

1. What is the history of this idea? When was it first suggested that Woodacre and San Geronimo could have a community wastewater system, and what have the obstacles been?

Several properties in the San Geronimo Valley suffer from failing septic systems because of the poor soils, high groundwater, small parcels and age (most systems are 50 years old or more). In addition, many homes are in close proximity to creeks. The Woodacre Flats with its high density of homes, in particular, suffers from failing systems. Ongoing water quality monitoring confirms that our streams have a high level of total coliforms, *E. coli* etc.. This required County to take action to address failing septic systems in the Valley.

2. To what extent will this study draw on the two previous reports completed by Questa in the last 5-6 years?

1. **“Woodacre Flats Wastewater Feasibility Study” July of 2011** – identified and evaluated w/w improvement alternatives for ~150 parcels and two solutions were identified:

1. A local community leach filed with limited capacity for properties in Woodacre.
2. A w/w recycling alternative in the San Geronimo Golf Course (potentially many houses can be connected both in San Geronimo and Woodacre)

Draft Report – March 2017 – potential uses of recycled water for irrigation of Golf Course property

Spring 2017 – Golf club property put on sale and purchased by Trust for Public Land. The Golf club parcel was in operation through 2018 and finally closed in 2019

2. “Woodacre San Geronimo Flats Wastewater Recycling Study, Feb 2019”

Different service area as it included additional homes in Woodacre Flats and San Geronimo, parcels most need of wastewater improvements, out of 360 developed parcels – 2/3 in Woodacre and 1/3 in San Geronimo. Accordingly, the water recycling alternatives still focus on **the golf course property as the location for placement of treatment facilities and recycled water uses**

Increasing pressures on water resources have led to greater water scarcity and a growing demand for alternative water sources. Onsite non-potable water reuse is one solution that can help communities reclaim, recycle, and then reuse water for non-drinking water purposes. Onsite non-potable water reuse systems (ONWS) capture and treat water sources generated from within or surrounding a building, such as wastewater, greywater. The treated water is then reused onsite or locally.

The current project is developing the service map. A major part of the project is need assessment and public outreach. There will be community engagement in terms of answering homeowners' concerns, and providing technical, financial, and process-related information on the project to the local community.

3. Did the county complete an E.I.R. on this already, and why did that not proceed?

An EIR was underway when the Trust for Public Land purchased the property, and the study was halted.

4. Did the purchase of the golf course property change those plans?

Yes, an Environmental Impact Report (EIR) is an essential next step that must be taken before there is a decision about which alternative will be selected as the planned project.

5. —How many properties could join this wastewater system? Could the service area extend to Lagunitas and Forest Knolls?

The approach to this project is that we don't have a condition or requirement for mandatory connection to community w/w facilities for all properties in the study area - property owner interest in connecting to community w/w facilities, differing w/w improvement needs from property to property. Property owners on the Woodacre Flats and San Geronimo Flats will have the option to hook up. These areas have been the focus of this project because of the known high rate of failing septic systems, due to soils, high groundwater, small parcels and age (most are 50 years old or greater). These areas are also in the closest proximity to streams.

6. For many septic systems in Woodacre/San Geronimo Valley does the county EHS have no records?

Review of County records showed less than half of the developed properties have septic system permit information on file with Marin County EHS. In 2004-2005 voluntary (confidential) septic system inspections conducted as part of a County-wide outreach effort ("Septic Matters Program") found roughly two-thirds of the systems inspected in Woodacre to have marginal to unacceptable operating conditions

7. What are the advantages of the primary, secondary and tertiary treatment alternatives outlined in the preliminary scope document from Questa?

Primary Treatment. – advantageous where sufficient amount of suitable land is available for subsurface wastewater disposal. Advantages are:

- Least costly construction
- Simplest to operate and maintain
- Lowest energy requirements
- Avoids the complexities of finding an acceptable location in the community for a wastewater treatment plant, and the ongoing operation and maintenance

Examples:

- (a) EAH Affordable Housing project in Pt Reyes Station (apartments with pressure dosed LF)
- (b) Marshall Phase 1 – standalone community leachfield; later expanded in Phase 2 with the addition of secondary treatment.

Secondary Treatment – provides better quality effluent with the following benefits or advantages:

Allows more efficient use of a given land area for wastewater disposal capacity (higher leachfield application rates)

- Extends the expected life of soil absorption systems and reliability
- Allows single (100%) rather than dual (200%) leachfield installation (cost savings)
- **Reduces nitrogen loading** to the environment where that may be a critical issue
- **Allows for limited surface/spray irrigation of treated effluent**, e.g. to restricted pasture/range land

Examples:

- (a) Local systems: Spirit Rock Center, Lagunitas School, French Ranch, Skywalker Ranch
- (b) Lawson's Landing: Secondary treatment, winter leachfield, summer pasture irrigation
- (c) Marshall Phase 2 – **secondary treatment** unit added to expand service area and capacity of Phase 1 leachfield

Tertiary Treatment – provides highest level of wastewater treatment suitable for water recycling; advantages include:

- Highest level of wastewater treatment for either reuse or dispersal to land
- Highest standards for reliability and redundancy
- Maximum opportunities for reuse-recycling and water conservation

Examples:

- Municipal Treatment Facilities: Las Gallinas/Marin Water; Novato Sanitary District
- Small-scale: Big Rock Ranch, tertiary water recycling for toilet flushing and landscape irrigation

8. Has it ever been considered for Woodacre to join the Ross Valley Sanitary District?

Yes, we did consider this alternative and compared it with the recycled w/w plant. This alternative would be expensive and even more complex than the proposed recycled

system. Joining the RVSD also brings more potential development and community character issues.

9. What effect might a larger system like this have on housing constraints?

The project will only serve existing homes (the number served will depend on the alternative chosen, with a maximum of about 200), and will not trigger development of undeveloped parcels. However, given that septic systems constrain home size, and because homeowners connecting to the proposed system will no longer be subject to septic regulations, they may have greater potential to make additions to their homes, or to legalize unpermitted structures. The Marshall community built a similar wastewater system and addressed this problem by requiring that all homes connected to the system be limited to future additions of no more than 500 square feet. This limitation is enforced by the County through a deed restriction.

10. Woodacre residents say the septic systems in the community pose an environmental and public health risk. Is this true elsewhere in West Marin also?

The old and failing systems pose human health risk and polluting the environment esp. creeks. The past studies have shown higher levels of fecal contamination in the streams.

11. In what ways does this feasibility study differ from Questa's previous feasibility study?

1. The initial 2011 Woodacre feasibility identified both a limited local community (Fire Rd) option and golf course water recycling option.
2. Strong community interest in the golf course option, along with support from the golf course owners, lead to additional State grant funds to evaluate an expanded water recycling project for Woodacre and portions of San Geronimo.
3. Sale and decommission of the golf course removed golf recycling project as a viable option

The **current study will go back to the 2011** study to evaluate ways to expand on the Fire Road community option, including:

- (a) ways to expand the leachfield area and capacity (not pursued in the 2011 study);
- (b) different wastewater treatment technology options and plant locations (not done in the 2011 study), and
- (c) exploring tertiary treatment options and other possible seasonal water recycling options closer to Woodacre that could be implemented in conjunction with winter use of Fire Rd leachfield, such as pasture irrigation/carbon farming, groundwater recharge, local landscape /open space irrigation, dust control, etc.
- (d) the current study will also look in additional detail as onsite system technologies and options that may have changed since 2011.