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Viewpoint: Gravity system is best solution for Los Osos

John Waddell and John Diodati

This April, the Los Osos wastewater project will reach the significant milestone of seeking certification of the Environmental Impact Report (EIR) and approval of the Coastal Development Permit.

The project team is bringing forward a project proposal developed from a far-reaching public process and the team's collective professional judgment. Typical of projects this size, it will most likely receive considerable discussion and some modification before construction contracts are awarded.

It has literally been a team effort to get to this point: AB 2701 (authored by Assemblyman Sam Blakeslee, R-San Luis Obispo) was passed by the state Legislature unanimously; the county Board of Supervisors loaned \$7 million of countywide funds; Los Osos property owners approved — with 80 percent voting "yes" — a \$127 million property assessment necessary to fund the project; and both the federal and state government have been responsive in addressing affordability issues.

Our unique project approach took extraordinary efforts to engage the community, review and analyze all viable technologies, develop a competitive design-build process aimed at driving project costs down, and conduct a community survey to measure acceptance of collection technology, treatment site location and price sensitivity.

Additionally, at the request of the community, we vetted our process with peer review by wastewater experts at the National Water Research Institute.

Core Values

Our process has been guided by certain core values, in particular deep concern for environmental sustainability and the project's cost. These

> Item No. 15 May 9, 2009 Meeting Status of Los Osos Wastewater Project Attachment 4

Attachment 4

values may not be explicit amid the many details of our technical efforts, but we are reminded of them when we look to our project mission statement for guidance, and they are clearly reflected in our proposed project.

Sustainability is an especially complex issue that has received considerable discussion. In general, we all agree that a "sustainable" wastewater project for Los Osos should permanently correct the groundwater pollution occurring today.

Let us emphasize permanently correct: This project must be as protective of the environment and functional for future generations as it will be for those who benefit from it the day it starts operation.

Some have taken a narrow view and believe that a specific collection system technology (STEP) defines a sustainable wastewater project. They assert that the alternative (gravity collection) poses unacceptable risks and is thus "unsustainable."

Peer review

The choice of an appropriate collection system technology is important, but our peer reviewers have deemed STEP and gravity to be "functionally equivalent."

That is, they both have unique risks and benefits, but as a whole are equally protective of the environment. Even a sustainable system will have to mitigate some level of risk. In five other controversial septic-tosewer projects in Santa Barbara County, Heal the Ocean and the Surfrider Foundation noted that "there are inherent risks with every type of sewage conveyance system ever devised, and that the success of any strategy ... depends on a combination of appropriate design, regular maintenance and homeowner education."

These comments were offered in support of the hybrid, low-pressure gravity system chosen for these communities.

These remarks raise an important point: No sewer system is sustainable if it is not diligently maintained. Regular maintenance of any system ensures potential harm to the environment is minimized.

Attachment 4

That is exactly why our project will have a comprehensive sewer system management plan (a regulatory requirement), built in redundancy and overflow capacity.

Best choice

After considerable analysis, our team concludes that a gravity system is the best choice for Los Osos.

STEP is a good technology, but more appropriately suited for small communities (less than 10,000 population, with low-density, large-lot development). None of these conditions exist in Los Osos.

Los Osos residents are remarkably knowledgeable about wastewater technology.

The community survey affirms our project choice by revealing that five times as many people "definitely prefer" a gravity system as compared to STEP (51 percent vs. 9 percent). Support for gravity grows to 69 percent when adding those who "probably prefer" a gravity system.

Clearly it is time to move past this technology debate and focus on the real aspects of a sustainable project.

Recognizing the project's relationship to current and future water supply is truly the key to solving a much bigger problem. Water sustains life, and since the water cycle does not recognize geo-political boundaries, a sustainable project must provide the foundation for integrated water management programs that address urban, agricultural and environmental water needs within the entire region. The project we are bringing forward for approval provides this foundation.

Looking beyond the wastewater project, we know our department will play a role in addressing this larger problem. The complex legal relationship between the wastewater project and efforts of the water purveyors, including ongoing groundwater litigation, will result in many of these issues being solved in time, as each is properly addressed.

Some may be addressed by the Planning Commission this April. We are dedicated to continuing our joint efforts in coming years.

Attachment 4

Future generations may need to tackle issues now unforeseen. Regardless, creating the proper foundation to deal with each issue the community faces in the future — from climate change to population increases to mitigating urban pressure on agricultural land — is the only appropriate definition of sustainability for Los Osos.

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