

US EPA ARCHIVE DOCUMENT

Environmental Assessment

**Westminster Project Area 1 Storm Drain
Improvements
Bounded by Westminster and Beach Boulevards,
23rd and Pacific Streets
City of Westminster, California**

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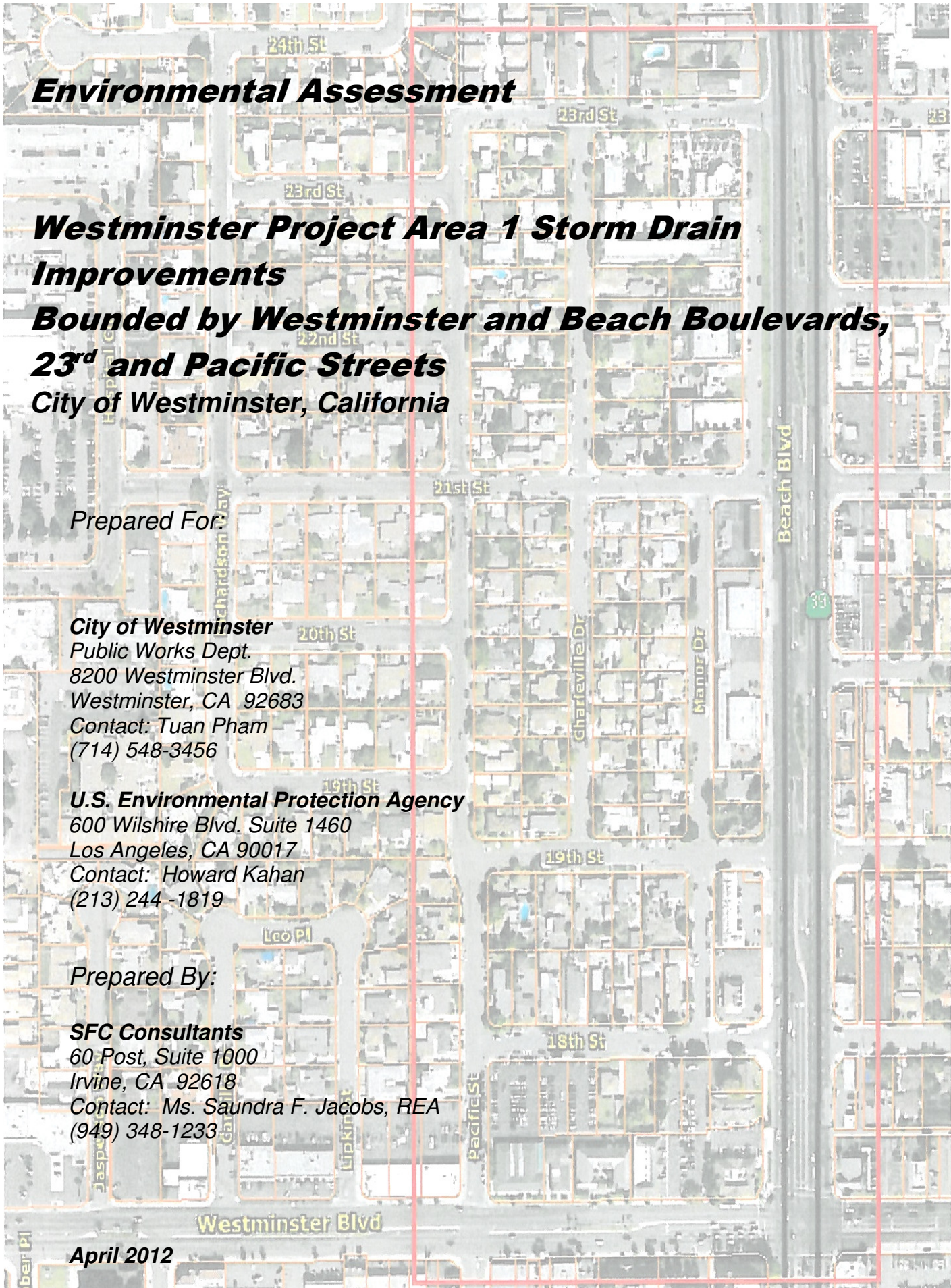


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Introduction

The City of Westminster is currently designing a new storm water drainage system in an older part of the City where no storm drains currently exist. This new system will connect to the City's existing storm drain located at 19th Street and Richardson Way. A detailed project location is below. *SFC Consultants* has been contracted by the City to undertake the environmental assessment to comply with the National Environmental Policy Act (NEPA).

1.1 Project Location

The project is generally located in the northeastern portion of the City of Westminster, Orange County, California. The City is regionally bound by the City of Garden Grove to the north and east, the 405 Freeway and the Cities of Seal Beach and Huntington Beach to the west, and on the south by portions of Fountain Valley and Huntington Beach.

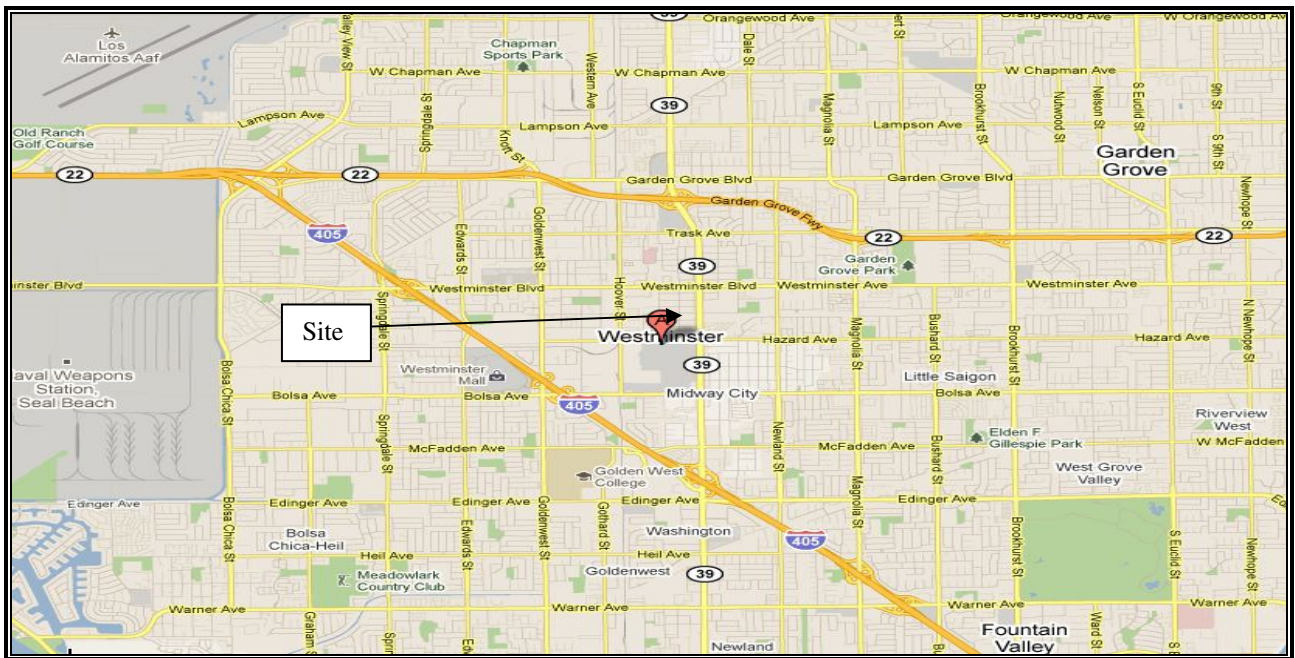


Figure 1 Regional Map

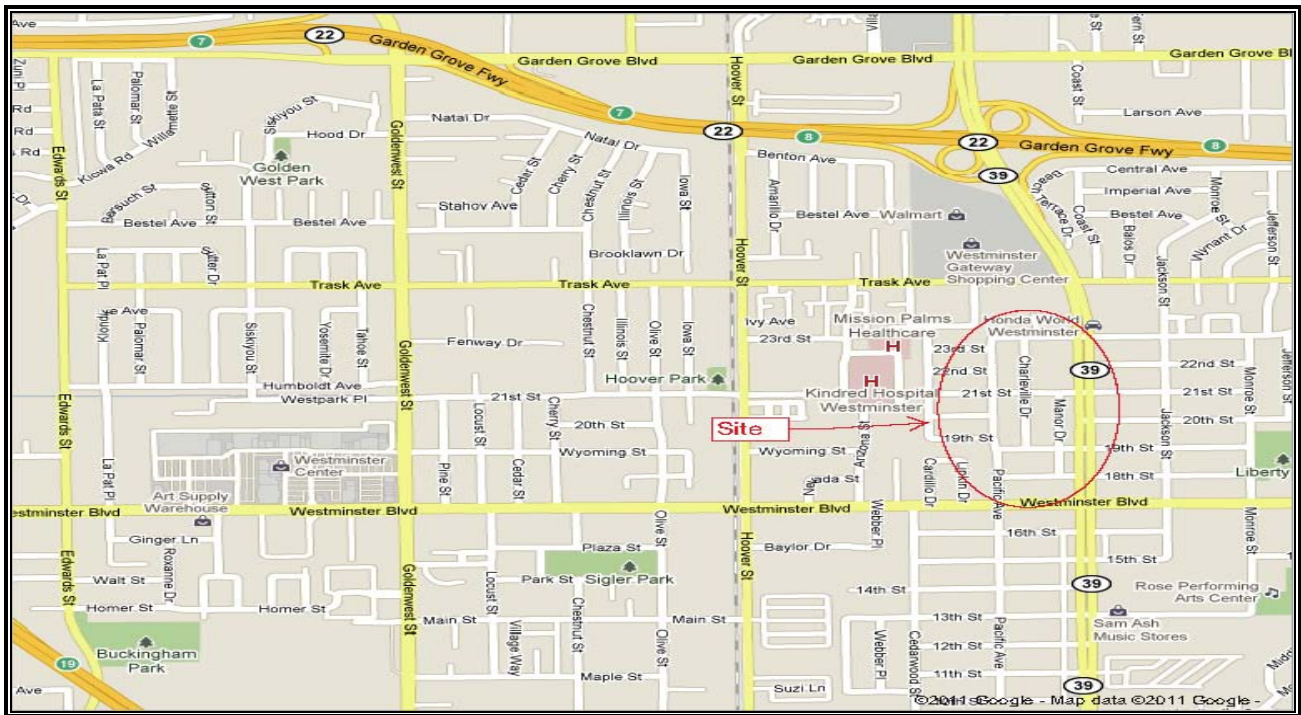


Figure 2 Vicinity Map

Locally, the project area includes storm drain improvements within the following streets, and color coded in Exhibit 3. Project details are in Section 2.2.

Blue - 24" line, east-west trending

- 18th Street between Beach Blvd. to Pacific Avenue
- 19th Street between Beach Blvd. to Pacific Avenue
- 21st Street between Beach Blvd. to Pacific Avenue
- 23rd Street between Beach Blvd. to Pacific Avenue

Green - 36" line, north-south trending

- Pacific Avenue between 23rd Street and Westminister Blvd.

Magenta – 42" line, East-west trending.

- 19th Street between Pacific Avenue and Richardson Way



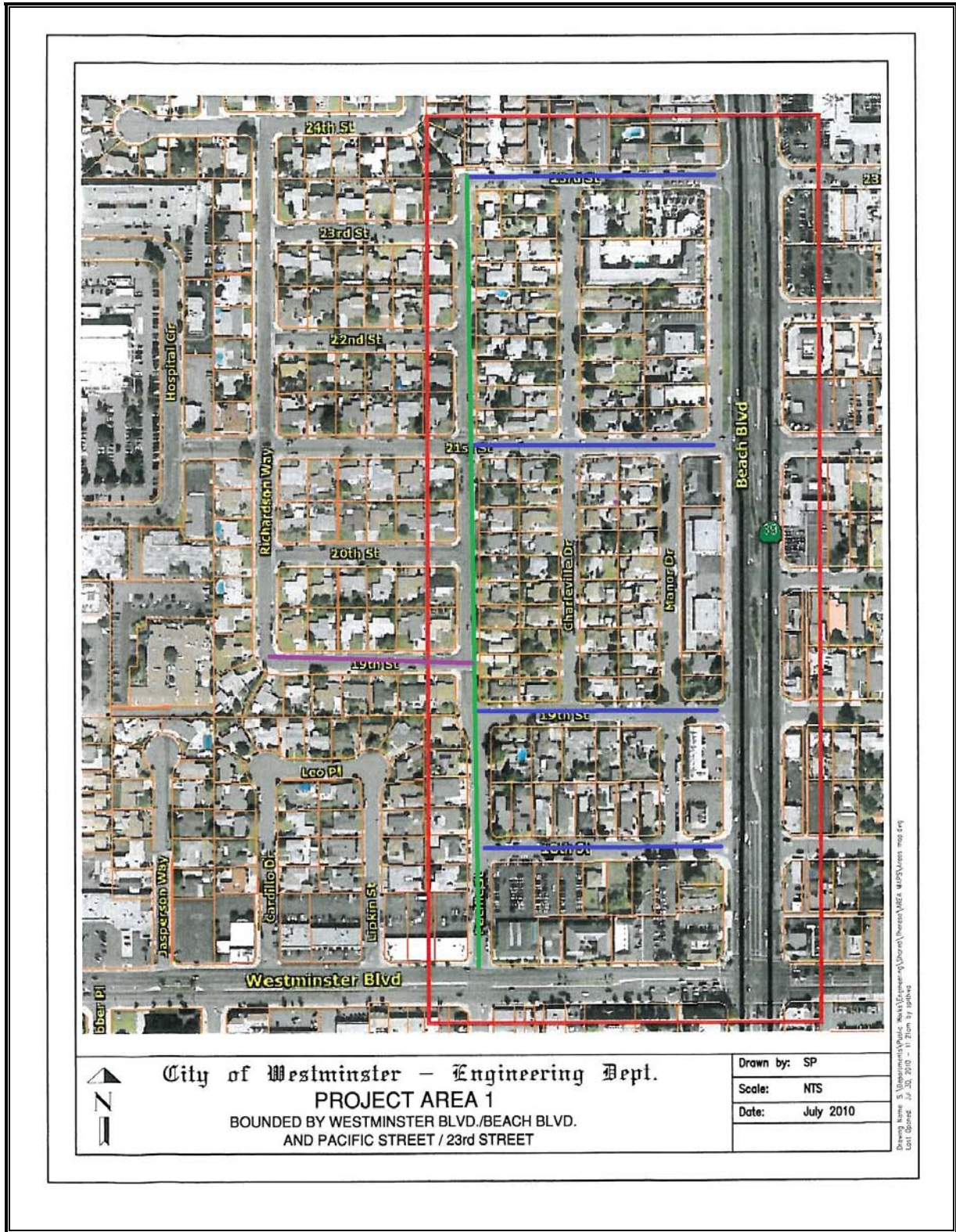


Figure 3 Project area color coded.





Figure 4 View North along Pacific Avenue at 18th Street.



Figure 5 View east along 10th Street from Pacific Avenue.



Figure 6 View west along 19th Street from Manor Drive.



Figure 7 View west along 23rd Street from frontage road.

1.2 Background

Storm drain infrastructure in Westminster was constructed well before the City's incorporation in 1957. In the 1920's and 30's, land uses consisted primarily of small farms with associated unlined drainage ditches. In 1938, a severe flood struck Southern California and the Westminster area and left washes and debris across roads which disrupted access to the town for months. The 1940's brought a transition to the Westminster area as farming tracts were slowly converted to large housing tracts. By the 1950's, land developers were acquiring local farms in and around Westminster and building new tracts of single family homes which relied on the smaller unlined drainage ditches for storm water flows. By the 1960's, single family homes were prevalent in the Westminster area and the City was in need of storm drain improvements.

The most pronounced area of severe storm damage was in the project area of Beach and Westminster Blvd's during the El Nino winters in the 1980's. Residential homes and businesses in these areas suffered severe damage after storm events because storm flows ran freely over the streets. Traffic was blocked for days during rush hour. And while loss of life was avoided, the City incurred millions of dollars in lawsuit settlements due to inadequate storm drainage facilities, as well as millions of dollars in City staff and contractors to clean up mud and debris from Beach and Westminster Blvds. The major reasons for storm impacts on local residents and businesses include:

- 1) There are no storm drains or inlet structures in the project area. This is one of the oldest areas of the City and no storm drains were constructed here at the time of residential development.
- 2) There is inadequate curb and gutter along residential streets in the project area to manage storm flows (see figure 8).
- 3) Construction of Beach Blvd. in the 1960's, immediately to the east of the project area, has essentially created a barrier for storm flows. Storm runoff from the west side of Beach Blvd. flows westerly into the neighborhood (see figure 9).
- 4) The Caltrans constructed catch basin at Beach Blvd. and 23rd Street is inadequate in size to collect storm water off the west side of Beach Blvd. This catch basin is often clogged with rock and debris after a storm event, exacerbating the flooding effect in the neighborhood.
- 5) Caltrans continued repaving of Beach Blvd. over the past 50 years has exacerbated the storm water barrier effect because new asphalt over the years has built up without appropriate re-grinding (see figure 10).

In the 1990's the City of Westminster approached the Orange County Flood Control Division (OCFCD) of the County of Orange Public Works Department to assist in alleviating the flood risks. However this area of Westminster is not a high priority for the OCFCD due to the high cost of retrofitting storm drains within paved streets, and flood control priorities elsewhere in the County.

Continued resident complaints after a storm event has prompted the City to improve storm drainage in this area during a time when the streets are scheduled for repaving. Based on the City's Pavement Management System (PMS), a requirement from the Orange County Transportation Authority (OCTA) for Measure M funding eligibility, Westminster must improve local streets to certain Pavement Condition Index's (PCI) on an annual basis. The project streets are scheduled for pavement rehabilitation in order to improve the City's PCI. City funds have been designated to improve not only the street pavement, but to make improvements to the curb, gutter, cross gutter, sidewalk, driveway approaches, and wheelchair ramps in the project area. These street improvements will result in short-term disruptions to residents and businesses in the area. Therefore, construction of the storm drain system during these street improvements is the most prudent use of local and federal funds, and will cause the least disruption to the residents and businesses in the area.

While commercial improvements along Beach and Westminster Blvds. have upgraded over the past 50 years, the single family residential homes and multi-family apartments in this area of Westminster have not. As one of the oldest parts of the community, the residents living along 18th, 19th, 21st and 23rd Streets and Pacific Avenue have an average annual per capita income of \$13,125, twenty percent of the residents here are below poverty, and less than 30% speak English well as a first language (EPA Environmental Justice Geographic Assessment EJView).



Figure 8 Example of no curb or gutter. Northern end of Pacific Avenue near 21st Street.



Figure 9 View east toward Beach Blvd. from 23rd Street. Note super-elevation of Beach Blvd.



Figure 10 View east toward Beach Blvd. from 19th Street. Note super-elevation of Beach Blvd.

2.0 Environmental Assessment

2.1 Purpose and Need for the Project

The City of Westminster storm drain project is intended to serve a necessary drainage purpose to:

- Protect the health, safety and welfare of the community from storm flow events.
- Minimize reoccurring city maintenance after storm events.
- Protect properties from flooding.
- Minimize local community impact during construction by coinciding construction of the storm drain with PMS street improvements.
- Improve both emergency vehicle access and local residence access and safety both during and after storm events.
- Installation of catch basin filter baskets will protect trash and other urban pollutants from reaching the ocean.

2.2 Proposed Project and Funding Status

Proposed Project

The City of Westminster is proposing to build a storm drain system and associated catch basins/inlet structures in the following areas and as outlined on Figure 3:

24" lines, east-west trending

- 18th Street between Beach Blvd. to Pacific Avenue
- 19th Street between Beach Blvd. to Pacific Avenue
- 21st Street between Beach Blvd. to Pacific Avenue
- 23rd Street between Beach Blvd. to Pacific Avenue

36" line, north-south trending

- Pacific Avenue between 23rd Street and Westminster Blvd.

42" line, East-west trending.

- 19th Street between Pacific Avenue and Richardson Way

Approximately 3,200 lineal feet of new storm drain piping is proposed to be constructed below existing streets as outlined above. Approximately 24 to 27 catch basin/inlet structures are proposed to channel storm flows from various locations in the project area to the existing storm drain located beneath Richardson Way one block west of the project area (Figures 11 and 12 below). Improvements will also include storm drain junction structures with manholes, constructing storm drain catch basins with bio-filter baskets and catch basin local depressions.

Construction of the storm drain will require trenching in the streets from six-feet (6') to eight-feet (8') in width and six-feet (6') to seven-feet (7') in depth. Excess dirt will be used for some back



fill and the balance will be transported to a dump site. Storm drain materials will be stored by the contractor until required for installation. Other staging of equipment will occur on the residential street as necessary and will be kept to a minimum. Construction vehicles will be removed from the site each night and returned to the contractor's facility. Residential and commercial access will be maintained at all times.

Relocation of Existing Utilities

Relocation of existing subsurface utilities (sewer and water) will be required with installation of the storm drain. This will include constructing sewer manholes, constructing 8" PVC sewer lines, 4" PVC sewer laterals with cleanouts, relocating 6" water lines, reconstructing water services, dewatering, resetting survey monuments, adjusting utility covers to grade, installing pavement markings, relocating signs and cleanup. Depths of these necessary excavations are within the previously stipulated 6' to 7'.

The City's hydrology and hydraulics report dated April 4, 2011 and prepared by WG Zimmerman Engineering Inc., indicates that the receiving storm drain at Richardson Way has sufficient capacity to accept the 43.4 acres of surface area storm runoff for the project. The total hydrologic flows for the stated surface area are 53 cfs (cubic feet per second) for a Q10 storm event (likelihood of occurrence 10 % per year), and 65 cfs for a Q 25 storm event.

Receiving Drainage Area and Capacities

Drainage from the Richardson Way storm drain travels approximately 0.4 miles southwest and feeds into the existing 54" Hoover storm drain below Hoover Street. The Hoover storm drain is larger in diameter because it receives storm flows from other locations in the City, in addition to the Richardson Way storm drainage. Flows in the Hoover storm drain then travel approximately 0.5 miles southward, until it reaches the Westminster channel. Westminster channel (C04 as identified by the Orange County Flood Control District OCFCD) is a 96" open and concrete lined storm drain channel which receives storm flows from several other storm drains in the area. Storm flows in the Westminster channel will then travel approximately 3.5 miles until it reaches the Bolsa Chica channel. The Bolsa Chica channel (C02 as identified by the OCFCD) is also an open and concrete lined channel that eventually drains to the Pacific Ocean near Seal Beach to the southwest.

Funding Status

Project costs for the storm drain are approximately \$1,585,350. As noted in Section 2.1 on pages 8 and 9, the City desires to minimize disruption to the residences and businesses within the project area by combining the necessary PMS street and pavement improvements with construction of the storm drain. However, the City is only seeking EPA grant funds of \$848,000, or 55% of the storm drain costs. The City has designated a grant matching amount of \$693,818 for the storm drain improvements. Total cost for the storm drain and street improvements are approximately \$3,300,000. Funding for the PMS street and pavement improvements will be provided with a combination of Measure M funds and the City Capital Improvement Project budget for 2012-2013.





Figure 11 View southeast from Richardson Way and 19th Street toward existing storm drain inlet.

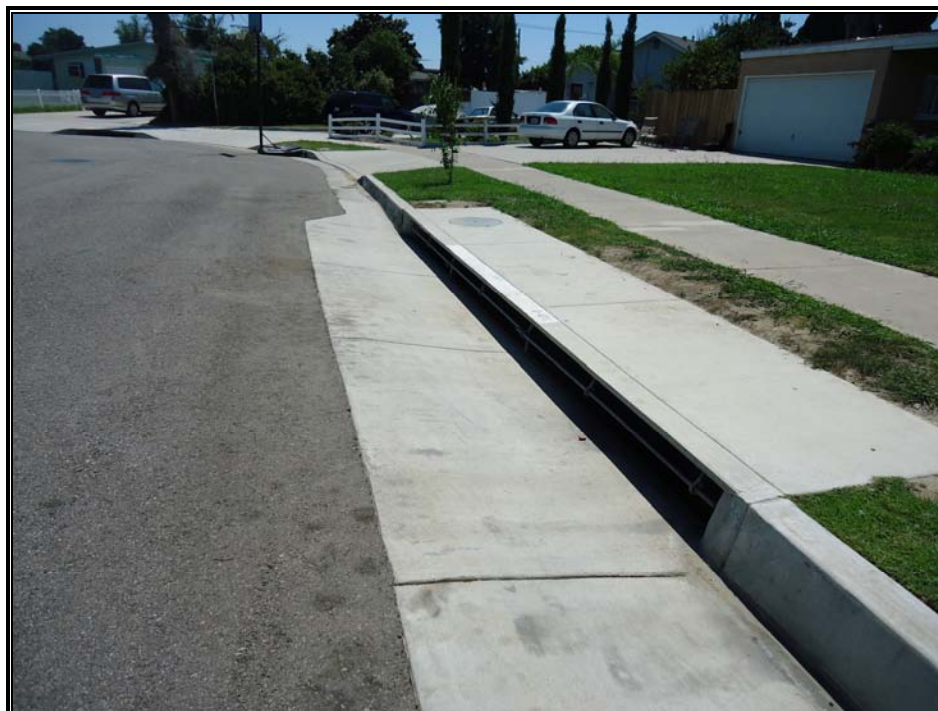


Figure 12 View south from Richardson Way toward existing storm drain inlet.

Cumulative Impacts

Pavement Management System street and pavement improvements are scheduled to be completed by the City in the 2012-2013 fiscal year. These improvements will occur whether or not the City receives the EPA grant funds. Therefore the street and pavement improvements are part of the cumulative projects in this environmental assesment. Street and pavement improvements include clearing and grubbing, relocating existing facilities, construction surveying, traffic control, sawcutting, asphalt pavement and base pulverizing for use in installing cement treated base (CTB), haul off of excess pulverized material, excavation, grading, constructing AC pavement, removing existing cement concrete curb and gutter, cross gutter, sidewalk, curb ramps, and PCC and AC driveways, constructing cement concrete curb and gutter, cross gutter, sidewalk, curb ramps, and driveways, trenching, disposal and trench backfilling.

The City began analyzing cumulative effects of the project by reviewing the impacts of the Proposed Action and alternatives on the specific environmental resources presented in Section 2.3. The City then identified past, present, and reasonably foreseeable future actions that could contribute to cumulative effects on each resource, and defined an area of analysis and timeframe for the potential cumulative effects for each resource.

The City used a variety of sources to identify and collect information on past, present, and reasonably foreseeable actions in the project area that could contribute to cumulative effects. These include:

- ✓ City and/or County General Plans
- ✓ Project Hydrology Report
- ✓ Existing environmental documents

The City also contacted various public agencies by phone in conjunction with projects that could contribute to cumulative effects.

- ✓ County of Orange Public Works Department, Flood Control Division.
- ✓ California Department of Transportation.
- ✓ Orange County Water District.

As a result, the City concluded that there are approximately 85 street segments planned for overlay/slurry projects and storm drain improvements for various residential streets in the City of Westminster in the next 10 years. Refer to the alternatives analysis table for an overview of cumulative and alternative project impacts.

1. Resources considered in the cumulative impact analysis.

The following resources were considered in the cumulative impact analysis, primarily because of their significance and applicability in this environmental assessment.

- Air Quality/Greenhouse Gases
- Agriculture/Protected Farmlands
- Coastal Zone/Barrier Resources
- Cultural Resources/Native Americans/SHPO
- Essential Fish Habitat
- Environmental Justice Geographic Assessment/Relocation Impacts Land Use
- Fish/Wildlife/Threatened and Endangered Species
- Flood Plain/Storm Water
- Hazardous Materials/Waste
- Hydrology/Water Quality
- Land Use
- Land/Water Conservation Fund
- National Historic Structures
- Soils/Liquefaction
- Sole Source Aquifer/Drinking Water Supplies
- Wetlands
- Wild and Scenic Rivers

2. Define the geographic boundary or Resource Study Area (RSA) for each resource to be addressed in the cumulative impact analysis.

Hydrology and flooding: The RSA for assessing hydrologic impacts encompasses 43.4 acres of surface area for the project. The RSA for assessing the balance of the impacts encompasses only the street segments noted in Section 2.2 Proposed Project.

3. Describe the current health and the historical context of each resource.

Each resource noted above has the same health and historical context and will therefore be assessed collectively in the Alternatives Analysis table.

4. Identify the direct and indirect impacts of the proposed project that might contribute to a cumulative impact on the identified resources.

Because of the short term nature of the project, storm drain construction and associated street improvements will not create direct or indirect impacts that might contribute to a cumulative impact to the resources listed in 1 above. Once the project is complete, there will be no visible indication that the project occurred except that future storm events will drain out of the residential area and potential flooding will be alleviated.

5. Identify the set of other current and reasonably foreseeable future actions or projects and their associated environmental impacts to include in the cumulative impact analysis.

The City is proposing approximately 85 other street improvements over the next 10 years. The City's consultant has analyzed the existing storm drain system through as-built plans from the Orange County Flood Control District and has determined that the downstream storm drain system is sufficient to receive these future flows. According to the City of Westminster Public Works Dept., approval of these storm drain improvements is not required by the Orange County Flood Control District because the City's system is upstream from the OCFCD system. The City has also performed the necessary due diligence in analyzing the existing system capacities.

6. Assess the potential cumulative impacts.

Based on the type of short term construction project, cumulative impacts to the resources listed in #1 above will be relatively minor because once constructed, no additional road disturbances will be required.

Long term cumulative effects of the project will be beneficial to hydrology and flooding because the new storm drain will direct and channel storm flows into the storm drain, rather than down the street and into resident yards.

7. Report the results of the cumulative impact analysis.

Based on the cumulative impacts reviewed in the Alternatives Analysis table for the affected resources, impact results are primarily considered less than significant with mitigation, less than significant or have No effect.

8. Assess the need for mitigation and/or recommendations for actions by other agencies to address a cumulative impact.

No additional mitigation, other than that listed in this document, is required to reduce cumulative impacts to less than significant levels.

2.3 Existing Environment

General

This is a standalone project with logical termination. Based on review of the design drawings, the project will not require future construction to fully utilize the design capabilities. The purpose of the project is to install a new storm drain and rehabilitate the existing pavement that has been classified to be in poor condition and has structural deficiencies per the Pavement Management System. One hundred percent of the storm drain project is located under existing impervious paved streets. After construction the impervious surfaces will remain the same. The curb and gutter portion of the street improvement project will convert approximately 10% of the existing pervious ground, to impervious curbs and gutters. In this residential area, urban pollutants are generally limited to residential discharge from landscape irrigation, trash and vehicle oil/gas leakage. Storm drain catch basins will help limit urban pollutants from entering the storm drain system. The project is not controversial and will not generate public controversy.



Air Quality/Climate

The climate in the City of Westminster, as in all of Southern California, is controlled largely by the strength and position of the subtropical high-pressure zone over the Pacific Ocean. It maintains moderate temperatures between 67 degrees and 50 degrees Fahrenheit and comfortable humidity's, and limits precipitation to a few storms during the winter "wet" season. Temperatures are normally mild with rare extremes above 100° or below freezing. Daily and seasonal variations above the annual mean temperature are small.

The project area is located within EPA Region 9, Los Angeles-South Coast Air Basin. Based on review of the EPA National Ambient Air Quality Standards, the project is located in a non-attainment or maintenance area. Based on review of the Environmental Justice area of the EPA EJView web site, the project area is also located within a nonattainment area for PM 2.5 and Ozone 8-hour. However, no new traffic trips or emissions there from will result with the proposed project after construction. The project, once completed, will not cause or contribute to any new localized CO or PM (10) violations or increase the frequency or severity of any existing CO or PM (10) non-attainment and maintenance areas because the project will not increase the number of travel lanes, will not change the zoning of any properties of the project area and will not increase the volume of traffic traveling through the area.

Short-term temporary impacts will result from construction activities associated with the proposed storm drain. Air pollutants will be emitted by construction equipment which will be emitted into the atmosphere from equipment exhaust. Secondary construction-related impacts to air quality will result from fugitive dust emitted from excavation and backfill. Air pollutants will also be emitted from construction worker commutes. Project-related impacts are anticipated to be short-term in duration, and will occur only during construction of the project. While approximately 90% of construction equipment utilizes sulfur burning diesel fuels, SCAQMD requires construction equipment to utilize at least low-sulfur burning fuels. Non-sulfur burning construction vehicles may be cost prohibitive under the City's current budget for this project. Therefore the use of non-sulfur burning fuel use will be a recommendation and not a requirement.

The project is exempt from the requirements to determine conformity, based on Table 2 from 40 CRF 93.126: Pavement resurfacing and/or rehabilitation. No new roads will be constructed. The improvements include construction of storm drain, new median curb, and new AC pavement. Other exemptions that apply include: Safety improvement program (due to flood risks).

No short-term or long-term impacts on climate or air quality management are anticipated. All such construction related air impacts are considered less than significant, given the recommended measures to mitigate temporary impacts and the short duration of construction.

In summary the proposed project will not result in construction-related emissions which are expected to exceed impact significance thresholds for any of the regionally significant pollutants.



Agriculture/Protected Farmlands

Based on review of the City's General Plan, and the Farmland Protection Policy Act (FPPA), as implemented by the Secretary of Agriculture, the project area is not located within a protected farmland.

Coastal Barrier Resources

The project area is not located within or adjacent to a coastal barrier resource as described in the Coastal Barrier Resources Act (CBRA) and as implemented by the US Fish and Wildlife Service. The CBRA restricts development on the Coastal Barrier Resources System (CBRS) which serves as an important buffer between coastal storms and inland areas. Coastal barriers also provide a protective habitat for aquatic plants and animals.

Coastal Zone

The project area is not located within the State Coastal Zone (within 1,000 yards from the mean high tide line). The project is located approximately 5 miles northeast from the coast.

Cultural Resources/National Historic Resources

On April 26, 2011, Ms. Dianne Bonner, Registered Geoarchaeologist and Principal Investigator, performed a cultural resources record search at the South Central Coastal Information Center (SCCIC) located at the California State University in Fullerton to locate any recorded cultural resources.

- Records search was conducted as a means to identify all previously recorded cultural resources (prehistoric and historic) within the area of potential effect (APE).
- Review of all cultural resource survey or excavation reports.
- Review of the California State Historic Resources Inventory (HRI) for Orange County, the National Register of Historic Places (NHRP), the California Historical Landmarks (CHL) and the California Points of Historical Interest (CPHI) to identify historic properties within the Area of Potential Effect (APE).
- Review of historic USGS maps for indications of earlier development in the project area.

No previously recorded prehistoric or historic archaeological sites, isolates or historic properties exist within the boundaries of the project area. However, the following results apply within a ½-mile radius of the project area:

One previously recorded historic cultural resource is noted:

The Westminster school at 7521 Westminster Blvd. was built in 1935 and appears to be eligible for National Register listing. It is located 1,200 feet to the west of the site and would not be visible from the project or impacted by any planned ground disturbance.

A Phase I Archaeological Survey was undertaken on August 29, 2011 by Diane F. Bonner Registered Geoarchaeologist and Principal Investigator. This survey entailed walking both sides of each street directly involved in Storm Drain Area 1 and the inspection of all exposed ground



surfaces and soil exposures such as rodent burrows, landscaped areas, and excavated or cleared areas. Details of the field observations are included in the attached cultural resource survey. Survey results concluded no prehistoric or historic archaeological resources were observed in the soils within the areas examined. Based on the report, it is unlikely that any new resources will be uncovered or impacted by the construction in Project Area 1 Storm Drain. The area is already developed into a residential neighborhood with some commercial structures, with paving, utilities and landscaping, which has caused considerable disturbance to the underlying soils and deposits. When these conditions exist, and in accordance with SHPO regulations, no further mitigation is required.

However, the mitigation below has been provided in order to off-set the potential for unknown buried prehistoric or historic archaeological remains:

- If human remains are encountered during excavations associated with this project, all work will halt and the County Coroner will be notified (Section 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are of forensic interest. If the Coroner, with the aid of the supervising Archaeologist, determines that the remains are prehistoric, he/she will contact the Native American Heritage Commission (NAHC). The NAHC will be responsible for designating the Most Likely Descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 7050.5 of the California Health and Safety Code. The MLD will make his/her recommendations within 24 hours of their notification by the NAHC. This recommendation may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (Section 7050.5 of the Health and Safety Code).

SHPO Consultation

The State Historic Preservation Office received a complete package on October 17, 2011. On December 12, 2011, SFC submitted a letter at SHPO's request (Tristan Tozer) outlining the project on a single page. Approval from SHPO was received January 25, 2012 under reference # EPA111006A, and is attached as an appendix.

Native American Consultation

Attached to this document is evidence that interested parties associated with the Native American Heritage Commission (NAHC) have been consulted. Based on the letter received from Mr. Dave Singleton with the NAHC and dated April 22, 2011, a record search of the Sacred Lands file has failed to indicate the presence of Native American cultural resources in the immediate area. SFC was provided a list of Native American tribes/individuals for consultation for Orange County. Project information was directed to each tribe and/or individual listed. Twelve (12) Native American tribes/individuals were sent separate correspondences via certified mail and each has been attached to this report. Those tribes with email addresses were sent the same information electronically.

Two responses were received from an individual on behalf of herself and another individual on the NAHC list provided to *SFC Consultants*. On May 12, 2011 a phone call was received by Ms. Joyce Perry, Representing Tribal Chairperson of the Juaneno Band of Mission Indians Acjachemen Nation. Per Ms. Perry; “She nor Mr. David Belardes, Chairperson, Juaneno Band of Mission Indians, Acjachemen Nation, had no concerns at this time on the Westminster Storm Drain Project.”

Drinking Water Supplies

Based on information from the Orange County Water District web site, the City of Westminster overlies the Orange County groundwater basin. However, the proposed project will not impact drinking water supplies because the depth of excavation, approximately 6 to 7 feet, will not be deep enough to impact drinking water supplies that are nearly 800’ below ground.

Environmental Justice Geographic Assessment / Relocation Impacts

This section identified minority and low income populations that exist within the project area and evaluates whether the environmental impacts (if any), or each alternative, would result in a disproportionately high and adverse impact on minority and low income populations. Based on review of the Environmental Justice area of the EPA EJView web site, the project area is located within the following Block Group ID’s. As the data shows, this area of Westminster has a low per capita income averaging approximately \$13,124 annually. Approximately 20% of the population in this area is below poverty and approximately all residents speak English well as a percentage. Approximately 30% of the population has an education greater than 12th grade.

While the project will inconvenience residents in this area for the duration of the project, long term impacts are considered beneficial because the storm drain system will alleviate future potential flooding. No residents or businesses will require relocation.

Essential Fish Habitat

Essential fish habitat is not within the project boundaries due to the urbanization of the project area. Based on review of the proposed development plans, improvements will take place near existing residential developments, more specifically along asphalt-paved streets; therefore, the proposed improvements at the Project site will not affect Essential Fish Habitat. Given these parameters, no mitigation is required.

Fish and Wildlife/Threatened-Endangered Species

On September 5, 2011, Mr. Burke Walker, an Environmental Biologist and Ecologist, reviewed the California Natural Diversity Database (CNDDDB), the California Department of Fish and Game (CDFG) BIOS and Quick Viewer websites, and the United States Fish and Wildlife Service (USFWS) Carlsbad Fish and Wildlife Office Species By County list for Threatened and Endangered Species that are known to exist in the USGS *Anaheim, California* Topographic Quadrangle (Anaheim Quad) and/or the County of Orange. Additionally, Mr. Walker reviewed the Google Maps website and construction Project area map provided by SFC Consultants, and online aerial photography and satellite imagery to assess the characteristics and suitability of the Project Site and areas surrounding for species habitat.



Based on a review of the CNDDDB data for the Anaheim Quad, no federally listed endangered or threatened species and no state listed endangered or threatened species are located within the Anaheim Quad; though two CDFG Species of Special Concern (SSC) and California Native Plant Society (CNPS) rated plants are known to exist within the Anaheim Quad. In addition, the proposed Project area will not affect Species of Special Concern and/or CNPS rated species known to exist within the Anaheim Quad. The Project area is located in a highly developed area, previously graded, and regularly disturbed and maintained. Additionally, the main Project area routes are proposed for areas currently used for vehicle access, extensive neighborhood traffic, and areas currently developed for residential and commercial use. The Project areas have been severely re-landscaped with introduced vegetation that will not support most native California species with food and refuge. Based on a review of the proposed development plans, the improvements will take place near existing residential developments, more specifically along asphalt-paved streets; therefore, the proposed improvements at the Project site will not affect fish or wildlife.

Existing nearby foliage and shrubs are not proposed to be disturbed during the proposed Project installation; therefore, nesting birds are not likely to be disturbed. Given the parameters discussed above, no mitigation is recommended for the proposed Project improvements.

Floodplain

The general project area is located within Flood Insurance Rate Map (FIRM) panel 06059C0138J (figure 15). FIRM review shows the project within a shaded Zone X. Based on the FIRM legend, this area is has a 0.2% annual chance of flood; has a 1% annual chance flood (100-year flood) with average depths of less than 1 foot or with drainage areas less than 1 square miles, and has areas protected by levees from the 1% annual chance flood. Based on the storm drainage issues noted in Section 1.2, flooding occurs in the project neighborhood after nearly every heavy storm.

Greenhouse Gases and Global Climate Change

The proposed storm drain project will create certain GHG's during construction of the project primarily from construction equipment. However due to the small size of the project and short term duration, no mitigation is recommended.

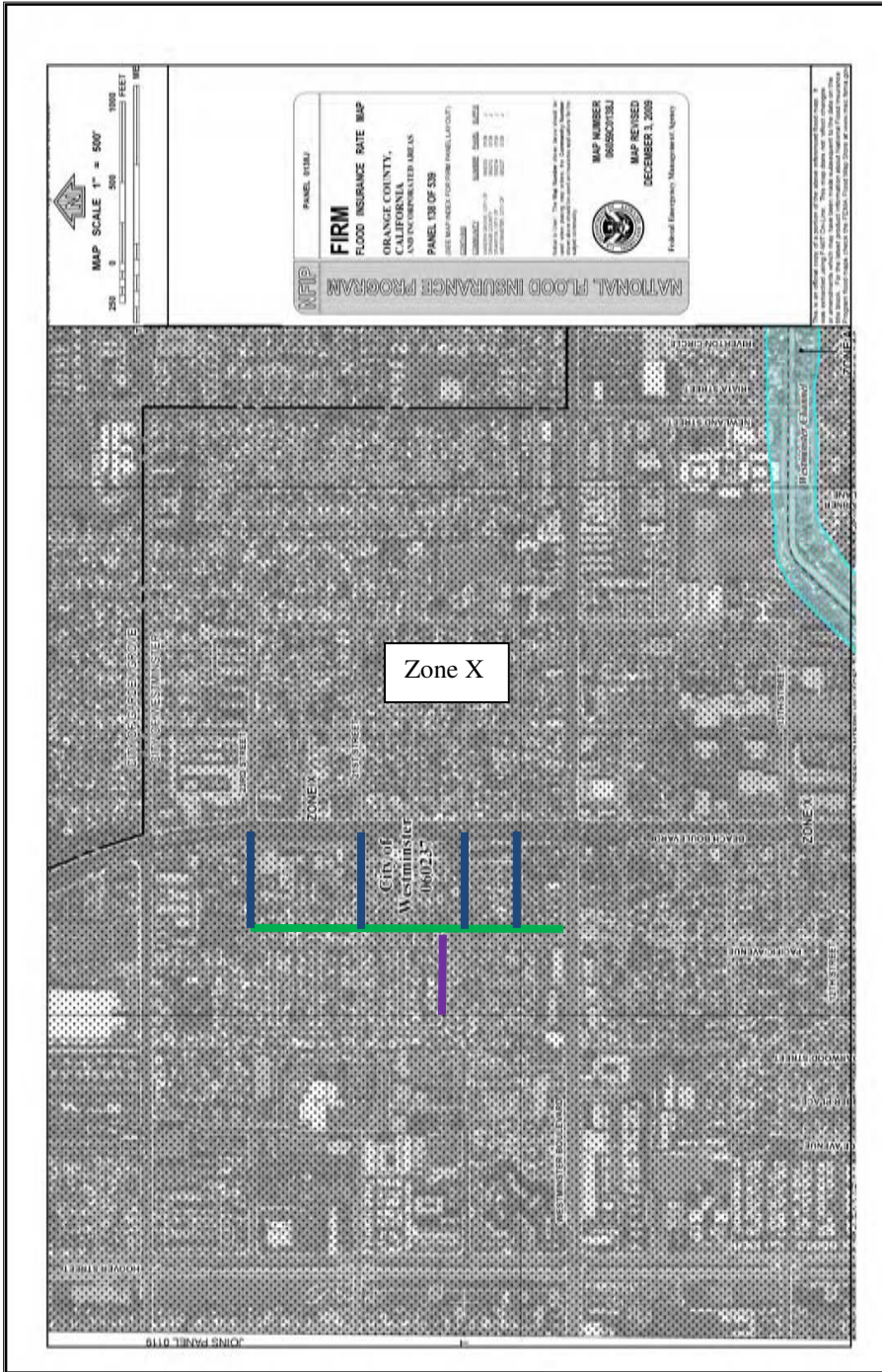


Figure 13 FIRM map of project area

Hydrology

The Westminster Watershed is part of the larger Santa Ana River Watershed, the largest stream system in southern California which covers an area of about 2,800 square miles in parts of Orange, San Bernardino, Riverside and Los Angeles Counties.

The project area is located within the Westminster Watershed which covers approximately 74 square miles of highly urbanized land uses in the southwestern corner of Orange County, California. It includes portions of the cities of Anaheim, Cypress, Fountain Valley, Garden Grove, Huntington Beach, Los Alamitos, Santa Ana, Seal Beach, Stanton, and Westminster. The watershed is drained by a manmade drainage and open channel system, which includes the Orange County drainage facilities East Garden Grove Wintersburg Channel (C05), Oceanview Channel (C06), Slater Channel (C05S04) and pump station, Haster Retarding Basin, and storm drains. Figure 13 presents the Westminster Watershed boundary.

The existing elevations for the project area range from approximately 48 feet above mean sea level (msl) at 23rd Street, to approximately 45 feet above msl at Westminster Blvd. to the southwest. The site is gently sloping at approximately 0.1 percent gradient to the southwest.

Land Use

The project area is primarily single family residential uses near Pacific and 23rd Streets. Multifamily apartments are located along the northern edge of the project at 23rd Street. Commercial uses are primarily located along Harbor and Westminster Boulevards. Commercial uses include car dealerships, auto repair facilities, hotels and smaller offices. There are no schools, churches or sensitive receptor areas at or adjacent to the project.

Land use designations for this area of the City of Westminster include the following:

- General Plan Designation: Residential and Commercial
- Zoning: R1-Single-Family Residential, R3- Multiple-Family Residential (13-14 units/acre), R4-Multiple-Family Residential (15-18 units/acre), C1-Local Business, C2-General Business.

One hundred percent of the storm drain project is located under existing impervious paved streets. After construction the impervious surfaces will remain the same. The curb and gutter portion of the street improvement project will convert approximately 10% of the existing pervious ground, to impervious curbs and gutters. In this residential area, urban pollutants are generally limited to residential discharge from landscape irrigation, trash and vehicle oil/gas leakage. Storm drain catch basins will help limit urban pollutants from entering the storm drain system.

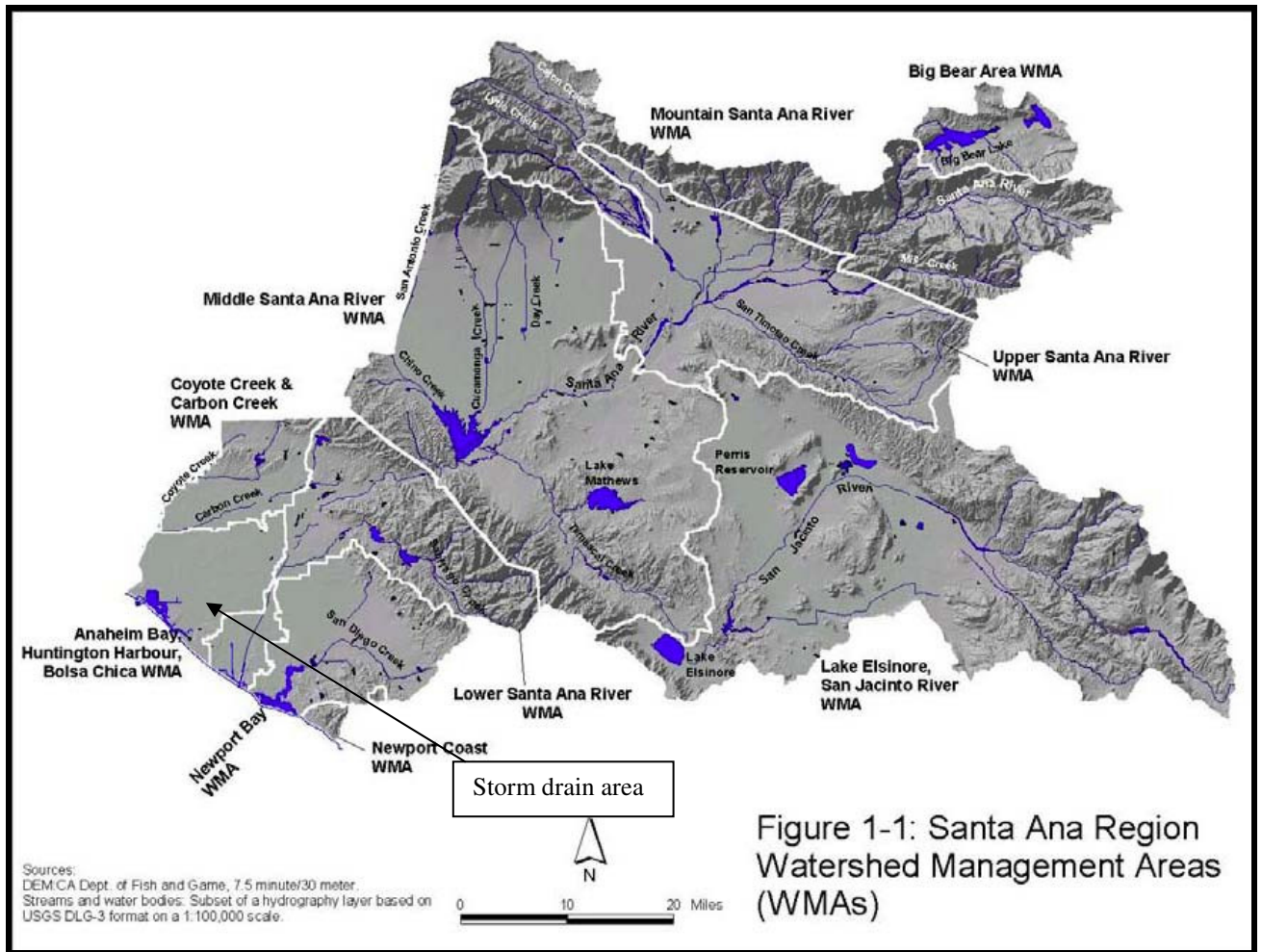


Figure 14 Santa Ana Region Watershed Management Area.

Liquefaction

The City of Westminster is one of many communities in Southern California that is built on a geologically ancient former ocean bottom and has loamy soil. In some cases this ground may be subject to liquefaction, depending on the depth of the water table. Perched groundwater may be present below 60 inches in depth and therefore the construction process may include de-watering and appropriate disposal.

Soils

Westminster’s soils have been mapped as part of a county wide soil survey (Soil Survey of Orange County and Western Part of Riverside County, California). Soils are mapped as soil associations and individually. The predominate soil association in Westminster is the Hueneme-Bolsa Soil Association. This association contains nearly level, poorly drained, and somewhat poorly drained



soils which are characterized as calcareous, (presence of calcium carbonate) fine sandy loams, silt loams, and silty clayloams. Such soils are deposited in alluvial fans and on flood plains.

Soils of the Hueneme-Bolsa Soil Association are formed in very deep alluvium. Slopes are zero to two percent. They are moderately alkaline throughout and calcareous, to 40 inches or more. Natural drainage is somewhat poor. Many areas however, are now drained and the water table is below 60 inches.

Sole-source Aquifer

The project is not located in or near the three sites in California that have been designated as sole-source aquifers. The project is located in the southern County of Orange and overlays the Orange County groundwater basin. The OC groundwater basin is not designated as a sole source aquifer.

Storm Water Programs MS4/NPDES

The Orange County Flood Control District, the County of Orange, and 34 incorporated cities within the Orange County Flood Control District (permittees) discharge or contribute to discharges of storm water and urban runoff from municipal separate storm sewer systems (MS4s), also called storm drain systems. The discharges flow to water courses within the Orange County Flood Control District and into receiving waters of the Orange County Region. These discharges are covered under countywide waste discharge requirements contained in Order No. 96-054 adopted by the Regional Board on July 15, 1996. Order No. 96-054 also serves as a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of municipal storm water into surface waters. The Report of Waste Discharge (ROWD), for renewal of an NPDES permit, includes a proposed Storm Water Quality Management Program (SQMP) and a Monitoring Program. The proposed SQMP contains programs in the following areas: a) Public Information and Participation; b) Development Planning, c) Development Construction, d) Public Agency Activities and e) Illicit Connection/Illicit Discharge Elimination Program.

Under the Orange County existing MS4 Permit, the City of Westminster will require compliance with the NPDES for excavation, trenching, and dewatering. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared by the contractor to address construction storm water runoff. All construction activity will be required to comply with construction site runoff control minimum control measures, as outlined by the Santa Ana Regional Water Quality Control Board (SARWQCB).



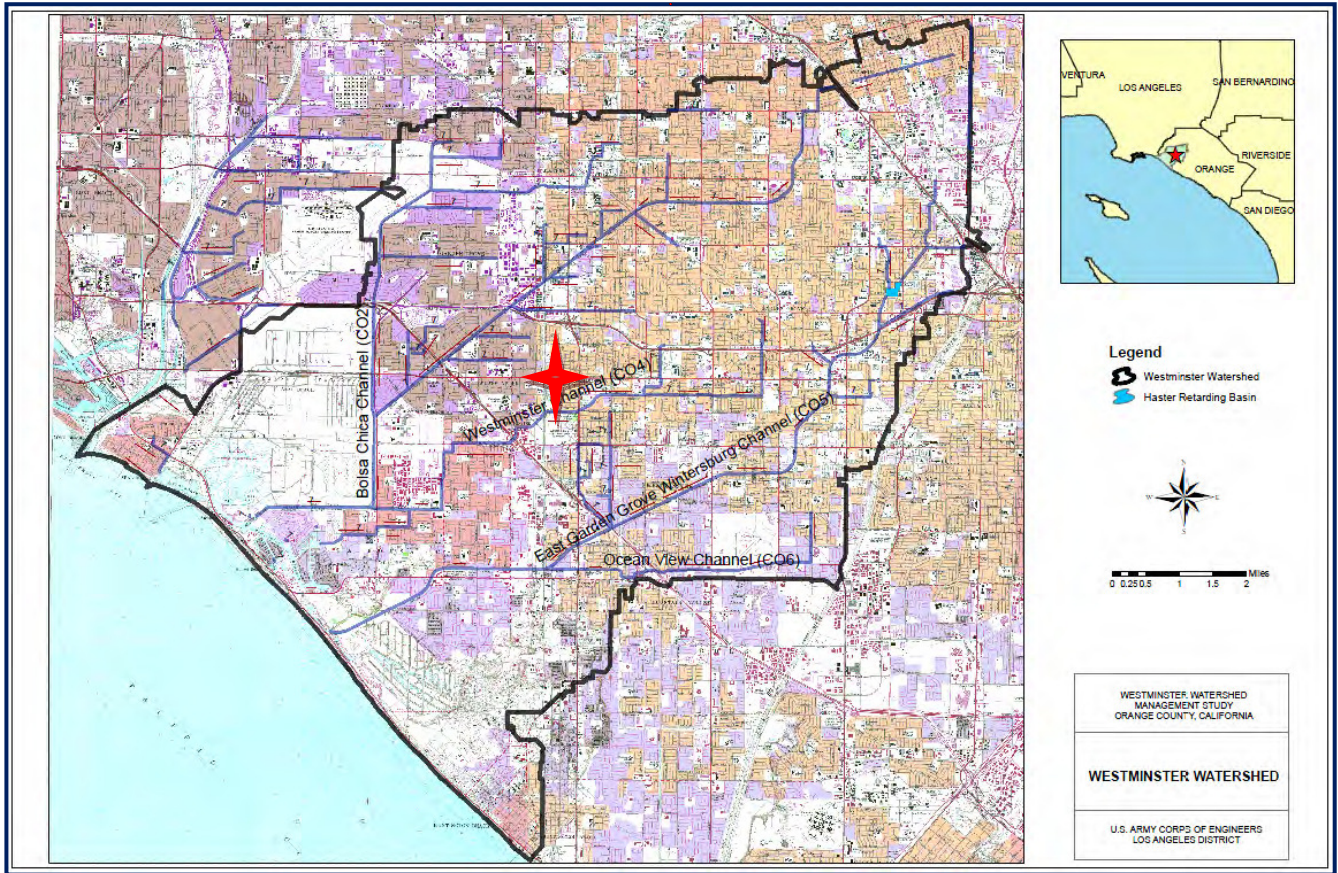


Figure 15 Westminster Watershed Map.

Water Quality/Resource

Based on a site visit by the Environmental Consultant (performed May 10, 2011) there are no water resources (rivers, streams, bays, inlets, lakes, drainage sloughs) within or immediately adjacent to the project area. No natural watercourses, lakes or streams will be impacted from the proposed project. Based on the City of Westminster’s Public Works Department, the proposed project will not create a net change in impervious surfaces or a net change in storm water runoff and drainage.

The nearest water body to the project is the Anaheim/San Pedro Bay at the Pacific Ocean located approximately 5 miles southwest of the project area near the Cities of Seal Beach and Huntington Beach. This area of the Pacific Ocean is listed on the State Water Resource Control Board (SWRCB) 2008-2010 CWA 303 (d) list of affected water bodies for Dieldrin (tissue), Nickel, PCBs and Sediment Toxicity. Therefore appropriate BMP’s will be implemented by the contractor during construction.

Disturbed Soil Area (DSA) incorporates the project area road right of ways and storm drain excavation. This project DSA is greater than 1 acre. BMP’s will be implemented to prevent disturbed soil from impacting residents during construction. After construction, any exposed areas

will be treated with ground cover to reduce soil erosion. However, no exposed areas are anticipated after construction.

Wetlands

Mr. Walker (biologist) reviewed the USFWS National Wetlands Inventory (NWI) Wetlands Mapper for designated wetland areas, the Department of Agriculture's list of wilderness areas, and the USFWS list of National Wildlife Refuges and determined that the Project area was not located in any of these areas.

Based on a review of the reference resources, the proposed Project area will not affect the Species of Special Concern and/or CNPS rated species known to exist within the Anaheim Quad. The Project area is located in a highly developed area, previously graded, and regularly disturbed and maintained. Additionally, the main Project area routes are proposed for areas currently used for vehicle access, extensive neighborhood traffic, and areas currently developed for residential and commercial use. The Project areas have been severely re-landscaped with introduced vegetation that will not support most native California species with food and refuge. Based on a review of the proposed development plans, the improvements will take place near existing residential developments, more specifically along asphalt-paved streets; therefore, the proposed improvements at the Project site will not affect Jurisdictional Drainages and Wetlands. Existing nearby foliage and shrubs are not proposed to be disturbed during the proposed Project installation; therefore, nesting birds are not likely to be disturbed. Given the parameters discussed above, no mitigation is recommended for the proposed Project improvements.

Wildlife

Typical of most urbanized areas, wildlife resources are limited within the project boundaries. Based on the City of Westminster General Plan EIR, in addition to domestic pets, the resident mammals include rabbits, opossum, untamed domestic cats, fox, California ground squirrel, house mouse, Western fence lizard and other reptiles. Common birds may include pigeons, hummingbirds, horned larks, ravens, seagulls, starlings, house sparrows, and various finches and warblers. Located approximately ½ mile to the south of Beach Blvd. and Westminster Boulevard, the 160-acre Westminster Memorial Park Cemetery affords some habitat for migratory ducks, geese and wild birds such as hawks, owls and other raptors. None will be impacted from the proposed project.

The level of human activity along the project alignment has already impacted any nesting activity, and this impact is ongoing. The construction and improvements of the Area 1 Project is not expected to impact nesting migratory or raptor species. No significant impacts to raptors and migratory birds or their habitats are expected, and therefore no mitigation is required.

Habitat fragmentation has already occurred with the development of this area of Westminster. The project will not add to the fragmentation of habitat. There are no substantial wildlife corridors on site. The project will not impede or significantly impact wildlife movement in this area. No significant impacts to habitat fragmentation and wildlife movement are expected to occur, and therefore no mitigation is required.



Wild and Scenic Rivers

The project is neither within, nor adjacent to a Wild and Scenic River System. There are no Wild and Scenic River Systems in Orange County.

2.4 Alternatives Analysis

The goal of addressing project alternatives is to reduce environmental impacts associated with the project. Alternatives must also consider the type of project (storm drain) within the context of the alternatives proposed. This document will address City selected project alternatives as applicable and feasible for this storm drain project.

Below is a brief description of the alternatives compared in Table 1 at the end of this environmental assessment.

Alternative 1: Proposed Project including Street Improvements (Cumulative project)

This alternative includes the proposed storm drain project in addition to the City initiated street improvements for this area. PMS street and pavement improvements are scheduled to be completed by the City in the 2012-2013 fiscal year. These improvements will occur whether or not the City receives the EPA grant funds. Street and pavement improvements include clearing and grubbing, relocating existing facilities, construction surveying, traffic control, sawcutting, asphalt pavement and base pulverizing for use in installing cement treated base (CTB), haul off of excess pulverized material, excavation, grading, constructing AC pavement, removing existing cement concrete curb and gutter, cross gutter, sidewalk, curb ramps, and PCC and AC driveways, constructing cement concrete curb and gutter, cross gutter, sidewalk, curb ramps, and driveways, trenching, disposal and trench backfilling.

- **Air Quality**
Short-term temporary impacts will result from construction activities associated with the proposed storm drain. Air pollutants will be emitted by construction equipment which will be emitted into the atmosphere from equipment exhaust. Secondary construction-related impacts to air quality will result from fugitive dust emitted from excavation and backfill. Air pollutants will also be emitted from construction worker commutes. Project-related impacts are anticipated to be short-term in duration, and will occur only during construction of the project. These impacts are less than significant with mitigation and the following mitigation measure will be implemented:

Short-term construction related air quality impacts may be associated with truck emissions. While idling of some of the construction trucks may be necessary, potential impacts will be mitigated by utilizing the City of Westminster standard Best Management Practices for construction. These measures include but are not limited to: maintaining construction equipment in good working condition, avoiding construction equipment idling in residential areas and utilizing low-sulfur burning fuels. Impacts are therefore less than significant with mitigation incorporated.

- **Agriculture/Protected Farmlands**
Based on review of the City's General Plan, and the Farmland Protection Policy Act (FPPA), as implemented by the Secretary of Agriculture, this alternative is not located within a protected farmland. There will be no effect to agriculture or protected farmlands.
- **Coastal Zone/Barrier Resources**
This alternative is not located within or adjacent to a coastal barrier resource as described in the Coastal Barrier Resources Act (CBRA) and as implemented by the US Fish and Wildlife Service. No effect is anticipated.
- **Cultural Resources/Native Americans/SHPO**
Based on the cultural analysis performed for the proposed project, impacts to cultural resources, Native American, including historical buildings and SHPO resources are unlikely to occur. The SHPO office concurred with a no effect determination. The impacts will be less than significant with mitigation. The following mitigation measure is included in case any human remains are found.

If human remains are encountered during excavations associated with this project, all work will halt and the County Coroner will be notified (Section 5097.98 of the Public Resources Code).

- **Essential Fish Habitat**
Essential fish habitat is non-existent within this alternatives' boundary due to the urbanization of the area. Therefore, the proposed improvements for this alternative will not affect essential fish habitat.
- **Environmental Justice Geographic Assessment/Relocation Impacts**
This alternative project will have no effect on environmental justice and will not require the relocation of residents or businesses. No mitigation is required.
- **Fish/Wildlife/Threatened and Endangered Species**
Based on the biological analysis performed for the proposed project, this alternative will not affect fish and wildlife nor threatened and endangered species because it is located in an urbanized area. No effect is anticipated.
- **Floodplain/Stormwater**
Based on the Firm Insurance Rate Map, the proposed project has a .02% annual chance of flood and a 1% annual chance flood with average depth of less than 1 foot. The proposed project would not increase the chance of flood in the project location. The proposed project would install catch basin filters that will trap and remove pollutants from enter the storm drain. Impacts will be less than significant.

- Greenhouse Gas Emissions

The proposed project will create certain CHG emissions during construction activities. These impacts are small in size due to the small size and short term duration. These impacts are less than significant with mitigation and the following mitigation measure will be implemented.

Short-term construction related greenhouse gas emission impacts may be associated with truck emissions. While idling of some of the construction trucks may be necessary, potential impacts will be mitigated by utilizing the City of Westminster standard Best Management Practices for construction. These measures include but are not limited to: maintaining construction equipment in good working condition, avoiding construction equipment idling in residential areas and utilizing low-sulfur burning fuels.

- Hydrology/Water Quality

The proposed project would affect the water quality during construction activities. There will be excavation for the trenches during this time. Additionally, there will be changes to the water quality through the installation of catch basins that will capture and remove pollutant materials from entering the storm drain. A NPDES permit will still be prepared. Impacts are less than significant with mitigation including and minimizing urban runoff where possible. The following mitigation measure will apply.

NPDES Permit for General Construction Activities will be required for lineal trenching, excavation and dewatering in accordance with the Regional Water Quality Control Board. The NPDES permit will dictate the required water quality allowed to be discharged during construction and specify BMP's used during construction. Catch basin filters will trap low flow waters and remove pollutant materials entering the storm drain. All spills, leaks or other losses of oils and other hazardous or toxic materials will be immediately cleaned up.

- Land Use

The proposed project would not affect land use in the project area. No effect to land use is anticipated.

- Soils/Liquefaction

The proposed project will have no effect to soils or liquefaction.

- Sole Source Aquifer/Drinking Water Supplies

The depth of excavation, approximately 6 to 7 feet, will not be deep enough to impact drinking water supplies that are nearly 800' below ground. No effect is anticipated.

- Wetlands

Based on the biological review and site visit, no wetlands are located in the project vicinity. No effect is anticipated.

- Wild and Scenic Rivers

The proposed project is not located at or near any wild and scenic rivers. There are no Wild and Scenic River Systems in Orange County. No effect is anticipated.

Alternative 2: Caltrans storm drain improvements at Beach Blvd.

The existing Caltrans maintained catch basin at Beach Blvd. is inadequate in size to collect storm water runoff from the west side of Beach Blvd. Beach Blvd. is located to the east and up gradient from the project. This catch basin is often clogged with rock and debris after a storm event, exacerbating the flooding effect in the neighborhood. The City's efforts to convince Caltrans to clean out this catch basin on a regular basis have not been effective. Phone calls to Caltrans concerning input on this alternative were not returned. However the feasibility of Caltrans conducting this alternative in this economic climate is un-realistic and therefore was not extensively studied as an alternative from a hydrologic standpoint. Traffic impacts along Beach Blvd. would likely be more significant than the proposed project without proper mitigation. Impacts would likely remain the same as the proposed project but for a different location.

- **Air Quality**

This alternative will have similar short term construction related air quality and greenhouse gas emissions than the proposed project because construction equipment would still be needed. These impacts are less than significant with mitigation.

Short-term construction related air quality impacts may be associated with truck emissions. While idling of some of the construction trucks may be necessary, potential impacts will be mitigated by utilizing the City of Westminster standard Best Management Practices for construction. These measures include but are not limited to: maintaining construction equipment in good working condition, avoiding construction equipment idling in residential areas and utilizing low-sulfur burning fuels. Impacts are therefore less than significant with mitigation incorporated.

- **Agriculture/Protected Farmlands**

Based on review of the City's General Plan, and the Farmland Protection Policy Act (FPPA), as implemented by the Secretary of Agriculture, this alternative is not located within a protected farmland. There will be no effect to agriculture or protected farmlands.

- **Coastal Zone/Barrier Resources**

This alternative is not located within or adjacent to a coastal barrier resource as described in the Coastal Barrier Resources Act (CBRA) and as implemented by the US Fish and Wildlife Service. No effect is anticipated.

- **Cultural Resources/Native Americans/SHPO**

Based on the cultural analysis performed for the proposed project, impacts to cultural resources, Native American and SHPO resources will be no greater than

the existing project because it is in the same general location. This impact will be less than significant with mitigation.

If human remains are encountered during excavations associated with this project, all work will halt and the County Coroner will be notified (Section 5097.98 of the Public Resources Code).

- **Essential Fish Habitat**
Essential fish habitat is non-existent within this alternatives’ boundary due to the urbanization of the area. Therefore, the proposed improvements for this alternative will not affect Essential Fish Habitat.
- **Environmental Justice Geographic Assessment/Relocation Impacts Land Use**
This alternative will have similar impacts to the surrounding residents as the proposed project. No mitigation is required. The alternative project will have no effect on environmental justice and will not require the relocation of residents or businesses.
- **Fish/Wildlife/Threatened and Endangered Species**
Based on the biological analysis performed for the proposed project, this alternative will not affect fish and wildlife nor threatened and endangered species because it is located in an urbanized area. No effect is anticipated.
- **Floodplain/Storm water**
This alternative lies within the same floodplain area as the proposed project. No additional effects are anticipated. As indicated in the hydrology section, this alternative will require a NPDES permit.
- **Greenhouse Gas Emissions**
This alternative will likely have fewer greenhouse gas emissions than the proposed project because the amount of work involved would be significantly less. Due to the small size of the alternative project and short term duration, these impacts are less than significant with mitigation and the following mitigation measure will be implemented.

Short-term construction related greenhouse gas emission impacts may be associated with truck emissions. While idling of some of the construction trucks may be necessary, potential impacts will be mitigated by utilizing the City of Westminster standard Best Management Practices for construction. These measures include but are not limited to: maintaining construction equipment in good working condition, avoiding construction equipment idling in residential areas and utilizing low-sulfur burning fuels.
- **Hydrology/Water Quality**
Hydrologic and water quality impacts from this alternative will be similar to the proposed project. An NPDES permit will still be prepared. Impacts are less than

significant with mitigation including, storm drain catch basins and minimizing urban runoff where possible. The following mitigation measure will apply.

NPDES Permit for General Construction Activities will be required for lineal trenching, excavation and dewatering in accordance with the Regional Water Quality Control Board. The NPDES permit will dictate the required water quality allowed to be discharged during construction and specify BMP's used during construction. Catch basin filters will trap low flow waters and remove pollutant materials entering the storm drain. All spills, leaks or other losses of oils and other hazardous or toxic materials will be immediately cleaned up.

- **Land Use**
This alternative would not impact the local residents as significantly as the proposed project because work would be conducted within the Caltrans right of way for the existing catch basin. This alternative will also not increase the amount of impervious surfaces as the proposed project. No effect is anticipated.
- **Soils/Liquefaction**
This alternative would have similar soils and liquefaction impacts as the proposed project. No effect is anticipated.
- **Sole Source Aquifer/Drinking Water Supplies**
This alternative would have similar sole source aquifer and drinking water supply impacts as the proposed project. The depth of excavation will not be deep enough to impact drinking water supplies that are nearly 800' below ground. No effect is anticipated.
- **Wetlands**
Based on the biological review and site visit, no wetlands are located in this alternative vicinity. No effect is anticipated.
- **Wild and Scenic Rivers**
Similarly to the proposed project, this alternative is not located at or near any wild and scenic rivers. There are no Wild and Scenic River Systems in Orange County. No effect is anticipated.

No Action Alternative

The no action alternative would result in no environmental impacts, temporary, cumulative or otherwise. However, the no action alternative would not result in the goals of the City and would only put off to later potential storm related impacts.

- **Air Quality**
There is no effect to air quality under the no action alternative because there is no construction related activities or modification to project location.
- **Agriculture/Protected Farmlands**

There is no effect to agriculture or project farmlands under the no action alternative. The project is not located within a protected farmland.

- **Coastal Zone/Barrier Resources**
There is no effect to coastal zone barrier resources under the no action alternative. The project is not located within or adjacent to a coastal barrier resource as described in the Coastal Barrier Resources Act (CBRA).
- **Cultural Resources/Native Americans/SHPO**
There is no effect to cultural resources under the no action alternative because there is no construction related activities or modification to project location.
- **Essential Fish Habitat**
There is no effect to essential fish habitat under the no action alternative. Essential fish habitat is non-existent within the boundary due to the urbanization of the area.
- **Environmental Justice Geographic Assessment/Relocation Impacts Land Use**
The no action alternative project will have no effect on environmental justice and will not require the relocation of residents or businesses.
- **Fish/Wildlife/Threatened and Endangered Species**
There is no effect to fish and wildlife nor threatened and endangered species under the no action alternative because there is no construction related activities or modification to project location.
- **Floodplain/Storm water**
Floodplain or storm water in the project location would not change under the no action alternative. However, the no action alternative would not meet the goals of the proposed project.
- **Greenhouse Gas Emissions**
There is no effect to greenhouse gas emissions under the no action alternative because there is no construction related activities or modification to project location.
- **Hydrology/Water Quality**
There is no effect to hydrology or water quality under the no action alternative because there is no construction related activities or modification to project location.
- **Land Use**
There is no effect to land use under the no action alternative.

- Soils/Liquefaction
There is no effect to soil or liquefaction under the no action alternative.
- Sole Source Aquifer/Drinking Water Supplies
There is no effect to and sole source aquifers or drinking water supplies under the no action alternative because there is no construction related activities or modification to project location.
- Wetlands
Based on the biological review and site visit, no wetlands are located in this project vicinity. There is no effect under the no action alternative.
- Wild and Scenic Rivers
There is no effect to wild or scenic rivers under the no action alternative. There are no Wild and Scenic River Systems in Orange County.

The following alternatives were considered but not fully analyzed because of either: a) a lack of space for the project, or b) because the City would not be the lead agent on the project and would not have control over implementation. Therefore, these alternatives were not reviewed in substantial detail.

a) Catch basin alternative

This alternative would include construction of a catch basin to collect storm flows that drain into the subject area, before it is directed in to the existing system. However, due to the lack of available land to accommodate the appropriately sized catch basin, this alternative was considered not feasible.

b) Upstream storm drain improvements

This alternative would include up-sizing of upstream storm drains to accommodate storm flows before they get to the subject area. The drainage area for this portion of the City is approximately 74 square miles in size. Upstream improvements for the project would require multi-jurisdictional coordination and planning. The Orange County Flood Control Division of the County Public Works Dept. was contacted to discuss this alternative. No phone calls have been received back from the County. Environmental impacts associated with this alternative are likely to be significant and require extensive environmental review and mitigation that the City does not have jurisdiction to perform.

Environmental Issues	No Action Alternative	Proposed Project + street improvements	Caltrans Storm Drain Improvements at Beach
Air Quality	No Effect	Less than Significant with Mitigation	Less than Significant with M
Agriculture/Protected Farmlands	No Effect	No Effect	No Effect
Coastal Zone/Barrier Resources	No Effect	No Effect	No Effect
Cultural Resources/Native Americans/SHPO	No Effect	Less than Significant with Mitigation	Less than Significant with M
Essential Fish Habitat	No Effect	No Effect	No Effect
Environmental Justice Geo. Assess./Relocation Impacts	No Effect	No Effect	No Effect
Fish/Wildlife/Threat.-Endang. Species	No Effect	No Effect	No Effect
Floodplain/Storm Water	No Effect	Less than Significant	Less than Significant
Greenhouse Gases	No Effect	Less than Significant with Mitigation	Less than Significant with M
Hydrology/Water Quality	No Effect	Less than Significant with Mitigation	Less than Significant with M
Land Use	No Effect	No Effect	No Effect
Land/Water Conservation Fund	No Effect	No Effect	No Effect
National Historic Structures	No Effect	No Effect	No Effect
Soils/Liquefaction	No Effect	No Effect	No Effect
Sole Source Aquifer/Drinking Water Supplies	No Effect	No Effect	No Effect
Wetlands	No Effect	No Effect	No Effect
Wild and Scenic Rivers	No Effect	No Effect	No Effect

Figure 16 Alternative Matrix



2.5 Environmental Impacts and Mitigation

The following impacts and associated mitigation measure will reduce impacts to less than significant levels.

<u><i>Project Impacts and Mitigation Description</i></u>	<u><i>Implementation and Timing</i></u>
<p>Air Quality. Short-term construction related air quality impacts may be associated with truck emissions. While idling of some of the construction trucks may be necessary, potential impacts will be mitigated by utilizing the City of Westminster standard Best Management Practices for construction. These measures include but are not limited to: maintaining construction equipment in good working condition, avoiding construction equipment idling in residential areas and utilizing low-sulfur burning fuels. Impacts are therefore less than significant with mitigation incorporated.</p> <p>Particulate matter emissions (PM10) will be controlled by the contractor with watering trucks.</p>	<p>City of Westminster Public Works Department to verify that construction contractors utilize standard Best Management Practices for avoiding short-term related air quality impacts, by incorporation of conditions into project specifications. BMP's are currently listed on the project specification and will be incorporated into the project.</p>
<p>Cultural Resources. Potential impacts are limited to construction activities only and are not expected to occur. The impacts will be less than significant with mitigation.</p>	<p>If human remains are encountered during excavations associated with this project, all work will halt and the County Coroner will be notified (Section 5097.98 of the Public Resources Code).</p>
<p>Greenhouse Gas Emissions Short-term construction related greenhouse gas emission impacts may be associated with truck emissions. While idling of some of the construction trucks may be necessary, potential impacts will be mitigated by utilizing the City of Westminster standard Best Management Practices for construction. These measures include but are not limited to: maintaining construction equipment in good working condition, avoiding construction equipment idling in residential areas and utilizing low-sulfur burning fuels.</p>	<p>City of Westminster Public Works Department to verify that construction contractors utilize standard Best Management Practices for avoiding short-term related air quality impacts, by incorporation of conditions into project specifications. BMP's are currently listed on the project specification and will be incorporated into the project.</p>

<p>Hydrology and Water Quality. NPDES Permit for General Construction Activities will be required for lineal trenching, excavation and dewatering in accordance with the Regional Water Quality Control Board. The NPDES permit will dictate the required water quality allowed to be discharged during construction and specify BMP's used during construction.</p> <p>Catch basin filters will trap low flow waters and remove pollutant materials entering the storm drain.</p> <p>All spills, leaks or other losses of oils and other hazardous or toxic materials will be immediately cleaned up.</p>	<p>The contractor will also be required to prepare a Water Quality Management Plan as part of its mitigation of water quality impacts from construction and trenching activity.</p>
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2.6 Interagency Coordination and Consultation Activities/Cross Cutters

The following agencies were consulted by phone.

- State Historic Preservation Office: The SHPO office was submitted a project package, including the cultural resource study, survey results and Native American consultation. On December 12, 2011, SFC submitted a letter at SHPO's request (Tristan Tozer) outing the project on a single page. Approval from SHPO was received January 25, 2012 under reference # EPA111006A, and is attached as an appendix.
- California Department of Transportation: Caltrans was contacted by phone with regard to proposed alternative solutions for storm flows. No returned phone calls have been received.
- Orange County Water District: The OCWD was contacted by phone with regard to drinking water impacts for this proposed project. SFC was directed to the OCWD website where depths to groundwater are documented.
- Orange County Public Works Department, Flood Control Division: The flood control district was contacted with regard to upstream alternatives to the proposed project. SFC was directed to the flood control website for approved storm drain improvements in the County.

2.7 Project Sponsors and List of Preparers

The City of Westminster is the applicant and the U.S. Environmental Protection Agency is the lead agency for this preparation of the Environmental Assessment.



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2.8 List of References

- United State Army Corp of Engineers, Los Angeles District
- United States Environmental Protection Agency (EPA) Environmental Justice website (EJView).
- United States Fish and Wildlife Service (USFWS) Carlsbad Fish and Wildlife Offices Species by County list for Threatened and Endangered Species that are known to exist in the USGS *Anaheim, California* Topographic Quadrangle.
- USFWS National Wetlands Inventory (NWI) Wetlands Mapper for designated wetland areas.



- USFWS list of National Wildlife Refuges.
- California Department of Fish and Game (CDFG) Bios and Quick Viewer websites.
- California Natural Resource Agency, Office of Historic Preservation, Dept. of Parks and Rec.
- CDFG Code, Section 2503.5, birds of prey.
- California Natural Diversity Database (CNDDDB).
- California Native Plant Society Inventory of Rare and Endangered Vascular Plants.
- South Coast Air Quality Management District
- Soil Survey of Orange County and Western Part of Riverside County, California.
- Flood Insurance Rate Map panel 06059C0138J.
- Orange County Flood Control District.
- Natural History Association of Orange County.
- City of Westminster General Plan
 - ✓ Land Use Element, Circulation Element