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Title: CONSIDER AN INFORMATIONAL UPDATE ON AN AWARD RECEIVED BY THE CITY OF CARSON PUBLIC WORKS DEPARTMENT (CITY COUNCIL)

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Report to Mayor and City Council

Tuesday, April 05, 2022

Discussion

SUBJECT:

CONSIDER AN INFORMATIONAL UPDATE ON AN AWARD RECEIVED BY THE CITY OF CARSON PUBLIC WORKS DEPARTMENT (CITY COUNCIL)

I. SUMMARY

The California Water Environment Association (CWEA) awarded the City of Carson First Place in Engineering Achievement for the Carriage Crest Stormwater Capture Project. This project was funded by Caltrans and LA County Public Works and was project-managed by the LA County Sanitation District.

CWEA is a California organization dedicated to protecting our important water resources. They connect water professionals, educate industry members on the most current technology and systems to accelerate innovation in the industry to achieve secure and robust water systems for our state and beyond. Water treatment systems, aging water infrastructure, water capture, water recycling, and water shortages are currently front-of-mind as challenges in the U.S. and internationally.

Carson’s Stormwater Capture Project at Carriage Crest has been receiving increased attention from sustainability experts and civic water engineers across the United States and throughout the State of California for its innovative and efficient design and function. This project, and Carson projects overall, is being looked to as a prototype for future water

design across the nation since it captures and treats stormwater, providing an opportunity for beneficial reuse.

II. RECOMMENDATION

Receive and File

III. ALTERNATIVES

None.

IV. BACKGROUND

Water that flows in storm drains, especially during dry weather, is a significant source of pollutants to rivers and coastal waters. The cities and unincorporated areas of Los Angeles County are responsible for managing water in storm drains (“stormwater”), whether raining or not, under a MS4 (Municipal Separate Storm Sewer System) permit issued by the Regional Water Quality Control Board. The MS4 permit requires the reduction of pollutants in stormwater to improve water quality. The permit also encourages cities and the County to develop collaborative solutions. Under Senate Bill 485, which became effective January 1, 2016, the Los Angeles County Sanitation Districts (Sanitation Districts) have authority to help manage and treat stormwater (including dry weather flows) in Los Angeles County. The Sanitation Districts’ first project under this new authority is the Carriage Crest Stormwater Capture Project.

The project will divert an average of 120 million gallons of stormwater per year from a storm drain that collects water from a 1,146-acre watershed that includes portions of the cities of Torrance, Los Angeles and Carson as well as unincorporated Los Angeles County. This regional solution will divert stormwater to a new underground storage facility located under Carriage Crest Park in the City of Carson. Captured stormwater will then be pumped to an existing Sanitation Districts sanitary (wastewater) sewer, which flows to the Sanitation Districts’ Joint Water Pollution Control Plant (JWPCP). The project diverts all dry-weather flow and the design storm generated by the City of Carson and the unincorporated Los Angeles County area in the watershed. The project’s control system and proximity to the JWPCP will make it possible to send large volumes of stormwater to the sanitary sewer during storms without appreciably increasing the risk of a sewer overflow. During larger storms, when sewer capacity isn’t available, the project diverts the stormwater to storage until sewer capacity is available again. By diverting these flows and treating them at the JWPCP, the project will improve water quality at Machado Lake and the Los Angeles Harbor because less bacteria, nutrients and other pollutants will reach those water bodies. The project will also increase flows at the JWPCP and thereby make more water available to recycle in the future.

The project contains a number of features to maximize water quality benefits, minimize overall cost and minimize risk of sewer system overflow.

Another project benefit is that the captured stormwater will provide more water to the JWPCP that can be recycled and used to augment our local water supply in the future.

A goal is that this multi-benefit project will serve as a roadmap to other jurisdictions seeking cost-effective ways to comply with MS4 permits and improve regional water quality.

V. FISCAL IMPACT

None

VI. EXHIBITS

None.

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