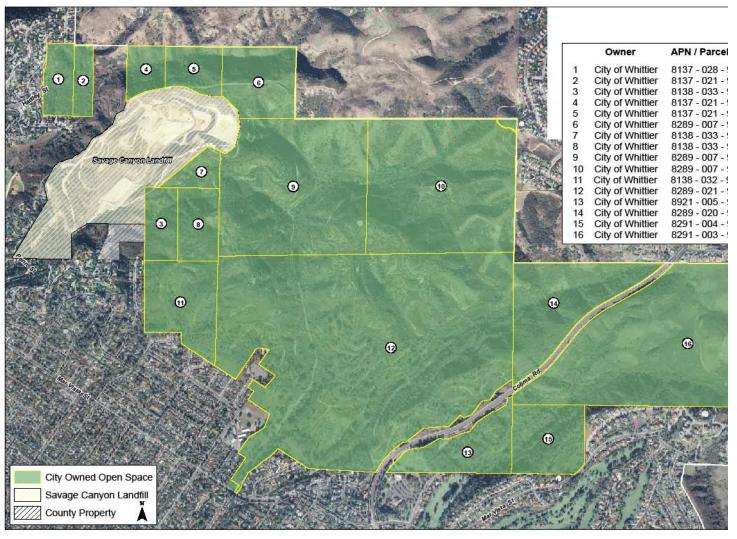


# Mineral Extraction in the Whittier Hills

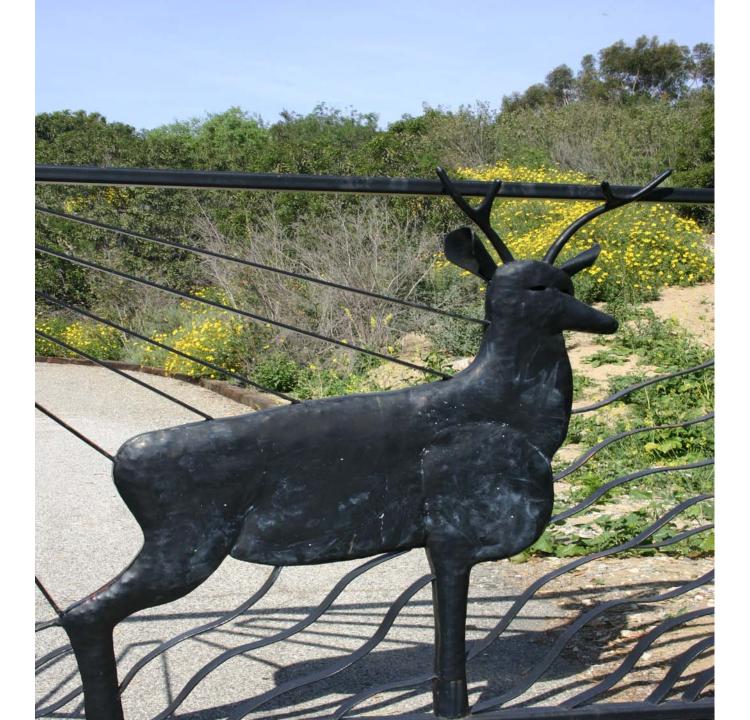
Friendly Hills Property Owners Association - April 22, 2009



#### City-owned parcels in the Hills



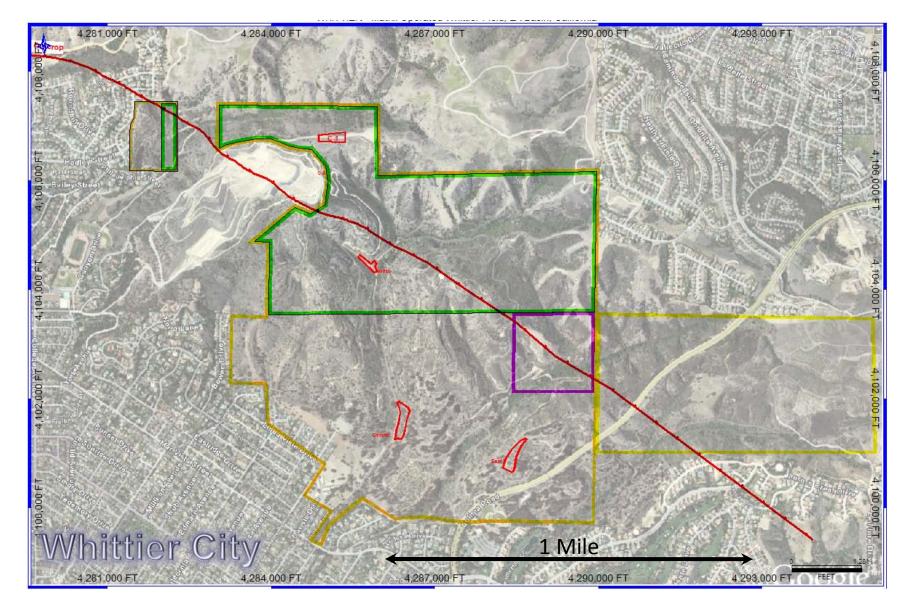




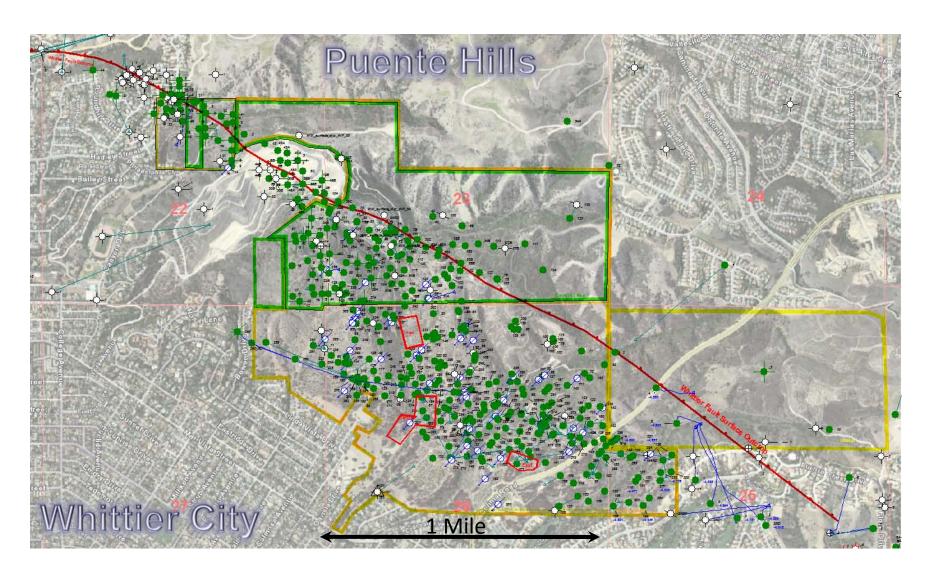




#### Whittier Fault







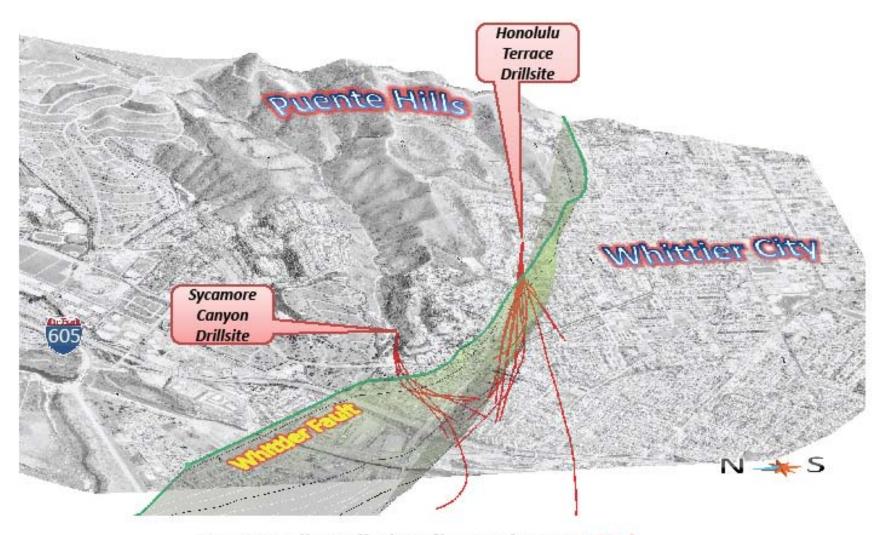
Original Wells: More than 500, are Shown in Green



# Possible Production Opportunities

- Oil Companies did not stop operations because all oil was extracted
- They stopped because of falling oil prices
- At closure Chevron alone was pumping 900 barrels a day
- The possibility exists for substantial additional production from greater depths
- New drilling techniques offer the possibility of reactivating the field while preserving the environment





Directionally Drilled Wells are Shown in Red

### **Underground Operations**

New wells use "cellar operations," in which the pumps and most other equipment are housed underground, with small buildings and holding tanks above the surface.







#### PROJECT PROFILE

#### Oil Field Consolidation & Well Cellar Project

A design-build project in two phases, the Oil Field Consolidation & Well Cellar Project involved the excavation and construction of two well cellars, the provision for drilling nearly 500 new wells and the

removal of more than 50 wells from the surrounding neighborhoods. These "satellite wells" will be centralized into the new cellars. Exploratory drilling and oil production continued without interruption throughout the construction.

The construction project began in August 2006 and was completed in April 2008; however, the client has continued to award additional engineering and construction work to Hobbs-Bannerman in order to further upgrade their facilities.

In addition to engineering and construction services, Hobbs-Bannerman also provided project management services, including supervision of various subcontractors.







Call today to learn how Hobbs-Bannerman can help make your next project a success: (714) 89-Hobbs (46227)



www.HobbsBannerman.com

5455 Garden Grove Blvd., Fifth Floor Westminster, California 92683

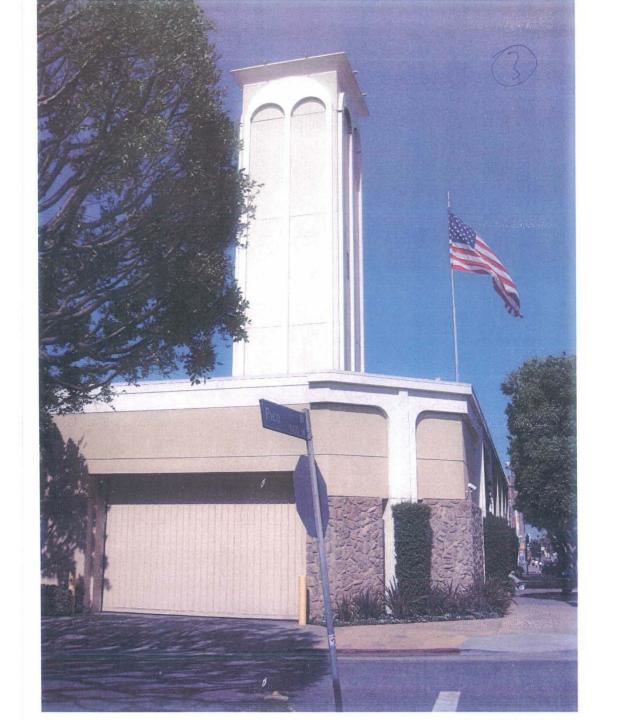
Tel: (714) 89-Hobbs (46227)

Fax: (714) 894-0100

## Screening

Permanent screening can be erected for continuous sound proofing and control of light. This is very important to protect wildlife in sensitive areas.







#### First Priority – Protect the Environment

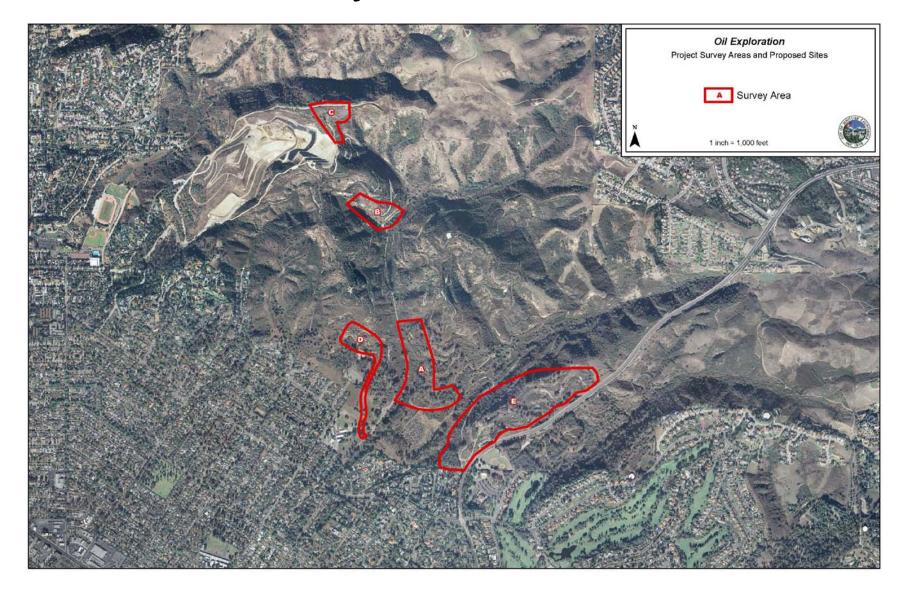
- The City Council has pledged to not drill unless we are sure it can be done without damaging the habitat
- To that end they are asking our property manager – the Habitat Authority – to oversee the biological studies and to continue oversight if drilling is permitted
- A full EIR will be completed

## Terms of the Lease Agreement

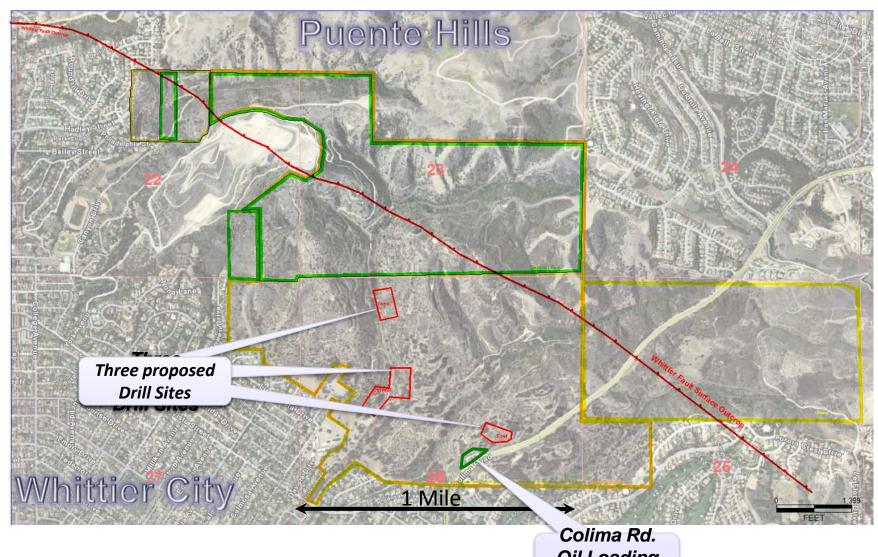
- There is no guarantee that after all the studies that they will be permitted to drill
- The developer pays for all City costs including the EIR and has paid a \$400,000 deposit as a down payment
- Royalty to the City is a minimum of 30% of the Gross Revenues with increases if revenues exceed certain benchmarks



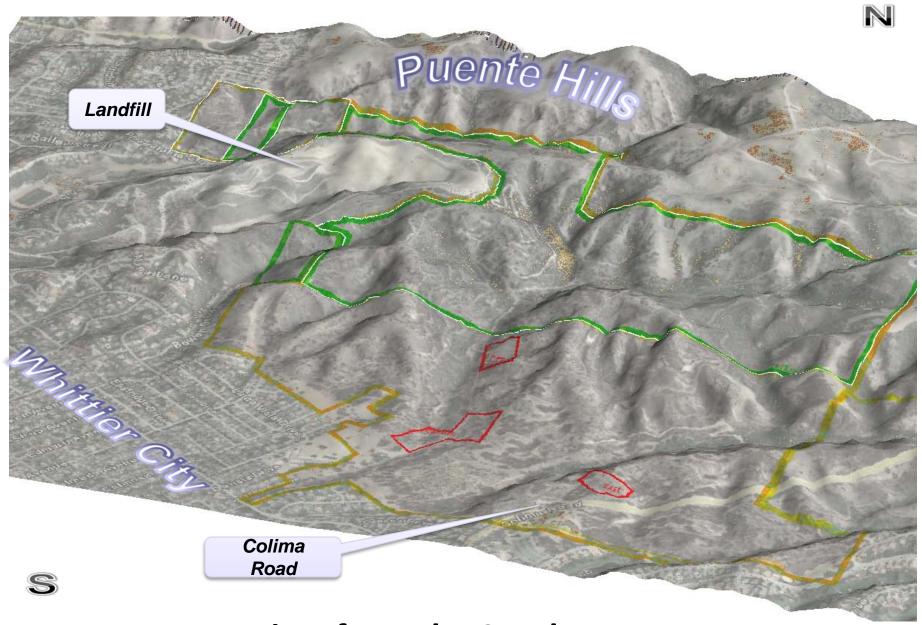
# Potential Study Sites



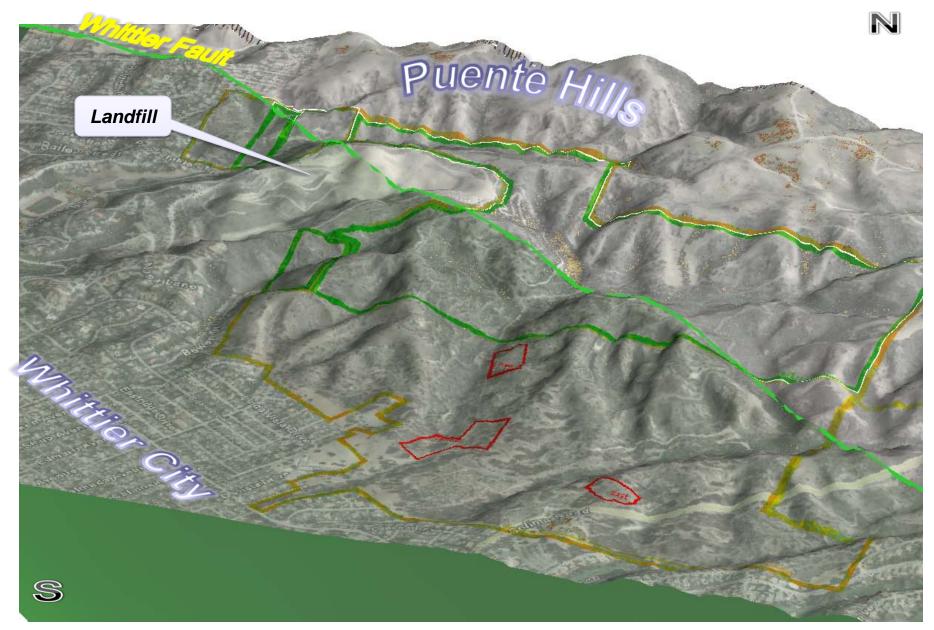




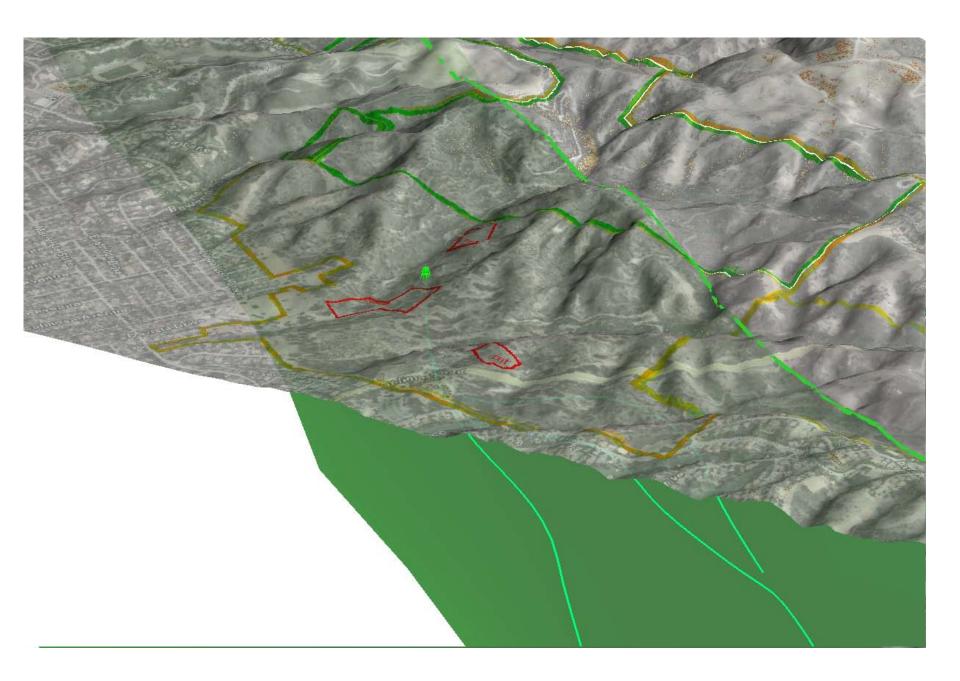
Colima Rd.
Oil Loading
facility

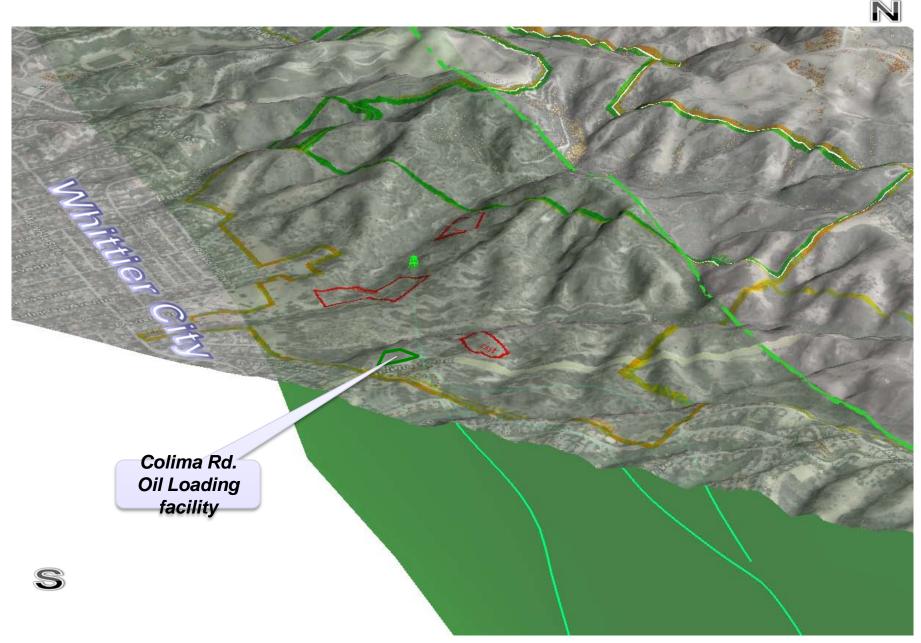


**View from the Southeast** 



**View from the Southeast** 





**View from the Southeast** 

#### **Estimated Time Line**

- Summer 2008 City Council adopts Resolution of Intention to Lease Property for Production of Oil
- Late Summer 2008 City receives bids on lease (bid for royalty amount)
- Fall 2008 City Council awarded lease agreement to highest bidder
   Matrix/Clayton Williams
- Spring 2009 Lessee files application for Conditional Use Permit; identifies facilities and locations requested for exploration and production operations
- Jan 2010 City initiates CEQA review NOP goes out
- Fall-Winter 2010 City Council considers Conditional Use Permit for facilities; Lessee obtains other permits as required
- 2011 Lessee starts exploration phase
- 2011/12 Lessee begins production wells

#### Much Still Remains To Be Done

- Final approval by Proposition A District
- Full Environmental Impact Report
- Public hearings
- Appropriate mitigation for any adverse affects
- Approval by City Council
- Determination on how funds generated will be used for the long term benefit of our community