

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 1/27/2026 Site Name: Upstream Site Time: 0922

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 checked="" type="checkbox"/> showers (intermittent)	
<u>0</u> % cloud cover	<u>50</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 bottom.

Water Color: clear

Estimated Depth: 1-2 in

Visibility: 100% to bottom

Tide (if applicable): N/A

Notes: lots of leaf litter

SPECIES OBSERVATIONS

Fish Kill? Yes ☒ No # Dead Fish 0

Fish Breathing Stress/Gulping ☒ None ☐ Yes

Fish Abnormal Behavior ☒ None ☐ Yes

Notes: No waterbirds/shorebirds

Species Observed	# of individuals	Behavior	Notes/Observations
Zebra Dove	1	Loaf	Loafing in the vegetation next to stream
Common Wax Bill	4	Loaf	Loafing in the vegetation next to stream
Red-vented bulbul	5	Fly	Flying over the stream
Jungle Fowl	1	Loaf	Loafing in the vegetation next to stream
White-rumped shama	2	Loaf	Loafing in the vegetation next to stream
Red-vented bulbul	1	Loaf	Loafing in the vegetation

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 1/27/2026 Site Name: Discharge Site Time: 0900

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>0</u> % cloud cover	<u>20</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 bottom

Water Color: clear

Estimated Depth: 2 –5 in

Visibility: 100% to bottom

Tide (if applicable): N/A

Notes: Active discharge

SPECIES OBSERVATIONS

Fish Kill? Yes ☒ No # Dead Fish 0

Fish Breathing Stress/Gulping ☒ None ☐ Yes

Fish Abnormal Behavior ☒ None ☐ Yes

Notes: No waterbirds/shorebirds

Species Observed	# of individuals	Behavior	Notes/Observations
Red Vented Bulbul	1	Fly	Flew over the stream.
Common Myna	2	Loafing	Loafing in the vegetation next to stream
Common Myna	2	Fly	Flew over the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 1/27/2026

Site Name: Downstream Site # 1

Time: 0937

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 checked="" type="checkbox"/> showers (intermittent)	
<u>10</u> % cloud cover	<u>50</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 bottom.

Water Color: Clear

Estimated Depth: 2-5 in

Visibility: 100% to bottom

Tide (if applicable): N/A

Notes: N/A

SPECIES OBSERVATIONS

Fish Kill? Yes ☒ No ☐ # Dead Fish 0

Fish Breathing Stress/Gulping ☒ None ☐ Yes

Fish Abnormal Behavior ☒ None ☐ Yes

Notes: No waterbirds/shorebirds

Species Observed	# of individuals	Behavior	Notes/Observations
Common Wax Bill	5	fly	Flying over stream
Cattle Egret	1	fly	Flying over stream

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS

	<p>Photograph # 1:</p> <p>Downstream Site # 1.</p>
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Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 1/27/2026 Site Name: Downstream Site # 2 Time: 0945

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 checked="" type="checkbox"/> showers (intermittent)	
<u>0%</u> cloud cover	<u>50%</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 on bottom

Water Color: Clear

Estimated Depth: 4 in - 3 ft

Visibility: 100% to the bottom

Tide (if applicable): 0.5 ft

Notes: Notable trash presence around and in stream

SPECIES OBSERVATIONS

Fish Kill? ☐ Yes ☒ No # Dead Fish

Fish Breathing Stress/Gulping ☒ None ☐ Yes

Fish Abnormal Behavior ☒ None ☐ Yes

Notes: Increased human presence around stream; alterations to stream flow due to trash.

Species Observed	# of individuals	Behavior	Notes/Observations
Hybrid Mallard	1	Loafing	Loafing in the stream
Spotted Dove	1	Loafing	Loafing in the vegetation next to stream
black-crowned night heron	1	Loafing	Loafing in the vegetation next to stream
Red-vented bulbul	4	Flying	Flying over the stream
Myna	1	Flying	Flying over stream
Common Wax Bill	10	Flying	Flying over stream
Spotted Dove	1	Flying	Flying over stream
Myna	1	Loafing	Loafing in the vegetation next to stream
Warbling White eye	1	Foraging	Foraging in the stream

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 1/27/2026 Site Name: Estuary Site # 1 Time: 1029

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 checked="" type="checkbox"/> showers (intermittent)	
<u>10</u> % cloud cover	<u>50</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: Cloudy, lighter sediment mixed in the water

Water Color: Green

Estimated Depth: 5-6ft

Visibility: 2 - 3ft

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: Notable human presence; fishing/crab nets present

Species Observed	# of individuals	Behavior	Notes/Observations
Hybrid Mallard	4	Foraging	Foraging in the stream
Spotted dove	1	Flying	Flying over the stream
Cattle Egret	1	Flying	Flying over the stream
Red-vented bulbul	5	Flying	Flying over the stream
Myna	1	Flying	Flying over the stream.
White Tern	5	Flying	Flying over the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph # 1:

Estuary Site # 1.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 1/27/2026 Site Name: Estuary Site # 2 Time: 1003

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 checked="" type="checkbox"/> showers (intermittent)	
<u>10</u> % cloud cover	<u>50</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: Cloudy, lighter sediment mixed in the water

Water Color: Brown

Estimated Depth: +6ft

Visibility: 2-3 ft

Tide (if applicable): 0.5 ft

Notes: Tour boat activity

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
White Rock dove	1	Flying	Flying over the stream
Spotted dove	4	Flying	Flying over the stream
Cattle Egret	1	Flying	Flying over the stream
Rose ringed parakeet	1	Flying	Flying 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 1/27/26

Island O'ahu

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

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

KEEP A COPY FOR YOUR RECORDS

Subadult includes juveniles and chicks

Observers [REDACTED]

Wetland Name	US				DC				DS 1				DS 2			
Condition	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC
	2	3	0	NA	2	3	2	NA	2	0	0	NA	1	0	1	N/A
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	0	0	0		0	0	0		10	0	1		10	0	1	
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	0922		0927		0900		0905		0937		0942		0945		0950	
COOT adult																
subadult																
GALLINULE/MOORHEN adult																
subadult																
STILT adult																
subadult																
KOLOA adult																
subadult																
Koloa/Mallard Hybrid													1 (adult/ loafing)			
Mallard (domestic/feral)																
Other Domestic Duck																
Black-cr. Night Heron													1 (adult /loafing)			
Cattle Egret																
Pacific Golden Plover																
Ruddy Turnstone																
Sanderling																
Wandering Tattler																
Northern Pintail																
Mallard (migratory)																
Lesser scaup																
White fairy tern																
Comments	no waterbirds/shorebirds.				no waterbirds/shorebirds.				no waterbirds/shorebirds.							

Rev. Aug 2017

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 1/27/26
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'

Island O'ahu
KEEP A COPY FOR YOUR RECORDS

Subadult includes juveniles and chicks

Wetland Name	ES 1				ES 2											
Condition	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC
	1	0	2	NA	1	0	2	NA								
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	10	0	1		10	0	1									
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	1029		1034		1003		1008									
COOT adult																
subadult																
GALLINULE/MOORHEN adult																
subadult																
STILT adult																
subadult																
KOLOA adult																
subadult																
Koloa/Mallard Hybrid	4 (adult/ forage)															
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	4 (adult/ fly)															
Comments					no waterbirds/shorebirds											

Rev. Aug 2017