



City of Stevenson

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To: Stevenson City Council
From: Karl Russell, Public Works Director and Leana Kinley, City Administrator
RE: Sewer Plant Update
Meeting Date: February 18th, 2021

Executive Summary:

This is an overview of items staff has been working on over the past month in line with the direction council gave to staff.

Overview of Items:

Plant Operations: Day to day operations continue to go well. The plant continues to see marked improvement with the side streaming efforts of Backwoods Brewing, Walking Man and LDB, Inc. Due to a rain event where we experienced over six inches of rain over two days, we received an influent total of one million gallons in a twenty-four-hour period. To put that into perspective, our monthly average daily influent flow for last January was 486,000 gallons. We were also sampling for BOD-TSS at that time. Once the higher-than-average flow was calculated into the BOD/TSS equation our daily BOD/TSS was 3496 lbs/day. The amount BOD in the sample was not higher than usual but our influent flow due to infiltration and inflow (I&I) was. This resulted in an influent violation not an effluent violation. Our waste water treatment plant is rated at 612 lbs/day average. Our daily average for January was 834 lbs/day average.

The average monthly Influent BOD load has been:

2018

- January 675 lbs/day – No Effluent Violations
- February 1,793 lbs/day – No Effluent Violations
- March 1,099 lbs/day – BOD and TSS Effluent Violations
- April 991 lbs/day – BOD and TSS Effluent Violations
- May 1,265 lbs/day – BOD and TSS Effluent Violations
- June 1,124 lbs/day – No Effluent Violations
- July 920 lbs/day – Low pH Violation (one day)
- August 1,113 lbs/day – No Effluent Violations
- September 1,439 lbs/day – Low pH Violation (one day)
- October 1,072 lbs/day – No Effluent Violations
- November 1,032 lbs/day – No Effluent Violations
- December 807 lbs/day – No Effluent Violations

2019

- January 776 lbs/day – Solids washout from clarifiers on 29th and 30th, TSS and BOD Effluent Violations
- February 749 lbs/day – Solids washout from clarifiers on the 18th.
- March 803 lbs/day – Solids washout from clarifiers on March 13th, TSS Effluent Violation

- April 589 lbs/day – Solids washout from clarifiers on April 1st
- May 1,067 lbs/day – No Effluent Violations
- June 897 lbs/day – No Effluent Violations
- July 785 lbs/day – No Effluent Violations
- August 833 lbs/day – No Effluent Violations
- September 720 lbs/day – No Effluent Violations
- October 810 lbs/day – No Effluent Violations
- November 620 lbs/day – No Effluent Violations
- December 588 lbs/day- No Effluent Violations

2020

- January 417 lbs/day- No Effluent Violations
- February 270 lbs/day- No Influent/Effluent Violations, Inf Flow Total 7.532 Mil/Gal.
- March 324 Lbs/day No Influent/Effluent Violations, Inf Flow Total 4.223 Mil/Gal.
- April 389 lbs/day No Influent/Effluent Violations, Inf Flow Total 3.852 Mil/Gal.
- May 295 lbs/day No influent/Effluent Violations, Inf Flow Total 3.315 Mil/Gal.
- June 502 lbs/day No Influent/Effluent Violations, Inf Flow Total 4.788 Mil/Gal.
- July 427 lbs/day No Influent/Effluent Violations, Inf Flow Total 4.048 Mil/Gal.
- August 458 lbs/day No Influent/Effluent Violations, Inf Flow Total 3.941 Mil/Gal.
- September 427 lbs/day No Influent/Effluent Violations, Inf Flow Total 3.786 Mil/Gal.
- October 353 lbs/day No Influent/Effluent Violations, Inf Flow Total 4.786 Mil/Gal.
- November 417 lbs/day No Influent/Effluent Violations, Inf Flow Total 8.018 Mil/Gal.
- December 363 lbs/day No Influent/Effluent Violations, Inf Flow Total 9.252 Mil/Gal.

2021

- January 834 lbs/day Influent Violation, no effluent violations, Inf Flow Total 8.988 Mil/Gal.

The current permit limit for Influent is 612 lbs/day and the current upgrades in the adopted General Sewer Plan call for a design max monthly BOD loading of 1,611 lbs/day.

WWTP Design:

Final design of the WWTP was be delivered to D.O.E. in June of this year and has been approved. 90% design for the Rock Creek Lift Station is complete and under review. Rock Creek Lift Station is slated to go out to bid in March 2021. Both the “Main D Extension” and “Cascade Interceptor” are at 90% design and under review.

Funding:

The City received a grant from the US Economic Development Administration (EDA) in the amount of \$4,054,400 for the Wastewater Collection System Capacity Upgrade Project (lift stations and a section of force sewer main). The total project amount is \$5,068,000 with the remaining 20% covered by a USDA loan in the amount of \$873,000 loan and \$70,600 grant. Staff is working on obtaining interim financing for the USDA loan to move forward, agreement on this agenda.

Staff submitted an application for \$9.9M in construction funding through the Department of Ecology for the wastewater treatment plant and extension of the sewer line. The initial offer is for a \$931,946 grant, \$9,004,054 loan at 1.5% interest for 30 years (approx. \$375k annual payment). Staff is applying for a USDA RD loan for the same project to see if we can get a better payment (lower interest, longer term and possibly more grant). A Public Hearing for the application is on this agenda.

Compliance:

The draft amendment to the Administrative Order is still in process. When it is finalized it will require additional testing.

Annual Infiltration/Inflow Evaluation and Wasteload Assessment Reports were completed.

Action Needed:

None