

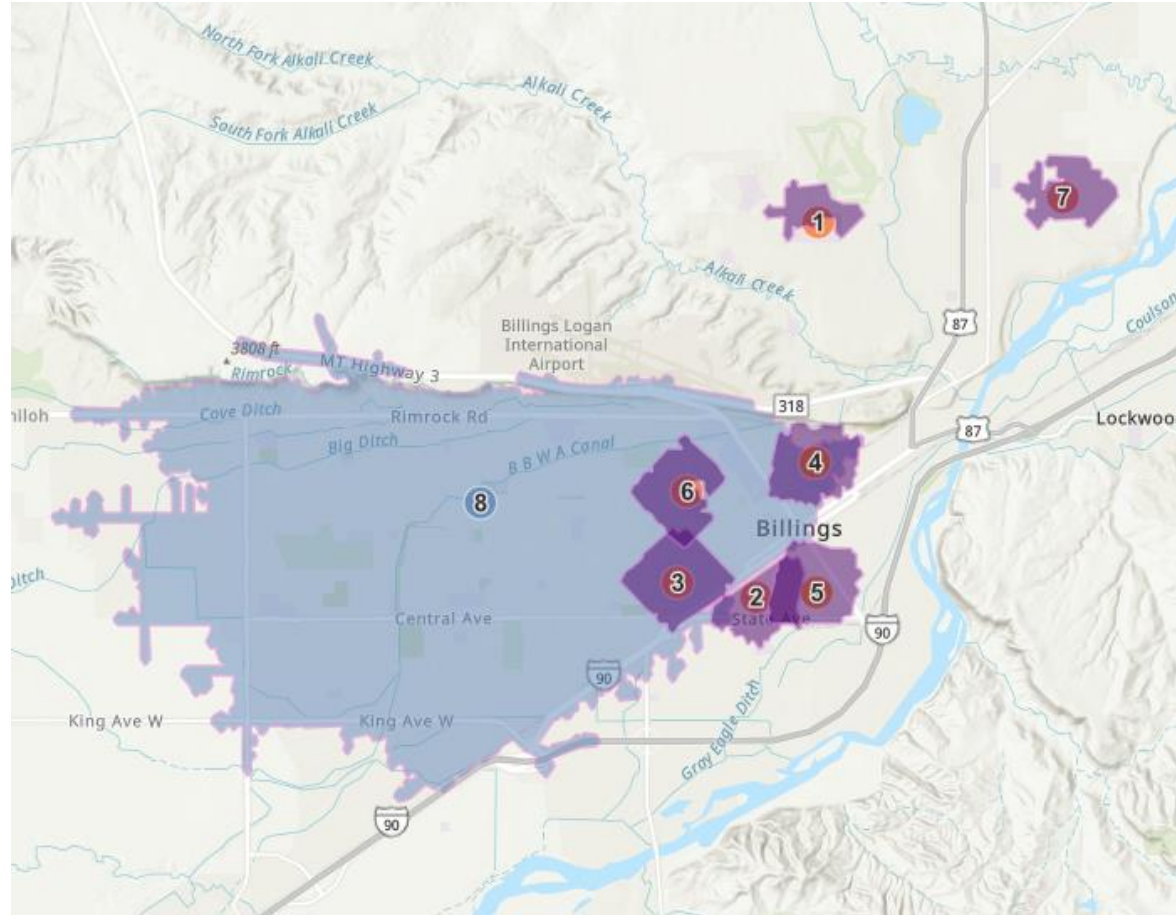


Counselman · Hunsaker
AQUATICS FOR LIFE

Billings Aquatics Assessment

MARKET OVERVIEW

Market Overview



Sprayground – 10-minute walking distance
Rose Pool (#8) – 10-minute driving

Esri, NASA, NGA, USGS



Demographics

Billings Overview

- Currently there are ~115,000 residents in Billings with 7 spraygrounds/wading pools (6 per 100,000)
- 74% of residents have a park within a 10-minute walk meeting national benchmarks

United States Comparison

- 7 in 10 U.S. residents have at least one local park, playground, open space or recreation center within walking distance of their homes.*
- Spraygrounds and wading pools:
 - These cater primarily to young children and families. Studies suggest that most users live within a 10-minute walk (around 0.5 miles) of the facility. Some families might drive up to 15-20 minutes (around 1-2 miles) if there's a lack of options closer to home.

*National Recreation and Park Association (NRPA) - 2023 Engagement with Parks Report



Existing Facility Assessment

Existing Facilities

Renovation Prioritization

High Priority

Full Replacement

- Pioneer Park
- Hawthorne Park
- Terry Park

Medium

Upgrades

- North Park

Low

No Concerns

- Highland Park
- Castle Rock Park
- South Park



Wading Pool

Pioneer Park Wading Pool



Wading Pool

Pioneer Park Wading Pool



10-minute walking distance

Population within a 10-minute walk

Park Name	Children - <10yrs	Total Population
Terry Park Sprayground	543	3,810
Highland Sprayground	483	3,371
Pioneer Park Wading Pool	350	3,325
Castle Rock Park Sprayground	497	3,191
South Park Splash Pad	365	2,837
North Park Splash Pad	364	2,713
Hawthorne Park Wading Pool	302	2,102
Grand Total	2,904	21,349



Wading Pool

Pioneer Park Wading Pool



Observations

- Wading pools are considered obsolete and carry a heightened risk of disease transmission.
- Enhancements to the area will better reflect the surrounding park space.



Wading Pool

Hawthorne Park Wading Pool



Wading Pool

Hawthorne Park Wading Pool



10-minute walking distance

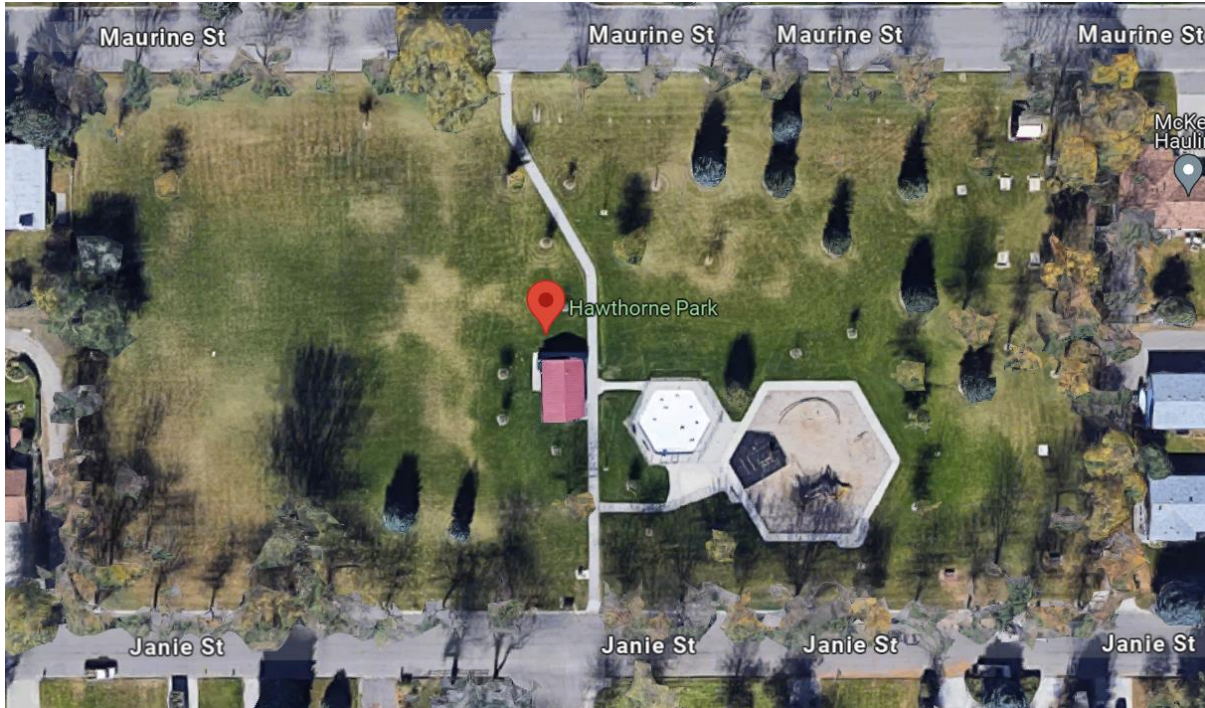
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Wading Pool

Hawthorne Park



Observations

- Wading pools are considered obsolete and carry a heightened risk of disease transmission.
- Water features should be enhanced to better support the park amenities.



Spraygrounds

Terry Park Sprayground



Spraygrounds

Terry Park Sprayground



10-minute walking distance

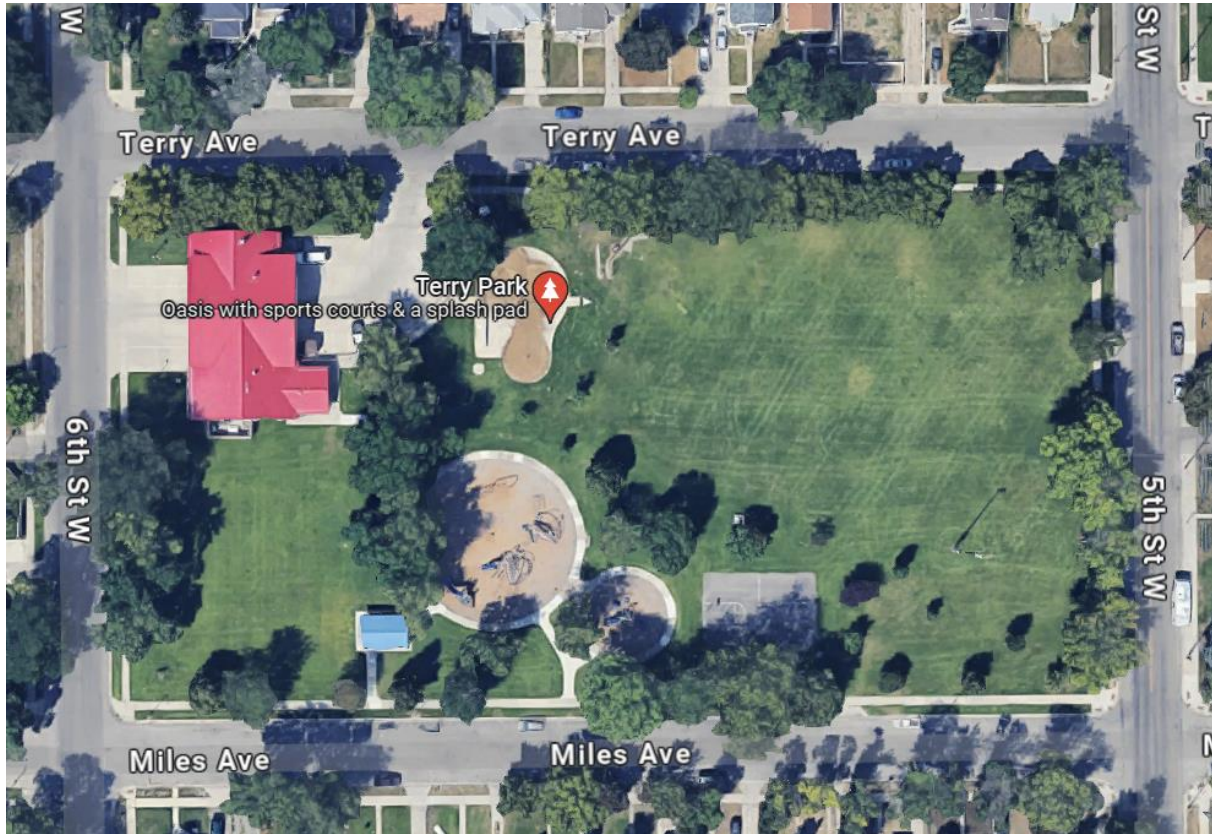
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Spraygrounds

Terry Park Sprayground

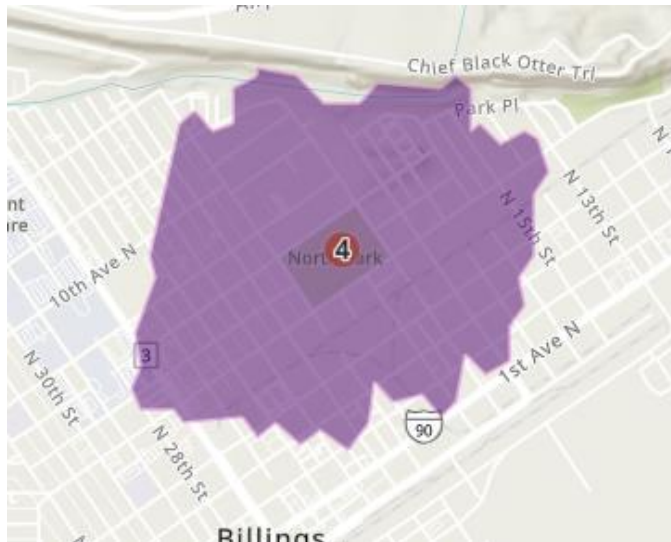


Observations

- The current sprayground lacks essential functional features, and the existing ones should be updated. The missing features are valuable elements that would significantly improve the overall experience for children at the park.
- There is an opportunity to impact a large number of residents
- Theming to the fire department will celebrate the surrounding area.

Spraygrounds

North Park Sprayground



10-minute walking distance

Population within a 10-minute walk

Park Name	Children - <10yrs	Total Population
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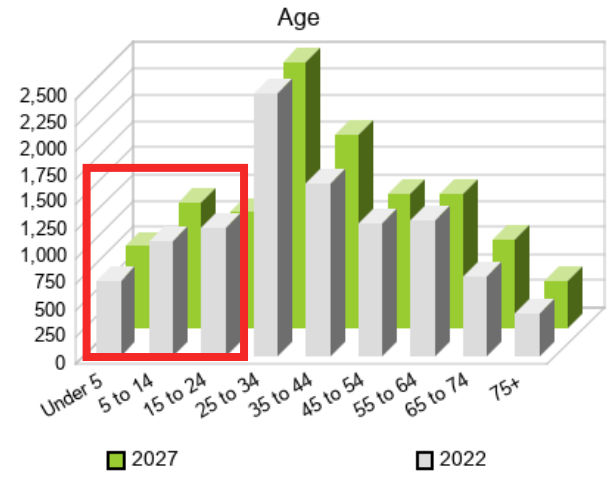
Spraygrounds

North Park Sprayground



Observations

- The converted sprayground should be remodeled to incorporate more spray features
- Replacement should be considered as an increase in school aged children is expected.



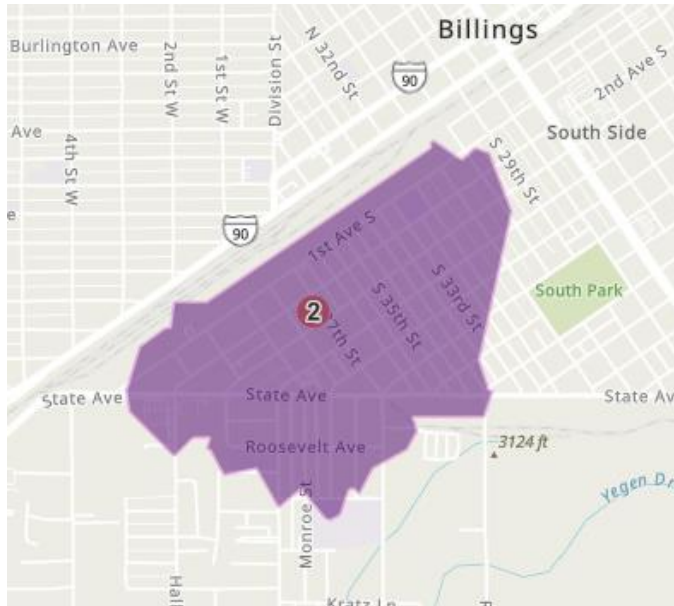
Spraygrounds

North Park Sprayground



Spraygrounds

Highland Park Sprayground



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Spraygrounds

Highland Park Sprayground



Observations

- Equipment appears to be in good condition.
- Features could be updated with minimal cost impact.

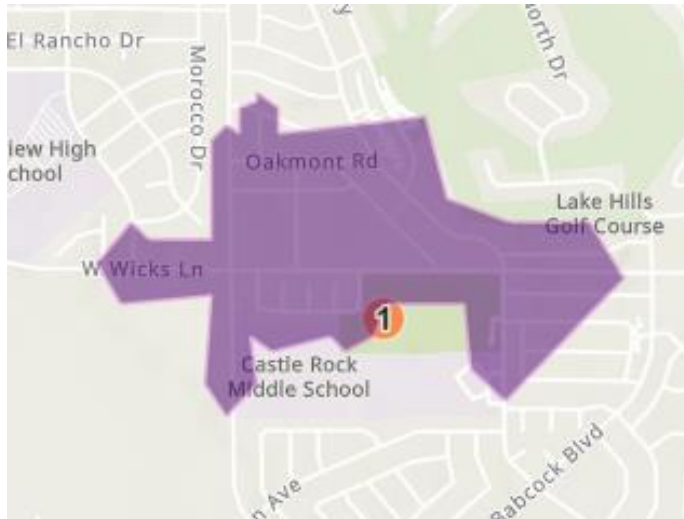
Spraygrounds

Highland Park Sprayground



Spraygrounds

Castle Rock Park



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Spraygrounds

Castle Rock Park



Observations

- Equipment appears to be in good condition.
- No changes necessary.



Spraygrounds

Castle Rock Park



The Industry is Phasing Out Wading Pools

Increased Risk of Disease Transmission

- Kiddie/Wading Pools are the most common pool type to experience an immediate closure from Health Department Officials due to low disinfectant levels (13.5%)*
- Secondary Sanitation Systems are recommended for pools designed for children less than 5 years olds due to the risk associated with disease outbreaks.

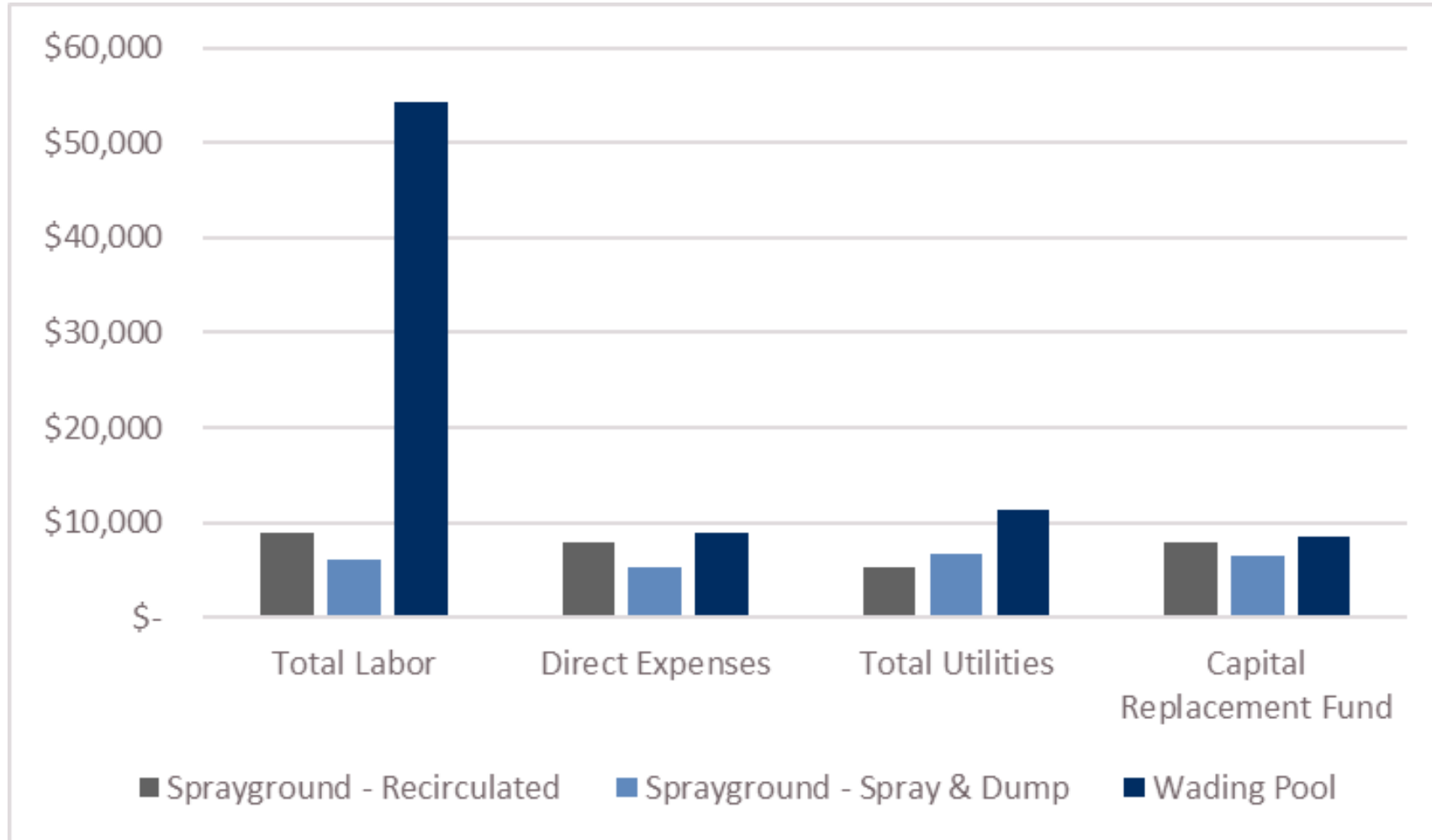
Increased Operating Costs

- Disinfectant is required in all pools and should be checked by staff throughout the day using valuable park resources, staff, and requiring specialized training.
- Attendants are required to open the facility straining an already short-staffed system.


Lack of Features

- Wading pools typically lack features that will draw younger families (spray features, dump buckets, slides, etc.)
- Wading pools do not accessibility to all, regardless of their abilities. They lack inclusive design which encourages the physical, functional and social development of children.

The Industry is Phasing Out Wading Pools



The Industry is Phasing Out Wading Pools

 Direct Facility Expense Budget			
	SG-Recirculated	SG-Spray & Dump	Wading Pool
Facility Staff			
Attendant Personnel	\$0	\$0	\$43,200
Part-Time Maintenance	\$9,000	\$6,000	\$9,000
Training	\$0	\$0	\$2,000
Total Labor	\$9,000	\$6,000	\$54,200
Direct Facility Expenses			
Repair and Maintenance	\$4,000	\$3,300	\$4,300
Operating Supplies	\$2,400	\$1,980	\$2,580
Chemicals	\$1,536	\$0	\$1,964
Direct Expenses	\$7,936	\$5,280	\$8,844
Utilities			
Electricity	\$3,633	\$4,106	\$3,654
Pool Heating	\$0	\$0	\$5,988
Water & Sewer	\$1,590	\$2,680	\$1,662
Total Utilities	\$5,223	\$6,785	\$11,304
Total Operating Expenses	\$22,158	\$18,065	\$74,348
Capital Replacement Fund	\$8,000	\$6,500	\$8,500
Total Expense	\$30,158	\$24,565	\$82,848
Estimate Current as of: 7/22/2024			
Source: Counsilman-Hunsaker			



Sprayground Modernization



Recirculated

Advantages

- **Water conservation:** Uses less water as it continuously recirculates and filters the water.
- **Lower operating costs:** Saves money on water use and reduces the amount of chemicals needed for treatment.
- **Environmentally friendly:** Minimizes water waste.

Disadvantages

- **Higher initial cost:** Requires more complex plumbing and filtration systems.
- **Maintenance:** Regular cleaning and filter maintenance are crucial.
- **Potential for waterborne illness:** Improper maintenance can lead to bacteria growth in the recirculated water.



Pump and Dump

- **Lower initial cost:** Less complex plumbing is needed.
- **Simpler maintenance:** Easier to maintain and clean.
- **Lower risk of illness:** Continuously replaces water, reducing the chance of bacteria growth.

- **Higher operating costs:** Uses more water, which can be expensive depending on location.
- **Less environmentally friendly:** Uses more water and requires more chemicals for treatment.

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Construction Cost: 1.6M

OPINION OF PROJECT COST: Sprayground - Recirculated			
Description	Unit	Amount	Opinion of Cost
Ops Building		1,000	\$378,000
Mechanical	Sq. Ft.	300	
Storage	Sq. Ft.	500	
Restrooms	Sq. Ft.	200	
Sprayground		855	\$500,088
Sprayground	Sq. Ft.	855	
Features	Allowance	1	
Pool Mechanical	Add. Cost	1	
Support		2,565	\$109,742
Outdoor Deck	Sq. Ft.	1,710	
Fence	Ln. Ft.	203	
Overhead Lighting	Sq. Ft.	2,565	
Shade Structures	Quantity	1	
Total Building Construction Costs	Sq. Ft.	4,420	987,829
Site Construction Costs (landscaping, utilities, walks)			\$110,500
Furniture, Fixtures, Equipment			\$27,000
Subtotal			\$1,125,329
Inflation (1 year)	10.0%		\$112,533
Contingency	10.0%		\$123,786
Indirect Costs	12.0%		\$163,398
Total Estimated Project Costs:			\$1,525,046
Rounded			\$1,600,000

Sprayground Modernization



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Ongoing Maintenance Cost: \$30k

Direct Facility Expense Budget	
	SG-Recirculated
Facility Staff	
Attendant Personnel	\$0
Part-Time Maintenance	\$9,000
Training	\$0
Total Labor	\$9,000
Direct Facility Expenses	
Repair and Maintenance	\$4,000
Operating Supplies	\$2,400
Chemicals	\$1,536
Direct Expenses	\$7,936
Utilities	
Electricity	\$3,633
Pool Heating	\$0
Water & Sewer	\$1,590
Total Utilities	\$5,223
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Total Expense	\$30,158
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Sprayground Modernization



Pump and Dump

Advantages

- **Lower initial cost:** Less complex plumbing is needed.
- **Simpler maintenance:** Easier to maintain and clean.
- **Lower risk of illness:** Continuously replaces water, reducing the chance of bacteria growth.

Disadvantages

- **Higher operating costs:** Uses more water, which can be expensive depending on location.
- **Less environmentally friendly:** Uses more water and requires more chemicals for treatment.

Construction Costs: \$1.3M

OPINION OF PROJECT COST: Sprayground - Spray & Dump			
Description	Unit	Amount	Opinion of Cost
Ops Building		900	\$346,500
Mechanical	Sq. Ft.	200	
Storage	Sq. Ft.	500	
Restrooms	Sq. Ft.	200	
Sprayground		855	\$350,088
Sprayground	Sq. Ft.	855	
Features	Allowance	1	
Support		2,565	\$109,742
Outdoor Deck	Sq. Ft.	1,710	
Fence	Ln. Ft.	203	
Overhead Lighting	Sq. Ft.	2,565	
Shade Structures	Quantity	1	
Total Building Construction Costs	Sq. Ft.	4,320	806,329
Site Construction Costs (landscaping, utilities, walks)			\$108,000
Furniture, Fixtures, Equipment			\$26,000
Subtotal			\$940,329
Inflation (1 year)	10.0%		\$94,033
Contingency	10.0%		\$103,436
Indirect Costs	12.0%		\$136,536
Total Estimated Project Costs:			\$1,274,334
Rounded			\$1,300,000

Sprayground Modernization



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Ongoing Maintenance Cost: \$24.5k

Direct Facility Expense Budget	
SG-Spray & Dump	
Facility Staff	
Attendant Personnel	\$0
Part-Time Maintenance	\$6,000
Training	\$0
Total Labor	\$6,000
Direct Facility Expenses	
Repair and Maintenance	\$3,300
Operating Supplies	\$1,980
Chemicals	\$0
Direct Expenses	\$5,280
Utilities	
Electricity	\$4,106
Pool Heating	\$0
Water & Sewer	\$2,680
Total Utilities	\$6,785
Total Operating Expenses	\$18,065
Capital Replacement Fund	\$6,500
Total Expense	\$24,565
Estimate Current as of:	
Source: Counsilman-Hunsaker	

Sprayground Options

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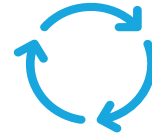


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Sprayground Options

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Source: Counsilman-Hunsaker	



Direct Facility Expense Budget	
Wading Pool	
Facility Staff	
Attendant Personnel	\$43,200
Part-Time Maintenance	\$9,000
Training	\$2,000
Total Labor	\$54,200
Direct Facility Expenses	
Repair and Maintenance	\$4,300
Operating Supplies	\$2,580
Chemicals	\$1,964
Direct Expenses	\$8,844
Utilities	
Electricity	\$3,654
Pool Heating	\$5,988
Water & Sewer	\$1,662
Total Utilities	\$11,304
Total Operating Expenses	\$74,348
Capital Replacement Fund	\$8,500
Total Expense	\$82,848
Estimate Current as of:	
Source: Counsilman-Hunsaker	



Recommendations

Consultant Recommendations

1. Theming of renovated spraygrounds will attract residents, foster a sense of community pride, and celebrate the unique character of surrounding neighborhoods.
2. Pump and Dump spraygrounds are recommended for all future and renovated spraygrounds due to the low operating costs, maintenance staff required, and no need for attendants.
3. Considering master planning at Centennial, Poly Vista, and Cottonwood. A lack of sprayground service was noted near the Heights. Additional spraygrounds are recommended to better serve those residents. Arrowhead Park, Uinta Park, and Clevenger Park are considerations.



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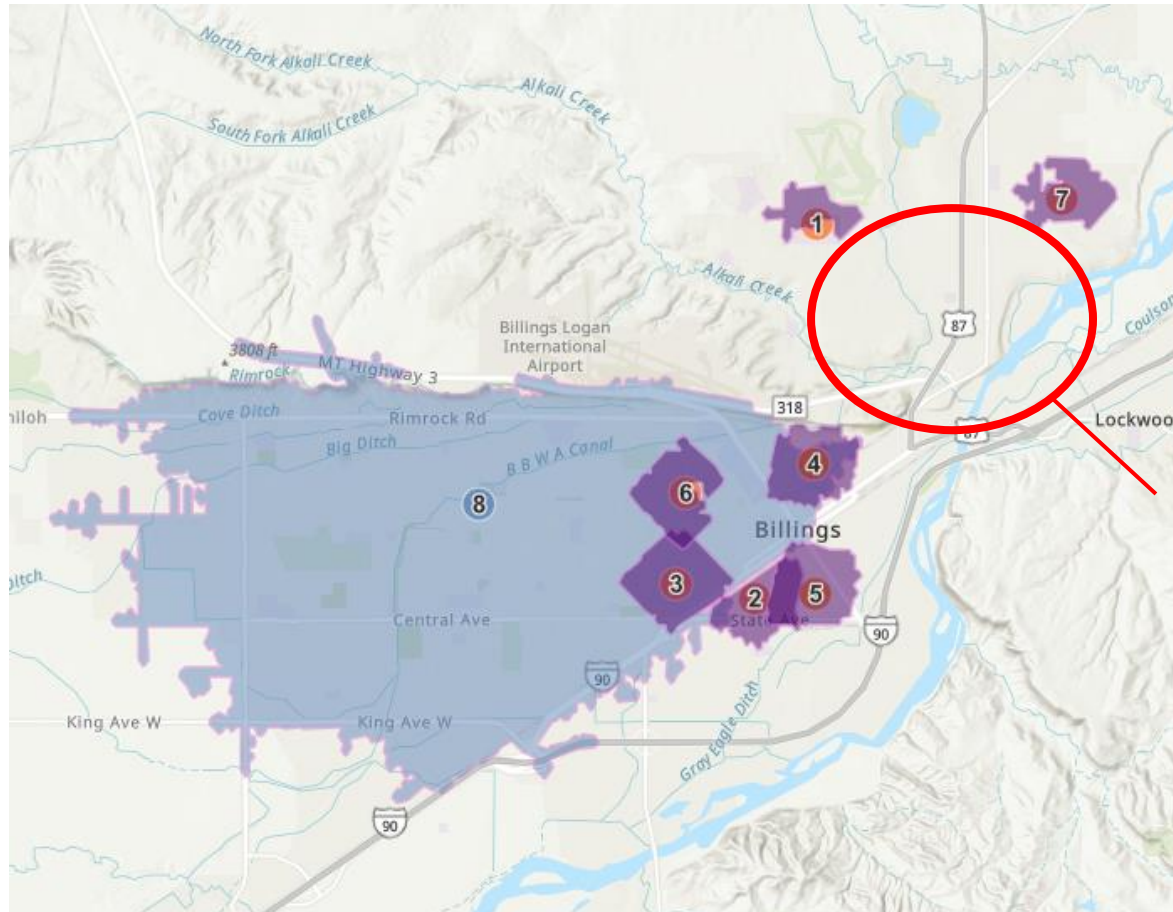
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Consultant Recommendations

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Potential sprayground site