



Impact Fee Analysis Summary of Results

Keith Larson, P.E.
Bowen Collins & Associates
Project Manager

The Challenge

**What is the best way to
pay for the new
infrastructure needed
to service future
growth?**



**BOWEN COLLINS
& ASSOCIATES**

Option 1 – Everyone for Themselves

Concept: Growth pays directly for all needed improvements.

Example: Brand new service districts

Issues:

1. Loss of efficiency in building infrastructure piecemeal – lower quality final system
2. Finances for small developments

Option 2 – Free Ride

Concept: All infrastructure paid through rate revenue from existing rate payers. No charge to new growth.

Example: School districts

Issues:

1. Fairness to existing rate payers

Option 3 – Impact Fees

Concept: Provider plans and finances improvements for expected growth. Growth pays a standardized fee based on the cost of providing service.

Example: Most municipal services

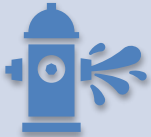
Issues:

1. Fair calculation of cost of service
2. Compliance with State Law
 - A. Required studies meeting the requirements can be costly
 - B. Potential for future challenges and litigation

Important Impact Fee Concepts



Definition of Level of Service



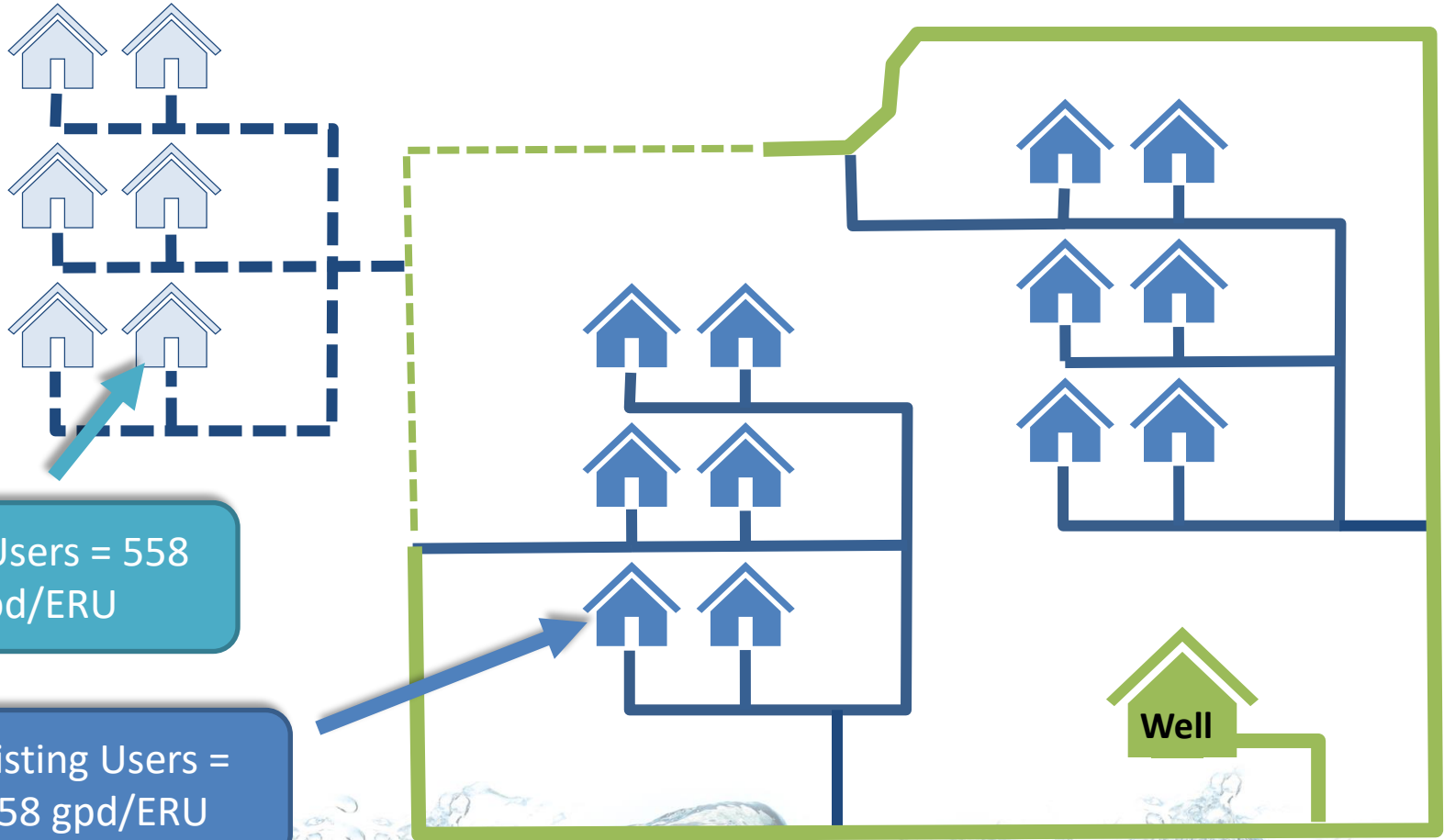
Project Level vs. System Level Improvements



Required Evaluation of Both Existing and Future Capacity

Level of Service

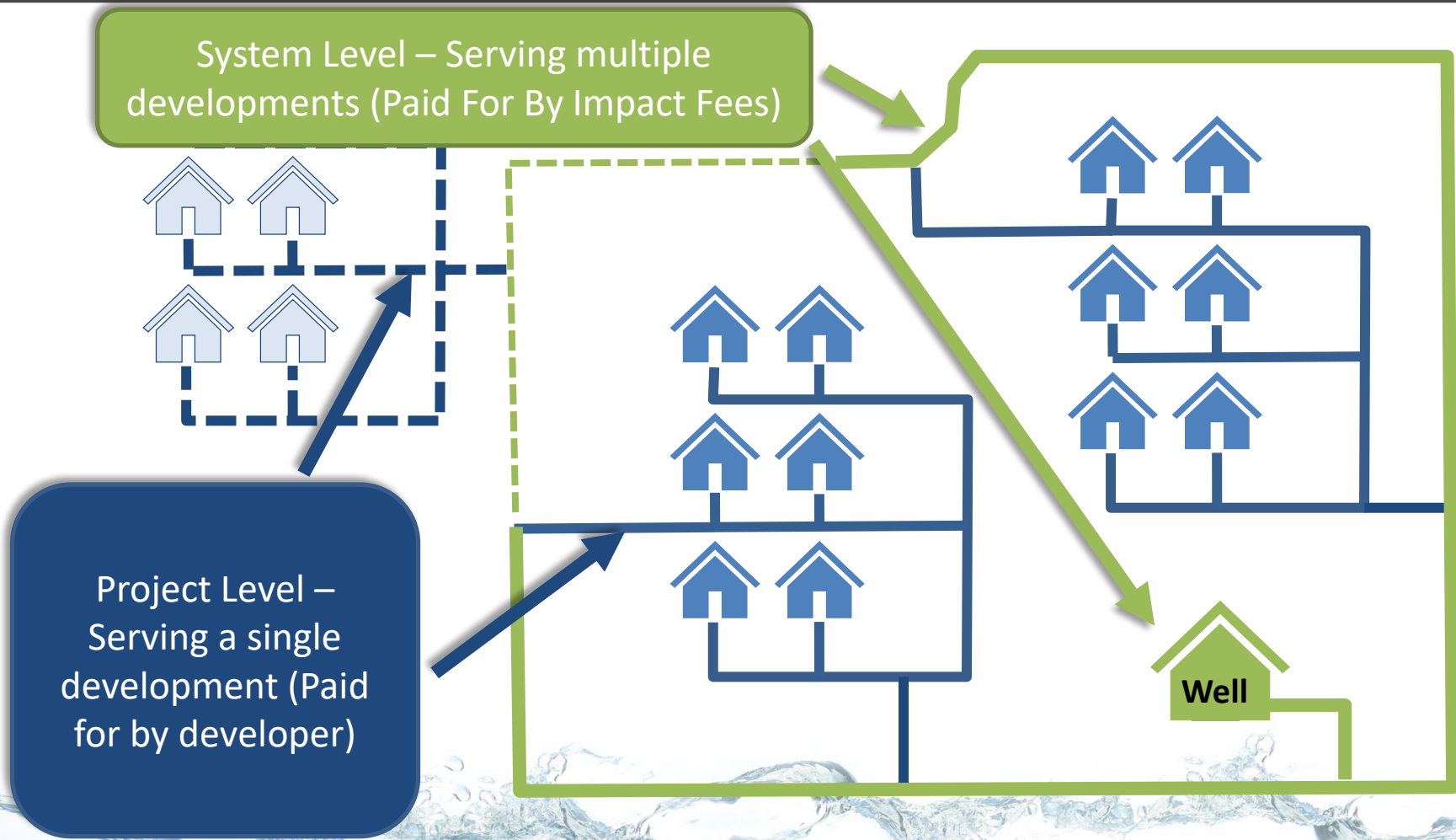
Must be the same for both existing and future users



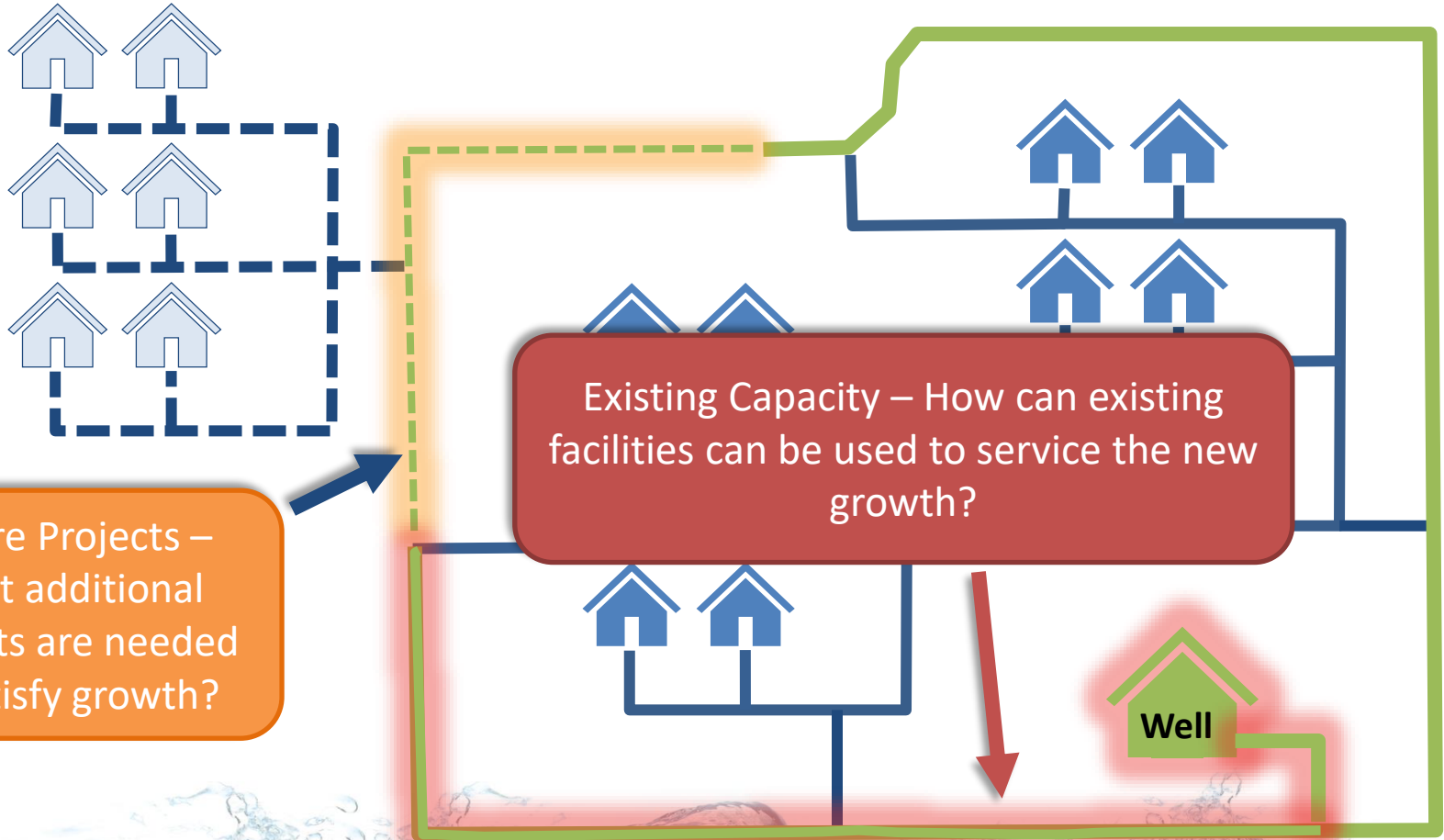
New Users = 558
gpd/ERU

Existing Users =
558 gpd/ERU

Project Level vs. System Level



Existing Capacity vs. Future Projects



Future Projects –
What additional
projects are needed
to satisfy growth?

Existing Capacity vs. Future Projects

Existing Capacity

- Actual Costs Only - Replacement Cost Not Allowed (even with depreciation)
- Deduction for grants or developer contributions
- Preference for existing available capacity vs. future capacity

Future Projects

- 6- to 10-year planning window
- 6-year Spend or Encumber

Future Projects

*Included in
the Planning
Window*

- *Water*
 - *6200 South Boosted Line Upgrade*
 - *Engineering for Redundant 24" Line*
 - *Barker Replacement Well*
- *Sewer*
 - *Sewer Siphon*
 - *Redwood Road Transition*
 - *CVWRF Plant Capacity Increase Costs*

Future Projects

Not Included

- *Construction of Redundant 24" line*
- *24" Trunkline Replacement*
- *Shop Expansion*
- *Bonding Expenses*

Calculation of Impact Fees

- Step 1 - Calculate the cost of excess capacity in existing facilities

$$\text{Cost of Excess Capacity} = \text{Actual Cost Of Existing Facilities} \times \% \text{ Use of Existing Capacity By New Users}$$

Calculation of Impact Fees

- Step 2 - Calculate the cost of new facilities for growth

$$\text{Cost of New Facilities} = \text{Actual Cost Of New Facilities} \times \% \text{ Use of New Capacity By New Users}$$

Calculation of Impact Fees

- Step 3 - Calculate Total Impact Fee

$$\begin{array}{rcc} \text{Total} & & \text{Cost of} \\ \text{Impact} & & \text{Excess} \\ \text{Fee} & = & \text{Capacity} \end{array} + \begin{array}{r} \text{Cost of} \\ \text{New} \\ \text{Facilities} \end{array}$$

$$\text{Total Quantity of New Use}$$

Impact Fee Recommendations - Water

System Components	Total Cost of Component	% Serving 10-year Growth	Cost Serving 10-year Growth	10-year ERUs Served	Cost Per ERU
Transmission Facilities					
Existing Facilities	\$42,708,021	6.1%	\$2,599,338	1,585	\$1,639.96
10-year Projects	\$1,762,900	40.2%	\$709,375	1,585	\$447.56
Subtotal	\$44,470,921		\$3,308,713		\$2,087.52
Storage Facilities					
Existing Facilities	\$1,330,305	6.6%	\$88,167	1,585	\$55.63
10-year Projects	\$0	0.0%	\$0	1,585	\$0.00
Subtotal	\$1,330,305		\$88,167		\$55.63
Production Facilities					
Existing Facilities	\$17,809,208	3.2%	\$564,766	1,585	\$356.32
10-year Projects	\$2,967,000	29.3%	\$868,155	1,585	\$547.73
Subtotal	\$20,776,208		\$1,432,921		\$904.05
Other					
Administrative & Shop Buildings	\$1,863,660	6.4%	\$119,461	1,585	\$75.37
Planning and Impact Fee Studies	\$32,956	83.3%	\$27,444	1,275	\$21.52
Subtotal	\$1,896,616		\$146,904		\$96.89
Total	\$68,474,050		\$4,976,705		\$3,144.09

Impact Fee Recommendations - Water

Current Fee	Allowable Fee	Difference	% Difference
\$2,357	\$3,144	\$787	33.4%

- Reasons for difference
 - Higher project costs from inflation
 - Improved documentation of existing system costs
 - Barker Well costs: Less expensive existing production capacity is no longer available

Impact Fee Recommendations - Sewer

System Components	Total Cost of Component	% Serving 10-year Growth	Cost Serving 10-year Growth	10-year ERUs Served	Cost Per ERU
Collection Facilities					
Existing Facilities	\$14,036,396	6.2%	\$875,011	1,585	\$552.06
10-year Projects	\$2,197,485	4.3%	\$95,331	1,585	\$60.15
Subtotal	\$16,233,881		\$970,342		\$612.20
Treatment Plant					
Existing Facilities	\$906,680	100.0%	\$906,680	1,585	\$572.04
10-year Projects	\$1,719,912	100.0%	\$1,719,912	1,585	\$1,085
Interest Costs	\$221,566	100.0%	\$221,566	1,585	\$139.79
User Fee Credit					-\$638.70
Subtotal	\$2,848,159		\$2,848,159		\$1,158.25
Total	\$10,305,150		\$1,062,326		\$7,970.26
Other					
Administrative & Shop Buildings	\$1,863,660	6.4%	\$119,461	1,585	\$75.37
Planning and Impact Fee Studies	\$31,456	84.14%	\$26,469	1,275	\$20.76
Subtotal	\$1,895,116		\$145,929		\$96.13
Total	\$20,977,156		\$3,964,430		\$1,866.58

Impact Fee Recommendations - Sewer

Current Fee	Allowable Fee	Difference	% Difference
\$1,903	\$1,866	-\$37	-1.91%

- Reasons for difference
 - Significant decrease in peak design flow (347 gpd/ERU to 234 gpd/ERU)
 - Limited number of remaining conveyance improvements
 - Impact of CVWRF projects is minimized because of bonding

Impact Fee Comparison

Entity	Water Impact Fee	Sewer Impact Fee
TBID Existing	\$2,357	\$1,903
TBID Proposed	\$3,144	\$1,866
Kearns ID	\$3,753	\$2,855
Murray City	\$3,027	\$1,372
Granger- Hunter ID	\$2,806	\$1,923
Mt. Olympus ID	-	\$748

Questions?