



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Wendy Katagi, CDM Smith
Matt Petty, CDM Smith*

Date: November 16, 2015

Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on November 16, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:15 am and ending at 4:45 p.m. Weather conditions were sunny and windy, with temperatures ranging from 51°F in the morning to a high of 66°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with constructing the gabion peninsula, stockpiling and spreading basin soils, repairing perimeter fence, and pouring concrete in the northeast corner of the site. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and several crew members wait inside cars at the construction trailer.

6:20 am. The initial biological survey begins. Nine double-crested cormorants fly over the staging area, and frequent western gull flyovers are observed. One Anna's hummingbird perches on the north fence, and one great blue heron flies over the West Basin from south to north. There is some ponding in the East Basin, southeast channel, and at the end of the stormwater pipe near the northwest peninsula. Three house finches are observed in palms along Washington Boulevard, and two black phoebes and one yellow-rumped warbler fly around the stormwater inlet. Water is actively flowing into the Basin from the stormwater inlet. Occasional American crow and double-

crested cormorant flyovers are observed, and two house sparrows perch on the east fence. Two Anna's hummingbirds and one dark-eyed junco fly about the pump house. Two yellow-rumped warblers are observed along the bike path, and one black phoebe and one yellow-rumped warbler fly along the southeast channel. The dead grebe is still present in the East Basin, and no signs of physical trauma are observed. Four mallards fly in and land in the East Basin and begin foraging near the dead grebe. The occasional California gull is observed flying over the Basin. One black-crowned night-heron perches on the tide gates, and two mourning doves perch on the west fence.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. The Construction Superintendent and Inspector of Record have yet to arrive. Emphasis was placed on protection of monarch butterflies, since observations are on the rise, and on the ducks present in the East Basin. Workers were reminded to clean up trash in the work area prior to the end of the work day. All crewmembers present signed the sign-in sheet.

7:15 am. Work begins and one large excavator heads to the Central Basin to excavate and stockpile soils while another loads rock in the West Basin. Three American crows perch on light poles near the construction trailer. The black-crowned night-heron flies from the tide gates to the southeast channel as crews approach on foot. Work begins by hand on the gabion peninsula. Work occurs along the entire length of the peninsula, but is focused on the area near the tide gates. A survey crew of two arrives and the biological monitor reminds them of wildlife protection measures; however, they do not sign the sheet because it is not nearby.

7:30 am. The third excavator is moved to the Central Basin from the east bank and begins transporting sand to the gabion peninsula. One Say's phoebe flies from mound-to-mound in the Central Basin, and nine mourning doves perch on powerlines along the north shoreline. The four mallards continue to forage near the stormwater inlet and are undisturbed by the excavator nearby. There are very frequent western and California gull flyovers and less frequent American crow flyovers. One yellow-rumped warbler and two house finches fly along the north fence, and two black phoebe perch on the stormwater inlet.

7:45 am. One of the two pairs of mallards begin courtship behavior and mate several times in a pool near the stormwater inlet. One double-crested cormorant circles the West Basin before leaving to the southwest. One great egret flies north to south over the West Basin. Excavator work moving soils in the Central Basin stops, but sand and rock deliveries to the gabion peninsula from the east and west banks continue.

8:00 am. A flock of six rock pigeons fly south to north over the Central Basin, and two house sparrows are observed flying along the north fence. Two yellow-rumped warblers fly around the stormwater inlet, and two least sandpipers fly in and forage in the inlet nearby. The arrival of the sandpipers cause the four mallards to fly to the east basin where they continue to forage.

8:15 am. One great egret lands in the southeast channel, and one merlin flies south to north over the East Basin. As it passes by a palm tree along Washington Boulevard, the merlin is chased by two house finches. One Say's phoebe perches on the northeast peninsula, and three western gulls land atop the construction trailer.

8:35 am. Four American crows probe the north bank, and two European starlings are observed flying along Washington Boulevard. Two large flocks of rock pigeons consisting of 12 and 16 individuals, circle buildings to the west of the site. Gull flyovers are observed less frequently than earlier in the morning.

8:50 am. Two mallards leave the site to the west. Work continues delivering sand and rock to the gabion peninsula via excavators. Two white-crowned sparrows and one black phoebe hop in and out of brush on the east bank. A cement truck arrives to the northeast gate. Green and brown algae are observed in the East Basin.

9:15 am. The cement pour begins near the stormwater inlet. Two yellow-rumped warblers and two black phoebes are perched nearby on the inlet itself, but are undisturbed by the activity close by.

9:40 am. The third excavator begins excavating and stockpiling soils in the West Basin; no wildlife is observed in the vicinity. One song sparrow is observed in the bushes on the northwest peninsula. The cement truck completes its pour and leaves the site. Two black phoebes fly around the stormwater inlet.

10:05 am. The third excavator moves to the Central Basin and begins stockpiling soils. Very little wildlife activity is being observed compared to earlier in the day. Two mourning doves fly over the West Basin. Other wildlife activity in the Basin includes black phoebes flying from mound-to-mound and occasional American crow, western gull, rock pigeon, and mourning dove flyovers.

10:30 am. Work continues in and around the gabion peninsula. One snowy egret flies over the West Basin. Two black phoebes fly mound-to-mound in the Central Basin. One house finch perches on a power pole on the northwest peninsula.

10:55 am. Winds have picked up significantly and are causing dead palm fronds to fall into the site from trees along Washington Boulevard. One ring-billed gull flies over the Basin, and one common yellowthroat is observed in bushes on the northwest peninsula before it flies over the West Basin to bushes on the west bank.

11:15 am. The excavators delivering sand and stone to the gabion peninsula from the east and west banks stop to allow crews to spread the sediment by hand. Two house finches fly over the excavator stockpiling soils in the Central Basin. One mourning dove perches on a temporary power line along the west bank.

11:35 am. One monarch flies along the west bank, where two yellow-rumped warblers perch on temporary power lines. In addition, one Say's phoebe and one common yellowthroat fly among the bushes on the west bank.

11:45 am. The survey crew finishes with its work for the day and prepares to leave the site. Gulls continue to occasionally fly over, otherwise very little wildlife is observed. The winds appear to be keeping butterflies down, as only one monarch has been observed this morning.

12:00 pm. The biological monitor and the construction crews break for lunch.

12:50 pm. The biological monitor returns from lunch and the construction crews resume work at the gabion peninsula. Excavators resume delivering sand and stone from the east and west banks to the gabion peninsula. The occasional western gull and California gull flyover is observed, and one yellow-rumped warbler and one black phoebe perch on the northeast peninsula.

1:10 pm. Pumps are making progress dewatering the East Basin; however, it is somewhat offset by water entering from the stormwater inlet. The third excavator begins stockpiling and spreading soils near the tide gates. Four house finches fly south to north over the Central Basin. One Say's phoebe is observed in the southeast channel, and three European starlings fly among the palms along Washington Boulevard.

1:30 pm. The third excavator moves into the Central Basin and begins stockpiling and spreading soils. The occasional western gull, American crow, or rock pigeon flyover is observed. One white cabbage butterfly and one swallowtail butterfly are observed over the West Basin. One Say's phoebe perches on a wooden stake on the northeast peninsula.

1:50 pm. One dark-eyed junco and one yellow-rumped warbler fly about the staging area near the construction trailer. One black phoebe is observed flying along the west bank.

2:15 pm. The excavator moving soils in the Central Basin stops, as does the excavator bringing sand to the gabion peninsula from the east bank. One Anna's hummingbird is observed hovering over the two pine trees in the northeast corner of the site. Two black phoebes are observed on the east bank.

2:35 pm. With the strong winds, there are some minor dust control issues; however, most of the soil is moist and does not escape. The potted pickleweed looks fairly dry and a crewmember is sent to water them. The occasional western gull and American crow flyover is observed, and a black phoebe perches on the stormwater inlet.

2:50 pm. The excavator in the Central Basin resumes soil stockpiling activities, as does the excavator delivering sand to the gabion peninsula from the east bank. No wildlife is observed in the vicinity of either excavator. Tree protection fencing remains in place around the pines and eucalyptus on-site, and other than a few areas where it's fallen at an angle, is in good condition. High winds blow over a portion of the exterior chain-link fence near the construction trailer. No wildlife or property is damaged by the fallen fence.

3:15 pm. The excavator in the West Basin stops hauling stone. One Say's phoebe and one black phoebe are observed on the northeast peninsula, and two house finches perch on the north fence. Three western gulls and one rock pigeon fly over the Basin.

3:35 pm. All excavators stop work. One crew continues to work on the gabion peninsula while a second crew repairs the wind-damaged fence. One California gull briefly lands in a pool near the stormwater inlet before flying off to the south. Very strong winds dissuade most wildlife from taking flight.

3:50 pm. The large generator and pumps at the tide gates are started up.

4:05 pm. Work stops on the gabion peninsula at the tide gates, but a second crew continues to work on the eastern end. A large excavator begins delivering sand to the gabion peninsula from the east bank, while a second large excavator begins stockpiling soils in the Central Basin. A bobcat is used to move chain-link fence along the north bank. One western gull and one double-crested cormorant brave high winds and fly over the Basin.

4:25 pm. Crews stop work for the day. Two mourning doves and three western gulls fly over the Basin. One house finch flies about the northwest peninsula.

4:45 pm. A flock of 6 mallards fly over the staging area as the construction crews and biological monitor leave the site for the day.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today.

Only one monarch butterfly was observed flying around the project site. The very strong winds made it difficult for butterflies to take flight; therefore, only three butterflies of all species were observed. This is far fewer than the number observed on a typical day. It's expected that butterfly observations will increase in the coming days when winds die down.

No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crow and gulls. Wildlife activity often increases slightly in the late afternoon.

3. Only one monarch butterfly was observed today because of strong winds.
4. Some green and brown algae were observed in the East Basin.
5. Winter species have arrived including the yellow-rumped warbler, Say's phoebe, and white-crowned sparrow. As autumn continues, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
6. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the basin itself. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.

Table 1 provides a list of bird species observed during biological monitoring on November 16, 2015.

Table 1. Bird Species Observed during Biological Monitoring on November 16, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Merlin	<i>Falco columbarius</i>	1 individual observed flying over the East Basin
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals; Very common flying overhead (less common than Western gull)
Ring-billed Gull	<i>Larus delawarensis</i>	1 individual observed flying overhead
Least Sandpiper	<i>Calidris minutilla</i>	2 individuals foraging at the stormwater inlet
Snowy Egret	<i>Egretta thula</i>	1 individual observed flying overhead
Great Egret	<i>Ardea alba</i>	1-2 individuals observed in the southeast channel and flying overhead
Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	1 individual observed perched on the tide gates
Black Phoebe	<i>Sayornis nigricans</i>	Several observed flying from perch to perch throughout the Basin
Say's Phoebe	<i>Sayornis saya</i>	4-6 individuals observed flying from perch to perch throughout the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mallard	<i>Anas platyrhynchos</i>	4 individuals observed foraging in the East Basin; 6 flying overhead
Yellow-rumped Warbler	<i>Dendroica coronate</i>	Several individuals observed flying from perch to perch throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	10-15 individuals observed throughout the basin; common in palms along Washington Boulevard
Mourning Dove	<i>Zenaida macroura</i>	Several individuals; Commonly observed sitting on power lines and flying overhead
Double-Crested Cormorant	<i>Phalacrocorax auritus</i>	10-12 individuals observed flying over the staging area and the Basin

Mr. Rick Sun
November 16, 2015
Page 7

House Sparrow	<i>Passer domesticus</i>	2-4 individuals along the east and north fences
Song Sparrow	<i>Melospiza melodia</i>	1 individual observed on the northwest peninsula
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	2 individuals observed on the east bank
Common Yellowthroat	<i>Geothlypis trichas</i>	1-2 individuals observed in the West Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	2-3 individuals observed near the pump house and the staging area
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed in and around trees and perched on fences throughout the basin

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Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:20 am and ending at 5:00 p.m. Weather conditions were sunny and windy, with temperatures ranging from 51°F in the morning to a high of 69°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with constructing the gabion peninsula, stockpiling and spreading basin soils, repairing perimeter fence, and pouring concrete in the southwest corner of the site. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:20 am. Biological monitor arrives onsite to conduct initial assessment. The construction trailer gate is open and several crew members wait inside cars at the construction trailer.

6:30 am. The initial biological survey begins. Four western gulls circle above the staging area, and one snowy egret flies west to east over the Basin. One yellow-rumped warbler is observed on the northwest peninsula, and three house finches and one Anna's hummingbird perch on the north fence. Winds have blown down half of the north perimeter fence from the northeast gate to approximately 100-feet west. One American crow perches on a power pole in the northeast corner, and two black phoebes and one yellow-rumped warbler perch on the stormwater inlet. Feral cat tracks are observed in the mud near the stormwater inlet. There is more water in the Basin than

yesterday, particularly near the tide gates and the stormwater inlet. Water continues to actively flow into the Basin through the stormwater inlet. Two mourning doves, one common yellowthroat, one orange-crowned warbler, and one Anna's hummingbird are observed along the east fence and bike path. Two Anna's hummingbirds and one yellow-rumped warbler are observed in trees near the pump house. Near the southeast channel gate, two European starlings and one American crow are observed. Two mallard fly in and land at the stormwater inlet, and a flock of 10 snowy egrets fly west to east over the Basin. Two house sparrows perch on the south fence as a group of three rock pigeons fly over. One snowy egret flies over the staging area.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. The Construction Superintendent and Inspector of Record have yet to arrive. Emphasis was placed on protection of monarch butterflies, since observations are on the rise, and on the ducks present in the East Basin. Excavator operations were singled out as needing to be extra vigilant for ducks and wading birds. Workers were reminded to clean up trash in the work area prior to the end of the work day. The monitor also informs the crew of the damaged north fence and the need to fix it first thing to protect the public and wildlife. All 18 crewmembers present signed the sign-in sheet.

7:15 am. Work begins and crews head off to fix the wind-damaged north perimeter fence. A separate crew begins work on the gabion peninsula. One large excavator begins hauling rock and materials from the northwest corner to the gabion peninsula near the tide gates. Several crewmembers install additional pumps and generators to deal with rising waters in the Basin. One great egret and several western gulls fly over the staging area. One house finch flies over the West Basin.

7:30 am. A large excavator is started up in the northeast corner, which causes the four mallards foraging near the stormwater inlet to leave the site to the southeast. One black phoebe is observed on the northwest peninsula, and a group of six American crows land in the East Basin. The north perimeter fence is repaired.

7:50 am. The large excavator in the northeast corner begins loading sand into a dump truck before making several sand deliveries to the gabion peninsula. Four mallards land in the southeast channel and begin foraging. Western and California gull flyovers are observed frequently, and three western gulls land on light poles along Washington Boulevard. Two house finches and two European starlings are observed near residences across Washington Boulevard.

8:10 am. The third large excavator begins spreading and stockpiling soils in the Central Basin. A concrete pump truck arrives at the staging area. One double-crested cormorant flies over the West Basin, and one Say's phoebe is observed flying along the north bank. One black phoebe and one yellow-rumped warbler perch on the northeast peninsula. There is increased crow activity in the Basin, with several crows probing the banks and mud piles.

8:25 am. The sand that was loaded into a dump truck at the northeast gate is taken to the staging area. The third large excavator stops soils work in the Central Basin. One mourning dove flies along the north fence, and a large flock of 24 rock pigeons circle buildings to the south and west of the site. One monarch butterfly, two black phoebes, one black-crowned night heron, one yellow-

rumped warbler, and four mallards are observed in the southeast channel.

8:45 am. A large front loader is used to transport sand from the staging area to a new stockpile in the Central Basin near the northeast peninsula. Work is wholly focused on the eastern end of the gabion peninsula. One house finch flies over the East Basin and lands in a palm tree along Washington Boulevard. One monarch butterfly is observed flying over the stormwater inlet, where one male mallard forages (the other three mallards remain in the southeast channel). Gull and American crow flyovers are still frequently observed.

9:05 am. The concrete pump truck moves into position to pour concrete on the gabion peninsula near the tide gates. Two cedar waxwings are observed in palms along Washington Boulevard. A female Allen's hummingbird hovers over the East Basin before perching on the stormwater inlet.

9:20 am. The large excavator stops bringing sand from the east bank and instead brings sand from the new stockpile in the Central Basin. One monarch is observed flying along the north fence. One mourning dove perches on powerlines above the north bank. The four mallards leave the site to the southeast.

9:45 am. Wildlife activity has decreased significantly in the Basin compared to earlier in the day. The occasional western gull, American crow, or rock pigeon fly over is observed. One house finch flies east to west over the Basin.

10:10 am. Work continues spreading sand and fill by hand on the eastern end of the gabion peninsula. The large excavator returns to delivering sand from the east bank while the Central Basin stockpile is replenished. Two yellow-rumped warblers are observed on the west bank, and three rock pigeons fly over the Central Basin.

10:30 am. One Say's phoebe flies over the West Basin and perches on a temporary power line above the west bank. A flock of nine American crows circle above the east fence. One monarch is observed flying among the mud piles in the Central Basin. Far more butterflies and dragonflies are being observed today due to the calmer winds.

10:50 am. Crews begin installing mesh to create the third tier of the gabion peninsula. A Rain for Rent crew member arrives onsite and works on the tanks and pipes in the staging area. Crews are still awaiting the arrival of the first of eight planned cement trucks. Two black phoebes and one monarch butterfly are observed flying about the stormwater inlet.

11:10 am. A concrete truck arrives at the staging area, followed five minutes later by a second concrete truck. Wildlife activity near the active work areas consists of black phoebes that fly from perch-to-perch and butterflies. One monarch butterfly and several cabbage white and Sulphur butterflies fly around the Central Basin. One snowy egret flies in and lands at the stormwater inlet. It spends a few minutes there before flying off to the northwest.

11:30 am. Crews focus on the cement pour in the West Basin, and spreading fill on the gabion peninsula in the Central Basin. One monarch butterfly is observed in the northwest corner of the

site. Rock pigeon flyovers are observed frequently. Winds are beginning to pick up.

12:00 pm. All crews, except for the cement crew, and the biological monitor break for lunch.

12:50 pm. The biological monitor returns from lunch and the construction crews resume work at the gabion peninsula. A cement truck arrives and the cement crew pours and treats the concrete on the gabion peninsula near the tide gates. At the other end of the peninsula, crews continue to pour fill and install mesh. One orange-crowned warbler and one least sandpiper are observed in the East Basin. One yellow-rumped warbler and three black phoebes are observed in the southeast channel. Western gulls are frequently observed flying over the site.

1:10 pm. Another cement truck arrives at the staging area. Winds are getting stronger, and four western gulls ride thermals high above the Basin. One double-crested cormorant circles to the southwest of the site.

1:30 pm. One least sandpiper and one black phoebe forage at the stormwater inlet, and are not bothered by the excavator passing nearby. A mechanic works on one of the large excavators near the northeast peninsula.

1:55 pm. The mechanic finishes work on the large excavator near the northeast peninsula and leaves the site. Cement work stops as the crew waits on the last truck to arrive. One Say's phoebe perches on a wooden stake on the east bank. High levels of rock pigeon activity are observed along Admiralty Way.

2:15 pm. The recently-serviced excavator is used to spread soils in the Central Basin. One Say's phoebe perches on the tide gates. The occasional western gull, American crow, and rock pigeon flyover is observed.

2:30 pm. The final concrete truck arrives to pour the last five yards of the gabion peninsula where it connects to the tide gates. No wildlife is observed in the vicinity. A second crew installs pre-fabricated gabion baskets that were built in the staging area on the gabion peninsula.

2:50 pm. What was to be the last concrete pour is complete; however, additional concrete is needed to connect to the tide gates. Crews spread and smooth the concrete while waiting on another truck to arrive. One black phoebe is observed on the west bank and another perches on silt fence on the south bank. One yellow-rumped warbler sings from the pine trees near the tide gates.

3:05 pm. Pre-fabricated gabion baskets are stockpiled near the gabion peninsula for future installation. Placement and spreading of structural fill at the east end of the gabion peninsula continues. One snowy egret circles the East Basin twice before exiting the site to the south.

3:20 pm. A large group of approximately 25 gulls, American crows, and rock pigeons circle and land in Parking Lot No.7 because a woman is feeding them. One European starling and three western gulls fly over the West Basin.

3:45 pm. The excavator delivering fill to the gabion peninsula stops work and crews spread the fill to grade. Two house finches perch atop light poles along the west bank. Two mallards fly north to south over the Central Basin.

4:00 pm. The cement truck arrives at the staging area and crews get into position for the day's final pour. The excavator resumes delivering fill to the east end of the gabion peninsula. The woman has finished feeding the flock of gulls, crows, and pigeons in Parking Lot No.7, and the birds slowly disperse. Three black phoebes and one yellow-rumped warbler are observed flying from perch-to-perch in the East Basin.

4:25 pm. Crews stop work for the day. Concrete crews clean trucks in the staging area, and construction crews clean the site and prepare to leave.

5:00 pm. The concrete trucks are sufficiently cleaned and all crewmembers and the biological monitor leave the site.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today.

Seven monarch butterflies were observed flying around the project site. The winds were not as strong as they were yesterday; therefore, significantly more butterflies were observed. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crow and gulls. Wildlife activity often increases slightly in the late afternoon.
3. Seven monarch butterflies were observed today. Insects remain relatively common, including several species of dragonflies and butterflies, including monarch, swallowtails, sulphurs, cabbage white, and painted lady. Butterflies are attracted to the moist soils and flowering plants. Monarchs are being observed with more regularity; however, observations decrease significantly when winds pick up.
4. Some green and brown algae were observed in the East Basin.

5. Winter species have arrived including the yellow-rumped warbler, Say's phoebe, and cedar waxwing. As autumn continues, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
6. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the basin itself. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.

Table 1 provides a list of bird species observed during biological monitoring on November 17, 2015.

Table 1. Bird Species Observed during Biological Monitoring on November 17, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals; Common flying overhead (less common than Western gull)
Least Sandpiper	<i>Calidris minutilla</i>	1-2 individuals foraging in the East Basin
Snowy Egret	<i>Egretta thula</i>	12-14 individuals observed flying overhead; one individual spent time at the stormwater inlet
Great Egret	<i>Ardea alba</i>	1 individual observed flying overhead
Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	1 individual observed in the southeast channel
Black Phoebe	<i>Sayornis nigricans</i>	Several observed flying from perch to perch throughout the Basin
Say's Phoebe	<i>Sayornis saya</i>	2-4 individuals observed flying from perch to perch throughout the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mallard	<i>Anas platyrhynchos</i>	4-6 individuals observed foraging in the East Basin; 2 flying overhead
Yellow-rumped Warbler	<i>Dendroica coronate</i>	Several individuals observed flying from perch to perch throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	10-12 individuals observed throughout the basin; common in palms along Washington Boulevard
Mourning Dove	<i>Zenaida macroura</i>	Several individuals; Commonly observed sitting on power lines and flying overhead
Double Crested Cormorant	<i>Phalacrocorax auritus</i>	2 individuals observed flying over the staging area and the Basin
House Sparrow	<i>Passer domesticus</i>	2 individuals perched on the south fence
Cedar Waxwing	<i>Bombycilla cedrorum</i>	2 individuals in palms along Washington Blvd
Orange-crowned Warbler	<i>Oreothlypis celata</i>	1-2 individuals in the East Basin and along the bike path
Common Yellowthroat	<i>Geothlypis trichas</i>	1 individual observed along the bike path
Anna's Hummingbird	<i>Calypte anna</i>	2-4 individuals observed in and around trees and

Mr. Rick Sun
November 17, 2015
Page 7

		perched on fences throughout the basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	1 individual hovering above the East Basin

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Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on November 18, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:10 am and ending at 4:45 p.m. Weather conditions were mostly sunny, with temperatures ranging from 55°F in the morning to a high of 72°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with constructing the gabion peninsula, stockpiling and spreading Basin soils, contaminated soil removal via truck, and fill deliveries and stockpiling. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:10 am. Biological monitor arrives onsite to conduct initial assessment. The construction trailer gate is open and several crew members wait inside cars at the construction trailer. Trucks are lined up along Washington Boulevard to offload fill and/or remove soils from the Basin.

6:20 am. The initial biological survey begins. Western gulls and American crows frequently fly over the staging area. One black phoebe flies among mud piles in the Central Basin. Two black phoebes and two yellow-rumped warblers fly around the stormwater inlet. Water levels in the Basin have increased during the night and active flow continues to come into the Basin from the stormwater inlet. A group of nine cedar waxwings and two house finches are observed in palms along Washington Boulevard, while two European starlings perch in residential vegetation nearby. Two

dark-eyed juncos are observed in the northeast corner of the site, and three black phoebes perch along the east bank. One bushtit, two orange-crowned warblers, and two Anna's hummingbirds are observed along the bike path. One song sparrow is observed in trees near the pump house, and two house sparrows are observed at the southeast gate. Three American crows are foraging along the south bank, and seven mourning doves fly over the East Basin. A brown pelican flies over the West Basin.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. The Construction Superintendent and Inspector of Record have yet to arrive. Emphasis was placed on protection of monarch butterflies, since observations are on the rise. Excavator operations were singled out as needing to be extra vigilant for ducks and wading birds. Workers were reminded to clean up trash in the work area prior to the end of the work day. All 24 crewmembers present signed the sign-in sheet. Two mallards fly over the staging area and land northwest of the site. Three dump trucks with stone idle in Parking Lot No.7.

7:10 am. Work begins and crews head to the gabion peninsula: One crew installs baskets near the tide gate; another places fill on the east end; and a third crew installs mesh on a central portion of the peninsula. The Construction Superintendent indicates he spoke with the concrete crews about BMPs. Trucks along Washington Boulevard begin offloading fill and/or removing Basin soils. There is very little wildlife activity in work areas; however, the occasional western gull or rock pigeon flies over.

7:25 am. Stone is delivered to the northwest corner of the site. One American crow perches on a light pole and one mourning dove sits on a power line above the activity. Two European starlings fly along Washington Boulevard, and one yellow-rumped warbler is observed in bushes on the west bank. There is significant American crow activity in the Basin with eight individuals probing banks. Three crows harass a sharp-shinned hawk in a palm near the northwest corner of the site. The hawk flies off to the south over the west bank.

7:40 am. A large excavator delivers stone from the northwest corner to the gabion peninsula near the tide gates. Seven mourning doves perch on power lines above the north bank. Two yellow-rumped warblers chase one another along the north fence, and one house finch flies over the East Basin. Two black phoebes perch on the stormwater inlet and are unaffected by truck activity at the nearby northeast gate.

8:00 am. A second large excavator begins delivering fill to the east end of the gabion peninsula. One female Allen's hummingbird hovers over the north fence, and one yellow-rumped warbler and one American crow fly about the northeast peninsula. Western gulls are frequently observed flying over the Basin.

8:20 am. One Anna's hummingbird and one house finch perch in the northeast pine trees above the truck offloading and loading activities. One black phoebe perches on a stake in the Central Basin, and one double-crested cormorant flies over the West Basin.

8:40 am. Work continues loading trucks with Basin soils in the northeast corner of the site and

constructing the gabion peninsula. Elevated songbird activity is observed in the palms along Washington Boulevard, including 10-12 yellow-rumped warblers and house finches. American crow activity has decreased; an occasional flyover is observed but no crows are observed in the Basin. Two Anna's hummingbirds chase one another out over the East Basin.

9:00 am. The excavator delivering fill to the east end of the gabion peninsula stops work. One Allen's hummingbird and two black phoebes are observed on the northeast peninsula. One monarch is observed flying along the north fence. The occasional western gull and rock pigeon flyover is observed, but the frequency has decreased significantly compared to earlier in the morning.

9:20 am. Two American crows perch on temporary power lines above gabion peninsula work in the southwest corner of the site. One monarch is observed flying above the West Basin. Two white-crowned sparrows are observed in the pine trees near the tide gates, and one Say's phoebe perches on the north fence. One Cassin's kingbird is observed in a palm tree along Washington Boulevard. It flies to a utility pole on the northeast peninsula and perches there for a moment before flying off over the Central Basin.

9:30 am. LA County Vector Control arrives onsite and speaks with the biological monitor near the construction trailer. They relay that nearby residents are concerned about the potential for mosquitoes. They ask about standing water and water sources. The biological monitor takes them to speak with the Inspector of Record and Construction Superintendent.

9:50 am. The Construction Superintendent takes LA County Vector Control on a tour of the site, and they sample standing water areas. A large excavator resumes delivering fill to the east side of the gabion peninsula. Rebar is delivered to the northwest corner of the site. Two western gulls fly over the west bank, and two house finches perch on the west perimeter fence. Butterfly activity is increasing.

10:15 am. The last trucks hauling Basin soils leave the site through the northeast gate. A flock of 11 American crows fly over the staging area. Two yellow-rumped warblers and two black phoebes are observed near the stormwater inlet, and are occasionally flushed by LA County Vector Control taking water samples.

10:35 am. The third large excavator begins to spread and stockpile soils in the Central Basin; all three excavators are now operating in the West and Central Basins. One monarch is observed flying along the southeast channel. Two black phoebes are observed, one on the northwest peninsula and one along the south bank. A flock of roughly 15 rock pigeons fly around the high-rises to the south of the site.

10:55 am. In the West Basin, one monarch butterfly lands in recent excavator tracks to sip from the wet soils. The excavator briefly stops delivering stone to the gabion peninsula until the monarch flies away. One Anna's hummingbird and one yellow-rumped warbler forage in bushes on the northwest peninsula.

11:15 am. A truck arrives to the staging area to replace the concrete truck wash bins. Work in the Basin is focused on the gabion peninsula – one crew constructs the third tier of a central portion and another constructs the second tier, composed of gabion baskets, near the tide gates. One Anna's hummingbird flies over the Central Basin, and two California gulls fly over the West Basin.

11:40 am. Trucks arrive at the northeast gate to haul off Basin soils stockpiled on the east bank. The excavator operator delivering fill to the gabion peninsula stops work to load soils into the trucks. Soil spreading and stockpiling in the Central Basin also ends. One monarch is observed flying along the south bank, and one black phoebe is observed on the northeast peninsula. The occasional American crow, western gull, and rock pigeon flyover is observed.

12:00 pm. All crews and the biological monitor break for lunch.

12:45 pm. The biological monitor returns from lunch and the construction crews resume work at the gabion peninsula. One excavator delivers fill from the Central Basin, and a second excavator delivers stone from the northwest corner stockpile. An electrical crew arrives and works on equipment at the tide gates. One Say's phoebe perches on a temporary power line above the west bank, and one monarch is observed flying along the north fence.

1:00 pm. One black phoebe is observed flying along the south bank.

1:20 pm. Tree trimming activities take place in Yvonne Burke Park near the southeast gate. One monarch and one black phoebe are observed in the East Basin. One yellow-rumped warbler is observed at the stormwater inlet, and a mixed group of seven western gulls and two California gulls circle low over the staging area before landing on the Hilton Garden Inn roof.

1:35 pm. Dump trucks arrive regularly and offload equipment at the staging area. Two dump trucks offload stone to the northwest corner stockpile. One monarch flies over the northeast peninsula, while a second monarch flies over the West Basin. An occasional western gull flyover is also observed.

2:00 pm. The third large excavator moves to the gabion peninsula at the tide gates to pick up and transport equipment. It then proceeds to spread and stockpile soils in the Central Basin. All three excavators are in use in the West and Central Basins. No wildlife is observed in the vicinity of the active work areas. However, gulls are attracted to soils being delivered and stockpiled in the staging area. A group of 10 western gulls perch on top of crewmembers' cars and on the Hilton Garden Inn roof and swoop down when new soils arrive.

2:20 pm. The Construction Superintendent informs the biological monitor that LA County Vector Control wants to administer pesticides in standing water at the stormwater inlet and the southeast channel to combat mosquitoes. The issue is that these are the two areas most frequented by feeding ducks, wading birds, sandpipers, and songbirds. The Construction Superintendent does not know what treatment is planned or if it is potentially toxic to birds. One black phoebe is observed at the stormwater inlet and another perches on a stake along the southeast channel.

2:45 pm. The Construction Superintendent informs the biological monitor that there is a chance LA County Vector Control has already administered pesticides or will be doing so this afternoon. Three mallards land in the East Basin and begin foraging. Two black phoebes, one Allen's hummingbird, and one yellow-rumped warbler are observed at the stormwater inlet.

3:00 pm. The biological monitor calls the LA County West Vector Control Field Operations Manager to inquire about the mosquito treatment and potential toxicity to birds feeding in treated waters. The Field Operations Manager does not pick up, and the biological monitor leaves a voicemail. Winds are picking up on-site; therefore, butterflies are being observed less frequently.

3:20 pm. Work continues constructing the gabion peninsula. One excavator delivers fill to the peninsula while another spreads soils in the Central Basin. All other crew members work on the gabion peninsula by hand. Wildlife activity has slowed. American crows and western gulls occasionally fly over the Basin, but other wildlife keep to the East Basin and southeast channel – away from the active work areas.

3:45 pm. Spreading soils in the Central Basin using a large excavator stops; however, the two other large excavators continue to deliver fill and stone to the gabion peninsula. One house finch and one yellow-rumped warbler are observed in bushes along the west bank.

4:05 pm. Two snowy egrets land in a pool roughly 20-feet in front of the excavator delivering fill to the gabion peninsula in the Central Basin. The operator stops the excavator and uses the horn to try and get the egrets to relocate. The biological monitor arrives and flushes the egrets out of harm's way; one flies off-site to the west, while the other lands at the stormwater inlet. American crow flyovers have ceased and gulls are observed only occasionally. Two European starlings perch on a utility pole in the northwest corner of the site, and two mallards leave the site to the west (leaving one mallard in the East Basin).

4:20 pm. Work stops for the day and crews begin to clean up and prepare to leave. One double-crested cormorant flies east-to-west along Admiralty Way. Large groups (i.e. 8-21 individuals) of gulls are observed in the distance, flying east-to-west to the north of Washington Boulevard.

4:45 pm. All crewmembers and the biological monitor leave the site.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today. A brown pelican, rarely observed at the site, was observed flying over the West Basin.

Nine monarch butterflies were observed flying around the project site. Winds were calm for most of the day; therefore, butterflies were observed often. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

As construction crews and the biological monitor were leaving the site in the late afternoon, large flocks of unidentified gulls were observed flying east-to-west to the north of Washington Boulevard. While gulls are observed frequently flying over the Basin, groups larger than 2-3 individuals are rare. The large flocks could be an early indicator that migratory gulls are arriving to the area in greater numbers.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crow and gulls. Wildlife activity often increases slightly in the late afternoon.
3. Nine monarch butterflies were observed today. Insects remain relatively common, including several species of dragonflies and butterflies, including monarchs, sulphurs, and cabbage whites. Butterflies are attracted to the moist soils and flowering plants. Monarchs are being observed with more regularity; however, observations decrease significantly when winds pick up.
4. Some green and brown algae were observed in the East Basin.
5. LA County Vector Control determined that mosquitoes are present and breeding in stagnant water at the stormwater inlet and the pump house. They plan to treat these areas with a pesticide. The issue is that these areas are the two most frequented in the Basin by ducks, wading birds, shorebirds, and insect-eating songbirds. Any treatment should be non-toxic to birds.
6. Winter species have arrived including the yellow-rumped warbler, Say's phoebe, and cedar waxwing. As autumn continues, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
7. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.

Table 1 provides a list of bird species observed during biological monitoring on November 18, 2015.

Table 1. Bird Species Observed during Biological Monitoring on November 18, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the Basin banks
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	2-4 individuals observed flying overhead
Brown Pelican	<i>Pelecanus occidentalis</i>	1 individual observed flying over the West Basin
Snowy Egret	<i>Egretta thula</i>	2 individuals resting and foraging in the Basin
Sharp-shinned Hawk	<i>Accipiter striatus</i>	1 individual observed flying over the West Basin
Bushtit	<i>Psaltriparus minimus</i>	1 individual observed along the bike path
Black Phoebe	<i>Sayornis nigricans</i>	Several observed flying from perch to perch throughout the Basin
Say's Phoebe	<i>Sayornis saya</i>	1-2 individuals observed flying from perch to perch throughout the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mallard	<i>Anas platyrhynchos</i>	3 individuals observed foraging in the East Basin; 2 flying overhead
Yellow-rumped Warbler	<i>Dendroica coronate</i>	Several individuals observed flying from perch to perch throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	8-10 individuals observed throughout the Basin; common in palms along Washington Boulevard
Mourning Dove	<i>Zenaida macroura</i>	Several individuals; Commonly observed sitting on power lines and flying overhead
Double Crested Cormorant	<i>Phalacrocorax auritus</i>	2 individuals observed flying overhead
Cassin's Kingbird	<i>Tyrannus vociferans</i>	1 individual observed on a power pole along the north bank
House Sparrow	<i>Passer domesticus</i>	2 individuals in trees near the southeast gate
Song Sparrow	<i>Melospiza melodia</i>	1 individual observed near the pump house
European Starling	<i>Sturnus vulgaris</i>	2-4 individuals observed along Washington Blvd
Cedar Waxwing	<i>Bombycilla cedrorum</i>	9 individuals in palms along Washington Blvd
Orange-crowned Warbler	<i>Oreothlypis celata</i>	2 individuals observed along the bike path
White-crowned Sparrow	<i>Zonotickia leucophrys</i>	2 individuals observed in pine trees near the tide gates
Dark-eyed Junco	<i>Junco hyemalis</i>	2 individuals observed in the northeast corner
Anna's Hummingbird	<i>Calypte anna</i>	5-7 individuals observed in and around trees and perched on fences throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	2-3 individuals hovering above the northeast corner of the site



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Wendy Katagi, CDM Smith
Matt Petty, CDM Smith*

Date: November 19, 2015

Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on November 19, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:10 am and ending at 4:40 p.m. Weather conditions were mostly sunny, with temperatures ranging from 56°F in the morning to a high of 76°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with constructing the gabion peninsula, stockpiling and spreading Basin soils, contaminated soil removal via truck, and fill deliveries and stockpiling. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives onsite to conduct initial assessment. The construction trailer gate is open and several crew members wait inside cars at the construction trailer. Three crew members are preparing hoses, pumps and generators in the staging area.

6:20 am. The initial biological survey begins. Eight western gulls are circling above or perched in the staging area, and three ring-billed gulls fly over the West Basin. Four double-crested cormorants fly over the staging area. A sharp-shinned hawk is harassed by two Anna's hummingbirds as it flies over the West Basin and perches in a palm near the Killer Shrimp restaurant. Two house finches and two yellow-rumped warblers are observed in palms along Washington Boulevard. One yellow-rumped warbler and one black phoebe are observed at the

stormwater inlet, and one snowy egret flies over the southeast channel. Two orange-crowned warblers are observed, one in the northeast pines and one along the bike path. One yellow-rumped warbler is observed in the northeast corner of the site, as one great egret flies north-to-south over the East Basin. Two house sparrows, two dark-eyed juncos, and one Anna's hummingbird are observed in trees along the bike path. Very frequent western gull and occasional American crow flyovers are recorded. Water levels are high again, particularly at the stormwater inlet, where there is active flow, and at the tide gates, where groundwater seeps in overnight.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of monarch butterflies, since observations are on the rise. Excavator operators were singled out as needing to be extra vigilant for ducks and wading birds. The biological monitor points out two good examples from yesterday where excavator operators paused for a snowy egret and a monarch butterfly. Workers were reminded to clean up trash in the work area prior to the end of the work day. All 23 crewmembers present sign the sign-in sheet.

7:15 am. Work begins and crews head to the gabion peninsula: One crew installs baskets and rebar near the tide gate; another places fill on the east end; and a third crew installs mesh on a central portion of the peninsula. One excavator delivers fill to the gabion peninsula in the Central Basin, while a second spreads soils in the West Basin. One great egret flies over the West Basin. Frequent gull activity is observed; most are western gulls, but there are also California and ring-billed gulls.

7:30 am. Two excavators are now spreading and stockpiling soils in the West Basin, and two crew members lay irrigation pipe at the base of the new concrete wall along the north bank. Three mallards circle the West Basin before landing off-site to the northwest. One Allen's hummingbird hovers above the northwest peninsula, and one black phoebe perches on a mud pile in the Central Basin.

7:45 am. A dump truck delivers stone to the northwest corner stockpile. Eight mourning doves are observed perching on power lines above the north bank, and three European starlings fly east over Washington Boulevard. Six house finches and two yellow-rumped warblers are observed in and around the palms along Washington Boulevard. Two house sparrows land atop the construction trailer.

8:00 am. Minor excavation occurs near the southeast gate with a small backhoe, and tree trimming (not affiliated with the project) begins in Yvonne Burke Park. One black phoebe is observed in the southeast channel, otherwise no wildlife is observed in the vicinity. An excavator spreading soils in the Central Basin becomes stuck in the wet mud. One yellow-rumped warbler forages on the northeast peninsula.

8:20 am. A dump truck delivers fill to the northeast corner stockpile. While three American crows perch nearby atop utility poles, crow activity is less than that observed on a typical morning. One black phoebe is observed at the stormwater inlet, and four European starlings fly over the West Basin.

8:40 am. The excavator delivering fill to the gabion peninsula stops work, and a dump truck

delivers rock to the northwest corner stockpile. One monarch is observed flying over the West Basin. Gull flyovers are still common, but are observed with less frequency than earlier this morning.

9:00 am. The large excavator resumes delivering fill to the portion of the gabion peninsula in the Central Basin. The cement crew prepares the gabion peninsula in the West Basin near the tide gates for the scheduled cement pour later in the day. A white-crowned sparrow is observed in bushes in the staging area, where three American crows chase one another. Water levels remain high near the tide gates.

9:20 am. The excavator stuck in the Central Basin is freed and resumes spreading soils. One house finch flies over the West Basin and lands in the pines near the tide gates. One killdeer forages in the shallow waters of the East Basin, as a black phoebe watches from a nearby perch. American crow activity is increasing in the Basin, with seven individuals present onsite.

9:35 am. Work stops in the West Basin as crews and resources are diverted to constructing the gabion peninsula in the Central Basin. Two American crows probe the south bank, while two house finches call out from the nearby pine trees. One black phoebe is observed on the northeast peninsula, and the occasional western gull flyover is observed. A flock of 11 California gulls fly east over the north fence.

10:00 am. A front loader replenishes the fill stockpile in the East Basin near the stormwater inlet before returning to the staging area and replenishing the fill pill in the Central Basin. No wildlife is disturbed by the front loader's journey along the north bank. A dump truck delivers more fill to the northeast stockpile, and the cement pump truck arrives to Parking Lot No.7. Crews return to the West Basin to prepare for the concrete pour. One black phoebe is observed at the tide gates, while another is observed at the northwest peninsula.

10:20 am. The concrete crew takes lunch because concrete is scheduled to be poured during normal lunch hours. One monarch is observed flying along the east bank, and a second monarch is observed flying over the Central Basin. One belted kingfisher perches on power lines above the north bank. Gull and American crow flyovers have become infrequent; however, rock pigeon flyovers are still occasionally observed.

10:45 am. Work continues constructing the third tier of the gabion peninsula. Where soils have been spread by the excavator to the correct elevation in the Central Basin, they are mechanically graded and smoothed. One black phoebe and one yellow-rumped warbler are observed at the stormwater inlet. One monarch flies above the northeast peninsula.

11:05 am. The cement pump truck is in position, and the cement crew returns from lunch. They are both awaiting the arrival of the cement trucks. The large excavator in the West Basin resumes spreading and stockpiling soils. Grading and smoothing of soils in the Central Basin stops. Two common yellowthroats perch on silt fence along the east bank, and four house sparrows forage near the stormwater inlet. Two house finches are observed in palms along Washington Boulevard.

11:25 am. The front loader makes several trips to and from the staging area to replenish the Central Basin fill pile. One monarch is observed flying above the north fence, and a flock of 13 rock pigeons fly over the West Basin.

11:40 am. A dump truck arrives with more stone and offloads it at the northwest corner stockpile. A great blue heron lands at the tide gates and spends a few minutes perched there before flying off to the East Basin. One monarch is observed flying over the West Basin.

12:00 pm. All crews, except for the cement crew, and the biological monitor break for lunch.

12:45 pm. The biological monitor returns from lunch and the construction crews resume work constructing the third tier of the gabion peninsula. One excavator delivers fill from the Central Basin. The concrete pour began roughly 20 minutes ago at the gabion peninsula in the West Basin. Concrete trucks line up in Parking Lot No.7 to supply the concrete pump truck. Two house finches are observed on the west bank, otherwise no wildlife is present in the vicinity of the concrete pour. A group of 12 American crows fly west along Washington Boulevard, and a turkey vulture soars roughly 5 miles north of the site.

1:00 pm. A second large excavator deposits rock near the gabion peninsula to create a path through the West Basin. The great blue heron leaves the East Basin and exits the site to the southwest. One monarch and one swallowtail butterfly are observed flying over the West Basin.

1:20 pm. A truck delivers cement blocks to the northeast gate and stockpiles them nearby. The biological monitor meets with LACDPW and they discuss mosquito treatment and the dead grebe that was found last week. One monarch is observed flying over the Central Basin, and one black phoebe perches on the northeast peninsula.

1:35 pm. LACDPW meets with LA County Vector Control at the construction trailer. A large excavator moves into the Central Basin to spread soils, and a dump truck arrives at the northeast gate to offload fill. Cement trucks continue to arrive at a steady pace to Parking Lot No.7. The front loader transports fill from the staging area to the Central Basin stockpile. A great egret lands in the East Basin, and one black phoebe is observed along the south bank. The occasional western gull flyover is observed.

1:55 pm. The concrete blocks are offloaded and the truck leaves. One double-crested cormorant flies over the West Basin. As the excavator delivering fill to the gabion peninsula nears the great egret on the east bank, the biological monitor alerts the operator to its presence. When the excavator gets to within 30 feet, the egret flies a short distance away into the East Basin. One black phoebe is observed on the northwest peninsula, and one mourning dove perches on the north fence.

2:10 pm. A large excavator spreads soils in the Central Basin to the base of the gabion peninsula. The great egret flies in and lands 10-feet in front of the excavator delivering fill to the gabion peninsula. The operator immediately stops the excavator and honks its horn, but the egret does not move. The biological monitor approaches clapping his hands and the egret flies 50-feet from active

work areas.

2:25 pm. Minor excavation at the southeast gate ends. Concrete trucks continue to arrive at Parking Lot No. 7. The great egret flies along the north bank and lands on the northwest peninsula. One monarch is observed flying over the northeast peninsula, and one black phoebe perches on the stormwater inlet. Four gadwall are observed flying over the West Basin, and the occasional western gull and American crow flyover is also observed.

2:45 pm. The front loader picks up fill from the staging area and replenishes the Central Basin stockpile. A snowy egret flies east-to-west over the south bank. American crow and western gull activity increases, particularly on the western side of the site.

3:00 pm. A snowy egret lands in a puddle in the Central Basin near the northwest peninsula. The front loader driver is told to go slow past the egret, which flies off to the stormwater inlet. A peregrine falcon is observed flushing a group of 16 rock pigeons from the high rise buildings along Admiralty Way. A great blue heron lands on the roof of the Killer Shrimp restaurant to the southwest of the site.

3:20 pm. The concrete pour ends for the day and the concrete crew prepares to leave the site. Work continues on the third tier of the gabion peninsula, which includes spreading fill and installing mesh. The snowy egret and great egret rest along the east bank.

4:00 pm. The concrete crew leaves the site. The remaining construction crews continue to work on the third tier of the gabion peninsula. Two black phoebes are observed at the stormwater inlet, and three house finches fly along the north fence. The snowy egret leaves the East Basin and exits the site to the southwest. The occasional western gull flyover is observed.

4:15 pm. Work stops for the day. A total of seven mallards, in three separate groups, fly over the staging area.

4:40 pm. All crewmembers and the biological monitor leave the site.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today.

Nine monarch butterflies were observed flying around the project site. Winds were calm for most of the day; therefore, butterflies were observed often. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. Nine monarch butterflies were observed today. Insects remain relatively common, including several species of dragonflies and butterflies, including monarchs, swallowtails, sulphurs, and cabbage whites. Butterflies are attracted to the moist soils and flowering plants. Monarchs are being observed with more regularity; however, observations decrease significantly when winds pick up.
4. Some green and brown algae were observed in the East Basin.
5. LA County Vector Control determined that mosquitoes are present and breeding in stagnant water at the stormwater inlet and the pump house. They plan to treat these areas with a pesticide. The issue is that these areas are the two most frequented in the Basin by ducks, wading birds, shorebirds, and insect-eating songbirds. Any treatment should be non-toxic to birds.
6. Winter species have arrived including the yellow-rumped warbler, orange-crowned warbler, and white-crowned sparrow. As autumn continues, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
7. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.

Table 1 provides a list of bird species observed during biological monitoring on November 19, 2015.

Table 1. Bird Species Observed during Biological Monitoring on November 19, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the Basin banks

Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals observed flying overhead; not as common as western gulls
Ring-billed Gull	<i>Larus delawarensis</i>	5-7 individuals observed flying overhead
Great Blue Heron	<i>Ardea herodias</i>	1-2 individuals observed at the tide gates and southwest of the Basin
Snowy Egret	<i>Egretta thula</i>	2-3 individuals resting/foraging in the Basin and flying overhead
Great Egret	<i>Ardea alba</i>	2-3 individuals resting/foraging in the Basin and flying overhead
Peregrine Falcon	<i>Falco peregrinus</i>	1 individual chasing pigeons around high-rises along Admiralty Way
Sharp-shinned Hawk	<i>Accipiter striatus</i>	1 individual observed flying over the West Basin
Turkey Vulture	<i>Cathartes aura</i>	1 individual observed flying roughly 5 miles north of the Basin
Killdeer	<i>Charadrius vociferus</i>	1 individual observed foraging in the East Basin
Mallard	<i>Anas platyrhynchos</i>	7-10 individuals observed flying overhead
Gadwall	<i>Anas strepera</i>	4 individuals observed flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Black Phoebe	<i>Sayornis nigricans</i>	Several observed flying from perch to perch throughout the Basin
Yellow-rumped Warbler	<i>Dendroica coronate</i>	Several individuals observed flying from perch to perch throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
Mourning Dove	<i>Zenaida macroura</i>	Several individuals; commonly observed sitting on power lines and flying overhead
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	5 individuals observed flying overhead
Belted Kingfisher	<i>Megaceryle alcyon</i>	1 individual perched on power lines above the north bank
House Sparrow	<i>Passer domesticus</i>	6-8 individuals observed throughout the Basin
European Starling	<i>Sturnus vulgaris</i>	5-7 individuals observed along Washington Blvd
Common Yellowthroat	<i>Geothlypis trichas</i>	2 individuals observed along the east bank
Orange-crowned Warbler	<i>Oreothlypis celata</i>	2 individuals observed near the bike path
White-crowned Sparrow	<i>Zonotickia leucophrys</i>	1 individual observed in the staging area
Dark-eyed Junco	<i>Junco hyemalis</i>	2 individuals observed near the bike path
Anna's Hummingbird	<i>Calypte anna</i>	2-3 individuals observed in and around trees and perched on fences throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	1 individual hovering above the northwest peninsula



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Wendy Katagi, CDM Smith
Matt Petty, CDM Smith*

Date: November 20, 2015

Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on November 20, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:15 am and ending at 4:45 p.m. Weather conditions were mostly sunny, with temperatures ranging from 59°F in the morning to a high of 80°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with constructing the gabion peninsula, stockpiling and spreading Basin soils, contaminated soil removal via truck, fixing the large pump near the tide gates, excavation at the boat ramp, perimeter fence repair, concrete block column construction, and fill/rock deliveries and stockpiling. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives onsite to conduct initial assessment. The construction trailer gate is open and several crew members wait inside cars at the construction trailer.

6:30 am. The initial biological survey begins. Frequent western gull and occasional California gull flyovers are observed. Two double-crested cormorants fly over the West Basin, and three rock pigeons fly along Admiralty Way. Water levels are once again elevated near the stormwater inlet and the tide gates; active flow is discharging from the stormwater inlet. Trucks are lined up along Washington Boulevard to haul away Basin soils. One black phoebe and two house finches fly along the north fence. One black phoebe and one yellow-rumped warbler perch in the northeast corner,

and one Allen's hummingbird hovers over the stormwater inlet. Two house sparrows, one yellow-rumped warbler, one Townsend's warbler, and one Anna's hummingbird are observed along the bike path. One dark-eyed junco, one yellow-rumped warbler, and two Anna's hummingbirds are observed near the pump house in the southeast channel. A great blue heron flies over the southeast channel. Three mallards land in the East Basin.

One dead monarch is found at the end of the southeast channel, approximately 100-feet southeast of the pump house. There are no signs of physical trauma (i.e. no broken wings, lacerations or trampling). The wings are closed; if the monarch was killed in flight it's more likely the wings would be open. Minor excavation did occur nearby at the boat ramp yesterday. When questioned, none of the crew remembered hitting a monarch or seeing one in distress.

6:50 am. A snowy egret lands at the stormwater inlet, followed shortly thereafter by two great egrets. All three perch on the stormwater inlet structure. Two American crows probe the south bank. The three mallards leave the site to the northwest. A third great egret flies over the West Basin and leaves the site to the south.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of monarch butterflies, since observations are on the rise, and a dead monarch was found in the southeast corner. Emphasis was also placed on protecting the ducks and egrets in the East Basin. Excavator operators were singled out as needing to be extra vigilant for ducks and wading birds. Workers were reminded to clean up trash in the work area prior to the end of the work day. All 30 crewmembers present sign the sign-in sheet.

7:15 am. Work begins and crews head to the gabion peninsula: One crew installs baskets near the tide gate, while another spreads fill on the central portion. One excavator delivers fill to the gabion peninsula in the Central Basin, while a second delivers stone to the baskets in the West Basin. Two snowy egrets fly over the staging area, and two gadwall fly over the West Basin. One brown pelican flies west over Admiralty Way, and three mallards are observed flying over the Central Basin. Two large flocks of rock pigeons, totaling roughly 40 birds, fly among the high rise buildings.

7:30 am. Minor excavation with a small backhoe resumes at the boat ramp. One Anna's hummingbird hovers over the southeast channel, while a black phoebe perches nearby. High levels of American crow activity are observed, with eight individuals on the north and west banks. Frequent western gull and occasional California gull flyovers are observed, along with a flyover by two ring-billed gulls. Two mourning doves perch on a power line in the northeast corner of the site.

7:45 am. Dump trucks deliver stone to the northwest stockpile. The front loader moves to the east bank where it fills trucks with Basin soils to be hauled away. Five mourning doves fly over the Central Basin. Four house finches and two yellow-rumped warblers fly among the palms along Washington Boulevard.

8:00 am. After the initial flurry, wildlife activity dies down. This may be due to the large number of people on the site today. The occasional American crow, rock pigeon, and western gull flyover is observed. Of the initial group of ducks and wading birds observed this morning, only one great

egret remains in the East Basin. Two black phoebes perch on the stormwater inlet.

8:20 am. A brown pelican flies over the West Basin. One house finch is observed flying along the north fence, and seven cedar waxwings fly high over the Central Basin. Two American crows perch atop power poles on the northwest peninsula.

8:40 am. The excavator stops delivering fill to the central portion of the gabion peninsula. One monarch is observed flying over the Central Basin. A second monarch and a black phoebe are observed in the southeast channel. Two American crows probe the east bank. One yellow-rumped warbler is observed in the northeast pines, and two Anna's hummingbirds fly along the east fence.

9:00 am. Five monarchs, one Anna's hummingbird, and two dark-eyed juncos are observed in eucalyptus trees near the pump house. The biological monitor points out the monarchs to the boat ramp excavation crew and remind them to be cautious. A Townsend's warbler is observed in trees along the bike path. A yellow-rumped warbler and one monarch are observed flying along the south fence.

9:15 am. All three excavators are back in operation: one delivers fill to the central gabion peninsula, a second delivers rock to the western gabion peninsula, and the third spreads and stockpiles soils in the West Basin. One belted kingfisher perches on powerlines above the stormwater inlet. One Say's phoebe perches on silt fence along the southeast channel. The occasional American crow and western gull flyover is observed.

9:45 am. The last truck hauling out Basin soils leaves the site through the northeast gate. Two Cassin's kingbirds alternative between perching on power lines and the stormwater inlet structure below. They swoop down and catch insects on the wing. A monarch butterfly flies over the stormwater inlet, past where a black phoebe is perched. One Anna's hummingbird is observed hovering above the pines near the tide gates.

10:15 am. A front loader makes several trips from the staging area and replenishes the fill stockpile in the Central Basin. No wildlife is disturbed by the front loader's journey along the north bank. The large excavator in the West Basin is moved to the Central Basin where it spreads and stockpiles soils. One monarch is observed flying among the mud piles in the Central Basin. One least sandpiper forages in the shallow waters of the East Basin. The occasional American crow and western gull flyover is observed.

10:35 am. A dump truck delivers gravel to the northeast stockpile. One monarch butterfly and one yellow-rumped warbler fly over the East Basin, and one black phoebe perches on the stormwater inlet. The dead grebe discovered last week in the East Basin is beginning to decompose and get scavenged upon.

10:55 am. Wildlife activity in the Basin has decreased significantly. One Anna's hummingbird is observed hovering around the south bank pines. One house finch flies along the west fence, and one monarch flies along the southeast channel.

11:15 am. The front loader finishes replenishing the fill stockpile in the Central Basin. The spreading of soils via excavator also stops in the Central Basin so that the excavator can be re-fueled. Work in the Basin consists of delivery and spread of fill to the central portion of the gabion peninsula, delivery of and placement of stone to the western portion of the gabion peninsula, and excavation near the boat ramp. Wildlife activity is limited to occasional American crow, rock pigeon, and western gull flyovers.

11:45 am. The great egret leaves the East Basin and exits the site to the south. One dark-eyed junco and one yellow-rumped warbler are observed in trees near the pump house. Two monarch butterflies fly nearby.

12:00 pm. All crews and the biological monitor break for lunch.

12:45 pm. The biological monitor returns from lunch, and the construction crews resume work constructing the third tier of the gabion peninsula. One excavator delivers fill from the Central Basin, while another delivers rock from the northwest corner stockpile. A dump truck arrives and delivers more rock to the northwest corner stockpile. Minor excavation resumes at the boat ramp. One black phoebe is observed at the stormwater inlet, and one Say's phoebe perches on silt fence along the south bank. One California gull, and several western gulls and American crows, fly over the Basin.

1:05 pm. Two crew members fix the south perimeter fence. There is currently more butterfly activity in the Basin than bird activity. Even the trees along the bike path, normally a hotspot of bird activity, is quiet. Six monarchs are observed flying around the eucalyptus trees near the pump house. One yellow-rumped warbler flies across the southeast channel.

1:25 pm. Crews continue to build columns in the northeast corner out of stone block that was delivered yesterday. One black phoebe perches on the stormwater inlet, and one Cassin's kingbird perches on power lines above the northwest peninsula.

1:45 pm. A front loader is used to replenish the fill stockpile in the West Basin from source material in the staging area. One brown pelican circles the West Basin before landing on the Killer Shrimp restaurant roof.

2:05 pm. A dump truck arrives and offloads gravel at the northeast corner stockpile. Rock delivery to the western gabion peninsula stops. Two American crows land in the staging area. Western gulls are frequently observed flying over the Basin.

2:30 pm. Rock delivery to the western gabion peninsula using an excavator resumes. A front loader is used to move fill from the staging area to the stockpile in the West Basin. A crew begins work on the large pump near the tide gates to improve suction. The water is becoming too deep for the excavator to continue to deliver rocks to the last 20 feet of gabion baskets near the tide gates. Two house sparrows are observed on the northwest peninsula. One black phoebe perches on silt fence near the tide gates.

2:55 pm. The large pump is moved downslope and closer to the water surface using a forklift and an excavator. Two house finches and two rock pigeons fly over the work area in the southwest corner of the site. One peregrine falcon flies over the East Basin and perches on a railing atop an adjacent high-rise building along Admiralty Way.

3:15 pm. One double-crested cormorant circles the West Basin before leaving the site to the southwest. Two mourning doves fly along the north fence. The peregrine falcon leaves its perch and flushes eight rock pigeons before flying over the West Basin.

3:40 pm. Soil is loaded into a dump truck at the northeast stockpile to be transported to the staging area stockpile. One black phoebe is observed on the northwest peninsula, and western gull flyovers are increasing in frequency.

4:00 pm. The Construction Superintendent relays that residents along the bike path are concerned regarding dust; therefore, the soils in the northeast corner are wetted down. One yellow-rumped warbler is observed in the sea lavender near the tide gates, and six mourning doves fly over the West Basin. Large numbers of California and western gulls fly west over and around the Basin. The largest flock contains 33 individual gulls.

4:20 pm. Crews reconstruct the wooden shed that houses the large pump near the tide gates (noise control measure). All other work stops for the day, and crews prepare to leave the site.

4:45 pm. All crewmembers and the biological monitor leave the site. Three mallard fly over the staging area, and six lesser scaup circle the Basin twice before leaving to the northwest.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today. However, a brown pelican, which is a rare visitor to the site, was observed.

Twenty monarch butterflies were observed flying around the project site. Winds were calm for most of the day; therefore, butterflies were observed often. No butterflies or other wildlife were harmed during construction; however a dead monarch was found during the morning biological survey. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.

2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. Twenty monarch butterflies were observed today; far more than any other day this week. Insects remain relatively common, including several species of dragonflies and butterflies, including monarchs, sulphurs, and cabbage whites. Butterflies are attracted to the moist soils and flowering plants. Monarchs are being observed with more regularity; however, observations decrease significantly when winds pick up.
4. During the initial biological survey this morning before work begins, one dead monarch was found at the end of the southeast channel, approximately 100-feet southeast of the pump house. There are no signs of physical trauma (i.e. no broken wings, lacerations or trampling). The wings are closed; if the monarch was killed in flight it's more likely the wings would be open. Minor excavation did occur nearby at the boat ramp yesterday. When questioned, none of the crew remembered hitting a monarch or seeing one in distress. It is unlikely that construction activities resulted in the death of this monarch.
5. Some green and brown algae were observed in the East Basin.
6. Winter species have arrived including the yellow-rumped warbler, Townsend's warbler, and lesser scaup. As autumn continues, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
7. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.

Table 1 provides a list of bird species observed during biological monitoring on November 20, 2015.

Table 1. Bird Species Observed during Biological Monitoring on November 20, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the Basin banks
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals observed flying overhead; not as common as western gulls
Ring-billed Gull	<i>Larus delawarensis</i>	2 individuals observed flying overhead
Great Blue Heron	<i>Ardea herodias</i>	1 individual observed flying overhead
Snowy Egret	<i>Egretta thula</i>	2-3 individuals resting/foraging in the Basin and flying overhead
Great Egret	<i>Ardea alba</i>	3 individuals resting/foraging in the Basin and flying overhead
Brown Pelican	<i>Pelecanus occidentalis</i>	1-2 individuals observed flying overhead

Double-crested Cormorant	<i>Phalacrocorax auritus</i>	2-3 individuals observed flying overhead
Peregrine Falcon	<i>Falco peregrinus</i>	1 individual observed flying overhead and perched atop adjacent high-rise buildings
Mallard	<i>Anas platyrhynchos</i>	6-9 individuals observed in the East Basin or flying overhead
Gadwall	<i>Anas strepera</i>	2 individuals observed flying overhead
Lesser Scaup	<i>Aythya affinis</i>	6 individuals observed flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Black Phoebe	<i>Sayornis nigricans</i>	Several observed flying from perch to perch throughout the Basin
Say's Phoebe	<i>Sayornis saya</i>	1-2 individuals observed along the south bank
Yellow-rumped Warbler	<i>Dendroica coronate</i>	Several individuals observed flying from perch to perch throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
Mourning Dove	<i>Zenaida macroura</i>	Several individuals; commonly observed sitting on power lines and flying overhead
Cassin's Kingbird	<i>Tyrannus vociferans</i>	2-3 individuals perched on power lines above the north bank and catching insects in flight
Belted Kingfisher	<i>Megasceryle alcyon</i>	1 individual perched on power lines above the north bank
House Sparrow	<i>Passer domesticus</i>	2-4 individuals observed throughout the Basin
Cedar Waxwing	<i>Bombycilla cedrorum</i>	7 individuals observed flying over the Basin
Townsend's Warbler	<i>Setophaga townsendii</i>	1-2 individuals observed in trees along the bike path
Dark-eyed Junco	<i>Junco hyemalis</i>	2-4 individuals observed near the pump house
Anna's Hummingbird	<i>Calypte anna</i>	6-8 individuals observed in and around trees and perched on fences throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	1 individual hovering above the stormwater inlet



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Wendy Katagi, CDM Smith
Linda Nguyen, SWCA Environmental Consultants*

Date: November 21, 2015

*Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin
Multiuse Enhancement Project*

Introduction

This memorandum summarizes the findings of biological monitoring on November 21, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Sunny Lee, SWCA biologist, beginning at 6:15 am and ending at 3:30p.m. Weather conditions during the day were clear with temperatures ranging from 55°F in the morning to a high of 88°F. No measurable rain was recorded.

During the daily monitoring, the biologist observed activities associated with installing the tidal gate, dredging soil from Basin, grading, building rock cage foundation, and building forms for the boat ramp. All crews were overseen by the Stormwater Pollution Inspector.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. The biological monitor arrived at project site.

6:30 am. The crew arrived at the layout yard, but work did not start until 8:00 am.

7:45 am. The biologist provided biological awareness training to the C.S. Legacy crew of 19 men.

8:00 am. The crew split off into two teams. One team continued to work on the rock cage foundation in the center of the Basin and the second team added gravel to the boat ramp.

Mr. Rick Sun
November 21, 2015
Page 2

8:40 am. Loads of sand were brought from the northwest corner of the Basin to the layout yard. The sand was placed on top of the rock cage foundation and compacted into place. One Western gull was observed flying overhead while one Common Raven was seen landing in the northwest corner of the Basin. A Monarch butterfly was observed flying along the western bank of the Basin.

9:20 am. One Say's Phoebe was observed feeding along the eastern channel. One American Goldfinch was observed flying along the eastern channel.

9:30 am. The crew added gravel to the boat ramp and graded the gravel to specification. One Monarch butterfly was observed flying along the eastern channel.

9:45 am. Nine Brown Pelicans were observed flying overhead. One Monarch butterfly was observed flying through the Basin.

10:00 am. One American Crow was observed flying overhead.

10:30 am. One Monarch butterfly was observed briefly flying through construction activities in the center of the Basin. The crew stopped their work until the butterfly moved off. Six Rock Pigeons were observed flying overhead.

11:30 am. The crew continued to build the rock cage foundation.

12:00 pm. One Monarch butterfly was observed flying along the western bank of the Basin.

12:30 pm. The crew broke for lunch.

12:45 pm. One American Crow was observed flying overhead.

1:15 pm. The crew returned to work.

1:30 pm. Three Western Gulls, and two American Crows were observed flying overhead.

2:00 pm. One Western Gull was observed flying overhead.

2:15 pm. Two Western Gulls were observed flying overhead.

2:30 pm. One Belted Kingfisher was observed perched on the utility wire near to the trailer office. Two Western Gulls were observed flying overhead.

2:45 pm. One Western Gull, one Common Raven, and two American Crows were observed flying overhead.

3:00 pm. The crew started to wrap up work. Five American Crows were observed flying overhead.

3:30 pm. Work ended for the day.

Additional Observations

No Black Skimmers, Least Terns, or Ospreys were observed today.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife has avoided foraging inside Basin entirely, due to soil dredging.
2. Wildlife levels were low throughout the day due to the high temperatures.

Table 1 provides a list of bird species observed during biological monitoring on November 21, 2015.

Table 1. Bird Species Observed during Biological Monitoring on November 21, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	11 individuals observed flying overhead
Say's Phoebe	<i>Sayornis saya</i>	1 individual observed feeding
Common Raven	<i>Corvus corax</i>	2 individual observed walking around in the Basin; flying overhead
Belted Kingfisher	<i>Ardea Alba</i>	One individual observed perched on a utility wire
Western Gull	<i>Larus occidentalis</i>	Very common; observed flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead
Brown Pelican	<i>Pelecanus occidentalis</i>	Nine individuals observed flying overhead



Figure 1. Photo facing northeast of C.S. Legacy crew building the rock cage foundation in the center of the Basin.



Figure 2. Photo facing northeast of C.S. Legacy crew adding gravel, and grading the boat ramp.



Figure 3. Photo facing east of C.S. Legacy crew compacting sand into the rock cage foundation.



Figure 4. Photo facing east of C.S. Legacy crew building rock cage foundation.