



SANITARY SEWER OVERFLOW ENVIRONMENTAL IMPACTS FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

 Sanitary Sewer Overflows (SSOs) are releases of untreated sewage into the environment.

 FAC 62-604.200 clarifies that SSO "... means any overflow, spill, release, discharge, or diversion of wastewater from a domestic wastewater collection/transmission system."



SSO ENVIRONMENTAL IMPACTS FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Pollutant	Impact
Bacteria	Public Health, Beach/Shellfish Closures
BOD	Reduced Oxygen Levels – Fish Kills
Solids	Deposition, Habitat Impairment
Nutrients	Algal Blooms, Aesthetic Impairment



POTENTIAL HEALTH IMPACTS FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

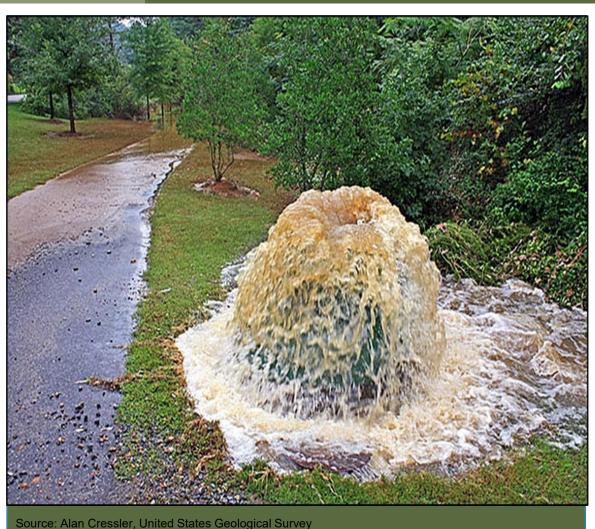
Pathogens in Sewage:

- Bacteria: Diarrhea and abdominal pain, Cholera, salmonellosis (food poisoning), typhoid fever, bacillary dysentery and gastroenteritis.
- Viruses: Hepatitis, meningitis, pneumonia, fever, common colds, paralysis, encephalitis, gastroenteritis, diarrhea and respiratory infection
- Protozoa: Gastroenteritis, acute enteritis, giardiasis, dysentery, toxoplasmosis and cryptosporidiosis.



WHY DO SSOS OCCUR?

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



- Human Error.
- Corrosion.
- Illicit connections.
- Lack of capacity.
- System breakdowns.

SPILL PREVENTION FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Repair --> Report --> Prevent

Repair whatever is causing the spill \rightarrow Report it to the department (and other agencies if necessary) \rightarrow Prevent future spills by conducting regular maintenance and testing!



SEWER OVERFLOW RESPONSE PLAN FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- Do you have a separate domestic wastewater Sewer Overflow Response Plan (SORP)?
- Does it contain a map of your collection system?
- Does it contain an agency notification checklist with contact information to ensure that you can notify state and local agencies within 24 hours of the spill?



RESPONSE AND CLEAN-UP FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- Having a plan of action in case of a SSO event is crucial to mitigating spill events as quickly and easily as possible.
 - Do you have a method of diversion for the overflowing water?
 - O Do you have a way to reroute the water?
 - Do you have contact information for vacuum/pump trucks?
 - Do you have Lime readily available to apply to the contaminated area?

INTERNAL CONTACTS FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Do you have a list of contacts to allow for a quick response to an SSO event?

For example, someone who:

- Can conduct lift station control and maintenance?
- Can quickly repair pipes?
- Someone who will work on public and/or agency notifications?



REPORTING ABNORMAL EVENTS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



FLORIDA DEPARTMENT OF **Environmental Protection**

Governor

leanette Nuñez Lt. Governor

Shawn Hamilton Secretary

Wastewater Abnormal Event 5 Day Report

This form is provided for your convenience only, in order to report the required information to Florida DEP. You may complete this form and email to the appropriate District office, as listed below

Southwest District - SWD DW@floridadep.gov

Northwest District -NWD_WastewaterCompliance@floridadep.gov Southeast District - SED.Wastewater@dep.state.fl.us South District - SD-AbnormalEvents@floridadep.gov

These incidents, and the corresponding Public Notice of Pollution, may also be reported through the DEP Business Portal. If it is preferred to submit these separately, the PNP may be submitted here. If the spill is greater than 1000 gallons, it MUST be reported to the State Watch Office at 1-800-320-0519 and a PNP MUST be submitted. All fields with an asterisk (*) must be completed as they are required by rule 62-620.610, F.A.C.

Responsible Party Information

*Fa	cility Name:				
*Pen	nit Number:				
*F:	acility Type:				•
	*County:				
*Rep	orter Name:				
*Rep	orter Phone:				
*Rep	orter Email:				
*Repor *Responsible l	ter Address: Party Name:				
*Responsible Pa	rty Address:				
*Responsible l	Party Phone:				
*Responsible l	Party Email:				
Who was conta	cted?				
DEP		State V	Vatch Office	Othe	<u>r</u>
*Date and ?	Γime:	*]	Date and Time:		*Date and Time:
*Person co	ntacted:	*	Incident Number:		*Person contacted:
Spill Informati	on				
*Spill Character	istic / Wastewa	iter:	-		
*Type Source:			•	Ì	
*Area affected:					
. Let affected.			Ľ		

*Date / Time Discharge	Began:			
*Amount Discharged (in	n gallons):			
*Amount Recovered (in	gallons):			
*Date / Time Discharge	Ceased:			
*Physical Address:				
*Latitude/Longitude:				
*Malfunction/Cause:		▼		
Effluent Limit Violatio	ns en			
□ CL ₂ (mg/L)		Fecal Coliforms	(CFU/100 mL)	
TSS (mg/L)		pH (SU)		
☐ Turbidity (NTU) ☐ NO ₃ (mg/L)		CBOD5 (mg/L)		
Other		Abnormal Flow	(MGD)	
Louie				
*Clean Up Status:		▼		
*Clean Up Actions:				
Vacuumed/Pump 1 Applied Disinfecta Applied Lime Applied HTH/chlo Applied absorbents	nct	Washed down area Water samples/field me Raked and disposed of o Signs posted Other		en
Applied absorbents		Otner		
Sampling results / Fiel	d readings:			
*Incident Description	and Remedial Acti	on Being Taken (Include	estimated time for	completion):
*Future Preventative !	Measures:			

- The owner/operator of the collection/transmission system shall report to the department all unauthorized releases or spills of wastewater to surface or ground waters from its collection/transmission system or any other abnormal events within 24 hours of the event.
- Please use the department's form to submit a 5-day Written Abnormal Event Report (AER).
 - Make sure to include ALL relevant information on the report, including the estimated volume of the spill.



PUBLIC NOTICE OF POLLUTION FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- Unauthorized releases or spills more than 1,000 gallons per incident, or other abnormal events where information indicates that public health or the environment will be endangered, or the spill has reached surface waters, needs to be reported to the State Watch Office as soon as practical, but no later than 24 hours from the time that the owner/operator becomes aware of the circumstances.
- For spills above 1,000 gallons, a public notice of pollution must be published.
- The following link leads to the DEP's pollution notice portal: https://floridadep.gov/pollutionnotice.



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, FL 32399-2400

Pollution Notice

You are submitting a Public Notice of Pollution in accordance with <u>Section 403.077, F.S.</u> which is intended to prevent harm to human health, welfare, or property by assisting the control of pollution. This rule specifies that "reportable releases" are required to be reported to the Department.

Please be aware that while submission of a Notice through this form complies with the requirements of Section 403.077, F.S., it does not relieve you of any obligation to report to the State Watch Office or other authority required by your permit or state law.

Fields marked with * are necessary to implement the Subscription service required by statute. After completion, please e-mail the form to pollution.notice@dep.state.fl.us.

If you are reporting a new release, please select "Initial Notice" below

If you have previously reported this incident, have obtained a DEP Incident ID, and wish to update your Notice, please select "Updated Notice of Pollution" and enter the DEP Incident ID.

I	NOTICE TYPE *
	□ Initial Notice of Pollution
	a mila Notice of Foliation
	☐ Updated Notice of Pollution
	If this is an updated Notice, DEP Incident ID:
I	INCIDENT INFORMATION
	Please enter a name for the Incident:
	State Watch Office Incident Number or Case ID:
	Incident Report (Please enter the information provided to the State Watch Office. If you have a summary e-mail from the State Watch Office, you may copy that and paste it here): *



STATE WATCH OFFICE - INFORMATION FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



- I. Name, address, and telephone number of person reporting
- 2. Name, address, and telephone number of owner/operator of the collection/transmission system or responsible person for the discharge
- 3. Date and time of the discharge and status of discharge (ongoing or ceased)
- 4. Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater)
- 5. Estimated amount of the discharge
- 6. Location or address of the discharge
- 7. Source and cause of the discharge
- 8. Whether the discharge was contained on-site, and cleanup actions taken to date
- 9. Description of area affected by the discharge, including name of water body affected, if any
- 10.Other persons or agencies contacted



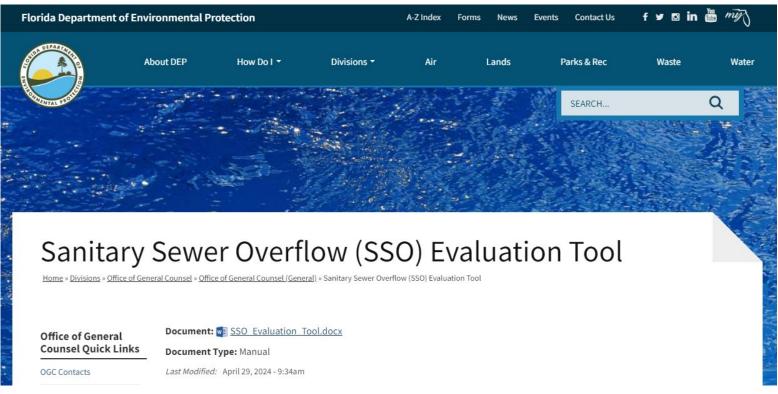
EXTERNAL CONTACT INFORMATION FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- State Watch Office:
 - Under the Florida Division of Emergency Management.
 - Toll Free Number: 800-320-0519.
- Florida Department of Environmental Protection, South District:
 - Main Line: 239-344-5600.
 - Abnormal Event Reporting Email: <u>SD-AbnormalEvents@dep.state.fl.us</u>.



ESTIMATING SPILL VOLUMES FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- Visual estimates.
- Volume estimates by dimensions.
- Connections served.



https://floridadep.gov/ogc/ogc/documents/sanitary-sewer-overflow-sso-evaluation-tool



VISUAL – OVERFLOWING MANHOLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION









100 gpm



Reference Sheet for Estimating Sewer Spills from Overflowing Sewer Manholes All estimates are calculated in gallons per minute (gpm)













200 gpm



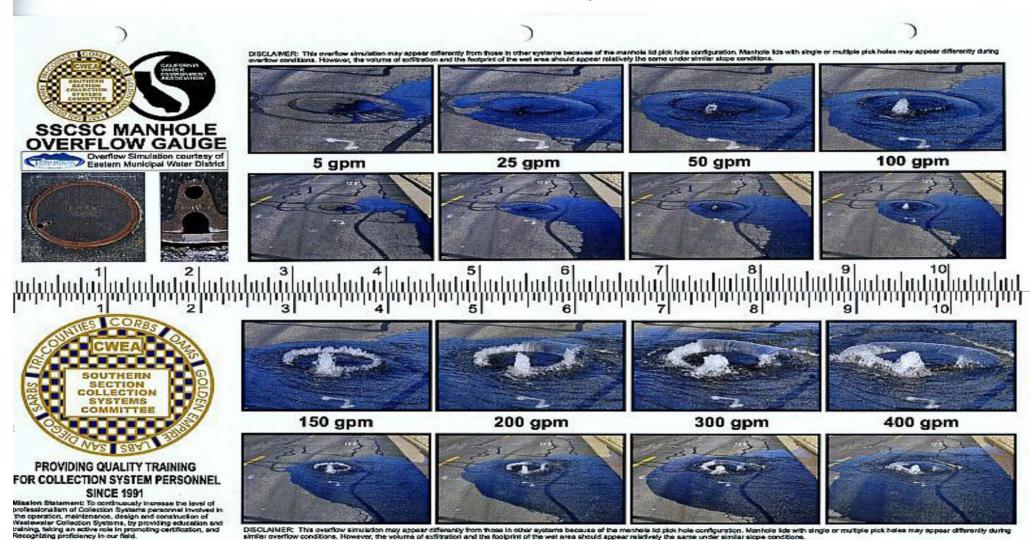
All photos were taken during a demonstration using metered water from a hydrant in cooperation with the City of San Diegos Water Department

rev. 4/99

Source: City of San Diego



VISUAL - OVERFLOWING MANHOLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Source: Southern Section Collection Systems Committee of the California Water Environment Association

DISCLAIMER: This overflow simulation may appear differently from those in other systems because of the membrile lid pick hole configuration. Membrile lide with single or multiple pick holes may appear differently during similar overflow conditions. However, the volume of extitration and the foolprint of the wet area should appear relatively the same under similar slope conditions.



