

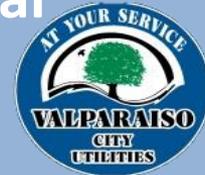


VALPARAISO CITY UTILITIES STORMWATER UTILITY

Bond Issue & Rate Proposal

City Council

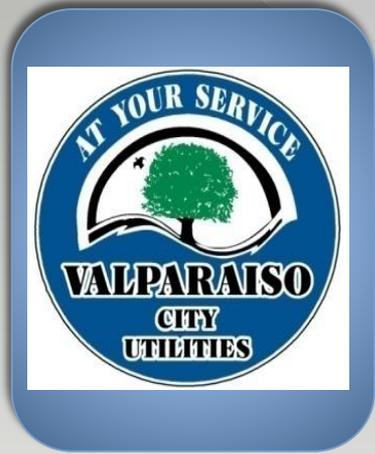
February 27, 2017



Agenda

- **Stormwater Board & Rates History**
- **Status of the Super 17 Storm Water Projects**
- **Critical Needs**
- **Revised Stormwater Master Plan**
- **Estimated Costs**
- **Financial Plan/Schedule & Rates**

TEAM



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- ❖ Adam McAlpine Deputy City Engineer
- ❖ Tim Burkman Engineering Director
- ❖ Bill Oeding City Administrator
- ❖ John Julien Umbaugh & Associates
- ❖ Tom Pitman Barnes & Thornburg LLC
- ❖ Steve Poulos Utilities Director

Stormwater Board & Rates History

1996

1998

2007

2009

2010

Storm Water Utilities Board
Establish/3 Member Board

\$3.00 Fee
per Residential Household

Merging of Storm Water Utility under the oversight of the VCU Board of Directors

65 Projects Evaluated - Establishment of SUPER 17 Storm Water Projects For Maximum Benefits

Bond Issue with Incremental Rate Increases
Phase I
\$4.00 - 2010
Phase II
\$4.00 - 2011

Total Fee:
\$11.00

STORMWATER MANAGEMENT HISTORY PAST 50 YEARS

2010
Population = 31,730

1991 - 2008

- 1991 – City specification manual adopted
- 1996 – Stormwater utility established
- 1998 – Stormwater fees collected
- 2003 – MS4 rule effective
- 2007 – VCU manages stormwater
- 2008 – UDO adopted

2015

2015

The year to make it "Green!"
We can do better!
Slow the flow again and implement
Water quality standards



2000
Population = 27,428

1990
Population = 24,414

1995

Slow the flow...again!
Build larger urban ponds and slow water
to 2-year predeveloped land conditions

1980
Population = 22,247

1975

Slow it down!
Pipes and creeks can't keep up!
Build urban ponds and slow water
to 10-year predeveloped land conditions

1970
Population = 20,020

1965

Not my problem!
Pipe water away! No
ponds required.

1965

*Valparaiso strives to properly manage the quantity and quality
of stormwater runoff resulting from community growth*

CITY OF VALPARAISO
STORMWATER MASTER PLAN



2010 TO 2020 IMPLEMENTATION

Prepared by the City of Valparaiso Engineering Department
November, 2009

“It should be noted that while this plan sets the framework for stormwater capital projects over the next ten years, it should be reevaluated and updated on a regular basis to incorporate needs as they arise.”

“Super 17” Projects – City Responds with Solutions

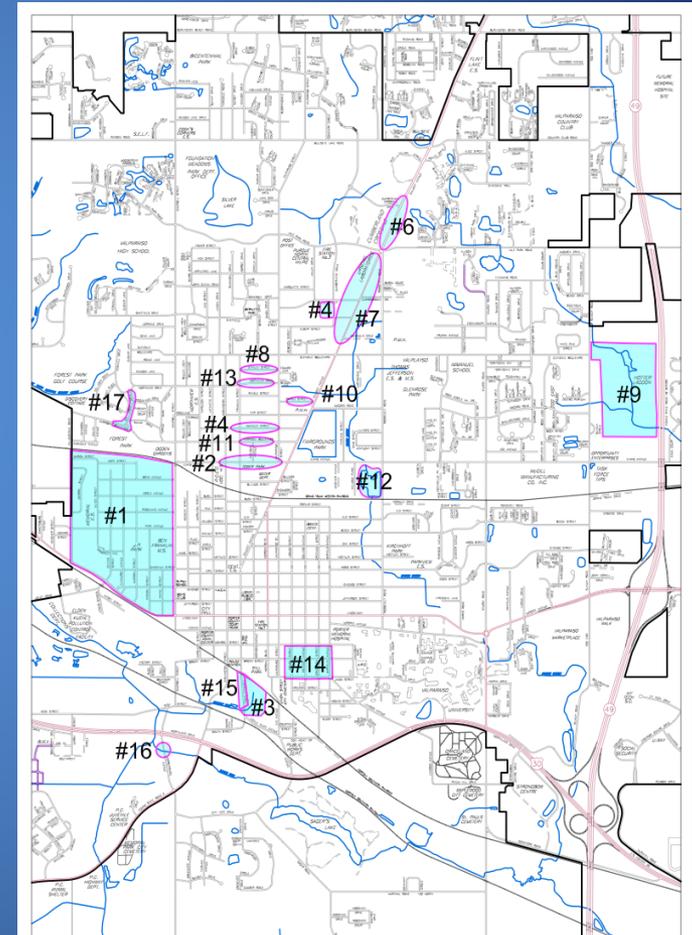


The City has been **“boldly proactive”** and accomplished many stormwater projects and significantly improved drainage conditions during the past seven years.

“Super 17” Projects – Progress Report

Valparaiso Stormwater Master Plan Projects (2010 to 2020 Implementation)

Priority	Project Name	Current Progress
1	Chautauqua Park Stormwater System	1
2	Evans Avenue West Interceptor Sewer	1
3	Franklin Street Detention Basin	1
4	Wall Street Detention Basin	1
5	McKinley Street Storm Sewer	1
6	Calumet Avenue North	1
7	Calumet Avenue Central	1
8	Stanley Street Storm Sewer	1
9	Hotter Lagoon Spill Protection	0
10	Randle Street Storm Sewer	1
11	Harrison Blvd. Storm Sewer	0
12	Thorgren Basin Rehabilitation	1
13	Northview Drive Storm Sewer	1
14	Hospital Storm Sewer Branches	0
15	Franklin Street South Storm Sewer	0
16	Horseprairie/Sagers Run Culvert Replacement	1
17	Del Vista Storm Sewer Replacement	0
Current Progress		
0 = No Progress		
0.25 = In Design		
0.50 = Design Complete		
0.75 = In Construction		
1 = Construction Complete		
Progress Summation:		12.00
Percent Complete (Summation Divided by 17):		71%

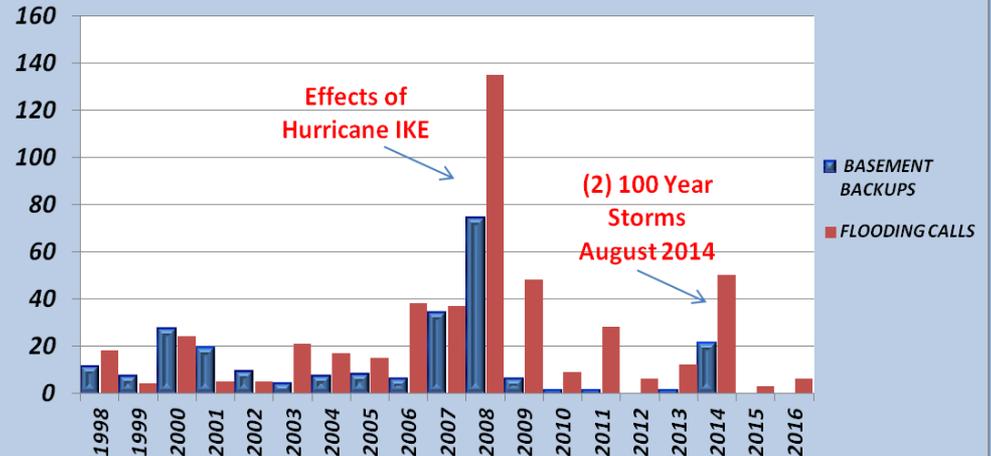


Quantifiable Results

Flooding & Basement Backups:

- ✓ Reduction in Flooding and Backup Events
- ✓ Reduction in Property Loss
- ✓ Quality of Life

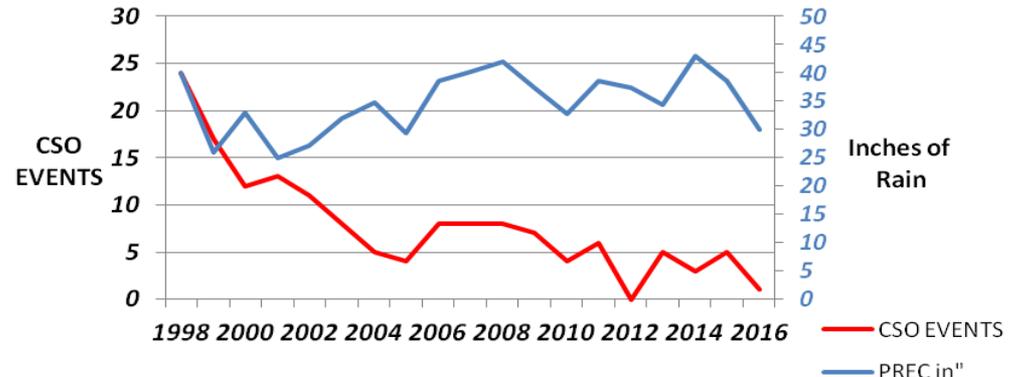
CITY OF VALPARAISO
FLOODING AND BASEMENT BACKUP CALLS DUE TO RAIN
 1998 - 2016



Combined Sewer Overflows:

- ✓ Reduction in CSO Events
- ✓ Reduction in CSO Volume
- ✓ CSO Disinfection
- ✓ Environmental Improvement
- ✓ Reduced Operating costs

Valparaiso City Utilities
Combined Sewer Overflow (CSO) Meter
Number of CSO Events
 1998 - 2016



RECENT FLASH FLOODS



OLD FAIRGROUNDS PARK

August 22, 2014

100-YEAR STORM

5.73 INCHES OF
RAIN IN
10 HOURS



SILHAVY & EVANS

August 26, 2014

100-YEAR STORM

2 INCHES OF RAIN
IN
20 MINUTES



ST. ANDREWS SQUARE

APPROXIMATELY
200 FLOOD
RELATED CALLS
RECEIVED FROM
RESIDENTS



FRANKLIN HOUSE

City of Valparaiso Flash Flood Infrastructure Damages

0 500 1,000 2,000 Feet

W 406 N

IN 130

VALE PARK RD.

VALE PARK RD. 400

VALE PA

KIMRICH CIR N

Vale Park Road Washout

LARIMAR TRL

KIMRICH CIR S

375 N.

FROBERG RD.

LONGFORD AVE.

HARRISON BLVD.

Beauty Creek

OLD OAK DR.

WILLIAM DR.

WINCHESTER DR.

SHERWOOD DR.

Harrison Blvd. Bridge Collapse

Daycare Center
School and Church

1855 Harrison Blvd.

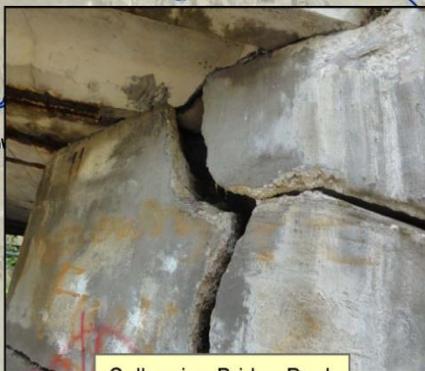
AVONDALE AVE.

MARION ST.

LONGFORD RD.



Sept. 2014



Collapsing Bridge Deck
Over Unstable Abutment



Bridge and Road Destruction



Map Area

City of Valparaiso



Bridge Demolition for Public Safety



Fallen Trees and Outfall Washout

JOLIET RD.

FARRELL

Critical Need

**Project: Village Station
Railroad Culvert Replacement**

Design By: DLZ

**Description: Replace aged
24" diameter brick storm
sewer culvert below railroad
tracks and upsize to 70"
diameter per DLZ study.**

Estimated Cost: \$2-2.5 M

Construction Year: 2017



**DOWNTOWN SEWER SEPARATION
AND DRAINAGE STUDY**



Prepared for:
VALPARAISO CITY UTILITIES
VALPARAISO, INDIANA
March 2015



Prepared by:
DLZ Indiana, LLC | 7011 Indianapolis Blvd.
Hammond, IN 46324 | 219.940.1700

Critical Need

Project: Beauty Creek Bank Stabilization Project: Phases A/B/C

Design By: Lawson Fisher

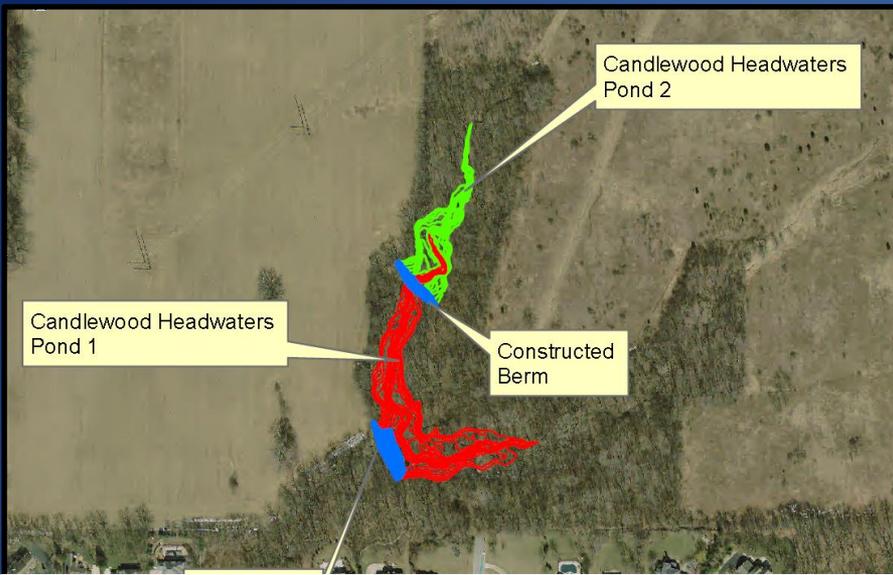
Description: Repair and stabilize the stream banks along the most severely eroded and highest priority locations.

Estimated Cost: \$3M

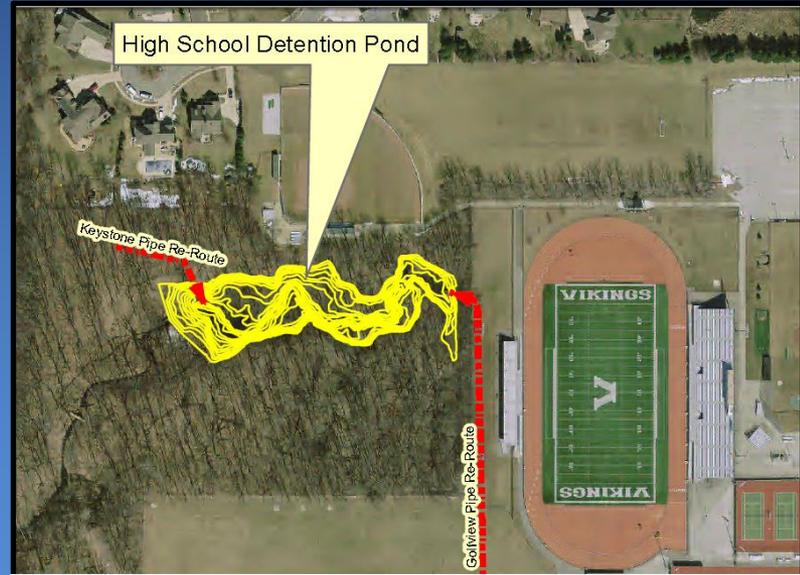
Approx. Unit Price: \$360 per foot

Construction Years: 2017-2019

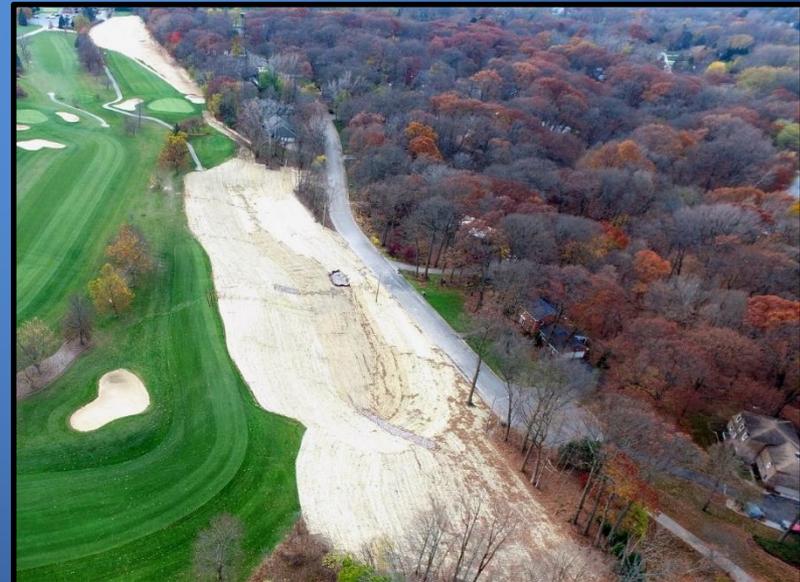
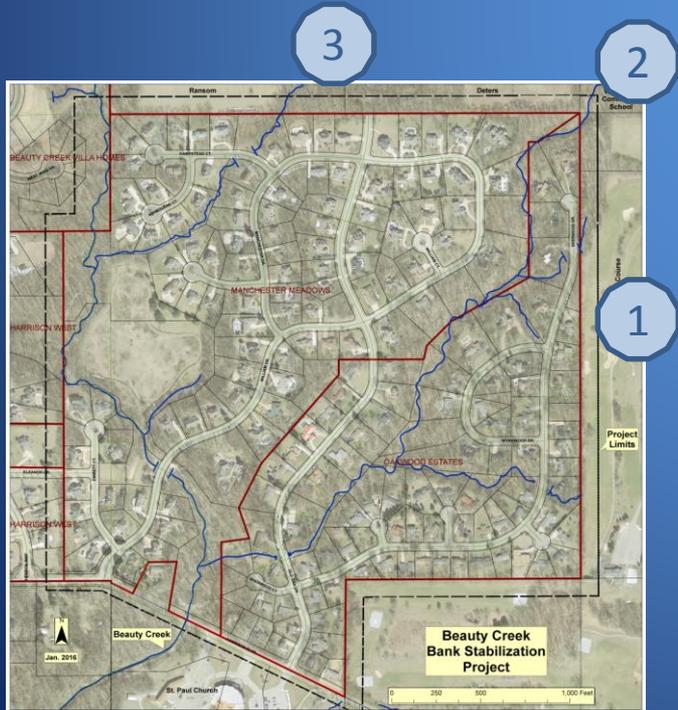




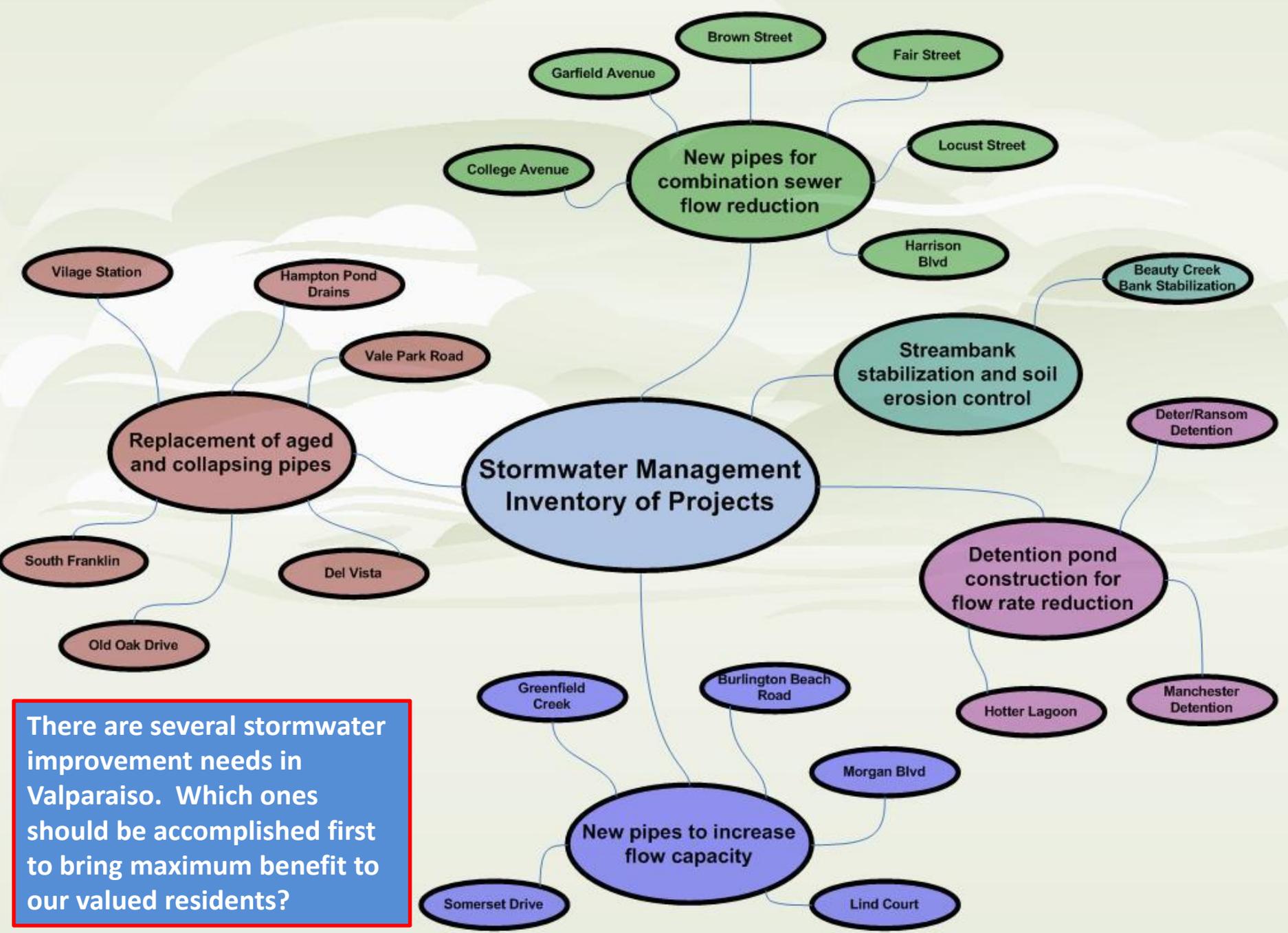
Future Detention – North (3)



Future Detention – Northeast VHS (2)



Recently Completed Detention – East (1)



There are several stormwater improvement needs in Valparaiso. Which ones should be accomplished first to bring maximum benefit to our valued residents?

CRITERIA FOR RANKING STORMWATER DRAINAGE PROJECTS

LOCATION

Is this project related to a water course over which the City has jurisdiction?

EXTENT OF OBLIGATION

Is the problem related to or independent of normal operation of the facility?

RISK

What is the potential for property damage or personal injury?

IMPACT

How many people and/or properties are affected?

ENVIRONMENT

Does the project improve water quality or other environmental i

TERM

How long has the project been "on the table"?

EFFICACY

How well does the project fit into the current timetable, budget, and overall plan?

Accepted by Storm Water
Management Board 5/14/96
Amended 6/19/97
Reaffirmed 12/15/99
Amended 7/7/03
Reaffirmed by Valparaiso
City Utilities Board 10/25/16

Priority	Projects	Point Total
1	Village Station Railroad Culvert	60
2	Beauty Creek Bank Stabilization, Phase A	57
3	Burlington Beach Road and Brentwood Drive	55
4	Del Vista Storm Sewer Replacement	55
5	Beauty Creek Watershed Detention Basins	54
6	Beauty Creek Bank Stabilization, Phase B	57
7	Harrison Boulevard Storm Sewer Separation	54
8	Beauty Creek Bank Stabilization, Phase C	57
9	Brown Street Storm Sewer Separation	53
10	Garfield Avenue Storm Sewer Separation	53
11	Locust Street Storm Sewer Separation	53
12	College Avenue Storm Sewer Separation	53
13	Fair Street Storm Sewer Separation	51
14	Greenfield Creek Drainage Improvements	42
15	South Franklin Street Storm Sewer	40
16	Somerset and Linden Drainage Improvements	41
17	Vale Park Road Drainage System	40
18	Will Park Detention Basin	39
19	Morgan Boulevard Interceptor Sewer	38
20	Hampton Pond Drains	32

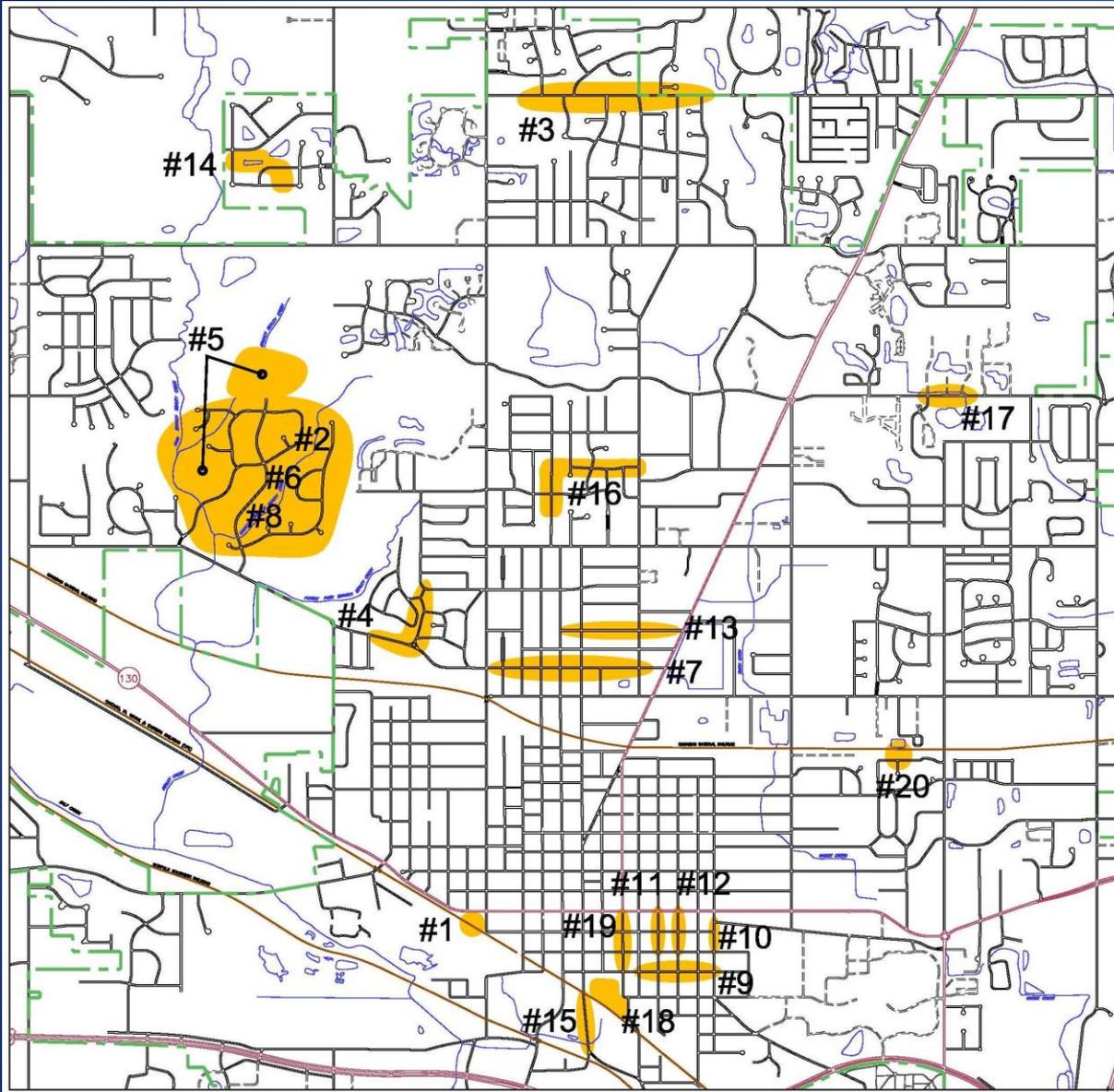
**2016
Stormwater
Master Plan
Approved by
Valparaiso
City Utilities
Board on
10/25/16**

Original Remaining Super 17
Projects Highlighted

Projects	Budget Amount
Village Station Railroad Culvert	\$2,500,000.00
Beauty Creek Bank Stabilization, Phase A	\$1,000,000.00
Burlington Beach Road and Brentwood Drive	\$930,000.00
Del Vista Storm Sewer Replacement	\$1,100,000.00
Beauty Creek Watershed Detention Basins	\$1,400,000.00
Beauty Creek Bank Stabilization, Phase B	\$1,000,000.00
Harrison Boulevard Storm Sewer Separation	\$750,000.00
Beauty Creek Bank Stabilization, Phase C	\$1,000,000.00
Brown Street Storm Sewer Separation	\$420,000.00
Garfield Avenue Storm Sewer Separation	\$180,000.00
Locust Street Storm Sewer Separation	\$280,000.00
College Avenue Storm Sewer Separation	\$400,000.00
Fair Street Storm Sewer Separation	\$530,000.00
Greenfield Creek Drainage Improvements	\$380,000.00
South Franklin Street Storm Sewer	\$280,000.00
Somerset and Linden Drainage Improvements	\$800,000.00
Vale Park Road Drainage System	\$1,200,000.00
Will Park Detention Basin	\$1,750,000.00
Morgan Boulevard Interceptor Sewer	\$1,500,000.00
Hampton Pond Drains	\$200,000.00

2016 Stormwater Master Plan

Original Remaining Super
17 Projects Highlighted



Priority	Projects
1	Village Station Railroad Culvert
2	Beauty Creek Bank Stabilization, Phase A
3	Burlington Beach Road and Brentwood Drive
4	Del Vista Storm Sewer Replacement
5	Beauty Creek Watershed Detention Basins
6	Beauty Creek Bank Stabilization, Phase B
7	Harrison Boulevard Storm Sewer Separation
8	Beauty Creek Bank Stabilization, Phase C
9	Brown Street Storm Sewer Separation
10	Garfield Avenue Storm Sewer Separation
11	Locust Street Storm Sewer Separation
12	College Avenue Storm Sewer Separation
13	Fair Street Storm Sewer Separation
14	Greenfield Creek Drainage Improvements
15	South Franklin Street Storm Sewer
16	Somerset and Linden Drainage Improvements
17	Vale Park Road Drainage System
18	Will Park Detention Basin
19	Morgan Boulevard Interceptor Sewer
20	Hampton Pond Drains

**2016
Stormwater
Master Plan**

STORMWATER PROJECTS

\$3 Monthly Fee 1998-2008

\$8 Addition to Monthly Fee 2009-PRESENT

\$1.50 Addition to Monthly Fee PROPOSED

Marion Manor Drainage Project	\$	273,000.00
Beauty Creek Relocation	\$	14,000.00
Fernhill Storm Project	\$	10,000.00
Campbell Street Storm Sewer	\$	572,000.00
Valparaiso Street Project	\$	500,000.00
Union Street Project 1	\$	1,400,000.00
Union Street Project 2	\$	1,263,000.00
Beauty Creek Kobak Property	\$	74,000.00
Cooks Corners Storm Sewers	\$	107,000.00
Burlington Beach Storm Sewer Repair	\$	403,000.00
Crosby Ditch Culvert Replacement	\$	49,000.00
TOTAL:	\$	4,665,000.00

Garfield Avenue Phase 1	\$	57,000.00
Vale Park Storm Sewer Phase 1	\$	29,000.00
McKinley Street Storm Sewer	\$	210,000.00
Wall Street Basin Phase 1	\$	472,000.00
Jefferson Street Alley Improvements	\$	35,000.00
West Street Culvert Replacement	\$	135,000.00
Randle Street Storm Sewer	\$	89,000.00
Beauty Creek East Branch Stabilization	\$	101,000.00
1200 Wood Street Ditch Maintenance	\$	42,000.00
Vale Park Storm Sewer Phase 2	\$	33,000.00
Kingsridge Storm Sewer Replacement	\$	135,000.00
Roosevelt Road Box Culvert	\$	142,000.00
Evans Avenue Storm Interceptor	\$	531,000.00
Franklin Street Culvert Replacement	\$	240,000.00
Wall Street Basin Phase 2	\$	149,000.00
Thorgren Basin Naturalization	\$	545,000.00
Garfield Avenue Phase 2	\$	61,000.00
Sager Run Culvert Replacement	\$	418,000.00
Hawthorne Bypass Storm Sewer Phase 1	\$	98,000.00
Roosevelt Road Storm Sewer Lining	\$	27,000.00
Chautauqua Park Project A	\$	3,000,000.00
Hawthorne Bypass Storm Sewer Phase 2	\$	52,000.00
Wood S	\$	7,000.00
Bicenter	\$	5,000.00
Harringt	\$	3,000.00
Burlingt	\$	5,000.00
Central	\$	7,000.00
Stanley	\$	2,000.00
Chicago Street Storm Sewer	\$	-2,000.00
Holiday Inn Stream Enhancements	\$	84,000.00
Evans Avenue Storm Sewer	\$	26,000.00
Harrison Boulevard Culvert Replacement	\$	624,000.00
Kenwood Avenue Storm Sewer	\$	234,000.00
Vale Park Storm Sewer Phase 3	\$	57,000.00
Sherwood Drive Washout Repair	\$	67,000.00
Northview Drive Storm Sewer	\$	247,000.00
Beauty Creek Oakwood Branch	\$	61,000.00
Napoleon Street Storm Sewer	\$	85,000.00
Forest Park Golf Course Basins	\$	560,000.00
Carrsbrooke Drive Storm Sewer	\$	151,000.00
Center for Pain Control Storm Sewer	\$	26,000.00
Johnson Ditch Culvert Replacement	\$	286,000.00
Lancaster Drive Drainage Project	\$	26,000.00
Sager Lake Dam Emergency Plan	\$	5,000.00
Beauty Creek Watershed Study	\$	57,000.00
TOTAL:	\$	10,055,000.00

Village Station Road Culvert	\$	2,500,000.00
Beauty Creek Bank Stabilization Phase A	\$	1,000,000.00
Burlington Beach Road and Brentwood Drive	\$	930,000.00
Del Vista Storm Sewer Replacement	\$	1,100,000.00
Beauty Creek Watershed Detention Basins	\$	1,400,000.00
Beauty Creek Bank Stabilization Phase B	\$	1,000,000.00
Harrison Boulevard Storm Sewer Separation	\$	750,000.00
Beauty Creek Bank Stabilization Phase C	\$	1,000,000.00
Brown Street Storm Sewer Separation	\$	420,000.00
Garfield Avenue Storm Sewer Separation	\$	180,000.00
Locust Street Storm Sewer Separation	\$	280,000.00
College Avenue Storm Sewer Separation	\$	400,000.00
Fair Street Storm Sewer Separation	\$	530,000.00
Greenfield Creek Drainage Improvements	\$	380,000.00
South Franklin Street Storm Sewer	\$	280,000.00
Somerset and Linden Drive Storm Sewer	\$	800,000.00
Vale Park Road Drainage System	\$	1,200,000.00
Repair/Replacement	\$	1,000,000.00
TOTAL:	\$	15,150,000.00

11 PROJECTS
\$4.6 Million

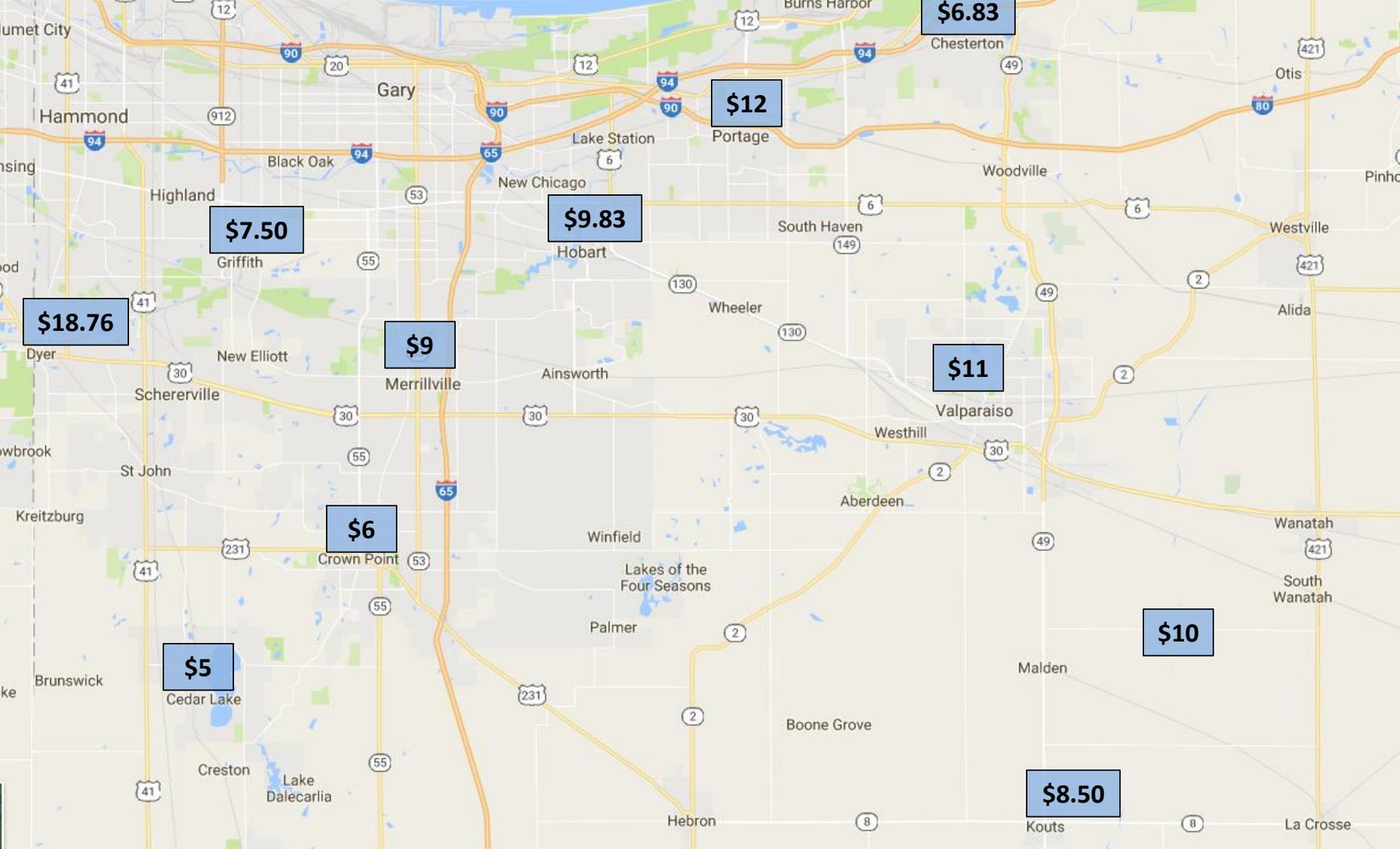
45 PROJECTS
\$10 Million

17 PROJECTS
\$15 Million

Valparaiso Stormwater

Proposed Financial Plan

Residential Monthly Stormwater Fee Comparison



**VALPARAISO CITY UTILITIES
STORMWATER PROJECTS
2017-2022 BOND AND CAPITAL IMPROVEMENT PLAN**

STORM WATER MASTER PLAN PROJECTS		BOND OR CIP	2017	2018	2019	2020	2021
			Budget	Budget	Budget	Budget	Budget
<i>Village Station Railroad Culvert</i>	<i>Repair</i>	<i>B</i>	<i>\$2,500,000.00</i>				
<i>Beauty Creek Bank Stabilization, Phase A</i>	<i>Repair/Flooding</i>	<i>B</i>	<i>\$1,000,000.00</i>				
<i>Burlington Beach Road and Brentwood Drive</i>	<i>Flooding</i>	<i>B</i>	<i>\$930,000.00</i>				
<i>General Storm Sewer Repairs</i>			<i>\$200,000.00</i>				
<i>Del Vista Storm Sewer Replacement</i>	<i>Repair</i>	<i>B</i>					
<i>Beauty Creek Watershed Detention Basins</i>	<i>Repair/Flooding</i>	<i>B</i>					
<i>Beauty Creek Bank Stabilization, Phase B</i>	<i>Repair/Flooding</i>	<i>B</i>					
<i>Harrison Boulevard Storm Sewer Separation</i>	<i>Separation</i>						
<i>General Storm Sewer Repairs</i>							
<i>Beauty Creek Bank Stabilization, Phase C</i>					<i>\$1,000,000.00</i>		
<i>Brown Street Storm Sewer Separation</i>					<i>\$420,000.00</i>		
<i>Garfield Avenue Storm Sewer Separation</i>					<i>\$180,000.00</i>		
<i>General Storm Sewer Repairs</i>					<i>\$200,000.00</i>		
<i>Locust Street Storm Sewer Separation</i>		<i>CIP</i>				<i>\$280,000.00</i>	
<i>College Avenue Storm Sewer Separation</i>	<i>Separation</i>	<i>CIP</i>				<i>\$400,000.00</i>	
<i>Fair Street Storm Sewer Separation</i>	<i>Separation</i>	<i>CIP</i>				<i>\$530,000.00</i>	
<i>Greenfield Creek Drainage Improvements</i>	<i>Flooding</i>	<i>CIP</i>				<i>\$380,000.00</i>	
<i>General Storm Sewer Repairs</i>						<i>\$200,000.00</i>	
<i>South Franklin Street Storm Sewer</i>		<i>CIP</i>					<i>\$280,000.00</i>
<i>Somerset and Linden Drainage Improvements</i>		<i>CIP</i>					<i>\$800,000.00</i>
<i>Vale Park Road Drainage System</i>		<i>CIP</i>					<i>\$1,200,000.00</i>
<i>General Storm Sewer Repairs</i>							<i>\$200,000.00</i>

\$15,150,000

Projected Revenue and Expenses

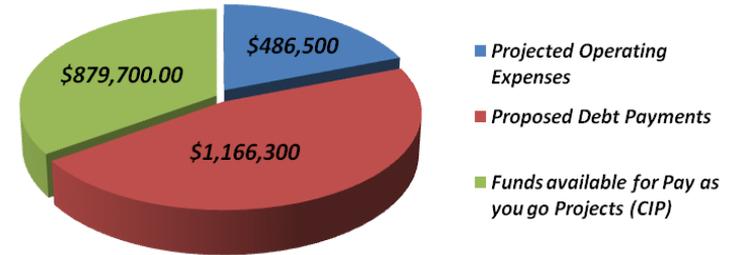
Projected Operating Revenues

\$2,532,500

Projected Operating Expenses:

Salaries and Benefits	\$262,000
Billing Expenses	58,000
Miscellaneous Expenses	18,500
Professional Services	120,000

Pro Forma Operating and Maintenance	458,500
Inflation Adjustment	28,000
Projected Operating and Maintenance	<u>486,500</u>



Net Operating Revenues available for Debt Payments and Capital Requirements

2,046,000

Proposed Debt Payments

Existing Bonds	846,100
Proposed 2017 Bonds (\$10 million, 20 years wrapped)	<u>320,200</u>

Funds available for Pay-go Projects (CIP)

\$879,700

UMBAUGH

It's all about experience

Capital Funding Plan

Projects for the Bond and 5 year Capital Improvement Plan:

Total Capital Needs \$15,150,000

Proposed Bond Issue	\$10,000,000
Five Years of Net Cash Flows - Slide 2 (5 x \$879,700)	4,398,500
Cash on Hand	<u>751,500</u>
Total Funding	<u>\$15,150,000</u>

STORM WATER MASTER PLAN PROJECTS	BOND	2017	2018	2019	2020	2021
	Q/C/F	Budget	Budget	Budget	Budget	Budget
Village Station Railroad Culvert	B	\$2,500,000.00				
Beauty Creek Bank Stabilization, Phase A	B	\$1,000,000.00				
Burlington Beach Road and Brentwood Drive General Storm Sewer Repairs	CIP	\$930,000.00				
Del Vito Storm Sewer Replacement	B		\$1,100,000.00			
Beauty Creek Watershed Detention Basins	B		\$1,400,000.00			
Beauty Creek Bank Stabilization, Phase B	B		\$1,000,000.00			
Hartness Boulevard Storm Sewer Separation General Storm Sewer Repairs	CIP		\$750,000.00			
Beauty Creek Bank Stabilization, Phase C	B			\$1,000,000.00		
Brown Street Storm Sewer Separation	CIP			\$400,000.00		
Garfield Avenue Storm Sewer Separation	CIP			\$180,000.00		
General Storm Sewer Repairs	CIP			\$200,000.00		
Locust Street Storm Sewer Separation	CIP				\$280,000.00	
College Avenue Storm Sewer Separation	CIP				\$400,000.00	
Park Street Storm Sewer Separation	CIP				\$530,000.00	
Greenfield Creek Drainage Improvements	CIP				\$380,000.00	
General Storm Sewer Repairs	CIP				\$200,000.00	
South Franklin Street Storm Sewer	CIP					\$280,000.00
Somerset and Linden Drainage Improvements	CIP					\$800,000.00
Vale Park Road Drainage System	CIP					\$1,200,000.00
General Storm Sewer Repairs	CIP					\$200,000.00
W88 Park Detention Basin	CIP					
Morgan Boulevard Interceptor Sewer	CIP					
Harrison Pond Drains	CIP					
General Storm Sewer Repairs	CIP					
TOTAL		\$4,630,000.00	\$4,450,000.00	\$1,800,000.00	\$1,790,000.00	\$2,480,000.00

Replenishment Plan for Cash Balances

Cash Balance applied towards Capital \$751,500

Funds from Proposed Increase in Current Rates

Proposed Rates

<u>Current</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
\$11.00	\$11.50	\$12.00	\$12.50

Additional Revenue	<u>2017</u>	<u>2018</u>	<u>2019</u>	
2017	\$115,000	115,000	115,000	(345,000)
2018		115,000	115,000	(230,000)
2019			115,000	(115,000)
				\$61,500

Balance to be replenished after 2019

**The incremental rate increase would replenish the majority of the capital outlay within 3 years and provide an additional \$345,000 in revenue starting in 2020.*

2019 Rates & Classifications

Classification	Description	Multiplier	Curernt Rate Per Month	Proposed Rate Per Month	Rate Per Year
1	Single Family	1.00	\$11	\$12.50	\$150
2	Apts. / Mobile	0.75	\$8.25	\$9.39	\$112.68
3	Non-Residential < 10,000 SF	1.00	\$11	\$12.50	\$150
4	Non-Residential 10 K - 40 K SF	4.00	\$44	\$50	\$600
5	Non-Residential 40 K - 160 K SF	16.00	\$176	\$200	\$2,400
6	Non-Residential > 160,000 SF	32.00	\$352	\$400	\$4,800

CLASS 4

CLASS 5

CLASS 6

Valparaiso City Utilities
 205 Billings St.
 Valparaiso, IN 46383
 (219) 462-6174
 www.valparaisoutilities.org



"Installed by Valparaiso City Utilities, 2014"

Account Statement



Account Information



Service Period: 12/30/2016-01/25/2017
 Billing Date: 02/05/2017
 Due Date: 03/01/2017

Billing Details

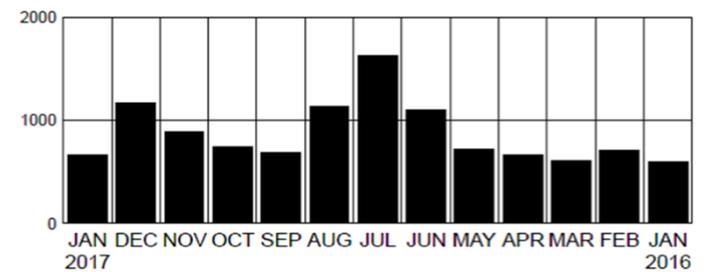
WATER	34.11
SEWAGE	47.86
TRASH	12.00
STORM WATER	11.00
TREE FUND	1.00
WATER TAX	1.49

Total Current Amount	\$107.46
Last Payment Received 01/23/2017	\$146.27 -
Previous Balance	\$146.27
Total Due if Paid By 03/01/2017	\$107.46
Total Due if Paid After 03/01/2017	\$115.79

To pay by credit card or debit card call 219-462-6174 ext 1
 or pay online at www.valparaisoutilities.org.

Important Information

CONSUMPTION HISTORY



Meter	Previous	Current	Cubic Ft	Approx in Gal
57408784	51680	52350	670	5011

2019 Additional \$1.50

1.4% - Total Bill



VALPARAISO CITY UTILITIES STORMWATER UTILITY

Bond Issue & Rate Proposal
QUESTIONS OR COMMENTS?



Projected Revenue and Expenses

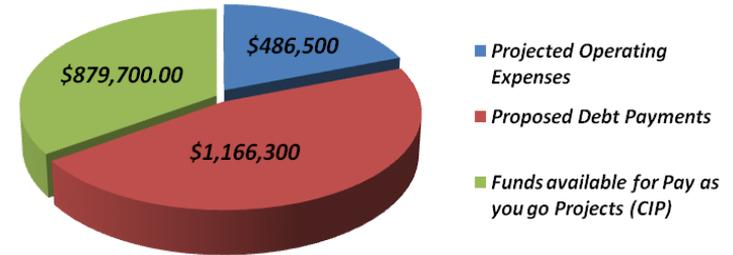
Projected Operating Revenues

\$2,532,500

Projected Operating Expenses:

Salaries and Benefits	\$262,000
Billing Expenses	58,000
Miscellaneous Expenses	18,500
Professional Services	120,000

Pro Forma Operating and Maintenance	458,500
Inflation Adjustment	28,000
Projected Operating and Maintenance	<u>486,500</u>



Net Operating Revenues available for Debt Payments and Capital Requirements

2,046,000

Proposed Debt Payments

Existing Bonds	846,100
Proposed 2017 Bonds (\$10 million, 20 years wrapped)	<u>320,200</u>

Funds available for Pay-go Projects (CIP)

\$879,700

UMBAUGH

It's all about experience

**VALPARAISO CITY UTILITIES
STORMWATER PROJECTS
2017-2022 BOND AND CAPITAL IMPROVEMENT PLAN**

STORM WATER MASTER PLAN PROJECTS	BOND OR CIP	2017 Budget	2018 Budget	2019 Budget	2020 Budget	2021 Budget
<i>Village Station Railroad Culvert</i>	<i>B</i>	<i>\$2,500,000.00</i>				
<i>Beauty Creek Bank Stabilization, Phase A</i>	<i>B</i>	<i>\$1,000,000.00</i>				
<i>Burlington Beach Road and Brentwood Drive General Storm Sewer Repairs</i>	<i>CIP</i>	<i>\$930,000.00</i>				
		<i>\$200,000.00</i>				
<i>Del Vista Storm Sewer Replacement</i>	<i>B</i>		<i>\$1,100,000.00</i>			
<i>Beauty Creek Watershed Detention Basins</i>	<i>B</i>		<i>\$1,400,000.00</i>			
<i>Beauty Creek Bank Stabilization, Phase B</i>	<i>B</i>		<i>\$1,000,000.00</i>			
<i>Harrison Boulevard Storm Sewer Separation</i>	<i>CIP</i>		<i>\$750,000.00</i>			
<i>General Storm Sewer Repairs</i>			<i>\$200,000.00</i>			
<i>Beauy Creek Bank Stabilization, Phase C</i>	<i>B</i>			<i>\$1,000,000.00</i>		
<i>Brown Street Storm Sewer Separation</i>	<i>CIP</i>			<i>\$420,000.00</i>		
<i>Garfield Avenue Storm Sewer Separation</i>	<i>CIP</i>			<i>\$180,000.00</i>		
<i>General Storm Sewer Repairs</i>				<i>\$200,000.00</i>		
<i>Locust Street Storm Sewer Separation</i>	<i>CIP</i>				<i>\$280,000.00</i>	
<i>College Avenue Storm Sewer Separation</i>	<i>CIP</i>				<i>\$400,000.00</i>	
<i>Fair Street Storm Sewer Separation</i>	<i>CIP</i>				<i>\$530,000.00</i>	
<i>Greenfield Creek Drainage Improvements</i>	<i>CIP</i>				<i>\$380,000.00</i>	
<i>General Storm Sewer Repairs</i>					<i>\$200,000.00</i>	
<i>South Franklin Street Storm Sewer</i>	<i>CIP</i>					<i>\$280,000.00</i>
<i>Somerset and Linden Drainage Improvements</i>	<i>CIP</i>					<i>\$800,000.00</i>
<i>Vale Park Road Drainage System</i>	<i>CIP</i>					<i>\$1,200,000.00</i>
<i>General Storm Sewer Repairs</i>						<i>\$200,000.00</i>
<i>Will Park Detention Basin</i>	<i>CIP</i>					
<i>Morgan Boulevard Interceptor Sewer</i>	<i>CIP</i>					
<i>Hampton Pond Drains</i>	<i>CIP</i>					
<i>General Storm Sewer Repairs</i>						
TOTAL		\$4,630,000.00	\$4,450,000.00	\$1,800,000.00	\$1,790,000.00	\$2,480,000.00

Projects for the Bond and 5 year Capital Improvement Plan:

5 YEAR CAPITAL PLAN NEEDS (BOND & CIP): **\$14,150,000**
PLUS GENERAL REPAIRS 5 YEARS: **\$ 1,000,000**
5 YEAR TOTAL PROJECT NEEDS: **\$15,150,000**

YR 6 PROJECTS (WILL, MORGAN, HAMPTON): **\$ 3,450,000**
TOTAL: **\$18,600,000**

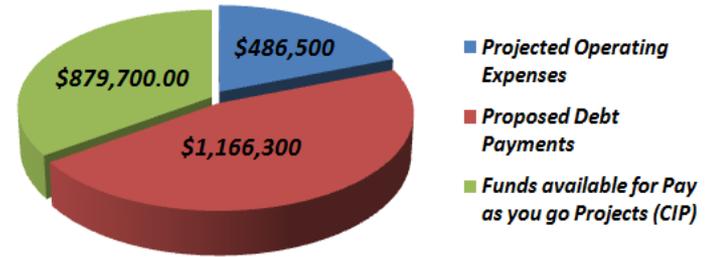
(Includes \$1.0M In General Storm Sewer Repairs)

Total Capital Needs \$15,150,000

Proposed Bond Issue	\$10,000,000
Five Years of Net Cash Flows - Slide 2 (5 x \$879,700)	4,398,500
Cash on Hand	751,500
Total Funding	\$15,150,000

Projected Revenue and Expenses			
Projected Operating Revenues			\$ 2,532,500
Projected Operating Expenses			\$ 486,500
Salaries and Benefits	\$	262,000	
Billing Expenses	\$	58,000	
Misc Expenses	\$	18,500	
Professional Services	\$	120,000	
Pro Forma Op & Maint	\$	458,500	
Inflation Adjustment	\$	28,000	
Projected Op & Maint			
Net Operating Revenues available for Debt Payments and Capital Requirements			\$ 2,046,000
Proposed Debt Payments			\$ 1,166,300.00
Existing Bonds	\$	846,100.00	\$846,100.00
Proposed 2017 Bonds (\$10 million, 20 yrs wrapped)	\$	320,200.00	
Funds available for Pay as you go Projects (CIP)			\$ 879,700.00

**Valparaiso City Utilities - Stormwater
Cash Flow Expenses
2017 Projected**



Projects for the Bond and 5 year Capital Improvement Plan:

Total Capital Needs \$15,150,000	
Proposed Bond Issue	\$10,000,000
Five Years of Net Cash Flows - Slide 2 (5 x \$879,700)	4,398,500
Cash on Hand	751,500
Total Funding	\$15,150,000

Cash Balance applied towards Capital \$751,500

Funds from Proposed Increase in Current Rates

	Proposed Rates			
<u>Current</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	
\$11.00	\$11.50	\$12.00	\$12.50	

Additional Revenue	<u>2017</u>	<u>2018</u>	<u>2019</u>	
2017	\$115,000	115,000	115,000	(345,000)
2018		115,000	115,000	(230,000)
2019			115,000	(115,000)
Balance to be replenished after 2019				\$61,500

**The incremental rate increase would replenish the majority of the capital outlay within 3 years and provide an additional \$345,000 in revenue starting in 2020.*

Valparaiso City Utilities

Stormwater Utility Accomplishments

- ✓ Valparaiso Street
- ✓ Beauty Creek Estates
- ✓ Burlington Beach Storm Sewer
- ✓ Clover Lane Restoration
- ✓ Cooks Corners
- ✓ Crosby Run Culverts
- ✓ Del Vista Dr. Erosion
- ✓ Marion Manor
- ✓ Valparaiso Street Phase 1
- ✓ VLACD Sediment Trap
- ✓ Union Street Project
- ✓ Beech Street



September, 2008

Flooding highlighted existing needs.



MS4 - Municipal Separate Storm Sewer Systems



FEDERAL

EPA – NPDES Stormwater



STATE

IDEM – Rule 13, Rule 5 & Rule 6



LOCAL

MS4 Entity – SW ordinance/permit



Public/Business/Land

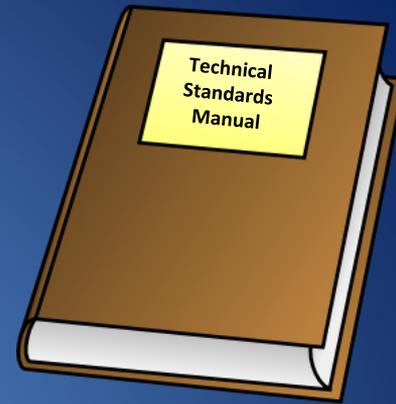
Owner/Developer/Builder/City Depts

- 1972 Clean Water Act – NPDES program
- 1987 Water Quality Act – NPDES Stormwater Program
- 1992 – NPDES Stormwater Program Phase I
- **2003 – NPDES Stormwater Program Phase II**

- **Rule 5 – Stormwater Discharge from Construction Activity**
- Rule 6 – Stormwater Discharge from Industrial Activity
- **Rule 13 – Stormwater Discharge from MS4s**

The Six Minimum Control Measures (MCMs)

1. Public Education & Outreach
2. Public Participation & Involvement
3. Illicit Discharge Detection & Elimination (IDDE)
4. Construction Site Run-off Control
5. Post-Construction Stormwater Management in New Development & Redevelopment
6. Pollution Prevention/Good Housekeeping for Municipal Operations



Proposed Documents

Out with the old and in with the new

Proposed ordinance will replace current stormwater management standards outlined in city Unified Development Ordinance (UDO)

Industry Standard

More thorough guidelines and already accepted stormwater engineering practices

Not going to be a surprise

Proposed documents modeled after the following governing bodies:
Lake County, Tippecanoe County, Crown Point, Merrillville, Cedar Lake, and Dyer

Detail Oriented

Ordinance will reference a separate Technical Standards Manual for supporting information and detail

Primary Change 1

Modify release rate requirement for detention ponds to 0.5 cfs/acre

Primary Change 2

Implement post-construction water quality requirements with BMPs

Valparaiso has a surface area of 15.6 square miles and 30% of this area is hard surface.

Impervious Types Outside Rights of Way

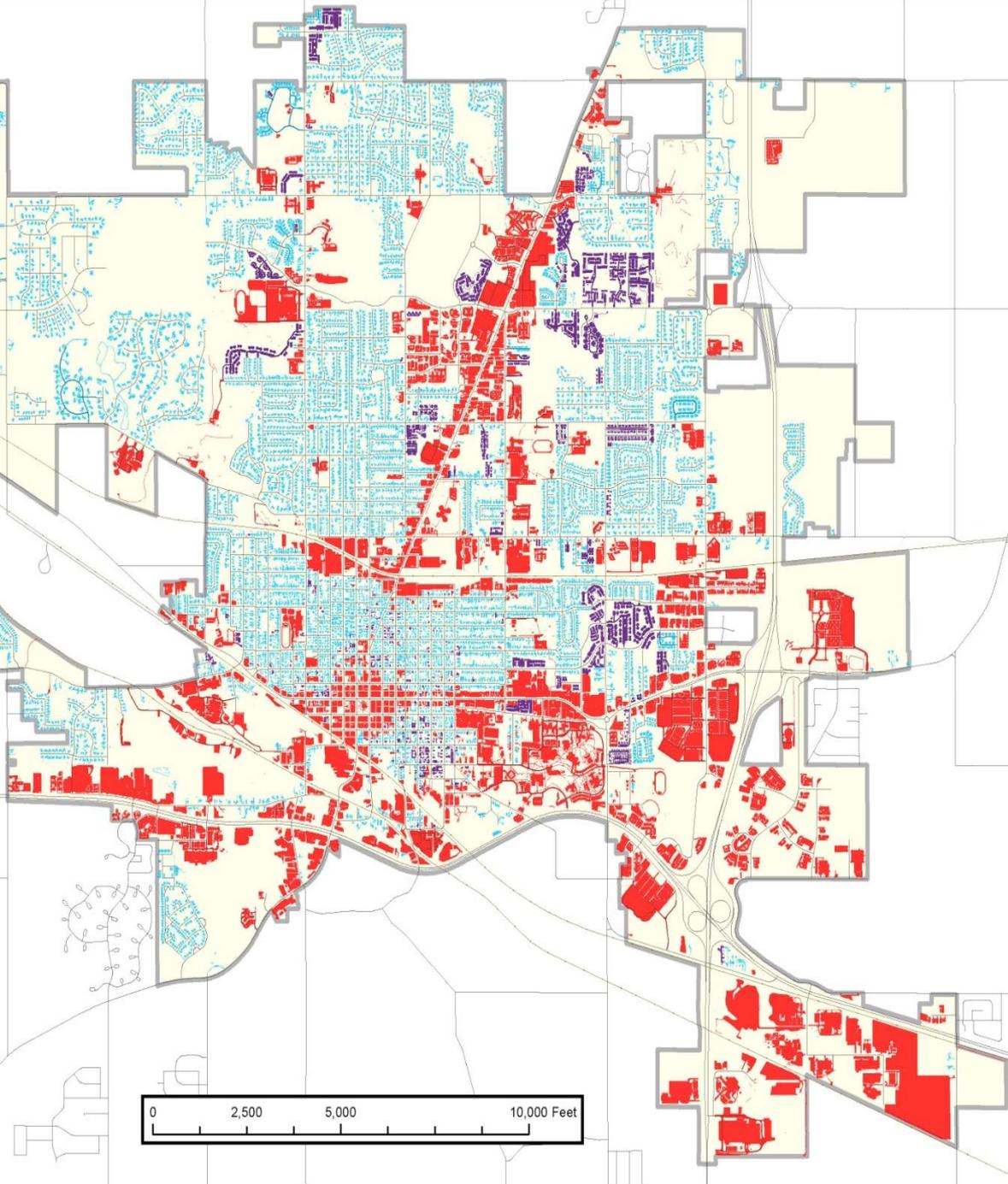
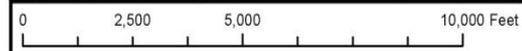
- City Limits
- Non-Residential (61.1%)
- Single Family Residential (30.7%)
- Multi-Family Residential (8.2%)



Total Area of Valparaiso is 15.61 Square Miles.
 30.02 % of Valparaiso is covered by Impervious Surfaces.
 69.32% of Valparaiso's Impervious Surfaces are billed for Stormwater.
 30.68% of Valparaiso's Impervious Surfaces are within the City, State and Railroad ROWs.

Valparaiso Impervious Areas

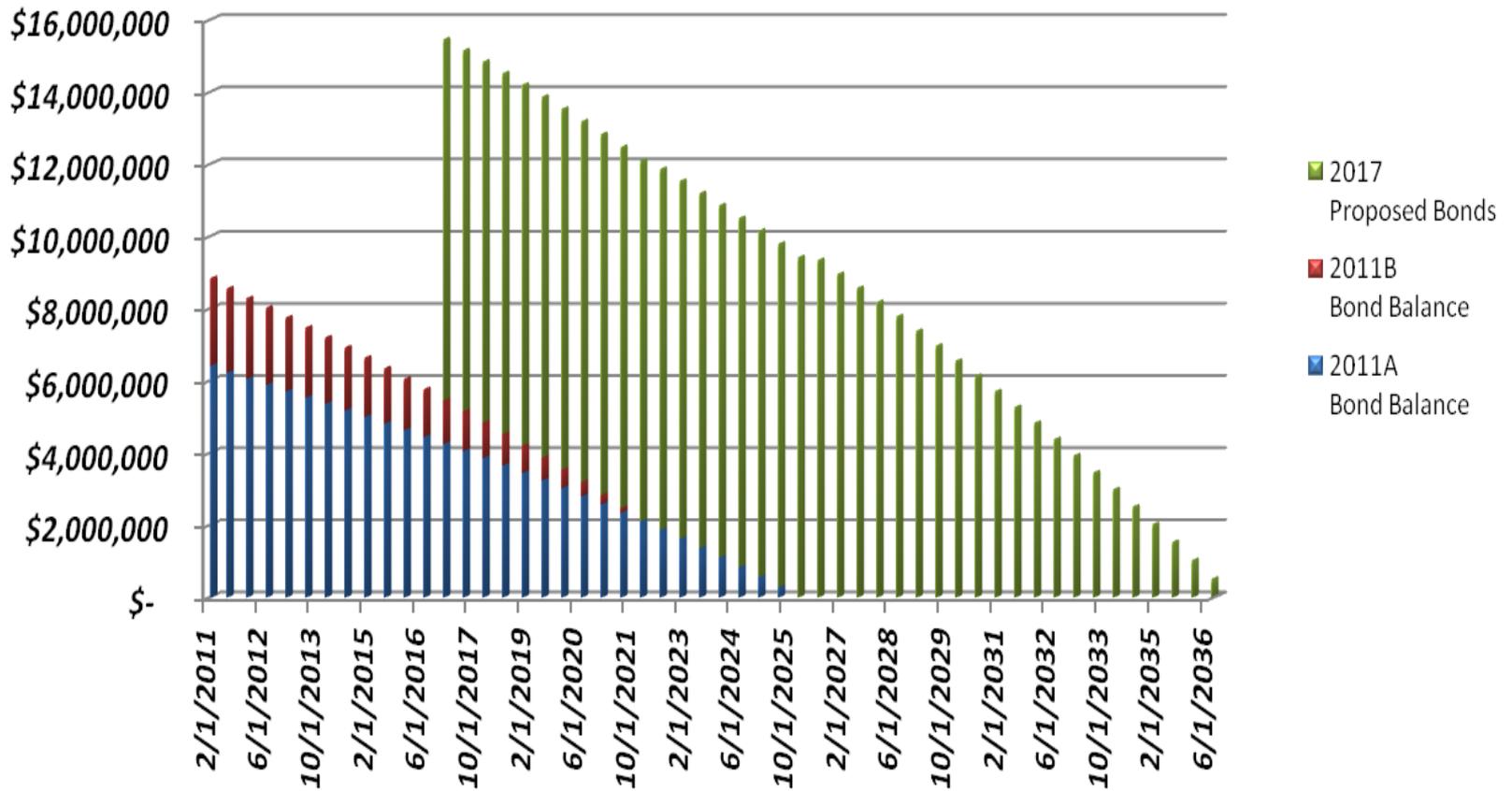
	Impervious (S.F.)	Impervious (Acres)	% of Impervious
Non-Residential	55323452.95	1270.1	61.1
Single Family Residential	27803311.89	638.3	30.7
Multi-Family Residential	7420658.53	170.4	8.2
Total Billed for Stormwater	90547423.37	2078.7	100.0



Valparaiso City Utilities

Stormwater Utility Debt Service Schedule - 2017

Includes Proposed \$10.0 M Issue



Valparaiso Stormwater Wrap versus Level Debt

- **Wrap – Pros**
 - Reduces rate increase from \$4.90 per month to three annual increases of \$.50 cents

- **Wrap – Cons**
 - Adds additional interest expense
 - * Estimated Interest rate increases from 3.10% to 3.30%
 - * Estimated total interest paid increases by \$1.3 million.