

# Department of Public Works Sewer Maintenance Fund



2015 Sewer Capital Budget

# 2015 Sewer Capital Program

■ Sewer Maintenance Relay	\$33,000,000
■ Inflow and Infiltration (I/I) Reduction Projects	\$5,000,000
• MMSD Grant	\$1,750,000
■ Sanitary Pump Rehabilitation	\$700,000
■ Water Quality Projects	\$1,000,000
■ Flood Mitigation Program	\$2,500,000
■ Channel Maintenance	<u>\$200,000</u>
<b>■ Total 2015 Preliminary Sewer Program</b>	<b>\$44,150,000</b>

# Sewer Maintenance Relay

	R/R Budget (million)
2014	\$33.90*
2015	\$33.00
2016	\$32.00
2017	\$32.00
2018	\$32.00
2019	\$32.00
<b>Total</b>	<b>\$194.90</b>

\* Includes \$2.9 million  
for reserves

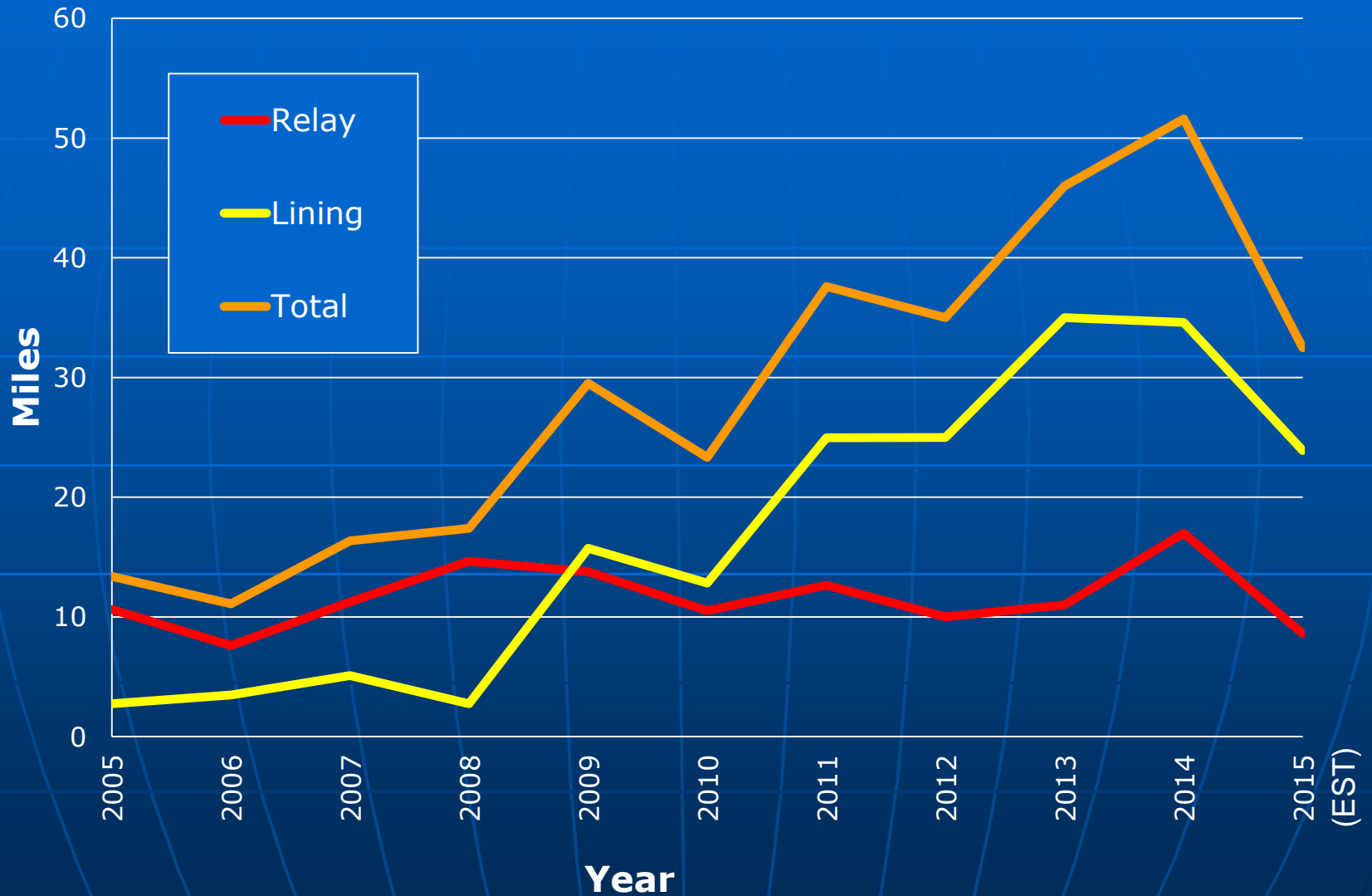


Sewer Maintenance Fund

# 2015 Major Projects

- W Harrison Ave – 120' East of S 13<sup>th</sup> St to S 16<sup>th</sup> St: \$650,000
- 30<sup>th</sup> Street Corridor Project (W Congress, W Hope, N 27<sup>th</sup> St to Railroad ROW) \$3,000,000
- N Broadway – E Wells St to E St Paul: \$900,000
- W Keefe Ave – N 18<sup>th</sup> St to N 22<sup>nd</sup> St: \$2,200,000

# 2005 - 2015 Sewer Replacement



# Inflow and Infiltration (I/I) Reduction

	I/I Budget (million)
2014	\$7.00
2015	\$5.00
2016	\$7.00
2017	\$7.00
2018	\$7.00
2019	\$7.00
<b>Total</b>	<b>\$40.00</b>



# Purpose of Inflow and Infiltration (I/I) Projects

- To address higher flows in MMSD's non-compliant metersheds
- To reduce basement backups, remove unwanted clear rain water from sanitary sewers
- To reduce Sanitary Sewer Overflows (SSO)

# 2015 I/I Reduction Projects

- Area Bounded By W Capitol Dr to W Finn Pl and N 8<sup>th</sup> St to N 24<sup>th</sup> St (System wide lining): \$1,740,000
- Area Bounded By W Congress St to W Capitol Dr and N 35<sup>th</sup> St to N 50<sup>th</sup> St (System wide lining): \$1,660,000
- Continued annual manhole inspection and rehabilitation of sanitary manholes to detect and eliminate large sources of I & I from entering into the manholes.



# Sanitary Pump Rehabilitation

	Pump Rehab (million)
2014	\$0.70
2015	\$0.70
2016	\$0.70
2017	\$0.70
2018	\$0.70
2019	\$0.70
<b>Total</b>	<b>\$4.20</b>



**Before**



**After**

# Purpose of Pump Rehabilitation

- Flow is pumped from the sanitary sewer to a higher level sanitary sewer or a storm sewer to prevent basement backups.
- Rebuild existing pump sites, including new pump and components
- Maintain SCADA telemetry system
- Perform monthly pump checks and “load” tests at all sites

# Storm Water Quality Projects

	Water Quality Projects (million)
2014	\$ 1.00
2015	\$ 1.00
2016	\$ 0.50
2017	\$ 0.50
2018	\$ 0.50
2019	\$0.50
<b>Total</b>	<b>\$4.00</b>



# Purpose of Storm Water Quality Projects

- Reduce Stormwater Peak Flows
- Improve Water Quality of Rivers and Lakes
- Improve Urban Aesthetics

# 2015 Storm Water Quality Projects

- Bioswales in the medians of:  
S. Howell Ave: W. Layton Ave. to W. Howard Ave.
- Green Alleys with 4-foot wide permeable pavers in the middle to infiltrate and store stormwater in the crushed stone underneath at:
  - Alley bounded by S. 20<sup>th</sup> St., W. Harrison Ave., and W. Windlake Ave.
  - Four legs of alleys in the area bounded by S. 19<sup>th</sup> St., W. Arthur Ave., S. 18<sup>th</sup> St., W. Windlake Ave., and W. Harrison Ave.

# Flood Mitigation Program

Requested amount is \$ 2.5 Million

The Dineen Park Neighborhood has experienced repeated occurrences of surface flooding in the past 10 years.

The City, Milwaukee County, and MMSD worked with residents to develop a mitigation plan.

This program will fund a storm water detention pond in Dineen Park that will provide a 25-year “level of protection”.

# River Channel Maintenance

	<b>Channel Maintenance (million)</b>
<b>2014</b>	<b>\$0.20</b>
<b>2015</b>	<b>\$0.20</b>
<b>2016</b>	<b>\$0.20</b>
<b>2017</b>	<b>\$0.20</b>
<b>2018</b>	<b>\$0.20</b>
<b>2019</b>	<b>\$0.20</b>
<b>Total</b>	<b>\$1.20</b>



# Purpose of Channel Maintenance

- Remove large debris from channels and culverts to maintain proper drainage
- Clean sediments from channels
- Bank stabilization and outfall protection