



April 7, 2016

**TO:** LOCSD Board of Directors

**FROM:** Peter J. Kampa, Interim General Manager

**SUBJECT: Agenda Item 12D – 4/7/2016 Board Meeting**

Approval of Station 15-South Bay Greywater System Installation Project Involving the Repurposing of the Existing Septic Tank as a Greywater Holding Reservoir to Support Installation of Potential Community Gardens and Drought Tolerant Demonstration Garden

**President**

Marshall E. Ochylski

**Vice President**

Jon-Erik G. Storm

**Directors**

Charles L. Cesena  
Louis G. Tornatzky  
R. Michael Wright

**Interim General Manager**

Peter J. Kampa

**Temporary District Accountant**

Dale G. Flynn

**Unit Fire Chief**

Scott M. Jalbert

**Battalion Chief**

Tom McEwen

**Mailing Address:**

P.O. Box 6064  
Los Osos, CA 93412

**Offices:**

2122 9<sup>th</sup> Street, Suite 102  
Los Osos, CA 93402

**Phone:** 805/528-9370

**FAX:** 805/528-9377

[www.losososcsd.org](http://www.losososcsd.org)

**STAFF RECOMMENDATION**

Staff recommends that the Board approve the following action(s):

***Motion: I move that the Board approve the Station 15-South Bay Greywater System Installation Project, to include a funding appropriation in the amount not-to-exceed \$9,000 in the 2015/16 fiscal year budget to fund connection to the new sewer and repurposing of the septic tank(s) for use as greywater (rainwater) holding tanks. (optional additional motion language) I further move to provide conceptual approval for the greywater pumping, control and irrigation system subject to final project budget and funding plan approval by the Board. Approval of the greywater project will authorize and direct the pursuit of grant funds for the project, which will support Development of Potential Community Gardens and a Drought Tolerant Demonstration Garden.***

**DISCUSSION**

Fire Station 15 – South Bay is owned by the District and located in the first phase of the community required to connect to the new sewer system. The cost of the sewer lateral connection was not included in the 2015/16 fiscal year budget, but the connection should be completed as early as possible to set an example for the community.

Staff also felt that repurposing the existing septic tank(s) on the fire department property for use as a greywater storage tank, would set a positive example for the community to follow suit on their own property. The cost of the sewer lateral connection plus repurposing the septic tank for rainwater storage is estimated to cost \$8,500, which is less than the cost of the lateral installation and permanently decommissioning the tank; estimated at \$9,000. The sewer lateral installation costs will be funded from the Fire Department Capital Reserve funds.

The concept of storing rainwater on site triggered the thought to develop a community garden, on property owned by the District, for consumable crops, as well as a demonstration garden showcasing drought tolerant plantings. The garden would be proudly managed by firefighters and would be a location for public tours held to educate the public on 1) greywater reuse technologies, 2) garden irrigation and water conservation best management practices, 3) appropriate drought tolerant plantings, and 4) healthy living using vegetables grown by firefighters.

Approving all project components together as a unit tremendously increases the potential for grant participation in the project. We will proceed with only the lateral connection and tank cleaning at this time. Our cost to install the lateral

and repurpose the septic tank will serve as a 50% or higher match for the total estimated project cost as detailed below. It is VERY important to note that all work constructed by the District or on our property is subject to the California Public Contracting requirements, which for this project would involve the payment of prevailing wage rates to contractors. This concept and requirement is important, because any project that the District constructs will typically cost 30% more than the cost for a private property owner. We do not want community residents to see the estimated cost of our greywater project, and assume that their project will cost the same.

Key project assumptions used in developing the cost estimate are as follows:

1. The sewer lateral is low enough to accommodate a gravity connection (very likely)
2. Single phase power is readily available
3. The septic tank volume is 3,000 gallons or less
4. Minimal utility conflicts exist in the septic tank area
5. The community garden will have a dedicated drip irrigation system, and the cost of the irrigation system will be funded separately from the estimates below.

Estimated costs, including contingency:

**Option 1:** Lateral connection without septic tank repurposing, including tank demo: \$9,000

**Option 2:** Lateral connection and sanitize tank for future re-use: \$8,500 (approx. same as option 1)

**Option 3:** Lateral connection, connect adjacent roof water downspout, and provide for manual installation of plug-in pump, with no controls (typical low pressure submersible pump on cable, with manual temp connection to irrigation system): \$11,500.

**Option 4:** Lateral connection, connect adjacent roof water downspout, and provide single irrigation pump with timer-based control panel, assuming an available 20 amp single phase circuit: \$23,000

Note that Option 4 is highly dependent on the specific equipment selected. We can easily spend twice that number using equipment with advanced controls, on-demand pressure, etc. The final budget for the greywater irrigation system (Options 3 or 4) will be developed after consultation with contractors, selection of construction standards, and identification of potential grant funding sources.

#### **FINANCIAL IMPACT**

The initial financial impact of the sewer lateral installation and septic tank repurposing is not to exceed \$9000. The financial impact of the full greywater project will be presented at a future date.