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LETTER OF TRANSMITTAL

DATE: March 15, 2010	W.O. NO.: 2008-0049
	FILE NO.:
ATTENTION: Mr. Matt Mitchell	
FILE: City of Imperial Bioassessment Report	

TO: **U.S. Environmental Protection Agency**
75 Hawthorne Street (WTR-5)
San Francisco, California 94105

TRANSMITTED: VIA: Fed Ex

On behalf of the City of Imperial, please find a copy of the Bioassessment Report, prepared by Barrett's Biological Surveys, for the City of Imperial's wastewater treatment outfall to the Dolson Drain.

THESE ARE TRANSMITTED AS CHECKED BELOW:

☐ FOR APPROVAL ☐ FOR YOUR USE ☐ AS REQUESTED ☒ FOR REVIEW AND COMMENT

☐ _____

NOTES / COMMENTS:

Should you have any questions or comments, please do not hesitate to call.

Cc: Jackie Loper, City of Imperial
John Carmona, SWRCB-Colorado River Basin

Shane Bloomfield
Project Manager

IF ENCLOSURES ARE NOT AS NOTED, KINDLY NOTIFY US AT ONCE.

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W.O. No.: 08-0049

March 15, 2010

Mr. Matt Mitchell
U.S. Environmental Protection Agency
75 Hawthorne Street WTR-5
San Francisco, California 94105

RE: National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements for City of Imperial – Imperial Wastewater Treatment Plant, Board Order No. R7-2005-0084, NPDES No. CA0104400

Dear Mr. Mitchell:

On behalf of the City of Imperial (City), please find attached a copy of the Bioassessment Report, prepared by Barrett's Biological Surveys, for the City of Imperial's wastewater treatment plant outfall to the Dolson Drain. The City of Imperial seeks approval from the U.S. Environmental Protection Agency to reclassify the Dolton Drain from saltwater to freshwater criteria.

If you have any questions regarding the status of the items discussed herein, please contact myself or Mr. Jackie Loper (760-355-1152).

Sincerely yours,
ALBERT A. WEBB ASSOCIATES

Brian P. Knoll, P.E.
Senior Engineer

cc: Jackie Loper, City of Imperial
John Carmona, SCRCB-Colorado River Basin

BARRETT'S BIOLOGICAL SURVEYS

2035 Forrester Road El Centro, Ca 92243 760 352 4159 fax: 760 353 0465
email: mariebarrett@roadrunner.com

February 26, 2010

City of Imperial
Attention: Jackie Loper
420 South Imperial Ave
Imperial, Ca 92251

Re: Biological Assessment of the City of Imperial Wastewater Treatment Facility Discharge Location

Dear Mr. Loper ,

This letter report documents the results of the bioassessment of the Dolson Drain (Map Attached) at the City of Imperial's wastewater treatment facility discharge. Samples were taken at two locations along the Dolson Drain using an aquatic kick net dragged along the drain bottom. These samples were gathered at the discharge and 100 meters downstream of the discharge. This drain begins at the discharge point, therefore there was no opportunity to collect water upstream. Water samples were collected at the same areas. The Dolson Drain flows to the New River. The New River flows approximately 50 miles from Mexico north through Imperial County to the Salton Sea.

Objective

Barrett's Biological Surveys was retained by the City of Imperial to conduct a rapid assessment of aquatic and shore organisms in the Dolson Drain at the point of discharge from the City of Imperial wastewater treatment facility (located at 701 East 14th Street, Imperial, CA). The objective of this survey was to determine whether the water, plant life and aquatic life at this discharge point are more typical of saltwater or freshwater environments. The goal of the City of Imperial is to gain approval from the U.S. Environmental Protection Agency (EPA) to use alternative freshwater criteria for a body of water segment where no marine beneficial use designation occurs, even if the salinity is above one part per thousand.

Background

The City of Imperial's wastewater treatment facility discharges into the Dolson Drain which ultimately flows north to the Salton Sea. The Dolson Drain is

approximately 20 feet wide with a rapid water flow of less than 1 foot deep at both collection sites. The Dolson Drain begins at approximately the discharge point. A sump pump south of the drain pumps agricultural drain water from adjacent field after the field is irrigated.

The Dolson Drain discharges into the New River which drains into the Salton Sea. The New River flows north from Mexico. Agricultural drain waters, industrial wastes and treated and untreated wastewater enter the United States within the flow of the New River. In the United States, agricultural drain and runoff water and treated wastewater enter the New River. All agricultural water is from the Colorado River and enters Imperial County through the All American Canal.

Agricultural water from the Colorado River has elevated salt levels. Farmers have installed tile at an average depth of 3 to 4 feet in their farmground to remove excess salinity and prevent salt contamination of their ground. As a result of removing salt from the soil, drain waters show an elevated salinity level.

The California Toxics Rule (CT) 40 CFR 131.38©(3) provides that waters that have salinity between 1 and 10 parts per thousand should be addressed as follows:

> For waters in which the salinity is between 1 and 10 parts per thousand as defined in paragraphs at (3)(i) and (ii) of this section, the applicable criteria are the more stringent of the freshwater or saltwater criteria. However, the Regional Administrator may approve the use of the alternative freshwater or saltwater criteria if scientifically defensible information and data demonstrate that on a site-specific basis, the biology of the water body is dominated by freshwater aquatic life and that freshwater criteria are more appropriate; or conversely, the biology of the water body is dominated by saltwater aquatic life and that saltwater criteria are more appropriate.

Methods

A bioasessment of the outfall was conducted between the hours of 01030 and 1145 (20^{o}C) on February 26, 2010 by M. Barrett and G. Westbrook of Barrett's Biological Surveys. Sampling stations were established at the discharge and 100 meters downstream. At each sampling station the following data were collected:

- Water salinity
- Dominant vegetation
- Aquatic organisms
- Animals

Aquatic invertebrates were collected from shore using an aquatic kick net, which was dragged along the bottom of the Dolson Drain perpendicular to the bank for a linear distance of approximately 5 feet. This net is also efficient in capture of small fishes.

Shore vegetation and animal species were visually observed.

Equipment used:

- Aquatic kick net
- Swing sampler/wide mouth bottles
- Garmin GPS
- Swarovski binoculars
- Caldwell wind wizard
- VeeGee Refractometer Model STX-3
- Omano steroscope

Results and Discussion

The Dolson Drain serves as the discharge point for the City of Imperial's wastewater treatment plant. This discharge pipe is approximately 2600 feet from the wastewater plant. The dominant plant in the project area included curly dock (*rumex crispus)* and salt cedar (*Tamarix sp.)*.

Salinity

Water salinity was measured using a hand held, temperature compensated salinity refractometer (VeeGee Refractometer Model STX-3). Instrument is accurate to 1% . Equipment was cleaned with distilled water after each sampling.

Readings:

Discharge: 3 %= 3 ppt

100 meters downstream of discharge: 4% = 4 ppt

Vegetation

Vegetation was similar at all sampling sites (Photographs). The dominate species included curly dock and salt cedar. Also observed: alkali

heliotrope (*heliotropoium curassavicum)*, watergrass (e*chinochloa sp.)*, Mexican sprangletop (*leptochloa uninervia),* Phragmites (p*hragmites australis)*, cattails (*typus sp*, goosefoot (*chenopodium berlandieri)* , and ditchgrass *(ruppia sp)*. Eurasian watermilfoil (*myriophyllum spicatum*) was growing on the bottom of the drain and is considered a non-native freshwater plant. All are common along agricultural waterways and curly dock and salt cedar can tolerate some salinity.

The Dolson Drain receives water from agricultural drainage water which has originated from the Colorado River, a freshwater source.

Aquatic Invertebrates

No insect larvae were observed.

Fishes

No specie of fish was observed:

Vertebrrates

Crickets (*gryllodes sigulatus)* were heard.
Grackles (q*uiscalus mexicanus)* were observed in the project area .

Conclusion

Based on the freshwater aquatic organisms and freshwater vegetation and wildlife at the Dolson Drain where it receives the discharge from the City of Imperial's wastewater treatment plant, it is concluded that this is a freshwater ecosystem.

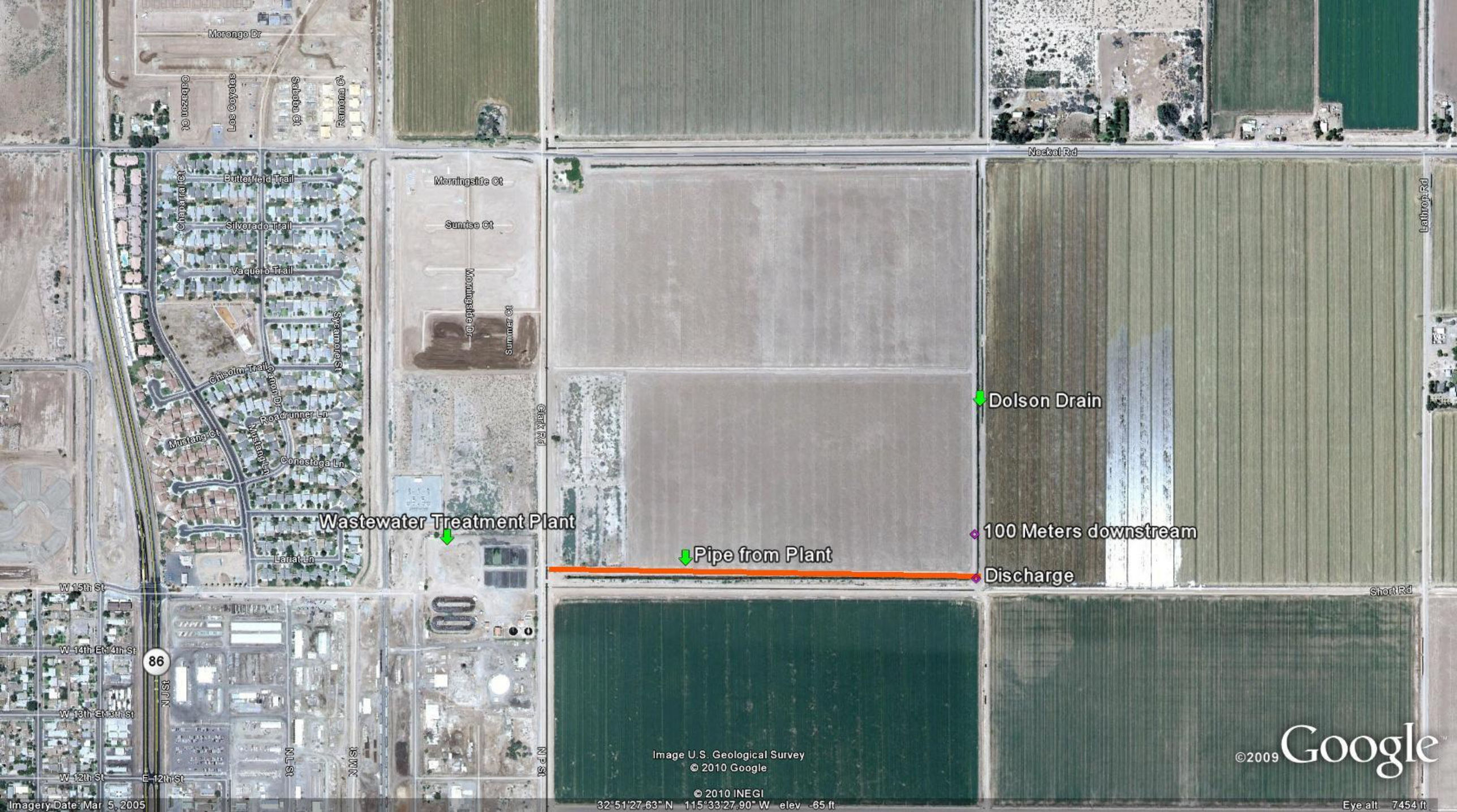
Species typically found in a saltwater system, such as barnacles (b*alanus amphrite***),** pileworms (n*enathes succinea),* or brackish water snail (t*hiara granifera)* were not observed. Saltwater vegetation or wildlife were also not observed.

The discharge area is a typical agricultural drain found in Imperial County and easily accessed. As a result, the samples collected during this rapid assessment are considered representative of the overall system.

Sincerely,

Marie D. Barrett

Marie Barrett, Biologist


Morongo Dr
Ocotillo Ct
Los Coyotes
Sequoia Ct
Ramona Ct
Neckel Rd
Butterfield Trail
Chaparral Ct
Silverado Trail
Vaquero Trail
Morningside Ct
Sunrise Ct
Morningside Dr
Summer Ct
Sycamore St
Chisolm Trail
Cheyenne Dr
Roadrunner Ln
Mustang Ct
Mustang Ln
Conestoga Ln
Lariat Ln
Clark Rd
Lathrop Rd
Short Rd
Dolson Drain
100 Meters downstream
Discharge
Pipe from Plant
Wastewater Treatment Plant
W 15th St
W 14th St
E 14th St
W 13th St
E 13th St
W 12th St
E 12th St
86
N J St
N L St
N M St
N P St
Image U.S. Geological Survey
© 2010 Google
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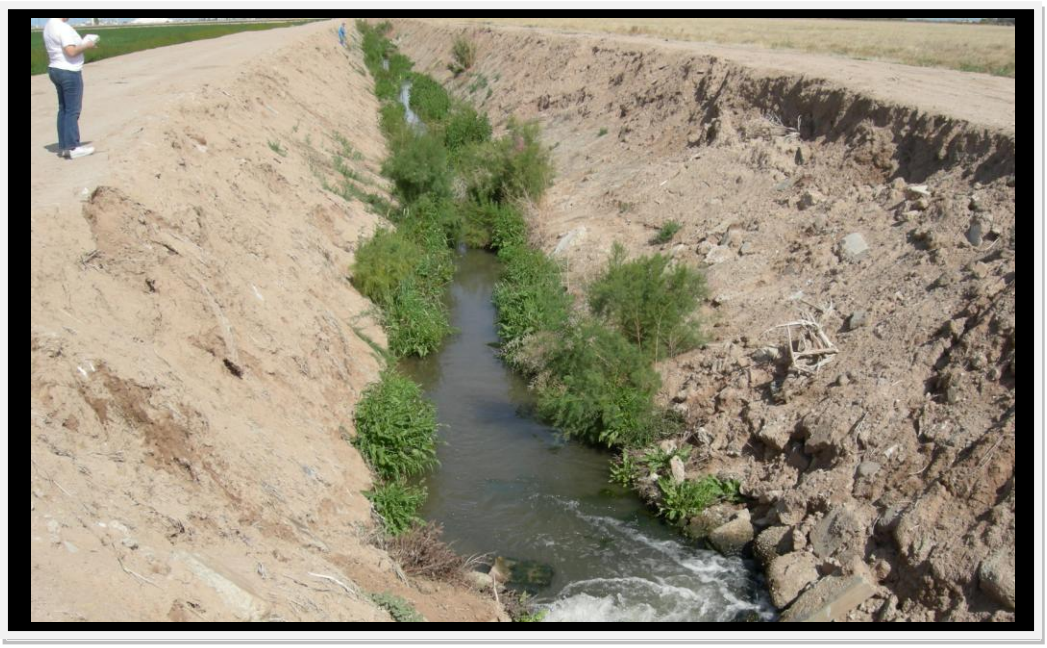
©2009 Google
Imagery Date: Mar 5, 2005
32°51'27.63" N 115°33'27.90" W elev -65 ft
Eye alt 7454 ft

PHOTOGRAPHS



1. Dolson Drain at Wastewater Pipe Discharge 32°51’17.5”/115°33’10.6” (WGS 84 EPE 17 feet)

2. Field Pump to South of Start of Dolson Drain

3. Vegetation Found in Vicinity of Discharge

4. 100 Meters Downstream

5. Agricultural Field to Left; Dolson Drain to Right