORE PROTECTION PROJECT: SANIBEL CAPTIVA ROAD EVACUATION ROUTE**
- **PLAN FORWARD – CURRENT OPTIONS**
- **SUMMARY**

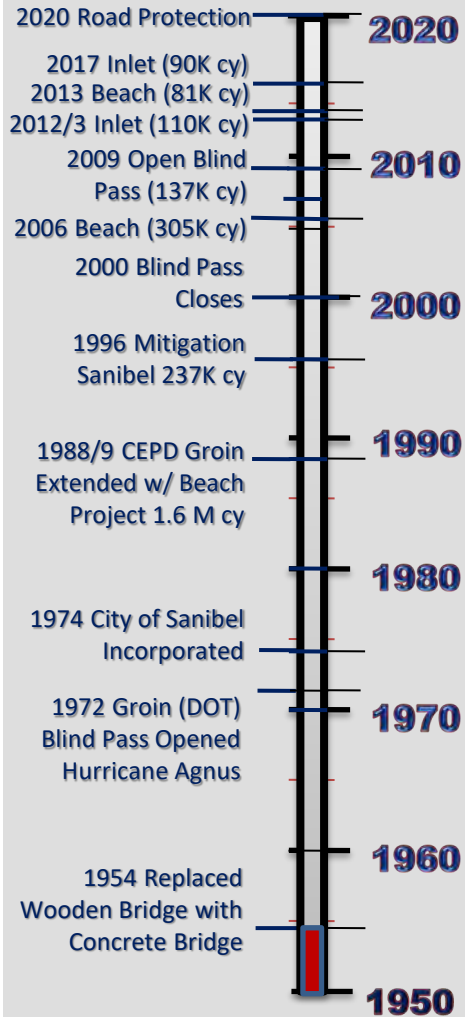
1950 Sanibel – Captiva Wooden Bridge



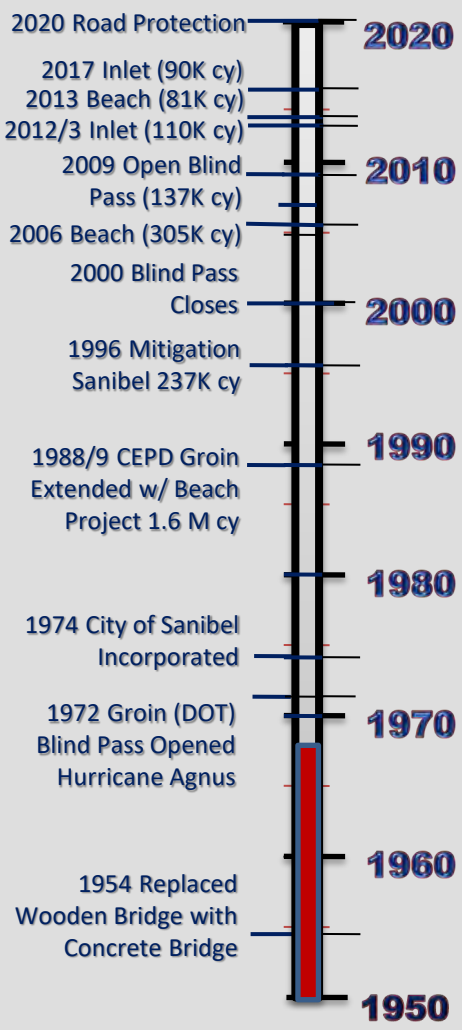
1953 Condition



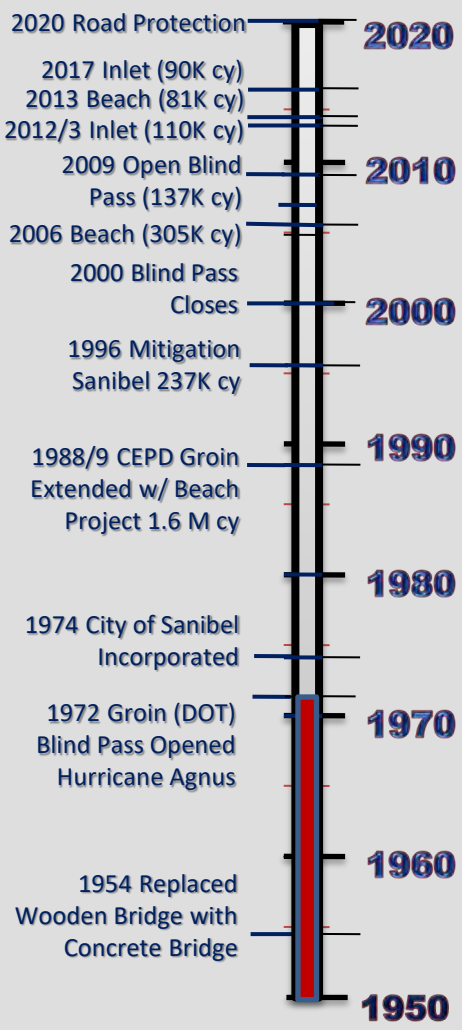
1954 Sanibel – Captiva Wood Bridge



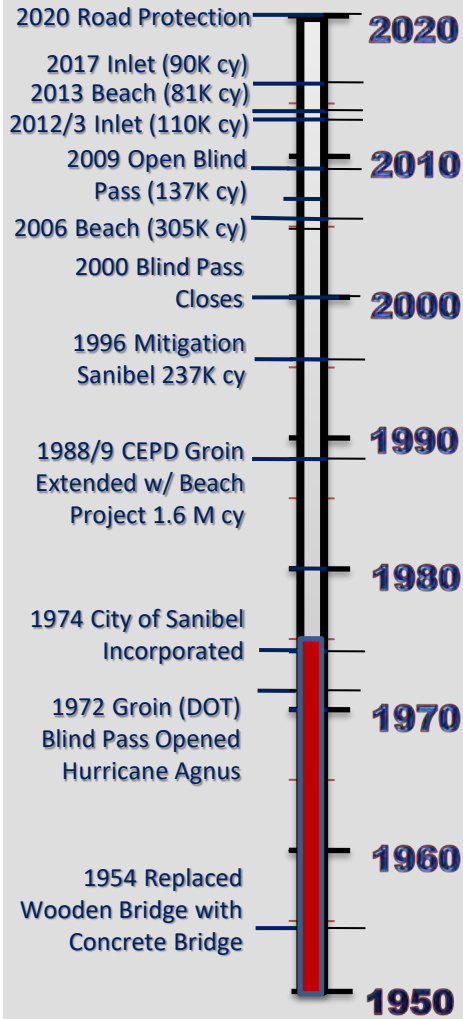
1968 Blind Pass Closed



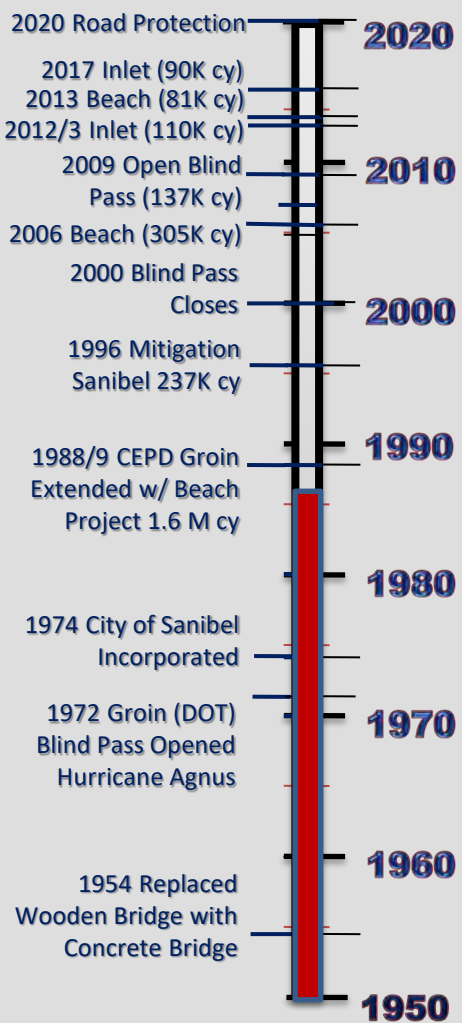
1972 Sanibel – Captiva Prior to Groin



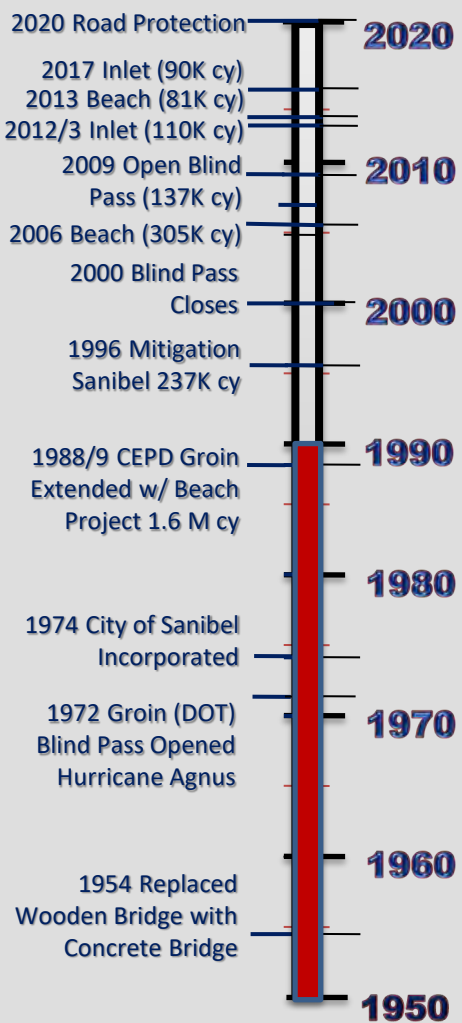
1975 Blind Pass Post Groin and Inlet Opening



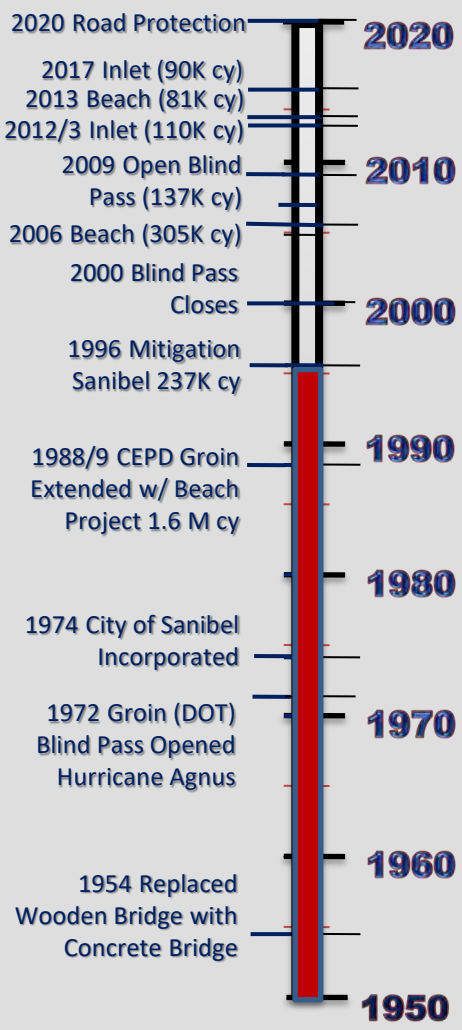
1986 Blind Pass Pre-Groin Extension (CEPD)



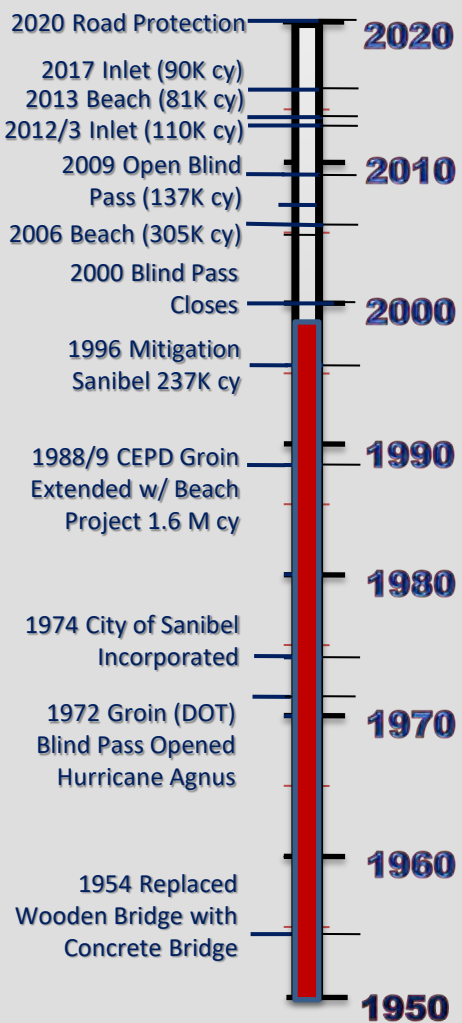
1990 Blind Pass Post Groin Extension (CEPD)



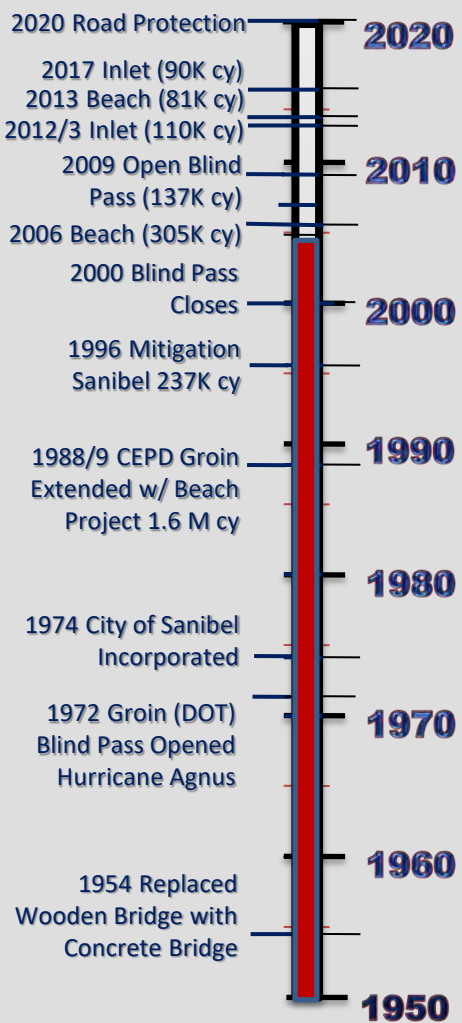
North Sanibel Pre-Fill (CEPD) 1996



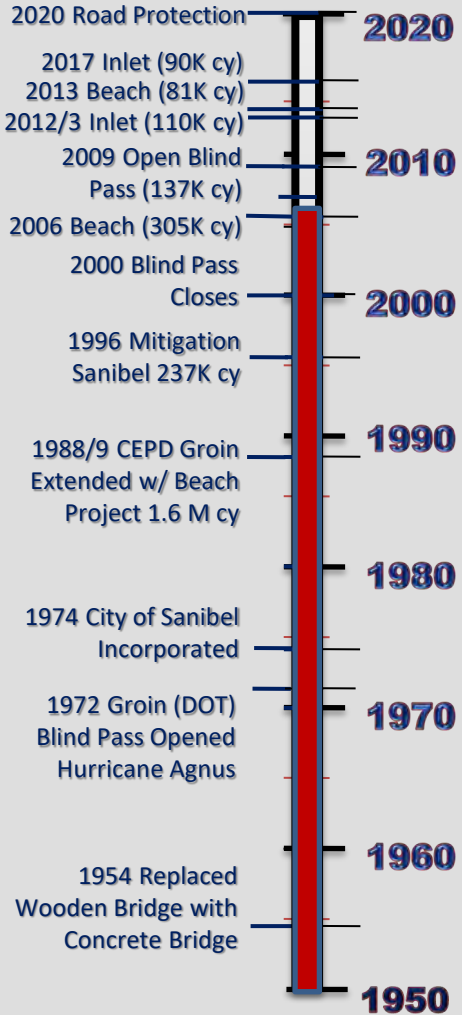
1999 North Sanibel Post Fill (CEPD)



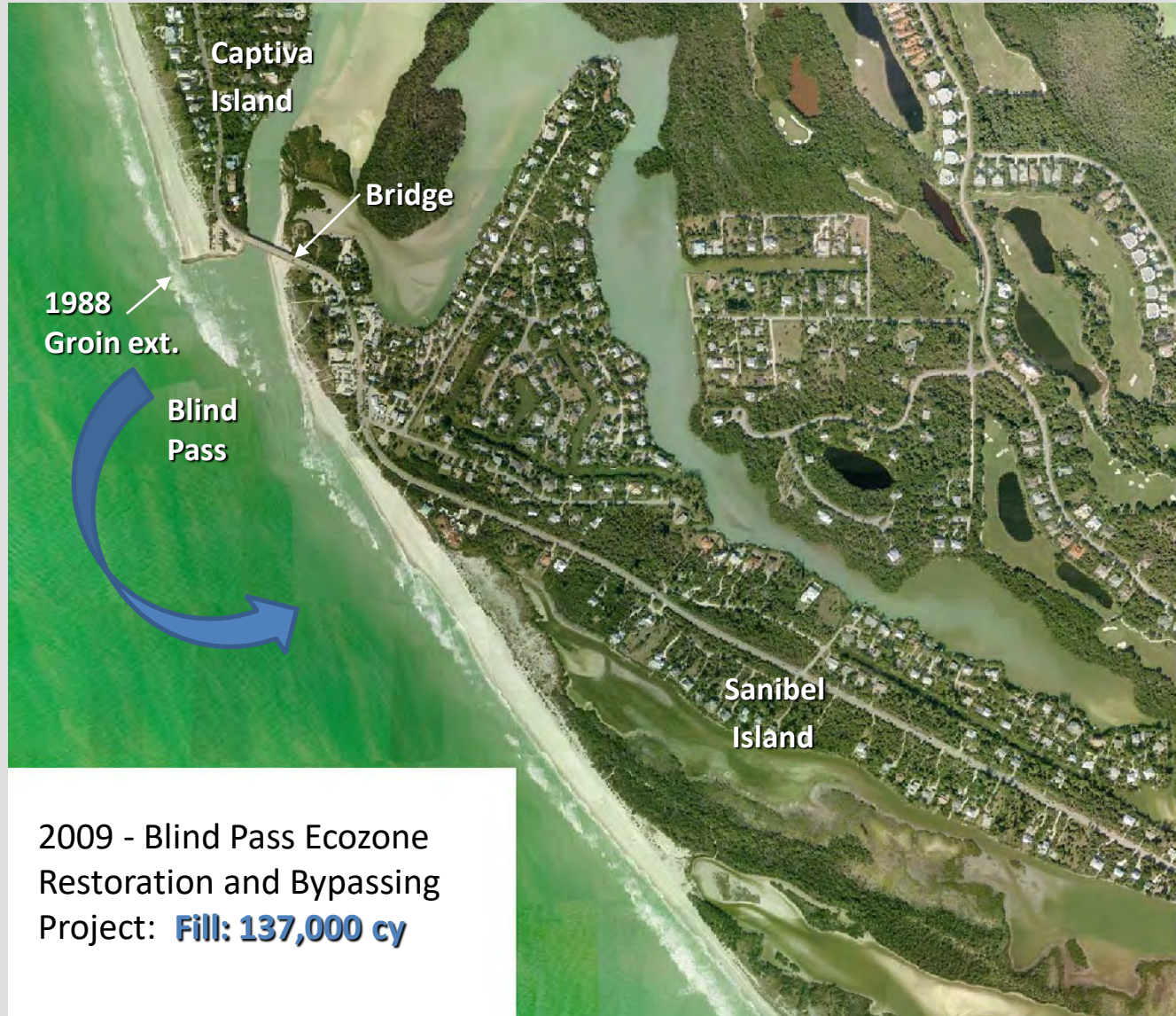
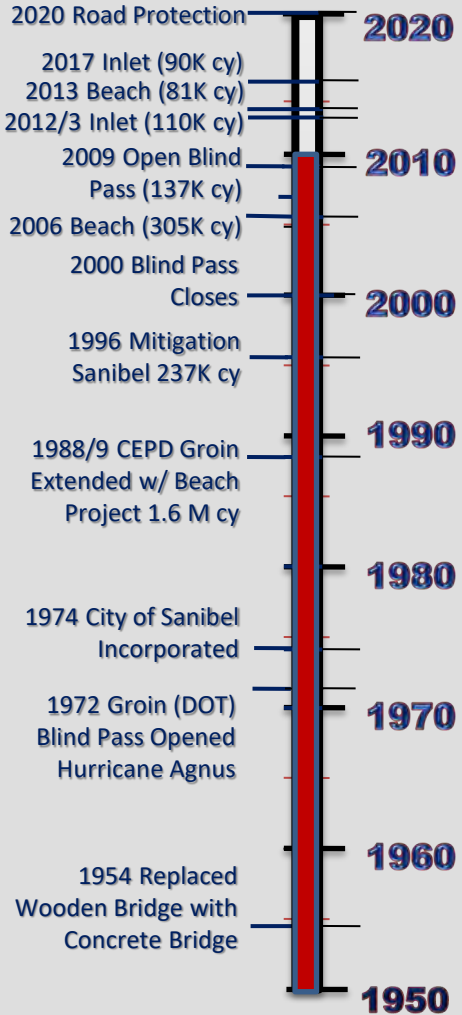
2005 North Sanibel Pre-Fill (CEPD)



2007 Post Opening Blind Pass and Fill



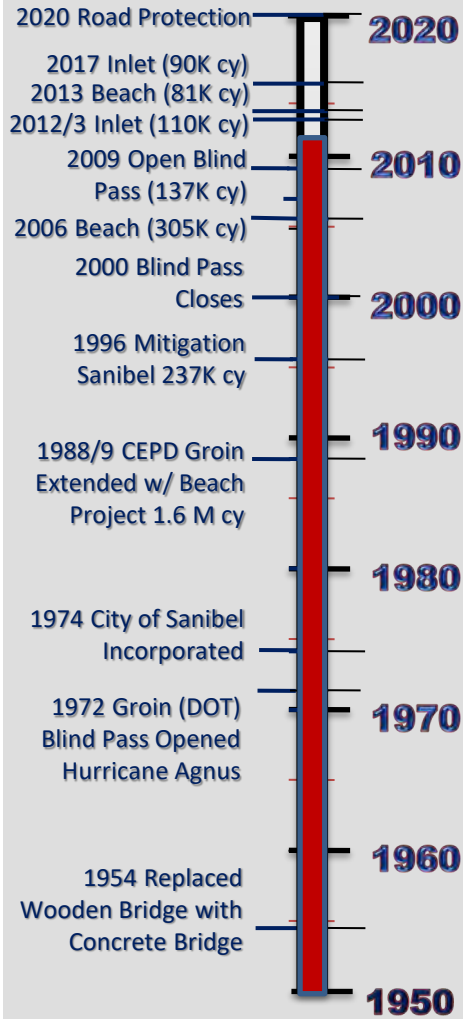
2010 Post Opening Blind Pass and Fill



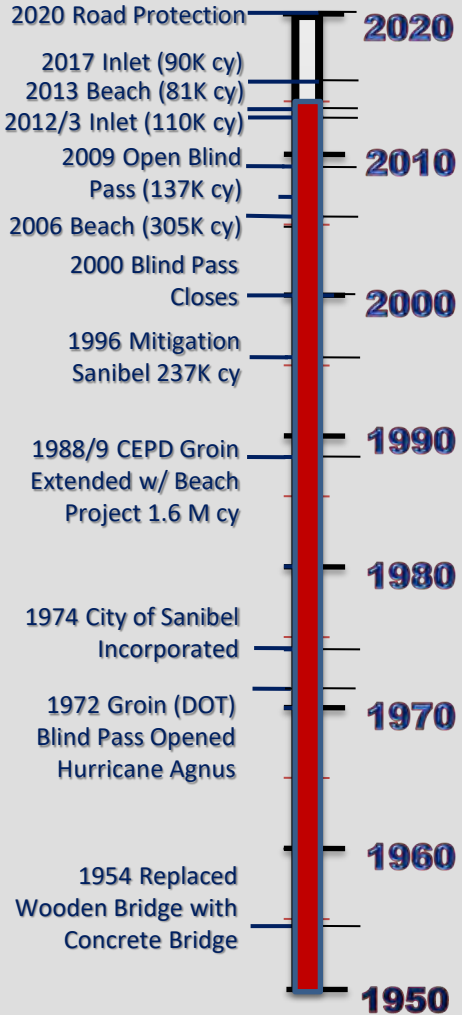
2009 - Blind Pass Ecozone Restoration and Bypassing Project: **Fill: 137,000 cy**



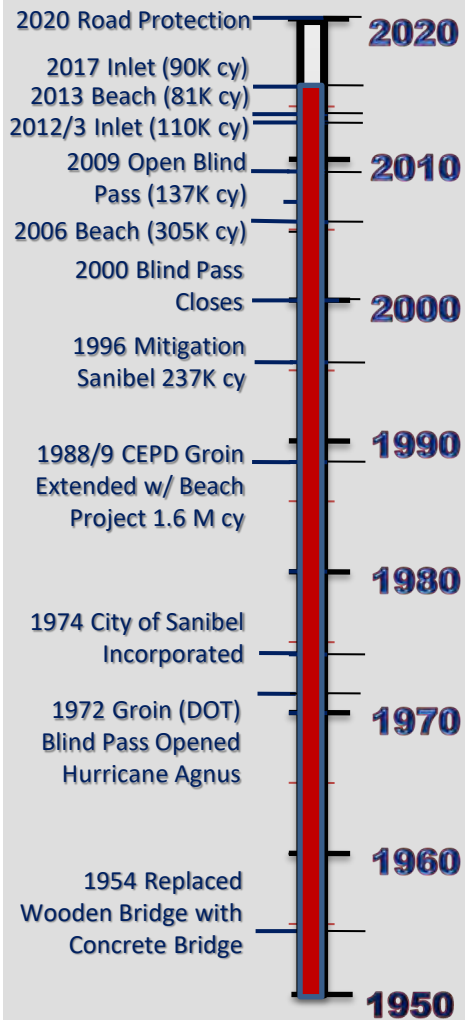
2012 Pre-Blind Pass Maintenance Dredge and Fill



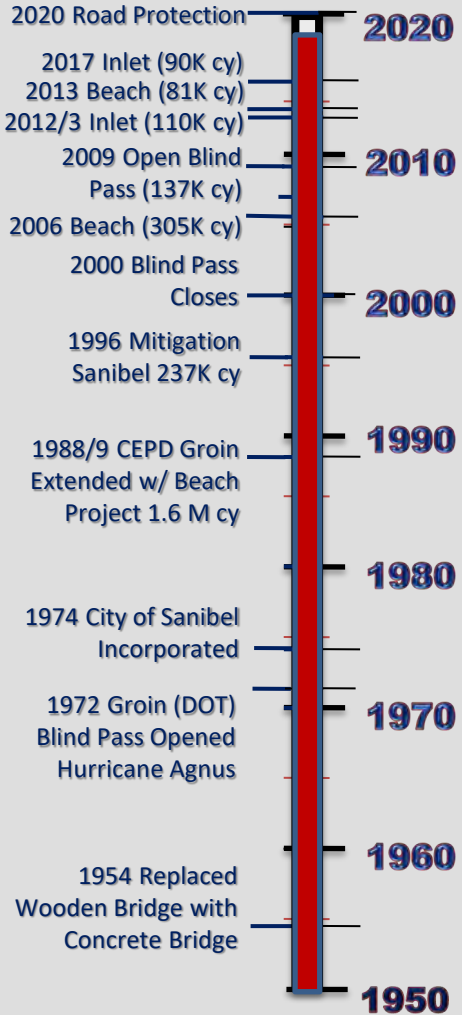
2014 Post Blind Pass Maintenance Dredge and Fill



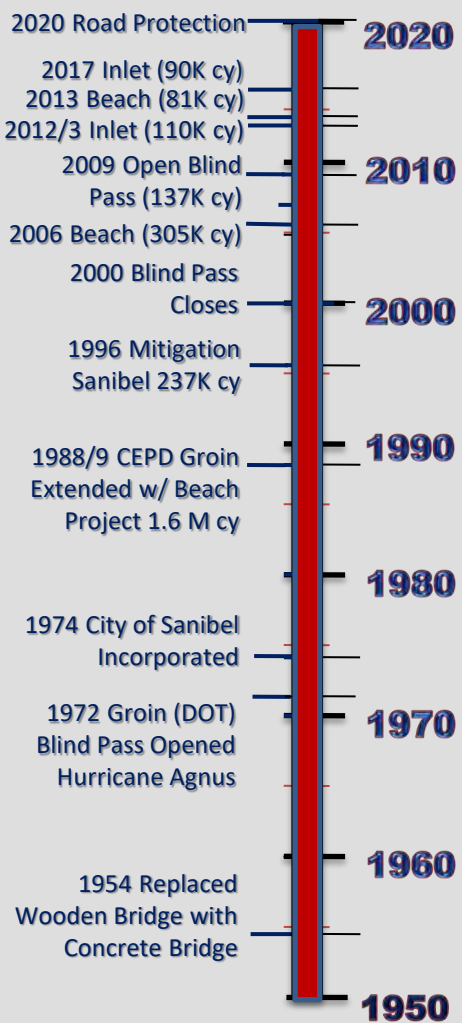
9-20-2017 Post Blind Pass Maintenance Dredge & Irma



2019 Two-Yr Post Blind Pass Maintenance Dredge



2020 Three-Yr Post Blind Pass Maintenance Dredge



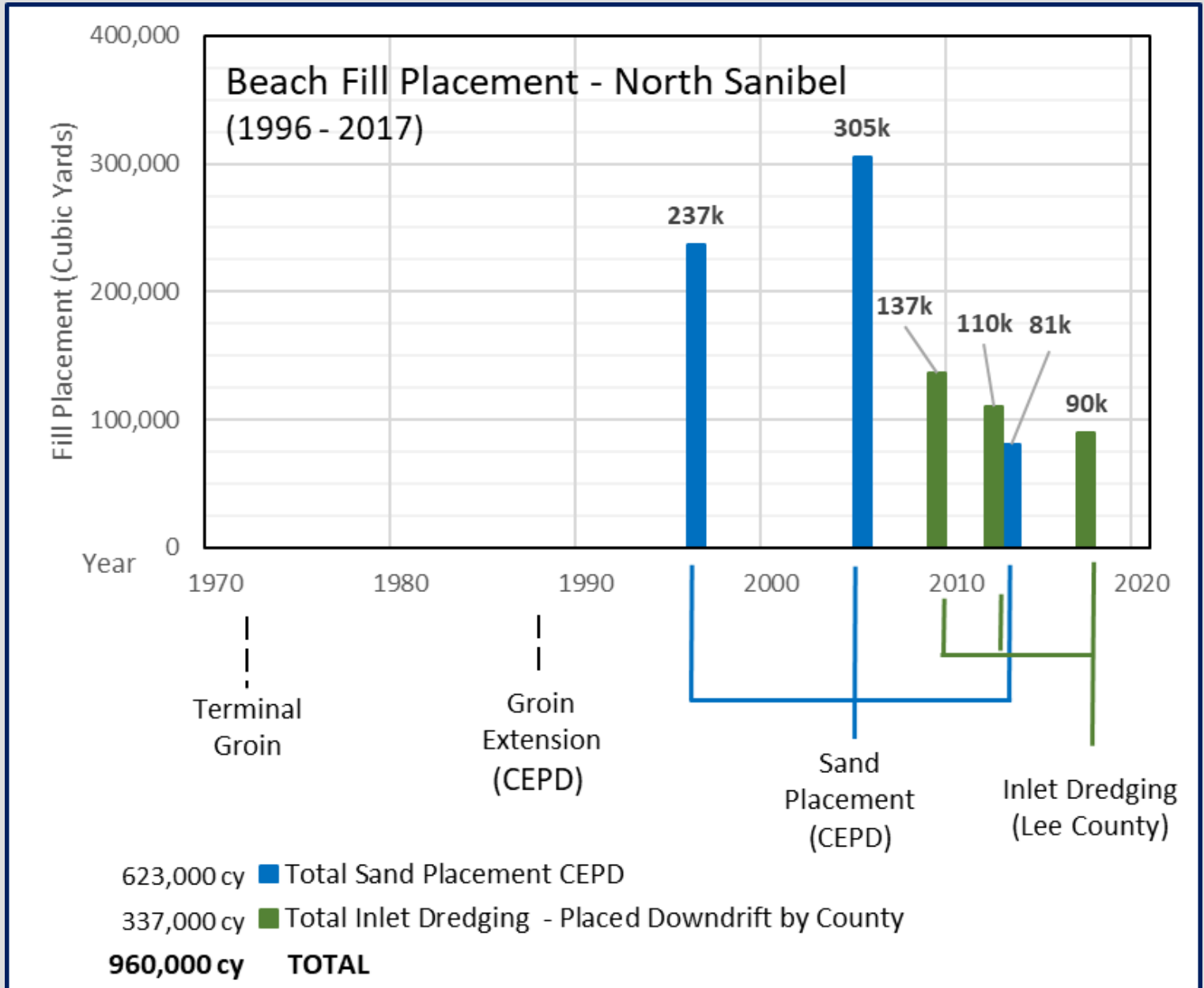
FILL PLACEMENT STRATEGIES ON NORTH SANIBEL

MITIGATIVE SAND PLACEMENT:

- **1996 - CEPD PLACED MITIGATIVE SAND**
- **2000 – 2015 CEPD & SANIBEL INTERLOCAL AGREEMENT**
- **FOR CEPD TO PLACE ON AVERAGE (25,000 CY/YR)**

INLET MANAGEMENT:

- **2009 – ONGOING LEE COUNTY MANAGEMENT**
- **2018 - INLET MANAGEMENT PLAN BLIND PASS**
PLACE 21,000 CY/YR ON NORTH SANIBEL





04-02-2019



04-02-2019



12-06-2019



11-22-2019

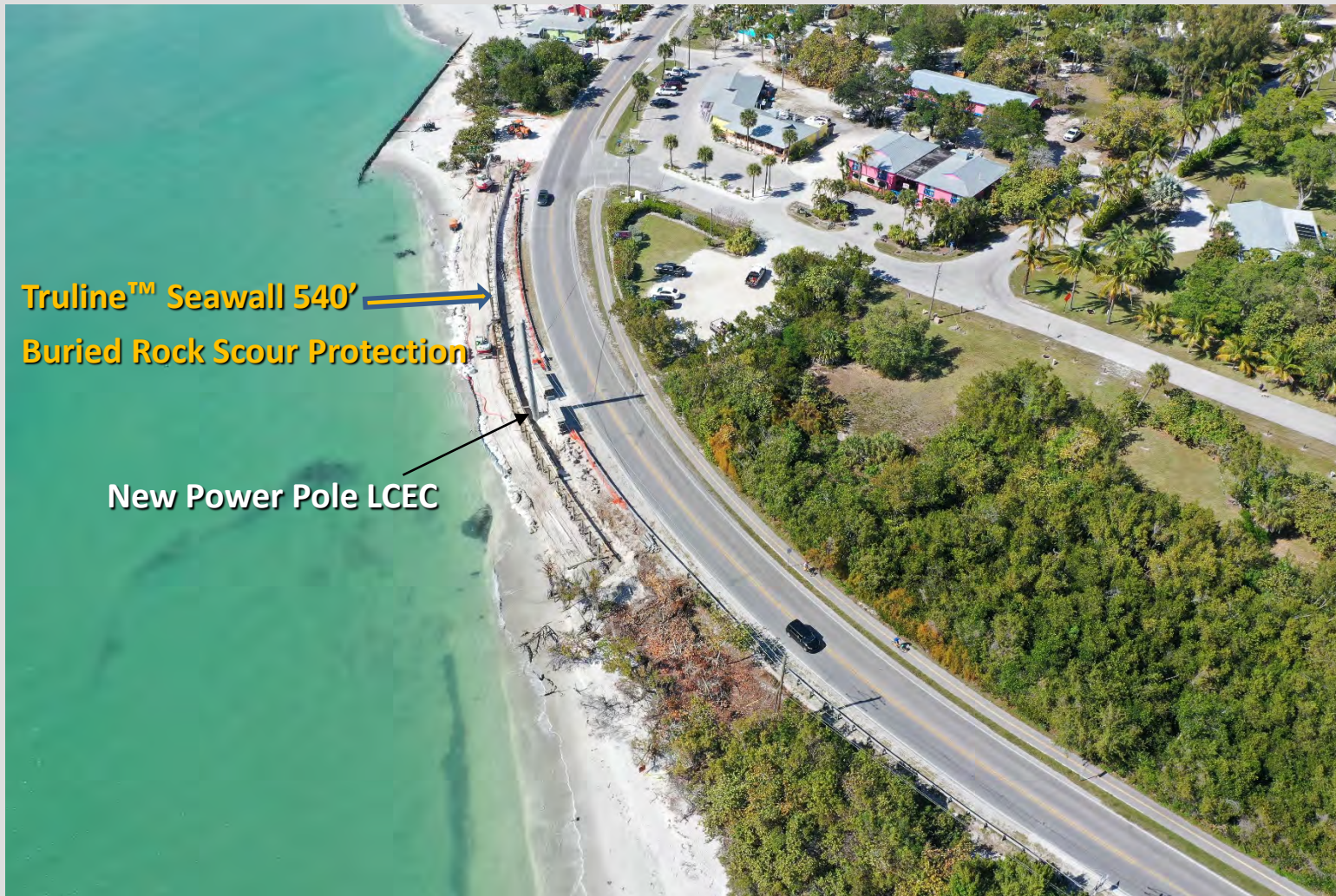


12-12-2019



01-03-2020





Truline™ Seawall 540'
Buried Rock Scour Protection

New Power Pole LCEC

03-09-2019



03-09-2019



03-20-2020



03-31-2020



04-04-2020



04-11-2020



04-20-2020



04-20-2020

04-22-2020



04-22-2020

05-21-2020



05-21-2020



Captiva

Seawall 540' with
Buried Rock Scour Protection

Beach Fill 5,000 cy

Sanibel



**Sanibel Captiva Road
Shore Protection Project**

Native Dune Plantings

1. BLIND PASS

- COUNTY TO IMPLEMENT INLET MANAGEMENT PLAN
AVG 21,000 CY/YR
- MONITOR EFFECTS FILL & DREDGE TEMPLATE

2. INTERLOCAL AGREEMENT CAPTIVA

- 8-10 YR INTERVAL

3. SUPPLEMENTAL SAND TRUCK HAUL

- ANNUAL AS NEEDED UP TO 10,000 CY/YR

4. MONITOR**5. FUTURE EROSION CONTROL EVALUATION**



