



February 29, 2008

Mr. Sam Unger  
Irrigated Lands  
State Regional Water Quality Board  
Los Angeles Region  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

Subject: Nursery Growers Association  
Los Angeles County Irrigated Lands Group  
Conditional Waiver for Irrigated Lands  
**ANNUAL MONITORING REPORT**

Dear Mr. Unger:

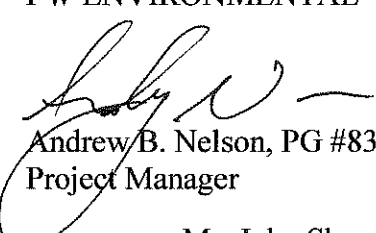
PW Environmental (PW) prepared this *Annual Monitoring Report* for the site on behalf of Nursery Growers Association (NGA), Los Angeles County Irrigated Lands Group. Monitoring and reporting was conducted in accordance with the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Order #R4-2005-0080), and the associated Quality Assurance Project Plan and Monitoring and Reporting Plan submitted for NGA.

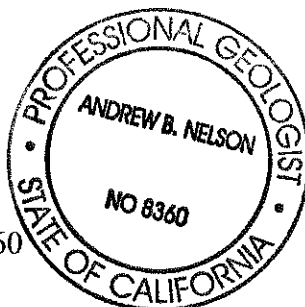
During this reporting period, general chemistry water quality benchmarks were exceeded in 15 of the 19 samples, pesticide benchmarks were exceeded in 11 of the 19 samples, and toxicity benchmarks were exceeded in nine of the 17 samples collected.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

Respectfully submitted,

PW ENVIRONMENTAL

  
Andrew B. Nelson, PG #8360  
Project Manager



cc: Mr. John Shoustra

**ANNUAL MONITORING REPORT**

**NURSERY GROWERS ASSOCIATION  
LOS ANGELES COUNTY  
IRRIGATED LANDS GROUP**

February 29, 2008

# ANNUAL MONITORING REPORT

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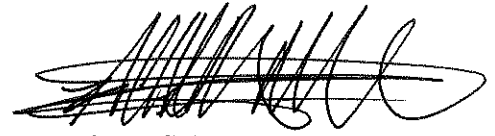
The Nursery Growers Association  
Los Angeles County Irrigated Lands Group  
Billing Address: 1589 North Main Street  
Orange CA 92867

CWIL Order No. R4-2005-0080

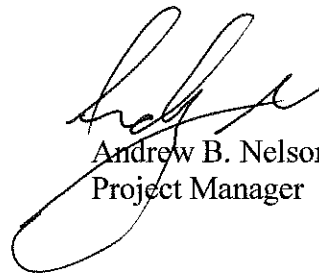
Prepared by:



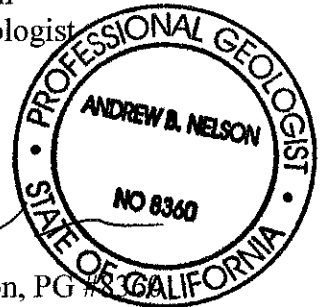
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**ANNUAL MONITORING REPORT**  
**NURSERY GROWERS ASSOCIATION**  
**LOS ANGELES COUNTY IRRIGATED LANDS GROUP**

**1.0 INTRODUCTION**

The Nursery Growers Association (NGA) is a non-profit association chartered in the late 1950s. The purpose of the NGA is to foster and encourage the growing and development of quality stock and to promote all matters that pertain to the best interests of the wholesale nursery growers. The NGA developed the Los Angeles County Irrigated Lands Group (LAILG) for compliance with the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (CWIL; Order #R4-2005-0080). PW Environmental was contracted by NGA to manage the technical aspect of the LAILG.

The Los Angeles Regional Water Quality Control Board (LARWQCB) is a State of California Agency that regulates water quality within the coastal watershed of Ventura and Los Angeles Counties under the authorities of the Federal Clean Water Act and State Porter Cologne Water Quality Control Act. The area under the jurisdiction of the LARWQCB is known as the Los Angeles Region.

In the Los Angeles Region, irrigated crops are the dominant agricultural land use. Water quality impacts associated with agriculture can be primarily traced to discharges resulting from irrigation or stormwater. These discharges typically contain pollutants that have been imported or introduced into the irrigation or stormwater; in addition, irrigation practices can mobilize and or concentrate some pollutants. In order to mitigate these potentially polluted discharges from impacting the beneficial uses of water bodies within the Region, the LARWQCB developed a CWIL as mandated by recent changes in state law and policy.

Los Angeles County covers 4,752 square miles (3,041,280 acres), and is bordered to the west by Ventura County, to the north by Kern County, to the east by San Bernadino County, to the southeast by Orange County, and to the south by the Pacific Ocean. The LAILG currently comprises approximately 1,649 acres.

Los Angeles County is broken up into four major watersheds: the Dominguez Channel, Los Angeles River, San Gabriel River, and Santa Monica Bay. All four watersheds have impacted waterbodies that appear on the federal 303(d) list, and listed contaminants include constituents that could be related to agricultural uses. Agricultural uses are considered as potential or current contributors of nutrients, pesticides, and suspended solids to these impacted waterbodies.

On November 3, 2005 the LARWQCB adopted the CWIL within the Los Angeles Region (Order No. R4-2005-0080). The goal of this program is to protect and improve water quality, and to attain water quality objectives in the receiving water bodies. This program has been adopted in its current form for five years. As a condition of the CWIL program, individual dischargers are required to develop monitoring programs to assess the impacts of discharges from irrigated lands.

The objective of this Annual Monitoring Report (AMR) is to evaluate compliance with water quality benchmarks established in the CWIL to assess if preparation of a Water Quality Management Plan (WQMP) is required, and to report findings to the LARWQCB as specified in the Monitoring and Reporting Plan (MRP). This AMR describes the monitoring efforts and results that have been undertaken by the NGA for compliance with the CWIL.

## **2.0 BACKGROUND**

There are a total of 202 nurseries that are currently associated with the LAILG (Figure 1). A complete list of group members is included in Appendix A. After communications with the LARWQCB on September 9, 2006, it was established that 16 sites would be representative sample sites for the LAILG based on their potential impacts to the surface waters of the Los Angeles Region (Table 1). These sample sites were chosen based on their potential runoff characteristics, location, the amount of pesticide and fertilizer use reported by the members, and on the type of crop grown at each site. To the extent possible, sample sites were chosen to be representative of the group as a whole, based on various crop types, watering practices, fertilizer and pesticide use, best management practices, and site locations. Sites were also chosen based on ease of sampling access.

Crop types for the LAILG were placed into six basic categories: general ornamentals, tree farms, color plants, greenhouses, sod farms, vineyards, and row crops. All visited sites had their foliage planted in pots or trays, with the exception of the sod farm. In order to minimize water use, the majority of the nurseries utilize either a drip irrigation or hand watering system, which produces very little to no dry season runoff. Some nurseries still use a sprinkler system in addition to or in replacement of hand watering and drip irrigation. Average water use ranges from approximately 4,000 gallons per month to 5,250,000 gallons per month at selected sampling sites. Fertilizer use varies at each site, ranging from approximately 1,550 pounds per year to 72,000 pounds per year. Pesticide uses and types also vary considerably. Not all sampling locations reported water use, pesticides types and amounts, and/or fertilizer use on their Notice of Intents (NOIs). A detailed description of each of the 16 chosen sites and field monitoring results is presented in the following sections. Figure 1 presents a regional map showing sites involved in the LAILG.

## **3.0 SAMPLING EVENTS**

Both rain totals and storm intensity were monitored throughout the program in order to determine when to initiate sampling events. The MRP stated that a rain total of 0.5 inches would be used as a trigger to initiate sampling activities; however, during field monitoring events and site reconnaissance, PW determined that rainfall intensity and duration was a better indicator for the successful sampling of most sites. Storms encountered during this monitoring period were generally short and intense, not multiple day sustained storm events. While visiting sites to collect stormwater samples, often times the rain would stop for extended periods of time. Since

the majority of nurseries only had enough runoff to collect a sample if it was still raining at the site at the time of sample collection, waiting at sites for rain to recommence was a common occurrence. Sustained runoff at the sample sites was generally not encountered after the storm had passed.

In addition, storms encountered during this reporting period tended to take place during evening hours. Although PW initially stated that sampling events would only take place during daytime hours, it was determined that evening sampling would be necessary to comply with the requirements for the conditional waiver. For safety reasons, evening crews consisted of two sampling personnel, and essentially cut the number of sampling crews in half. Traffic was also an issue during sample collection, as rain events generally cause the Los Angeles freeways and surface streets to become considerably congested with traffic.

For the above reasons, not all sites could be monitored during the same storm event, and PW initiated partial monitoring events when the storm was too short to sample all sixteen of the selected sites. Rainfall amounts, storm intensity, and storm patterns were monitored using [www.accuweather.com](http://www.accuweather.com), [www.weather.com](http://www.weather.com), [www.wunderground.com](http://www.wunderground.com), and <http://cdec.water.ca.gov/misc/RealPrecip.html>. Rainfall information from specific storm events has been kept on file at PW, and is available upon request.

Although the Quality Assurance Project Plan (QAPP) stated: *"In the wet season for each calendar year, one event will be completed between January 1 and May 15, and one event will be completed between October 15 and December 31,"* field experience has shown that splitting each rainy season into two separate sampling events will cause timing issues if all sites can not be sampled during one particular storm. For this report, the first wet season is defined as January 1 through May 15, 2007, and the second wet season is defined as October 15, 2007 through May 15, 2008. This report presents data generated during the first wet season, the first dry season, and the second wet season up to December 31, 2007. All additional data collected during the second wet season will be presented in the following years AMR.

The first wet season did not contain a storm of sufficient intensity, duration, or amount to trigger sample collection from any of the 16 sampling sites.

During the dry season, which lasted from May 16 through October 15, 2007, samples were collected at 6 of the 16 sampling sites. The remaining 10 sites did not have sufficient runoff for sampling purposes. Two sites were also sampled twice, for a total of 8 samples collected throughout the dry season (Table 2). Various combinations of nurseries were visited on August 6, August 8, August 9, August 13, August 21, September 24, September 25, September 26, and September 28, 2007. All sites were visited at least two times during irrigation practices, to the extent practical. The majority of nurseries utilized a drip or hand watering irrigation system, and not enough water was used to generate runoff from the property. Photographs were taken at each site, and are supplied on the labeled CD ROM that accompanies this report.



The sampling event for the second wet season (October 15, 2007 through May 15, 2008) is still underway. From the period of October 15 through December 31, 2007, samples were collected from 11 of the 16 sampling sites, over a period of three rain events. Samples were collected from one site on November 30, 2007, five sites on December 7, 2007, and five sites on December 18, 2007. Efforts were made to collect as many samples as possible from each storm event; however, storm duration, timing, and traffic conditions did not allow for sample collection at all sites during any single rain event.

#### 4.0 SUMMARY OF RESULTS

Samples were collected and analyzed as presented in the MRP and QAPP. Table 3 presents the list of constituents analyzed during this reporting period, and the general subdivisions that are ascribed to them for this report. Chronic toxicity testing was conducted for three test species: *Pimephales promelas* (Fathead Minnow), *Ceriodaphnia* (water flea), and *Selenastrum capricornutum* (green algae). Subsequent toxicity and Toxicity Identification Evaluation (TIE) testing was conducted on the most sensitive test species. Samples were submitted to CRG Marine Laboratories, Inc. (CRG) and Aquatic Bioassay and Consulting Laboratories, Inc. (ABC), both state-certified laboratories. All analysis were conducted in accordance with current United States Environmental Protection Agency guideline procedures, or as specified in this monitoring program. Complete laboratory analytical results from CRG are included as Appendix B. Complete toxicity results from ABC are included as Appendix C.

#### 4.1 GENERAL CHEMISTRY

General Chemistry water quality objectives for each site were obtained from the *Water Quality Control Plan, Los Angeles Region*, dated June 13, 1994. To choose the most appropriate water quality objectives for each site, all sites were assumed to drain through storm drains that ran perpendicularly to the closest blue line stream. The most relevant stream reach and related water quality objectives were chosen for each site using this assumption. Table 4 outlines the site specific water quality objectives and associated sampling sites used to evaluate general chemistry results for this report. Complete laboratory analytical results for general chemistry constituents are presented in Table 5.

Based on laboratory analytical results, general chemistry water quality benchmarks were exceeded in 15 of the 19 samples collected during this reporting period, at eight of the 11 sites sampled. Concentrations exceeding CWIL benchmarks were: ammonia in one sample; chloride in three samples collected from three sampling sites; nitrate in 12 samples collected from seven sampling sites; sulfate in one sample; and total dissolved solids (TDS) in 13 samples collected from seven sampling sites. Exceedances were seen in approximately the same percentages of samples collected during the dry season as samples collected during the wet season.

## 4.2 PESTICIDES

Pesticide water quality objectives were taken directly from the CWIL, as stated on the MRP and QAPP. Based on laboratory analytical results, pesticide benchmarks were exceeded in 11 of the 19 samples collected during this reporting period, at eight of the 11 sampling sites. Complete laboratory analytical results for pesticides are presented in Tables 6-8.

Concentrations of chlorinated pesticides exceeding CWIL benchmarks were: Aldrin in one sample; 4,4'-DDD in six samples collected from four sampling sites; 4,4'-DDE in seven samples (one estimated concentration) collected from five sampling sites; 4,4'-DDT in six samples collected from four sampling sites; and total Chlordane in five samples (two estimated concentrations) collected from four sampling sites. Exceedances were seen in approximately the same percentage of samples collected during the dry season as samples collected during the wet season.

CWIL regulated compounds BHC-alpha, BHC-beta, BHC-gamma, Dieldrin, Endosulfan, Endrin, Heptachlor, Heptachlor Epoxide, and Toxaphene were not detected above laboratory MDLs in samples collected this reporting period. Additional chlorinated pesticides not regulated by the CWIL that were detected in sampling events were: 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, and dicofol. Detailed information on site specific sampling results is presented in Section 5.

Concentrations of organophosphorus pesticides exceeding CWIL benchmarks were: chlorpyrifos and diazinon in one sample, collected from the same sampling site. Additional organophosphorus pesticides not regulated by the CWIL that were detected in sampling events were: Dichlorvos and Malathion. Detailed information on site specific sampling results is presented in Section 5.

Water quality benchmarks for pyrethroid pesticides were not established by the CWIL. Pyrethroid pesticides detected during sampling events were: Bifenthrin, Cyfluthrin, Cypermethrin, Danitol, Deltamethrin, Fluvalinate, L-Cyhalothrin, Permethrin, and Prallethrin.

## 4.3 TOXICITY

Statistically significant toxicity water quality objectives were determined as outlined in the MRP and QAPP, and through communications with ABC laboratory. Chronic toxicity testing was conducted for *Pimephales promelas* (Fathead Minnow), *Ceriodaphnia* (water flea), and *Selenastrum capricornutum* (green algae). Based on laboratory analytical results, statistically significant toxicity of at least one of the three test species were reported in nine of the 17 samples collected during this reporting period, at eight of the 11 sampling sites. Toxicity trigger exceedance reports were submitted to the LARWQCB on September 5, 2007 and January 28, 2008. Complete toxicity results for are presented in Table 9.

During the dry season, statistically significant toxicity exceedances were reported for Ceriodaphnia survival and reproduction and Selenastrum growth at two sampling sites, and for Selenastrum growth at one sampling site. Follow up TIE testing was attempted at all three sites, however, there was only enough runoff water to conduct follow up sampling at one of the three sites. The other two sites were visited multiple times in an attempt to conduct follow up TIE testing. Baseline TIE testing on the follow up sample that was collected did not exhibit toxicity.

Toxicity sampling for the second wet season from October 15 through May 15 is still underway. From the period of October 15 through December 31, 2007, statistically significant toxicity was reported for: all three species at one sampling site, for Ceriodaphnia survival and reproduction and Selenastrum growth at two sampling sites, for Ceriodaphnia survival and reproduction and Pimephales survival and growth at one sampling sites, for Ceriodaphnia survival and reproduction at one site, and for Selenastrum growth at one site. As of December 31, 2007, follow up TIE testing was still being conducted. Results of TIE testing will be included in the next AMR.

Based on field experience, PW believes that the current protocol for toxicity testing, as stated in the QAPP, should be revised. The QAPP states: *"If chronic toxicity in runoff water is found to exceed 1.0 TUc, additional toxicity testing will be implemented for the following two months. If the toxicity persists during the additional two-month sampling period, a TIE will be performed to determine the constituent causing the toxicity."* Due to the irregular runoff patterns observed both during irrigation and storm events, PW believes an adequate sample volume should be collected for each toxicity test to allow for a TIE to be run on the same sample that the toxicity exceedance was reported in. This will alleviate the problem of not being able to collect follow up toxicity samples due to a lack of discernable runoff. Following LARWQCB review of this report, PW will submit an amended QAPP with all proposed modifications.

Generally, Ceriodaphnia appears to be the most susceptible species, as 0% survival was seen in five of the samples collected during this reporting period. Beginning during the second dry sampling event, only the most susceptible species from each site will be sampled for toxicity. If toxicity is not seen at a site prior to this sampling event, the Ceriodaphnia will be utilized.

#### **4.4 FIELD MONITORING RESULTS**

Based on objectives outlined in the *Water Quality Control Plan, Los Angeles Region*, dated June 13, 1994, field monitoring readings did not exceed basin plan objectives. Although elevated and depressed readings of pH, and elevated readings of turbidity were seen at some sample sites, the low flow off of these sites would be unlikely to have any effect on the quality of the eventual receiving waterbody for these sites. Complete results for field measurements are presented in Table 10. Hard copies of field data sheets and field reports are kept on file at PW, and are available upon request.

## 5.0 SAMPLING SITES

Site-specific information and water quality objective exceedances are presented below.

### 5.1 ABC NURSERY – NGA SITE #4

Crop Type: General Ornamental  
Sub basin: Dominguez Channel  
City: Gardena  
Irrigated Acres: 19.2 Acres  
Irrigation: Drip, hand watering  
Approximate Water Use: 440,000 gallons per month  
Pesticides/amount: Malathion, Orthene, Subdue Maxx, Enstar II, Dursban 50, Tame,  
unknown quantities  
Fertilizers/amount: 14-6-5 / 1,550 lb per year  
Discharge: Stormwater only  
Approximate sample site GPS location: N 33° 52' 55.5" W 118° 16' 06.1"

An aerial photo of the site with sampling locations is presented on Figure 2 (Google Earth™ mapping services).

**Dry season sampling:** No samples were collected, as there was no runoff from the property.

**Wet season sampling:** A sample was collected on December 7, 2007.

General Chemistry Exceedances: None.

Pesticide Exceedances: Detected concentrations of chlorpyrifos and diazinon exceeded CWIL benchmarks in the December 7, 2007 sampling event (Table 7).

Toxicity Exceedances: Statistically significant toxicity was reported for Ceriodaphnia, Fathead Minnow, and Selenastrum in the sample collected on December 7, 2007 (Table 9). Follow up TIE testing was conducted in January and will be included in the next AMR.

## 5.2 ACOSTA GROWERS – NGA SITE #13

Crop Type: General Ornamental  
Sub basin: San Gabriel River  
City: Hacienda Heights  
Irrigated Acres: 4.5 Acres  
Irrigation: Hand watering  
Approximate Water Use: 240,000 gallons per month  
Pesticides/amount: None used  
Fertilizers/amount: 21-5-6 / 5,000 lb per year; 13-5-8 / 2,000 lb per year  
Discharge: Stormwater only  
Approximate sample site GPS location: N 33° 59' 50.9" W 117° 56' 56.9"

An aerial photo of the site with sampling locations is presented on Figure 3 (Google Earth<sup>tm</sup> mapping services).

**Dry season sampling:** No samples were collected, as there was no runoff from the property.

**Wet season sampling:** A sample was collected on December 18, 2007.

General Chemistry Exceedances: None.

Pesticide Exceedances: Detected concentrations of DDE and total chlordane exceeded CWIL benchmarks in the December 18, 2007 sampling event (Table 6).

Toxicity Exceedances: Statistically significant toxicity was seen for Ceriodaphnia and Fathead Minnow in the sample collected on December 18, 2007 (Table 9). Follow up TIE testing is still being conducted, and results will be included in the next AMR.

## 5.3 BOETHING TREELAND FARMS – NGA SITE #19

Crop Type: Trees, General Ornamental  
Sub basin: Los Angeles River  
City: Woodland Hills  
Irrigated Acres: 32.04 Acres  
Irrigation: Sprinkler, hose, and trickle  
Approximate Water Use: 1,720,00 gallons per month  
Pesticides/amount: Subdue Maxx, Marathon II, Alette, Chipco 26G, Glyphosate / unknown quantities  
Fertilizers/amount: Slow release 23-6-12 / unknown quantity  
Discharge: Irrigation and stormwater  
Approximate sample site GPS location: N 34° 09' 51.1" W 118° 38' 2.07"

An aerial photo of the site with sampling locations is presented on Figure 4 (Google Earth™ mapping services).

**Dry season sampling:** A sample was collected on August 13, 2007. The site was visited multiple times to collect a second dry season sample, but no runoff was encountered.

**Wet season sampling:** A sample was collected on December 18, 2007.

**General Chemistry Exceedances:** Detected concentrations of nitrate and TDS exceeded municipal drinking water standards, as set forth in the Los Angeles Region basin plan, in the August 13 and December 18, 2007 sampling event (Table 5).

**Pesticide Exceedances:** Estimated concentrations of total chlordane exceeded CWIL benchmarks in the December 18, 2007 sampling event (Table 6).

**Toxicity Exceedances:** Statistically significant toxicity was seen for Ceriodaphnia in the sample collected on December 18, 2007 (Table 9). Follow up TIE testing was conducted in January and will be included in the next AMR.

#### 5.4 CARLOS SOTO, JR. – NGA SITE #25

Crop Type: General Ornamental

Sub basin: Dominguez Channel

City: Gardena

Irrigated Acres: 3.5 Acres

Irrigation: Sprinkler, hand watering

Approximate Water Use: 4,000 gallons per month

Pesticides/amount: Malathion / 2 teaspoons (tsp) per gallon, Banner Maxx / 4 ounces (oz) per 50 gallon, Daconil / 3 tsp per gallon, Orthene / 2 tsp per gallon, Round Up / 2 oz per gallon, Kocide 2000 T/N/O / 0.5 tsp per gallon

Fertilizers/amount: 20-9-9 / 2,000 lb per year

Discharge: Stormwater only

Approximate sample site GPS location: N 33° 53' 6" W 118° 17' 6"

An aerial photo of the site with anticipated sampling locations is presented on Figure 5 (Google Earth™ mapping services).

**Dry season sampling:** No samples were collected, as there was no runoff from the property.

**Wet season sampling:** No samples were collected, as there was no runoff from the property.

### 5.5 COINER NURSERY – NGA SITE #31

Crop Type: General Ornamental  
Sub basin: San Gabriel River  
City: La Puente  
Irrigated Acres: 62 Acres  
Irrigation: Drip, sprinkler, hand watering  
Approximate Water Use: 13,000 gallons per month / summer  
Pesticides/amount: Orthene, Glyphosate, Marathon III, Daconil, Banner Maxx / unknown quantities  
Fertilizers/amount: 15-15-15 / 16,000 lb per year  
Discharge: Stormwater and Irrigation  
Approximate sample site GPS location: N 33° 3' 0" W 118° 0' 14.4"

An aerial photo of the site with anticipated sampling locations is presented on Figure 6 (Google Earth™ mapping services).

**Best Management Practices:** Catch basins are in place to collect excess run off from the property.

**Dry season sampling:** No samples were collected, as there was no run off from the property.

**Wet season sampling:** No samples were collected, as there was no runoff from the property. The catch basins constructed on site appear to be able to handle runoff generated from the property during rain events.

### 5.6 G. HERNANDEZ - NEW WESTGROWERS – NGA SITE #53

Crop Type: General Ornamental  
Sub basin: Los Angeles River  
City: Compton  
Irrigated Acres: 3.5 Acres  
Irrigation: Unknown  
Approximate Water Use: 10,000 gallons per month  
Pesticides/amount: None  
Fertilizers/amount: 20-5-5 / 2,000 lb per year  
Discharge: Stormwater only  
Approximate sample site GPS location: N 33° 52' 51.1" W 118° 12' 56.3"

An aerial photo of the site with sampling locations is presented on Figure 7 (Google Earth™ mapping services).

**Dry season sampling:** No samples were collected, as there was no runoff from the property.

**Wet season sampling:** A sample was collected on December 18, 2007.

General Chemistry Exceedances: None.  
Pesticide Exceedances: None.

Toxicity Exceedances: None.

### **5.7 H&H NURSERY OF LAKEWOOD – NGA SITE #64**

Crop Type: General Ornamental  
Sub basin: San Gabriel River  
City: Lakewood  
Irrigated Acres: 5 Acres  
Irrigation: Hand watering  
Approximate Water Use: 14,700 gallons per month  
Pesticides/amount: Horticultural Oil, Banner, Dithane, Round-up / unknown quantities  
Fertilizers/amount: 8-3-2 / 8,700 lb per year  
Discharge: Stormwater only  
Approximate sample site GPS location: N 33° 52' 05.9" W 118° 08' 32.3"

An aerial photo of the site with sampling locations is presented on Figure 8 (Google Earth™ mapping services).

**Dry season sampling:** No samples were collected, as there was no runoff from the property.

**Wet season sampling:** No samples were collected, due to site access issues. Site access has been resolved, and samples were successfully collected in January. Results from the January sampling event will be included in the next AMR.



### 5.8 M. DOWNARD – RAINBOW GARDEN NURSERY – NGA SITE #109

Crop Type: General Ornamental / Color plants  
Sub basin: San Gabriel River  
City: Glendora  
Irrigated Acres: 7 Acres  
Irrigation: Drip, hand watering  
Approximate Water Use: Unknown  
Pesticides/amount: Monteroy Softicide, Monteroy Neem, Ortho Malathion, Monteroy  
Wormender, Bt, Horticultural Oil / unknown quantites  
Fertilizers/amount: 25-5-5 / 5,000 lb per year  
Discharge: Stormwater only  
Approximate sample site GPS location: N 34° 07' 4.8" W 117° 52' 22.8"

An aerial photo of the site with sampling locations is presented on Figure 9.

**Dry season sampling:** No samples were collected, as there was no runoff from the property.

**Wet season sampling:** No samples were collected, as there was no runoff from the property. Samples were successfully collected in January. Results from the January sampling event will be included in the next annual monitoring report.

### 5.9 NORMAN'S NURSERY – BROADWAY SOUTH – NGA SITE #124

Crop Type: General Ornamental  
Sub basin: Los Angeles River  
City: San Gabriel  
Irrigated Acres: 10.4 Acres  
Irrigation: Drip, hand watering  
Approximate Water Use: 990,000 gallons per month  
Pesticides/amount: Snapshot / 300 lb per year, Glyphosate Pro II / 24 gallons per year, OH 2  
/ 600 lb per year, Marathon II / 10.2 oz per year  
Fertilizers/amount: 23-6-12 / 6,000 lb per year  
Discharge: Stormwater only  
Approximate sample site GPS location: N 34° 05' 56.9" W 118° 04' 56.0"

An aerial photo of the site with sampling locations is presented on Figure 10 (Google Earth™ mapping services).

**Dry season sampling:** A sample was collected on August 13, 2007. The site was visited multiple times to collect a second dry season sample, but no runoff was encountered.

**Wet season sampling:** A sample was collected on December 7, 2007.

**General Chemistry Exceedances:** Detected concentrations of nitrate and TDS exceeded Los Angeles River Watershed water quality objectives (Table 4), as set forth in the Los Angeles Region basin plan, in the August 13 and December 7, 2007 sampling events (Table 5).

**Pesticide Exceedances:** Detected concentrations of DDD, DDE, DDT and total chlordane exceeded CWIL benchmarks in the August 13 and December 7, 2007 sampling events (Table 6).

**Toxicity Exceedances:** Statistically significant toxicity was seen for Ceriodaphnia and Selenastrum in the sample collected on December 7, 2007 (Table 9). Follow up TIE testing was conducted in January and will be included in the next AMR.

#### **5.10 NORMANS NURSERY – ROSEMEAD – NGA SITE #130**

Crop Type: Trees / General Ornamental

Sub basin: Los Angeles River

City: South El Monte

Irrigated Acres: 16.56 Acres

Irrigation: Drip, hand watering

Approximate Water Use: 2,450,000 gallons per month

Pesticides/amount: Snapshot / 1,800 lb per year, Glyphosate Pro II / 96 gallons per year,  
Award 100 / 102 lb per year, Marathon II / 20.4 oz per year

Fertilizers/amount: 23-6-12 / 34,000 lb per year

Discharge: Irrigation and stormwater

Approximate sample site GPS location: N 34° 01' 59.3" W 118° 03' 54.8"

An aerial photo of the site with sampling locations is presented on Figure 11 (Google Earth™ mapping services).

**Dry season sampling:** A sample was collected on August 6, 2007. The site was visited multiple times to collect a second dry season sample, but no runoff was encountered.

**Wet season sampling:** A sample was collected on December 7, 2007.

**General Chemistry Exceedances:** Detected concentrations of nitrate and TDS exceeded Los Angeles River Watershed water quality objectives (Table 4), as set forth in the Los Angeles Region basin plan, in the August 6, 2007 sampling event (Table 5). Detected concentrations of chloride, nitrate, and TDS exceeded Los Angeles River Watershed water quality objectives in the December 7, 2007 sampling event.

**Pesticide Exceedances:** Detected concentrations of DDD, DDE, and DDT exceeded CWIL benchmarks in the August 6, 2007 sampling event (Table 6).

Toxicity Exceedances: Statistically significant toxicity was seen for Selenastrum in the sample collected on August 6, 2007 (Table 9). Follow up TIE testing during the dry season was not conducted, as additional runoff was not encountered during subsequent site visits.

#### 5.11 R. WILSON – COLORAMA – NGA SITE #150

Crop Type: Color plants  
Sub basin: San Gabriel River  
City: Azusa  
Irrigated Acres: 26 Acres  
Irrigation: Drip, ebb and flow, hand watering  
Approximate Water Use: Unknown  
Pesticides/amount: B9 / 18,848 oz per year, A-rest / 9,074 oz per year, Aliette / 4,859 oz per year, Bonzi / 4,051 oz per year, Cleary WP / 3,292 oz per year  
Fertilizers/amount: 8.4-2.7-4.2 / 15,154 lb per year  
Discharge: Stormwater only  
Approximate sample site GPS location: N 34° 08'27.3" W 117° 55' 33.8"

An aerial photo of the site with sampling locations is presented on Figure 12 (Google Earth™ mapping services).

**Best Management Practices:** The majority of the site drains to the center, and a sump pump is installed that pumps water to a collection pond. The water from this pond is treated through a filtration and ozone system, and the water is reused on-site. Only a small amount of the property drains off the site.

**Dry season sampling:** A sample was collected on September 25, 2007. The site was visited multiple times to collect a second dry season sample, but runoff was not encountered.

**Wet season sampling:** A sample was collected on December 7, 2007.

**General Chemistry Exceedances:** Detected concentrations of ammonia, nitrate and TDS exceeded San Gabriel River Watershed water quality objectives (Table 4), as set forth in the Los Angeles Region basin plan, in the September 25, 2007 sampling event (Table 5). Detected concentrations of nitrate and TDS exceeded San Gabriel River Watershed water quality objectives in the December 7, 2007 sampling event.

**Pesticide Exceedances:** Detected concentrations of aldrin exceeded CWIL benchmarks in the December 7, 2007 sampling event (Table 6).

**Toxicity Exceedances:** Statistically significant toxicity was reported for Selenastrum in samples collected on September 25 and December 7, 2007, and Ceriodaphnia in the sample collected on

September 25, 2007 (Table 9). Follow up TIE testing is still being conducted, and results will be included in the next AMR.

#### 5.12 SY NURSERY, INC. – NGA SITE #168

Crop Type: General Ornamental  
Sub basin: San Gabriel River  
City: Cerritos  
Irrigated Acres: 4.75 Acres  
Irrigation: Drip, sprinklers  
Approximate Water Use: Unknown  
Pesticides/amount: Talstar Granular, Subdue, Malathion 8E, PT Ultra Fine Oil, Pennant, Reward / unknown quantities  
Fertilizers/amount: 21-7-6 / 6,000 lb per year  
Discharge: Stormwater and Irrigation  
Approximate sample site GPS location: N 33° 51' 3.2" W 118° 4' 55.2"

An aerial photo of the site with sampling locations is presented on Figure 13 (Google Earth™ mapping services).

**Dry season sampling:** A sample was collected on August 13 and September 28, 2007.

**Wet season sampling:** A sample was collected on November 30, 2007.

**General Chemistry Exceedances:** Detected concentrations of TDS exceeded municipal drinking water standards (Table 4), as set forth in the Los Angeles Region basin plan, in the August 13, September 28, and November 30, 2007 sampling events (Table 5). Detected concentrations of nitrate exceeded municipal drinking water standards in the November 30, 2007 sampling event.

**Pesticide Exceedances:** Detected concentrations of DDD and DDT exceeded CWIL benchmarks in the September 28, 2007 sampling event. Estimated concentrations of DDE and total chlordane exceeded CWIL benchmarks in the November 30, 2007 sampling event (Table 6).

**Toxicity Exceedances:** Statistically significant toxicity was reported for Ceriodaphnia and Selenastrum in the sample collected on August 13, 2007 (Table 9). Baseline TIE testing conducted on September 28 did not exhibit acute toxicity for Ceriodaphnia.

### 5.13 TY NURSERY – YARD #6 – NGA SITE #176

Crop Type: General Ornamental  
Sub basin: Santa Monica Bay  
City: Redondo Beach  
Irrigated Acres: 2 Acres  
Irrigation: Drip, sprinkler  
Approximate Water Use: 255,000 gallons per month  
Pesticides/amount: Marathon, Orthene, Subdue, Round Up, Dacontl / unknown quantities  
Fertilizers/amount: Unknown  
Discharge: Stormwater only  
Approximate sample site GPS location: N 33° 51' 24.4" W 118° 22' 51.6"

An aerial photo of the site with sampling locations is presented on Figure 14 (Google Earth™ mapping services).

**Best Management Practices:** Catch basins are in place to collect excess run off from the property, and the boundary of the property is lined with sand bags and control measures to alleviate runoff of water and soil.

**Dry season sampling:** No samples were collected, as there was no runoff from the property.

**Wet season sampling:** A sample was collected on December 18, 2007.

**General Chemistry Exceedances:** Detected concentrations of TDS exceeded municipal drinking water standards, as set forth in the Los Angeles Region basin plan (Table 4), in the December 18, 2007 sampling event (Table 5).

**Pesticide Exceedances:** None.

**Toxicity Exceedances:** None.

#### 5.14 VALLEY CREST TREE COMPANY – NGA SITE #182

Crop Type: Trees  
Sub basin: Los Angeles River  
City: Sylmar  
Irrigated Acres: 16 Acres  
Irrigation: Drip, hand watering  
Approximate Water Use: Unknown  
Pesticides/amount: Discuss / <2 gallons per year, Avid / 1-64 oz per year, Banner Maxx / 1 gallon per year, Dalonil Weather Stik / <2 gallons per year, Mavrik / < 1 gallon per year  
Fertilizers/amount: 20-9-9 / 10,000 lb per year, 38-0-0 / 2,000 lb per year, 0-45-0 / 2,000 lb per year  
Discharge: Stormwater only  
Approximate sample site GPS location: N 34° 18' 56.3" W 118° 28' 49.8"

An aerial photo of the site with sampling locations is presented on Figure 15 (Google Earth<sup>™</sup> mapping services).

**Dry season sampling:** No samples were collected, as there was no runoff from the property.

**Wet season sampling:** A sample was collected on December 7, 2007.

General Chemistry Exceedances: Detected concentrations of chloride, nitrate, sulfate, and TDS exceeded Los Angeles River Watershed water quality objectives (Table 4), as set forth in the Los Angeles Region basin plan, in the December 7, 2007 sampling event (Table 5).

Pesticide Exceedances: None.

Toxicity Exceedances: Statistically significant toxicity was seen for Ceriodaphnia and Selenastrum in the sample collected on December 7, 2007 (Table 9). Follow up TIE testing was conducted in January and will be included in the next AMR.

### 5.15 VALLEY SOD FARMS – NGA SITE #183

Crop Type: Sod farm  
Sub basin: Los Angeles River  
City: Encino  
Size: 60 Acres  
Irrigation: Sprinkler  
Approximate Water Use: 5,250,000 gallons per month  
Pesticides/amount: Tuppensan / 600 lb per year, Turflon / 3,840 oz per year, Sempra / 80 oz per year, Dithane / 41,600 oz per year  
Fertilizers/amount: 21-7-14 / 72,000 lb per year  
Discharge: Irrigation and stormwater  
Approximate sample site GPS location: N 34° 18' 56.3" W 118° 28' 49.8"

An aerial photo of the site with sampling locations is presented on Figure 1 (Google Earth™ mapping services).

**Dry season sampling:** A sample was collected on August 6 and September 26, 2007.

**Wet season sampling:** A sample was collected on December 18, 2007.

**General Chemistry Exceedances:** Detected concentrations of chloride exceeded Los Angeles River Watershed water quality objectives (Table 4), as set forth in the Los Angeles Region basin plan, in the August 6, 2007 sampling event (Table 5). Detected concentrations of nitrate exceeded Los Angeles River Watershed water quality objectives in the September 26 and December 18, 2007 sampling event.

**Pesticide Exceedances:** Detected concentrations of DDD, DDE, and DDT exceeded CWIL benchmarks in the September 26 and December 18, 2007 sampling event (Table 6).

**Toxicity Exceedances:** None.

## 5.16 WEST COVINA WHOLESALE – DAMIEN – NGA SITE #189

Crop Type: General Ornamental  
Sub basin: San Gabriel River  
City: La Verne  
Size: 1.5 Acres  
Irrigation: Drip  
Approximate Water Use: 160,000 gallons per month  
Pesticides/amount: Unknown  
Fertilizers/amount: 21-5-12 / 2,000 lb per year  
Discharge: Irrigation and stormwater  
Approximate sample site GPS location: N 34° 06' 59.1" W 117° 47' 03.9"

An aerial photo of the site with sampling locations is presented on Figure 17 (Google Earth™ mapping services).

**Dry season sampling:** No samples were collected, as there was no runoff from the property.

**Wet season sampling:** No samples were collected, as there was no runoff from the property. Samples were successfully collected in January. Results from the January sampling event will be included in the next annual monitoring report.

## 6.0 QUALITY ASSURANCE

Quality assurance and quality control for the project was implemented as outlined in the QAPP submitted to LARWQCB on January 31, 2007. Throughout this reporting period, a total of 60 out of 1554 tested analytes had data qualifiers, for an overall, unqualified completeness of 96.1 percent. Of the 60 analytes that were qualified, 30 of them were evaluated as estimated, for an overall percentage of complete un-estimated data at 98.1 percent. Variations for each sample and analyte are footnoted on Tables 5 through 8. The following discusses Quality Assurance (QA) findings in detail.

### 6.1 SAMPLE HANDLING

During the dry season, and the beginning of the first wet season sampling event, there was a general discontinuity of the exact nomenclature for sample labels. This did not cause any samples to be mixed up or mislabeled, and all samples were properly submitted and tracked. However, for clarity of naming procedures, master copies of labels and partially completed chain of custody (COC) forms are now available at the office, and labels are checked prior to mobilization for sampling events.



PW personnel transported all samples, in a cooler chilled with ice, to ABC and CRG laboratories within the acceptable holding times. Laboratory personnel signed the COC upon delivery, and copies were made for PW to be kept on file at the office. All samples collected this reporting period were delivered within appropriate holding times.

## **6.2 FIELD QUALITY CONTROL**

### **6.2.1 Equipment Blanks**

Equipment blanks were collected on August 21, September 26, and December 7, 2007. Laboratory analytical results reported non detect concentrations for all analytes analyzed, with the exception of TDS and sulfate in samples collected on September 26 and December 7, 2007, respectively. Concentrations of TDS and sulfate were minimal in comparison to detected results in samples collected the same sampling event (less than 10 percent), and did not warrant estimating any data or modifying equipment use. For future sampling events, PW suggests that laboratory analytical data be qualified as estimated if associated equipment blank results are greater than 10 percent of the detected concentration. Laboratory analytical results for detected concentrations in equipment blanks are presented on Table 11.

### **6.2.2 Field Blanks**

Field blanks were collected on August 21, September 28, and December 18, 2007. Laboratory analytical results reported non detect concentrations for all analytes analyzed, with the exception of estimated concentrations of ammonia and nitrate, and concentrations of TDS in samples collected on August 21 and December 18, respectively. Concentrations of TDS were minimal in comparison to detected results in samples collected the same sampling event (less than 10 percent), and did not warrant estimating any data or modifying equipment use. Estimated concentrations of ammonia and nitrate were only at or just above the laboratory Method Detection Limits (MDL). For future sampling events, PW suggests that laboratory analytical data be qualified as estimated if associated field blank results are greater than 10 percent of the detected concentration. Laboratory analytical results for detected concentrations in field blanks are presented on Table 11.

### **6.2.3 Field Duplicates**

Field duplicates were collected on September 26, and December 7, 2007. A field duplicate was inadvertently not collected during the first dry season sampling event, as there were less sites with irrigation runoff than anticipated. This procedural error has been corrected, and field duplicates are now collected at the first applicable site during every sampling event. Laboratory analytical results for the duplicate collected on September 26, 2007 reported concentrations outside the acceptance limit of 25 percent relative percent difference (RPD) for general water quality constituents and chlorinated pesticides. The data for 14 of the 74 analytes on this sample have been appropriately flagged as estimated on all tables. All laboratory analytical results for

the duplicate collected on December 7, 2007 were within the acceptance limits. If continued duplicate testing shows results outside of acceptance limits, sampling protocol will be adjusted accordingly. Laboratory analytical results for detected concentrations in field duplicates are presented on Tables 5-8.

### **6.3 LABORATORY QUALITY CONTROL**

#### **6.3.1 Procedural Blanks**

Procedural blanks were prepared and analyzed by CRG on a minimum frequency of one per batch. Procedural blank samples were analyzed for all analytes of interest. There was one detected concentration of sulfate in a procedural blank run on December 7, 2007, at 1.09 milligrams per liter. This value corresponded to less than 5% of detected results in samples run in the same batch as the procedural blank. Due to the relatively low detected concentration in the procedural blank, associated data was not qualified as estimated. However, the data is footnoted on Table 5.

#### **6.3.2 Accuracy**

Accuracy of data was indicated by analysis of matrix spikes, surrogate spikes, reference materials, and control materials on a minimum frequency of one per batch. Matrix spikes were performed for all analytes on the procedural blanks and for general chemistry constituents on field samples. Due to a miscommunication with CRG, matrix spikes were not performed for any of the pesticides during this reporting period. This issue has been addressed, and the appropriate sample volume (typically 2 to 3 times the standard volume) will be collected to run matrix spikes for pesticides on select samples. PW will randomly select and collect sufficient sample volume to run matrix spikes and matrix spike duplicates for two sites during each of the two seasonal sampling events in the future (four per year).

Data accuracy for this reporting period was high, with only 9 out of 1554 analytes qualified, and only two values considered estimated, for an accuracy of greater than 99.5%. Variations from data accuracy acceptance ranges are footnoted on Tables 5 through 8. Seven of the nine total qualifications were related to laboratory procedural blank matrix spikes being out of acceptance range. These results were footnoted, although reported results for these analytes were considered valid. Two detected concentrations were labeled as estimated for sulfate, as the corresponding matrix spike was out of range. Three of the nine qualifiers occurred on analytes that had concentrations above MDLs.

#### **6.3.3 Precision**

Precision of data was indicated by analysis of duplicate matrix spikes, duplicate blank spikes, and/or duplicate test sample analysis on a minimum frequency of one per batch. Matrix spike duplicates were performed for all analytes on the procedural blanks and for general chemistry

constituents on field samples. Due to a miscommunication with CRG, matrix spikes duplicates were not performed for any of the pesticides during this reporting period. This issue has been addressed, and the appropriate sample volume (typically 2 to 3 times the standard volume) will be collected to run matrix spikes duplicates for pesticides on select samples. PW will randomly select and collect sufficient sample volume to run matrix spikes and matrix spike duplicates for two sites during each of the two seasonal sampling events in the future (four per year).

Data precision for this reporting period was high, with only 20 out of 1,554 analytes qualified, and no values considered estimated, for an accuracy of greater than 98.5%. Variations from data precision acceptance ranges are footnoted on Tables 5 through 8. All 20 of the qualifications were because the RPD of laboratory procedural blank duplicate matrix spikes were out of acceptance range. These results were footnoted, although reported results for these analytes were considered valid. Two of the twenty qualifiers occurred on analytes that had concentrations above MDLs.

#### **6.4 EQUIPMENT/MATERIAL CLEANING AND CALIBRATION**

Sampling equipment and materials were decontaminated prior to use, between all sampling sites, and after use for all sampling events. Results from field and equipment blanks submitted to CRG indicate that decontamination procedures, as currently in place, are not causing cross contamination between sampling sites or from sampling equipment.

Field monitoring equipment was cleaned and calibrated prior to each monitoring event. Equipment was not recalibrated if the previous sampling team did not utilize it during dry season sampling. The dissolved oxygen and temperature probes could only be factory calibrated, and thus were not calibrated before each sampling event. Calibration logs for field monitoring equipment is presented on Table 12.

Calibration frequencies and procedures for laboratory analytical equipment was performed by ABC and CRG, as outlined in the QA manual for each laboratory.

### **7.0 DISCUSSION / CONCLUSION**

Results from this AMR indicate that the preparation of a Water Quality Management Plan (WQMP) will be required. The WQMP will contain a more detailed discussion regarding: constituents of concern detected at the sampling sites; evaluation of the time, frequency, and possible flow direction of contaminants; evaluation of site conditions and information to determine possible sources of benchmark exceedance; and will list existing and possible best management practices to help mitigate the issue. The WQMP will be submitted to LARWQCB by June 18, 2008. Unless otherwise requested, results from sampling events and follow-up toxicity testing will be presented in the 2008 AMR.

PW is currently implementing follow-up toxicity testing at sampling sites. Beginning May 15, 2008, PW will implement toxicity testing for only the most susceptible species at each site. Generally, Ceriodaphnia appears to be the most susceptible species in the group as a whole. If toxicity is not seen at a site prior to this sampling event, Ceriodaphnia will be utilized as the most susceptible species.

The testing for matrix spikes and matrix spike duplicates will begin immediately during the next rain event.

Based on experience obtained from the first year of this program, PW recommends that a number of issues be modified in the MRP and the QAPP, including:

- Due to the irregular runoff patterns observed both during irrigation and storm events, PW believes that enough sample volume should be collected for each toxicity sample to allow for a TIE to be run immediately on any sample that toxicity is reported in. This will alleviate the problem of not being able to collect follow up toxicity samples due to a lack of discernable runoff. PW suggests that all verbiage regarding this matter be changed.
- Although the MRP stated that a rain total of 0.5 inches would be used as a trigger to initiate sampling activities, field monitoring events and site reconnaissance has indicated that rainfall intensity and duration is a better indicator for the successful sampling of most sites. The majority of nurseries only had discernable runoff if it was still raining at the site during sample collection, and sustained runoff was generally not encountered for an extended period of time after the storm had passed. For this reason, not all sites could be monitored during the same storm event, and PW initiated partial monitoring events when the storm was too short to sample all sixteen of the selected sites. PW suggests that the QAPP is updated to remove the official trigger of 0.5 inches, in order to leave a larger flexibility for sampling events.
- Although the QAPP stated: "In the wet season for each calendar year, one event will be completed between January 1 and May 15, and one event will be completed between October 15 and December 31," field experience has shown that splitting each rainy season into two separate sampling events will cause timing issues if all sites can not sampled during one particular storm. PW suggests that the verbiage in the QAPP be changed to remove this division of sampling events.
- For future sampling events, PW suggests that laboratory analytical data be qualified as estimated if associated equipment blank results are greater than 10 percent of the detected concentration.
- Project personnel will be amended.

Following LARWQCB review and response to the AMR, PW will initiate communications to formally change the aforementioned issues, and any other issues that arise, in the QAPP and the MRP.

## **8.0 LIMITATIONS**

Project limitations are presented in Appendix D.

**TABLE 1**  
**LIST OF SAMPLING SITES**  
**NURSERY GROWERS ASSOCIATION**  
**LOS ANGELES COUNTY IRRIGATED LANDS GROUP**  
**CONDITIONAL WAIVER, BOARD ORDER NO. R4-2005-0080**

OWNER/TENANT	NGA #	PROPERTY ADDRESS	CITY	CROP TYPE	RUNOFF TYPE	ACREAGE (Irrigated)	BASIN	PHONE #	CONTACT
ABC Nursery, Inc.	4	424 E. Gardena Boulevard	Gardena	O	S	19.19	Dominguez	(310) 327-9212	Eric Yonemura
Acosta Growers Inc.	13	16412 Wedgeworth Dr	Hacienda Hts	O	S	4.50	San Gabriel	(626) 334-6317	Carlos Acosta
Boething Treeland Farms, Inc.	19	23475 Long Valley Road	Woodland Hills	O	B	32.00	Los Angeles	(818) 883-1222	Bruce Pherson
Carlos Soto, Jr	25	600 W. Alondra Blvd	Gardena	O	S	3.50	Dominguez	(310) 466-0337	Carlos Soto
Coiner Nursery	31	285 San Fidel	La Puente	O	S	62.00	San Gabriel	(909) 593-1373	James Coiner
G Hernandez-New Westgrowers	53	1601 S. Santa Fe Ave	Compton	O	S	3.50	Los Angeles	(310) 669-9378	Grace Hernandez
H&H Nursery of Lakewood	64	6220 Lakewood Boulevard	Lakewood	R / O	S	2.50	San Gabriel	(562) 804-2513	Jim Scarborough
M Downard-Rainbow Garden Nursery	109/110	1132 & 1135 S Grand Avenue	Glendora	C / O	S	7.00	San Gabriel	(626) 914-6718	Mike Downard
Norman's Nsy-Broadway South	124	1550 E Broadway	San Gabriel	O	S	2.38	Los Angeles	(626) 285-9795	Nancy Webb
Norman's Nsy-Rosemead	130	475 Rosemead Blvd	S El Monte	T	S	16.56	Los Angeles	(626) 285-9795	Nancy Webb
R Wilson-Colorama Wholesale Nursery	150	1025 N. Todd Ave.	Azusa	C	S	26.00	San Gabriel	(626) 969-3585	Richard Wilson
SY Nursery Inc.	168	19900 S Pioneer Blvd	Cerritos	O	B	4.75	San Gabriel	(562) 865-8069	Patty Yasutake
T-Y Nursery-Yard #6	176	Between Paulina/Prospect	Redondo Beach	O	S	2.00	Santa Monica	(310) 370-2561	Terry Yasutake
Valley Crest Tree Company	182	16202 Yarnell St. and 16222 Filbert St	Sylmar	T	S	16.00	Los Angeles	(805) 524-3939	Brad Bowers
Valley Sod Farms, Inc.	183	6301 Balboa Boulevard	Encino	S	B	60.00	Los Angeles	(818) 892-7258	Dan Gibson
West Covina Wholesale-Damien	189	3425 Damien Ave	La Verne	O	B	1.50	San Gabriel	(909) 596-3723	Mark/Dave

Total Irrigated Acres 263.38

NGA # Number associaed with the site on Figure

- |                       |                                    |
|-----------------------|------------------------------------|
| O General Ornamental: | S Stormwater runoff                |
| C Colors              | B Stormwater and Irrigation runoff |
| T Trees               |                                    |
| G Greenhouse          |                                    |
| V Vineyard            |                                    |
| S Sod                 |                                    |
| R Retail              |                                    |

**TABLE 2**

**LIST OF COLLECTED SAMPLES - YEAR 1  
NURSERY GROWERS ASSOCIATION  
LOS ANGELES COUNTY IRRIGATED LANDS GROUP  
CONDITIONAL WAIVER, BOARD ORDER NO. R4-2005-0080**

OWNER/TENANT	NGA #	PROPERTY ADDRESS	ACREAGE (Irrigated)	Jan. 1 through May 15, 2007		May 15 through Oct 15, 2007		Oct. 15 through Dec. 31, 2007	
				Wet Season Event #1	Wet Season Event #2	Dry Season Event #1	Dry Season Event #2	Wet Season Event #1	Wet Season Event #2
ABC Nursery, Inc.	4	424 E. Gardena Boulevard, Gardena	19.19	ns	ns	ns	ns	12/7/07	JAN*
Acosta Growers Inc.	13	16412 Wedgeworth Dr, Hacienda Hights	4.50	ns	ns	ns	ns	12/18/07	ns
Boething Treeland Farms, Inc.	19	23475 Long Valley Road, Woodland Hills	32.00	ns	ns	8/13/07	ns	12/18/07	JAN*
Carlos Soto, Jr	25	600 W. Alondra Blvd, Gardena	3.50	ns	ns	ns	ns	ns	ns
Coiner Nursery	31	285 San Fidel, La Puente	62.00	ns	ns	ns	ns	ns	ns
G Hernandez-New Westgrowers	53	1601 S. Santa Fe Ave, Compton	3.50	ns	ns	ns	ns	12/18/07	JAN
H&H Nursery of Lakewood	64	6220 Lakewood Boulevard, Lakewood	2.50	ns	ns	ns	ns	JAN	ns
M Downard-Rainbow Garden Nursery	109/110	1132 & 1135 S Grand Avenue, Glendora	7.00	ns	ns	ns	ns	JAN	ns
Norman's Nsy-Broadway South	124	1550 E Broadway, San Gabriel	2.38	ns	ns	8/13/07	ns	12/7/07	JAN*
Norman's Nsy-Rosemead	130	475 Rosemead Blvd, S. El Monte	16.56	ns	ns	8/6/07	ns	12/7/07	ns
R Wilson-Colorama Wholesale Nursery	150	1025 N. Todd Avenue, Azusa	26.00	ns	ns	ns	9/25/07	12/7/07	ns
SY Nursery Inc.	168	19900 S Pioneer Blvd, Cerritos	4.75	ns	ns	8/13/07	9/28/07	11/30/07	JAN
T-Y Nursery-Yard #6	176	Between Paulina/Prospect, Redondo Beach	2.00	ns	ns	ns	ns	12/18/07	ns
Valley Crest Tree Company	182	16202 Yarnell St. and 16222 Filbert St, Sylmar	16.00	ns	ns	ns	ns	12/7/07	ns
Valley Sod Farms, Inc.	183	6301 Balboa Boulevard, Encino	60.00	ns	ns	8/6/07	9/26/07	12/18/07	JAN
West Covina Wholesale-Damien	189	3425 Damien Ave, La Verne	1.50	ns	ns	ns	ns	JAN	ns

**Total Irrigated Acres**     263.38

NGA #     Number associated with the site on Figure 1  
 JAN     Samples collected in January. Results will be presented in next years Annual Monitoring Report.  
 ns     Not sampled due to minimal rainfall and/or no runoff observed during sampling event.  
 \*     Sample collected and TIE initiated based on previous toxicity sample.

**TABLE 3**

**LIST OF CONSTITUENTS FOR TESTING  
NURSERY GROWERS ASSOCIATION  
LOS ANGELES COUNTY IRRIGATED LANDS GROUP  
CONDITIONAL WAIVER, BOARD ORDER NO. R4-2005-0080**

<b>CONSTITUENT</b>	<b>UNITS</b>	<b>SUBDIVISION</b>
Flow	varies	Field
pH	pH units	Field
Temperature	°C	Field
Dissolved Oxygen	mg/L	Field
Turbidity	NTU	Field
Electrical Conductivity	µS	Field
Total Dissolved Solids	mg/L	General Chemistry
Total Suspended Solids	mg/L	General Chemistry
Chloride	mg/L	General Chemistry
Ammonia	mg/L	General Chemistry
Nitrate-Nitrogen	mg/L	General Chemistry
Toxaphene	ng/L	Pesticide
Pyrethroids	ng/L	Pesticide
Toxicity	TUc	Toxicity
Phosphate	mg/L	General Chemistry
Sulfate	mg/L	General Chemistry
Organophosphate Suite <sup>1</sup>	ng/L	Pesticide
Organochlorines Suite <sup>2</sup>	ng/L	Pesticide

<sup>1</sup> Organophosphate Suite: Bolstar, Chlorpyrifos, Demeton, Diazinon, Dichlorvos, Dimethoate, Disulfoton, Ethoprop, Fenchlorophos, Fensulfothion, Fenthion, Malathion, Merphos, Methyl Parathion, Mevinphos, Phorate, Tetrachlorvinphos, Tokuthion, Trichloronate.

<sup>2</sup> Organochlorine Suite: 2,4' - DDD, 2,4' - DDE, 2,4' DDT, 4,4' -DDD, 4,4' -DDE, 4,4' -DDT, Aldrin, BHC-alpha, BHC-beta, BHC-delta, BHC-gamma, Chlordane-alpha, Chlordane-gamma, Dieldrin, Endosulfan sulfate, Endosulfan-I, Endosulfan-II, Endrin, Endrin Aldehyde, Endrin Ketone.

mg/l            milligrams per liter  
ng/l            nanograms per liter  
°F              degrees fahrenheit  
TUc             chronic toxic unit  
NTU            nephelitic turbidity units



**TABLE 4**  
**WATER QUALITY OBJECTIVES\***  
**GENERAL CHEMISTRY**  
**NURSERY GROWERS ASSOCIATION**  
**LOS ANGELES IRRIGATED LANDS GROUP**

Watershed/stream reach		NGA Site #	Ammonia	TDS	Sulfate	Chloride	Nitrogen
Los Angeles River							
1	Between Figueroa and Willow St.	53	a)	1,500	350	150	8
2	Above Figueroa St.	183, 19	a)	950	300	150	8
3	Rio Honda above Santa Ana Freeway	130, 125	a)	750	300	150	8
8	Pacoima Wash above Pacoima spreading grounds	182	a)	250	30	10	MUN
San Gabriel River							
1	Between Firestone Blvd. and San Gabriel River Estuary	168, 64	a)	MUN			
2	Between Ramona and Firestone Blvd.	13, 31, 189, 110	a)	750	300	150	8
3	Between Morris Dam and Ramona Blvd.	150	a)	450	100	100	8
Dominguez Channel		4, 25	a)	MUN			
Santa Monica Bay (Ballona)		176	a)	MUN			
USEPA Municipal Drinking Water Standards			a)	500	250	400	10

\* All limits are recorded for milligrams per liter (mg/L)

a) Limit varies as a factor of temperature and pH. Objectives based on corresponding field readings for WARM water (One-hour average concentration), as outlined in the Water Quality Control Plan, Los Angeles Region.

MUN No site specific objectives have been established. Objectives are based on USEPA guidelines for municipal drinking water standards.

**TABLE 5**  
**SUMMARY OF SAMPLES COLLECTED - YEAR 1**  
**GENERAL CHEMISTRY**  
**NURSERY GROWERS ASSOCIATION**  
**LOS ANGELES IRRIGATED LANDS GROUP**

Site	Sample #	Date	General Chemistry									
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS
NGA #130	NGA-#130-LAILG-1	8/6/07	2.5	58.34	2.2457	<b>50.44</b>	43.04	2.29	<b>1,170</b>	2.05	2.305	6.3
NGA #183	NGA-#183-LAILG-1	8/6/07	0.04 <sup>J</sup>	<b>209.97</b>	0.2336	0.13	177.83	0.23	223	0.23	0.264	11
NGA #19	NGA-#19-LAILG-1	8/13/07	1	108.57	2.2882	<b>10.84</b>	118.85	2.68	<b>772</b>	4.62	5.09	568
NGA #124	NGA-#124-LAILG-1	8/13/07	9.8	69.23	3.5006	<b>72.48</b>	206.25	4.31	<b>1,002</b>	3.96	4.627	99.5
NGA #168	NGA-#168-LAILG-1	8/13/07	0.4	81.85	1.977	4.93	131.16	2.28	<b>664</b>	2.13	3.243	122
NGA BLANK	NGA LAILG-BLANK-1	8/13/07	0.04 <sup>J</sup>	nd	nd	nd	nd	nd	32	nd	nd	nd
NGA FB LI	NGA-LAILG-FB LI	8/21/07	0.01 <sup>J</sup>	nd	nd	0.016 <sup>J</sup>	nd	nd	nd	nd	nd	nd
NGA EQB LI	NGA-LAILG-EQB LI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	NGA-#150-LAILG	9/25/07	<b>52.4</b>	95.9	26.84	<b>355.6</b>	87	22.5	<b>2279</b>	23	24	57
NGA #183	ILG-#183	9/26/07	13.5 <sup>B</sup>	51.63	1.4457 <sup>B</sup>	<b>11.35<sup>B</sup></b>	57.38 <sup>B</sup>	1.64 <sup>B</sup>	317 <sup>B</sup>	2.24 <sup>B</sup>	0.858 <sup>B</sup>	28.7 <sup>B</sup>
NGA #183-DUP	ILGNGA-#Dup	9/26/07	29 <sup>B</sup>	55.3	4.193 <sup>B</sup>	<b>26.77<sup>B</sup></b>	89.17 <sup>B</sup>	4.29 <sup>B</sup>	434 <sup>B</sup>	5.66 <sup>B</sup>	4.488 <sup>B</sup>	20 <sup>B</sup>
NGA #EQUIP	ILGNGA-#Equip	9/26/07	nd	nd	nd	nd	nd	nd	5	nd	nd	nd
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168-2	ILGNGA-#168-2	9/28/07	2.2	172.52	1.582 <sup>C</sup>	8.91	340.14 <sup>E</sup>	2.15	<b>1,297</b>	3.51	5.379	504
NGA #168	NGA-#168-LAILG-3	11/30/07	0.48	101.43	2.1635	<b>30.81</b>	245.04 <sup>E</sup>	2.67	<b>951</b>	3.13	3.548	nd
NGA #182	NGA #182-LAILG-1	12/7/07	0.4	<b>60.71</b>	1.7533	<b>19.85</b>	<b>159.87<sup>F</sup></b>	1.52	<b>456</b>	1.41	1.554	20.3
NGA #182-DUP	NGA-Duplicate	12/7/07	0.42	59.2	1.8269	<b>19.71</b>	118.48 <sup>F</sup>	1.51	<b>552</b>	1.56	1.523	20.7
NGA #4	NGA #4-LAILG-1	12/7/07	0.48	20.64	1.1355	4.03	20.39 <sup>F</sup>	0.8	186	0.77	0.829	58
NGA #130	NGA #130-LAILG-2	12/7/07	0.3	<b>162.95</b>	1.0247	<b>26.16</b>	190 <sup>F</sup>	0.91	<b>830</b>	0.74	0.94	51
NGA #150	NGA #150-LAILG-2	12/7/07	2.9	27.34	14.0243	<b>80.89</b>	56.59 <sup>F</sup>	9.43	<b>780</b>	8.89	9.445	40
NGA #124	NGA-#124-LAILG-2	12/7/07	4.6	33.03	3.9247	<b>45.41</b>	59.24 <sup>F</sup>	2.9	<b>550</b>	2.76	3.168	90
NGA #EQUIP	NGA-equip blank	12/7/07	nd	nd	nd	nd	1.13	nd	nd	nd	nd	nd
NGA #FIELD	Field Blank-2	12/18/07	nd	nd	nd	nd	nd	nd	6	nd	nd	nd
NGA #176	NGA-#176-LAILG-1	12/18/07	5.5	56.82	0.7145	3.85	293.12	0.54	<b>680</b>	12.21	3.447	6,168
NGA #183	LAILG-NGA#183-3	12/18/07	1.95	28.41	2.344	<b>11.37</b>	41.11	2.78	292	3.14	3.561	92
NGA #19	LAILG-NGA#19-2	12/18/07	1.4	162.66	11.2352	<b>86.7</b>	290.99	2.13	<b>1,292</b>	4.01	5.544	684
NGA #13	LAILG-NGA#13-1	12/18/07	1.6	5.46	0.2033	1.72	32.27	0.49	32	1.44	2.878	944
NGA #53	LAILG-NGA#53-1	12/18/07	0.7	4.72	0.2973	0.49	12.51	0.57	132	0.75	1.188	124
CWIL Limits			See Table X									
MDL			0.01	0.01	0.0075	0.01	0.01	0.016	0.1	0.01	0.016	0.5
RL			0.05	0.05	0.01	0.05	0.05	0.05	5	0.01	0.05	5

Concentrations are reported in milligrams per liter (mg/L). Results above CWIL Limits are presented **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated by the QA Officer.

CWIL Conditional waiver for irrigated lands, order #R4-2005-008C  
**B** Estimated concentration, since RPD of duplicate is >25%  
C Procedural blank Matrix Spike recovery out of limit  
E ESTIMATED CONCENTRATION, matrix spike does not meet acceptance criteri  
F Sulfate detected in lab blank, at 1.09 mg/L  
J Estimated concentrations, results above MDL but less than R

**TABLE 6**

**SUMMARY OF SAMPLES COLLECTED - YEAR 1  
CHLORINATED PESTICIDES  
NURSERY GROWERS ASSOCIATION  
LOS ANGELES IRRIGATED LANDS GROUP**

Site	Sample #	Date	Chlorinated Pesticides																
			2,4'-DDD	2, 4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	BHC-alpha	BHC-beta	BHC-delta	BHC-gamma	Chlordane-alpha	Chlordane-gamma	cis-Nonachlor	DCPA	Dicofol	Dieldrin
NGA #130	NGA-#130-LAILG-1	8/6/07	nd	nd	nd	<b>22.8</b>	<b>34.7</b>	<b>16.1</b>	nd	nd	nd	nd	nd	nd	nd	nd	nd	68.3 <sup>J</sup>	nd
NGA #183	NGA-#183-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	NGA-#19-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #124	NGA-#124-LAILG-1	8/13/07	nd	nd	nd	<b>22.5</b>	<b>15.3</b>	<b>13.7</b>	nd	nd	nd	nd	nd	nd	nd	nd	12.1	nd	nd
NGA #168	NGA-#168-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA BLANK	NGA LAILG-BLANK-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA FBI	NGA-LAILG-FBI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA EQBLI	NGA-LAILG-EQBLI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	NGA-#150-LAILG	9/25/07	nd	nd	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183	ILG-#183	9/26/07	25 <sup>B</sup>	nd	31.8 <sup>B</sup>	<b>90.3<sup>B</sup></b>	<b>113.8<sup>B</sup></b>	<b>51.1<sup>B,D</sup></b>	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183-DUP	ILGNGA-#Dup	9/26/07	nd <sup>B</sup>	nd	nd <sup>B</sup>	<b>64.5<sup>B</sup></b>	<b>70.2<sup>B</sup></b>	nd <sup>B,D</sup>	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #EQUIP	ILGNGA-#Equip	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168-2	ILGNGA-#168-2	9/28/07	nd	nd	17.3	<b>16.7</b>	nd	<b>84<sup>D</sup></b>	nd	nd	nd	nd	nd	nd	nd	nd	nd	52 <sup>J</sup>	nd
NGA #168	NGA-#168-LAILG-3	11/30/07	nd	nd	nd	nd	<b>2.7<sup>J</sup></b>	nd <sup>C</sup>	nd	nd	nd	nd	nd	1.4 <sup>J</sup>	1.4 <sup>J</sup>	1.1 <sup>J</sup>	nd	nd	nd
NGA #182	NGA #182-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #182-DUP	NGA-Duplicate	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #4	NGA #4-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #130	NGA #130-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	NGA #150-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	<b>35.2</b>	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #124	NGA-#124-LAILG-2	12/7/07	nd	nd	nd	<b>6.0</b>	<b>22.1</b>	<b>9.3</b>	nd	nd	nd	nd	nd	1.1 <sup>J</sup>	3.0 <sup>J</sup>	nd	nd	63.7 <sup>J</sup>	nd
NGA #EQUIP	NGA-equip blank	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	Field Blank-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #176	LAILG-NGA#176-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183	LAILG-NGA#183-3	12/18/07	36.8	5.7	20.6	<b>224.8</b>	<b>344.4</b>	<b>73.5</b>	nd	nd	nd	nd	nd	nd	nd	nd	nd	51.5 <sup>J</sup>	nd
NGA #19	LAILG-NGA#19-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #13	LAILG-NGA#13-1	12/18/07	nd	nd	nd	nd	<b>32.7</b>	nd	nd	nd	nd	nd	nd	18	19.2	19.6	nd	nd	nd
NGA #53	LAILG-NGA#53-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CWIL Limits			nl	nl	nl	<b>0.59</b>	<b>0.59</b>	<b>0.83</b>	<b>0.13</b>	<b>3.9</b>	<b>14</b>	nl	<b>19</b>	<b>a)</b>	<b>a)</b>	<b>a)</b>	nl	nl	<b>0.14</b>
MDL			1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	50	1
RL			5	5	5	5	5	5	5	5	5	5	5	5	5	5	10	100	5

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented **in BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated by the QA Office

CWIL Conditional waiver for irrigated lands, order #R4-2005-008C  
A Component of total chlordane, see total chlordane for CWIL limitation  
**B Estimated concentration, RPD of duplicate sample >25%**  
C Procedural blank Matrix Spike recovery out of limit:  
D Procedural blank Matrix Spike Duplicate RPD out of limit:  
J Estimated concentrations, results above MDL but less than R

MDL Method Detection Limits  
RL Reporting Limits  
nd not detected  
nl not listed  
na not analyzed

**TABLE 6, cont**  
**SUMMARY OF SAMPLES COLLECTED - YEAR 1**  
**CHLORINATED PESTICIDES**  
**NURSERY GROWERS ASSOCIATION**  
**LOS ANGELES IRRIGATED LANDS GROUP**

Site	Sample #	Date	Endosulfan Sulfate	Endosulphan-I	Endosulfan-II	Endrin	Endrin Aldehyde	Endrin Ketone	Heptachlor	Heptachlor Epoxide	Methoxychlor	Kepone	Mirex	Oxychlorthane	Perthane	Toxaphene	trans-Nonachlor	Total Chlordane
NGA #130	NGA-#130-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd
NGA #183	NGA-#183-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd
NGA #19	NGA-#19-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd
NGA #124	NGA-#124-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	21.9	<b>34</b>
NGA #168	NGA-#168-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd
NGA BLANK	NGA LAILG-BLANK-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA FB LI	NGA-LAILG-FB LI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA EQ BLI	NGA-LAILG-EQ BLI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	NGA-#150-LAILG	9/25/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd <sup>D</sup>	nd	nd	nd	nd
NGA #183	ILG-#183	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd <sup>D</sup>	nd	nd	nd	nd
NGA #183-DUP	ILGNGA-#Dup	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd <sup>D</sup>	nd	nd	nd	nd
NGA #EQUIP	ILGNGA-#Equip	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168-2	ILGNGA-#168-2	9/28/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd <sup>D</sup>	nd	nd	nd	nd
NGA #168	NGA-#168-LAILG-3	11/30/07	nd	nd	nd	nd	nd	nd	nd	nd	nd <sup>C</sup>	nd	nd	nd	nd	nd	1.7 <sup>J</sup>	<b>5.6<sup>J</sup></b>
NGA #182	NGA #182-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #182-DUP	NGA-Duplicate	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #4	NGA #4-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #130	NGA #130-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	NGA #150-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #124	NGA-#124-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	7.3	<b>11.4</b>
NGA #EQUIP	NGA-equip blank	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	Field Blank-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #176	LAILG-NGA#176-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd <sup>C</sup>	nd	nd	nd	nd	nd	nd
NGA #183	LAILG-NGA#183-3	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd <sup>C</sup>	nd	nd	nd	nd	nd	nd
NGA #19	LAILG-NGA#19-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd <sup>C</sup>	nd	nd	nd	nd	2.4 <sup>J</sup>	<b>2.4<sup>J</sup></b>
NGA #13	LAILG-NGA#13-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd <sup>C</sup>	nd	nd	nd	nd	54.1	<b>110.9</b>
NGA #53	LAILG-NGA#53-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd <sup>C</sup>	nd	nd	nd	nd	nd	nd
CWIL Limits			nl	<b>5.6</b>	<b>5.6</b>	<b>36</b>	nl	nl	<b>0.21</b>	<b>0.1</b>	nl	nl	nl	<b>a)</b>	nl	<b>25</b>	<b>a)</b>	<b>0.57</b>
MDL			1	1	1	1	1	1	1	1	1	1	1	1	5	10	1	1
RL			5	5	5	5	5	5	5	5	5	5	5	5	10	50	5	5

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated by the QA Office

CWIL Conditional waiver for irrigated lands, order #R4-2005-008  
A Component of total chlordane, see total chlordane for CWIL limitation  
B **Estimated concentration, RPD of duplicate sample >25%**  
C Procedural blank Matrix Spike recovery out of limit  
D Procedural blank Matrix Spike Duplicate RPD out of limit  
J Estimated concentrations, results above MDL but less than R

MDL Method Detection Limits  
RL Reporting Limits  
nd not detected  
nl not listed  
na not analyzed

**TABLE 7**

**SUMMARY OF SAMPLES COLLECTED - YEAR 1  
ORGANOPHOSPHORUS PESTICIDES  
NURSERY GROWERS ASSOCIATION  
LOS ANGELES IRRIGATED LANDS GROUP**

Site	Sample #	Date	Organophosphorus Pesticides																		
			Bolstar	Chlorpyrifos	Demeton	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Fenclorophos	Fensulfothion	Fenthion	Malathion	Merphos	Methyl Parathion	Mevinphos	Phorate	Tetrachlorvinphos	Tokuthion	Trichloronate
NGA #130	NGA-#130-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183	NGA-#183-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	NGA-#19-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #124	NGA-#124-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168	NGA-#168-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA BLANK	NGA LAILG-BLANK-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA FB LI	NGA-LAILG-FB LI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA EQB LI	NGA-LAILG-EQB LI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	NGA-#150-LAILG	9/25/07	nd	nd	nd	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd
NGA #183	ILG-#183	9/26/07	nd	nd	nd	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd
NGA #183-DUP	ILGNGA-#Dup	9/26/07	nd	nd	nd	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd
NGA #EQUIP	ILGNGA-#Equip	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168-2	ILGNGA-#168-2	9/28/07	nd	nd	nd	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd	nd <sup>D</sup>	nd	nd	nd
NGA #168	NGA-#168-LAILG-3	11/30/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	8.9	nd	nd	nd	nd	nd	nd	nd
NGA #182	NGA #182-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #182-DUP	NGA-Duplicate	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #4	NGA #4-LAILG-1	12/7/07	nd	<b>1,122.6</b>	nd	<b>175.2</b>	11.3	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #130	NGA #130-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	NGA #150-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #124	NGA-#124-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #EQUIP	NGA-equip blank	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	Field Blank-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #176	NGA-#176-LAILG-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183	LAILG-NGA#183-3	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	LAILG-NGA#19-2	12/18/07	nd	nd	nd	15	nd	nd	nd	nd	nd	nd	nd	2,291.3	nd	nd	nd	nd	nd	nd	nd
NGA #13	LAILG-NGA#13-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #53	LAILG-NGA#53-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CWIL Limits			nl	<b>25</b>	nl	<b>100</b>	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl
MDL			2	1	1	2	3	3	1	1	2	1	2	3	1	1	8	6	2	3	1
RL			4	2	2	4	6	6	2	2	4	2	4	6	2	2	16	12	4	6	2

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented **in bold**. Footnotes in **bold** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated by the QA Office

CWIL Conditional waiver for irrigated lands, order #R4-2005-0080  
D Procedural blank Matrix Spike Duplicate RPD out of limit:  
nl not listed

**TABLE 8**  
**SUMMARY OF SAMPLES COLLECTED - YEAR 1**  
**PYRETHROID PESTICIDES**  
**NURSERY GROWERS ASSOCIATION**  
**LOS ANGELES IRRIGATED LANDS GROUP**

Site	Sample #	Date	Pyrethroid Pesticides													
			Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Danitol	Deltamethrin	Esfenvalerate	Fenvalerate	Fluvalinate	L-Cyhalothrin	Permethrin	Prallethrin	Resmethrin	
NGA #130	NGA-#130-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183	NGA-#183-LAILG-1	8/6/07	nd	21 <sup>J</sup>	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	NGA-#19-LAILG-1	8/13/07	nd	13.7 <sup>J</sup>	24.2 <sup>J</sup>	nd	465.5	nd	nd	nd	5 <sup>J</sup>	nd	444.9	nd	nd	nd
NGA #124	NGA-#124-LAILG-1	8/13/07	nd	62.2	nd	nd	74.7	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168	NGA-#168-LAILG-1	8/13/07	nd	1348.2	19.8 <sup>J</sup>	nd	nd	nd	nd	nd	nd	11.1 <sup>J</sup>	nd	nd	nd	nd
NGA BLANK	NGA LAILG-BLANK-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA FB LI	NGA-LAILG-FB LI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA EQB LI	NGA-LAILG-EQB LI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	NGA-#150-LAILG	9/25/07	nd	19,426.6	153.4	nd	nd	nd	nd	nd	515.2	nd	5,208.8	nd	nd	nd
NGA #183	ILG-#183	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183-DUP	ILGNGA-#Dup	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #EQUIP	ILGNGA-#Equip	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168-2	ILGNGA-#168-2	9/28/07	nd	964	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168	NGA-#168-LAILG-3	11/30/07	nd	nd	1.4 <sup>J</sup>	1.6 <sup>J</sup>	463.1	nd	nd	nd	nd	nd	nd	nd	nd	na
NGA #182	NGA #182-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na
NGA #182-DUP	NGA-Duplicate	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na
NGA #4	NGA #4-LAILG-1	12/7/07	nd	10.7	30.6	nd	1,940.5	69	nd	nd	1.6 <sup>J</sup>	55.1	nd	nd	nd	na
NGA #130	NGA #130-LAILG-2	12/7/07	nd	944.6	14.2	nd	73.5	nd	nd	nd	33.5	nd	327.3	nd	nd	na
NGA #150	NGA #150-LAILG-2	12/7/07	nd	1,566.7	nd	nd	nd	nd	nd	nd	17.9	nd	237.8	nd	nd	na
NGA #124	NGA-#124-LAILG-2	12/7/07	nd	3,083.4	183.8	nd	150.5	180.3	nd	nd	32.3	3.1	70.9	nd	nd	na
NGA #EQUIP	NGA-equip blank	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	Field Blank-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #176	NGA-#176-LAILG-1	12/18/07	nd	870.5	nd	nd	3.4	nd	nd	nd	nd	nd	nd	nd	nd	na
NGA #183	LAILG-NGA#183-3	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na
NGA #19	LAILG-NGA#19-2	12/18/07	nd	nd	11.5	nd	449.5	nd	nd	nd	6.6	nd	1,346.4	nd	nd	na
NGA #13	LAILG-NGA#13-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na
NGA #53	LAILG-NGA#53-1	12/18/07	nd	8	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	3.5	na
CWIL Limits			nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl
MDL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
RL			2	2	2	2	2	2	2	2	2	2	2	2	2	2

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented **in BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated by the QA Office

CWIL Conditional waiver for irrigated lands, order #R4-2005-008C  
na not analyzed  
J Estimated concentration, results above MDL but below RL

**TABLE 9**

**SUMMARY OF SAMPLES COLLECTED - YEAR 1  
TOXICITY RESULTS  
NURSERY GROWERS ASSOCIATION  
LOS ANGELES IRRIGATED LANDS GROUP**

Site	Sample #	Date	Ceriodaphnia		Fathead Minnow		Selenastrum	TIE	
			Survival	Reproduction	Survival	Growth	Growth	Date	Result
NGA #130	NGA-#130-LAILG-1	8/6/07	100.00%	N	93.33%	N	Y	ns	
NGA #183	NGA-#183-LAILG-1	8/6/07	100.00%	N	93.33%	N	N		
NGA #19	NGA-#19-LAILG-1	8/13/07	80.00%	N	98.30%	N	N		
NGA #124	NGA-#124-LAILG-1	8/13/07	100.00%	N	98.30%	N	N		
NGA #168	NGA-#168-LAILG-1	8/13/07	<b>0.00%</b>	Y	98.30%	N	Y	9/28/08	100% survival
NGA #150	NGA-#150-LAILG	9/25/07	<b>0.00%</b>	Y	98.33%	N	Y	ns	
NGA #168	NGA-#168-LAILG-3	11/30/07	100.00%	N	100.00%	N	N		
NGA #182	NGA #182-LAILG-1	12/7/07	<b>0.00%</b>	Y	98.33%	N	Y	IP	
NGA #4	NGA #4-LAILG-1	12/7/07	<b>0.00%</b>	Y	<b>40.00%</b>	Y	Y	IP	
NGA #130	NGA #130-LAILG-2	12/7/07	100.00%	N	98.33%	N	N		
NGA #150	NGA #150-LAILG-2	12/7/07	100.00%	N	98.33%	N	Y	IP	
NGA #124	NGA-#124-LAILG-2	12/7/07	<b>0.00%</b>	Y	100.00%	N	Y	IP	
NGA #176	NGA-#176-LAILG-1	12/18/07	100.00%	N	100.00%	N	N		
NGA #183	LAILG-NGA#183-3	12/18/07	100.00%	N	100.00%	N	N		
NGA #19	LAILG-NGA#19-2	12/18/07	<b>50.00%</b>	Y	100.00%	N	N	IP	
NGA #13	LAILG-NGA#13-1	12/18/07	<b>10.00%</b>	Y	<b>21.67%</b>	Y	N	IP	
NGA #53	LAILG-NGA#53-1	12/18/07	100.00%	N	81.67%	N	N		

Y Significantly different from control group  
 N No significant difference between control group  
 ns not enough runoff for follow up sample  
 IP In progress

**TABLE 10**

**SUMMARY OF SAMPLES COLLECTED - YEAR 1  
FIELD MONITORING RESULTS  
NURSERY GROWERS ASSOCIATION  
LOS ANGELES IRRIGATED LANDS GROUP**

Site	Sample ID	Date	Time (24hr)	*Approximate Flow Cross Section (ft <sup>2</sup> )	Flow	Temperature (°C)	pH	E.C. (uS)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
NGA #130	NGA-#130-LAILG-1	8/6/07	12:15	na	~4.25 gal/min	27.0	7.71	1331	6.12	38
			12:20	na		26.7	7.82	1315	6.51	42
			12:25	na		26.6	7.84	1312	6.48	37
NGA #183	NGA-#183-LAILG-1	8/6/07	13:45	0.36	3.79 ft/s	34.1	8.00	403	8.41	72
			13:50		3.56 ft/s	34.0	8.04	399	8.43	83
			13:55		3.19 ft/s	34.2	8.01	398	8.12	82
NGA #19	NGA-#19-LAILG-1	8/13/07	12:50	0.15	0.74 ft/s	35.1	8.67	848	9.43	563
			12:53		0.71 ft/s	35.0	8.69	833	9.81	492
			12:56		0.67 ft/s	35.0	8.70	834	9.78	522
NGA #124	NGA-#124-LAILG-1	8/13/07	10:38	na	~75-100 gal total	28.9	7.75	1112	6.13	118
			10:41	na		28.9	7.70	1086	6.29	131
			10:45	na		28.9	7.67	1091	6.26	114
NGA #168	NGA-#168-LAILG-1	8/13/07	7:35	na	< 0.08 ft/s	20.6	8.48	894	5.53	958
			7:40	na	< 0.08 ft/s	20.7	8.83	790	5.62	999
			7:45	na	< 0.08 ft/s	20.7	8.91	788	5.59	978
NGA #150	NGA-#150-LAILG	9/25/07	9:10	0.016	0.33 ft/s	21.3	6.51	2450	5.93	11
			9:16		0.35 ft/s	21.4	6.71	2650	6.10	126
			9:20		0.32 ft/s	21.8	6.69	2680	5.98	72
NGA #183	LAILG-NGA#183-2	9/26/07	11:30	0.42	0.30 ft/s	23.5	6.38	823	6.25	47
			11:33		0.33 ft/s	23.6	6.50	737	6.14	45
			11:36		0.33 ft/s	23.9	6.64	735	6.08	47

\*  
gal/min      Runoff streams were assumed to have a parabolic shape unless field measurements indicated otherwise. The cross sectional area of a parabola is 2/3\*width\*depth.  
ft/s          gallons per minute      mg/L                      milligrams per liter  
oC             feet per second          NTU                      Nephelometric Turbidity units  
uS             degrees celcius  
microsiemens



**TABLE 10, cont.**

**SUMMARY OF SAMPLES COLLECTED - YEAR 1  
FIELD MONITORING RESULTS  
NURSERY GROWERS ASSOCIATION  
LOS ANGELES IRRIGATED LANDS GROUP**

Site	Sample ID	Date	Time (24hr)	*Approximate Flow Cross Section (ft <sup>2</sup> )	Flow	Temperature (°C)	pH	E.C. (uS)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
NGA #168-2	LAILG-NGA-#168-2	9/28/07	8:30	0.0003	< 0.08 ft/s	20.9	7.76	798	5.98	999
			8:35		< 0.08 ft/s	21.1	7.79	790	6.21	999
			8:40		< 0.08 ft/s	21.1	7.99	787	6.27	999
NGA #168	NGA-#168-LAILG-3	11/30/07	15:30	0.002	< 0.08 ft/s	14.4	7.97	1200	10.03	89
			15:08		< 0.08 ft/s	14.2	8.00	1200	10.17	104
			15:11		< 0.08 ft/s	14.1	8.00	1200	10.15	100
NGA #182	NGA #182-LAILG-1	12/7/07	6:42	0.006	1.50 ft/s	11.6	7.64	720	8.10	11
			6:44		1.50 ft/s	11.6	7.59	740	8.20	11
			6:46		1.50 ft/s	11.5	7.56	740	8.10	11
NGA #4	NGA #4-LAILG-1	12/7/07	7:45	0.046	0.60 ft/s	14.1	7.15	281	nm	80
			7:57		0.60 ft/s	13.9	7.11	286	nm	41
			8:00		0.60 ft/s	13.9	7.14	279	nm	41
NGA #130	NGA #130-LAILG-2	12/7/07	8:10	na	~4.25 gal/min	14.7	6.22	1280	nm	60
			8:12	na		14.9	6.20	1285	nm	59
			8:15	na		15.0	6.24	1291	nm	59
NGA #150	NGA #150-LAILG-2	12/7/07	6:42	0.46	3.7 ft/s	13.0	5.97	861	10.28	17
			6:47		4.2 ft/s	12.9	6.21	839	10.10	18
			6:52		4.5 ft/s	12.9	6.37	836	9.99	18
NGA #124	NGA-#124-LAILG-2	12/7/07	6:00	0.09	1.50 ft/s	13.3	5.90	753	nm	44
			6:02		1.50 ft/s	13.3	5.92	758	nm	44
			6:04		1.50 ft/s	13.3	5.91	759	nm	44

\* gal/min      Runoff streams were assumed to have a parabolic shape unless field measurements indicated otherwise. The cross sectional area of a parabola is 2/3\*width\*depth.  
ft/s            gallons per minute      mg/L                    milligrams per liter  
oC                feet per second            NTU                      Nephelometric Turbidity units  
uS                degrees celcius  
microsiemens

**TABLE 10, cont.**

**SUMMARY OF SAMPLES COLLECTED - YEAR 1  
FIELD MONITORING RESULTS  
NURSERY GROWERS ASSOCIATION  
LOS ANGELES IRRIGATED LANDS GROUP**

Site	Sample ID	Date	Time (24hr)	*Approximate Flow Cross Section (ft <sup>2</sup> )	Flow	Temperature (°C)	pH	E.C. (uS)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
NGA #176	NGA-#176-LAILG-1	12/18/07	16:34	na	~ 1 gal/min	15.7	6.60	1362	10.10	nm
			16:36	na		15.6	6.70	1364	10.70	nm
			16:38	na		15.8	6.90	1360	10.30	nm
NGA #183	LAILG-NGA#183-3	12/18/07	20:55	1.38	0.11 ft/s	11.5	6.60	855	10.94	158
			20:59		0.12 ft/s	11.7	6.70	849	10.98	148
			21:05		0.12 ft/s	11.7	6.80	844	10.97	164
NGA #19	LAILG-NGA#19-2	12/18/07	21:37	na	~ 1.3 gal/min	11.7	6.70	912	10.29	895
			21:38	na		11.9	6.80	921	10.30	910
			21:39	na		12.0	6.50	911	10.31	906
NGA #13	LAILG-NGA#13-1	12/18/07	6:45	0.014	2.26 ft/s	18.6	6.58	225	10.18	240
			6:48		2.18 ft/s	18.5	6.37	198	10.25	233
			6:50		2.49 ft/s	18.6	6.29	171	10.10	234
NGA #53	LAILG-NGA#53-1	12/18/07	18:15	na	~ 1.5 gal/min	13.7	6.60	260	10.41	nm
			18:18	na		13.3	6.90	270	10.50	nm
			18:20	na		13.8	7.10	270	10.32	nm

\*  
gal/min      gallons per minute      mg/L      milligrams per liter  
ft/s          feet per second              NTU          Nephelometric Turbidity units  
oC            degrees celcius  
uS            microsiemens

Runoff streams were assumed to have a parabolic shape unless field measurements indicated otherwise. The cross sectional area of a parabola is 2/3\*width\*depth.

**TABLE 11**

**SUMMARY OF QUALITY ASSURANCE SAMPLES COLLECTED - YEAR 1  
DETECTED CONSTITUENTS\*  
NURSERY GROWERS ASSOCIATION  
LOS ANGELES IRRIGATED LANDS GROUP**

Site	Sample #	Date	General Chemistry			
			Ammonia	Nitrate	Sulfate	TDS
NGA BLANK	NGA LAILG-BLANK-1	8/13/07	0.04 <sup>J</sup>	nd	nd	32
NGA FBLI	NGA-LAILG-FBLI	8/21/07	0.01 <sup>J</sup>	0.016 <sup>J</sup>	nd	nd
NGA EQBLI	NGA-LAILG-EQBLI	8/21/07	nd	nd	nd	nd
NGA #EQUIP	ILGNGA-#Equip	9/26/07	nd	nd	nd	5
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	nd	nd	nd
NGA #EQUIP	NGA-equip blank	12/7/07	nd	nd	1.13	nd
NGA #FIELD	Field Blank-2	12/18/07	nd	nd	nd	6
MDL			0.01	0.01	0.01	0.1
RL			0.05	0.05	0.05	5

\* Reported in milligrams per liter (mg/L)

**TABLE 12**

**CALIBRATION LOG  
EQUIPMENT SET NUMBER 1  
NURSERY GROWERS ASSOCIATION**

MEASUREMENT	INSTRUMENT	DATE	CALIBRATION STANDARD	PRE / POST CALIBRATION MEASUREMENT
pH	Oakton	8/6/07	4	3.78 / 4.02
		8/6/07	7	7.03 / 7.00
		8/6/07	10	9.95 / 9.99
EC	Oakton	8/6/07	447 mS	489 / 450
		8/6/07	1500 mS	1475 / 1496
Turbidity	LaMotte	8/6/07	10 NTU	9.81 / 9.89
		8/6/07	200 NTU	212 / 201
pH	Oakton	8/8/07	4	3.86 / 4.01
		8/8/07	7	6.97 / 7.01
		8/8/07	10	9.72 / 10.0
EC	Oakton	8/8/07	447 mS	458 / 445
		8/8/07	1500 mS	1515 / 1498
Turbidity	LaMotte	8/8/07	10 NTU	9.78 / 9.95
		8/8/07	200 NTU	202 / 200
pH	Oakton	8/13/07	4	4.08 / 4.01
		8/13/07	7	6.87 / 7.03
		8/13/07	10	10.02 / 10.02
EC	Oakton	8/13/07	447 mS	440 / 448
		8/13/07	1500 mS	1497 / 1499
Turbidity	LaMotte	8/13/07	10 NTU	10.2 / 10.1
		8/13/07	200 NTU	206 / 201
pH	Oakton	9/24/07	4	3.69 / 3.98
		9/24/07	7	6.68 / 7.05
		9/24/07	10	10.18 / 9.97
EC	Oakton	9/24/07	447 mS	442 / 447
		9/24/07	1500 mS	1475 / 1496
Turbidity	LaMotte	9/24/07	10 NTU	10.0 / 9.95
		9/24/07	200 NTU	197 / 201
pH	Oakton	9/26/07	4	4.07 / 4.00
		9/26/07	7	7.08 / 6.99
		9/26/07	10	10.04 / 9.98
EC	Oakton	9/26/07	447 mS	445 / 445
		9/26/07	1500 mS	1492 / 1497
Turbidity	LaMotte	9/26/07	10 NTU	9.68 / 10.1
		9/26/07	200 NTU	200 / 200

**TABLE 12, continued****CALIBRATION LOG  
EQUIPMENT SET NUMBER 1  
NURSERY GROWERS ASSOCIATION**

MEASUREMENT	INSTRUMENT	DATE	CALIBRATION STANDARD	PRE / POST CALIBRATION MEASUREMENT
pH	Oakton	9/28/07	4	3.88 / 4.01
		9/28/07	7	6.98 / 7.01
		9/28/07	10	9.97 / 9.98
EC	Oakton	9/28/07	447 mS	455 / 448
		9/28/07	1500 mS	1477 / 1499
Turbidity	LaMotte	9/28/07	10 NTU	9.91 / 9.92
		9/28/07	200 NTU	203 / 201
pH	Oakton	11/30/07	4	3.96 / 4.00
		11/30/07	7	6.94 / 6.99
		11/30/07	10	9.84 / 9.98
EC	Oakton	11/30/07	447 mS	467 / 444
		11/30/07	1500 mS	1506 / 1502
Turbidity	LaMotte	11/30/07	10 NTU	9.96 / 9.94
		11/30/07	200 NTU	198 / 200
pH	Oakton	12/7/07	4	3.98 / 3.99
		12/7/07	7	7.01 / 7.00
		12/7/07	10	9.99 / 10.01
EC	Oakton	12/7/07	447 mS	446 / 445
		12/7/07	1500 mS	1501 / 1498
Turbidity	LaMotte	12/7/07	10 NTU	9.99 / 9.98
		12/7/07	200 NTU	200 / 201
pH	Oakton	12/18/07	4	3.63 / 3.99
		12/18/07	7	6.76 / 7.02
		12/18/07	10	10.03 / 10.01
EC	Oakton	12/18/07	447 mS	444 / 448
		12/18/07	1500 mS	1486 / 1500
Turbidity	LaMotte	12/18/07	10 NTU	9.98 / 10.02
		12/18/07	200 NTU	197 / 201

**TABLE 12, continued****CALIBRATION LOG  
EQUIPMENT SET NUMBER 2  
NURSERY GROWERS ASSOCIATION**

MEASUREMENT	INSTRUMENT	DATE	CALIBRATION STANDARD	PRE / POST CALIBRATION MEASUREMENT
pH	Oakton	12/7/07	4	3.93 / 4.02
		12/7/07	7	7.02 / 7.01
		12/7/07	10	9.92 / 9.99
EC	Oakton	12/7/07	447 mS	450 / 446
		12/7/07	1500 mS	1486 / 1498
Turbidity	LaMotte	12/7/07	10 NTU	9.94 / 9.95
		12/7/07	200 NTU	200 / 200
pH	Oakton	12/18/07	4	3.95 / 4.01
		12/18/07	7	7.01 / 6.99
		12/18/07	10	9.84 / 9.98
EC	Oakton	12/18/07	447 mS	445 / 448
		12/18/07	1500 mS	1503 / 1501
Turbidity	LaMotte	12/18/07	10 NTU	9.95 / 9.99
		12/18/07	200 NTU	201 / 203

**TABLE 12, continued**

**CALIBRATION LOG  
EQUIPMENT SET NUMBER 3  
NURSERY GROWERS ASSOCIATION**

MEASUREMENT	INSTRUMENT	DATE	CALIBRATION STANDARD	PRE / POST CALIBRATION MEASUREMENT
pH	Oakton	12/7/07	4	3.99 / 4.00
		12/7/07	7	7.01 / 7.03
		12/7/07	10	9.89 / 9.97
EC	Oakton	12/7/07	447 mS	446 / 447
		12/7/07	1500 mS	1493 / 1499
Turbidity	LaMotte	12/7/07	10 NTU	9.98 / 10.1
		12/7/07	200 NTU	199 / 201

**TABLE 12, continued**

**CALIBRATION LOG  
EQUIPMENT SET NUMBER 4  
NURSERY GROWERS ASSOCIATION**

MEASUREMENT	INSTRUMENT	DATE	CALIBRATION STANDARD	PRE / POST CALIBRATION MEASUREMENT
pH	Oakton	12/7/07	4	4.01 / 4.00
		12/7/07	7	6.99 / 6.97
		12/7/07	10	9.93 / 9.99
EC	Oakton	12/7/07	447 mS	445 / 449
		12/7/07	1500 mS	1491 / 1500
Turbidity	LaMotte	12/7/07	10 NTU	9.95 / 10.2
		12/7/07	200 NTU	200 / 201



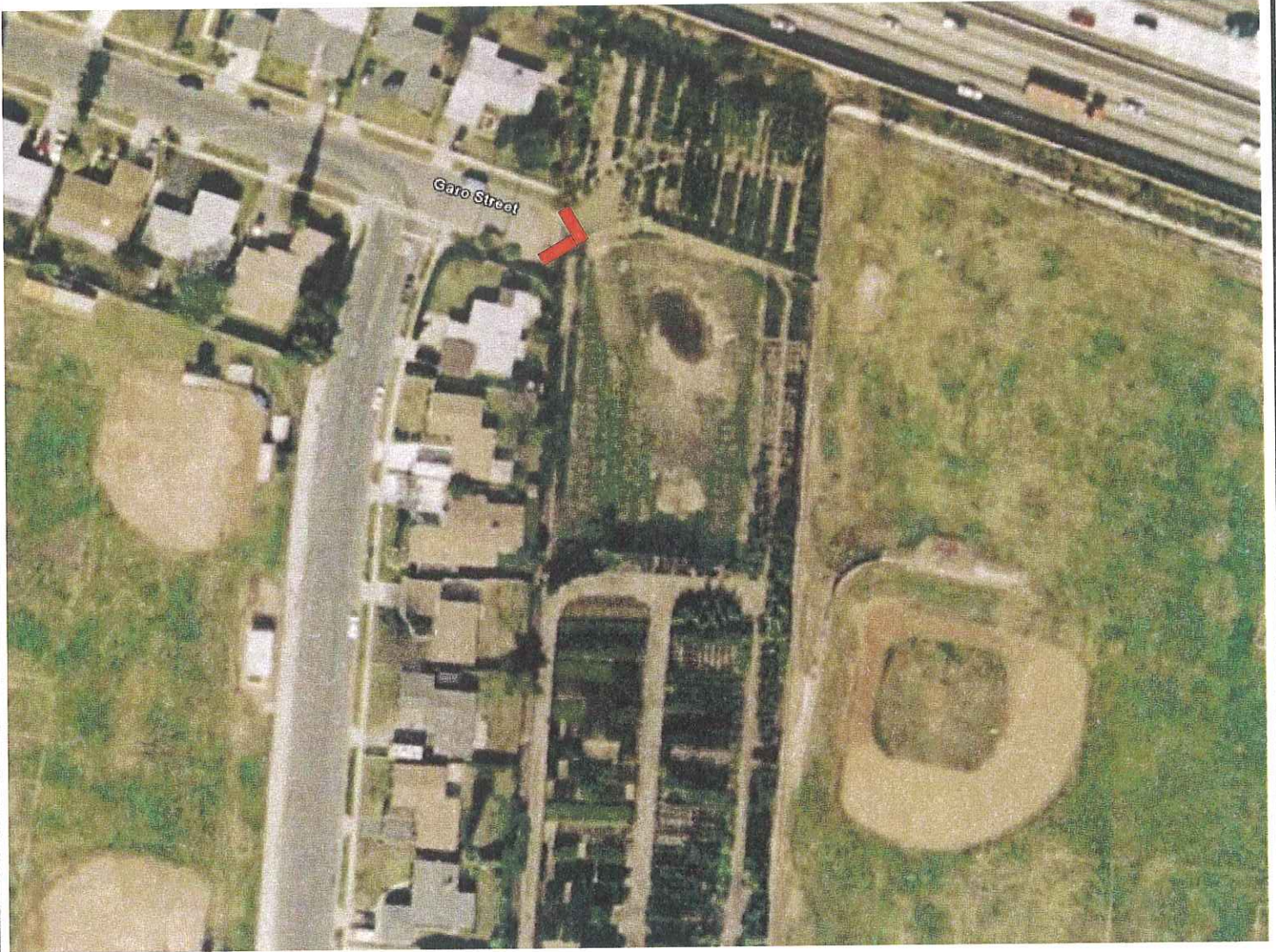


● = SAMPLING LOCATION

ABC NURSERY  
424 GARDENA BLVD.  
GARDENA  
SAMPLING LOCATION

FIGURE 2





 = SAMPLING LOCATION

 = POSSIBLE SAMPLE LOCATION

ACOSTA GROWERS  
16412 WEDGEWORTH DR.  
HACIENDA HEIGHTS  
SAMPLING LOCATION

FIGURE 3



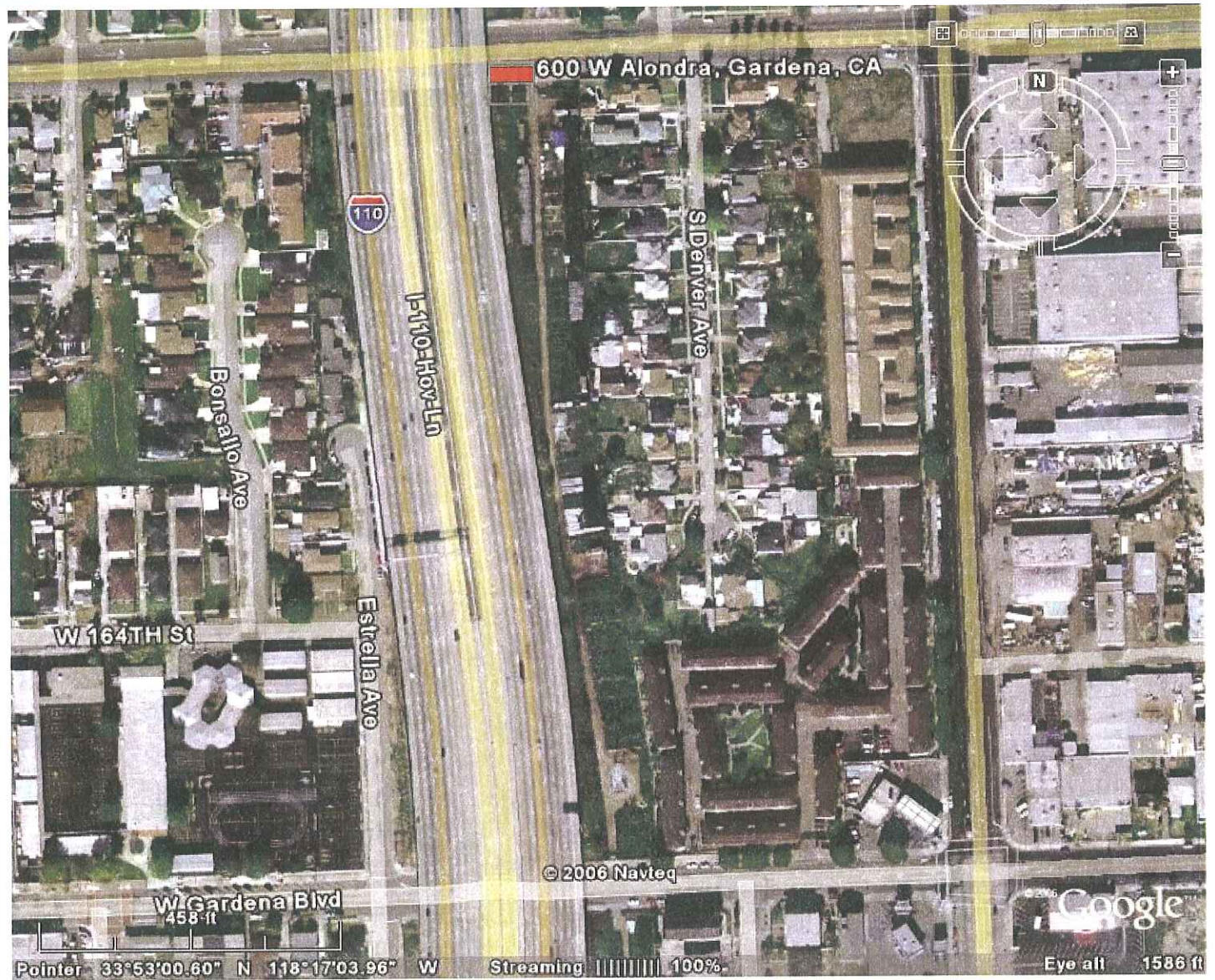


= SAMPLING LOCATION

**BOETHING TREELAND FARMS**  
**23475 LONG VALLEY ROAD**  
**WOODLAND HILLS**  
**SAMPLING LOCATION**

**FIGURE 4**





 = ANTICIPATED SAMPLE LOCATION

CARLOS SOTO, JR.  
600 WEST ALONDRA BLVD.  
GARDENA  
ANTICIPATED SAMPLE LOCATION

FIGURE 5



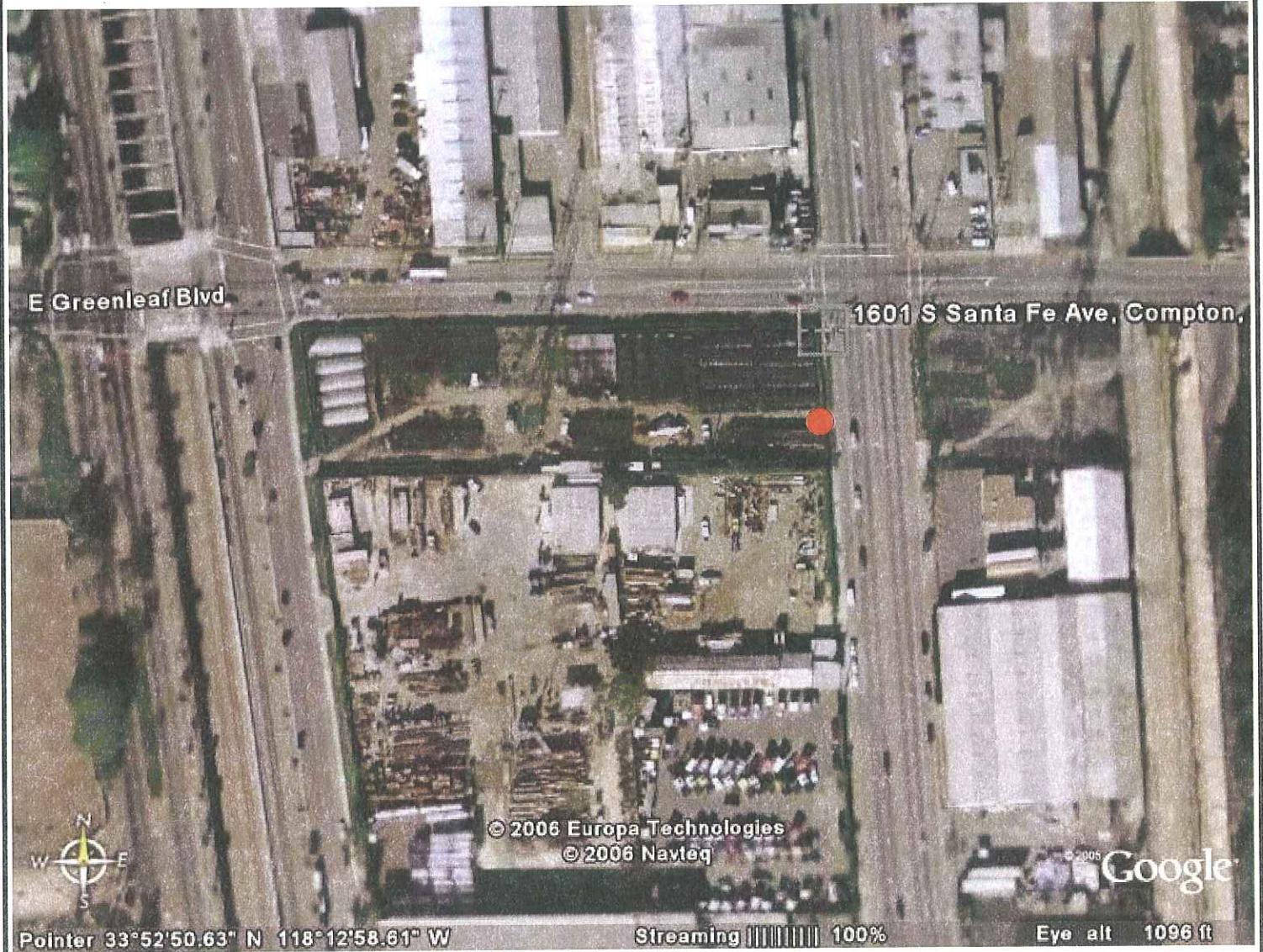


- █ = ANTICIPATED SAMPLE LOCATION
- = CATCH BASIN

**COINER NURSERY  
285 SOUTH SAN FIDEL AVE.  
LA PUENTE  
ANTICIPATED SAMPLING LOCATION**

**FIGURE 6**



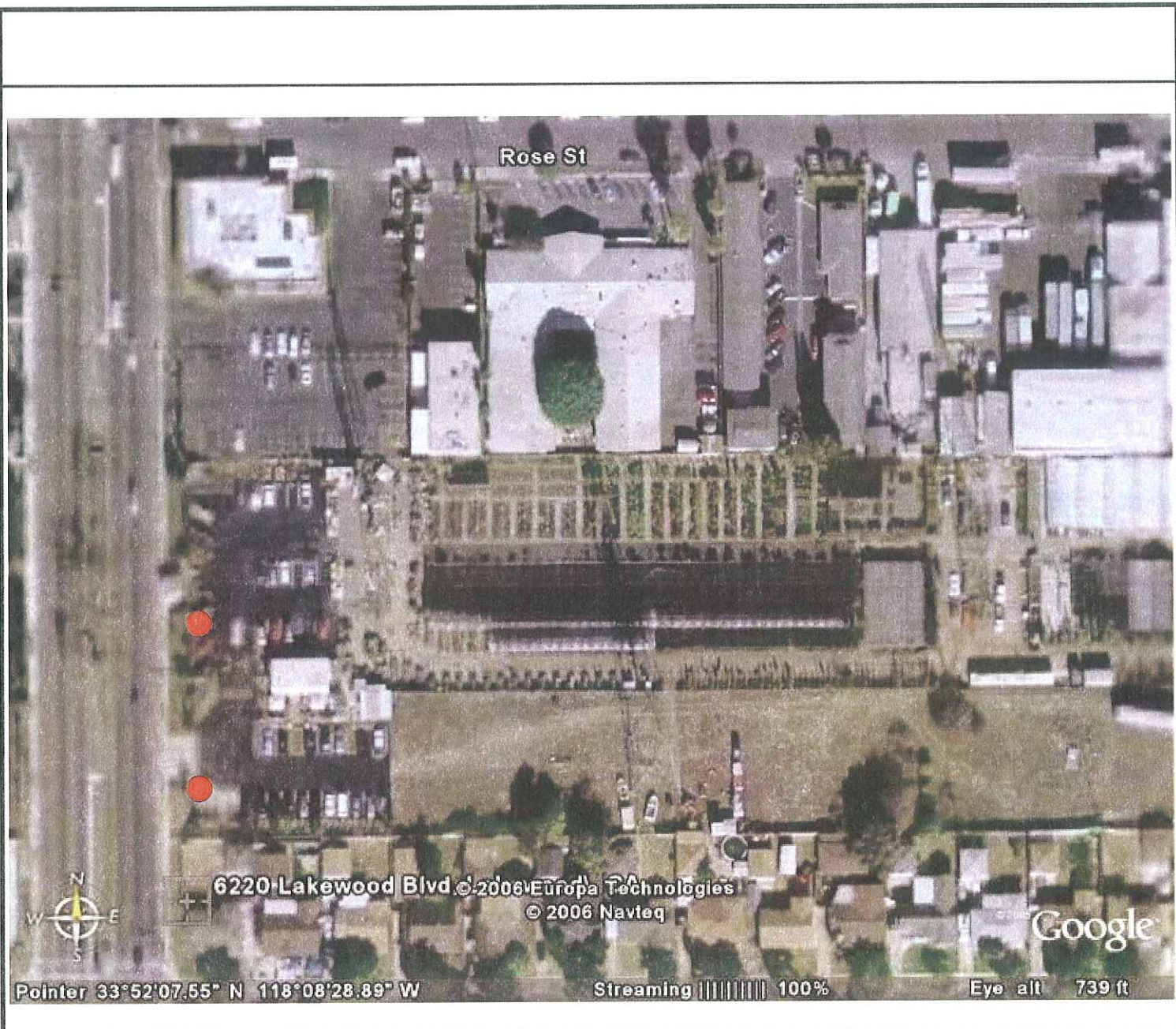


● = SAMPLING LOCATION

NEW WESTGROWERS  
1601 SANTA FE AVE.  
COMPTON  
SAMPLING LOCATION

FIGURE 7



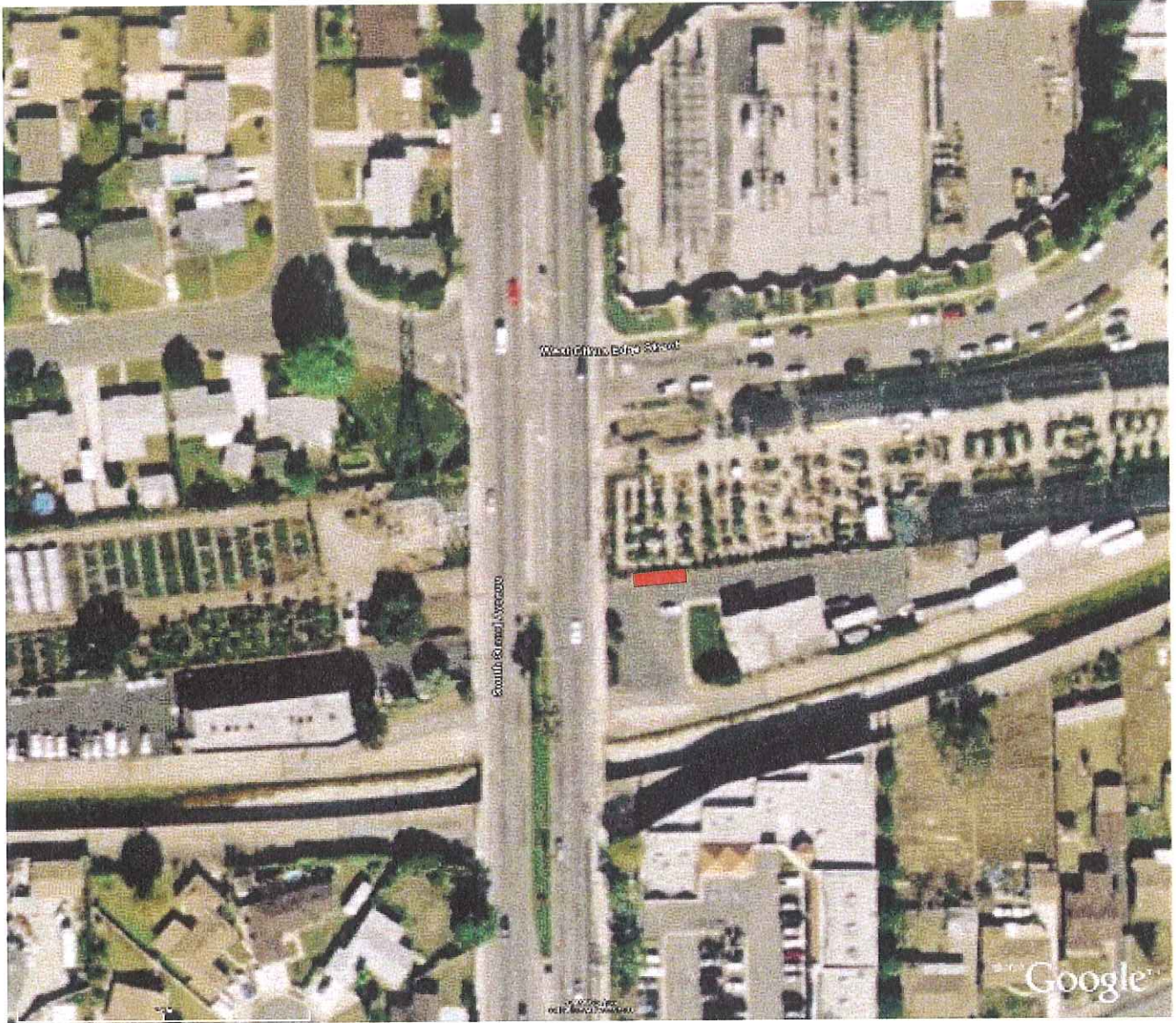


● = SAMPLING LOCATIONS

H&H NURSERY OF LAKEWOOD  
6220 LAKEWOOD BLVD.  
LAKEWOOD  
SAMPLING LOCATIONS

FIGURE 8



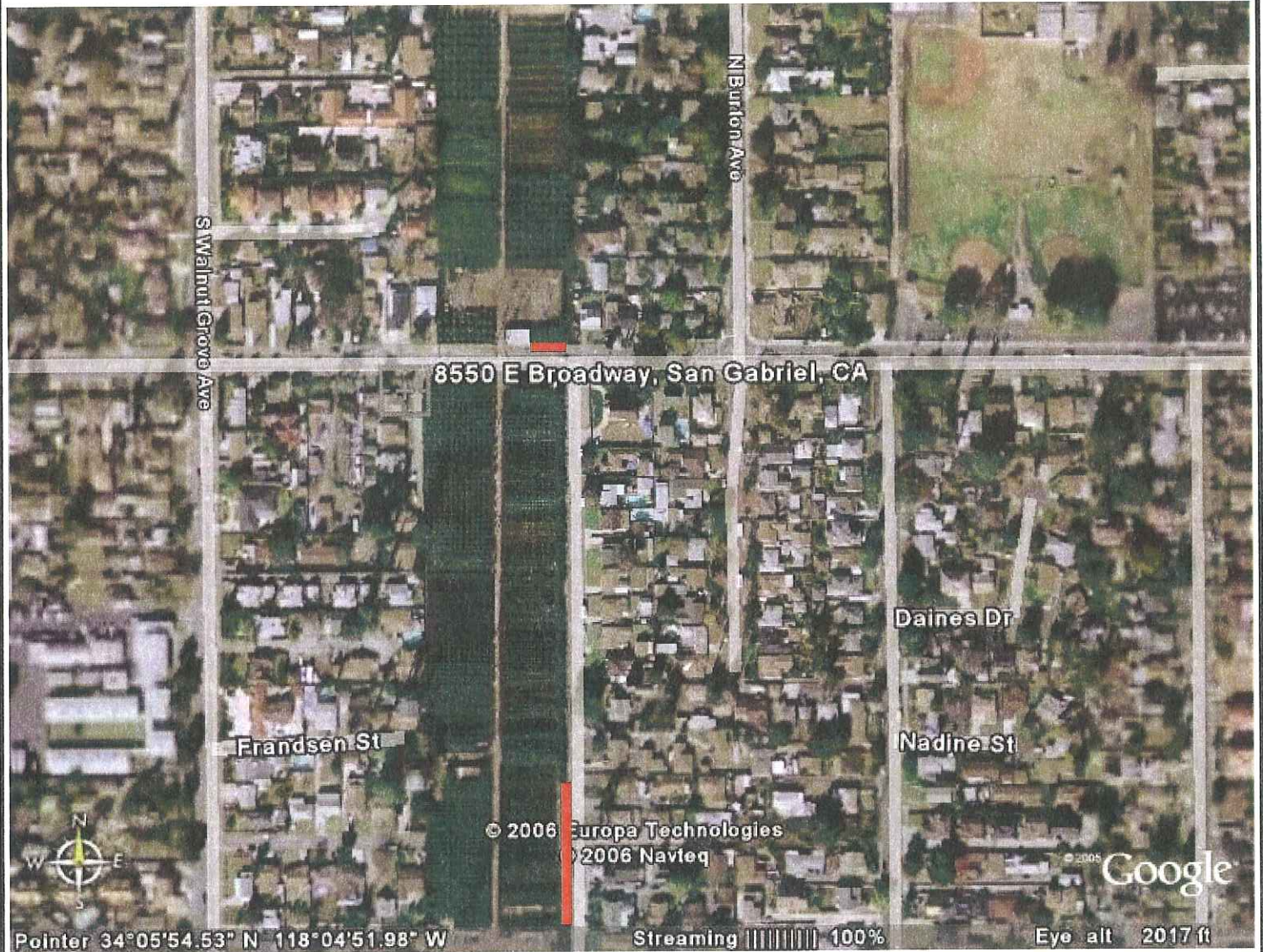


 = SAMPLING LOCATION

**M. DOWNARD - RAINBOW GARDEN NURSERY  
1135 SOUTH GRAND AVE.  
GLENDDRA  
SAMPLING LOCATION**

**FIGURE 9**





 = SAMPLING LOCATION

NORMAN'S NURSERY - BROADWAY SOUTH  
 1150 E BROADWAY  
 SAN GABRIEL  
 SAMPLING LOCATION

FIGURE 10





● = SAMPLING LOCATION

NORMAN'S NURSERY - ROSEMEAD  
475 ROSEMEAD BLVD.,  
EL MONTE  
SAMPLE LOCATION

FIGURE 11



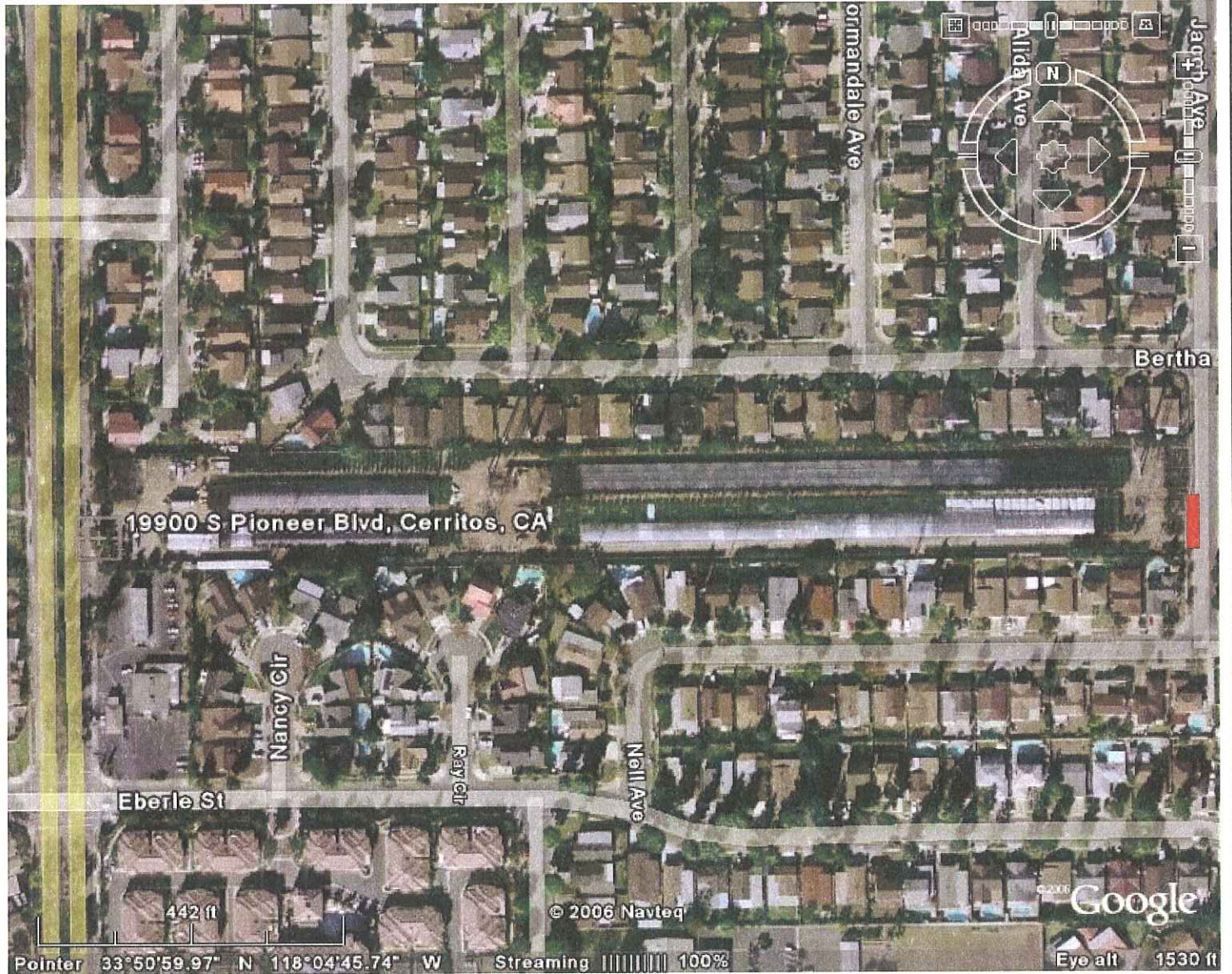


- = SAMPLING LOCATION
- = SUMP PUMP AND COLLECTION POND

**R. WILSON - COLORAMA**  
**1025 N TODD AVE.**  
**AZUSA**  
**SAMPLING LOCATION**

**FIGURE 12**





█ = SAMPLING LOCATION

SY NURSERY, INC.  
 424 GARDENA BLVD.  
 GARDENA  
 SAMPLING LOCATION

FIGURE 13





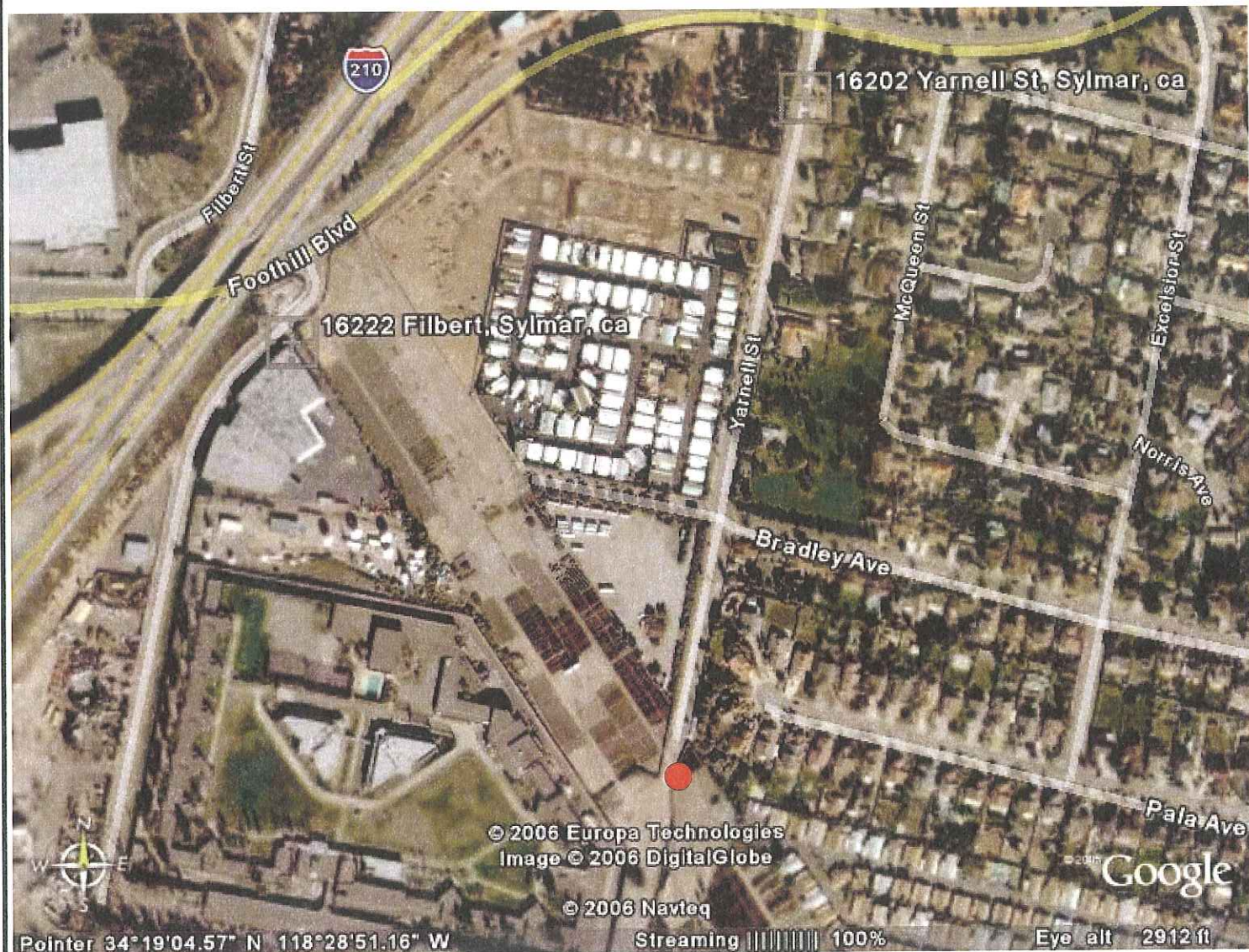
● = COLLECTION POND LOCATION

— = SAMPLING LOCATION

TY NURSERY - YARD #6  
REDONDO BEACH  
SAMPLING LOCATION

FIGURE 14





● = SAMPLING LOCATION

VALLEY CREST TREE COMPANY  
1622 FILBERT ST.  
SYLMAR  
SAMPLING LOCATION

FIGURE 15



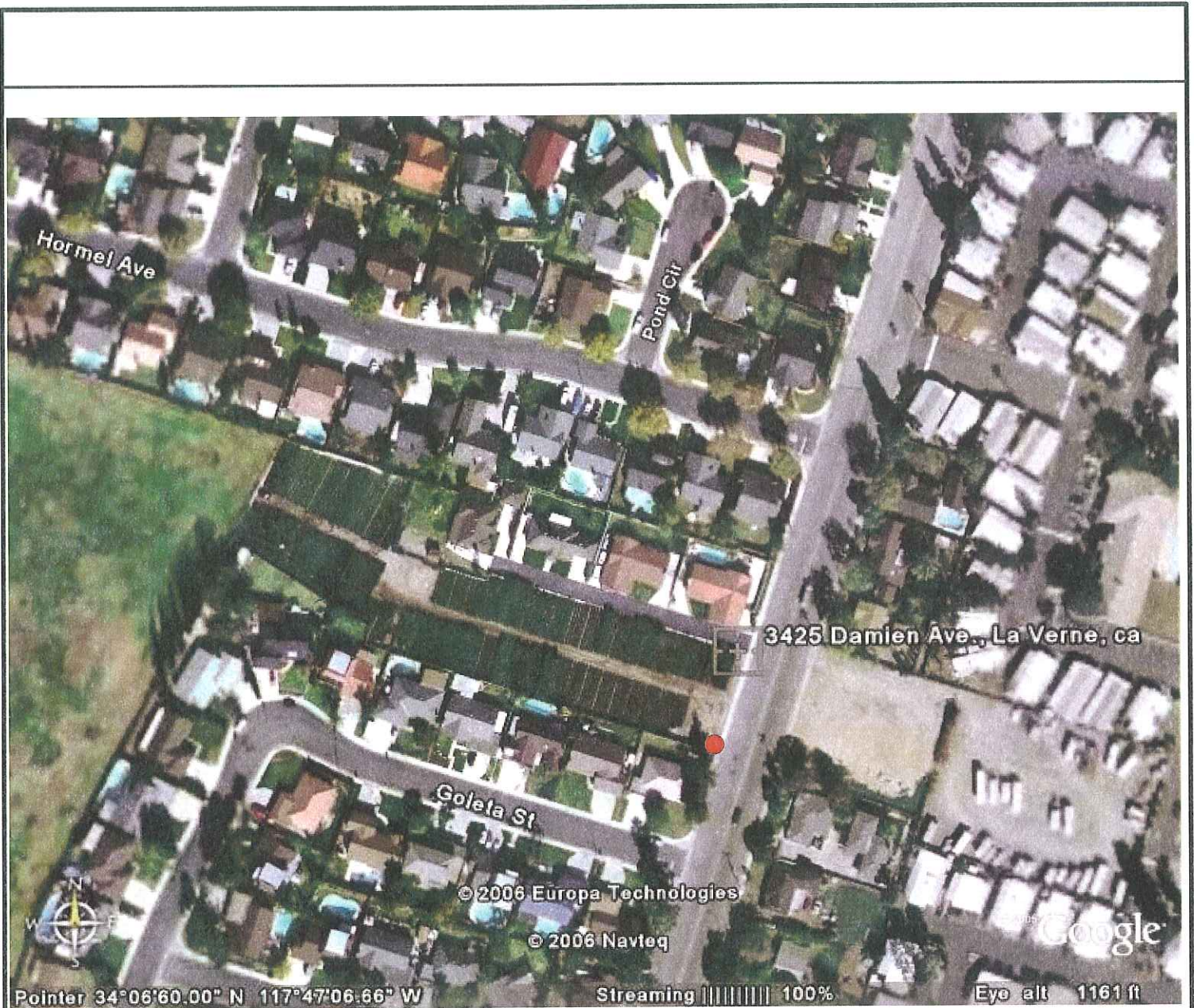


● = SAMPLING LOCATION

VALLEY SOD FARMS  
6301 BALBOA BLVD.  
ENCINO  
SAMPLING LOCATION

FIGURE 16





● = SAMPLING LOCATION

WEST COVINA WHOLESAL  
3425 DAMIEN AVE.  
LA VERNE  
SAMPLING LOCATION

FIGURE 17



## **APPENDIX A**

### **COMPLETE LIST OF LOS ANGELES COUNTY IRRIGATED LANDS GROUP – NURSERY GROWERS ASSOCIATION**

## **APPENDIX B**

### **LABORATORY ANALYTICAL RESULTS AND CHAIN OF CUSTODY DOCUMENTATION - CRG**

## **APPENDIX C**

### **LABORATORY ANALYTICAL RESULTS AND CHAIN OF CUSTODY DOCUMENTATION - ABC**

**APPENDIX D**

**LIMITATIONS**

## LIMITATIONS

This report, including all attached exhibits, describes results of all or a portion of PW Environmental's investigation into subsurface conditions at the subject site. The findings and recommendations are based on the application of a variety of scientific and technical disciplines to data developed regarding the subject property. The data was developed by observation, sampling, and gathering of information (both documentary and oral) about the property. Some of this data is subject to change over time. Some of this data is based on information not currently observable or measurable, but recorded by documents or orally reported by individuals. The findings and recommendations are based, in part, on application of sampling techniques. Said techniques inherently involve a risk of overstating or understating the presence or severity of contamination. The findings and recommendations are based also on sampling only for the specific contaminants shown in the laboratory reports. The samples taken were not subjected to testing for every contaminant known to the environmental industry, and every biological and/or chemical condition known to the environmental industry.

PW Environmental is not responsible for the accuracy of data not developed by PW Environmental or its agents or subcontractors. PW Environmental is not responsible for overstating or understating the presence or severity of contamination. PW Environmental is not responsible for failing to test for contaminants or biological/chemical conditions it had no reason to know were of concern at the subject site.

PW Environmental has performed this investigation in a professional manner using that degree of skill and care exercised for similar projects under similar conditions by reputable and competent environmental consultants. No warranty, either expressed or implied, was made. PW Environmental is not responsible for the ramifications caused by the concealment, withholding or failure to disclose of relevant information known to anyone contacted by PW Environmental in connection with its work at the subject site. This report and all field data, notes, laboratory test data on which it is based (hereinafter collectively designated "Information") were prepared by PW Environmental solely for the benefit of PW Environmental's client, Nursery Growers Association. Nursery Growers Association has the legal right to release all or a portion of this Information, in its discretion, to third parties. Said third parties may not have access to all information upon which this report was based, nor access to prior reports, nor to other information developed and not placed in any report (hereinafter collectively designated "Additional Information"). The presence or absence of such Additional Information may materially affect the statement contained in this report. Any use or reliance upon this report of Information by a party other than Nursery Growers Association, therefore, shall be solely at the risk of such third party and without legal recourse against PW Environmental, its employees, officers, or directors, regardless of whether the action in which recovery of damages is sought based upon contract, tort, statute or otherwise.