

Lampasas River Watershed Partnership

Urban Nonpoint Source Work Group

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Introductions

Past Business

July Steering Committee Report

- ▶ Approved changes to the Partnership Ground Rules, merging Work Groups
 - Agriculture and Wildlife Work Group
 - Urban Nonpoint Source Work Group
- ▶ Approved Fecal Coliform Conversion Method
 - Texas Surface Water Quality Standards
 - *E. coli* geometric mean to fecal coliform geometric mean ratio (SWQS)
 - $E. coli / \text{Fecal coliform} = 0.63$
- ▶ Approved Land Use analysis
- ▶ Approved SELECT model results

July Steering Committee Report

- ▶ Approved Water Quality Goals for the Lampasas River WPP
 - Adopt State Surface Water Quality Standards
 - Fecal Coliform: geomean < 200 cfu per 100 ml
 - *E. coli*: geomean < 126 cfu per 100 ml
 - Chloride: mean < 500 mg/l
 - Sulfate: mean < 100 mg/l
 - Total Dissolved Solids: mean < 1200 mg/l
 - Dissolved Oxygen: ≥ 3.0 mg/l
 - Nitrate Nitrogen^{**}: mean < 2.76 mg/l
 - Orthophosphate^{**}: mean < 0.5 mg/l

*^{**}State screening criteria – 85% of state's waterbodies are below this level^{**}*

Best Management Practices for Bacteria Reduction

Structural and Non-structural Urban BMPs

BEST MANAGEMENT PRACTICE	EFFECT ON URBAN NONPOINT SOURCE POLLUTANTS			
	Sediment	Nutrients	Toxic Chemicals	Pathogens
STRUCTURAL				
<i>Infiltration systems</i>				
Infiltration basins	+	+	\	\
Porous pavement systems	+	+	\	\
Infiltration trenches and wells	+	+	\	\
<i>Detention systems</i>				
Detention basins	\	-	-	-
Underground vaults, pipes and tanks	\	-	-	-
<i>Retention systems</i>				
Retention ponds	+	-	-	-
Retention tanks, tunnels, vaults and pipes	+	-	-	-
<i>Constructed wetland systems</i>				
Wetland basins and wetland channels	+	+	-	-
<i>Filtration systems</i>				
Surface sand filter	+	+	-	\
Underground vault sand filter	+	+	-	\
Biofiltration/bioretenion systems	+	+	-	\
<i>Vegetation systems (biofilters)</i>				
Grass filter strips	+	+	-	-
Vegetated swales	+	+	-	-
NON-STRUCTURAL				
<i>Education, recycling, source controls</i>				
Automotive product disposal	-	+	+	-
Commercial and retail space good housekeeping	-	+	+	-
General community outreach	+	+	+	+
Industrial good housekeeping	-	+	+	-
Storm drain inlet stenciling	-	+	+	+
Pesticide/herbicide use	-	+	+	-
Fertilizer use	-	+	-	-
Household hazardous material disposal	-	-	+	-
Lawn debris management	+	+	-	-
Pet waste disposal	-	+	-	+
Illicit discharge detection and elimination	+	+	+	+

Structural and Non-structural Urban BMPs, continued

BEST MANAGEMENT PRACTICE	IMPACT ON URBAN NONPOINT SOURCE POLLUTANTS			
	Sediment	Nutrients	Toxic Chemicals	Pathogens
<i>Maintenance practices</i>				
Catch basin cleaning	+	-	-	-
Street and parking lot cleaning	+	+	+	+
Road and ditch maintenance	+	+	+	+
Road salting and sanding	+	-	+	-
Vegetation maintenance	+	+	-	-
<i>Low-Impact development practices</i>				
Minimizing impervious areas	+	+	+	+
Directed growth	+	+	+	+
Sensitive area protection	+	+	+	+
Open space preservation	+	+	+	+
Minimizing soil and vegetation disturbance	+	+	+	+
KEY + Medium to high effectiveness / Low to medium effectiveness - No control to low effectiveness	NOTE These practices may not perform as indicated at all sites and in all situations. <i>Adapted from Texas Watershed Stewards Handbook</i>			

Texas Commission on Environmental Quality; Programs for Watershed Management & Urban Runoff

Arthur Talley, Engineer, TCEQ Water Quality
Planning Division

City of Killeen – Phase II Permit Update

Kristina Ramirez, Project Engineer,
City of Killeen – Public Works/Drainage

Discussion

Next Steps

Update on NRCS Riparian Function workshop

- ▶ NRCS will host a Proper Riparian Function workshop
- ▶ One-day course; ½ Classroom, ½ Field
- ▶ Two course are planned:
 - One in upper portion of watershed (Mills/ Hamilton/ Lampasas Counties)
 - One in lower portion of watershed (Lampasas/ Burnet/ Bell Counties)
- ▶ We need volunteers for field sites; must have river or stream-front property,
 - Preferably on small tributaries
- ▶ October 28 & 29

Upcoming Meetings

- ▶ To Be Announced
- ▶ Information will be sent out in newsletter