

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 01/06/2025 Site Name: Upstream Site Time: 0826

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 type="checkbox"/> yes <input checked="" type="checkbox"/> no
<input type="checkbox"/> rain (steady rain)	<input type="checkbox"/> rain (steady rain)	
<input type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>30</u> % cloud cover	<u>30</u> % cloud cover or less	
<input checked="" type="checkbox"/> clear/sunny	<input checked="" type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: N/A

Water Color: N/A

Estimated Depth: N/A

Visibility: N/A

Tide (if applicable): N/A

Notes: Fallen tree still in streambed. No water

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
Jungle Fowl	1	Loafing	Calling from the vegetation above the stream.
White-rumped shama	1	Loafing	Calling from the vegetation above the stream.
Warbling white-eye	4	Foraging	Foraging in the trees above the stream.
Rose-ring parakeet	3	Flying	Flying above the stream.
Bush warbler	1	Loafing	Calling from the vegetation above the stream.
Cat	1	Loafing	Calling from the vegetation above the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Upstream Site
looking
upstream.



Photograph #
2:
Upstream Site
looking
downstream.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 01/06/2025 Site Name: Discharge Site Time: 0806

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 type="checkbox"/> yes <input checked="" type="checkbox"/> no
<input type="checkbox"/> rain (steady rain)	<input type="checkbox"/> rain (steady rain)	
<input type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>30</u> % cloud cover	<u>30</u> % cloud cover or less	
<input checked="" type="checkbox"/> clear/sunny	<input type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: Clear, sediment at the bottom of stream bed

Water Color: clear

Estimated Depth: <1"

Visibility: 100% to the bottom

Tide (if applicable): N/A

Notes: Lots of leaf debris, trash. No active discharge

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
Common Myna	2	Foraging	Foraging in the streambed.
White-rumped shama	1	Loafing	Calling from the vegetation
Red-Vented Bubul	2	Loafing	Calling from vegetation
Pacific Golden Plover	1	Foraging	Foraging in the streambed
Rose-ringed Parakeet	5	Flying	Flying above streambed
Red-Crested Cardinal	1	Loafing	Calling from the vegetation

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: 01-06-25 Site Name: Downstream Site 1 Time: 0853

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 type="checkbox"/> yes <input checked="" type="checkbox"/> no
<input type="checkbox"/> rain (steady rain)	<input type="checkbox"/> rain (steady rain)	
<input type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>30</u> % cloud cover	<u>30</u> % cloud cover or less	
<input checked="" type="checkbox"/> clear/sunny	<input checked="" type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: clear, sediment at the bottom

Water Color: Clear

Estimated Depth: 1-2"

Visibility: Clear

Tide (if applicable): N/A

Notes: Sediment buildup, bacteria growth (sheen visible), algae growth.

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: Tadpoles (+100)

Species Observed	# of individuals	Behavior	Notes/Observations
Pacific golden plover	1	Foraging	Foraging in the streambed.
Zebra dove	1	Foraging	Foraging in the streambed.
Zebra dove	1	Flying	Flying above the streambed.
Common Myna	3	Flying	Flying above the streambed
Mallard hybrid	2	Foraging	Foraging in the streambed

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Downstream
Site 1 looking
upstream.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 01-06-25

Site Name: Downstream Site 2

Time: 0905

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 type="checkbox"/> yes <input checked="" type="checkbox"/> no
<input type="checkbox"/> rain (steady rain)	<input type="checkbox"/> rain (steady rain)	
<input type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>20</u> % cloud cover	<u>30</u> % cloud cover or less	
<input checked="" type="checkbox"/> clear/sunny	<input checked="" type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: Clear, sediment at the bottom

Water Color: light green

Estimated Depth: 2-4'

Visibility: 1-2'

Tide (if applicable): 1.5'

Notes: Light foam line forming on left side of stream.

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: Numerous tilapia present

Species Observed	# of individuals	Behavior	Notes/Observations
Common mallard	4	Foraging	Foraging in the streambed.
Black-crowned Night Heron	1	Foraging	Foraging in the streambed.
Pacific Golden Plover	1	Foraging	Foraging in the streambed
Zebra dove	3	Foraging	Foraging in the streambed
Spotted dove	2	Flying	Flying above the streambed

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Downstream
Site 2 looking
downstream.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 01-06-25 Site Name: Estuary Site 1 Time: 0932

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 type="checkbox"/> yes <input checked="" type="checkbox"/> no
<input type="checkbox"/> rain (steady rain)	<input type="checkbox"/> rain (steady rain)	
<input type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>20</u> % cloud cover	<u>30</u> % cloud cover or less	
<input checked="" type="checkbox"/> clear/sunny	<input checked="" type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: Cloudy, lighter sediment mixed in water.

Water Color: green

Estimated Depth: 5-6'

Visibility: 2-3'

Tide (if applicable): ~0.6'

Notes: None

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish N/A

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: Construction and traffic noise. Increased human presence along the streambank.

Species Observed	# of individuals	Behavior	Notes/Observations
Common Myna	1	Loafing	Along the streambank in the vegetation.
Common Myna	1	Flying	Flying above the streambank.
Zebra dove	1	Flying	Flying above the streambank.
Red-vented bulbul	2	Flying	Flying above the streambank.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Estuary Site 1
looking
upstream.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 01-06-25 Site Name: Estuary Site 2 Time: 0950

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 type="checkbox"/> yes <input checked="" type="checkbox"/> no
<input type="checkbox"/> rain (steady rain)	<input type="checkbox"/> rain (steady rain)	
<input type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>20</u> % cloud cover	<u>30</u> % cloud cover or less	
<input checked="" type="checkbox"/> clear/sunny	<input checked="" type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: Cloudy, sediment mixed in water.

Water Color: Green

Estimated Depth: +6'

Visibility: 1'

Tide (if applicable): 1.5'

Notes: N/A

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish N/A

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: Tilapia (20+)

Species Observed	# of individuals	Behavior	Notes/Observations
Mallard Hybrid	1	Flying	Flying above the streambed.
Pacific golden Plover	1	Loafing	Loafing in the vegetation along streambank.
Java Sparrow	3	Foraging	Foraging in the vegetation along streambank.
Common Myna	7	Foraging	Foraging in the vegetation along streambank.
Pacific golden Plover	1	Foraging	Foraging in the vegetation along streambank.
Common Waxbill	17	Foraging	Foraging in the vegetation along streambank.
Red-vented Bulbul	1	Flying	Flying above the streambed

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Zebra dove	2	Foraging	Foraging in the vegetation along streambank.
Rock dove	1	Flying	Flying above the streambed.
Cat	1	Loafing	Loafing in the vegetation along streambank.

PHOTOGRAPHS



Photograph #
1:
Estuary Site 2
looking
upstream.

Halawa Stream Monitoring Data Sheet



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 01-06-25

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

Observers XXXXXXXXXX

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	1	0	0	NA	1	0	0	NA	1	0	0	NA	1	0	0	N/A
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	30	0	1		30	0	1		30	0	1		20	0	2	
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	0826		0831		0806		0811		0853		0858		0905		0910	
COOT adult																
subadult																
GALLINULE/MOORHEN adult																
subadult																
STILT adult																
subadult																
KOLOA adult																
subadult																
Koloa/Mallard Hybrid									2 (adult, foraging)				4 (adult, foraging)			
Mallard (domestic/feral)																
Other Domestic Duck																
Black-cr. Night Heron																
Cattle Egret																
Pacific Golden Plover									1 (adult flying/foraging)				1 (adult, foraging)			
Ruddy Turnstone																
Sanderling																
Wandering Tattler																
Northern Pintail																
Mallard (migratory)																
Lesser scaup																
White fairy tern																
Comments	no waterbirds/shorebirds															

WATERBIRD SURVEY DATASHEET

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Date 01-06-25

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

Observers ██████████

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	1	N/A	2	0	0	N/A								
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	0932		0937		0950		0955									
COOT adult																
COOT subadult																
GALLINULE/MOORHEN adult																
GALLINULE/MOORHEN subadult																
STILT adult																
STILT subadult																
KOLOA adult																
KOLOA subadult																
Koloa/Mallard Hybrid																
Mallard (domestic/feral)																
Other Domestic Duck																
Black-cr. Night Heron																
Cattle Egret																
Pacific Golden Plover																
Ruddy Turnstone																
Sanderling																
Wandering Tattler																
Northern Pintail																
Mallard (migratory)																
Lesser scaup																
White Tern																
Comments	No shorebirds/waterbirds															