

Stormwater Utility Level of Service Discussion

Citizens' Stormwater
Task Force
Presentation of
Recommendations

City Council Regular Session
Thursday, October 14, 2004



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Public Works Committee

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Agenda

- ❖ Review Stormwater Utility Level of Service (LOS)
- ❖ Recommended LOS (How much is sufficient? / How much is too much?)
- ❖ Next Steps and Discussion

What do we mean by Level of Service (LOS)? (1 of 2)

❖ How well does the stormwater system function?

- ❖ Convey stormwater runoff to: Property line? Nearest stream? City boundary? Watershed boundary?
- ❖ Design Criteria: how much in pipe network vs. overland flow? How much flood risk mitigation? How much water quality? Design beyond property boundaries to evaluate the entire watershed
- ❖ Construction criteria: Materials? Construction specifications? Levels of inspections?

❖ What do we want to protect or enhance with stormwater management?

- ❖ Critical facilities? Emergency access during storm events?
- ❖ Inhabited structures? All structures (fencing, sheds)? or Yards, parks, and open areas ?
- ❖ Beautification enhancements: Natural stream buffers? Conservation Areas? Parks or trails?
- ❖ Mitigate potential impacts to local lakes and streams? Retroactively address concerns?
- ❖ Stormwater system expansions “do no harm”? (preserve water quality; mitigate flood risks)

What do we mean by Level of Service (LOS)? (2 of 2)

❖ How do we want maintain the systems ?

- ❖ Response time for sinkhole repairs and other emergency repairs?
- ❖ Preventive maintenance efforts ?
- ❖ Streambank erosion? Culvert cleaning? Litter collection? Lake dredging? Annual basin inspections?

❖ How do we want to approach regulatory requirements?

- ❖ Erosion control enforcement
- ❖ Public education
- ❖ Illicit discharge detection and prevention
- ❖ Land use planning (post-construction runoff control, such as low impact development)

Activities that Create Levels of Service

Stormwater Program Cost Centers	Key Activities
System Maintenance	Routine preventative inspections, cleaning & repairs and reactive maintenance/repairs of stormwater conveyance inlets, catch basins, sewers, channels, ditches, detention basins, and other structures
Water Quality/Compliance	Public Outreach & Participation, Stormwater Plan Review, Construction inspections, Post-Construction BMP inspections, IDDE Program, Good Housekeeping, Compliance Reporting
Engineering & Planning	FPM Program, Operations, CIP and Development support
Stormwater Program Administration	Public Works management & administration, indirect costs

Current LOS

❖ Large Stormwater Projects

- ❖ Stormwater Improvements with Road Projects (CIP)
- ❖ Stormwater Failed Infrastructure Mitigation (CIP)
- ❖ Structural Flooding Mitigations (CIP)

❖ Small Stormwater Projects

- ❖ None

Current Resources

- City Engineer, Staff Engineers, Staff Inspections shared with other CIP Projects.
- Consultant Services for Design
- Voted 2007: \$12M G.O. bond issue for stormwater capital projects
- Voted 2017 CIP Sales Tax for Road & Stormwater Projects
- Voted 2023 NTIB for Transportation Projects

Current LOS

❖ Stormwater Maintenance

- ❖ Debris Removal/Culvert Cleaning (Reactive)
- ❖ Repaired Failed Pipes and Structures
- ❖ Projects funded by General Fund to address immediate life-safety threats from failed infrastructure (e.g. pipe collapse, sink holes, etc.)
 - ❖ Avg. Response time to Complete WO = 187 days
 - ❖ Ten WO over 1 year to complete
- ❖ Cannot keep pace with known and emerging needs due to funding and staffing challenges
- ❖ Cost approximately \$400 to \$680 per foot of pipe

❖ Stormwater Preventative

- ❖ Street Sweeping

Current Resources

- PW Maintenance Operators, Contract Specialist shared with other Work Order needs.
- Dump Trucks, Mini Excavator Rental, Excavator, Skid Steer (with attachments) shared with other Work Order needs.
- Contracted On-Call Construction for Repairs/Replacements
- Street Sweeper (1)

Current LOS

❖ Stormwater Education

- ❖ Signed Creek/River Crossings
- ❖ Required of MS4 Permit Compliance
 - ❖ City Webpage
 - ❖ Regional Stormwater Education (by MARC)
- ❖ Stream Team/Green Team

Current Resources

- MARC (Subscription Service)
- Environmental Specialist (10% of FTE time)

Current LOS

❖ Stormwater Private Assistance

- ❖ Staff consultations. Staff will perform site visits and offer suggestions upon service request.
- ❖ Mail annual notice to HOAs for basin inspections

Current Resources

- Staff Engineers, Environmental Specialist, Neighborhood Services Officers, etc.

Proposed LOS

❖ Large Stormwater Projects

- ❖ Stormwater Improvements with Road Projects (CIP)
- ❖ Stormwater Failed Infrastructure Mitigation (CIP)
- ❖ Structural Flooding Mitigations (CIP)
- ❖ Beyond Structural Flooding Mitigations
 - ❖ Streambank stability
 - ❖ Maintain / Rehabilitate City-owned basins
- ❖ Stormwater Infrastructure Master Planning
- ❖ Potentially Limited Private System Acquisitions/Work
 - ❖ Short Major Private Connections/Conveyances between Public Sections of Stormwater Infrastructure

❖ Small Stormwater Projects

- ❖ Stormwater Improvements (CIP) Program
 - ❖ Culvert Replacement, Pipe Lining, Etc.
- ❖ Public Works Operations Stormwater Projects

Proposed Resources

- City Engineer, Staff Engineers, Staff Inspections shared with other CIP Projects.
- Consultant Services for Design
- Voted 2007: \$12M G.O. bond issue for stormwater capital projects
- Voted 2017 CIP Sales Tax for Road & Stormwater Projects
- Voted 2023 NTIB for Transportation Projects
- Potential Sales Tax for Major Stormwater CIP
- Potential Bonds for Major Stormwater CIP
- Stormwater Utility Funding for Small Projects or Supplemental to Major Stormwater CIP
- Stormwater Engineer
- Operations Crew, Equipment, Materials & Contracts for Small Projects

(Refer to Proposed Maintenance Resources)

Proposed LOS

❖ Stormwater Maintenance

- ❖ Debris Removal/Culvert Cleaning (Reactive)
- ❖ Repaired Failed Pipes and Structures
- ❖ Projects funded by General Fund to address immediate life-safety threats from failed infrastructure (e.g. pipe collapse, sink holes, etc.)
 - ❖ Significantly Improved Response Time
- ~~❖ Cannot keep pace with~~ Address known and emerging needs ~~due to funding and staffing challenges~~

❖ Stormwater Preventative

- ❖ Street Sweeping + Future Enhanced Frequency
- ❖ Permit Compliance (5- Year Recertification)
- ❖ Improved Erosion Controls (CIP, ROW, Development)
- ❖ Proactive Inspections and Pipe Rehabilitation
- ❖ Maintenance Program (e.g. similar to pavement)
 - ❖ Basins, BMPs (vacuum cleaning, landscaping, etc.), Litter

Proposed Resources

- PW Maintenance Operators, Contract Specialist shared with other Work Order needs. As Needed
- Dump Trucks, Mini Excavator Rental, Excavator, Skid Steer (with attachments) shared with other Work Order needs. As Needed
- Contracted On-Call Construction for Repairs/Replacements
- Preventative Stormwater CIP Program
- Additional (1) Dump Truck, Mini Excavator, Backhoe/Excavator, Trailer, Skid Steer, Jet Truck, CCTV Truck, and Various Equipment Attachments
- Three Crews:
 - 5 Existing Operators + 10 New Operators
 - Operations Supervisor
- Street Sweeper (1) + Future Street Sweeper

Proposed LOS

❖ Stormwater Education

- ❖ Signed Creek/River Crossings
- ❖ Required of MS4 Permit Compliance
 - ❖ City Webpage
 - ❖ Regional Stormwater Education (by MARC)
- ❖ Stream Team/Green Team & Enhanced Activities
- ❖ Pollution Management Programming
- ❖ HOA Consultations
- ❖ School Programming
- ❖ Private Stormwater System Consultations
- ❖ Flood Mapping Information
- ❖ Flood Insurance Program Communications
- ❖ General Stormwater and Erosion Control Information
 - ❖ Flood Hazard Letters (Reverse Declining Levels of Services)

Proposed Resources

- MARC (Subscription Service)
- Environmental Specialist (~~10% of FTE time~~)
 - Part-Time Public Education Support
 - Full-Time Regulatory Compliance, Permitting, Insurance
- Stormwater Public Educator
 - Full-Time Public Education
- Customer Service Staff
- School Partnerships
- Public Education Materials

Proposed LOS

❖ Stormwater Private Assistance

- ❖ Staff consultations. Staff will perform site visits and offer suggestions upon service request.
- ❖ Mail annual notice to HOAs for basin inspections
- ❖ Staff Inspections/Reporting of private basins (e.g. HOA)
- ❖ Flood Mapping & Improved Permitting Assistance
- ❖ Flood Hazard & Flood Insurance Program Letters
- ❖ Potentially Limited Private System Acquisitions/Work
(Refer to Large Stormwater Projects)

Proposed Resources

- Staff Engineers, ~~Environmental Specialist~~, Neighborhood Services Officers, etc. As Needed
- Environmental Specialist
- Stormwater Public Educator
- Potentially Limited Private System Acquisitions/Work

Resources for Proposed Level of Service

- Add two crews, equipment, public education and support staff
- Adds funding for small capital improvements and maintenance
 - Contracted work for extensive system repairs/replacements
 - Master planning
- Initial Cost \$5.7 Million per year in 2022
- \$6.1 million per year in 2025 adjusted for inflation

Expansions to support Proposed Level of Service

- Add 2 full time, stormwater maintenance crew to PW Ops
 - Add 10 Operators; Field Supervisor
 - Add jet truck; CCTV truck; backhoe; dump truck; 1-ton truck; pickup and mini excavator/skid steer/etc.
- Support staff added to PW Engineering and Administration
 - Add one full-time stormwater engineer
 - Add Customer Service Supervisor
 - Add full-time public educator
 - Retain Environmental Specialist
- Excludes Billing Systems, Staff and Support (Billing TBD)

Next steps

- Confirm LOS guidance with PWC
- Discuss staffing and cost to support LOS guidance
- Address remaining stormwater utility funding and implementation questions
 - Structure; types of fees or taxes; collection system; administration
 - Timeline
- PWC renders a recommendation for the City Council