

# The Woodacre/San Geronimo Flats Wastewater Group



Update - September 2018

Dear Friends and Neighbors,

It has been a long time since you have heard from us. We remain focused on the need to find a cost-effective, community-based solution to our longstanding problems with substandard septic systems, and the resulting pollution of our creeks. Our goal is to provide to the community factual information about potential solutions and associated costs, and to facilitate community discussion. We also support homeowners throughout the Valley who are facing septic problems. While the lack of reports from us over the last year reflects complications with the project, we now have good news to report.

## **Background**

Over the last 11 years we have worked to understand problems and identify solutions for the Flats of Woodacre and San Geronimo, an area of about 360 homes. We have raised nearly \$53,000 in the form of contributions from property owners, and received petitions from 190 Woodacre and San Geronimo property owners endorsing the use of these funds for feasibility studies and an Environmental Impact Report (EIR). In 2011 a feasibility study conducted by Questa Engineering identified four alternatives:

1. No project
2. Upgrade of onsite systems using modern technology
3. A community system with shared leach field on Fire Road above Woodacre, serving a maximum of 150 homes
4. A recycled wastewater treatment plant, providing treated water to the Golf Course to serve up to several hundred homes.

Following the 2011 study, a series of community meetings regarding the potential solutions were held. As a result of the petitions and input received at meetings, fundraising was undertaken by the County and the Woodacre/San Geronimo Flats Group to support an additional feasibility study to provide more detailed information about the recycled water treatment plant, and to fund the EIR. Grants were received from the State of California and the Marin Municipal Water District, and, in 2016, the work on the supplemental feasibility study, known as the “Woodacre/San Geronimo Flats Wastewater Recycling Project Feasibility Study,” began. In early 2017 the EIR process also commenced. It is important to note that no particular alternative has been chosen – the purpose of this study and the EIR are to inform the community about the alternatives, and to facilitate a community dialogue about our path forward.

**Project delay:** As many in the San Geronimo Valley are aware, in late 2017 the County began efforts to purchase the San Geronimo Golf Course, and in early 2018, a lawsuit related to that purchase caused the County to stop the supplemental feasibility study and EIR process.

## **The good news: The County has restarted the feasibility study.**

On August 21, 2018 the Board of Supervisors approved a renewed contract with Questa Engineering to continue the supplemental feasibility study, and revised the scope of work to broaden the study to consider diverse potential uses for the recycled water. A community meeting will be held when the study is completed to report the results.

The EIR is still on hold, awaiting the resolution of the lawsuit related to the Golf Course.

## **Other News: Water quality studies affirm human fecal matter is in our creeks, especially in wet weather.**

While this comes as no surprise to those of us who live on the Flats of Woodacre and San Geronimo, it is very helpful to have the factual results of two programs, which sampled water from Woodacre and San Geronimo Creeks in the winter of 2016/17. The studies used different technologies to identify the presence of pathogens (primarily bacteria) from guts of specific species or groups of species, including humans, ruminants, and dogs. One study, known as qPCR (Microbial Source Tracking), was undertaken by the County of Marin and the San Francisco Bay Regional Water Quality Control Board, with the support of the Marin Municipal Water District and the San Geronimo Valley Planning Group. This sampled water from

three sites in the Woodacre/San Geronimo Flats. Concurrently, the San Geronimo Valley Planning Group also funded a study that was analyzed by the Lawrence Berkeley Laboratory using “PhyloChip Analysis.” Replicate samples were collected at the same time as the three County sites, as well as 10 additional locations. These additional samples included sites upstream from the Woodacre Flats to provide an understanding of the natural water quality condition.

**Results:** Both studies showed the presence of human-sourced pathogens in various locations in our creeks at different times throughout the season, but primarily in wet weather. Both studies also showed negative or marginal results in other locations. The author of the PhyloChip Analysis report, Dr. Ed Dubinsky, states in his conclusion, “The PhyloChip analysis of the San Geronimo Creek samples found strong fecal signals from human sources in five samples, ruminant in one sample and dog in one sample. Marginal fecal signal from human was detected in six samples, ruminant in two samples, horse in two samples and bird in two samples. Fecal signals were more frequently detected in wet season months (December and February) ...”. The County’s Microbial Source Tracking also identifies the presence of human pathogens in all three tested locations, with the highest level of detection in December of 2016.

**Woodacre/San Geronimo Creek  
Microbial Source Tracking and PhyloChip**  
Sponsored by SFRWQCB  
MST Lab Analysis: Cel Analytical  
PhyloChip Analysis: Lawrence Berkeley Laboratory/UC Berkeley

Marker	Woodacre Creek above Confluence with San Geronimo Creek (LBL Station 2)				San Geronimo Creek above Confluence with Woodacre Creek (LBL Station 3)				San Geronimo Creek under Meadow Way (LBL Station 1)			
	12/16/16	2/15/17	5/22/17	7/20/17	12/16/16	2/15/17	5/22/17	7/20/17	12/16/16	2/15/17	5/22/2017	7/20/2017
<i>E. Coli</i>	816	161	214	66	2420	131	127	12	921	150	461	56
Human MST	541	136	8 DNQ	39	85	57	2 DBLOD	0	438	14	3 DBLOD	22
Human MST	Positive	Positive	Positive	Positive	Positive	Positive	Detected	No Detect	Positive	Positive	Detected	Positive
Phylochip	0.38	0.22	0.03	0.07	0.20	0.05	0.01	0.03	0.28	0.15	0.01	0.00

Horse MST	No Detect	Detected	No Detect	Positive	No Detect	Detected	Detected	Positive	No Detect	Detected	Positive	Positive
Phylochip	0.11	0.04	0.02	0.04	0.11	0.05	0.00	0.01	0.09	0.04	0.01	0.01
Ruminant MST	No Detect	No Detect	No Detect	Detected	Positive	Positive	No Detect	Detected	Detected	Detected	Detected	Detected
Phylochip	0.06	0.03	0.02	0.04	0.22	0.08	0.01	0.02	0.15	0.07	0.01	0.01
Dog MST	Positive	No Detect	No Detect	No Detect	No Detect	Detected	No Detect	No Detect	Detected	Positive	No Detect	No Detect
Phylochip	0.04	0.02	0.03	0.05	0.04	0.03	0.01	0.02	0.04	0.02	0.01	0.01

Exceeds <i>E. coli</i> standard	
Positive	Results above the MST Limit of Detection (LOD) and PhyloChip 0.20 and above
Positive	PhyloChip results between 0.1 and 0.2 indicates marginal source
Detected	MST Results Detected Below Level of Detection (DBLOD) or Detected but Not Quantifiable (DNQ). Non-zero signals below LOD
No Detect	For MST, no detectable amplification for the sample; for PhyloChip, result less than 0.1

Human Marker LOD = 6 gc/mL  
Humna Marker LLOQ = 12 gc/mL

0 = Non detect  
DBLOD = Detected below level of detection  
DNQ = Detected but not quantifiable

**Financial Report: what happened to your money?**

As mentioned above, many community members contributed \$350 per property to support the studies and our outreach efforts, totaling nearly \$53,000. These funds were carefully managed by our treasurers, Catherine McQuilkin and Maya Gladstern. In 2010, \$11,800 was provided to the County of Marin for the first feasibility study. In 2016, \$38,000 of the community’s funds was transferred to the County to support the supplemental feasibility study and EIR. The balance, nearly \$3,000, has been expended to support a webpage and the printing/ mailing of several dozen meeting notices and newsletters. The Group’s checking account balance is now less than \$300, which is not enough to support future mailings.

**We need your help!** We don’t expect any large expenses – but need to continue our mailed updates to keep you informed, as well as to maintain our webpage. Can you make a modest contribution to support our continued efforts? Even \$25 will help.

Please send your contribution to the Woodacre/San Geronimo Flats Wastewater Group, c/o Maya Gladstern, P.O. Box 945, Woodacre, CA, 94973.

For more information contact Liza Crosse, 415-279-4637, or go to our website and sign up for updates.

Thank you for your support!

Christin Anderson, Liza Crosse, Wypke DeVries, Maya Gladstern, Rich Lohman, Catherine McQuilkin, Jim Rawlinson, Ann Seramin, Liz Vial, Mark Weiss, Bruce Wick, Mark Wilson (Technical Advisor)