



UTILITIES

MEMO

To: Water Subcommittee: Mayor Deborah Robertson
Mayor Pro Tem Ed Scott

From: Thomas J. Crowley, P.E., Utilities Manager

Date: July 28, 2021

Re: Consider Partnership with Lennar Homes for Development of Stormwater Detention Basins for Groundwater Recharge in the Lytle Creek Region

The Lytle Creek Basin, a groundwater sub-basin of the San Bernardino Basin Area (SBBA), receives natural recharge primarily from Lytle Creek and supports groundwater extractions for the City of Rialto, West Valley Water District, Fontana Water Company and Riverside Highland Water company. Due to presence of sensitive species and other environmental constraints, there are no large-scale recharge basins available to facilitate recharge of State Water Project (SWP) water in the Lytle Creek Basin area at this time. Through collaborative efforts, Rialto, WVWD, and Valley District staff have been working with Lennar Homes for the possible incorporation of the proposed stormwater detention basins as part of the Lytle Development project to facilitate recharge of SWP water and stormwater capture.

Staff believes these stormwater basins provide a unique opportunity for facilitation of SWP water recharge and stormwater capture in the area and recommend continue working with Lennar Homes and others for an agreement to be considered.

Staff has been exploring opportunities for development of large-scale basins in the Lytle Creek Area to facilitate SWP recharge to enhance water supply reliability for our region. However, due to presence of multiple environmental constraints in the area, development of new large recharge basins has been a major challenge. Through collaborative efforts, staff became aware of the development of stormwater detention basins as part of the proposed Lytle Development in the Lytle Creek area by Lennar Homes.

As part of the first neighborhood development, Lennar Homes will be grading and constructing 3 basins, including Basin 0, 1, and 2 (see attached) along with a storm drain system connecting the three basins within the former El Rancho Verde Country Club. Although Basin 0 will be constructed by Lennar, it is owned by a separate entity, Lytle Development Company. Based on

the estimates of the basin bottom areas (9.0 acres) and infiltration rate (2 ft/day), these basins can potentially accommodate approximately 18 acre-ft/day. Given an anticipated recharge window of 9 months a year, the annual recharge capacity for SWP water would be around 4,800 AF.

In order to facilitate SWP water recharge, a couple of pipeline alternatives that connect the basins to the tailrace of the WVWD's Roemer Hydroelectric Plant where SWP water is accessible, are being considered. One of the preferred conceptual alignments is to follow the perimeter of the existing residential tract homes to the top end of Basin 0. Additionally, a branch off the pipeline will connect to a ditch that would facilitate recharge of SWP water in an existing basin in the wash area. This pipeline alignment will be further refined based on the future development of the area.

Based on the preliminary discussions between Lennar Homes and staff, Basins 1 and 2 would be transferred to the Homeowner's Association (HOA) when completed. It is the desire of Lennar Homes that the water agencies take over the properties for Basins 1 and 2 as well as ongoing operation and maintenance of these basins if the water agencies are interested in recharge of SWP water in these basins. The general concept of this arrangement would delineate the responsibility of the basin maintenance at the top embankment; the landscaping areas outside the top of the embankment would be maintained by HOA, possibly through a joint-use agreement.

Given the regional nature of these facilities, we would need to identify the agency that would take over the basin properties and facilities and operate and maintain. Since these basins are within the San Bernardino Basin Area, the O&M costs will be passed through to the San Bernardino Basin Groundwater Council (SBB GC). In addition to the benefit of SWP recharge, these basins would be maintained routinely and improved, as necessary, to enhance stormwater capture and recharge.

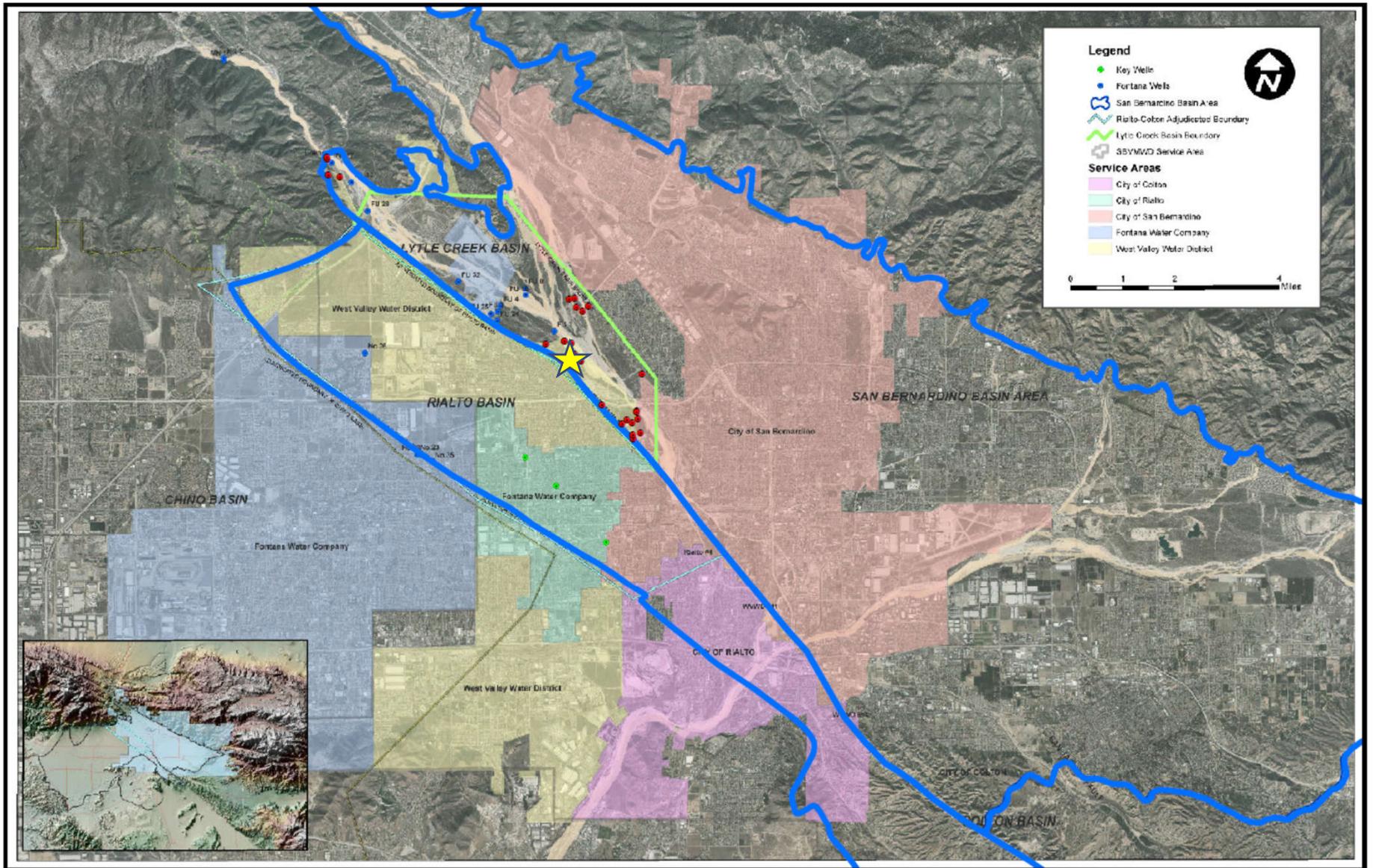
Staff believes these stormwater basins provide a unique opportunity for facilitation of SWP water recharge and enhancement of stormwater capture and recharge in the area and recommend continuing working with Lennar Homes and the water agencies to refine the concept and bring an arrangement back for consideration by the Water Subcommittee in the near future.

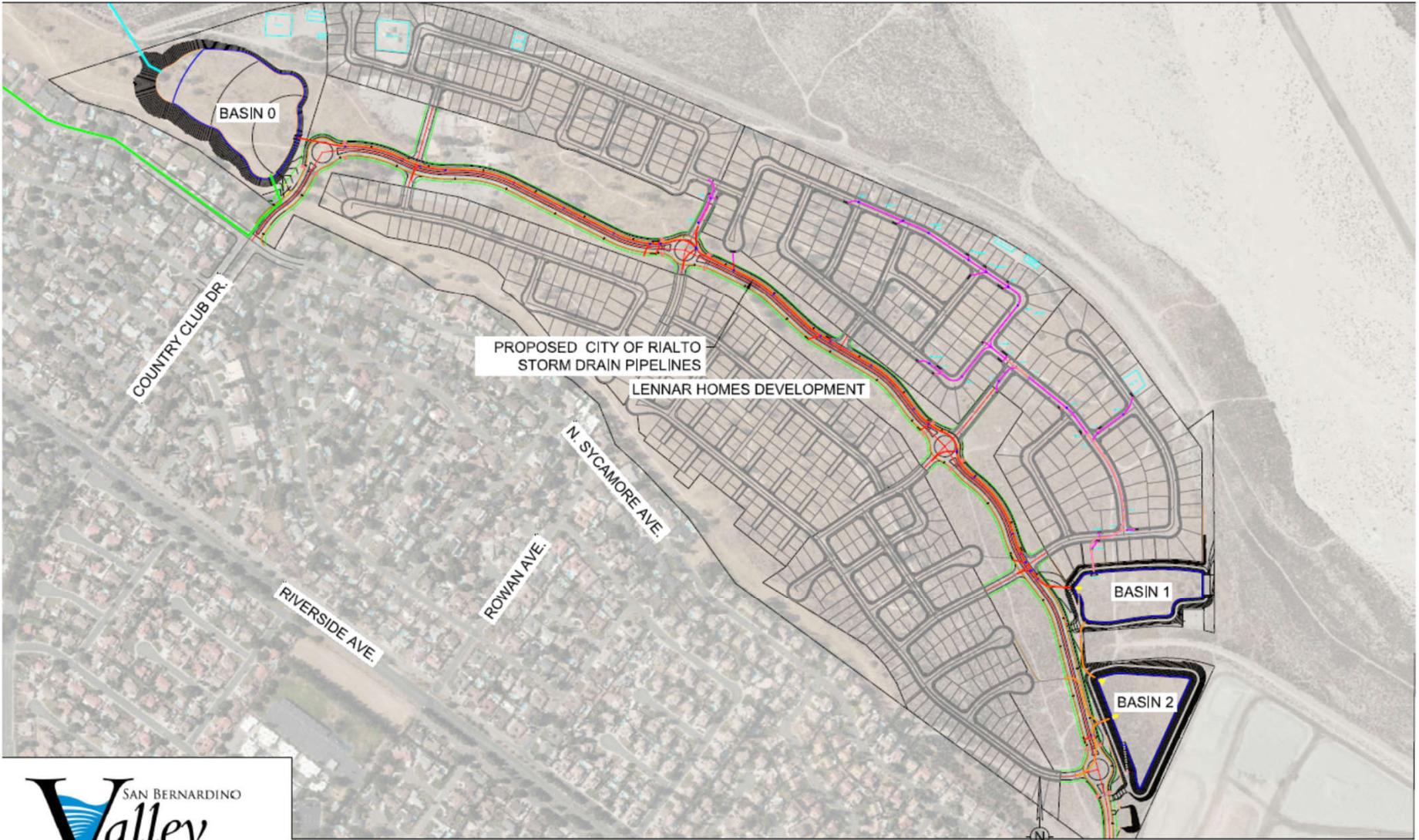
RECOMMENDATION/ACTION REQUESTED

Direct staff to continue working with Lennar Homes, WVWD and Valley District to develop an agreement for the operations and maintenance of the storm basins within the Lennar Homes project.

Attachments:

Proposed locations of Basins 0, 1, and 2 by Lennar Homes and alignment alternatives for the Pipeline conveying SWP water to these Basins





LENNAR DEVELOPMENT BASIN 0, 1 & 2 EXHIBIT
SCALE: 1" = 400'
DATE: JUNE 22, 2021

