

Report to Congress for Future Water Resources Development (WRRDA 7001) Submission Package

Proposal Name: Rio Hondo San Gabriel River Ecosystem Restoration Feasibility Study

Submission Date: 08/27/2019

Proposal ID Number: 23e6ed42-216d-459c-91f7-f2c622ad3322

Purpose of Proposal: The City of Arcadia is seeking a General Investigations Feasibility Study to restore degraded habitat adjacent to Corps-built channels at the locations described below: 1.Arcadia Wash Ecosystem Restoration Project at the Arboretum. The proposed project would restore degraded habitat along a 1,200-foot long section of Arcadia Wash. The project would consist of a channel diversion structure to convey stormwater flows from Arcadia Wash to the wetlands, groundwater recharge basins, and a naturalized stream to Baldwin Lake. The wetlands will restore native riparian and aquatic habitat while providing a natural treatment system for the recharge basins for infiltration. Stormwater will also be conveyed to Baldwin Lake via a natural stream to provide additional habitat areas and water for the lake. 2.Rio Hondo Ecosystem Restoration and Arcadia Wash Water Diversion Project. The proposed project would provide ecosystem restoration on a degraded industrial property along a 2,000-foot long section of the Sawpit Wash by constructing an approximately 7-acre wetland habitat area prior to discharge into the Peck Road Water Conservation Basins and the Rio Hondo Channel. The project would consist of a channel diversion structure and pipeline to convey stormwater flows from the Sawpit Wash to the wetland habitat area. The wetlands will create an area for native riparian and aquatic habitat while providing a natural treatment system for the groundwater recharge basins downstream. 3.Habitat Restoration for Basin 3E at the Santa Fe Spreading Grounds Project. The proposed project would provide ecosystem restoration to a degraded habitat that exists in a sedimentation basin within the Santa Fe Dam reservoir and spillway areas. Stormwater flows from Bradbury Channel to Basin 3E prior to discharging to the San Gabriel River. The project would enhance the site's function with new riparian and aquatic habitat that would reduce the sediment discharged to downstream ecosystems.

1. Administrative Details

Proposal Name: Rio Hondo San Gabriel River Ecosystem Restoration Feasibility Study

by Agency: City of Arcadia, CA

Locations: CA

POC Name:

POC Phone:

POC Email:

Date Submitted: 08/27/2019

Confirmation Number: 23e6ed42-216d-459c-91f7-f2c622ad3322

Supporting Documents

File Name	Date Uploaded
Rio Hondo Ecosystem Restoration Support Letters.PDF	08/27/2019
Rio Hondo Ecosystem Restoration Support Letters.PDF	08/27/2019
Rio Hondo Ecosystem Restoration Project Vicinity Map.PDF	08/27/2019
Rio Hondo Ecosystem Restoration Project Fact Sheets Rev-2019-0207-FINAL.PDF	08/27/2019

2. Provide the name of the primary sponsor and all non-Federal interests that have contributed or are expected to contribute toward the non-Federal share of the proposed feasibility study or modification.

Sponsor	Letter of Support
City of Arcadia (Primary)(Primary)	See attached letters of support. The City of Arcadia and the other non-Federal sponsors continue to support the project and its inclusion in the U.S. Army Corps of Engineers 2020 Annual Report to Congress on Future Water Resource Development.
Cities of Bradbury, Duarte, Monrovia, Sierra Madre, County of Los Angeles, Los Angeles County Flood Control District	See attached letters of support. The City of Arcadia and the other non-Federal sponsors continue to support the project and its inclusion in the U.S. Army Corps of Engineers 2020 Annual Report to Congress on Future Water Resource Development.

3. State if this proposal is for new feasibility study authority, a modification to an existing feasibility study authority, a modification to an existing USACE project authority, or a modification to an existing USACE Environmental Infrastructure Program authority. If it is a proposal for a modification to an existing study, project or program authority, provide the authorized water resources development feasibility study or project name.

[x] New Feasibility Study Authority

4. Clearly articulate the specific project purpose(s) of the proposed study or modification. Demonstrate that the proposal is related to USACE mission and authorities and specifically address why additional or new authorization is needed.

The City of Arcadia is seeking a General Investigations Feasibility Study to restore degraded habitat adjacent to Corps-built channels at the locations described below:

1. Arcadia Wash Ecosystem Restoration Project at the Arboretum. The proposed project would restore degraded habitat along a 1,200-foot long section of Arcadia Wash. The project would consist of a channel diversion structure to convey stormwater flows from Arcadia Wash to the wetlands, groundwater recharge basins, and a naturalized stream to Baldwin Lake. The wetlands will restore native riparian and aquatic habitat while providing a natural treatment system for the recharge basins for infiltration. Stormwater will also be conveyed to Baldwin Lake via a natural stream to provide additional habitat areas and water for the lake.
2. Rio Hondo Ecosystem Restoration and Arcadia Wash Water Diversion Project. The proposed project would provide ecosystem restoration on a degraded industrial property along a 2,000-foot long section of the Sawpit Wash by constructing an approximately 7-acre wetland habitat area prior to discharge into the Peck Road Water Conservation Basins and the Rio Hondo Channel. The project would consist of a channel diversion structure and pipeline to convey stormwater flows from the Sawpit Wash to the wetland habitat area. The wetlands will create an area for native riparian and aquatic habitat while providing a natural treatment system for the groundwater recharge basins downstream.
3. Habitat Restoration for Basin 3E at the Santa Fe Spreading Grounds Project. The proposed project would provide ecosystem restoration to a degraded habitat that exists in a sedimentation basin within the Santa Fe Dam reservoir and spillway areas. Stormwater flows from Bradbury Channel to Basin 3E prior to discharging to the San Gabriel River. The project would enhance the site's function with new riparian and aquatic habitat that would reduce the sediment discharged to downstream ecosystems.

5. To the extent practicable, provide an estimate of the total cost, and the Federal and non-Federal share of those costs, of the proposed study and, separately, an estimate of the cost of construction or modification.

	Federal	Non-Federal	Total
Study	\$1,500,000	\$1,500,000	\$3,000,000
Construction	\$44,300,000	\$23,900,000	\$68,200,000

Explanation (if necessary)

6. To the extent practicable, describe the anticipated monetary and nonmonetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.

Located in the foothills of the San Gabriel Mountains, the projects would restore aquatic ecosystems in the Rio Hondo watershed, a subwatershed of the Los Angeles River watershed that is linked to the San Gabriel River watershed, begins high in the San Gabriel Mountains, and flows into urbanized areas of Los Angeles County. The proposed projects would provide restored aquatic ecosystem functions and habitat in key areas along the Pacific Flyway 2-5 miles south of the Angeles National Forest and connected San Gabriel Mountains National Monument. It would also restore Baldwin Lake, an iconic aquatic resource at the Los Angeles County Arboretum and Botanical Gardens that draws more than 400,000 visitors per year, including most of the County's schoolchildren, and holds enormous natural and cultural value for the region. The projects capture, retain, and treat stormwater for ecosystem restoration. The largest project would restore the area of Sawpit Wash, an Army Corps-constructed concrete lined channel that feeds into Peck Lake. The projects will also recharge groundwater in two aquifers: the Main San Gabriel and Raymond Basins. The projects therefore offer multiple regional benefits for ecosystem restoration, water conservation, and recreation. The combined projects would conserve approximately 1900 acre-ft per year of stormwater that would otherwise be discharged to the ocean. The restored natural processes and habitat will also provide incidental water quality benefits for the watershed. The recent, historic drought has taught us that it is critical for the region to invest in multi-purpose projects that capture stormwater flows to restore habitat and also conserve water through groundwater recharge. These projects would demonstrate a new model that provides ecosystem services for surrounding communities and habitats, more resilient and sustainable water resources for the region, and benefits for other ecosystems by reducing dependence on imported water supplies.

7. Does local support exist? If 'Yes', describe the local support for the proposal.

Yes

Local Support Description

This is a regional project supported by numerous separate localities in addition to the lead agency the City of Arcadia, including the cities of Bradbury, Duarte, Monrovia, Sierra Madre, County of Los Angeles, as well as the Los Angeles County Flood Control District. Key local stakeholders who support the project, including the Los Angeles Arboretum Foundation. The Foundation has expressed its support, pointing to the restoration and enhancement of vegetation, trees and other natural resources which will provide enjoyment to the public and habitat for wildlife. Other organizations that support restoration of these areas include the Audubon Society, Save Baldwin Lake Task Force, the Tongva-Gabrielino Tribe, and the Arcadia Historical Society.

8. Does the primary sponsor named in (2.) above have the financial ability to provide for the required cost share?

Yes

Primary Sponsor Letter of Support

(This is as uploaded, a blank page will show if nothing was submitted)

Rio Hondo Ecosystem Restoration Support Letters.PDF



August 14, 2018

Col. Aaron Barta
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd.
Los Angeles, CA 90017

RE: Letter of Support for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study

Dear Col. Barta:

As Chief Executive Officer of the Los Angeles County Arboretum, I write in support of the City of Arcadia's application to fund the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. Note that the Arboretum serves as project site and as an environmental education center receiving 445,000 annual visitors, offering singular opportunity to enhance regional water sustainability. The proposed project will not only showcase the importance of ground water recharge and high efficiency water use, but restore a habitat area that is critical to the urban ecosystem and to regional environmental education programs.

The proposed project will restore and make sustainable Baldwin Lake, the Arboretum's center piece and one of the most vital habitats in the Rio Hondo/San Gabriel River watershed. The recent lack of precipitation has not replenished the water levels needed to support wildlife and thus Baldwin Lake has relied on potable water to maintain habitat quality. Through the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study, the City of Arcadia would construct projects that restore and maintain water levels while also increasing groundwater recharge and improving water quality.

I urge your agency to select this project as part of the "US Army Corps of Engineers 2019 Annual Report to Congress on Future Water Resources Development" authorization.

If you have any questions, please contact me at richard.schulhof@arboretum.org, or by phone at 626.821.3231. Thank you for your time and consideration.

Sincerely,

Richard Schulhof
CEO



City of Duarte

1600 Huntington Drive | Duarte, CA 91010 | Bus. 626.357.7931 | Fax 626.358.0018 | www.accessduarte.com

August 14, 2018

Col. Aaron Barta
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd.
Los Angeles, CA 90017

RE: Letter of Support for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study

Dear Col. Barta:

On behalf of the City of Duarte, I am writing in support of the City of Arcadia's efforts to seek funding for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. As a city located within the Rio Hondo/San Gabriel River watersheds, the proposed Ecosystem Restoration Feasibility Study will examine opportunities to create and reestablish habitat to support wildlife populations at project areas such as the Los Angeles County Arboretum and Botanic Garden, the Peck Road Park Lake, and Basin 3E of the San Gabriel River Spreading Grounds. Ancillary to habitat restoration, the proposed Feasibility Study will evaluate opportunities to increase groundwater recharge, improve water quality and enhance recreational experiences.

Since the statewide drought, many of the habitats located in the Rio Hondo/San Gabriel River watersheds, have been severely impacted. For example, the lack of precipitation has not replenished the water levels at Baldwin Lake to sustain the wildlife populations and thus Baldwin Lake has relied on portable water to maintain the necessary water levels. With the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study, the City of Arcadia would construct projects that address habitat restoration while other benefits such as groundwater recharge and improve water quality can also be achieved.

I hope your agency selects this project to be included in the "US Army Corps of Engineers 2019 Annual Report to Congress on Future Water Resources Development" authorization.

If you have any questions, please contact me at georged@accessduarte.com or by phone at (626) 357-7931 Ext. 223

Sincerely,

Darrell George
City Manager



August 14, 2018

Col. Aaron Barta
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd.
Los Angeles, CA 90017

RE: Letter of Support for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study

Dear Col. Barta:

On behalf of the City of Monrovia, I am writing in support of the City of Arcadia's efforts to seek funding for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. As a city located within the Rio Hondo/San Gabriel River watersheds, the proposed Ecosystem Restoration Feasibility Study will examine opportunities to create and reestablish habitat to support wildlife populations at project areas such as the Los Angeles County Arboretum and Botanic Garden, the Peck Road Park Lake, and Basin 3E of the San Gabriel River Spreading Grounds. Anxially to habitat restoration, the proposed Feasibility Study will evaluate opportunities to increase groundwater recharge, improve water quality and enhance recreational experiences.

Since the statewide drought, many of the habitats located in the Rio Hondo/San Gabriel River watersheds, have been severely impacted. For example, the lack of precipitation has not replenished the water levels at Baldwin Lake to sustain the wildlife populations and thus Baldwin Lake has relied on portable water to maintain the necessary water levels. With the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study, the City of Arcadia would construct projects that address habitat restoration while other benefits such as groundwater recharge and improve water quality can also be achieved.

I hope your agency selects this project to be included in the the "US Army Corps of Engineers 2019 Annual Report to Congress on Future Water Resources Development" authorization.

If you have any questions, please contact me Alex Tachiki, Senior Management Analyst at atachiki@ci.monrovia.ca.us by phone at 626-932-5553.

Sincerely,

Oliver Chi
City Manager



City of Sierra Madre

Public Works Department

232 W. Sierra Madre Boulevard, Sierra Madre, CA 91024

phone 626.355.7135 fax 626.355.2251

August 14, 2018

Col. Aaron Barta
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd.
Los Angeles, CA 90017

RE: Letter of Support for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study

Dear Col. Barta:

On behalf of the City of Sierra Madre, I am writing in support of the City of Arcadia's efforts to seek funding for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. As a city located within the Rio Hondo/San Gabriel River watersheds, the proposed Ecosystem Restoration Feasibility Study will examine opportunities to create and reestablish habitat to support wildlife populations at project areas such as the Los Angeles County Arboretum and Botanic Garden, the Peck Road Park Lake, and Basin 3E of the San Gabriel River Spreading Grounds. Ancillary to habitat restoration, the proposed Feasibility Study will evaluate opportunities to increase groundwater recharge, improve water quality and enhance recreational experiences.

Since the statewide drought, many of the habitats located in the Rio Hondo/San Gabriel River watersheds, have been severely impacted. For example, the lack of precipitation has not replenished the water levels at Baldwin Lake to sustain the wildlife populations and thus Baldwin Lake has relied on portable water to maintain the necessary water levels. With the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study, the City of Arcadia would construct projects that address habitat restoration while other benefits such as groundwater recharge and improve water quality can also be achieved.

I hope your agency selects this project to be included in the "US Army Corps of Engineers 2019 Annual Report to Congress on Future Water Resources Development" authorization.

If you have any questions, please contact me at ccimino@cityofsierramadre.com, or by phone at 626-355-6615.

Sincerely,

Chris Cimino
Director of Public Works



MARK PESTRELLA, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

August 16, 2018

IN REPLY PLEASE

REFER TO FILE: **SWQ-4**

Colonel Aaron Barta
United States Army Corps of Engineers
Los Angeles District
915 Wilshire Boulevard
Los Angeles, CA 90017

Dear Colonel, Barta:

WATER RESOURCES DEVELOPMENT ACT RIO HONDO/SAN GABRIEL RIVER ECOSYSTEM RESTORATION FEASIBILITY STUDY – LETTER OF SUPPORT

On behalf of the County of Los Angeles and the Los Angeles County Flood Control District, we support the City of Arcadia's efforts to seek funding through the Water Resources Development Act for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. As agencies located within the Rio Hondo/San Gabriel River watersheds, the proposed Ecosystem Restoration Feasibility Study will examine opportunities to create and reestablish habitat to support wildlife populations at local project areas, such as the Los Angeles County Arboretum and Botanic Garden, the Peck Road Park Lake, and Basin 3E of the San Gabriel River Spreading Grounds. Ancillary to habitat restoration, the proposed Feasibility Study will evaluate opportunities to increase groundwater recharge, improve water quality, and enhance recreational experiences.

Since the statewide drought, many of the habitats located in the Rio Hondo/San Gabriel River watersheds have been severely impacted. For example, the lack of precipitation has not replenished the water levels at Baldwin Lake to sustain the wildlife populations and thus, Baldwin Lake has relied on potable water to maintain the necessary water levels. With the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study, the City of Arcadia would construct projects that address habitat restoration while other benefits, such as groundwater recharge and improved water quality can also be achieved.

We hope your agency selects this project to be included in the "United States Army Corps of Engineers 2019 Annual Report to Congress on Future Water Resources Development" authorization.

Colonel Barta
August 16, 2017
Page 2

If you have any questions, please contact me at (626) 458-4325 or palva@dpw.lacounty.gov or your staff may contact Ms. Genevieve Osmeña at (626) 458-3978 or gosmena@dpw.lacounty.gov.

Very truly yours,

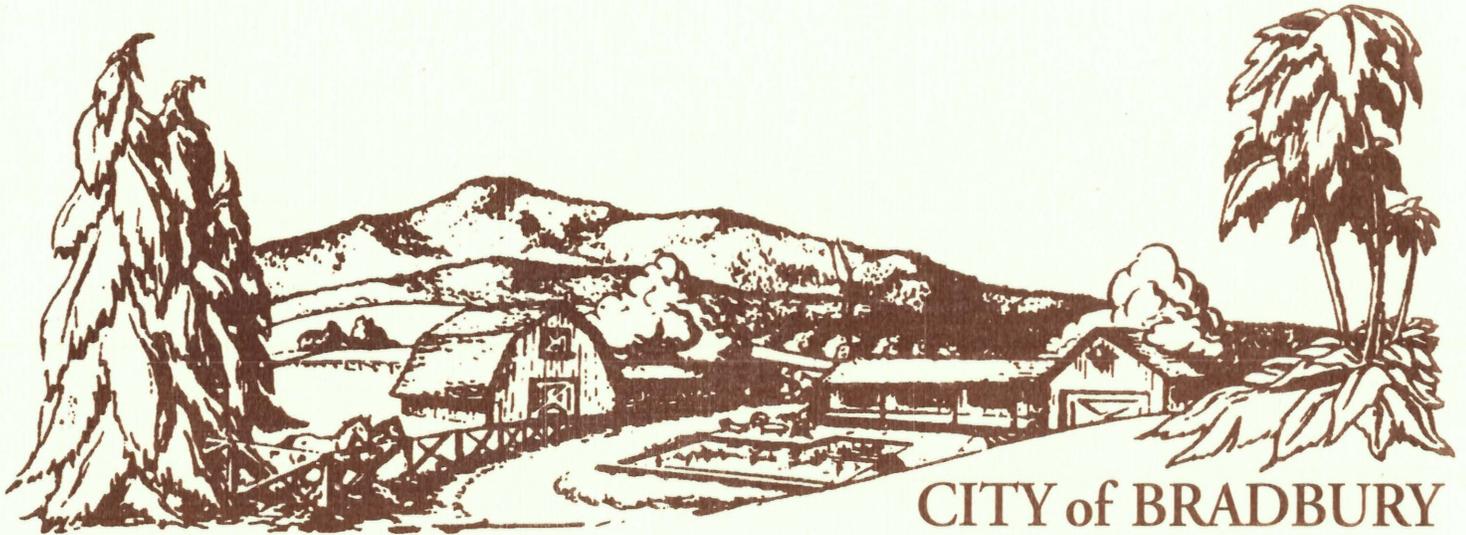
MARK PESTRELLA
Director of Public Works

A handwritten signature in black ink, appearing to read 'Paul Alva', written over the printed name and title.

for PAUL ALVA
Assistant Deputy Director
Stormwater Quality Division

ACL:ba

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CITY of BRADBURY

Incorporated July 26, 1957

August 14, 2018

Col. Aaron Barta
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd.
Los Angeles, CA 90017

RE: Letter of Support for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study

Dear Col. Barta:

On behalf of the City of Bradbury, I am writing in support of the City of Arcadia's efforts to seek funding for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. As a city located within the Rio Hondo/San Gabriel River watersheds, the proposed Ecosystem Restoration Feasibility Study will examine opportunities to create and reestablish habitat to support wildlife populations at project areas such as the Los Angeles County Arboretum and Botanic Garden, the Peck Road Park Lake, and Basin 3E of the San Gabriel River Spreading Grounds. Ancillary to habitat restoration, the proposed Feasibility Study will evaluate opportunities to increase groundwater recharge, improve water quality and enhance recreational experiences.

Since the statewide drought, many of the habitats located in the Rio Hondo/San Gabriel River watersheds, have been severely impacted. For example, the lack of precipitation has not replenished the water levels at Baldwin Lake to sustain the wildlife populations and thus Baldwin Lake has relied on portable water to maintain the necessary water levels. With the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study, the City of Arcadia would construct projects that address habitat restoration while other benefits such as groundwater recharge and improve water quality can also be achieved.

I hope your agency selects this project to be included in the "US Army Corps of Engineers 2019 Annual Report to Congress on Future Water Resources Development" authorization.

If you have any questions, please contact me at kkearney@cityofbradbury.org by phone at (626) 358-3218.

Sincerely,

Kevin Kearney
City Manager

Other Non-Federal Sponsors Letter(s) of Support

(This is as uploaded, a blank page will show if nothing was submitted)

Rio Hondo Ecosystem Restoration Support Letters.PDF



August 14, 2018

Col. Aaron Barta
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd.
Los Angeles, CA 90017

RE: Letter of Support for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study

Dear Col. Barta:

As Chief Executive Officer of the Los Angeles County Arboretum, I write in support of the City of Arcadia's application to fund the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. Note that the Arboretum serves as project site and as an environmental education center receiving 445,000 annual visitors, offering singular opportunity to enhance regional water sustainability. The proposed project will not only showcase the importance of ground water recharge and high efficiency water use, but restore a habitat area that is critical to the urban ecosystem and to regional environmental education programs.

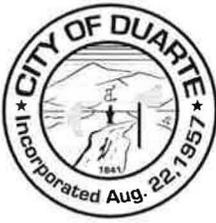
The proposed project will restore and make sustainable Baldwin Lake, the Arboretum's center piece and one of the most vital habitats in the Rio Hondo/San Gabriel River watershed. The recent lack of precipitation has not replenished the water levels needed to support wildlife and thus Baldwin Lake has relied on potable water to maintain habitat quality. Through the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study, the City of Arcadia would construct projects that restore and maintain water levels while also increasing groundwater recharge and improving water quality.

I urge your agency to select this project as part of the "US Army Corps of Engineers 2019 Annual Report to Congress on Future Water Resources Development" authorization.

If you have any questions, please contact me at richard.schulhof@arboretum.org, or by phone at 626.821.3231. Thank you for your time and consideration.

Sincerely,

Richard Schulhof
CEO



City of Duarte

1600 Huntington Drive | Duarte, CA 91010 | Bus. 626.357.7931 | Fax 626.358.0018 | www.accessduarte.com

August 14, 2018

Col. Aaron Barta
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd.
Los Angeles, CA 90017

RE: Letter of Support for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study

Dear Col. Barta:

On behalf of the City of Duarte, I am writing in support of the City of Arcadia's efforts to seek funding for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. As a city located within the Rio Hondo/San Gabriel River watersheds, the proposed Ecosystem Restoration Feasibility Study will examine opportunities to create and reestablish habitat to support wildlife populations at project areas such as the Los Angeles County Arboretum and Botanic Garden, the Peck Road Park Lake, and Basin 3E of the San Gabriel River Spreading Grounds. Ancillary to habitat restoration, the proposed Feasibility Study will evaluate opportunities to increase groundwater recharge, improve water quality and enhance recreational experiences.

Since the statewide drought, many of the habitats located in the Rio Hondo/San Gabriel River watersheds, have been severely impacted. For example, the lack of precipitation has not replenished the water levels at Baldwin Lake to sustain the wildlife populations and thus Baldwin Lake has relied on portable water to maintain the necessary water levels. With the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study, the City of Arcadia would construct projects that address habitat restoration while other benefits such as groundwater recharge and improve water quality can also be achieved.

I hope your agency selects this project to be included in the "US Army Corps of Engineers 2019 Annual Report to Congress on Future Water Resources Development" authorization.

If you have any questions, please contact me at georged@accessduarte.com or by phone at (626) 357-7931 Ext. 223

Sincerely,

Darrell George
City Manager



August 14, 2018

Col. Aaron Barta
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd.
Los Angeles, CA 90017

RE: Letter of Support for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study

Dear Col. Barta:

On behalf of the City of Monrovia, I am writing in support of the City of Arcadia's efforts to seek funding for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. As a city located within the Rio Hondo/San Gabriel River watersheds, the proposed Ecosystem Restoration Feasibility Study will examine opportunities to create and reestablish habitat to support wildlife populations at project areas such as the Los Angeles County Arboretum and Botanic Garden, the Peck Road Park Lake, and Basin 3E of the San Gabriel River Spreading Grounds. Anxially to habitat restoration, the proposed Feasibility Study will evaluate opportunities to increase groundwater recharge, improve water quality and enhance recreational experiences.

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I hope your agency selects this project to be included in the the "US Army Corps of Engineers 2019 Annual Report to Congress on Future Water Resources Development" authorization.

If you have any questions, please contact me Alex Tachiki, Senior Management Analyst at atachiki@ci.monrovia.ca.us by phone at 626-932-5553.

Sincerely,

Oliver Chi
City Manager



City of Sierra Madre

Public Works Department

232 W. Sierra Madre Boulevard, Sierra Madre, CA 91024

phone 626.355.7135 fax 626.355.2251

August 14, 2018

Col. Aaron Barta
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd.
Los Angeles, CA 90017

RE: Letter of Support for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study

Dear Col. Barta:

On behalf of the City of Sierra Madre, I am writing in support of the City of Arcadia's efforts to seek funding for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. As a city located within the Rio Hondo/San Gabriel River watersheds, the proposed Ecosystem Restoration Feasibility Study will examine opportunities to create and reestablish habitat to support wildlife populations at project areas such as the Los Angeles County Arboretum and Botanic Garden, the Peck Road Park Lake, and Basin 3E of the San Gabriel River Spreading Grounds. Ancillary to habitat restoration, the proposed Feasibility Study will evaluate opportunities to increase groundwater recharge, improve water quality and enhance recreational experiences.

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If you have any questions, please contact me at ccimino@cityofsierramadre.com, or by phone at 626-355-6615.

Sincerely,

Chris Cimino
Director of Public Works



MARK PESTRELLA, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

August 16, 2018

IN REPLY PLEASE

REFER TO FILE: **SWQ-4**

Colonel Aaron Barta
United States Army Corps of Engineers
Los Angeles District
915 Wilshire Boulevard
Los Angeles, CA 90017

Dear Colonel, Barta:

WATER RESOURCES DEVELOPMENT ACT RIO HONDO/SAN GABRIEL RIVER ECOSYSTEM RESTORATION FEASIBILITY STUDY – LETTER OF SUPPORT

On behalf of the County of Los Angeles and the Los Angeles County Flood Control District, we support the City of Arcadia's efforts to seek funding through the Water Resources Development Act for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. As agencies located within the Rio Hondo/San Gabriel River watersheds, the proposed Ecosystem Restoration Feasibility Study will examine opportunities to create and reestablish habitat to support wildlife populations at local project areas, such as the Los Angeles County Arboretum and Botanic Garden, the Peck Road Park Lake, and Basin 3E of the San Gabriel River Spreading Grounds. Ancillary to habitat restoration, the proposed Feasibility Study will evaluate opportunities to increase groundwater recharge, improve water quality, and enhance recreational experiences.

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We hope your agency selects this project to be included in the "United States Army Corps of Engineers 2019 Annual Report to Congress on Future Water Resources Development" authorization.

Colonel Barta
August 16, 2017
Page 2

If you have any questions, please contact me at (626) 458-4325 or palva@dpw.lacounty.gov or your staff may contact Ms. Genevieve Osmeña at (626) 458-3978 or gosmena@dpw.lacounty.gov.

Very truly yours,

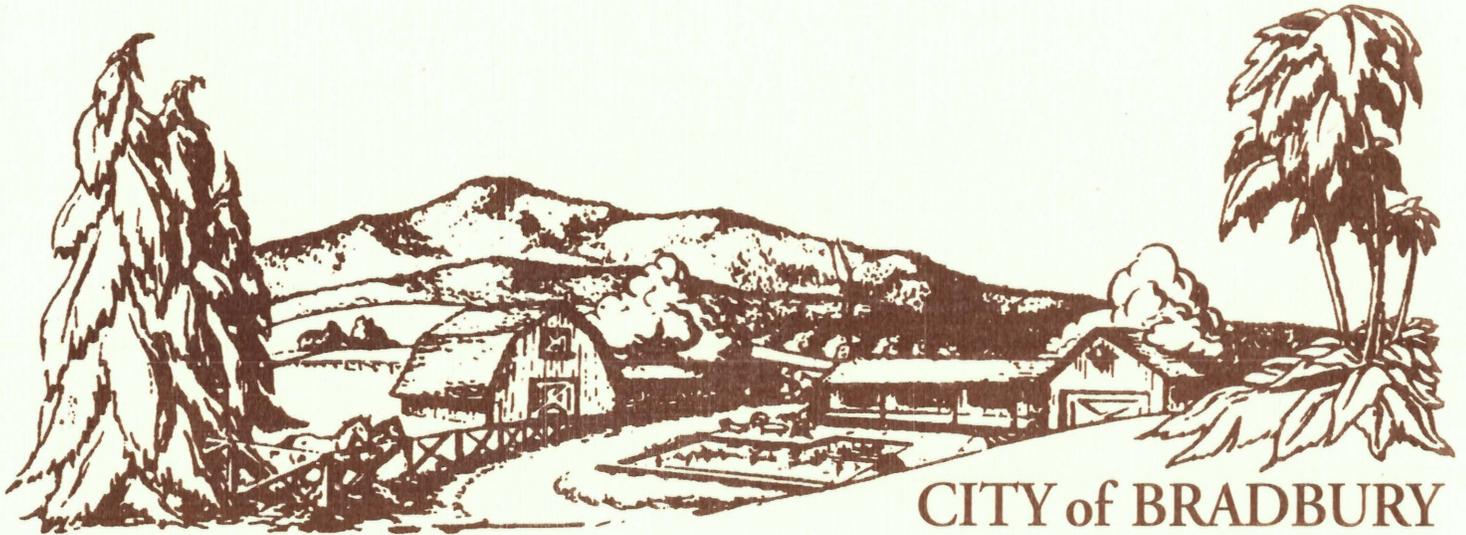
MARK PESTRELLA
Director of Public Works

A handwritten signature in black ink, appearing to read 'Paul Alva', written over the printed name and title.

for PAUL ALVA
Assistant Deputy Director
Stormwater Quality Division

ACL:ba

P:\swqpub\Secretarial\2018 Documents\Letters\RHSGR WRDA.docx



CITY of BRADBURY

Incorporated July 26, 1957

August 14, 2018

Col. Aaron Barta
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd.
Los Angeles, CA 90017

RE: Letter of Support for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study

Dear Col. Barta:

On behalf of the City of Bradbury, I am writing in support of the City of Arcadia's efforts to seek funding for the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study. As a city located within the Rio Hondo/San Gabriel River watersheds, the proposed Ecosystem Restoration Feasibility Study will examine opportunities to create and reestablish habitat to support wildlife populations at project areas such as the Los Angeles County Arboretum and Botanic Garden, the Peck Road Park Lake, and Basin 3E of the San Gabriel River Spreading Grounds. Ancillary to habitat restoration, the proposed Feasibility Study will evaluate opportunities to increase groundwater recharge, improve water quality and enhance recreational experiences.

Since the statewide drought, many of the habitats located in the Rio Hondo/San Gabriel River watersheds, have been severely impacted. For example, the lack of precipitation has not replenished the water levels at Baldwin Lake to sustain the wildlife populations and thus Baldwin Lake has relied on portable water to maintain the necessary water levels. With the Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study, the City of Arcadia would construct projects that address habitat restoration while other benefits such as groundwater recharge and improve water quality can also be achieved.

I hope your agency selects this project to be included in the "US Army Corps of Engineers 2019 Annual Report to Congress on Future Water Resources Development" authorization.

If you have any questions, please contact me at kkearney@cityofbradbury.org by phone at (626) 358-3218.

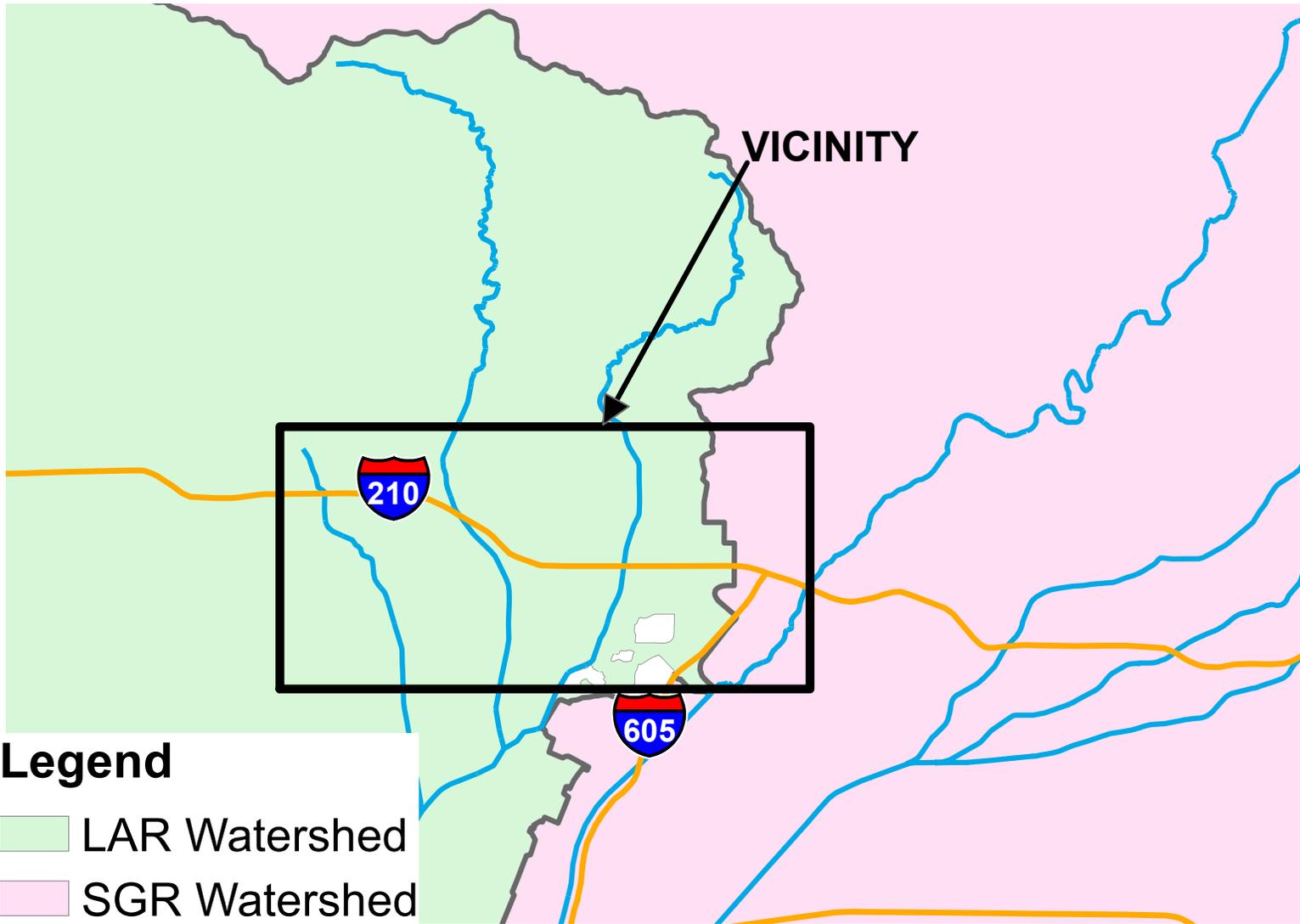
Sincerely,

Kevin Kearney
City Manager

Map Document

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Rio Hondo Ecosystem Restoration Project Vicinity Map.PDF

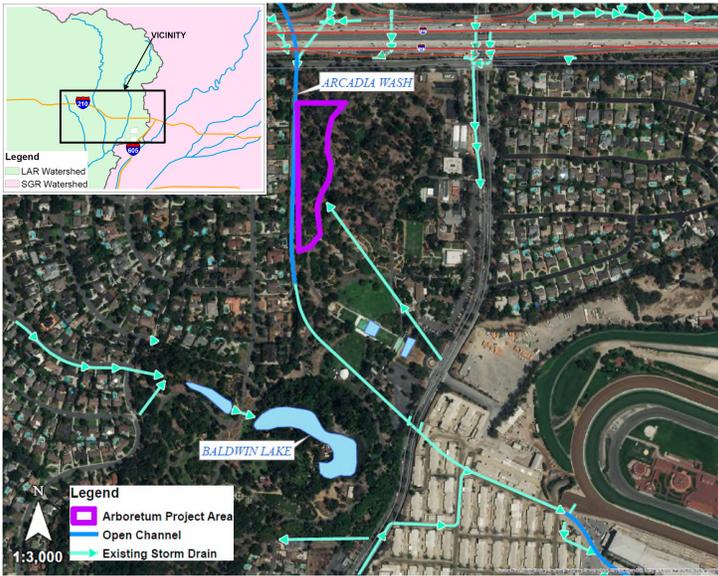


Additional Proposal Information

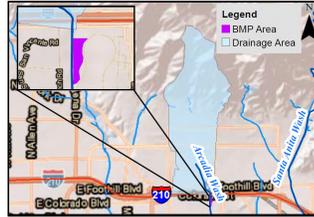
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Rio Hondo Ecosystem Restoration Project Fact Sheets
Rev_2019_0207_FINAL.PDF

EXISTING SITE CONDITIONS



DRAINAGE AREA



DRAINAGE CHARACTERISTICS

DRAINAGE AREA (acres)	1,633
HYDROLOGIC SOIL GROUP	A/B
APPROX. DEPTH TO GROUNDWATER (ft)	58.9
SOIL DESCRIPTION	Well-drained
MODELED AVERAGE ANNUAL RUNOFF VOLUME (ac-ft)	1,633

BMP CHARACTERISTICS

LOCATION: ARCADIA ARBORETUM	LAT: 34° 8' 32.55" N LONG: 118° 3' 13.62" W
Proposed BMP Description: The proposed project would restore degraded habitat along a 2,000-ft long section of the Arcadia Wash flood control channel by constructing a vegetated wetland system with wetland ponds, groundwater (GW) recharge basins, and a meandering stream to Baldwin Lake. The project would consist of a rubber dam diversion structure to convey diverted flows from the Wash through the wetlands, GW recharge basins, to the stream, and then to Baldwin lake. Within the project area non-native habitat will be removed, and new plant species will be selected for the wetland ponds to provide native riparian habitat. The basins will infiltrate into the Raymond GW Basin providing GW recharge. Stormwater will also be conveyed to Baldwin Lake via a natural stream to provide additional habitat area and sustained water. This project also proposes catch basin reconstruction into green street mechanisms on the 3 drain inlets to Tule Pond, which would connect to the downstream Baldwin lake. This reconstruction would allow for Tule pond to be developed into a native habitat area.	Project Benefits: <ul style="list-style-type: none"> Ecosystem restoration with a natural treatment wetlands and meandering stream adjacent to the Arcadia Wash Increase habitat value with native/riparian vegetation for migratory birds and other sensitive species located within the area Creation of linkage of natural water supply to Baldwin Lake for a sustainable pond

Arcadia Wash (Corps-Built Channel)



Northwest walking path adjacent to Arcadia Wash



Baldwin Lake



PROPOSED CONCEPTUAL SITE LAYOUT

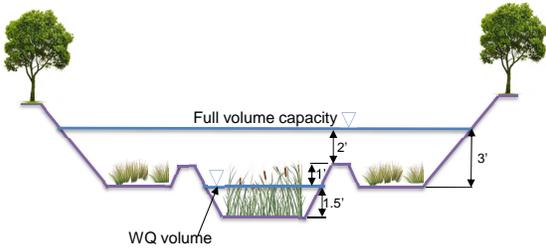


PLANNING-LEVEL COST ESTIMATE

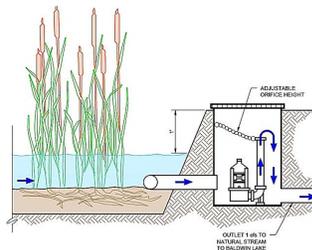
DESCRIPTION	TOTAL COST
Arcadia Wash Diversion, Pretreatment, and Conveyance	\$316,450
Dry Weather Pump Station	\$800,000
Treatment and Recharge Ponds	\$2,565,600
Green Streets for Tule Pond	\$851,360
SUBTOTAL	\$4,533,410
Mobilization/Demobilization (5% of Subtotal)	\$226,671
Estimating Contingency (25% of Subtotal)	\$1,133,353
TOTAL COST	\$5,893,433



TYPICAL CROSS SECTION



WETLAND CROSS SECTION TO OUTLET

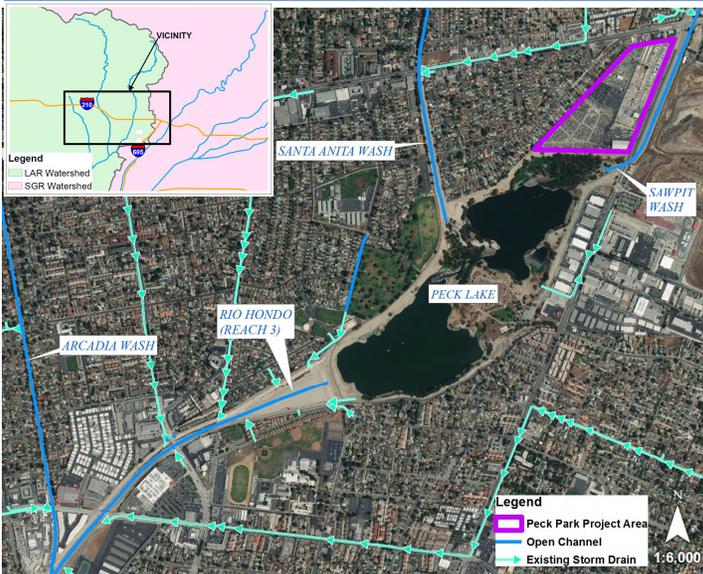


PROJECT CHARACTERISTICS

Approx. Arcadia Wash Invert Elevation at Diversion	575.00
Design Diversion Rate	30 cfs
Design In-Stream Flow to Baldwin Lake	1 cfs
Estimated Storage Capacity for Wetland Pond	1.4 ac-ft
Estimate Annual Groundwater Recharge	103.6 ac-ft/yr
Aquatic Ecosystem Restoration Area	0.6 acres

CITIES OF ARCADIA, MONROVIA, AND SIERRA MADRE, THE COUNTY OF LOS ANGELES, AND THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
RIO HONDO ECOSYSTEM RESTORATION AND ARCADIA WASH WATER DIVERSION PROJECT

EXISTING SITE CONDITIONS



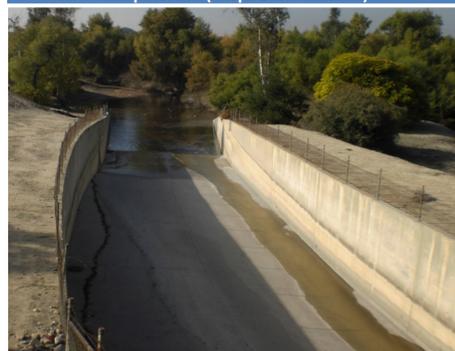
Vacant Lot - Potential Location for Pump and Pretreatment Unit (Source: Google Earth)



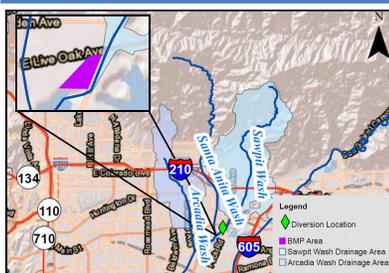
Arcadia Wash Confluence with Rio Hondo



Sawpit Wash (Corps Built Channel)



DRAINAGE AREA



DRAINAGE CHARACTERISTICS

DRAINAGE AREA OF EACH WASH (acres)	5,085 (Arcadia) 10,692 (Sawpit)
HYDROLOGIC SOIL GROUP	D
APPROX. DEPTH TO GROUNDWATER (ft)	42.1
SOIL DESCRIPTION	Well-drained/ somewhat excessively drained
MODELED AVERAGE ANNUAL RUNOFF VOLUME (ac-ft)	4,035.86 (Sawpit) 4,409.51 (Arcadia)

BMP CHARACTERISTICS

LOCATION: CITIES OF ARCADIA AND MONROVIA

LAT: 34° 6' 20.75"N
LONG: 118° 0' 33.85"W

Proposed BMP Description: The proposed project would restore the degraded Sawpit and Arcadia Washes by constructing approximately a 6.7-acre wetlands habitat area to treat stormwater flows and provide ecosystem services prior to discharge into the Peck Road Water Conservation Basins and the downstream Rio Hondo Channel. The project will consist of two channel diversion structures to convey stormwater flows from Sawpit Wash and Arcadia Wash to the wetlands habitat area. Phase 1 would construct the Arcadia Wash Diversion to Sawpit Wash, and Phase 2 would construct the Sawpit Wash Diversion and the wetlands. The Arcadia Wash diversion would require a pretreatment unit and pump to convey flows to Sawpit Wash. The wetlands will create an area for native riparian habitat while providing a natural treatment system for the recharge basins downstream.

Project Benefits:

- Aquatic ecosystem restoration with a natural treatment wetlands
- Increase habitat value with native/riparian vegetation for migratory birds and other sensitive species located within the area



PROPOSED CONCEPTUAL SITE LAYOUT



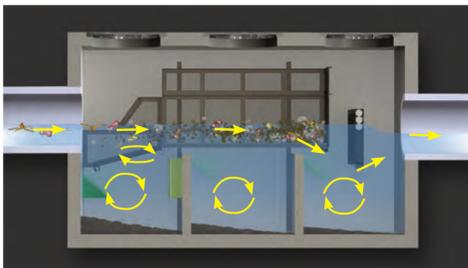
PLAN VIEW

PLANNING-LEVEL COST ESTIMATE

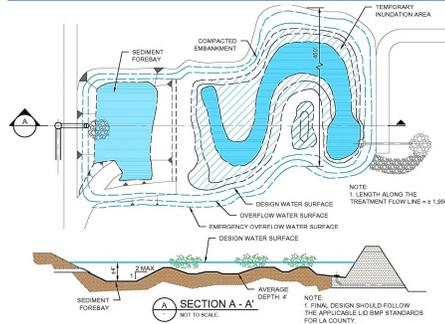
DESCRIPTION	TOTAL COST
Phase 1 – Arcadia Wash Water Conservation Diversion	
Arcadia Wash Diversion, Pretreatment, and Conveyance	\$5,997,500
Estimated Land Acquisition	\$1,390,000
Phase 1 Subtotal	\$7,387,500
Mobilization/Demobilization (5% of Subtotal)	\$147,750
Estimating Contingency (25% of Subtotal)	\$1,846,875
Phase 1 Total Cost	\$9,382,125
Phase 2 – Rio Hondo Ecosystem Restoration Project	
Sawpit Wash Diversion, Pretreatment, and Conveyance	\$16,789,000
Storage and Treatment	\$17,536,400
Estimated Land Acquisition	\$6,350,000
Phase 2 Subtotal	\$40,675,400
Mobilization/Demobilization (5% of Subtotal)	\$2,033,770
Estimating Contingency (25% of Subtotal)	\$10,168,850
Phase 2 Total Cost	\$52,878,020
TOTAL COST	\$62,260,145

Note: The land acquisition costs were estimated from the LA Property Assessment Information 2017 Roll Values.

TYPICAL DEBRIS SEPARATING BAFFLE BOX (Source: BioClean Environmental, Inc.)



TYPICAL PLAN VIEW AND CROSS SECTION



PROJECT CHARACTERISTICS

Design Diversion Rate from Sawpit Wash	185 cfs
Approx. Sawpit Wash Elevation at Diversion	332.0
Design Diversion Rate from Arcadia Wash	37 cfs
Approx. Arcadia Wash Invert Elevation at Diversion	338.5
Estimated Storage Capacity for Wetlands	33 ac-ft
Estimate Annual Groundwater Recharge	1,006 ac-ft/yr
Aquatic Ecosystem Restoration Area	6.7 acres