



# TYPES OF CSO CONTROLS

After selecting a preferred level of control, MSD must decide which control technologies or combination of technologies work best to reduce CSOs:

- ***Collection System Controls***
  - Sewer separation
  - Outfall relocation / elimination
  - Upgraded pump station capacity
- ***Storage Technologies***
  - Underground storage tunnels or tanks to hold overflows during rainfalls
- ***Treatment Technologies***
  - Increased wet-weather capacity of area treatment plants
  - Localized treatment
- ***Source Control Technologies***
  - Green infrastructure
  - Litter control and proper waste disposal



**Storage Tunnel**



**Lemay Treatment Plant**



**Rain Barrel**

Starbuck Industrial Supply  
5200 Brentwood Avenue  
St. Louis, MO 63119  
TEL: 314-772-2100  
FAX: 314-772-2102



# POSSIBLE CONTROLS BY WATERWAY

*Along impacted waterways, MSD is considering implementation of the following types of controls:*

TYPES OF CONTROLS	RDP – LOWER & MIDDLE	RDP – UPPER	RDP TRIBS	MALINE CREEK	GINGRAS CREEK	MISSISSIPPI RIVER
<i>Collection System Controls</i>	X	X	X	X	X	X
<i>Storage Technologies</i>	X	X	X			X
<i>Treatment Technologies</i>	X			X		X
<i>Source Controls</i>	X	X	X	X		X

*MSD will decide which controls to implement based upon:*

- Environmental benefits
- Public cost / financial capability
- Community disruption
- Social contribution



# CONTROLS MSD HAS ALREADY IMPLEMENTED

- Invested \$0.6 billion between 1992 and 2008
- Reduced overflows by 33%
- Completed controls, such as:
  - *Treatment plant improvements to handle greater CSO flow*
  - *“Express sewers” to ensure more flow at treatment plants*
  - *Small sewer separations*
- Improved inspection and maintenance programs
- Implemented CSO public notification program



# CONTROLS YOU CAN IMPLEMENT

You can help MSD reduce stormwater runoff and water pollution by:

- ***Stormwater Control***

- Disconnecting rain gutters/downspouts from sewer lines (where possible)
- Installing rain barrels on your property to collect stormwater runoff
- Planting a rain garden using native plants
- Reducing impervious surfaces (blacktop, concrete, etc), when possible

- ***Pollution Control***

- Disposing of trash, yard waste and pet waste properly
- Disposing of hazardous products properly (ex. At HHW sites)



**Litter Pick-Up**



# STAY ENGAGED!

- Call the information-line: 314-768-CRHC (2742)
- Visit the program website - [www.cleanriversstl.com](http://www.cleanriversstl.com)
- Invite Clean Rivers representatives to present at your neighborhood or organizational meetings
- Attend future public open houses
- Participate in a StreamTeam or HHW collection event
- Spread the word and advocate for clean water in our streams and rivers