

CITY OF COOS BAY CITY COUNCIL
Agenda Staff Report

MEETING DATE	AGENDA ITEM NUMBER
October 21, 2014	

TO: Mayor Shoji and City Councilors

FROM: Jim Hossley, Public Works Director *JH*

THROUGH: Rodger Craddock, City Manager *RC*

ISSUE: Consideration of the Ocean Boulevard Wastewater Collection Basin

BACKGROUND:

In 2006, engineering consultants for the City completed an evaluation of the City's entire wastewater collection system (pipes and pump stations). As a result, a master plan for the wastewater system was completed. This master plan was comprehensive and prepared as a planning document. As such it is not detailed enough to identify all specific issues within the City's sewer system.

In 2013, developers for the Ocean Grove project proposed building more than 700 residential dwellings on undeveloped property at the south end of Lindy Lane south of Ocean Boulevard. The intensity of the proposed development would add significant flow to the downstream wastewater collection system. From the 2006 evaluation and plan, staff was aware of potential capacity issues in the downstream system between the proposed Ocean Grove development and Wastewater Treatment Plant #1 (WWTP#1), (approximately 75% of the downstream system was identified as deficient in the master plan). The engineering consultant that assisted the City in preparing the 20-year takedown list of wastewater projects identified two improvement projects in the downstream collection system. These projects are scheduled for construction in 2023 and 2024. When the site plan and architectural review application for Ocean Grove was submitted, it was determined that a more thorough study of the downstream collection system should be performed. Therefore, the City contracted with The Dyer Partnership Engineers and Planners, Inc. to prepare a detailed "Regional Sewer Study" to do an in-depth evaluation of the wastewater collection system downstream of Ocean Grove. Dyer evaluated the existing mainline sanitary sewer capacity and identified required improvement projects for build-out of, not only the Ocean Grove property, but all properties (both developed and undeveloped) along the downstream system that services the Ocean Grove property terminating at Wastewater Treatment Plant #1. Only the mainline sewer collection system infrastructure was evaluated including the main trunk line gravity sewer piping, manholes, pump stations, and force mains that convey sewer flows from each basin in direct route to WWTP#1.

The 2006 master plan confirmed that over 75% of this system analyzed in Dyer's report was deficient. The Dyer Partnership report confirmed the master plan's finding and determined that the majority of the sewer system downstream of Ocean Grove is currently undersized for peak flows from existing development. The consultant identified over \$4.8 million in improvement projects recommended to ensure the system can handle existing development. The consultant identified an additional \$2.2 million in improvements necessary to handle the wastewater flow from the Ocean Grove project plus an additional \$1.5 million in improvement projects necessary to accommodate future full build out of all property discharging to the system downstream of Ocean Grove. Please

note that these costs are likely to rise with time and further evaluation of each individual project.

Several commercial properties in the vicinity of the Ocean Grove project, including the “old” K-Mart site, the Knife River property, and the sand pit property are all properties that have had recent consideration for possible re-development. These properties all would or do discharge wastewater flows to the same downstream collection system as Ocean Grove. Future development/redevelopment of these properties could require a significant upgrade of the downstream sewer system in order to support the increased wastewater flows associated with potential new development. These upgrades may have to occur prior to build out of these properties or else the system will be at risk of failure and/or sanitary sewer overflows. Failures such as this could potentially result in fines and mandates from DEQ. Because this is the case, DEQ can, in some circumstances, deny issuance of wastewater permits to developers until the upgrades are made. The necessity for any downstream improvements would depend upon the intensity and or volume of wastewater flows to be generated by the development/redevelopment. The developer’s engineer would need to assess the particular development’s expected wastewater flows in light of the assessment prepared by The Dyer Partnership.

The City’s current 20-year city-wide wastewater project takedown schedule includes only two (2) of the 17 projects identified for full build out of the properties discharging to the collection system downstream of Ocean Grove. The two projects are not scheduled for construction before 2023. Thus a significant amount of work required to accommodate future development/redevelopment has yet to be planned. Thus, Ocean Grove and other future development will have to take on the cost of making necessary downstream collection system improvements. In the case of Ocean Grove, the developer proposed to construct a pump station and horizontally drill and install a pressurized sewer line from their site to WWTP#1. The details have yet to be worked out and the developer’s cost estimate is approximately \$1.5 million. Ultimately the City would have to take over the operation and maintenance of both of these items.

The \$4.8 million of improvements necessary just to support existing development would typically be the responsibility of the City to make. The estimated \$3.7 million in improvements needed to support future development could be made by the City and partially recovered through System Development Charges (SDC’s) or an improvement district. Determining which projects need to be done first is difficult to forecast until we know what sort of development will actually occur. In an effort to minimize delay to potential development/redevelopment, the collection system improvement projects would need to start as soon as possible because the earliest we could see the first improvements up and running is likely three years. We need to consider whether to add any of or all of the remaining fifteen projects and their cost (estimated to be \$8.5 million) to the existing takedown schedule. If we do so, do we simply add them all to the list of \$80 million worth of projects, or do we delete \$8.5 million from the list? To delete any projects would require DEQ approval and could require substantial effort to provide justification. Adding these projects would undoubtedly require annual sewer rate increases in excess of the 6.5% increases the City has implemented over the past several years and is proposing over the next 5 years.

There are probably several choices the City could make. I will discuss three possibilities here. One is doing nothing thus putting the burden on developers to solve the downstream wastewater collection system repairs. However, through legal action by developers, this course of action could result in the City paying its share of the improvements. Another possible choice is the City add the repairs necessary to accommodate existing development to our takedown list of scheduled projects, commit to make these improvement over a short period of time (say five years), and add upgrades supporting future development to later years on the takedown schedule (these improvements might be made piecemeal by future developers or the City). A third possible choice is the City commit to

make all improvements in a relatively short period of time (say five years).

ADVANTAGES:

Discussing this issue now, will help the City formulate a course of action to repair the wastewater collection system downstream of the Ocean Grove development. This will help City staff and developers plan for potential impediments to their development projects.

DISADVANTAGES:

No matter the course of action taken, the cost could be significant to either the rate payers or developers or both.

BUDGET IMPLICATIONS:

Approximately \$8.5 million in total repairs and upgrades have been identified for the wastewater collection system downstream of the Ocean Grove project site. Of this \$4.8 million is to support existing development with the remainder necessary to support future development. The actual costs are likely to rise with time and as we develop more thorough design of each individual project.

RELATED CITY GOAL:

To maintain and improve the City's physical infrastructure and provide quality services for current and future citizens.

ACTION REQUESTED:

Staff requests that the City Council direct staff in how to proceed with this issue.