SUMMARY OF FINDINGS FOR THE ANNUAL DRAINAGE CHANNEL FIELD ASSESSMENT AND MAINTENANCE PRIORITIZATION PROJECT (PHASE 1) FOR THE CITY OF SAN DIEGO – MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM (MMP) MAP 105: EUCLID & CASTANA

Job Number 17204-D
August 4, 2015
SUMMARY OF FINDINGS FOR THE 
ANNUAL DRAINAGE CHANNEL FIELD 
ASSESSMENT AND MAINTENANCE PRIORITIZATION PROJECT (PHASE 1) 
FOR 
THE CITY OF SAN DIEGO – MASTER STORM WATER SYSTEM MAINTENANCE 
PROGRAM (MMP) MAP 105: EUCLID & CASTANA

Job Number 17204-D

[Signature]

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August 4, 2015
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1.0 Executive Summary

This report and preliminary analyses concludes that the Channel Prioritization Score for the Euclid & Castana (MMP Map 105) is **50.9 out of 100**. This score is at average and indicates that the channel is recommended for maintenance. If the channel is maintained to reflect the as-built condition, the hydraulic capacity of the channel will increase from the current 1077 cfs (100-year storm event) capacity to a 1616.4 cfs (100-year storm event) capacity. In addition to the hydraulic capacity, the analyses considered other factors including water quality, community input and aesthetics. The analyses concluded that these other factors are generally in good condition and the benefits of maintaining the channel are mainly to reduce the flood risk.

2.0 Introduction

This report summarizes the findings for the Annual Drainage Channel Field Assessment and Maintenance Prioritization Project (Phase 1) for the City of San Diego for Master Storm Water System Maintenance Program (MMP), dated October 2011, Map 105: Euclid & Castana. Refer to Appendix A for the MMP Storm Water Facilities Key Map and Map 105.

**Purpose**

As part of the Master Storm Water System Maintenance Program (MMP), the City of San Diego performed site visits to drainage channels within the MMP and designated several drainage channels as maintenance priorities. The purpose of Phase 1 of this project is to perform a desktop analysis to evaluate the drainage channels identified by the City of San Diego and rank them in order of significance for the purposes of City of San Diego maintenance activities.

3.0 Desktop Channel Maintenance Prioritization Analysis

The desktop channel maintenance prioritization analysis is based on the following items which were reviewed and evaluated to determine the maintenance priority:

- City of San Diego Operations and Maintenance (O&M) Channel Maintenance Inspection Forms completed for the channel by the City of San Diego (Refer to Appendix B)
- Site photos taken by the City of San Diego (Refer to Appendix B)
- Available as-built plans (Refer to Appendix G)
- Hydraulic Analysis (Refer to Section 5.0 and Appendix D for detailed output)
Section 5.1 of the MMP discusses the Annual Maintenance Needs Determination Process. As part of the determination process, the MMP recommends that certain factors be evaluated including flood risk to life and property, water quality, community input and aesthetics. These four factors were utilized for this channel maintenance prioritization analysis. For the purposes of prioritizing the channel for maintenance activities, each main factor is weighted as shown in Table 1 below:

As part of the channel prioritization analysis, each of the main factors has been divided into sub-factors. To determine the Flood Risk factor, a basic hydraulic analysis was performed for the channel. The hydraulic analysis is described in more detail in the Hydraulic Analysis section (Section 5.0) of this report. The remaining factors, Water Quality, Community Input and Aesthetics were assessed based on the site photos and the information provided on the (O&M) Channel Maintenance Inspection Form completed for the channel provided by the City of San Diego. These factors and sub-factors and how they relate to the Channel Prioritization Score are shown in more detail on the Channel Prioritization Assessment Sheet located in Appendix E.

4.0 Hydrologic Summary

Estimated Peak Discharges
A drainage study for the channel was not available at the authorship of this report. The drainage channel is not a Federal Emergency Management Agency (FEMA) defined channel and no detailed hydrologic analysis was available. Therefore, the 100-year storm event peak discharge (Q100) for the channel was estimated based on the size of the watershed tributary to the channel as shown in Table 2 below:

<table>
<thead>
<tr>
<th>Watershed Area (square)</th>
<th>&lt;1</th>
<th>1</th>
<th>2</th>
<th>&gt;4</th>
</tr>
</thead>
<tbody>
<tr>
<td>cfs per acre</td>
<td>4</td>
<td>2</td>
<td>1.5</td>
<td>1</td>
</tr>
</tbody>
</table>

\(\text{cfs} = \text{cubic feet per second}\)
The 2-, 5-, 10-, 25-, and 50-year storm event flow rates were then approximated by taking the ratio of the unknown storm event 6-hour precipitation and the 100-year storm event 6-hour precipitation, and then multiplying Q100 by the ratio to estimate the flow rate for the unknown storm event. Hydrologic support material is located in Appendix C. A summary of the estimated peak discharges are provided in the table below:

<table>
<thead>
<tr>
<th>6-hour Precipitation</th>
<th>1.2</th>
<th>1.4</th>
<th>1.6</th>
<th>2.0</th>
<th>2.25</th>
<th>2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>2-Year</td>
<td>5-Year</td>
<td>10-Year</td>
<td>25-Year</td>
<td>50-Year</td>
<td>100-Year</td>
</tr>
<tr>
<td>Discharge (cfs)</td>
<td>123</td>
<td>143</td>
<td>164</td>
<td>205</td>
<td>230</td>
<td>256</td>
</tr>
</tbody>
</table>

cfs = cubic feet per second

### 5.0 Hydraulic Analysis

A basic hydraulic analysis of the channel was performed to assess the Flood Risk factor. The channel assessment limits are shown on Map 105 located in Appendix A. Manning’s equation was utilized to calculate the capacity of the channel under two conditions:

1. Post-Maintenance Conditions: based on the material and geometry as observed on a site visit conducted on July 20, 2015 along with City of San Diego’s 1999 2-foot topography.
2. Current Conditions: based on the vegetation and sediment levels estimated from the site photos taken by the City of San Diego and information provided on the (O&M) Channel Maintenance Inspection Form prepared by the City of San Diego.

In the absence of As-Builts for this channel, a site visit on July 20, 2015 along with City of San Diego 1999 topography was used to obtain the geometry of the channel. This channel is entirely earthen and was measured in the field to have a bottom width of 11 feet. It was measured on the 1999 topography that the channel side slopes are approximately 4:1 and the channel has an approximate overall slope of 0.049. These channel properties were used for hydraulic calculations of the Post-Maintenance Conditions.

Culvert crossings that may exist within the channel reach were not analyzed as part of this hydraulic analysis. Existing culverts may be inefficient or undersized, however the culvert hydraulics were not considered as part of this analysis.
The multiple storm event peak discharges previously calculated in Section 4.0 were evaluated under each condition to assess the capacity of the channel and evaluate the benefit of performing maintenance activities on the channel. See the table below for a summary of the hydraulic results and Appendix D for detailed hydraulic output.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Summary of Hydraulic Analysis Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRENT CHANNEL CAPACITY</td>
<td>AS-BUILT CHANNEL CAPACITY</td>
</tr>
<tr>
<td>Current Condition (cfs)</td>
<td>Equivalent Storm Event (year)</td>
</tr>
<tr>
<td>1077</td>
<td>100</td>
</tr>
</tbody>
</table>

cfs = cubic feet per second

6.0 Other Channel Prioritization Factors

Sections 4.0 and 5.0 above discuss the determination process for the Flood Risk factor. For more information on the assessment of the Water Quality, Community Input, and Aesthetics factors please refer to the Channel Prioritization Assessment Sheet in Attachment E. The Channel Prioritization Assessment Sheet lists and describes the sub-factors that are considered in the determination of the four main channel assessment factors.

7.0 Summary of Findings and Recommendations

A summary of the Channel Assessment is shown in the table below:

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Channel Prioritization Assessment Scoring Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
<td>Percent Weighted (%)</td>
</tr>
<tr>
<td>Flood Risk</td>
<td>75</td>
</tr>
<tr>
<td>Water Quality</td>
<td>10</td>
</tr>
<tr>
<td>Community Input</td>
<td>10</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>5</td>
</tr>
<tr>
<td>Overall Channel Score:</td>
<td>50.9/100</td>
</tr>
</tbody>
</table>

Additionally, the following items should be noted:

- The culvert entrance at the downstream end of the channel is protected by a grate. This grate is partially clogged and recommended for maintenance to prevent the grate from fully clogging.
Based on the evaluation of the four weighted channel prioritization factors described in Section 3.0 of this report, the Channel Prioritization Score for MMP Map 105: Euclid & Castana is 50.9. Refer to the Channel Prioritization Assessment Sheet located in Appendix E for details on the evaluation of the weighted factors and resulting score for this channel.

It is recommended that this drainage channel be maintained to increase the current capacity of the channel from a 1077 cfs (100-year storm event) back to a 1616.4 cfs (100-year storm event) capacity. It is important to note that although maintenance will not reduce the frequency of flooding, it will reduce the overall effect of flooding.

A summary of the channel including an aerial map, channel prioritization score, and other pertinent information is shown on the exhibit titled “Channel Maintenance Prioritization Summary Sheet” located in Appendix F.
Appendix A
Master Storm Water System Maintenance Program (MMP),
dated October 2011, Storm Water Facilities
Key Map and Map 105: Euclid & Castana
Stormwater Facilities - Central San Diego Area

CITY OF SAN DIEGO MASTER STORMWATER SYSTEM MAINTENANCE PROGRAM

Figure 2d
Appendix B
City of San Diego Operations and Maintenance (O&M)
Channel Maintenance Inspection Forms completed
for the channel and Site photos taken by the City of San Diego
Operations and Maintenance
Channel Maintenance Inspection Form

Date: 5/9/15  Time: 12:45
Channel Map No.: 105  Watershed: Pueblo San Diego
Inspector: Jorge Jacobs  Weather: Good
Initial Inspection  Follow Up Inspection

A. Channel Condition
   1 = Poor Condition/Needs Immediate Attention
   2 = Moderate Condition
   3 = Good Condition

<table>
<thead>
<tr>
<th>Item</th>
<th>Condition</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Structure Condition</td>
<td>1 2 3 N/A</td>
<td></td>
</tr>
<tr>
<td>2. Erosion</td>
<td>1 2 3 N/A</td>
<td></td>
</tr>
<tr>
<td>3. Trash/Debris/Weeds</td>
<td>1 2 3 N/A</td>
<td>Type of trash and source:</td>
</tr>
<tr>
<td>4. Water Conveyance/Volume</td>
<td>1 2 3 N/A</td>
<td></td>
</tr>
<tr>
<td>5. Standing Water</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>A. Ponding</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>B. Noticeable odors</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>C. Algae</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>6. Vegetation</td>
<td>1 2 3 N/A</td>
<td>Approx. Coverage/Density of Vegetation: 40%</td>
</tr>
<tr>
<td>A. Invasive (Arundo)</td>
<td>1 2 3 N/A</td>
<td>Palms</td>
</tr>
<tr>
<td>B. Native</td>
<td>1 2 3 N/A</td>
<td></td>
</tr>
<tr>
<td>7. Sediment</td>
<td>1 2 3 N/A</td>
<td>Approx. Depth/Coverage of Sediment:</td>
</tr>
<tr>
<td>8. Transients/encampments</td>
<td>Y N</td>
<td></td>
</tr>
</tbody>
</table>
B. Culverts and Outfalls

1 = Poor Condition/Needs Immediate Attention
2 = Moderate Condition
3 = Good Condition

<table>
<thead>
<tr>
<th>Item</th>
<th>Condition</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Structure Condition</td>
<td>1 3 3 N/A</td>
<td></td>
</tr>
<tr>
<td>2. Trash/Debris/Sediment Trees</td>
<td>1 3 N/A</td>
<td></td>
</tr>
<tr>
<td>3. Clogging</td>
<td>1 2 3 N/A</td>
<td></td>
</tr>
</tbody>
</table>

C. See Map Attached

- Identify Key Issues on Map
- Inspect and take photographs from vantage points identified on Map

Other Comments: 

D. To Be Completed by Management

Follow Up Actions

1. 
2. 
3. 
### E. Infrastructure Failure Issues

<table>
<thead>
<tr>
<th>Item</th>
<th>Condition</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Broken Concrete/Gunite?</td>
<td>Y N N/A</td>
<td></td>
</tr>
<tr>
<td>2. Broken/Missing Trash Fence?</td>
<td>Y N N/A</td>
<td></td>
</tr>
<tr>
<td>3. Broken/Missing Poles/Supports?</td>
<td>Y N N/A</td>
<td></td>
</tr>
<tr>
<td>4. Exposed Rebar?</td>
<td>Y N N/A</td>
<td></td>
</tr>
<tr>
<td>5. Rock/Debris Accumulation?</td>
<td>Y N N/A</td>
<td></td>
</tr>
<tr>
<td>6. Potential Flooding/Litigation?</td>
<td>Y N N/A</td>
<td></td>
</tr>
<tr>
<td>7. Slope Failure?</td>
<td>Y N N/A</td>
<td></td>
</tr>
</tbody>
</table>

Other Comments/Observations:

Access to channel has been blocked with two buildings!!
Euclid & Castana Watershed MMP Map 105

Explanation

- Global Watershed Point
- Centroid
- Hydro-net Junctions
- Global Watershed

Synthetic Stream Grid

- Gaging Station, Continuous Record
- Low Flow, Partial Record
- Peak Flow, Partial Record
- Peak and Low Flow, Partial Record
- Stage Only
- Low Flow, Partial Record, Stage
- Miscellaneous Record
- Unknown

- Instream
- Streams
- Excluded Poly
San Diego County
Hydrology Manual

Prepared by the County of San Diego
Department of Public Works
Flood Control Section
June 2003
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<td>A-1</td>
</tr>
<tr>
<td>B</td>
<td>Isopluvial Maps</td>
<td>B-1</td>
</tr>
<tr>
<td>C</td>
<td>Precipitation Zone Number (PZN) Map</td>
<td>C-1</td>
</tr>
<tr>
<td>D</td>
<td>Worksheets for NRCS Hydrologic Method Calculations</td>
<td>D-1</td>
</tr>
<tr>
<td>E</td>
<td>85th Percentile Precipitation Isopluvial Map</td>
<td>E-1</td>
</tr>
</tbody>
</table>
County of San Diego Hydrology Manual

Rainfall Isophovials

2 Year Rainfall Event - 6 Hours

- Isophovel (inches)

\[ P_0 = 1.2 \text{ inches} \]
County of San Diego Hydrology Manual

Rainfall Isopleths

50 Year Rainfall Event - 6 Hours

Isopleth (inches)

$P_6 = 2.25$ inches
Rainfall Isopluvials

100 Year Rainfall Event - 6 Hours

Isopluval (inches)

\( P_6 = 2.6 \) inches
Appendix D
Hydraulic Analysis Output
Hydraulic Analysis Report

Project Data

Project Title: Project - Euclid and Castana
Designer: Rick Engineering Company
Project Date: Tuesday, July 21, 2015
Project Units: U.S. Customary Units

Channel Analysis: As-built_Euclid&Castana_100

Notes: In the absence of As-Builts for this channel, a site visit on July 20, 2015 along with City of San Diego 1999 topography was used to obtain the geometry of the channel. This channel is entirely earthen and was measured in the field to have a bottom width of 11 feet. It was measured on the 1999 topography that the channel side slopes are approximately 4:1 and the channel has an approximate overall slope of 0.049. Pursuant to Table 1-104.14A of the City of San Diego Drainage Design Manual, dated April 1984, the roughness coefficient used for the channel side slopes and channel bottom is 0.04. This roughness coefficient is based on some weeds, light brush on banks.

Input Parameters

Channel Type: Trapezoidal
Side Slope 1 (Z1): 4.0000 (ft/ft)
Side Slope 2 (Z2): 4.0000 (ft/ft)
Channel Width: 11.0000 (ft)
Longitudinal Slope: 0.0490 (ft/ft)
Manning's n: 0.0400
Depth: 8.0000 (ft)

Result Parameters

Flow: 7675.5193 (cfs)
Area of Flow: 344.0000 (ft^2)
Wetted Perimeter: 76.9697 (ft)
Hydraulic Radius: 4.4693 (ft)
Average Velocity: 22.3126 (ft/s)
Top Width: 75.0000 (ft)
Froude Number: 1.8360
Critical Depth: 10.5188 (ft)
Critical Velocity: 13.7482 (ft/s)
Critical Slope: 0.0134 (ft/ft)
Critical Top Width: 95.1507 (ft)
Calculated Max Shear Stress: 24.4608 (lb/ft^2)
Calculated Avg Shear Stress: 13.6653 (lb/ft^2)
Channel Analysis: Current_CONDITION_Euclid&Castana_100

Notes: In the absence of As-Builts for this channel, a site visit on July 20, 2015 along with City of San Diego 1999 topography was used to obtain the geometry of the channel. This channel is entirely earthen and was measured in the field to have a bottom width of 11 feet. It was measured on the 1999 topography that the channel side slopes are approximately 4:1 and the channel has an approximate overall slope of 0.049. Based on the site photos provided to us and a site visit conducted by us, heavy brush is seen on the channel banks. Pursuant to Table 1-104.14A of the City of San Diego Drainage Design Manual, dated April 1984, the roughness coefficient used for the channel side slopes and channel bottom is 0.06. This roughness coefficient is based on some weeds, heavy brush on banks.

Input Parameters
Channel Type: Trapezoidal
Side Slope 1 (Z1): 4.0000 (ft/ft)
Side Slope 2 (Z2): 4.0000 (ft/ft)
Channel Width: 11.0000 (ft)
Longitudinal Slope: 0.0490 (ft/ft)
Manning's n: 0.0600
Depth: 8.0000 (ft)

Result Parameters
Flow: 5117.0129 (cfs)
Area of Flow: 344.0000 (ft^2)
Wetted Perimeter: 76.9697 (ft)
Hydraulic Radius: 4.4693 (ft)
Average Velocity: 14.8750 (ft/s)
Top Width: 75.0000 (ft)
Froude Number: 1.2240
Critical Depth: 8.7704 (ft)
Critical Velocity: 12.6611 (ft/s)
Critical Slope: 0.0318 (ft/ft)
Critical Top Width: 81.1630 (ft)
Calculated Max Shear Stress: 24.4608 (lb/ft^2)
Calculated Avg Shear Stress: 13.6653 (lb/ft^2)
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TABLE 1-104.14A

DESIGN VALUES FOR MANNINGS ROUGHNESS COEFFICIENT (n)

<table>
<thead>
<tr>
<th>TYPE OF CHANNEL</th>
<th>N VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlined Channels:</td>
<td></td>
</tr>
<tr>
<td>Clay Loam</td>
<td>0.023</td>
</tr>
<tr>
<td>Sand</td>
<td>0.020</td>
</tr>
<tr>
<td>Gravel</td>
<td>0.030</td>
</tr>
<tr>
<td>Rock</td>
<td>0.040</td>
</tr>
<tr>
<td>Lined Channels:</td>
<td></td>
</tr>
<tr>
<td>Portland Cement Concrete</td>
<td>0.015</td>
</tr>
<tr>
<td>Air Blown Mortar</td>
<td>0.018</td>
</tr>
<tr>
<td>Asphalt Concrete</td>
<td>0.018</td>
</tr>
<tr>
<td>Grass Lined Channels: (Shallow depths)</td>
<td></td>
</tr>
<tr>
<td>2 inch length</td>
<td>0.050</td>
</tr>
<tr>
<td>4 - 6 inch length</td>
<td>0.060</td>
</tr>
<tr>
<td>6 - 12 inch length</td>
<td>0.120</td>
</tr>
<tr>
<td>12 - 24 inch + length</td>
<td>0.200</td>
</tr>
<tr>
<td>Pavement and Gutters:</td>
<td></td>
</tr>
<tr>
<td>Concrete</td>
<td>0.015</td>
</tr>
<tr>
<td>Asphalt Concrete</td>
<td>0.018</td>
</tr>
<tr>
<td>Natural Streams: (Less than 100 feet wide at flood stage)</td>
<td></td>
</tr>
<tr>
<td>1. Regular section</td>
<td></td>
</tr>
<tr>
<td>a. Some grass and weeds, little or no brush</td>
<td>0.030</td>
</tr>
<tr>
<td>b. Dense growth of weeds, depth of flow substantially greater than weed height</td>
<td>0.040</td>
</tr>
<tr>
<td>c. Some weeds, light brush on bank</td>
<td>0.040</td>
</tr>
<tr>
<td>d. Some weeds, heavy brush on banks</td>
<td>0.060</td>
</tr>
<tr>
<td>e. With trees in channel, branches submerged at flood stage, increase above values by</td>
<td>0.015</td>
</tr>
</tbody>
</table>
TABLE 1-104.14A (Continued)

2. Irregular section, with pools, slight channel meander increase all values listed in 1. Regular Section, by 0.015

Flood Plains: (adjacent to natural streams)

1. Pasture, no brush
   a. Short grass 0.030
   b. High grass 0.040

2. Cultivated areas
   a. No crop 0.040
   b. Mature row crops 0.040
   c. Mature field crops 0.050

3. Heavy weeds, scattered brush 0.050

4. Light brush and trees 0.060

5. Medium to dense brush 0.090

6. Dense willows 0.170

7. Cleared land with tree stumps, 100-150 per acre 0.060

8. Heavy stand of timer, little undergrowth
   a. Flood depth below branches 0.110
   b. Flood depth reaches branches 0.140
### Channel Prioritization Assesment Sheet for Euclid and Castana MMP Map 105

#### Total Channel Score: 50.9 / 100

### Flood Hazard (75% of total weight)

<table>
<thead>
<tr>
<th>Sub-factor</th>
<th>Score</th>
<th>factor weight</th>
<th>Weighted Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Risk of flooding</td>
<td>0</td>
<td>25%</td>
<td>0</td>
</tr>
<tr>
<td>b. Increase in storm event capacity</td>
<td>1077 cfs</td>
<td>100-yr. storm event</td>
<td>0</td>
</tr>
<tr>
<td>c. Net percent increase in channel capacity post-maintenance</td>
<td>1616.4 cfs</td>
<td>100-yr. storm event</td>
<td>50%</td>
</tr>
</tbody>
</table>

#### Calculation:
- Risk of flooding: 0
- Increase in storm event capacity: 1077 cfs
- Net percent increase in channel capacity: 1616.4 cfs

**Total Weighted Flood Hazard Points:** 46.9

### Water Quality/Channel Condition (10% of total weight)

<table>
<thead>
<tr>
<th>Sub-factor</th>
<th>Score</th>
<th>factor weight</th>
<th>Weighted Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trash/Debris</td>
<td>0</td>
<td>20%</td>
<td>0</td>
</tr>
<tr>
<td>Standing water</td>
<td>0</td>
<td>15%</td>
<td>0</td>
</tr>
<tr>
<td>Sediment</td>
<td>0</td>
<td>35%</td>
<td>0</td>
</tr>
<tr>
<td>Transients/encampments</td>
<td>0</td>
<td>10%</td>
<td>0</td>
</tr>
<tr>
<td>Culverts and Outfalls</td>
<td>0</td>
<td>10%</td>
<td>0</td>
</tr>
<tr>
<td>Infrastructure issues</td>
<td>0</td>
<td>10%</td>
<td>0</td>
</tr>
</tbody>
</table>

**Total Weighted Water Quality Points:** 4.0

### Community Input (10% of total weight)

<table>
<thead>
<tr>
<th>Sub-factor</th>
<th>Score</th>
<th>factor weight</th>
<th>Weighted Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Complaints Received</td>
<td>YES</td>
<td>50%</td>
<td>0</td>
</tr>
<tr>
<td>Community Outreach Input</td>
<td>NO</td>
<td>50%</td>
<td>0</td>
</tr>
</tbody>
</table>

**Total Weighted Community Input Points:** 0.0

### Aesthetics (5% of total weight)

<table>
<thead>
<tr>
<th>Sub-factor</th>
<th>Score</th>
<th>factor weight</th>
<th>Weighted Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetics</td>
<td>0</td>
<td>100%</td>
<td>0</td>
</tr>
</tbody>
</table>

**Total Weighted Aesthetics Points:** 0.0

---

1. See appendix D for geometry parameters

### Scoring Legend

- Factor is in good condition and does not need attention
- Factor is in good condition, but will eventually need attention
- Factor needs attention
- Factor is in bad condition and needs attention
- Factor is in severe condition and needs immediate attention

---

**Surrounding area land use:** Residential

**Is there open space surrounding the channel?:** Yes

**Are there trees/large debris that have potential to flow D/S and clog culverts/the channel?:** Yes

**The downstream culvert entrance has a large grate to prevent large debris from flowing into the culvert. However, this grate is being covered by trash/debris and still has potential to be blocked by larger debris.**

---

**Remainder of page:**

- Approx. sediment coverage: (Based on information provided on City of San Diego O&M Channel Maintenance Inspection Form)
- Channel Prioritization Assesment Sheet for Euclid and Castana MMP Map 105
- Total Channel Score: 50.9 / 100
- Flood Hazard (75% of total weight)
- Sum of sub-factor a-c scores: 0
- Water Quality/Channel Condition (10% of total weight)
- Community Input (10% of total weight)
- Aesthetics (5% of total weight)
- Factor in severe condition and needs immediate attention
Appendix F
Channel Maintenance Prioritization Summary Sheet
Assessment Results

- Channel Prioritization Score: 50.9 out of 100
  - Flood Hazard Score: 46.9 out of 75
  - Water Quality Score: 4 out of 10
  - Community Input Score: 0 out of 10
  - Aesthetics Score: 0 out of 5

- Capacity Prior to Maintenance: 100-year storm event
- Capacity After Maintenance (As-built Capacity): 100-year storm event

- Clogging Potential: HIGH
- Approximate Vegetation Coverage: MEDIUM
- Surrounding Area: Residential
- Infrastructure Failures: None
- Site Evaluation Date: May 9, 2015
- Notes/Comments:
The culvert entrance at the downstream end of the channel is protected by a grate. This grate is partially clogged and recommended for maintenance to prevent the grate from fully clogging.
Appendix G
Available As-built plans
No Available As-built Plans