

Exhibit A - Drainage Improvement Cost-Benefit Economic Analysis

Existing Conditions			
Flood Frequency	Structure Damage	Accumulated Projected Damages	Accumulated 50-year Projected Damages #
1-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 50
2-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 25
5-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 10
10-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 5
25-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 2
50-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 1
100-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Not Applicable

* FEMA average flood damage - ~~\$4,700~~ ^{most current} per structure; assume additional 50% damage per 1 level increase of flood
~~# Assume 50-year useful life for new structure~~

Conditions with Proposed Improvements					
Flood Frequency	Structure Damage	Accumulated Projected Damages	Accumulated 50-year Projected Damages	Proposed Improvement Costs	Difference - Accum. 50-year Prop. Dam. & Prop. Imp. Costs
1-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 50	TBD	
2-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 25	TBD	
5-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 10	TBD	
10-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 5	TBD	
25-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 2	TBD	
50-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Accumulated Projected Damages x 1	TBD	
100-year	# of Structures & Damage per Structure*	# of Structures x Damage per Structure	Not Applicable	Not Applicable	

Add Benefit cost ratio column