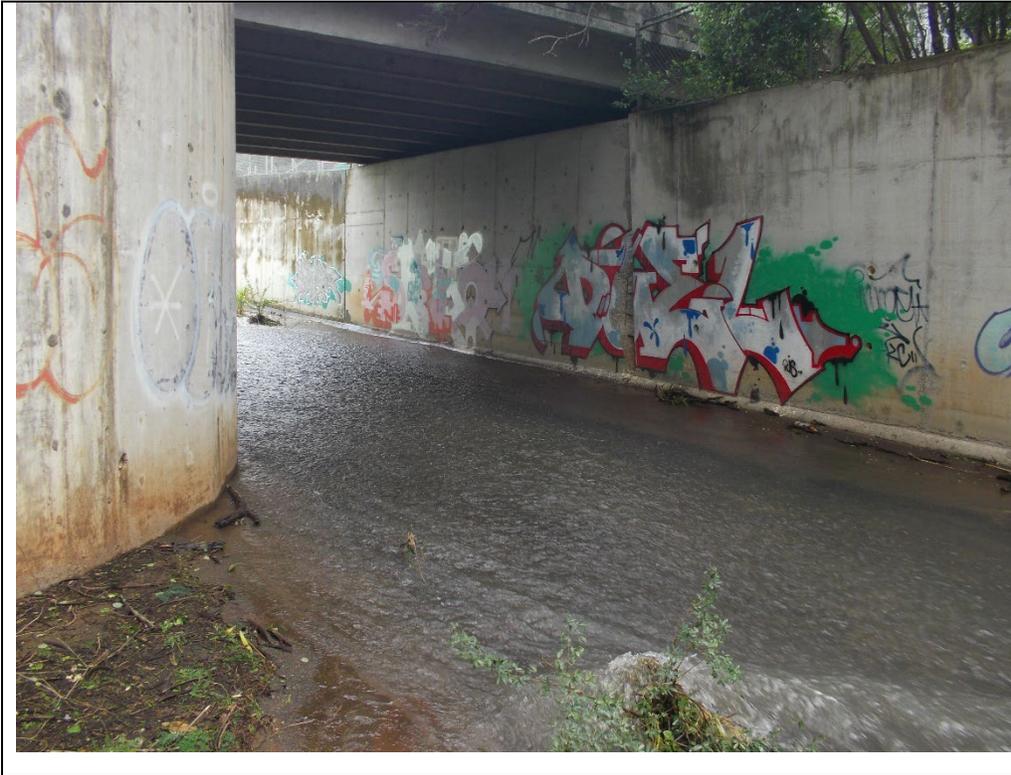


Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Upstream Site
looking
upstream.



Photograph #
2:
Upstream Site
looking
downstream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Discharge Site
looking
upstream.



Photograph #
2:
Discharge Site
looking
downstream.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 02-10-26 Site Name: Downstream Site 1 Time: 1242

WEATHER CONDITIONS

NOW	Past 24 Hours	Has there been a heavy rain in the past 7 days?
<input type="checkbox"/> storm (heavy rain)	<input type="checkbox"/> storm (heavy rain)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<input type="checkbox"/> rain (steady rain)	<input type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input checked="" type="checkbox"/> showers (intermittent)	
<u>100</u> % cloud cover	<u>100</u> % cloud cover or less	
<input type="checkbox"/> clear/sunny	<input type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: To the bottom

Water Color: clear

Estimated Depth: 1"-2'

Visibility: 100% to the bottom

Tide (if applicable): N/A

Notes: There were large piles of cut vegetation in the stream. Lots of water was flowing fast.

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: N/A

Species Observed	# of individuals	Behavior	Notes/Observations
cattle egret	1	Foraging	On the cut vegetation pile In the stream.
mongoose	1	Loafing	In the vegetation above the stream.
common waxbill	2	Flying	Flew over the stream.
rock dove	9	Flying	Flew over the stream.
sanderling	1	Flying	Flew over the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Downstream
Site 1 looking
upstream.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 02-10-26

Site Name: Downstream Site 2

Time: 1232

WEATHER CONDITIONS

NOW	Past 24 Hours	Has there been a heavy rain in the past 7 days?
<input type="checkbox"/> storm (heavy rain)	<input type="checkbox"/> storm (heavy rain)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<input type="checkbox"/> rain (steady rain)	<input type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input checked="" type="checkbox"/> showers (intermittent)	
<u>70</u> % cloud cover	<u>100</u> % cloud cover or less	
<input type="checkbox"/> clear/sunny	<input type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: Sediment to the bottom.

Water Color: clear

Estimated Depth: 6"-2'

Visibility: 100% to the bottom

Tide (if applicable): N/A

Notes: Lots of fast-moving water in the stream.

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: None

Species Observed	# of individuals	Behavior	Notes/Observations
common waxbill	2	Loafing	In the vegetation above the stream.
pacific golden plover	1	Loafing	In the vegetation above the stream.
spotted dove	1	Fly	Flew over the stream.
zebra dove	1	Flying	Flew over the stream.
koloa/mallard hybrid	4	Swimming	In the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Downstream
Site 2 looking
downstream.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 02-10-26 Site Name: Estuary Site 1 Time: 1211

WEATHER CONDITIONS

NOW	Past 24 Hours	Has there been a heavy rain in the past 7 days?
<input type="checkbox"/> storm (heavy rain)	<input type="checkbox"/> storm (heavy rain)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<input type="checkbox"/> rain (steady rain)	<input type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input checked="" type="checkbox"/> showers (intermittent)	
<u>100</u> % cloud cover	<u>100</u> % cloud cover or less	
<input type="checkbox"/> clear/sunny	<input type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: Sediment mixed

Water Color: cloudy green

Estimated Depth: 6'

Visibility: 8"

Tide (if applicable): 0.5 ft

Notes: None

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: Windy day.

Species Observed	# of individuals	Behavior	Notes/Observations
rock dove	3	Flying	Flew over the stream.
red-vented bulbul	2	Loafing	In vegetation above the stream.
koloa/mallard hybrid	9	Swimming	Three adults and six ducklings swimming in the stream.
zebra dove	1	Flying	Flew over the stream.
spotted dove	2	Flying	Flew over the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Estuary Site 1
looking
upstream.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 02-10-26 Site Name: Estuary Site 2 Time: 1220

WEATHER CONDITIONS

NOW	Past 24 Hours	Has there been a heavy rain in the past 7 days?
<input type="checkbox"/> storm (heavy rain)	<input type="checkbox"/> storm (heavy rain)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<input type="checkbox"/> rain (steady rain)	<input type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input checked="" type="checkbox"/> showers (intermittent)	
<u>70</u> % cloud cover	<u>100</u> % cloud cover or less	
<input type="checkbox"/> clear/sunny	<input type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: Sediment to the bottom

Water Color: clear to light green

Estimated Depth: 1''-3'

Visibility: 100% to bottom

Tide (if applicable): 0.5 ft

Notes: N/A

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: N/A

Species Observed	# of individuals	Behavior	Notes/Observations
tilapia	2	Swimming	In the stream.
red-vented bulbul	1	Flying	Flew over the stream.
rose-ringed parakeet	3	Flying	Flew over the stream.
common myna	1	Flying	Flew over the stream.
cattle egret	1	Flying	Flew over the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Estuary Site 2
looking
upstream.



Photograph #
2:
Estuary Site 2
looking
downstream.

WATERBIRD SURVEY DATASHEET

WETLAND CONDITION CODES				WEATHER CODES			
Water Level (WL) 0 = dry 1 = lower than normal 2 = normal 3 = higher than normal	Human Impact (HI) 0 = indirect (little garbage, few people) 1 = moderate 2 = heavy (many people present; e.g., wading, boating, fishing, etc)	Rainfall (RF) 0 = no rain 1 = mist or fog 2 = drizzle 3 = light rain 4 = heavy rain 5 = snow or hail	Wind 0 = no wind, < 1 mph 1 = smoke drifts, 1-3 mph 2 = wind felt on face, 4-7 mph 3 = leaves and twigs rustle, 8-12 mph 4 = dust raises, branches stir, 13-18 mph 5 = small trees sway, >19 mph				
Vegetation Cover (VC) 0 = open water (<25% veg) 1 = 26-50% veg cover 2 = 51-75% veg cover 3 = >75% cover	Shoreline Condition of Tidal Wetlands (SC) 0 = water at high tide mark N/A=not applicable 1 = water 25 ft from high tide mark 2 = water 50 ft from high tide mark 3 = water >50 ft from high tide mark	Cloud Cover (CC) = Estimate to the nearest 10%					

Date 02-10-26

REMINDERS: If site is not accessible, include wetland name and write 'no access'

Observers [REDACTED]

If no birds observed, fill out top portion and write 'no birds'

KEEP A COPY FOR YOUR RECORDS

Island O'ahu

Subadult includes juveniles and chicks

Wetland Name	US				DC				DS 1				DS 2			
	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC
Condition	3	0	0	N/A	3	0	0	N/A	3	0	0	N/A	3	0	0	N/A
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	90	1	5		100	1	5		100	1	4		70	1	4	
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	1325		1330		1311		1316		1242		1247		1232		1237	
COOT adult																
subadult																
GALLINULE/MOORHEN adult																
subadult																
STILT adult																
subadult																
KOLOA adult																
subadult																
Koloa/Mallard Hybrid													4 (adult/swimming)			
Mallard (domestic/feral)																
Other Domestic Duck																
Black-cr. Night Heron																
Cattle Egret													1 (adult/foraging)			
Pacific Golden Plover													1 (adult/loafing)			
Ruddy Turnstone																
Sanderling													1 (adult/flying)			
Wandering Tattler																
Northern Pintail																
Mallard (migratory)																
Lesser scaup																
White tern																
Comments	No water/shorebirds observed.				No water/shorebirds observed.											

WATERBIRD SURVEY DATASHEET

WETLAND CONDITION CODES		WEATHER CODES	
Water Level (WL) 0 = dry 1 = lower than normal 2 = normal 3 = higher than normal	Human Impact (HI) 0 = indirect (little garbage, few people) 1 = moderate 2 = heavy (many people present; e.g., wading, boating, fishing, etc)	Rainfall (RF) 0 = no rain 1 = mist or fog 2 = drizzle 3 = light rain 4 = heavy rain 5 = snow or hail	Wind 0 = no wind, < 1 mph 1 = smoke drifts, 1-3 mph 2 = wind felt on face, 4-7 mph 3 = leaves and twigs rustle, 8-12 mph 4 = dust raises, branches stir, 13-18 mph 5 = small trees sway, >19 mph
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Date 02-10-26

REMINDERS: If site is not accessible, include wetland name and write 'no access'

Observers [REDACTED]

If no birds observed, fill out top portion and write 'no birds'

KEEP A COPY FOR YOUR RECORDS

Island O'ahu

Subadult includes juveniles and chicks

Wetland Name	ES 1				ES 2											
	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC
Condition	2	0	0	0	2	0	0	0								
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	100	1	4		70	1	4									
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	1211		1216		1220		1225									
COOT adult																
subadult																
GALLINULE/MOORHEN adult																
subadult																
STILT adult																
subadult																
KOLOA adult																
subadult																
Koloa/Mallard Hybrid	9 (3 adult, 6 ducklings/swimming)															
Mallard (domestic/feral)																
Other Domestic Duck																
Black-cr. Night Heron																
Cattle Egret	1 (adult/flying)															
Pacific Golden Plover																
Ruddy Turnstone																
Sanderling																
Wandering Tattler																
Northern Pintail																
Mallard (migratory)																
Lesser scaup																
White Tern																
Comments																