



Drainage Impact Fee Update Recommended Revisions

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11 April 2022

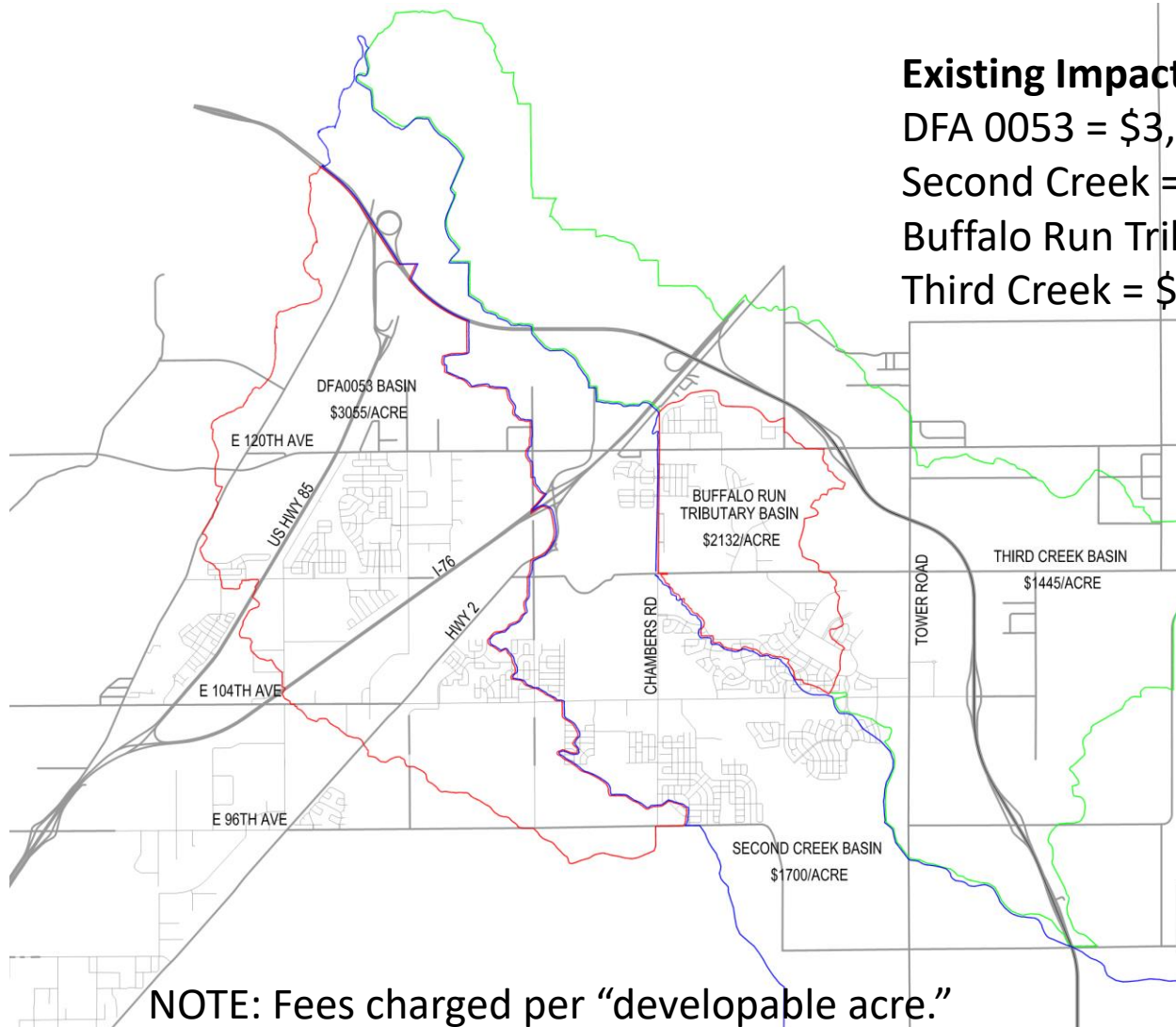
Overview

- Purpose and Need
- Drainage Impact Fee Overview
- Top 10 Drainage Project Priority List
- Excise Tax
- Rational Nexus
- Drainage Impact Fee Guidelines
- Drainage Impact Fee Options
- Drainage Fee Comparison with other Cities

Purpose and Need

- The City is developing rapidly & our drainage impact fees have not been updated since the early to mid 2000's.
 - Third Creek last updated in 2007
 - Buffalo Run Trib last updated in 2005
 - Direct Flow Area 0053 last updated in 2006
 - Second Creek last updated in 2003
- The drainage impact fees are based upon older and now outdated costs from previous master plans
- The City needs to update our drainage impact fees to help fund capital projects to accommodate increased stormwater runoff caused by new development

Drainage Impact Fee Overview



Existing Impact Fees

DFA 0053 = \$3,055/Acre

Second Creek = \$1700/Acre

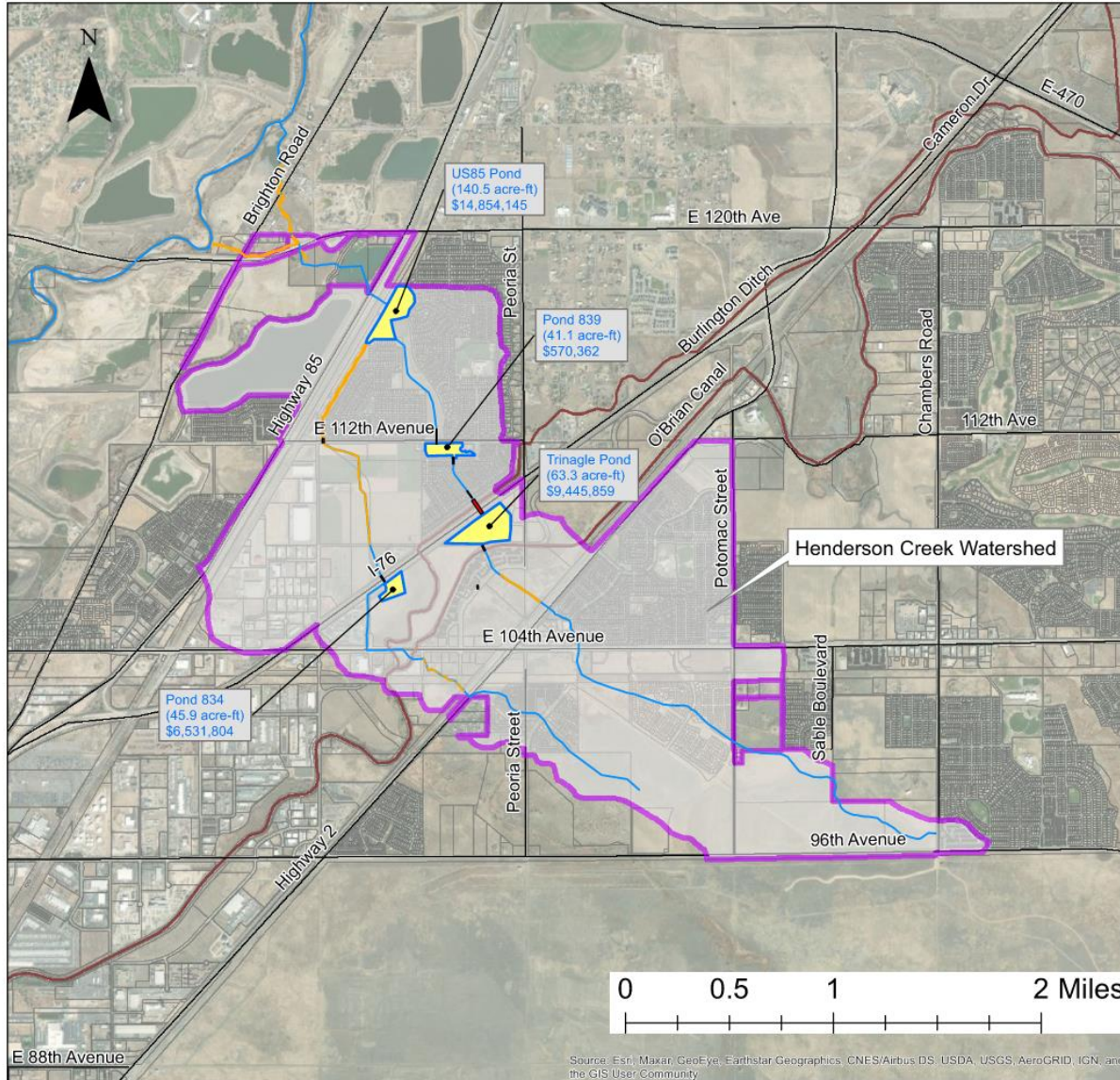
Buffalo Run Trib = \$2,132/Acre

Third Creek = \$1,445/Acre

NOTE: Fees charged per “developable acre.”



Henderson Creek Current Need



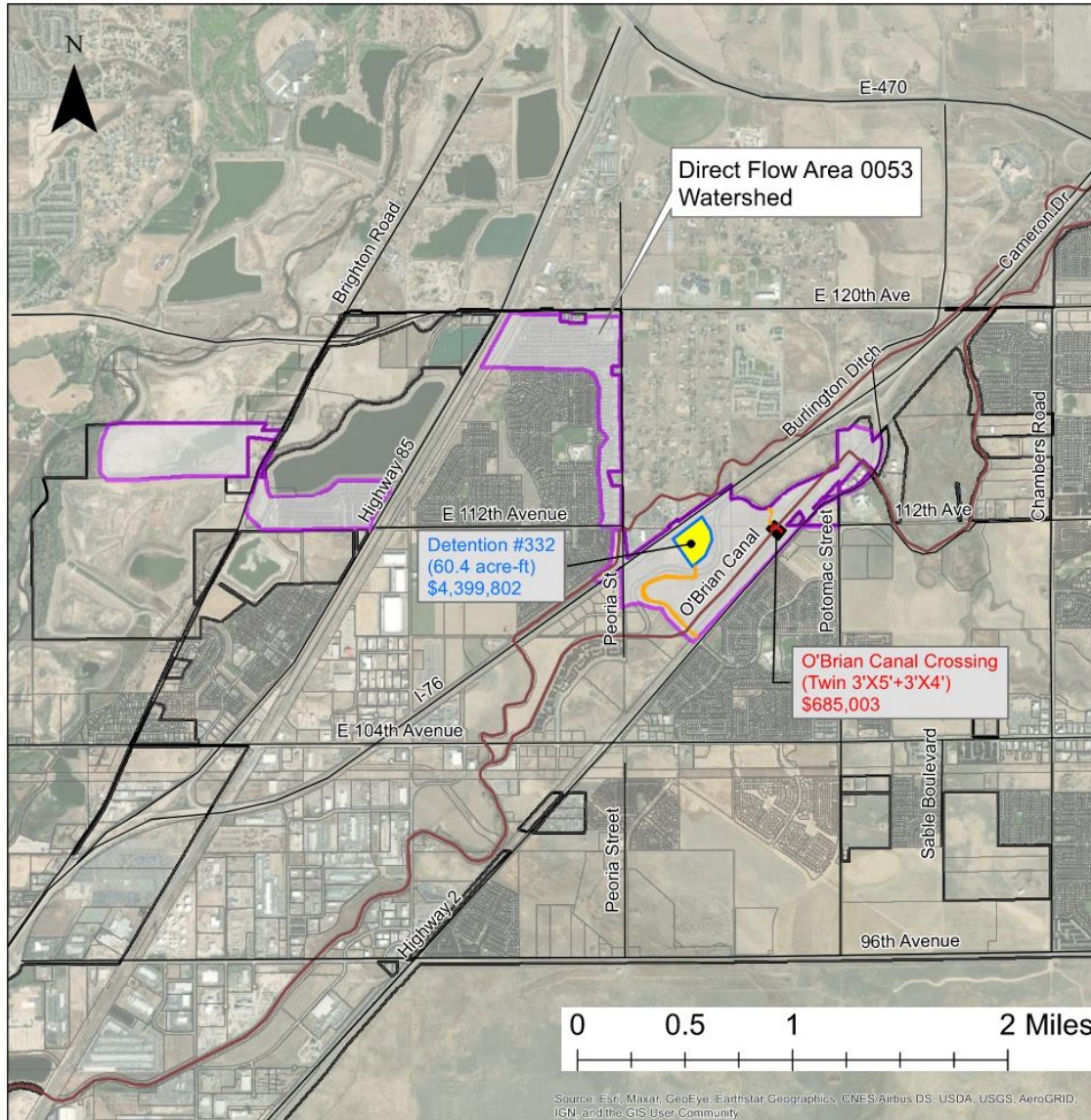
Henderson Creek Watershed Capital Costs

Total Bain Area (acres)	3481
Remaining Developable Land (acres)	1896
Detention Pond Cost	\$31,402,170
Other Capital Cost*	\$19,795,118
Overall Cost	\$51,197,288
Cost Per Impervious Acre	\$27,003

*Culverts, channles, land acquisition, engineering, permitting, etc.

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

DFA 0053 Current Need

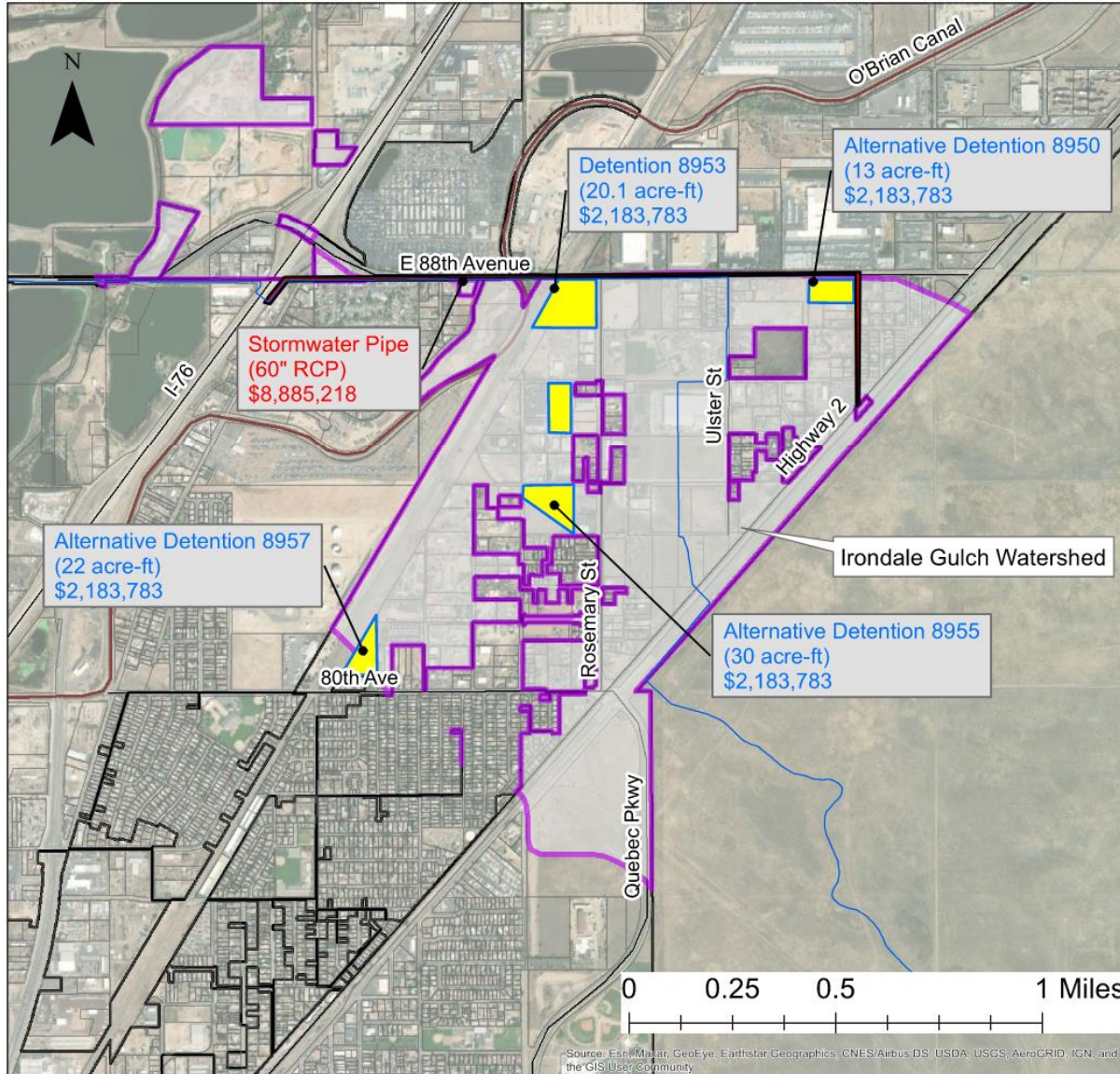


Direct Flow Area 0053 Watershed Capital Cost

Total Bain Area (acres)	307
Remaining Developable Land (acres)	133
Detention Pond Cost	\$4,399,802
Other Capital Cost*	\$6,258,596
Overall Cost	\$10,658,398
Cost Per Impervious Acre	\$80,138

*Culverts, channles, land acquisition, engineering, permitting, etc.

Irondale Current Need

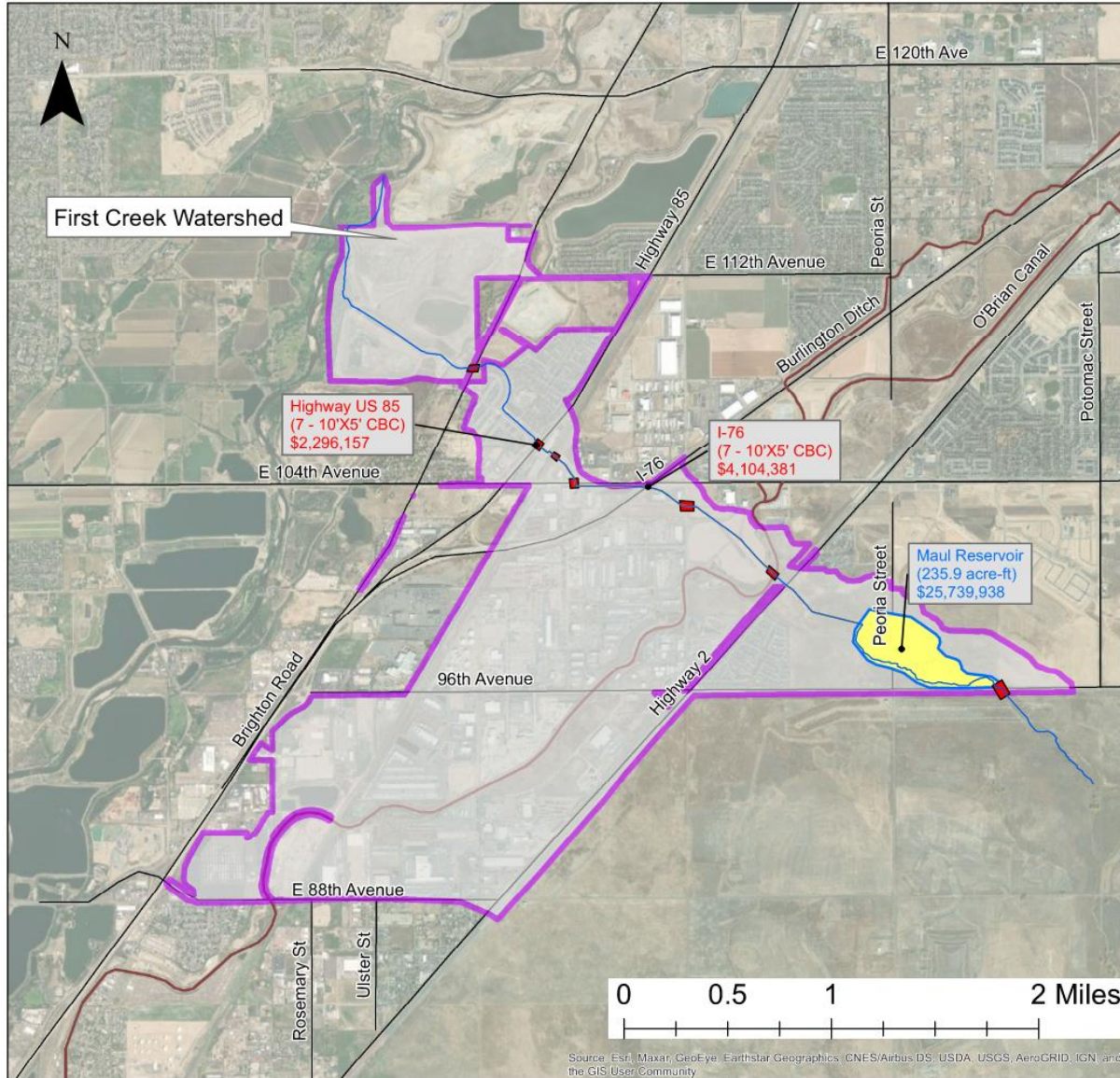


Irondale Gulch Watershed Capital Costs

Total Basin Area (acres)	744
Remaining Developable Land (acres)	435
Detention Ponds Cost	\$10,918,915
Other Capital Cost*	\$12,705,343
Overall Cost	\$23,624,258
Cost Per Impervious Acre	\$54,309

*Culverts, channles, detention ponds, engineering, permitting, etc.

First Creek Current Need

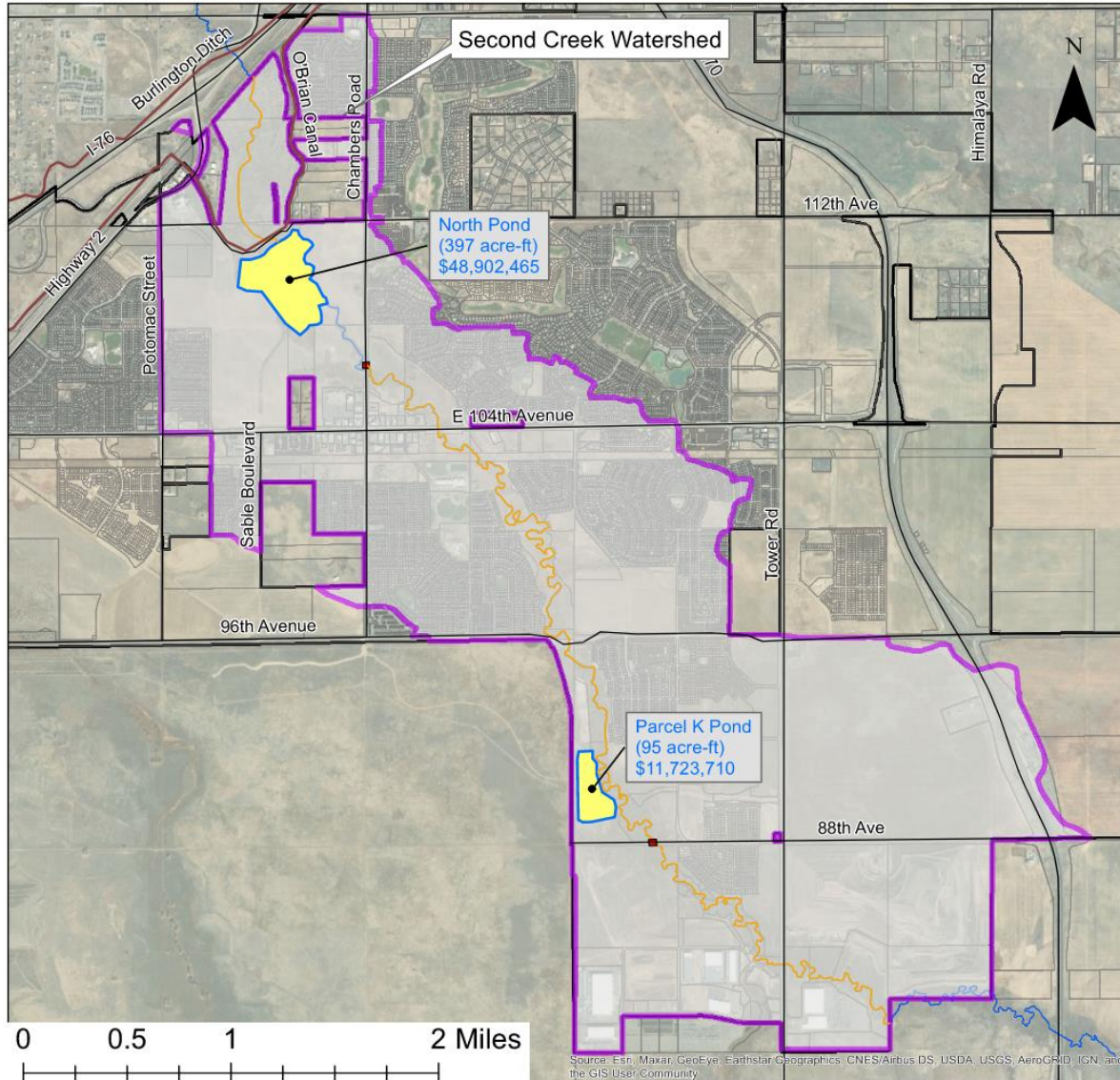


First Creek Watershed Capital Costs

Total Basin Area (acres)	3026
Remaining Developable Land (acres)	1335
Detention Pond Cost	\$25,739,938
Other Capital Cost*	\$64,303,545
Overall Cost	\$90,043,483
Cost Per Impervious Acre	\$67,448

*Culverts, channles, land acquisition, engineering, permitting, etc.

Second Creek Current Need

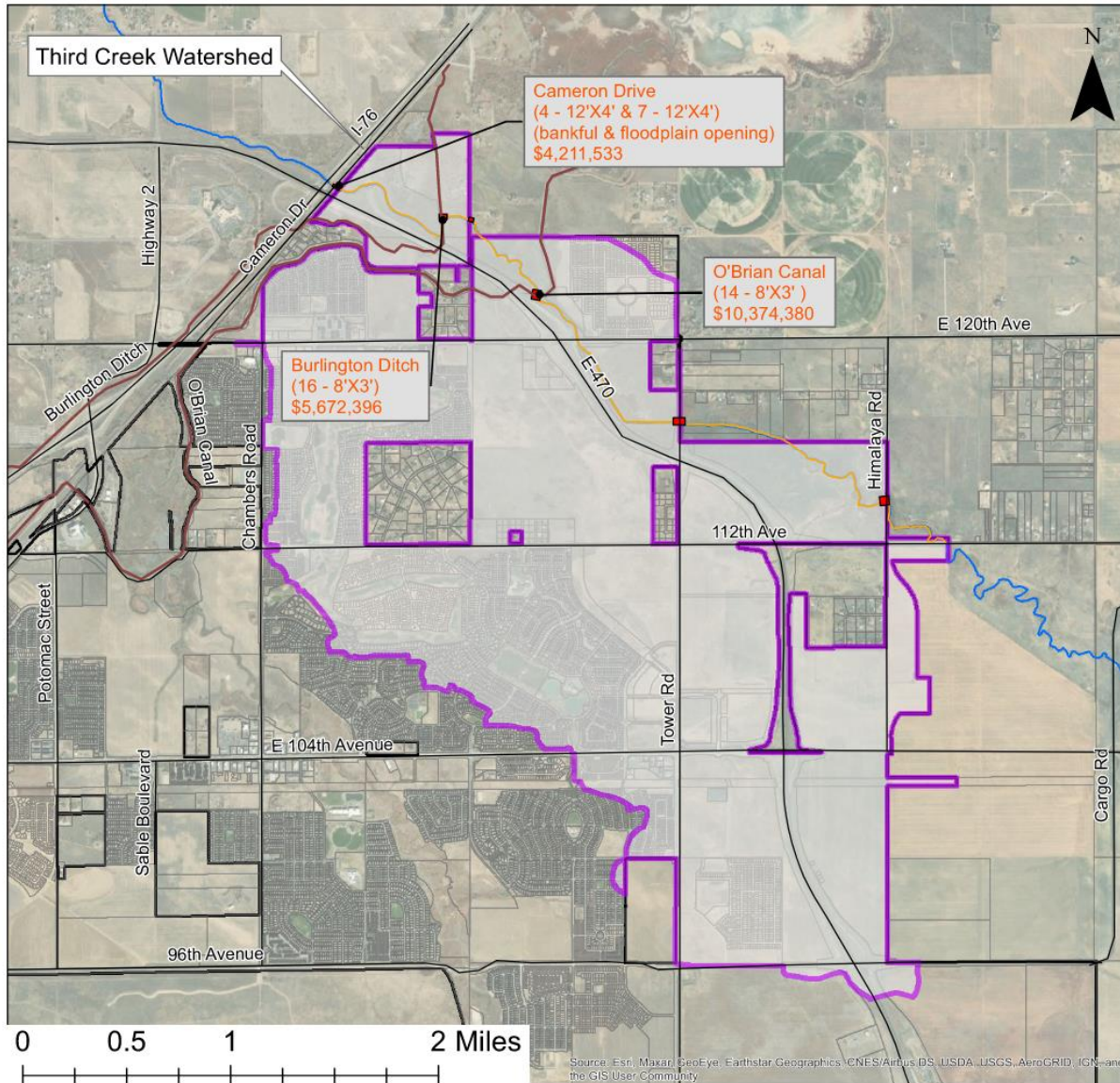


Second Creek Watershed Capital Cost

Total Basin Area (acres)	6280
Remaining Developable Land (acres)	3081
Detention Pond Cost	\$60,626,175
Other Capital Cost*	\$38,049,073
Overall Cost	\$98,675,248
Cost Per Impervious Acre	\$32,027

*Culverts, channles, land acquisition, engineering, permitting, etc.

Third Creek Current Need



Third Creek Watershed Capital Cost

Total Basin Area (acres)	6779
Remaining Developable Land (acres)	3720
Culvert Cost	\$20,258,309
Other Capital Cost*	\$14,029,528
Overall Cost	\$34,287,837
Cost Per Impervious Acre	\$9,217

*Channles, drop structures, land acquisition, engineering, permitting, etc.

Drainage Impact Fee Overview

Basin	Current Fund Balance	Capital Needs (2021)	Notes
Henderson/DFA 0053	\$693,435	\$61,855,686	Costs taken from latest MHFD Master Plan. Henderson Crk is part of DFA 0053
Second Creek	\$1,489,407	\$98,675,248	Costs taken from latest MHFD Master Plan
Third Creek	\$108,242	\$34,287,837	Costs taken from latest MHFD Master Plan
First Creek	Currently No Impact Fee	\$90,043,483	Costs taken from latest MHFD Master Plan
Irondale	Currently No Impact Fee	\$23,624,258	Costs taken from latest MHFD Master Plan
Totals =	\$2,291,084.00	\$308,486,514	
	Shortfall =	\$306,195,430	

NOTES:

1. Anticipated Future Amount Captured Under Current Impact Fee Construct = \$16,811,695
2. MHFD = Mile High Flood District



Drainage Impact Fee Overview

Area	Basin	Total Capital Need	Developable Area (Acres)	Current Impact Fee/Acre ¹	Proposed Impact Fee/Remaining Developable Acre ²	Proposed Impact Fee/SF ²
City	Commerce City	\$308,486,514	10,846	N/A	\$28,442	\$0.65
Basin Specific	Henderson/ DFA 0053	\$61,855,686	2029	\$3,055	\$30,486	\$0.70
	Second Creek	\$98,675,248	3081	\$1,700	\$32,027	\$0.74
	Third Creek	\$34,287,837	3720	\$1,445	\$9,217	\$0.21
	First Creek	\$90,043,483	1335	N/A	\$67,448	\$1.55
	Irondale	\$23,624,258	435	N/A	\$54,309	\$1.25

Notes:

1. Current fees are per parcel area, regardless of impervious area added
2. Costs are in 2021 Q1 dollars and fee is assessed on new impervious areas only



Top 10 Drainage Projects

- Table below shows the Top 10 drainage projects within the City. A list of all projects is included in the Drainage Impact Fee Study

Reach	Project Description	2021 Estimated Cost	Priority
Second Crk - 3	13900 LF Channel Improvements BNSF Railroad to Chambers Rd	\$6,072,132.75	1
Irondale Gulch - 1	1647 LF Irondale Gulch Outfall into South Platte River	\$3,820,125.85	2
Irondale Gulch - 2	Detention Pond 8953 (88th Ave and Rosemary St.)	\$2,183,782.83	3
Henderson Creek - Rag 2	O'Brian Canal Crossing	\$306,194.08	4
Henderson Creek - Rag 2	Triangle Pond and D/S Crossing (Vic. I-76)	\$9,445,859.02	5
Henderson Creek – Hend 6B	1525 LF New Channel Brighton Rd to 120th Pkwy	\$340,659.14	6
Henderson Creek - Hend 6	Havana St - US 85 Crossing and Stormwater Pipe	\$11,260,137.44	7
Third Crk - 5	O'Brian Canal Crossing	\$10,374,379.95	8
Second Crk - 3	North Detention Pond (Vic. O'Brian Canal Crossing)	\$48,902,465.40	9
First Creek - 4a & 5	3370 LF of Channel Improvements (Hwy US 85 to I-76) & Replacing Culverts at Hwy US 85, Union Pacific Railroad, 104th Ave, and I-76	\$12,076,599.99	10
Total =		\$104,782,336.47	



Excise Taxes

- Same as the impact fees but would have to be approved by voters
- Example: Town of Parker
 - Fee levied on all residential and non-residential development
 - Paid at time of building permit
 - Includes annual cost escalation to “ensure that the value of the revenue collected pursuant to this Chapter is maintained”
 - Fee can be credited back as outlined in the ordinance

Rational Nexus Study

- Governments are allowed to exact property or something of value without providing compensation, provided two tests are met:
 - Nexus – The exaction must have rational connection to the burden the govt seeks to avoid
 - Rough Proportionality – The amount of the exaction must roughly correspond to the burden placed on the government, resulting from the development

Exaction = Government mandated contribution of anything of value imposed as a condition of approving a project

- Includes: Impact fees, road dedications, utility improvements, sidewalk, curb and gutter, road and transportation improvements, land, parks and trails, lighting, etc...

Drainage Impact Fee Guidelines

- The City cannot charge more than the fee calculated in the drainage impact fee study. The amount of the exaction must be roughly proportional to the burden placed on City, resulting from development.
- The City can adopt a lower fee
- The City can adopt a lower fee for different land uses. Fees can be adjusted in the future at anytime.
- The City can phase the fee

Drainage Impact Fee Options

- Option 1 – Adopt full drainage impact fees as proposed per basin
 - Option 2 – Adopt full residential and industrial drainage impact fees, and adopt a lower commercial fee per basin.
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- Notes:
 - Proposed Drainage Impact Fees do not include any future Operating and Maintenance Costs, which we estimate at approximately \$1M per year (in 2021 dollars)
 - Staff suggests that the fee ordinance have an escalator that is tied to the construction cost index and that the fee be adjusted automatically every 2 years.
 - The Northern Infrastructure General Improvement District (NIGID) and the E-470 Residential Area General Improvement District (ERAGID) do not have any regional drainage projects included in their districts

Drainage Impact Fee Option 1

- Option 1 is the adoption of the full drainage impact fee
- The tables below shows adoption of the full proposed Drainage Impact Fees with a comparison to existing Fees

Commerce City Basins	Proposed Drainage Fee Per Impervious Acre	Single Family Detached ¹ (7,000 SF Lot)	Multifamily Duplex ¹ (10,000 SF Lot)	Industrial ² 4.8 Acres (3.8 Acres Impervious)	Warehouse ² 40 Acres (32 Acres Impervious)	Shopping Center ³ 20 Acres (17 Acres Impervious)
Henderson/DFA 0053	\$30,486	\$2,205	\$3,149	\$115,847	\$975,552	\$518,262
Second Creek	\$32,027	\$2,316	\$3,309	\$121,703	\$1,024,864	\$544,459
Third Creek	\$9,217	\$667	\$952	\$35,025	\$294,944	\$156,689
First Creek	\$67,448	\$4,877	\$6,968	\$256,302	\$2,158,336	\$1,146,616
Irondale	\$54,309	\$3,927	\$5,610	\$206,374	\$1,737,888	\$923,253

¹ Assumes development is 45% impervious.

² Assumes development is 80% impervious.

³ Assumes development is 85% impervious.

Commerce City Basin	Current Drainage Fee Per Developable Acre	Single Family Detached (7,000 SF Lot)	Multifamily Duplex (10,000 SF Lot)	Industrial/Warehouse 4.8 Acres (3.8 Acres Impervious)	Industrial/Warehouse 40 Acres (32 Acres Impervious)	Shopping Center ³ 20 Acres (17 Acres Impervious)
Henderson/DFA 0053	\$3,053	\$491	\$701	\$14,654	\$122,120	\$61,060
Second Creek	\$1,700	\$273	\$390	\$8,160	\$68,000	\$34,000
Third Creek	\$1,445	\$232	\$332	\$6,936	\$57,800	\$28,900
First Creek	\$0	\$0	\$0	\$0	\$0	\$0
Irondale	\$0	\$0	\$0	\$0	\$0	\$0

Drainage Impact Fee Option 2

- Option 2 is adoption of the full residential and industrial fee and a reduced commercial drainage impact fee.
- Table below shows impact fee with a 50% Commercial impact fee versus the existing impact fees.

Proposed Drainage Impact Fees (Commercial Reduced 50%)

Commerce City Basins	Proposed Drainage Fee Per Impervious Acre	Single Family Detached ¹ (7,000 SF Lot)	Multifamily Duplex ¹ (10,000 SF Lot)	Industrial ² 4.8 Acres (3.8 Acres Impervious)	Warehouse ² 40 Acres (32 Acres Impervious)	Commercial Center ³ 20 Acres (17 Acres Impervious) 50% Fee
Henderson/DFA 0053	\$30,486	\$2,205	\$3,149	\$115,847	\$975,552	\$259,131
Second Creek	\$32,027	\$2,316	\$3,309	\$121,703	\$1,024,864	\$272,230
Third Creek	\$9,217	\$667	\$952	\$35,025	\$294,944	\$78,345
First Creek	\$67,448	\$4,877	\$6,968	\$256,302	\$2,158,336	\$573,308
Irondale	\$54,309	\$3,927	\$5,610	\$206,374	\$1,737,888	\$461,627

¹ Assumes development is 45% impervious.

² Assumes development is 80% impervious.

³ Assumes development is 85% impervious.

Existing Drainage Impact Fees

Commerce City Basin	Current Drainage Fee Per Developable Acre	Single Family Detached (7,000 SF Lot)	Multifamily Duplex (10,000 SF Lot)	Industrial/Warehouse 4.8 Acres (3.8 Acres Impervious)	Industrial/Warehouse 40 Acres (32 Acres Impervious)	Shopping Center ³ 20 Acres (17 Acres Impervious)
Henderson/DFA 0053	\$3,053	\$491	\$701	\$14,654	\$122,120	\$61,060
Second Creek	\$1,700	\$273	\$390	\$8,160	\$68,000	\$34,000
Third Creek	\$1,445	\$232	\$332	\$6,936	\$57,800	\$28,900
First Creek	\$0	\$0	\$0	\$0	\$0	\$0
Irondale	\$0	\$0	\$0	\$0	\$0	\$0

Drainage Impact Fee Option 2

- Table below shows different Commercial impact fee options.

Commerce City Basins	Proposed Drainage Fee Per Impervious Acre	Commercial Center ¹ 20 Acres (17 Acres Impervious) Full Fee	Commercial Center ¹ 20 Acres (17 Acres Impervious) 50% Fee	Commercial Center ¹ 20 Acres (17 Acres Impervious) 30% Fee
Henderson/DFA 0053	\$30,486	\$518,262	\$259,131	\$155,479
Second Creek	\$32,027	\$544,459	\$272,230	\$163,338
Third Creek	\$9,217	\$156,689	\$78,345	\$47,007
First Creek	\$67,448	\$1,146,616	\$573,308	\$343,985
Irondale	\$54,309	\$923,253	\$461,627	\$276,976

¹ Assumes development is 85% impervious.



Drainage Impact Fee Option 2

- Table below shows estimated reduction in Capital Collection with reduced Commercial Fee

Land Use	Developable Area (acres) City-Wide	Portion of New Development	Portion of Total Using Full Fee	Shortfall due to Elimination of Commercial Fee	Shortfall due to 70% Reduction in Commercial Fee	Shortfall due to 50% Reduction in Commercial Fee
Residential	7,317	67%	\$207,000,000	\$0	\$0	\$0
Commercial	956	9%	\$28,000,000	\$28,000,000	\$20,000,000	\$14,000,000
Industrial	2,573	24%	\$74,000,000	\$0	\$0	\$0
Total	10,846	100%	\$308,000,000	\$28,000,000	\$20,000,000	\$14,000,000

Comparisons with other Cities

- Table below shows a comparisons of proposed drainage impact fees with neighboring Cities (Note: Stormwater utility fees below for SEMSWA, Denver & Thornton)

City	Year Adopted	Drainage Fee	Single Family Detached ² (7,000 SF Lot)	Multifamily Duplex ² (10,000 SF Lot)	Industrial 4.8 Acres (3.8 Acres Impervious)	Warehouse 40 Acres (32 Acres Impervious)
Brighton	2015	\$4,580/single family lot \$2,310/multi-family unit \$0.86/impervious square foot (industrial)	\$4,580	\$4,620	\$142,354	\$1,198,771
SEMSWA ¹	2007	\$10,058/impervious acre	\$727	\$1,039	\$38,220	\$321,856
SEMSWA ^{1,3}	2007	\$111.59/single family residential \$0.034/impervious square foot (non-single family)	\$112/yr	\$153/yr	\$5,628/yr	\$47,393/yr
Denver ³	1981	\$0.07/impervious square foot ¹ /year	\$204/yr	\$291/yr	\$11,587/yr	\$97,574/yr
Thornton ³	2019	\$60/residential property/year \$0.02/impervious square foot/year	\$60/yr	\$60/yr	\$3,311/yr	\$27,878/yr
Unincorporated Adams County ³	2012	\$83/residential property/year \$746/Commercial property/year \$886/Industrial property/year	\$83yr	\$166/yr	\$886/yr	\$886/yr
Commerce City	TBD	\$0.84/impervious square foot ¹	\$2,646	\$3,780	\$139,044	\$1,170,893

¹ These are median values; fee depends on how much impervious area is being added (Denver) or which basin the development is in (SEMSWA, Commerce City).

² Assumes development is 45% impervious.

³ These communities use annual fees, more akin to an annual stormwater utility fee than a one-time impact fee.

SEMSWA = Southeast Metro Stormwater Authority





Questions & Discussion





Questions & Discussion



Outreach To Development Community

- Presented Drainage Impact Fee Update & Potential Phasing Options to Developer Community at the 7 October & 9 December 2021 Developer and Construction Stakeholders Meetings
- Developer comments included;
 - Phase impact fee increases over 3-to-5 years versus 1 year
 - Incorporate construction cost escalator every 2-to-3 years versus every year
 - Concern if it would still be affordable to build houses with increase in fees
 - Collection of fees through the development process would be too complicated

Sample Property Tax and Drainage Impact Fee - Warehouse

- Table below shows a typical property tax bill for a warehouse in the northern range.

Current for Warehouse in Northern Range		
Property Value =		\$5,000,000
Assessed Property Value =		\$1,450,000
	Mills	Amount (\$)
Total Property Tax=	177.171	\$256,897.95

- Current Second Creek Impact Fee = \$68,000 for 40 acre Warehouse site.
- Proposed Second Creek Impact Fee = \$1,024,864 for 40 acre Warehouse site.
- Current Impact Fee annualized over 30 years is approximately \$2,270 per year
- Proposed Impact Fee annualized over 30 years is approximately \$34,160 per year
- Proposed Impact Fee would be an additional \$31,890/year over 30 years

Sample Property Tax and Drainage Impact Fee - Single Family Home

- Table below shows a typical property tax bill a house in the northern range.

Current Taxes for House in Northern Range		
Property Value =		\$500,000
Assessed Property Value =		\$35,755
	Mills	Amount (\$)
Total Property Tax =	209.877	\$7,504.15

- Current Second Creek Impact Fee = \$273 per Single Family Home
- Proposed Second Creek Impact Fee = \$2,316 per Single Family Home
- Current Impact Fee annualized over 30 years is approximately \$10 per year
- Proposed Impact Fee annualized over 30 years is approximately \$77 per year
- Proposed Impact Fee would be an additional \$67/year over 30 years