

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 4/21/2026 Site Name: Upstream Site Time: 0814-0819

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>50</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 in

Visibility: to bottom

Tide (if applicable): N/A

Notes: observations from bridge.

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: Dead cat in water. No waterbirds/shorebirds.

Species Observed	# of individuals	Behavior	Notes/Observations
red-vented bulbul	1	Forage	In trees above stream
Norther cardinal	1	Call	In trees above stream
Japanese bush warbler	1	Call	In trees above stream
Warbling white-eye	3	Call	In trees above stream
Common waxbill	4	call	In trees above stream
zebra dove	1	call	In trees above stream

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS:



Photograph # 1:
Upstream Site
looking upstream.

4/21/2026



Photograph # 2:
Upstream Site
looking
downstream.

4/21/2026

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 4/21/2026 Site Name: Discharge Site Time: 0758-0804

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>50</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 in

Visibility: to bottom

Tide (if applicable): N/A

Notes: discharge pipe on. Wet flowing water on both sides of stream bank, not middle.

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes:

Species Observed	# of individuals	Behavior	Notes/Observations
Spotted dove	1	Loaf	In stream water
Northern cardinal	1	call	In trees next to stream
Rose-ringed parakeet	1	call	Fly over stream
Red-vented bulbul	2	forage	In trees next to stream
Red-vented bulbul	1	Call	In trees next to stream

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph # 1:
Discharge Site
looking
upstream.

4/21/2026



Photograph # 2:
Discharge Site
looking
downstream.

4/21/2026

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 4/21/2026 Site Name: Downstream Site # 1 Time: 0848-0853

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>0</u> % cloud cover	<u>50</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: 3 in

Visibility: to bottom

Tide (if applicable): N/A

Notes: Algae clumps moving in water.

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: NA

Species Observed	# of individuals	Behavior	Notes/Observations
Black-crowned night heron	2	Forage/fly	Forage in stream
Common myna	2	Forage	In trees/vegetation next to stream
Common waxbill	5	Forage	In trees/vegetation next to stream
Warbling white-eye	2	Forage	In trees/vegetation next to stream
Spotted dove	1	Forage	On sloped stream bed
Ring-neck parakeet	2	call	Fly over stream

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Downstream
Site # 1.

4/21/2026

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 4/21/2026 Site Name: Downstream Site # 2 Time: 0836-0841

WEATHER CONDITIONS

NOW	Past 24 Hours	Has there been 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>50%</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: 3 ft

Visibility: 2 ft down

Tide (if applicable): NA

Notes: high glare. Human rock stack wall 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: N/A

Species Observed	# of individuals	Behavior	Notes/Observations
Common myna	4	Fly	Fly over stream
Spotted dove	1	Forage	In stream bed
Pacific golden plover	1	Forage	In stream bed
rose-ringed Parakeet	1	Fly	Fly over stream
black-crowned night heron	2	Forage	Forage in stream
black-crowned night heron	1	Loaf	In tree next to stream
Cattle egret	1	Fly	Fly over stream
Common waxbill	5	Fly	Fly over stream
tilapia	100+	Swim	Lower stream
mongoose	1	Forage	On stream bank

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph # 1:
Downstream Site #
2.

4/21/2026

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 4/21/2025 Site Name: Estuary Site # 1 Time: 0927-0933

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 checked="" type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: slight clear, suspended sediment.

Water Color: green

Estimated Depth: 4 ft

Visibility: 2ft

Tide (if applicable): 0.15

Notes: NA

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes:

Species Observed	# of individuals	Behavior	Notes/Observations
Jungle fowl	1	call	Under trees next to stream
warbling white-eye	2	Call	In trees next to stream
zebra dove	5	fly	Flew over stream
Red-vented bulbul	3	fly	Flew over stream
Rose-ringed parakeet	2	fly	Flew over stream
Mallard duck hybrid	2	forage	In stream water
Mallard duck hybrid	2	loaf	On stream bank
Wandering tattler	1	Loaf	On stream bank
tilapia	5	forage	Concentrated around bridge pier

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph # 1:
Estuary Site # 1.

4/21/2026

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 4/21/2025 Site Name: Estuary Site # 2 Time: 0915-0920

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 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 checked="" type="checkbox"/> clear/sunny	

WATER QUALITY

Water level dry wet standing water flowing water sheen visible

Observed Turbidity/Sedimentation: slightly clear, sediment at bottom.

Water Color: light brown

Estimated Depth: 3 ft

Visibility: 2 ft

Tide (if applicable): 0.17 ft (low)

Notes: NA

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: no water birds or shore birds

Species Observed	# of individuals	Behavior	Notes/Observations
Jungle fowl	1	Call	In trees next to stream
myna	9	Call	In trees next to stream
Zebra dove	6	Call/ loaf	On stream bed
Spotted dove	2	Loaf	Next to stream
Fish	50+	Swim	Most near shoreline

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS

<p>No picture taken 4/21/26</p>	<p>Photograph # 1: Estuary Site # 2 looking upstream.</p>
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<p>No picture taken 4/21/26</p>	<p>Photograph # 2: Estuary Site # 2 looking downstream.</p>
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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%	

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

Observers

Date 4/21/2026

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	2	2	1	NA	2	0	0	NA	2	0	1	NA	2	0	0	NA
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	0	0	1		0	0	0		0	0	2		0	0	2	
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	0814		0819		0758		0804		0848		0853		0836		0841	
COOT adult																
subadult																
GALLINULE/MOORHEN adult																
subadult																
STILT adult																
subadult																
KOLOA adult																
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 fairy tern																
Comments	no waterbirds/shorebirds.				no waterbirds/shorebirds.											

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 4-21-2026 **Observers**

Island O'ahu 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	2	0	1	1	2	0	0	1								
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	0	0	0		0	0	2									
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	0927		0933		0915		0920									
COOT adult																
subadult																
GALLINULE/MOORHEN adult																
subadult																
STILT adult																
subadult																
KOLOA adult																
subadult																
Koloa/Mallard Hybrid	4 (adult/ loaf, forage)															
Mallard (domestic/feral)																
Other Domestic Duck																
Black-cr. Night Heron																
Cattle Egret																
Pacific Golden Plover																
Ruddy Turnstone																
Sanderling																
Wandering Tattler	1 (adult/ loaf)															
Northern Pintail																
Mallard (migratory)																
Lesser scaup																
White Tern																
Comments	No shorebirds/ waterbirds															