# AGENDA
# PERSIGO BOARD MEETING
## CITY OF GRAND JUNCTION, CITY COUNCIL
## MESA COUNTY, BOARD OF COUNTY COMMISSIONERS
## CITY HALL AUDITORIUM
## 250 NORTH 5TH STREET
## GRAND JUNCTION, COLORADO
## MONDAY, SEPTEMBER 23, 2024
## 8:00 AM

1. **Discussion Topics**

    a. Septic System Elimination Program Update

2. **Next Meeting Topics**

3. **Other Business**

JOINT PERSIGO MEETING
CITY OF GRAND JUNCTION, CITY COUNCIL
MESA COUNTY, BOARD OF COUNTY COMMISSIONERS

**Item #1.a.**

| | |
|---|---|
| **Meeting Date:** | September 23, 2024 |
| **Presented By:** | Randi Kim, Utilities Director |
| **Department:** | Persigo |
| **Submitted By:** | Randi Kim |

## Information

**SUBJECT:**

Septic System Elimination Program Update

**RECOMMENDATION:**

Consider options for revising the Septic System Elimination Program (SSEP)

**EXECUTIVE SUMMARY:**

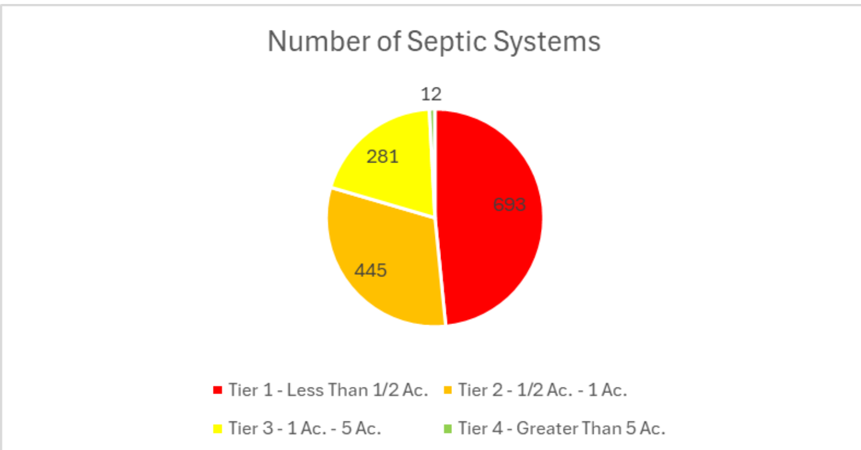
Staff will present options for revising the Septic Elimination Program to incentivize and increase participation in the program with the goal of eliminating the remaining 1,555 septic systems within the Persigo 201 Sewer Service Boundary, including increasing the Sewer Fund cost share, financing provisions, prioritizing and combining sewer improvement districts, and mandating connections.

**BACKGROUND OR DETAILED INFORMATION:**

The City and Mesa County issued joint resolutions (Grand Junction Resolution No. 38-00 and Mesa County Resolution No. MCM 2000-73) in May 2000 that established the Septic System Elimination Program. The City and the County determined that it was in the best interests of the community and the sewer system to establish a program to provide incentives for property owners to join together and create improvement districts to eliminate these septic systems and to provide incentives to underwrite a portion of the improvement district assessment to reduce the overall cost to the customer.

The Sewer Fund included $1,000,000 per year between 2001 and 2005 and $1,500,000 per year between 2006 and 2010 to create local sewer improvement districts and finance the improvements. The Sewer Enterprise assessed 70 percent of the actual construction cost per lot for these improvements, while the Sewer Enterprise funded the remaining amount. The cost of plant investment fees, trunk line extension fees, and service line construction costs were not included in the assistance program. An interest rate of 8 percent was established for those property owners utilizing the long-term financing mechanism of a local improvement district.

At the program's onset, approximately 1,800 septic systems were operating within the Persigo 201 Boundary. To date, 29 sewer improvement districts (SIDs) have been formed, and 23 miles of sewer have been constructed, extending service to 1,431 parcels. Between 2000 and 2014, 23 SIDs were constructed with a total capital expenditure of $11 million. One SID consisting of two properties was built in 2020 for $25,000. The majority (80 percent) of the lots within the completed SIDs were less than one acre as shown in the below graph.




A review of the program as part of the 2020 Comprehensive Wastewater Basin Study Update indicated 1,555 septic systems within the Persigo 201 Boundary. Of these, 218 are within SIDs that were formed, 518 are within SIDs that were previously proposed but voted down by property owners, 528 are within newly proposed SIDs, 13 single lots that don't have access to sewer, and 278 that already have access to a sewer main.

According to County permitting records, 998 septic systems are over 25 years old, while 189 were installed after the Septic System Elimination Program was established in 2000.

The 2020 Comprehensive Wastewater Master Plan includes recommendations for funding levels of $1,000,000 per year. The 2024 Adopted Budget includes $800,000 for 2024 and $1,000,000 per year in the 10-year capital plan. Staff are working with property owners to form four SIDs: Meander Drive, Rosevale/South Redlands, Skyline, and Bookcliffs Ranch. Estimated costs to extend sewer to these SIDs range from $50,700 to $70,800 per lot, resulting in an average assessment cost of $44,375 (70 percent owner share). Sewer construction costs are considerably higher than in 2000 ($10,799 - $17,358 per lot) due to construction cost escalation and because there are fewer lots per SID to spread the costs across. Property owners are also faced with the additional cost of installing a private sewer lateral ($3,000), the sewer plant investment fee ($5,544), and abandoning the septic system ($500), which will increase the total cost of connecting to the sewer to $53,419.

In addition to the program's cost burden on property owners, staff are experiencing challenges with implementing it. With 103 identified SIDs, the administrative time required to conduct community outreach to property owners, receive petitions, administer the formation of SIDs, complete engineering designs, and oversee construction is very time-consuming.

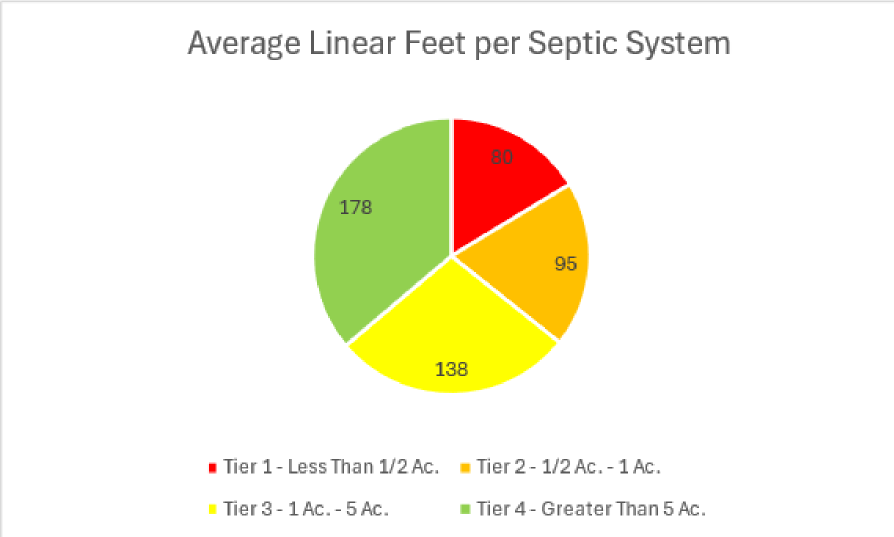
Therefore, staff proposed options for consideration that would reduce the cost burden on property owners and streamline program administration. These included:

- Creating a maximum assessment cost of $28,000 (comparable cost to replace septic system)
- Reducing the assessment cost by increasing the Sewer Fund Share to 50 percent
- Funding 100 percent with the Sewer Fund and assessing costs through Plant Investment Fees
- Allowing the Plant Investment Fee to be included in the long-term financing mechanism
- Allowing the long-term financing mechanism to extend for more than 10 years
- Combining non-contiguous areas into larger SIDs
- Establishing a minimum number of lots per SID
- Requiring mandatory connections within two years of constructing the sewer, depending upon the age of the septic system

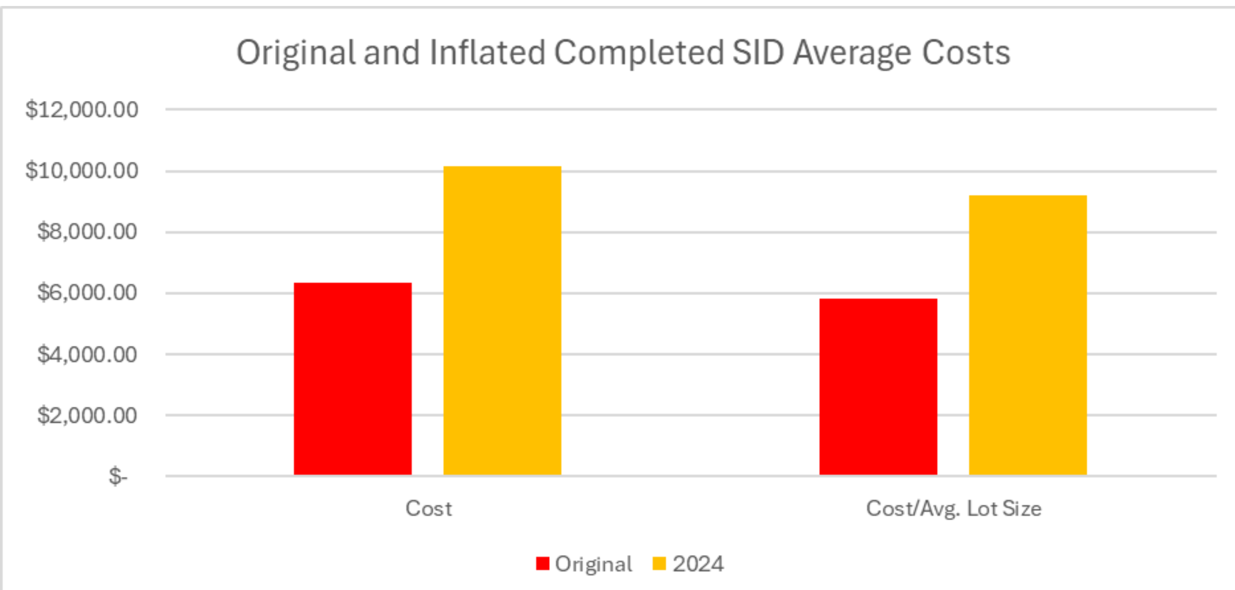
At the July 31, 2024 Persigo Board workshop, the Board directed staff to provide additional information to more fully assess options for the program. The following information is provided in response to that request.

**Cost of Sewer Extensions by Lot Size**

The cost of sewer extensions varies depending upon several factors including distance to the nearest sewer main, terrain, number of lots served by the sewer extension, and lot size. In general, extending sewer to areas of higher density is less costly than extending sewer to areas of lower density. As shown in the graph below, the length of sewer lines is inversely proportional to the density, with an average of 80 feet per lot for lot sizes less than 0.5 acres and 178 feet per lot for lot sizes greater than five acres.

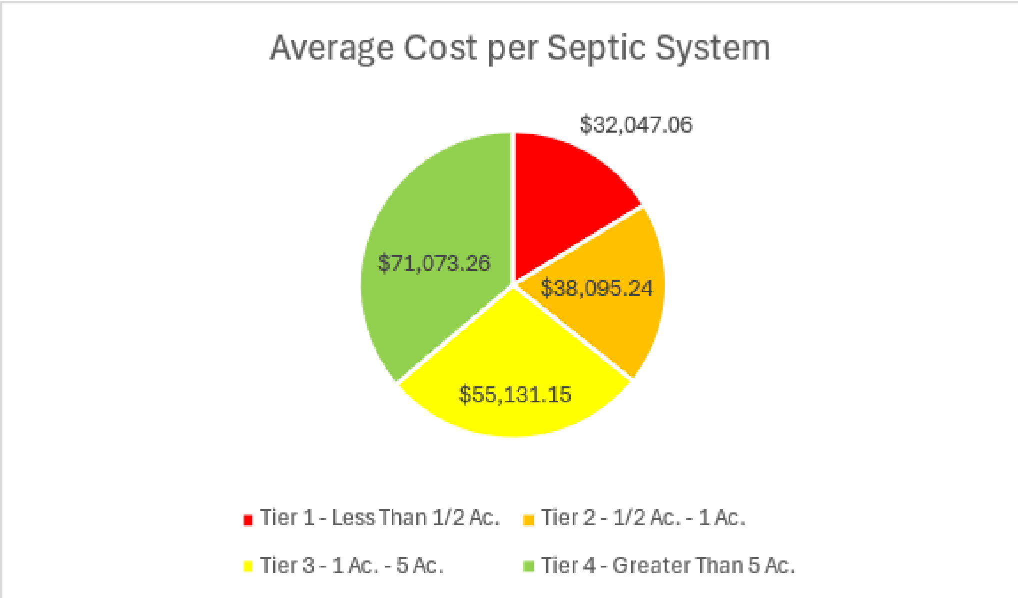



Within the 29 sewer improvement districts (SIDs) that have been formed, the average lot size of the 1,429 parcels was 0.83 acres. As shown in the graph below, the average cost per lot was $10,164.19 (inflated cost in 2024 dollars).




The four SIDs that are currently in process (Meander Drive, Rosevale/South Redlands, Skyline, Bookcliffs Ranch) have lot sizes of 0.21 to 39.67 acres. Therefore, costs to extend sewer to these SIDs may be skewed high due to the larger lot sizes.

Staff modeled sewer extensions for four ranges of lot sizes to establish cost ranges for SIDs by lot size. The average cost per lot ranges from $32,000 for lots less than 0.5 acres to more than $70,000 for lots greater than five acres.




Extrapolating these averages, total program costs to eliminate septic systems are $4.6 million for lots less than 0.5 acres and $8.4 million for lots between 0.5 to one acre or a total program cost of $13 million to extend sewer to all lots less than one acre. As shown in the table below, costs to extend sewer to lots greater than one acre would add $47.4 million to the program.

| Lot Size | Number of Lots in SID | Cost Sewer Extension Per Lot | Cost of Sewer Extension |
|---|---|---|---|
| 0.5 acres or less | 142 | $32,047 | $4,550,674 |
| 0.5 – 1 acre | 220 | $38,095 | $8,380,952 |
| 1 acre – 5 acres | 642 | $55,131 | $35,394,200 |
| More than 5 acres | 170 | $71,073 | $12,082,454 |

Based on the above analysis, staff developed the following options for the septic system elimination program.

**Option 1 – Focus SSEP on Septic Systems in Unsuitable Areas**
Mesa County permits on-site wastewater treatment systems on properties that are more than 0.5 acres provided they meet the minimum design standards and setback requirements.
Mesa County's On-Site Wastewater Treatment System Regulations prohibit septic systems in unsuitable areas, which include:

- land use density of two dwelling units per acre
- properties within the 100-year floodplain

Within the Persigo 201 boundary, there are a total of approximately 176 septic systems that are located in unsuitable areas as defined by current Mesa County regulations:

- 142 septic systems on properties of 0.5 acres or less,
- 34 septic systems on properties within the 100-year floodplain,

Staff recommends prioritizing the septic elimination program on properties that have septic systems within these unsuitable areas.

**Option 2 – Increase annual Funding for Septic Elimination Program**
The 2024 Adopted Budget includes $800,000 for 2024 and $1,000,000 per year in subsequent years in the 10-year capital plan. Staff recommends increasing funding levels in the 2025 budget to $2 million annually, adjusted annually for inflation. At this funding level, staff estimates that approximately 60 septic systems can be eliminated annually, assuming an average cost of $33,000 per lot for lots one acre or less. This would eliminate all septic systems on lots less than one acre within seven years.

**Option 3 – Fund Sewer Extensions with Plant Investment Fee**
Currently sewer extensions to areas with septic systems are funded through formation of sewer improvement district and assessment of 70 percent of the inflated estimated construction cost per lot for these improvements to the property owner and funding the remaining 30 percent by the Sewer Fund. Rather than forming sewer improvement districts, this option would fund the cost of sewer extensions to areas with septic systems with the plant investment fee (PIF).

Currently, the PIF is being held at the 2022 rate of $5,544 per equivalent unit (EQU) because the Phase 1 expansion of the wastewater treatment plant to 15.0 million gallons per day expanded the EQU basis, reducing the PIF cost per EQU. By including the $2 million annual capital expense associated with the septic system elimination program in the PIF-eligible expenses, the PIF cost would increase by $211 from $5,121 to $5,387. This is still below the $5,544 rate that is currently being assessed. Therefore, the Sewer Fund could fund the septic system elimination program with the PIF without increasing the PIF in 2025.

Staff recommends that sewer extensions to areas with septic systems be considered, as this would eliminate the administrative time and cost associated with forming sewer improvement districts.

**Option 4 – Expand SID Assessment to Include Plant Investment Fee**
The Board should consider this option if Option 3 is <u>not</u> selected. The total cost of eliminating septic systems and connecting to sewer includes the SID assessment, the cost of the private sewer lateral to connect the house to the main sewer line, the plant investment fee, and abandoning the septic system. This option would include the plant investment fee cost in the SID assessment so that it could be financed over the amortization period. Staff recommends including the plant investment fee in the SID

assessment if Option 3 is not adopted.

**Option 5 – Increase Sewer Fund Cost Share**
The Board should consider this option if Option 3 is not selected. Under the current program, the Sewer Fund contributes 30 percent of the cost of sewer extensions to SIDs. Staff recommends increasing the Sewer Fund cost share to:

**Options 5a**: 30 percent or the remainder of the cost after the property owner pays an assessment of $28,000.

**Option 5b:** 50 percent.

**Option 6 – Financing Amortization Period and Rate**
If Option 3 is not selected, the board should consider this option. The current program allows property owners within an SID to finance the SID assessment over a 10-year amortization period at a rate of 8 percent. To incentivize property owners to connect to sewer, Staff recommends increasing the amortization period to 15 years and using an interest rate equivalent to the prime loan rate for a 15-year fixed mortgage rate.

**Options 7 – Financing Plant Investment Fee within Completed SIDs**
There are 218 properties that are within SIDs that were completed between 2000 and 2014. One of the barriers to connection is the cost of plant investment fees. With new construction, builders pay the plant investment fees, and the cost is passed on to the property owner in the cost of the house, which then can be mortgaged. Conversely, property owners within SIDs must pay the plant investment fee ($5,544 in 2024) upon connection. Staff recommends offering a financing plan for property owners within completed SIDs with an amortization period of five years and an interest rate equivalent to the prime loan rate for a five-year fixed mortgage rate. This option would be offered for up to two years after the effective date of the new program.

## FISCAL IMPACT:

The 2024 Adopted Budget includes $800,000 for 2024 and $1,000,000 per year in the 10-year capital plan for the Joint Sewer Fund. Option 2 would increase annual funding levels beginning in 2025 to $2 million per year.

## SUGGESTED MOTION:

I move to (adopt/deny) revisions to City of Grand Junction and Mesa County joint resolutions (Grand Junction Resolution No. 38-00 and Mesa County Resolution No. MCM 2000-73) that established the Septic System Elimination Program as follows:

**Option 1** – Prioritize the septic elimination program on properties that have septic systems within unsuitable areas as defined by Mesa County's On-Site Wastewater Treatment System Regulations.
**Option 2** – Increase annual Funding for Septic Elimination Program to $2 million per year adjusted annually for inflation.

**Option 3** – Fund the cost of sewer extensions to areas with septic systems with the plant investment fee rather than through sewer improvement districts.
[Only Vote on this option if Option 3 is denied.] **Option 4** – Including the plant investment fee in the SID assessment.
[Only Vote on this option if Option 3 is denied.] **Option 5** – Increasing the Sewer Fund cost share to:
**Option 5a:** 30 percent or the remainder of the cost after the property owner pays an assessment of $28,000.
**Option 5b:** 50 percent.
[Only Vote on this option if Option 3 is denied.] **Option 6** – Increasing the amortization period to 15 years and an interest rate equivalent to the prime loan rate for a 15-year fixed mortgage rate.
**Options 7** – A financing plan for property owners within completed SIDs with an amortization period of five years and an interest rate equivalent to the prime loan rate for a five-year fixed mortgage rate.

## Attachments

None