STAFF REPORT

Date: September 11, 2019

To: Mayor and City Council

Thru: Sabra Newby, City Manager

Subject: D.7. Staff Report (For Possible Action): Presentation, discussion and

potential direction to staff on the use of the flow shave for sewer capacity as it relates to the Sewer Capacity Allocation Program for the Reno Stead

Water Reclamation Facility.

From: John Flansberg, Director of Public Works

Summary: This staff report outlines an allocation program for wastewater treatment capacity at the Reno Stead Water Reclamation Facility (RSWRF) and for the "flow shave" pipeline to the Truckee Meadows Water Reclamation Facility (TMWRF). Recommendations are consistent with direction provided at the August 5, 2019 special City Council meeting on water management and flooding issues in the North Valleys.

Previous Council Action:

- August 14, 2019 Council approved a special use permit to expand the Reno Stead Water Reclamation Facility from 2.0 to 4.0 million gallons per day (MGD); along with a design contract for the plant expansion, a feasibility study for the construction of one or more effluent storage reservoirs, and initiation of the process to consider general obligation sewer bonds for the plant expansion.
- August 5, 2019 Council comprehensively evaluated water and flood management options for the North Valleys and provided direction to staff.
- **January 9, 2019** Council adopted Resolution No. 8624 A Resolution of City Council determining the need to establish a sewer allocation list and the prepayment of sewer connection fees for the Reno Stead Water Reclamation Facility pursuant to RMC 12.16.310.

Background: On January 9, 2019, Council adopted a Resolution determining the need to establish a sewer allocation list and the prepayment of sewer connection fees for the RSWRF pursuant to RMC 12.16.310. Pursuant to the resolution, the sewer allocation program was implemented.

On August 5, 2019, Council decided to move forward with a 2.0 MGD expansion to the RSWRF, design the expansion to not require additional discharge of effluent into Swan Lake, expedite a suite of projects to lower water levels at Swan Lake and initiate a long-range water and flood management planning process.

One action was direction to use the 0.5 MGD flow shave pipeline primarily to lower water levels at Swan Lake. This could result in delayed "Sewer Will Serve" approvals for some development projects prior to completion of the treatment facility expansion. Council directed staff to return with recommendations for an allocation program for remaining capacity at the existing 2.0 MGD treatment facility and for the 0.5 MGD flow shave pipeline.

Discussion: The current RSWRF sewer allocation list is included as Exhibit A. Approximately 340,000 gallons per day (GPD) of treatment capacity remains (Section 1). The flow shave, if not being used for flood relief, would provide an additional 500,000 GPD of treatment capacity, which would be sufficient to serve projected growth prior to the estimated completion date for the RSWRF expansion project in calendar year 2022.

Reno reserves sewer capacity through "will serve" commitments for new development upon approval of final maps or building permits and payment of sewer connection fees (Sections 2 and 3). The connection fees compensate the City for facility construction costs. Of the 340,000 GPD of remaining plant capacity, 298,444 GPD are reserved leaving 41,556 GPD unreserved.

Sewer will serve applications are received with final map and building permit applications described as "Projects in Plan Review" (Section 4). If the 73,810 GPD represented by these projects paid for sewer connections and were issued will serve letters, 32,254 GPD (6.5 percent) of the flow shave project capacity would be needed. If will serve letters are issued, the Director of Public Works recommends that projects listed in Exhibit A, Section 4 be provided treatment capacity at RSWRF or through the flow shave project, if available. Development of all section 3 and 4 projects will not be completed prior to the 2019/2020 wet season, so 100 percent of the flow shave project would be available for flood relief during the 2019/2020 winter.

Section 5 of the sewer allocation list includes projects totaling 322,335 GPD that have approved tentative maps, special use permits and site plan reviews. Some of the Section 5 projects are later phases of projects that are currently under construction. With completion of all projects that are known, 354,589 GPD (70.9 percent) of the flow shave project would be required. The sewer allocation system could delay some Section 5 projects and future applications.

Finally, there is a delay between obtaining sewer will serve commitments and when those projects begin flowing sewer to RSWRF. This delay is often 12 to 18 months or longer. For

instance, the projects that obtained sewer will serve letters prior to 2019 (Section 2) are still being constructed. The current sewer flow being realized at RSWRF is approximately 1.8 MGD. It is unlikely that any of the flow shave capacity will be used for sewer capacity through the winter of 2020/2021. Therefore the entire flow shave capacity would be utilized for flood relief through the next two winters.

<u>Proposed Allocation System</u>: The allocation system provides immediate and ongoing flood relief at Swan Lake, while minimizing sewer service delays for new development projects. The Director of Public Works recommends the following provisions for the allocation system:

- 1. Allocations should be provided for all will serve applications submitted at this time under Section 4 (Projects in Plan Review). This would require 6.5 percent of the flow shave capacity. These will serve applications would continue to be perfected as building permits and final maps are approved.
- 2. There are a number of projects included in Section 5 that are in active construction through grading or site improvement building permits. Two of the projects are for multifamily units that are actively constructing buildings and additional buildings can go straight to building permit. These two projects account for approximately 90,000 GPD and based on the existing allocation program would receive sewer capacity on a first come first serve basis. Including these two projects would require increasing the amount of the flow shave project to be used for sewer capacity to 21.6 percent. Based on timing on when sewer will serve commitments are granted and when sewer actually flows to the treatment plant, the Director of Public Works recommends allocating 150,000 gallons of the flow shave project at this time. Additional releases of flow shave capacity for development should be considered each spring based on conditions at that time.
- 3. An annual monitoring and capacity release process is recommended. In April 2020 and April 2021, Council would review lake levels, project applications, and available treatment capacity prior to making a decision on the potential release of additional flow shave capacity for development. Table A depicts alternative phased releases of sewer treatment capacity. The middle release schedule may be appropriate if winters are about average and lake levels are declining. If unusually wet winters continue, little or no capacity could be released for development. If lake levels decline substantially, more capacity could be released. The flow shave will be entirely available for flood relief following completion of the expansion project.

Table A: Flow Shave Pipeline – Potential Capacity Allocations for Development												
Release	High Release		Medium Release		Low Release		No Release					
Date	GPD	%	GPD	%	GPD	%	GPD	%				

Sept.	200,000	40%	150,000	30%	100,000	20%	32,254	6.5%	
2019									
April	300,000	60%	250,000	50%	150,000	30%	32,254	6.5%	
2020									
April	500,000	100%	350,000	70%	200,000	40%	32,254	6.5%	
2021									
3-Year	333,333	66.7%	250,000	50%	150,000	30%	32,254	6.5%	
Average									
Spring 2022 Estimated Completion Date									

- 4. Per the existing Reno Municipal Code 12.16.330; <u>Administration of procedures by public works</u>, the duties for administering the remaining capacity by the director is provided. The director shall not withhold issuance of sewer connection permits indiscriminately *provided sufficient capacity exists*. For this purpose, the director is seeking direction on the amount of sewer capacity that can be allocated from the flow shave project to meet the objective of being used primarily for flood relief. Any amount of sewer capacity from the flow shave that is made available to overall sewer capacity will be administered through this section of the Reno Municipal Code (RMC). Primarily, sewer capacity is issued on a first come first serve basis with a few exemptions as outlined in RMC 12.16.330(e):
 - 1) A single family residence for the owner's use and occupancy or individuals remodeling their own single-family residence for their own use;
 - 2) Commercial application with a requirement of 500 gallons per day or less;
 - 3) Public health, safety and welfare projects;
 - 4) Affordable housing as defined by ordinance;
 - 5) Elderly or handicapped housing;
 - 6) All projects requiring consideration because of a regulatory agency's order or rule for health, welfare or safety purposes with a sewer treatment demand of six fixture units or less will be issued permits upon a sufficient showing of need;
 - 7) When it is deemed by the health department that an existing septic tank is no longer usable and is a hazard to health;
 - 8) Residential applicants with a requirement of 1,000 gallons per day, or less, per year per single family builder or developer.
- 5. The director may make minor corrections to the will serve allocation list based on actual applications submitted prior to August 5, 2019. If corrections result in increased flow shave usage by more than one percent (5,000 GPD), review by Council will be required.

Financial Implications: Potentially reduced tax and fee revenue resulting from project delays.

Legal Implications: The sewer allocation program is controlled by RMC 12.16.310 through 12.16.330. Direction provided is to be pursuant to the controlling RMC.

Recommendation: Staff recommends Council provide direction to follow the medium release schedule for use of the flow shave for overall sewer capacity at Reno Stead Water Reclamation Facility and to review conditions in April 2020 and April 2021 to determine if additional capacity of the flow shave may be used at those times.

Proposed Motion: I move to approve staff recommendation.

Attachments:

• RSWRF_Sewer Will Serve_Allocation_Current_2019-09-03 (PDF)