

# Sarasota County Multi-Jurisdictional Beach Bacteria Incident Action Plan 2012



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# **Sarasota County Multi-Jurisdictional Beach Bacteria Incident Action Plan November 2012**

## **Introduction**

In 1999 the Sarasota County Health Department (SCHD) participated in a pilot project along with 10 other Florida counties to monitor 8 county beaches bi-weekly for enteric bacteria (*enterococci* and fecal coliform). Subsequently, the beach water sampling program (Healthy Beaches Program) was created in 2000 through state legislation and was expanded to include a total of 34 coastal counties.

Under the 2000 Federal Beaches Environmental Assessment and Coastal Health (BEACH) Act, the Environmental Protection Agency (EPA) began to provide funding in the form of grants to coastal and Great Lakes states, territories, and tribes to develop and implement beach monitoring and notification programs.

The SCHD expanded the Sarasota County sampling regime from bi-weekly to weekly in 2002 and added 8 more beaches, bringing the total number of beaches sampled to sixteen. The sampling program continued unchanged until July 1, 2011 when the fecal coliform bacteria parameter was discontinued. The DOH continues to sample weekly for *enterococcus* bacteria.

Occasionally, bacteria values exceed the standards established to protect public health. Follow-up samples are collected and if levels still exceed state standards, a “No-Swim Advisory” is posted for the impacted beach(es). Health Department protocols call for sampling the impacted beach(es) until values drop below the standard and the “No-Swim Advisory” can be lifted.

Recognizing the recreational, environmental, and economic value of Sarasota County beaches, a management team made up of representatives of all associated jurisdictions was created to develop an Incident Action Plan (IAP) to address beach bacteria issues.

## **Purpose**

To minimize adverse human health impacts from bacteria exposure and avert “No-Swim Advisories” at Sarasota County beaches.

## **Goal**

To develop an Incident Action Plan based upon Incident Command System (ICS) principles with assigned roles and responsibilities to respond to potential health impacts at county beaches.

## **Objectives**

Provide an organized, consolidated, and coordinated regional approach to managing a defined incident along Sarasota County beaches.

Provide a rapid and appropriate response to an incident requiring subsequent re-sampling under the Florida Healthy Beaches Program.

Provide well-defined methods and procedures for responding quickly, efficiently, and effectively to an incident requiring subsequent re-sampling under the Florida Healthy Beaches Program.

Provide the community with a prompt, accurate, coordinated response regarding potential bacteria sources should a “No-Swim Advisory” posting be required.

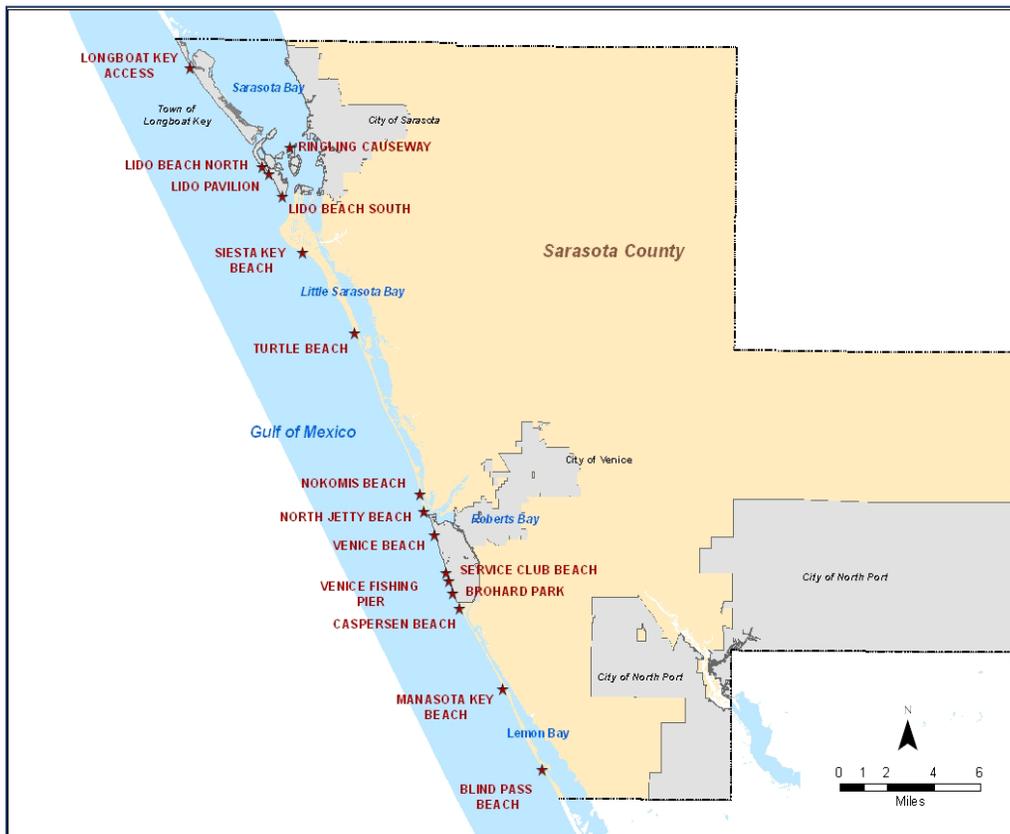
## INCIDENT ACTION PLAN

This IAP incorporates a multi-agency/multi-jurisdictional approach to beach bacteria incidents occurring on beaches in Sarasota County. Sixteen beaches are currently monitored under the SCHD Healthy Beaches Program. While some beaches are owned and operated by a single jurisdiction, other beaches are owned by one jurisdiction and operated or maintained by another. **Table 1** provides a list of the beaches covered by this IAP and the responsible jurisdictions. Beach locations are provided in **Figure 1**. An overview the IAP strategy is provided in **Appendix A**.

**Table 1. Beaches**

Beach	Jurisdiction(s)	Beach	Jurisdiction(s)
Blind Pass Beach	Sarasota County	Nokomis Beach	Sarasota County
Brohard Beach	Sarasota County	North Jetty Beach	Sarasota County
Caspersen Beach	Sarasota County	Ringling Causeway	City of Sarasota/Sarasota County
Lido Beach North	City of Sarasota/Sarasota County	Service Club Beach	City of Venice/Sarasota County
Lido Beach Pavilion	City of Sarasota/Sarasota County	Siesta Key Beach	Sarasota County
Lido Beach South	Sarasota County	Turtle Beach	Sarasota County
Longboat Key Beach	Town of Longboat Key	Venice Beach	City of Venice/Sarasota County
Manasota Key Beach	Sarasota County	Venice Fishing Pier	City of Venice/Sarasota County

**Figure 1. Beaches**



## **Incident Management Team**

The IAP was developed by the IMT, a multi-jurisdictional committee comprised of staff from the Town of Longboat Key, City of Sarasota, Sarasota County, Sarasota County Health Department, City of Venice, Englewood Water District, and Manatee County Health Department. See **Table 2**.

**Table 2. Incident Management Team**

<b>Jurisdiction</b>	<b>Name</b>	<b>Phone</b>	<b>Email</b>
City of Sarasota	Susan Blake	941-365-2200 ext.6212	<a href="mailto:susan.blake@sarasotagov.com">susan.blake@sarasotagov.com</a>
City of Sarasota	Gerald Boyce	941-365-2200, ext. 6104	<a href="mailto:gerald.boyce@sarasotagov.com">gerald.boyce@sarasotagov.com</a>
City of Venice	Kathleen Weeden	941-486-2626	<a href="mailto:kweedden@ci.venice.fl.us">kweedden@ci.venice.fl.us</a>
City of Venice	James Clinch	941-486-2626 ext. 25002	<a href="mailto:jclinch@ci.venice.fl.us">jclinch@ci.venice.fl.us</a>
Englewood Water District	Jay Linden	941-474-3217	<a href="mailto:jlinden@englewoodwater.com">jlinden@englewoodwater.com</a>
Manatee County DOH	Terri Stripling	941-748-0747 ext. 1415	<a href="mailto:terri_stripling@doh.state.fl.us">terri_stripling@doh.state.fl.us</a>
Sarasota County	Kathy Meaux	941-650-1640	<a href="mailto:kmeaux@scgov.net">kmeaux@scgov.net</a>
Sarasota County	Laura Ammeson	941-861-0928	<a href="mailto:lammeso@scgov.net">lammeso@scgov.net</a>
Sarasota County	Bruce Maloney	941-650-2059	<a href="mailto:bmaloney@scgov.net">bmaloney@scgov.net</a>
Sarasota County – SPOC Sewage Spills	David Pouso	941-232-8397	<a href="mailto:dpouso@scgov.net">dpouso@scgov.net</a>
Sarasota County	Laird Wreford	941-809-7491	<a href="mailto:lwreford@scgov.net">lwreford@scgov.net</a>
Sarasota County	George Tatge	941-915-1159	<a href="mailto:gtatge@scgov.net">gtatge@scgov.net</a>
Sarasota County – SPOC Lifeguards	Scott Montgomery	941-232-2012	<a href="mailto:smontgo@scgov.net">smontgo@scgov.net</a>
Sarasota County HD	Quintin Clark	941-861-6677	<a href="mailto:Quintin_Clark@doh.state.fl.us">Quintin_Clark@doh.state.fl.us</a>
Sarasota County HD	Jennifer Clemente	941-861-3531	<a href="mailto:jennifer_clemente@doh.state.fl.us">jennifer_clemente@doh.state.fl.us</a>
Sarasota County HD	Hector Mendez	941-861-3312	<a href="mailto:hector_mendez2@doh.state.fl.us">hector_mendez2@doh.state.fl.us</a>
Town of Longboat Key	Juan Florensa	941-650-1963	<a href="mailto:jflorensa@longboatkey.org">jflorensa@longboatkey.org</a>
Town of Longboat Key	Anne Ross	941-316-1988	<a href="mailto:aross@longoatkey.org">aross@longoatkey.org</a>

## **Pre-Incident Preparation**

Baseline Sanitary Surveys were conducted of all beaches and surrounding watersheds within a 1 mile radius of each beach using aerial maps as the basis. Survey methods were adopted from a program developed by the EPA and piloted in the Great Lakes region. Survey methods and forms were adapted and customized for the particular conditions of beaches in the Gulf region. **Appendix B** contains an example of the baseline survey.

A Communications Team (CT) was formed with Public Information Officers from the DOH, county, and municipalities (**Table 3**). Incident response and notification protocols were established; the standard press release was updated according to recommendations of CT and IMT members; and protocols for conducting interviews and disseminating accurate information to the news media were developed.

**Table 3. Communications Team**

<b>Jurisdiction</b>	<b>Name</b>	<b>email</b>	<b>Phone</b>
City of Sarasota	Jan Thornburg	<a href="mailto:jan.thornburg@sarasotagov.com">jan.thornburg@sarasotagov.com</a>	941-954-2613; cell 941-650-9693
City of Venice	Pam Johnson	<a href="mailto:pjohnso@ci.venice.fl.us">pjohnso@ci.venice.fl.us</a> ;	941-486-2626 x 24005; cell 941-915-3530
Englewood WD	Jay Linden	<a href="mailto:jlinden@englewoodwater.com">jlinden@englewoodwater.com</a>	941-474-3217
Englewood WD	Teresa Herzog	<a href="mailto:therzog@ewdfl.com">therzog@ewdfl.com</a>	941-460-1003
Manatee County HD	Tom Larkin	<a href="mailto:Tom_Larkin@doh.state.fl.us">Tom_Larkin@doh.state.fl.us</a>	941-748-0747 x 1325; 941-708-8497
Manatee County HD	Megan Jourdan	<a href="mailto:Megan_Jourdan@doh.state.fl.us">Megan_Jourdan@doh.state.fl.us</a>	941-748-0747 x 1212; 941-708-8446
Sarasota County	Curt Preisser	<a href="mailto:cpreisse@scgov.net">cpreisse@scgov.net</a>	941-861-5884
Sarasota County HD	Dianne Shipley-CT Leader	<a href="mailto:dianne_shipley@doh.state.fl.us">dianne_shipley@doh.state.fl.us</a>	941-861-2852; cell 941-302-1058
Sarasota County HD	Liz Bumpus	<a href="mailto:liz_bumpus@doh.state.fl.us">liz_bumpus@doh.state.fl.us</a>	941-861-2964
Sarasota County HD	Tom Higginbotham	<a href="mailto:William_Higginbotham@doh.state.fl.us">William_Higginbotham@doh.state.fl.us</a>	941-861-6134
Town of Longboat Key	Susan Phillips	<a href="mailto:sphillips@longboatkey.org">sphillips@longboatkey.org</a>	941-316-1955
Visit Sarasota County	Virginia Haley	<a href="mailto:VHaley@visitsarasota.org">VHaley@visitsarasota.org</a>	941-955-0991, ext. 107
Visit Sarasota County	Erin Duggan	<a href="mailto:EDuggan@visitsarasota.org">EDuggan@visitsarasota.org</a>	941-955-0991, ext. 108

**Incident Action Plan Activation**

Fecal indicator bacteria (*enterococcus*) values exceed the Environmental Protection Agency (EPA) and Florida Department of Health (FDOH) standard, permissible limits ( $\geq 105$  *Enterococcus sp* per 100 ml marine water) one or more county beaches, which prompts re-sampling by the DOH. The incident activates the IAP.

**Notification**

Upon receipt of the laboratory results, SCHD staff will: 1) Notify the CT via email; 2) Notify the Rapid Response Team (RRT) Leader via telephone to advise which beaches will be re-sampled; 3) Notify the IMT via email; and 4) Notify the Single Point of Contact (SPOC) for beach lifeguards via email/telephone.

**Communications Team and Incident Management Team Activation**

Upon notification of a re-sampling event, the CT Leader will contact members of the IMT having jurisdictional responsibility over the impacted beach. Those members will comprise the CT and IMT for that incident. A preliminary press release (to be issued if sample results exceed the standard limit) will be prepared. If sample results fall below the standard limit, the CT and IMT will stand down. If sample results exceed the standard, the press release will be issued immediately and a “No-Swim Advisory” will be posted. The CT will also communicate with the news media and coordinate any telephone or live interviews with appropriate staff. The CT will continue to issue information as needed while the advisory continues. The IMT will continue to work with the CT and RRT. When subsequent re-samples indicate that bacteria levels fall below the standard limit, a final press release will be immediately issued, the “No-Swim Advisory” will be lifted, and the CT and IMT will stand down.

## **Rapid Response Team Activation**

Upon notification by the SCHD, the IMT will activate the RRT, and the RRT Leader will notify and the appropriate RRT Unit Leader (**Table 4**) assigned to the impacted beach(es). The SCHD will provide the RRT a copy of the conditions report of the impacted beach from the Monday’s sampling event. The RRT will first conduct the initial assessment and collect preliminary information that includes:

- Review of the baseline sanitary survey of the impacted beach(es) to inspect target areas identified in the survey (the baseline survey should be taken on the inspection as a reference);
- Contact the SPOC for recently reported sanitary sewer overflows (SSOs);
- Antecedent weather conditions (storms, wind speed/direction, current direction);
- Antecedent rainfall;
- Antecedent beach conditions (Mote Beach Conditions Website/Lifeguards);
- Unusual beach conditions such as excessive algae or harmful algae blooms (red tide);
- Recent cleaning of piers (Tony Saprito, Venice Fishing Pier);
- Nearby fire hydrant flush-outs (**Appendix D**); and
- Regional results from other counties along the coast;

**Table 4. Rapid Response Team**

<b>Beach Bacteria Incident Action Plan - Rapid Response Teams</b>	
<b>Rapid Response Team</b>	<b>Beach</b>
Kathy Meaux - RRT Leader	Siesta Key Beach; Turtle Beach
Bruce Maloney – Unit Leader	Nokomis Beach; North Jetty Beach
Susie Murray – Sarasota County	Nokomis Beach; North Jetty Beach
David Pouso – Unit Leader	North Lido Beach; Lido Casino Beach; South Lido Beach
Joe Kraus – Unit Leader	Longboat Key Beach; Ringling Causeway
James Clinch - City of Venice Unit Leader	Venice Beach; Service Club Beach; Venice Fishing Pier; Brohard Beach
Bill Ward - City of Venice	Venice Beach; Service Club Beach; Venice Fishing Pier; Brohard Beach
Don Simpson - Sarasota County	Caspersen Beach
Jay Linden - EWD Unit Leader	Manasota Key Beach; Blind Pass Beach
Michael Storino - Sarasota County	Manasota Key Beach; Blind Pass Beach

## **Rapid Response Team Deployment**

After conducting the initial assessment, the RRT will conduct a sanitary survey following standard protocols and using the approved incident response forms (**See Appendix D**). During the survey, the RRT will:

- Contact lifeguards to determine weekend conditions prior to the DOH Monday sampling;
- Inspect the beach, complete the sanitary survey form, and take photos;
- Inspect target areas identified in the baseline sanitary survey, take photos, and document any suspected bacteria sources;
- Collect samples from suspected bacteria sources such as standing water from suspected sources such as ditches, catch basins, stormwater pipes, tidal pools, etc. for *enterococcus* bacteria.
- Request “next-day” verbal results from the analytical laboratory;
- Conduct further investigation to confirm source if sample results indicate high levels of bacteria;

- Collect follow-up samples, if needed; and
- Record data to electronic Sanitary Survey Form and include representative photo; Organize all documentation, photos, lab reports, etc. and save in the appropriate action plan folder.

### **Lifeguard Participation**

Not only do county lifeguards play a vital role in overseeing the safety of swimmers, surfers, water sport participants, and other beachgoers, they are trained observers of ambient beach conditions such as recent rainfall events, current direction, rip currents, wind direction and speed, and the presence of birds and other wildlife. Upon notification by the SCHD, the SPOC will disseminate information to the lifeguards and concessionaire(s) at the impacted beach(es). If a “No-Swim” advisory is posted, double-red flags will be flown to indicate that a Sanitary Sewer Overflow (SSO) is the source, and the water **only** will be closed to swimming. If the source is not related to a SSO, a single red flag will be flown to indicate that elevated bacteria levels exist and swimming is not recommended.

The RRT may make contact with the lifeguards during the initial sanitary survey to obtain background information. The following types of information will be collected:

- Ambient weekend conditions such as general weather patterns, rainfall amounts, high surf, rip currents, and tropical systems;
- Presence of excessive algae (seaweed);
- Dates of recent beach cleaning;
- High numbers of birds and wildlife;
- High numbers of beachgoers; and
- Special functions such as athletic events, music festivals, sand sculpting competitions, and fishing tournaments.

The SPOC will be responsible for making further contact or providing additional information to the lifeguards.

### **Sewage Spill Protocols**

Whenever a significant sewage spill (>25,000 gallons) occurs in close proximity to or within a distance that could cause potential impacts to a beach sampled by the SCHD, an investigation will be conducted by County and/or SCHD staff and samples will be collected to measure bacteria levels. The investigation will include the amount of sewage discharged, distance of the beach from the sewage spill, weather conditions, currents and tidal activity, and corrective measures taken by the appropriate jurisdiction.

### **Sampling Protocols**

When bacteria samples are collected during the initial sanitary surveys and/or follow-up investigations, the following protocols shall be followed:

- Meter calibrations, sample collection, and field measurements will be conducted in accordance with Chapter 62-160 F.A.C. and the Department of Environmental Protection “Standard Operating Procedures (SOPs) for Laboratory Operations and “Sample Collection Activities” and equipment manufacturer’s procedures.
- Samples will be collected and analyzed for fecal coliform and *enterococcus*. It will be left to the discretion of the different municipalities to add the collection and analysis of samples for fecal coliform bacteria to their sampling regime.
- Sample collection by Sarasota County staff will be coordinated through the Sarasota County QA Office.

- The sampler will contact the QA Officer to advise that samples are being collected, the number of samples, the time the first sample is taken, and the estimated time of arrival at the drop-off site.
- The QA Officer will notify the courier and arrange a pick-up time at the drop-off point.
- Samples collected by Sarasota County staff can be delivered to one of the following facilities: 1) Bee Ridge Water Reclamation Facility Laboratory, 4001 Iona Rd., Sarasota, FL. 2) Sarasota County Health Department Laboratory, 1001 Sarasota Center Blvd., Sarasota, FL. 3) Benchmark Laboratory, 1001 Corporate Way, #102, North Port, FL.
- If the courier cannot meet the sampler at the scheduled time, the sampler will execute the Chain of Custody form (COC), print a copy of the form, and leave the samples in the refrigerator at the pre-determined facility. The original COC form will be attached to the front of the refrigerator with a magnet (provided). One copy of the COC will be emailed to the QA Officer, and a second copy will be kept with the original inspection forms and records and returned to the RRT Leader.
- Sample collection by municipalities will be conducted and coordinated through the appropriate jurisdictional agency.

All information and data from the sanitary survey will be provided to the RRT Leader who will provide the information to the CT and the IMT. If the sample results from the re-sampling event exceed the standard and an advisory is posted, the RRT will standby for follow-up investigation, if needed. If the sample results from the re-sampling event fall below standards, the RRT will stand down.

### **Fire Hydrants**

Fire hydrants are often located adjacent to curbs, gutters, and stormwater inlets. Clean water flowing across the ground and impervious pavement during hydrant flushing can pick up and transport bacteria and other pollutants through the stormwater conveyance into the nearest waterway. Fire hydrants in unincorporated Sarasota County are indexed by half-section grids and are flushed annually, with staff working from North County to South County. **Appendix D** contains an index of the beaches with their half-section grid numbers and the corresponding aerial maps. During the baseline sanitary survey inspections, it was determined that water discharged during flushing from many hydrants would be directed to stormwater ponds or toward the bay side of the island/key and away from the Gulf beaches. Those hydrants would not be relative to the purpose of this plan.

### **Incident Follow-Up**

If the beach(es) is posted, the RRT will remain available to conduct follow-up inspections for reasons including, but are not limited to:

- Calls from citizens reporting what they believe is the source;
- Calls from other agencies; and
- Inquiries from the media.

Investigations will continue and findings will be reported to the CT and IMT until subsequent re-samples indicate that levels fall below the standard limit and the “No-Swim” advisory is lifted. At that time, the RRT will complete the final report, submit findings to the IMT, and stand down.

### **Post-Incident Debriefing**

After the “no-swim” advisory is lifted and if deemed necessary, team members may meet to conduct a debriefing to analyze the performance of the Incident Response Teams; discuss any unanticipated problems or issues that were encountered; develop corrective actions for any observed violations; formulate solutions to those problems or issues; generate a “lessons learned” list; anticipate any future problems or issues; and revise protocols for future incidents.

### **Continuing Team Operations**

The IMT will participate in a pre-season meeting in May each year organized by the RRT Leader to provide an update of any changes in personnel and contact information and to review procedures and protocols to “gear up” for the rainy season and potential bacteria issues. The IMT will participate in a post-season meeting in November each year organized by the RRT Leader to discuss any problems or issues that were encountered; formulate solutions to those problems or issues; and revise protocols and the action plan for future incidents.

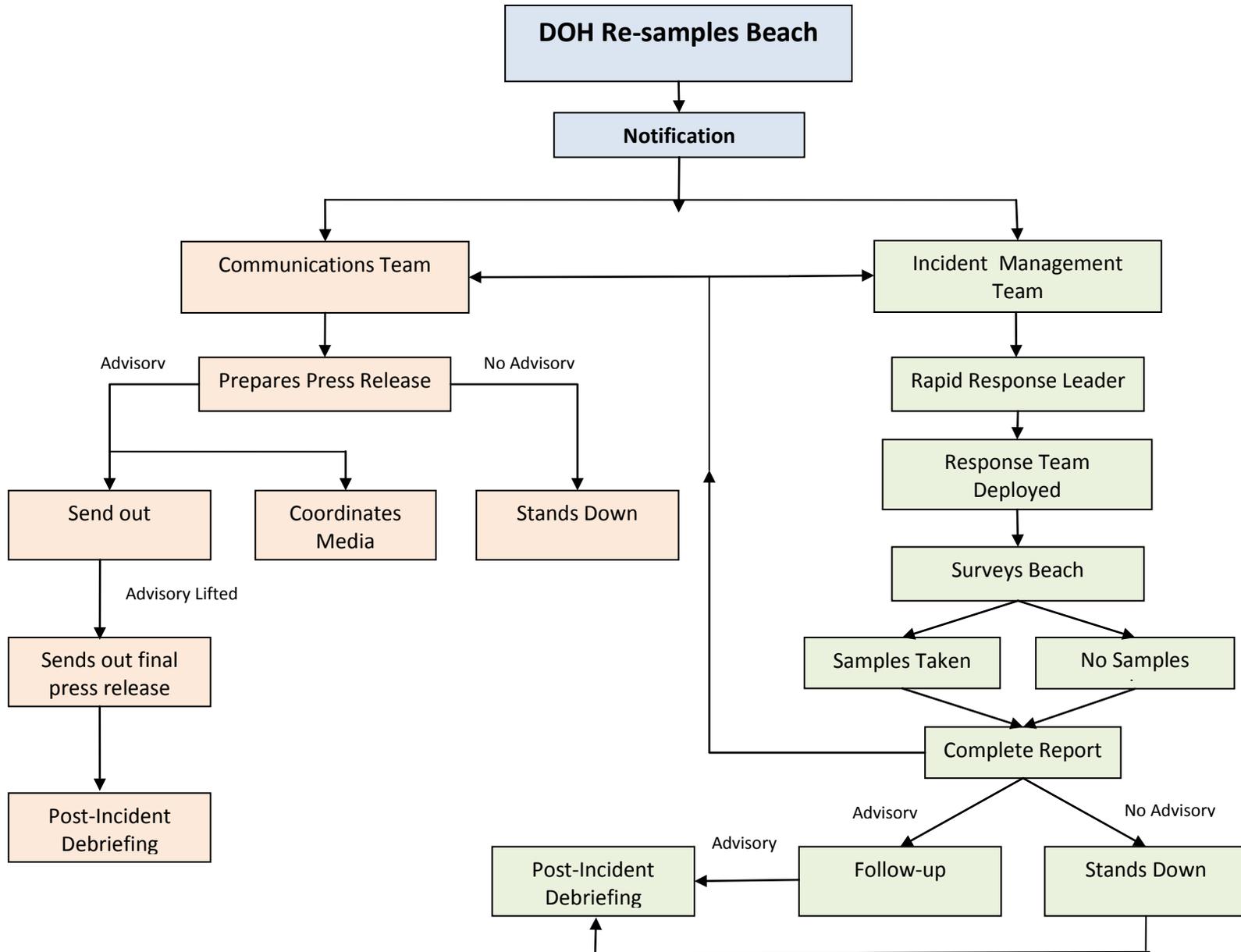
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# Appendix A

## Incident Response Overview

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# INCIDENT RESPONSE OVERVIEW



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# Appendix B

## Baseline Sanitary Survey Form

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**SARASOTA COUNTY MULTI-JURISDICTIONAL BEACH BACTERIA INCIDENT ACTION PLAN  
BEACH WATER QUALITY BASELINE SANITARY SURVEY - PAGE 1**

**Beach:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_  
**Surveyor(s):** \_\_\_\_\_

**PART I - GENERAL CONDITIONS**

Weather: Clear Partly Cloudy Mostly Cloudy Rain Fog Haze  
 Cloud Cover (%): \_\_\_\_\_ Wind Dir. (From): \_\_\_\_\_ Wind Spd. (mph): 0-5 5-10 10-15 15-20 >20  
 Water Temp (°F): \_\_\_\_\_ Wave Ht. (ft.): 0-1 1-2 2-3 3-5 >5 Air Temp (°F): \_\_\_\_\_  
 Rainfall (3 day): \_\_\_\_\_ Tidal Stage: LO SL In Hi SLH O Current Dir: \_\_\_\_\_

**PART II - BATHER LOAD**

No. of people on beach: \_\_\_\_\_ 0-50 \_\_\_\_\_ 51-100 \_\_\_\_\_ 100-200 \_\_\_\_\_ 200-500 \_\_\_\_\_ >500  
 No. of people in water: \_\_\_\_\_ 0-50 \_\_\_\_\_ 51-100 \_\_\_\_\_ 100-200 \_\_\_\_\_ 200-500 \_\_\_\_\_ >500

**PART III - BEACH CONDITIONS - ENTER DETAILS ON PAGES 3-6**

Outfalls: Yes No Describe: \_\_\_\_\_  
 Ditches: Yes No Describe: \_\_\_\_\_  
 Litter/Debris: Yes No Describe: \_\_\_\_\_  
 Wrack Line: Yes No Describe: \_\_\_\_\_  
 Tidal Pools: Yes No Describe: \_\_\_\_\_  
 Pet Waste: Yes No Describe: \_\_\_\_\_  
 Other: Yes No Describe: \_\_\_\_\_  
 Animals/Wild life: Birds Dogs Other: \_\_\_\_\_  
 Number: \_\_\_\_\_

**PART IV - SANITARY FACILITIES**

No. Restrooms: \_\_\_\_\_ No. Trash Cans/Bins: \_\_\_\_\_  
 Comments: \_\_\_\_\_

**PART IV - HABITAT AROUND BEACH**

Dunes Wetlands Forest Park Creek Preserve Urban

Comments: \_\_\_\_\_

**SARASOTA COUNTY MULTI-JURISDICTIONAL BEACH BACTERIA INCIDENT ACTION PLAN  
 BEACH WATER QUALITY BASELINE SANITARY SURVEY - PAGE 2**

**Beach:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_  
**Surveyor(s):** \_\_\_\_\_

**PART V - DESCRIPTION OF OTHER NEARBY FACILITIES**

Marinas: \_\_\_\_\_  
 Restaurants/Bars: \_\_\_\_\_  
 Playgrounds: \_\_\_\_\_  
 Parking Lots: \_\_\_\_\_  
 Dog Beaches: \_\_\_\_\_

**PART VI - INSPECTION WITHIN 1 MILE RADIUS**

	Present		Issues		_____
	Yes	No	Yes	No	
Stormwater Outfalls:	Yes	No	Yes	No	_____
Stormwater Vaults:	Yes	No	Yes	No	_____
Lift Stations:	Yes	No	Yes	No	_____
Septic Systems:	Yes	No	Yes	No	_____
Irrigation Systems:	Yes	No	Yes	No	_____
Pet Waste:	Yes	No	Yes	No	_____
Fire Hydrants:	Yes	No	Yes	No	_____

**PART VII - OTHER OBSERVATIONS**

\_\_\_\_\_  
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## Appendix C

Incident Response Sanitary Survey From

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**SARASOTA COUNTY MULTI-JURISDICTIONAL BEACH BACTERIA INCIDENT ACTION PLAN**

**BEACH WATER QUALITY SANITARY SURVEY**

<b>Agency:</b>		<b>Date:</b>		<b>Time:</b>		<b>Surveyor(s):</b>		
	<b>Location</b>	<b>StationID</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Air Temp.</b>	<b>Wind Spd.(mph)</b>	<b>Wind Dir.(Deg.)</b>	<b>Cloud Cover (%)</b>
<b>Water Quality</b>	<b>Parameter(s)</b>	<b>Water Temp (°C):</b>		<b>Tide:</b>	<b>Wave Ht.</b>	<b>Wave Dir (From):</b>	<b>Current Direction (From-To):</b>	
<b>Beach Load</b>	<b>No. of people on the beach</b>	<b>0-50</b>	<b>51-100</b>	<b>100-200</b>	<b>200-500</b>	<b>&gt;500</b>	<b>Comments:</b>	
<b>Bather Load</b>	<b>No. of people in the water</b>	<b>0-50</b>	<b>51-100</b>	<b>100-200</b>	<b>200-500</b>	<b>&gt;500</b>	<b>Comments:</b>	
<b>Potential Pollution Sources</b>	<b>Source</b>	<b>SSO</b>	<b>Lift Station</b>	<b>Outfall</b>	<b>Pond</b>	<b>Direct Runoff</b>	<b>Pet Waste</b>	<b>Wildlife</b>
	<b>Pathway</b>	<b>Ditch</b>	<b>Outfall</b>	<b>Pass</b>	<b>Open Water</b>			
	<b>Floatables:</b>	<b>Yes</b>	<b>No</b>	<b>Describe:</b>				
	<b>Litter/Debris:</b>	<b>Yes</b>	<b>No</b>	<b>Describe:</b>				
	<b>Wrack Line:</b>	<b>Yes</b>	<b>No</b>	<b>Describe:</b>				
	<b>Animals/Wildlife:</b>	<b>Birds</b>	<b>Dogs</b>	<b>Other - Specify</b>				
	<b>Number:</b>							
	<b>Comments and Observations:</b>					Insert Photo		



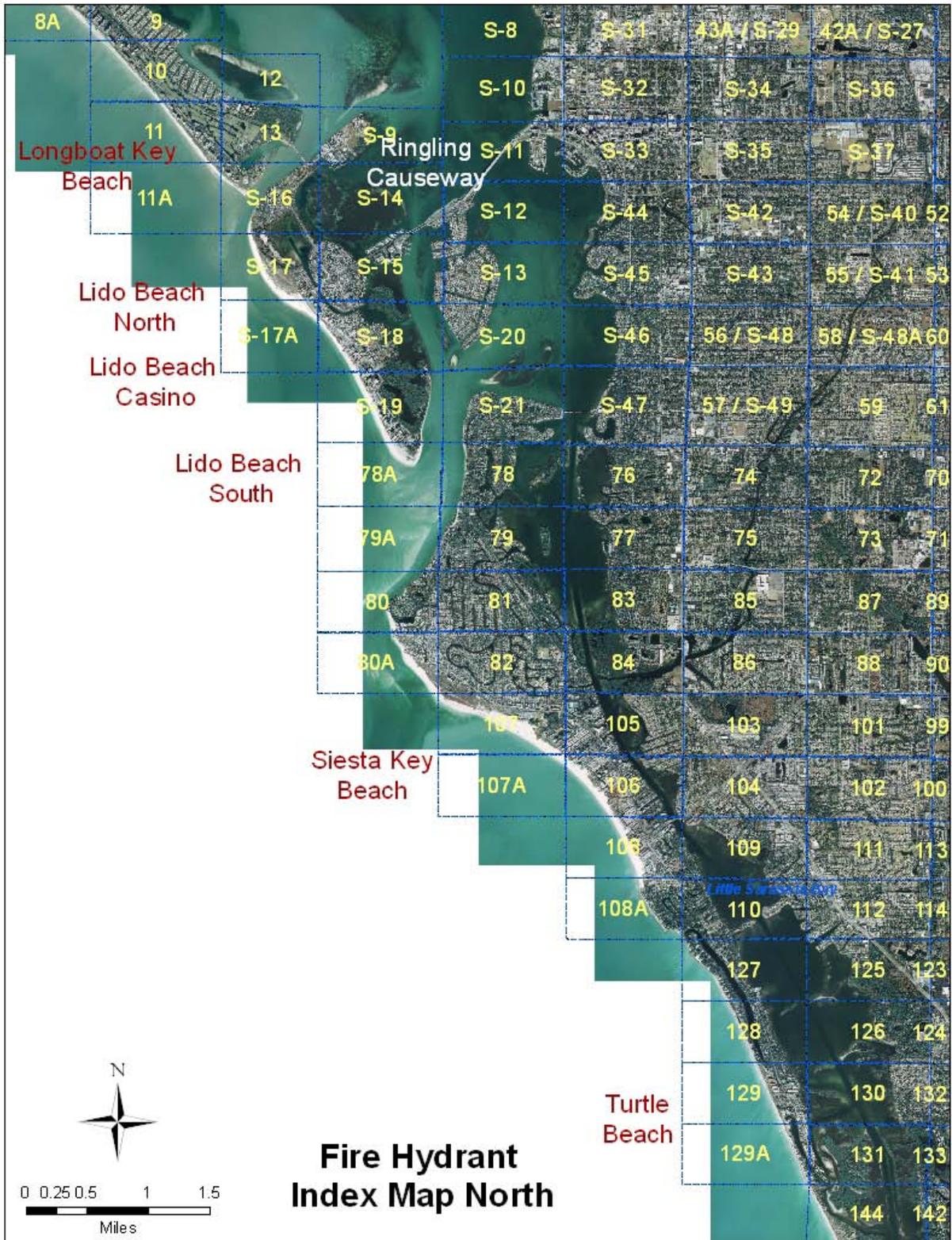
Appendix D  
Fire Hydrant Index Sheet  
and Maps

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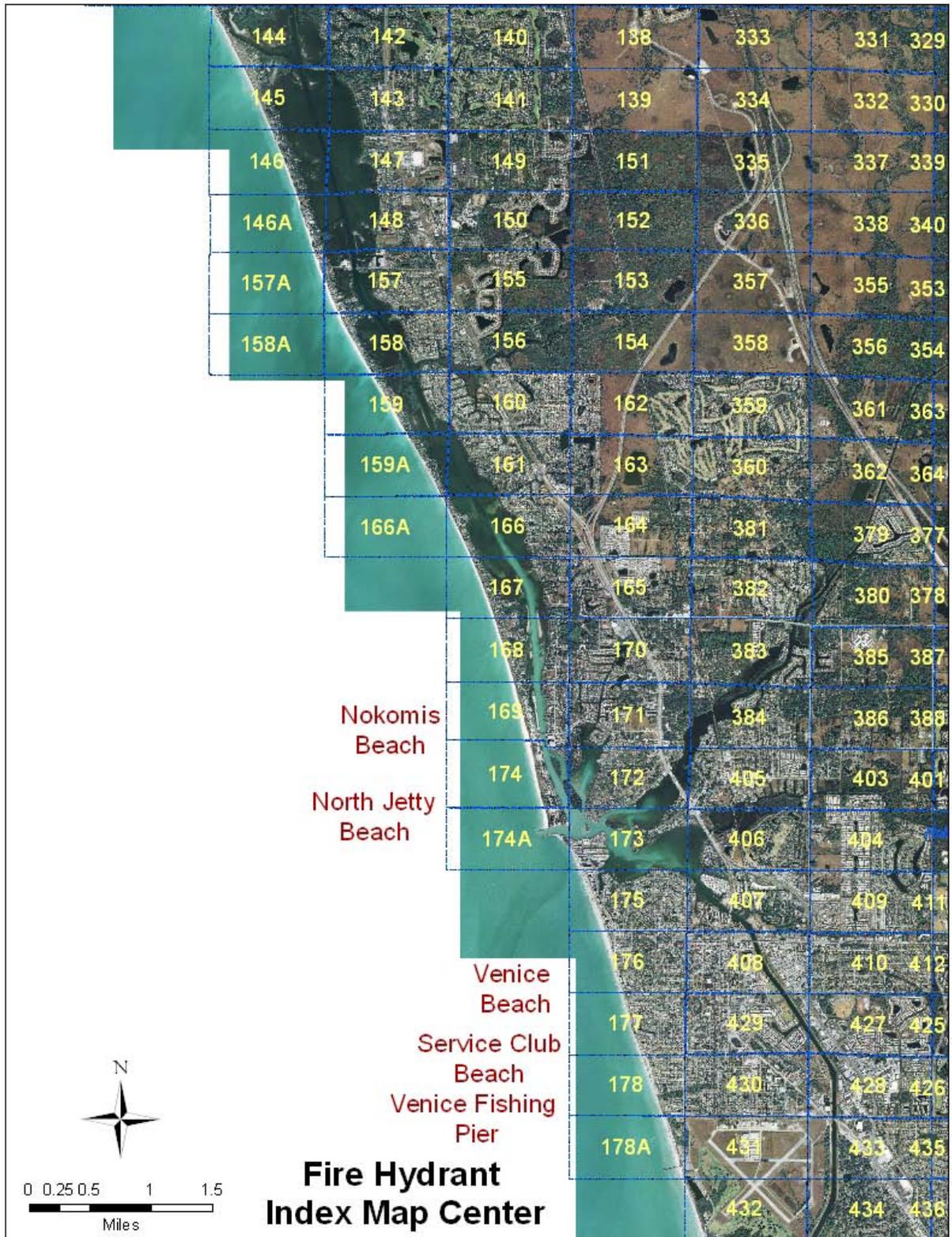
FIRE HYDRANT INDEX

<b>Sarasota county</b>	
Beach	Half Section
Blind Pass Beach	500, 500A, 501,502
Caspersen Beach	453,454, 455
Lido Beach - South	S-21, 18
Manasota Key Beach	475, 476, 489, 489A
Nokomis Beach	166, 167, 168, 169
North Jetty Beach	171, 172,174, 174A,
Siesta Key Beach	106, 107, 108, 108A
Turtle Beach	128, 129, 129A, 144, 145,
<b>City of Sarasota</b>	
Beach	Half Section
Lido Beach - Casino	S-18, S-19
Lido Beach - North	S-9, S-16, S-17
Ringling Causeway	S-11, S-12, S-13, S-15
<b>City of Venice</b>	
Beach	Half Section
Brohard Beach	431,
Service Club Beach	177, 429
Venice Beach	175, 176, 407, 408
Venice Fishing Pier	178, 430
<b>Town of Longboat Key</b>	
Beach	Half Section
Longboat Key Beach	2, 3, 5, 7, 8, 8A, 10, 11

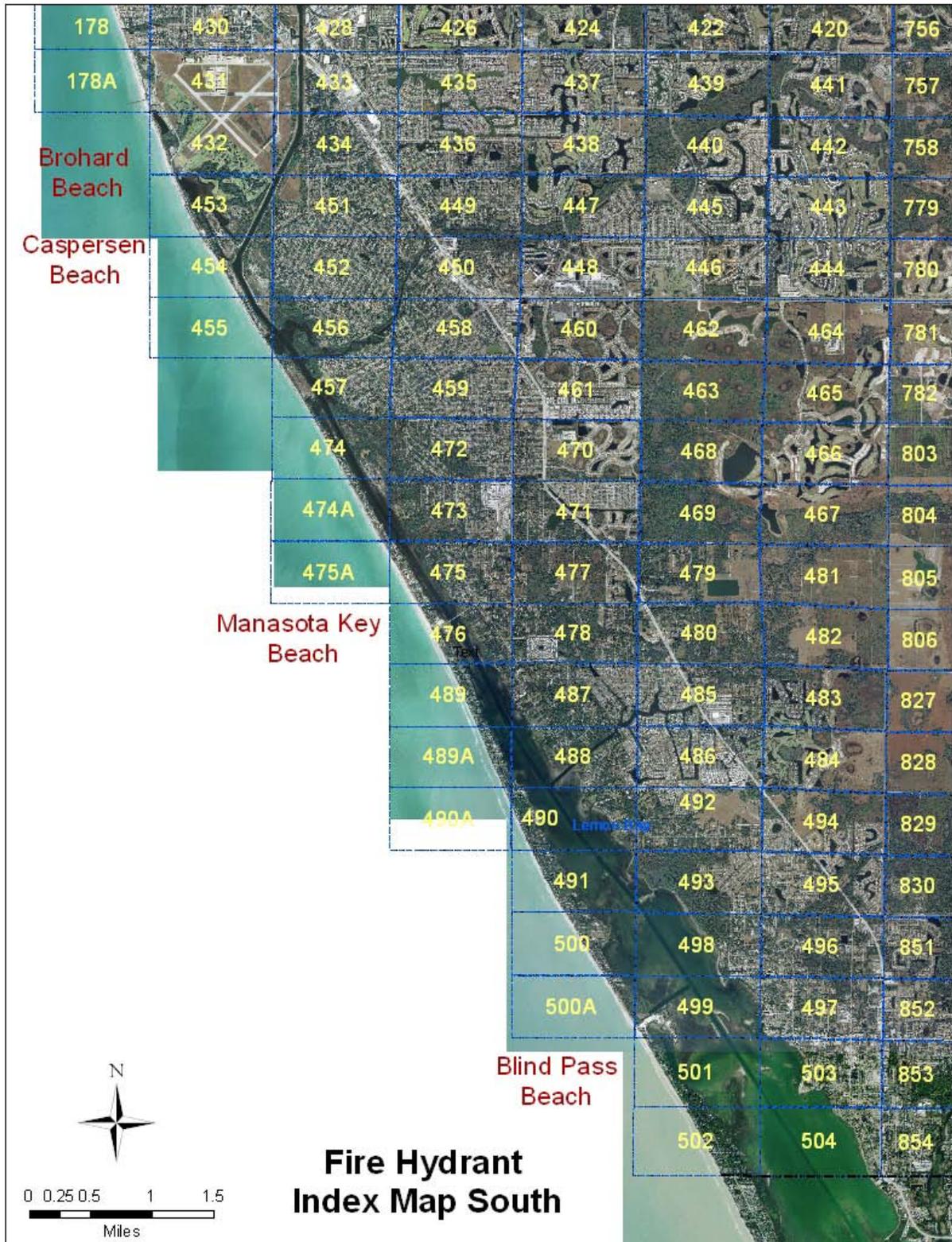
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# APPENDIX E

## Definitions

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## Definitions

**Bacteria Standards for Saltwater:** Under current water quality standards, the following are limits for beach bacteria. Good: 0-35 *enterococcus*/100mL marine water; Moderate: 36-104 *enterococci*/100mL marine water; and Poor:  $\geq 105$  *enterococcus*/100mL marine water.

**Baseline Beach Sanitary Survey:** An initial sanitary survey of a beach that involves: 1) collecting information about the beach and its surrounding watershed to establish baseline conditions; 2) identifying potential sources of fecal contamination; 3) ruling out sources of fecal contamination; and 4) identifying and eliminating sources of fecal contamination. The information gathered in the baseline survey will be used to investigate an incident that prompts re-sampling under the Healthy Beaches Program.

**Beach Sanitary Survey:** An investigative tool developed by the Environmental Protection Agency (EPA) to investigate the sources and migration pathways of fecal contamination to a waterbody that borders a beach. Sanitary surveys help state and local beach program managers and public health officials identify sources of beach water pollution, assess the magnitude of pollution, and identify priority locations for water testing.

**Corrective Actions:** The implementation of procedures that are based on lessons learned from actual incidents, from training, exercises, and baseline sanitary surveys.

**Enteric bacteria:** Bacterial species that normally inhabit the intestinal tract of humans and animals.

**Enterococci:** Enteric streptococcal (round) bacteria used to indicate fecal contamination and the possible presence of pathogens.

**Incident:** On occurrence or event, natural or manmade, that requires a response to protect human health. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, civil unrest, wild land and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, tsunamis, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response. For the purpose of an IAP “incident” is defined as: A single instance of fecal indicator bacteria values exceeding the Environmental Protection Agency (EPA) and Florida Department of Health (DOH) standard, permissible limits at one or more county beaches.

**Incident Action Plan (IAP):** An oral or written plan containing general objectives reflecting the overall strategy for managing an incident. It may include the identification of operational resources and assignments. It may also include attachments that provide direction and important information for management of the incident during one or more operational periods.

**Incident Management:** The broad spectrum of activities and organizations providing effective and efficient operations, coordination, and support applied at all levels of government, utilizing both governmental and nongovernmental resources to plan for, respond to, and recover from an incident, regardless of cause, size, or complexity.

**Incident Management Team (IMT):** An Incident Commander and the appropriate Command and General Staff personnel assigned to an incident. The level of training and experience of the IMT members, coupled with the identified formal response requirements and responsibilities of the IMT, are factors in determining “type,” or level, of IMT.

**Joint Information System (JIS):** A structure that integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, accurate, accessible, timely, and

complete information during crisis or incident operations. The mission of the JIS is to provide a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans and strategies on behalf of the Incident Commander (IC); advising the IC concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.

**Jurisdiction:** A range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authority. Jurisdictional authority at an incident can be political or geographical (e.g., city, county, tribal, State, or Federal boundary lines) or functional (e.g., law enforcement, public health).

**Jurisdictional Agency:** The agency having jurisdiction and responsibility for a specific geographical area, or a mandated function.

**Mobilization:** The process and procedures used by all organizations—Federal, State, tribal, and local—for activating, assembling, and transporting all resources that have been requested to respond to or support an incident.

**Multi-Agency Communications Team (CT):** Staff and Public Information Officers from all participating agencies.

**Multi-Agency Incident Management Team (IMT):** Staff from the Sarasota County Department of Health, Town of Longboat Key, City of Sarasota, Sarasota County, City of Venice, Englewood Water District, Manatee Department of Health

**Pathogen:** An organism capable of inducing disease symptoms associated with such illnesses as gastrointestinal disorders and infections.

**Protocol:** A set of established guidelines for actions (which may be designated by individuals, teams, functions, or capabilities) under various specified conditions.

**Public Information Officer (PIO):** A member of the Command Staff responsible for interfacing with the public and media and/or with other agencies with incident-related information requirements.

**Public Information:** Processes, procedures, and systems for communicating timely, accurate, accessible information on the incident's cause, size, and current situation; resources committed; and other matters of general interest to the public, responders, and additional stakeholders (both directly affected and indirectly affected).

**Rapid Response:** A systematic effort by a Rapid Response Team (Bacteria Action Team?) to investigate an incident that prompts re-sampling under the Florida Healthy Beaches Program.

**Rapid Response Team (RRT):** A specialized team of trained individuals that is mobilized by the activation of the incident and follows a set of protocols defined by the IAP to investigate the source(s) of bacteria at the impacted beach(es) and minimize or mitigate the negative effects.

**Sanitary Sewer Overflow (SSO):** An unintentional discharge of untreated sewage from municipal sanitary sewer systems into the environment.

**Single Point of Contact (SPOC):** The identification of and means of communication with person(s) and organizations(s) associated with specific resource(s). A SPOC can be a person or a department serving as the coordinator or focal point of information concerning an incident. SPOCs are used where information is time-sensitive and accuracy is important.