

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

	<p>Photograph # 1: Upstream Site looking upstream.</p>
	<p>Photograph # 2: Upstream Site looking downstream.</p>

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 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

	<p>Photograph # 1: Discharge Site looking upstream.</p>
	<p>Photograph # 2: Discharge Site looking downstream.</p>

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: 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



Photograph # 1:

Downstream
Site # 2.

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

	<p>Photograph # 1: Estuary Site # 1.</p>
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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 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%	

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

Observers

Date 1/27/26

Island O'ahu

Subadult includes juveniles and chicks

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																														

WATERBIRD SURVEY DATASHEET

WETLAND CONDITION CODES								WEATHER CODES													
Water Level (WL)		Human Impact (HI)								Rainfall (RF)		Wind									
0 = dry		0 = indirect (little garbage, few people)								0 = no rain		0 = no wind, < 1 mph									
1 = lower than normal		1 = moderate								1 = mist or fog		1 = smoke drifts, 1-3 mph									
2 = normal		2 = heavy (many people present; e.g., wading, boating, fishing, etc)								2 = drizzle		2 = wind felt on face, 4-7 mph									
3 = higher than normal										3 = light rain		3 = leaves and twigs rustle, 8-12 mph									
Vegetation Cover (VC)		Shoreline Condition of Tidal Wetlands (SC)								4 = heavy rain		4 = dust raises, branches stir, 13-18 mph									
0 = open water (<25% veg)		0 = water at high tide mark								5 = snow or hail		5 = small trees sway, >19 mph									
1 = 26-50% veg cover		1 = water 25 ft from high tide mark								Cloud Cover (CC) = Estimate to the nearest 10%											
2 = 51-75% veg cover		2 = water 50 ft from high tide mark																			
3 = >75% cover		3 = water >50 ft from high tide mark																			

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

Observers _____

Date 1/27/26

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

KEEP A COPY FOR YOUR RECORDS

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	1	0	2	NA	1	0	2	NA								
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
Time	10	0	1		10	0	1									
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											