

Hidden Springs Sewer Company Wastewater Treatment Facility

Public Meeting / April 6, 2022



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Welcome

Everyone in this room has a role to play in keeping the Hidden Springs Sewer Company, the Wastewater Treatment Facility, and the discharge of irrigation water continuously and efficiently operating while keeping sewer rates as low as possible.

Agenda

- Introductions
- Overview
- History of the Facility
- Wastewater Facility Plan & Expansion
- Sludge Removal
- Reserve Study
- Financial Update & Funding Options
- Managing a Healthy Sewer System
- Questions

Hidden Springs Sewer Company, LLC

- HSTA Staff provides administrative, project management and operational support.
- The Hidden Springs Town Association, Town Council serves as the Board for the Sewer Company.

John Ahrens, President Bradley Shafer, Vice President Jeffrey Mousseau, Treasurer Garry Stanislaw, Recording Secretary Ryan Luke

OMCS



- Operations Management Consulting Services (OMCS) is a private water renewal company that provides full scale operation and consulting services
- Service partner for 25 years.
- Jay Irby, Professional Operator-Owner/General Manager and Ty Waterman, Owner/Operations Coordinator



Elam & Burke

- Hidden Springs Sewer Company has retained Abigail R. Germaine of Elam & Burke to provide legal counsel and guidance related to the Sewer Company's governing documents and agreements.
- Abbey's practice focuses on public utilities, municipal law, water, and energy. She has extensive experience advising on issues of public government and agencies, including private-public partnerships, government contracting, public works, and administrative law.



Mountain Waterworks



- Water engineering firm committed to reliable water service, sustainable infrastructure rehabilitation, and long-term utility planning.
- The firm provides planning, commissioning, design, construction, and operational optimization services.
- Service partner for 4 years.
- Mike Woodworth, Engineering Manager



North Star Reserves (NSR)



- NSR operates in seven states with 20+ years of experience in commercial and residential construction and budget management for long-term O&M planning.
- HSTA hired NSR in 2021 to conduct a Reserve Study for the Association as well as the Sewer Company.
- Aaron Lombardo, Reserve Analyst



Customers







Hidden Springs Sewer Company, LLC

- The Hidden Springs Sewer Company, LLC (HSSC) is a stand-alone business entity owned by the Hidden Springs Town Association.
- The Sewer Company is managed as a non-profit for the benefit of the community it services.



Hidden Springs Sewer Company, LLC

- Located on a 17.42-acre lot within Hidden Springs
- Regulated by the Idaho Department of Environmental Quality (IDEQ)
- Produces a class B reuse water, as designated by the IDEQ

Reuse Permit No. M-174-05

The Sewer Company was issued Reuse Permit No. M-174-05 January 30, 2020 and expires January 30, 2030.

DEQ issued a 10-year permit instead of 5-year based on HSSC and OMC's 20-year history of operational standards, site and facility compliance.

Compliance Activity under new permit:

- ✓ Updated Plan of Operation (PO)
- ✓ Updated Quality Assurance Project Plan (QAPP)
- ✓ Seepage Testing



Wastewater (Influent)

Storage & Treatment

Reuse Water (effluent)

- Anything disposed of through a drain is gravity fed to the Lift Station
- From the Lift Station, it is pumped to the WWTF
- Current Average Daily Flow is 155 gallons per day per connection*

*Up from 145 gallons in 2015

- Maximum storage capacity of the Cells at the WWTF is 45.1 million gallons
- Anticipated Build Out Average Daily +10% is 42.8 million gallons
- Wastewater is filtered, treated and used for irrigation (April-Oct)

 Reuse water is applied on irrigated areas in Hidden Springs, landscaped common areas, open space, agricultural fields and the orchard

Frequently Used Acronyms

BOD - Biochemical Oxygen Demand

CRTA - Cartwright Ranch Town Association

DHS - Developer of Hidden Springs

GCP - Grossman Company Properties

GPD - Gallons Per Day

HSSC - Hidden Springs Sewer Company

HSTA - Hidden Springs Town Association

IDEQ - Idaho Department of Environmental Quality

TDS - Total Dissolved Solids

TSS - Total Suspended Solids

WWTF - Wastewater Treatment Facility



History 1997 2007 HSSC established by the **WWTF Sharing** Developer of Hidden 2009 Agreement signed Springs (DHS) to serve the HSTA purchases HSSC between DHS and planned community of from DHS and begins **GCP** Hidden Springs applying irrigation water 2007-2008 2005 HSSC expands lagoon storage DHS agrees to capacity for Hidden Springs provide wastewater build out of 900 homes and 620 treatment services to future homes in Cartwright Grossman Company Ranch. HSSC invests \$1.3M Properties (GCP)

and CRTA provides initial contribution of \$1.6M

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History 2021 Legal audit of the 2019 2016 governing documents on Storage Capacity CR begins behalf of current and Study conducted to construction. HSSC future customers and a begins reimbursing confirm storage reserve study GCP connection capacity based on commissioned to analyze average GPD and fees in the amount current rates, reserves Sludge Removal of \$2250 per and future project funding Cells 1, 1a & 2 connection 2018 Collaborating with GCP Updated Facility Plan (Permit Bathometric Survey to ensure governing Compliance) identifies need conducted to determine documentation outlines the for upgrades to WWTF to how much sludge is in needs and protections of process additional influent each lagoon and need to apply reuse all customers water in more areas for storage capacity www.hiddensprings.com

The Facts

- The DHS elected to build a dedicated sewage treatment facility versus connecting to Boise Sewer.
- The DHS and GCP plan for storage capacity expansion.
- HSTA purchased the sewer company from the DHS with all Assumptions and Assigns.
- With construction commencing in Cartwright Ranch in 2016 and the age
 of the WWTF, the Town Council identified necessary studies, analysis and
 best practices to ensure continued successful operation to meet the
 demands of the facility with a growing customer base.

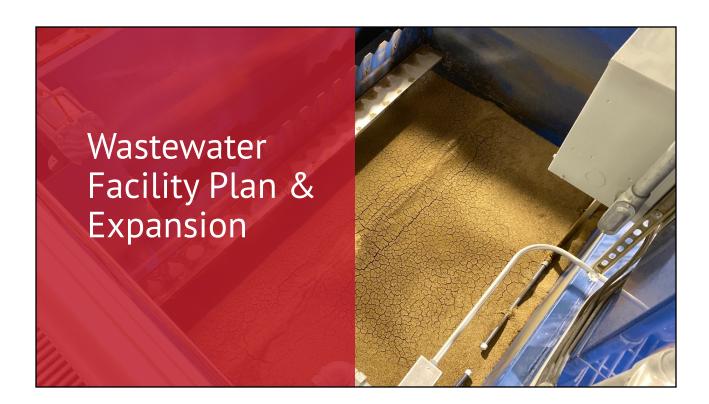
Assessment History (2022-2017)

	2022	2021	2020	2019	2018	2017	2016
Monthly Assessment	\$56.66	\$51.33	\$47	\$43.91	\$41	\$40	\$38.50
Quarterly Assessment	\$170	\$154	\$141	\$131.75	\$123	\$120	\$115.50
Annual Assessment	\$680	\$616	\$564	\$527	\$492	\$480	\$462
% Annual Increase	10%	9%	7%	7%	2%	4%	0%
\$ Annual Increase	\$64	\$52	\$37	\$35	\$12	\$18	\$0

Additional \$7 per quarter for CRTA = Billing/Admin Fee / HS pays Fee with HOA Assessment

The Facts

- The Town Council in collaboration with the panel before you has spent the last three years exploring all possible options, doing their due diligence, with the cumulation of that information and necessary next steps being shared with customers tonight.
- The WWTF has some immediate needs which we will now expand on:
 - ✓ Process capacity expansion
 - ✓ Sludge removal
 - Additional reserve funding



Mountain Waterworks Facility Expansion Presentation

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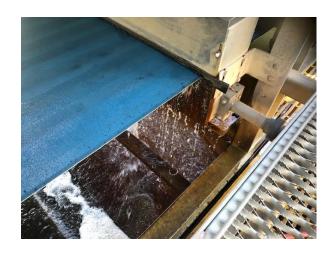


Sludge Removal

- Lagoon dredging is the process of mechanically removing sludge that has accumulated on the bottom of a wastewater lagoon.
- Dredging is a necessary requirement to meet IDEQ requirements for TSS and BOD.
- Sludge is pumped from the lagoon to a holding tank and material is dewatered through a belt filter press.
- The "dry sludge" is hauled to the landfill and the water is pumped back into the lagoon.

2019 Sludge Removal Lagoon Cells 1, 1a & 2

- 218.98 dry tons removed
- 1 ton = 2000 pounds
- 437,960 pounds of sludge
- 2000 pounds of hair, feminine products and prophylactics





2019 Sludge Removal Lagoon Cells 1, 1a & 2



2023 Sludge Removal Lagoon Cell 3

- Sludge removal for Cell 3 needed sooner than previously forecasted and planned for fall 2023.
- Sludge removal for Cells 1, 1a and 2 planned again for 2029 with funding included in the Reserve Study.





Purpose of a Reserve Fund

- The intention of the Reserve Study was to forecast the Sewer Company's ability to repair or replace major components as they wear out in future years.
- Study included an on-site inspection, life and valuation assessment with estimates which culminate to the association fund status and funding plan. The inspection included items that have a remaining useful life of less than 30 years and value greater than approximately \$5,000.
- The "Cash Flow Method" was used to develop the reserve funding plan where the contributions to the reserve fund are designed to offset the variable annual expenditures from the reserved fund.
- Reserves can be funded by annual excess carryover or planned budget.

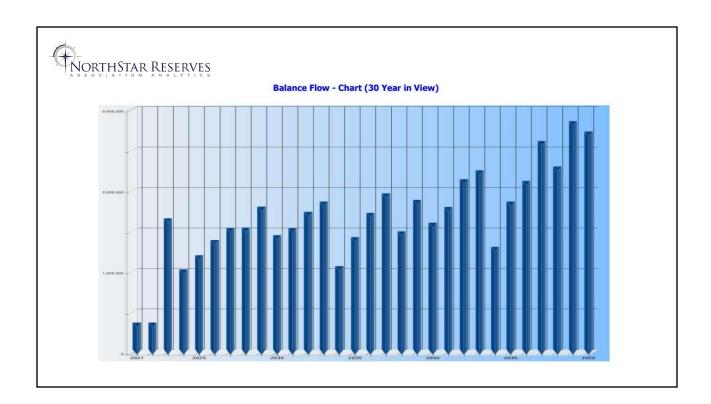
Reserve Study Assessment

- A 3% inflation rate is assumed.
- Based on the 30 year cash flow projection (pre 2022 contribution level) and planning for 70% threshold funding, HSSC reserves are inadequately funded and increased contributions and/or assessments are needed to meet future expenditures.
- Based on the Reserve Study Assessment, the Hidden Springs Town Council:
 - ✓ Adjusted the sewer assessment in 2022 to address rising annual O&M costs and to adequately fund reserves in accordance with the Reserve Study findings.
 - An Annual Reserve Study Review will be conducted prior to budget preparation to make adjustments and to confirm HSSC is tracking according to the funding model.



Percent Funded - Cash Flow - Annual

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
100% Funded	2,445,871	2,934,340	1,930,805	1,377,607	1,645,836	1,894,353	2,107,737	2,186,712	2,483,700	2,182,724
Percent Funded	13.36%	11.20%	83.66%	71.40%	70.49%	71.19%	71.04%	68.74%	70.90%	64.47%
Begin Balance	326,760	328,637	1,615,300	983,587	1,160,077	1,348,682	1,497,286	1,503,126	1,761,032	1,407,293
Contribution	150,000	225,000	225,000	225,000	258,750	258,750	258,750	297,562	297,562	297,562
Average Per Unit	174	3,172	261	261	301	301	301	346	346	346
Percent Change	0.00%	50.00%	0.00%	0.00%	15.00%	0.00%	0.00%	15.00%	0.00%	0.00%
Special Assessment	0	2,500,000	0	0	0	0	0	0	0	0
Interest	0	0	0	0	0	0	0	0	0	0
Less Tax on Interest	0	0	0	0	0	0	0	0	0	0
Net Interest	0	0	0	0	0	0	0	0	0	0
Less Expenditures	148,123	1,438,336	856,713	48,509	70,144	110,146	252,909	39,656	651,301	208,788
Less Deferred Expenditur	0	0	0	0	0	0	0	0	0	0
Ending Balance	328,637	1,615,300	983,587	1,160,077	1,348,682	1,497,286	1,503,126	1,761,032	1,407,293	1,496,067
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Sewer Company Income Sources











2022 HSSC Income - \$873.9K

- Budgeted income is 9% > 2021 Actual
- 10% fee increase for 2022
- Current quarterly sewer fees:
 - o HS \$170
 - o CR \$177
 - Additional \$7 for CR = Billing Admin Fee/HS pays Fee with HOA
- Income from 65% HS, 35% CR sewer fees
- Delinquent sewer fee balances HSTA \$5,270 and CRTA \$2,699

Hidden Springs Sewer Company Expenses Paid for by Sewer Fees



Contract Operations & Professional Services



Equipment



Inspection & Cleaning



Operations



Administration



Analytical



Maintenance & Repairs



Office

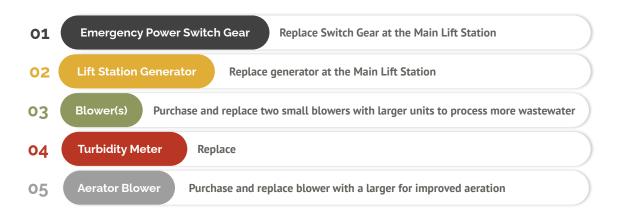


Reserves

2022 HSSC Budgeted Expense - \$870.9K

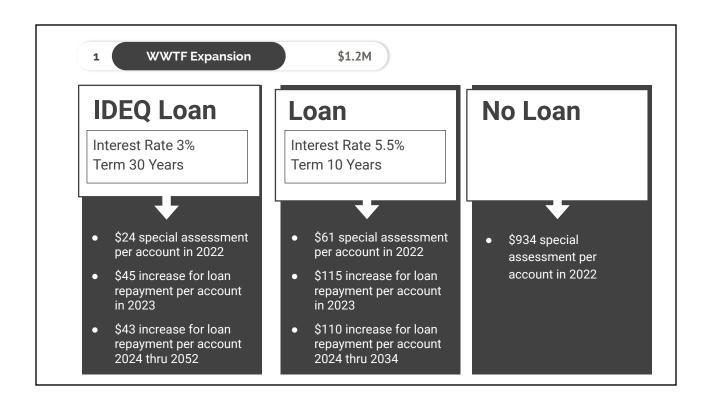
- Budgeted expense is 8.1% > 2021 Budget
- Budgeted expense is 36% > 2021 actual (2021 was a low expense year)
- #1 expense = contract operations \$298K or 34%
- Biggest unknown repairs/maintenance/equipment (\$84K)

2022 Sewer Company - Capital Projects



Funding incorporated in the 2022 budget reserves and O&M

3 Components to Special Assessments & Increases 1 WWTF Expansion \$1.2M 2 Sludge Removal Pond 3 \$390K 3 Reserve Contribution \$535K



Sludge Removal

Maintenance for Cell 3

S152 special assessment per account in 2022

S144 special assessment per account in 2023

Sludge Removal

Reserve Contribution

\$535K

Reserve Study

S208 special assessment per account in 2022

S144 special assessment per account in 2023

Special Assessments & Increases

	Option 1 IDEQ Loan	Option 2 Loan	Option 3 No Loan
2022 (July & Oct Special Assessments/includes loan repayment)	\$192 / \$192	\$211 / \$210	\$647 / \$647
2023 (April & July Special Assessments)	\$171 / \$170	\$171 / \$170	\$171 / \$170
2023 (Annual Increase loan repayment)	\$ 45	\$115	0
2024-Loan Term (Annual Increase loan repayment)	\$ 43	\$110	0
Estimated Total Cost to Customer	\$2017	\$1867	\$1635

These assessments and increases are in addition to any required increases for annual operation and maintenance as determined necessary by the Town Council and recommended by reserve analyst.



Customers Play a Pivotal Role

- FOG (Fats, Oils & Grease) are three substances you should try to ALWAYS keep out of your drains.
- Review the list of items that are not flushable as they do not break down clogging pipes and pumps.
- Avoid salt or potassium chloride regenerative water softeners which increase the salinity of wastewater because they discharge brine, a salty waste derivative, into the sewer. There are salt-free or tank exchange system options available.



Any Questions?

In an effort to ensure we have the time to address everyone, please keep comments and questions to 3 minutes.

