

# Malibu Civic Center Stakeholders Meeting



**March 28, 2013**

# Meeting Agenda



- Regional Water Quality Control Board
- Community Facilities District (CFD)
- Wastewater Facility Design
- Questions/Comments
- Next Meeting April 25, 2013
- Adjourn

# Regional Water Quality Control Board



- Met with Eric Wu RWQCB Groundwater and Permitting Unit
- Discussed:
  - ❖ Project milestones
  - ❖ EIR
  - ❖ CDP requirements
  - ❖ Monitoring well and locations
  - ❖ US EPA requirements
  - ❖ Department of Health review
  - ❖ Permits
- Submit quarterly report to the Board by March 2013
- Submit response to RWQCB comments to the Recycled Water Use and Storage Study, Results of Phase I Work, and Conceptual Groundwater Injection Plan

# Community Facilities District (CFD)



- Bond sale closed in February 2013
- City received funds in February 2013
- No other updates

# Wastewater Facility Design



- Groundwater Injection Study
  - ❖ Phase 1 – cursory modeling and scoping
  - ❖ Phase 2 – preliminary feasibility assessment
  - ❖ Phase 3 – monitor and injection well testing, modeling and analysis, injection well pre-design
- Environmental Impact Report (EIR)
- Final Design/ Construction Document

# Project Schedule



## Phase 3 Field Program

- Pre-field Work **(March – May 2013)**
  - ❖ Solicit and execute consultant and contractor agreements
  - ❖ Select monitoring well locations and secure access
  - ❖ Obtain drilling and testing permits
  
- Monitoring wells construction, testing, and development **(April – August 2013)**
  - ❖ Install wells
  - ❖ Test wells
  - ❖ Analyze collected data
  - ❖ Prepare well reports

# Project Schedule



## Phase 3 Field Program

- Well Injection Testing

(June – August 2013)

- ❖ MW 01
- ❖ MW 02
- ❖ MW 03

- Modeling Work

(September – December 2013)

- ❖ Updating model
- ❖ Recalibration
- ❖ Run scenarios
- ❖ Perform sensitivity analysis
- ❖ Prepare model report

- Begin injection well design

(December 2013)



# Phase III Field Program (Malibu Colony)



## Location of new wells



# Phase III Field Program (Malibu Colony)



- ❖ **Install two additional monitoring wells adjacent to two existing monitoring wells**

Location of New Well 1



Location of New Well 2



# Phase III Field Program (Malibu Colony)



## Steps for constructing a well

### Step 1 – Staging

- ❖ Well locations will be marked and cleared for drilling
- ❖ Drill rig and support equipment will be in place at the site
- ❖ Noise curtains will be placed around drilling site to dampen noise
- ❖ Road restrictions will be in place but homes will remain accessible

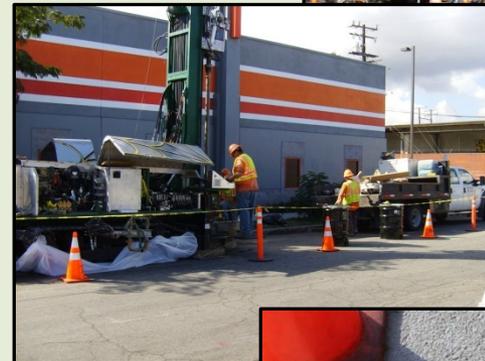


# Phase III Field Program (Malibu Colony)



## Step 2 – Drill and Construct Wells

- ❖ Borings are drilled and wells constructed within holes
- ❖ Wells will be 2-inches in diameter and approximately 125 feet deep
- ❖ Sonic drill rig will be used
- ❖ Soil will be removed from site daily
- ❖ Sound blankets will be used to minimize noise
- ❖ Well be set in a Christy box set flush to grade



# Phase III Field Program (Malibu Colony)



## Step 3 – Develop the Wells

- ❖ Wells will be pumped to clear out sediments and ensure smooth flow of water
- ❖ Water pumped will be removed from site daily in 55-gallon drums



# Phase III Field Program (Malibu Colony)



## Step 4 – Wells Sampling Site Restoration

- ❖ **Site will be restored to its previous state**
- ❖ **Equipment will be removed**
- ❖ **Pavement will be restored**
- ❖ **Site will be cleared of any debris**

## 2. Field Testing

- ❖ **Field testing will begin after construction has been completed**
- ❖ **Wells will be tested predominantly**
  - **Water level monitoring**
  - **Water quality sampling**

# Phase III Field Program (Malibu Colony)



## Water Quality Sampling

### Cations

- Sodium
- Potassium
- Calcium
- Iron
- Manganese
- Magnesium
- Arsenic
- Boron
- Barium
- Cadmium
- Lead
- Mercury
- Selenium
- Strontium

### Anions

- Bicarbonate as  $\text{HCO}_3$
- Chloride
- Sulfate
- Sulfide
- Fluoride
- Nitrate
- Nitrite
- Ammonia Nitrogen
- Hardness as  $\text{CaCO}_3$
- Alkalinity as  $\text{CaCO}_3$

### Metals

- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Chromium
- Cobalt
- Copper
- Iron
- Lead
- Manganese
- Mercury
- Nickel
- Selenium
- Silver
- Thallium
- Vanadium
- Zinc

### EPA Regulated

#### Priority Pollutants

- Volatile Organic Compounds by EPA Method 8260
- Semi-Volatile Organic Compounds by EPA Method 8270
- Total Dissolved Solids (TDS)
- Total Organic Carbon (TOC)
- Silica

# Project Schedule



## **Environmental Impact Report (EIR)**

- ❖ **Prepare and circulate NOP/IS** (March – May 2013)
- ❖ **Prepare and circulate Draft EIR** (March 2013– January 2014)
- ❖ **Prepare Final EIR** (January – April 2014)

# Project Schedule



- ❖ **Final design and construction documents** (April – June 2014)



# **Questions / Comments**



**Next meeting April 25, 2013**



**Thank you**