

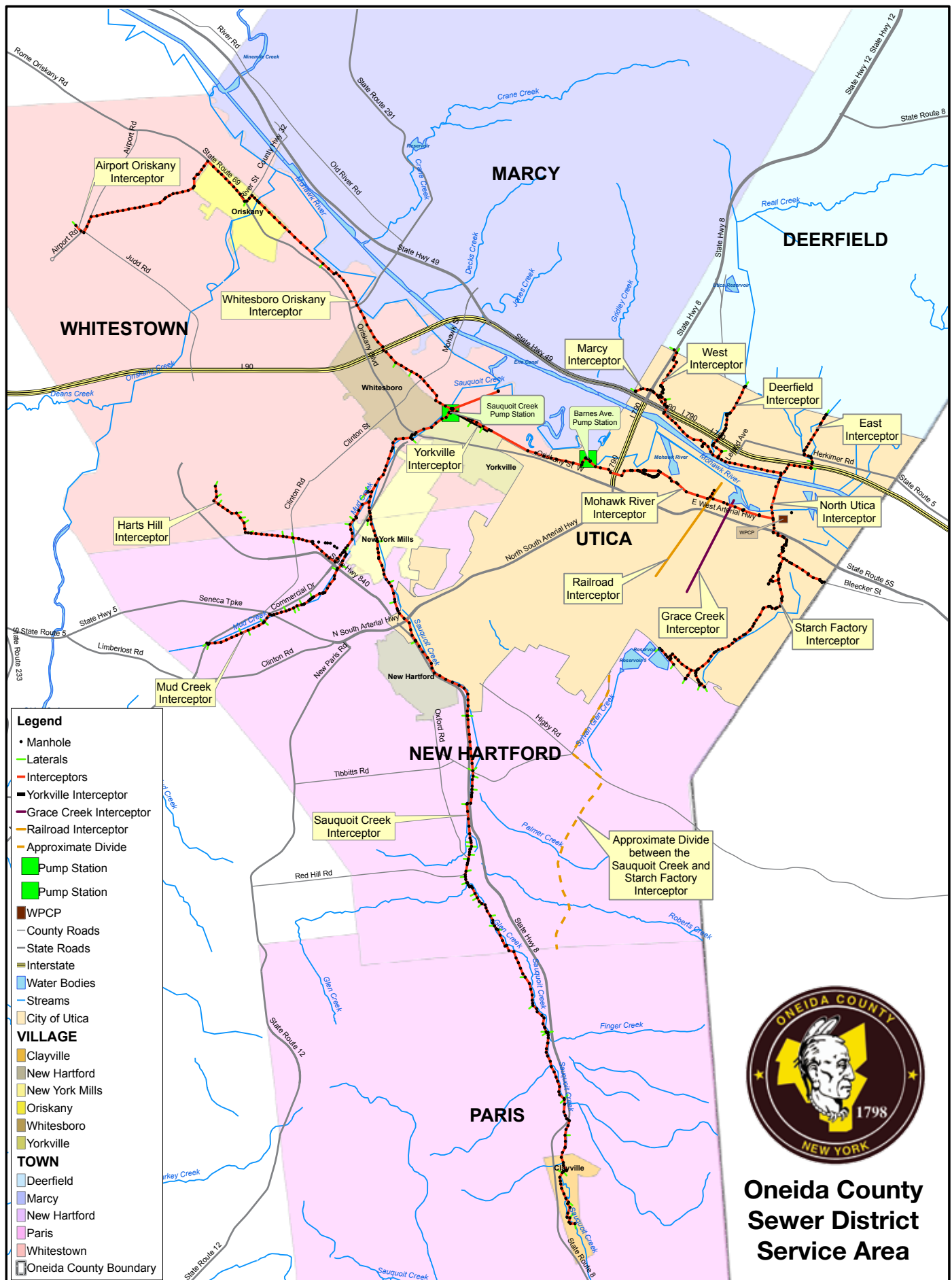
# OPERATION *Ripple Effect*<sup>TM</sup>

**SIMPLE STEPS: BIG BENEFITS  
FOR THE MOHAWK RIVER**

TM

Oneida County Sewer District  
Overflow Mitigation Project  
2015 Progress Report





# FROM THE COUNTY EXECUTIVE



What a journey this has been.

For more than eight years, we've researched, studied, mapped, negotiated and, most importantly, progressed a project that aims to redefine our County's wastewater system.

Why? The Oneida County Sewer District (OCSD) Sanitary Sewer Overflow Mitigation Project is vital to restoring and maintaining our aging conveyance system. This critical infrastructure is key to future economic development within our region. Without enhancement, progress within the OCSD simply cannot advance.

Guided by the input and collaboration of our project steering committee, a group consisting of representatives from each District municipality, we're proud to share with you the significant accomplishments outlined in the following pages.

Our achievements include advancing critical rehabilitation and repair projects, establishing standard processes to ensure the continued and consistent maintenance of our District's system, the start of data collection with the final installation of flow meters, and expanding public and resident awareness and support.

While our work is far from over, let's take a step back and appreciate what can be accomplished when we work together.

A handwritten signature in black ink, reading "Anthony J. Picente Jr." in a cursive script.

**Anthony J. Picente Jr.**

*County Executive  
Oneida County*







# OPERATION Ripple Effect™

## SIMPLE STEPS: BIG BENEFITS FOR THE MOHAWK RIVER

*Operation Ripple Effect™ is an Oneida County initiative that acts as a guide to provide simple steps to help keep the Mohawk River clean. This program highlights how individual actions add up to widespread improvements for the system.*

Normally, our sanitary sewer system has enough capacity to operate properly. But heavy rains or snowmelts can cause stormwater to overwhelm the system and result in overflows into the Mohawk River.

National studies have shown that as much as 50% of the excess stormwater in sanitary sewer system comes from private property. One big source is rainwater that is captured in roof gutters that then flows through a downspout that is connected into a sanitary sewer. Another significant source is the discharge from sump pumps.

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A standard 8-inch sanitary sewer line can service as many as 456 homes. Yet, during

a significant rainfall, that same sewer line can become overloaded with excess water from only 36 homes if downspouts are connected to it.

Sump pumps that discharge to the sanitary sewer can also be significant private property contributors of excess flow through the system. Discharge from as few as 10 sump pumps can overload that same 8-inch sewer line.

By discharging diluted raw sewage into the Mohawk River, we are potentially damaging the natural ecosystem and limiting our future generation's ability to enjoy the resource that helped develop the Mohawk Valley. In addition to impacting the river, if these overflows are not reduced, Oneida County faces harsh fines that would place a severe burden on local residents and hinder future regional economic development.



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# OCSD Sanitary Sewer Overflow Mitigation Project

Operation Ripple Effect™ is an outcome of the OCSD Sanitary Sewer Overflow Mitigation Project. Initiated in 2007, this project is a multi-year initiative designed to reduce sanitary sewer overflows. With the guidance of a Steering Committee composed of representatives from each city, town, and village within the district, the project is comprised of three major components that will reduce overflows:

1

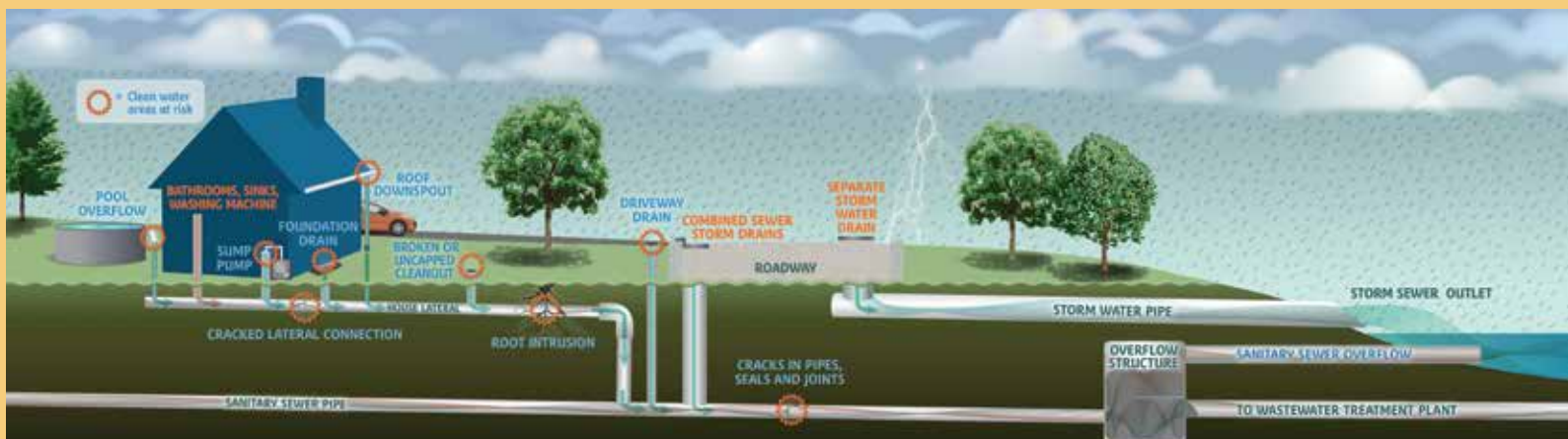
***Performing engineering investigations to determine sanitary sewer problems, repairs and upgrades***

2

***Identifying funding to enable repairs***

3

***Completing sewer system repairs and upgrades to reduce infiltration and inflow (I/I), and increasing pumping and treatment capacity***





# Rehabilitation & Repair Progress

From 2014 to 2015, approximately 60 miles of additional sewer lines have benefited from rehabilitation or repairs. Since implementing repair and rehabilitation work, **1,345 manholes** and **103.5 miles of pipe** have been rehabilitated

**– an accomplishment to be celebrated!**



## CONTRACT 6

### Location:

The towns of New Hartford, Paris and Whitestown, and the villages of Clayville and New Hartford.

### Description:

Pipe lining, pipe grouting, lateral grouting, lateral lining, and spot repairs.

### Status:

Approximately 15 miles of sewers have been rehabilitated under Contract 6. Minor items remain and work is expected to be complete this fall.

## CONTRACT 7

### Location:

Towns of Whitestown and New Hartford

### Description:

Pipe lining, pipe grouting, lateral grouting, lateral lining, and spot repairs.

### Status:

Approximately 13 miles of sewers have been rehabilitated under Contract 7. Minor items remain and work is expected to be complete this fall.

## CONTRACT 8

### Location:

Town of New Hartford

### Description:

Pipe grouting, lateral grouting, open cut and spot repair liners; small amount of pipe lining.

### Status:

A total of approximately 14 miles of pipe will be rehabilitated under Contract 8. The Notice to Proceed was issued on July 21, 2015 and work has begun.

## CONTRACT 10

### Location:

Village of Whitesboro and Town of Whitestown

### Status:

Bids were received on August 18, 2015. Contract 10 contains approximately 17 miles of pipe. Work under this contract consists of a mix of CIPP lining, pipe joint grouting, open cut repairs, spot repair liners, and supplemental CCTV inspections. Work is anticipated to begin in late December 2015/early January 2016.

## OTHER PROGRESS TO DATE

Municipality	Number of Manholes Rehabilitated*	Miles of Pipe Rehabilitated*
Clayville	40	1.0
Paris	154	3.4
New Hartford (T)	337	16.3
New Hartford (V)	87	3.1
New York Mills	182	4.6
Yorkville	104	2.5
Whitesboro	109	1.7
Whitestown	76	9.8
Oriskany	97	1.1
Airport Business Park	39	0
OCSD (District-wide)	120	0
<b>TOTALS</b>	<b>1,345</b>	<b>43.5</b>

\* Includes approximations. Actual numbers may vary slightly.





# Water Pollution Control Plant Upgrades

Wastewater treatment is at the heart of this project. Upgrades to the Water Pollution Control Plant (WPCP) will help the OCSD increase capacity, become more efficient, and meet the evolving needs of the region.

Driving the deadline for some of this work includes upcoming United States Environmental Protection Agency (EPA) and New York State Department of Environmental Conservation (DEC) air emissions regulations, starting in March 2016.

Progress:

- ▶ The solids-handling upgrade design is at 95% completion. The design includes advanced technologies, such as anaerobic digesters, and combined heat and power generation.
- ▶ The WPCP expansion and upgrade design is at 30% completion. Upgrades include new screening facility and pump station for flows from the North Utica and Starch Factory Creek Interceptors, upgrades to the existing raw waste facility to accommodate the combined flows from the City of Utica, new grit removal facilities, new primary settling tanks, high-rate disinfection system for wet weather combined sewer flows, new blowers and aeration tank diffusers, and refurbishment of the final settling tanks. In addition, security, fire protection, electrical, HVAC, structural, and hydraulic infrastructure upgrades will be completed.
- ▶ Refurbished incinerator modifications to comply with federal regulations are moving forward, including the award of contracts in July 2015 for the installation of new mercury scrubbers.

“Driving the deadline for some of this work includes upcoming EPA and DEC air emission regulations, starting in March 2016.”







# Sauquoit Creek Pump Station and Force Main Improvements

## Flow Meter Data Collection

All flow meters have been installed in the county and municipal sewers and are collecting data! Software will be used to analyze the dry and wet weather flows collected from the 63 flow meters and 5 rain gauges. The results will allow the County to assess the effectiveness of I/I removal projects. Due to the dry summer conditions, reliable data that reflects dry and wet weather dynamics is not expected until late 2015.

The Sauquoit Creek Pump Station (SCPS) has the capacity to pump 15 million gallons per day (mgd). This amount is more than sufficient to pump the average daily usage for this basin – roughly 5 mgd, based on domestic water consumption.

Progress:

**Designs for this project have reached 90% completion and include:**

- ◆ Replacement of existing pump station mechanical screen with two redundant screens in a new screen building; two screenings washer/compactors; a new outdoor standby generator; electrical and HVAC system upgrades; a new 48-inch force main and rehab of the existing force main; new flow metering and flow control vaults.
- ◆ Easement and title/abstract work is underway for properties along the new force main route.
- ◆ Wetland permitting is in progress.
- ◆ A final determination of “no further action required” was received from the NYS Office of Parks, Recreation, and Historic Preservation for the Cultural Resources Assessment.





## Steering Committee Achievements

**Since 2007**, the Steering Committee, consisting of representatives from each District municipality, has provided invaluable system insights, data, and project feedback to OCSD staff and an engineering consultant team. The Steering Committee serves in an essential oversight role in relation to decisions affecting system operations, management, and costs.

The Steering Committee and Working Groups have helped guide an extensive engineering study and the development of a New York State Department of Environmental Conservation-approved plan. They also have helped advance two critical community-based initiatives: Capacity, Management, Operation, and Maintenance (CMOM) and Private Property Inflow and Infiltration (PPII).

### CMOM Program

The CMOM working group has made significant progress in the following areas:

- ◆ Enhanced the Fats, Oils and Grease program with additional materials, and explore a possible collaboration with the Oneida County Health Department for implementation.
- ◆ Increased awareness regarding the physical and financial impacts of improper disposal of items, including wipes, hazardous materials, and other non-biodegradable substances.
- ◆ Identified sewer/creek-crossing inspections as an additional Standard Operating Guideline need.
- ◆ Explored Design and Construction Standards for pump stations and grease interceptors.
- ◆ Participated in a 2-hour asbestos awareness training to aid those who may come in contact with confirmed or suspected asbestos-containing materials during regular and emergency maintenance.

### PPII Program

The PPII working group has made significant progress in the following areas:

- ◆ Built upon initial voluntary residential assessments to identify private property impacts to sewer capacity for future pilot project development.
- ◆ Identified and advanced the first pilot project conceptual design.
- ◆ Assisted in the promotion of outreach events, including the Operation Ripple Effect Earth Day Celebration.





# Steering Committee Members

## Steering Committee

Robert Palmieri, Mayor, City of Utica  
Bruce Brodsky, Oneida County  
Harvey Yando, Oneida County  
Scott Mahardy, Supervisor  
Town of Deerfield  
Joseph Kinney, Supervisor  
Town of Frankfort  
George Bianchi, Deputy Supervisor  
Town of Frankfort  
Brian Scala, Supervisor, Town of Marcy  
Brendon Candella, Town of Marcy  
Carson Sorrell, Town of Marcy  
Patrick Tyksinski, Supervisor  
Town of New Hartford  
Scot Owens, Town of New Hartford  
Mary Lou McEnroy, Supervisor  
Town of Paris  
Jim Hogel, Town of Paris  
Kenneth Dodge, Supervisor  
Town of Schuyler  
Anthony Lucenti, Town of Schuyler  
Charles Gibbs II, Supervisor  
Town of Whitestown  
Bill Schmitt, Town of Whitestown  
Terry Dote, Mayor, Village of Clayville  
Mike Steiger, Village of Clayville  
Michael Bennison, Mayor  
Village of Holland Patent  
Peter Gaige, Village of Holland Patent  
Donald Ryan, Mayor  
Village of New Hartford  
John Bialek, Mayor  
Village of New York Mills  
George Majka  
Village of New York Mills  
Joseph Urban  
Village of New York Mills  
Don Rothdiener, Mayor  
Village of Oriskany  
Chris Burtch, Village of Oriskany  
Patrick O'Connor, Mayor  
Village of Whitesboro  
Anthony Leone, Jr., Mayor  
Village of Yorkville

## CMOM Working Group

Deb Day, City of Utica  
Sam Arcuri, Town of Deerfield  
Ronald Testa, Town of Frankfort  
Rich Quigley, Town of Marcy  
Chris Moran, Town of New Hartford  
Tony Cardillo, Town of Paris  
Joe Inglis, Town of Paris  
Don Sroka, Town of Schuyler  
Sal Granato, Town of Whitestown  
and Village of Yorkville  
Scott Barron, Village of Clayville  
Ben West, Village of Holland Patent  
Tim Hughes, Village of New Hartford  
Joseph Cotrupe, Jr.  
Village of New York Mills  
Mick O'Connor, Village of Oriskany  
Chuck Tritten, Village of Whitesboro

## PPII Working Group

Deb Day, City of Utica  
Sam Arcuri, Town of Deerfield  
John Rota, Town of Frankfort  
Rich Quigley, Town of Marcy  
Rick Sherman, Town of New Hartford  
Gina Lamonte, Town of Paris  
Robert VanDusen, Town of Schuyler  
Phil Husted, Town of Whitestown  
Carla Bostick, Village of Clayville  
Mike Hyrb, Village of Clayville  
Ken Cutler, Village of Holland Patent  
Don Bathke, Village of New Hartford  
Dave Neary, Villages of New York Mills  
and Whitesboro  
George Farley, Villages of Oriskany  
and Yorkville





# Public Outreach Accomplishments

Public outreach is a critical element of this project and a process that occurs in multiple formats, such as face-to-face, facilitated group discussions and presentations, media relations, printed and digital materials, communications bulletins, etc.

**Facilitated Steering Committee and Working Group Meetings**  
January 2014 - September 2015

**3** Full Steering Committee

**8** PPII Working Group

**8** CMOM Working Group

**Operation Ripple Effect™ has gained increased traction in 2014 and 2015, due to a number of highly-effective outreach activities.**

● **Operation Ripple Effect Earth Day Celebration:** A public event was hosted on April 18, 2015 at Jay-K Lumber in New Hartford. This event included live radio promotions, a pre-aired promotional radio spot, event ads in the Jay-K Lumber flyer and mention on the TV show Organization Motivation! and media coverage.

● **Business partnerships:** Several local businesses agreed to post consumer-friendly displays and provide brochures to customers.

● **Public displays:** Pull-up banners promoting Reroute, Reclaim, and Recharge were displayed at locations, including the Oneida County Public Market and Jay-K Lumber.

● **Presentations:** Speaking engagements were given to educate organizations and residents about the project.

● **Media relations:** Press releases and feature stories were published.

● **Public information bulletins:** Regular communications with project updates and education were distributed.

● **Website enhancements:** SewerRehabOCSD.org and RippleEffectOCSD.org were updated and enhanced to include additional digital content.

**Outreach and awareness building will continue into 2016 and will include:**

● *Continued partnerships with local media outlets*

● *Expanded public and partner presentations*

● *Promotional events and activities*

● *Website enhancements*

● *And much more!*





[rippleeffectocsd.org](http://rippleeffectocsd.org)