

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 5/20/2026 Site Name: Upstream Site Time: 0940-0945

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 checked="" type="checkbox"/> yes <input 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>50%</u> cloud cover	<u>40%</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: clear, sediment at bottom

Water Color: clear

Estimated Depth: 2-3 in

Visibility: 100%

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: N/A

Species Observed	# of individuals	Behavior	Notes/Observations
hybrid mallard	3	fly	Over stream
red-vented bulbul	6	forage	In vegetation next to stream
red-crested cardinal	1	forage	In stream bed
myna	2	fly	zebra dove
Warbling white eye	1	Fly	Over stream
House finch	3	Forage	In vegetation next to stream
cat	1	forage	In stream bed

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: 5/20/2026 Site Name: Discharge Site Time: 0 923-0928

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 type="checkbox"/> showers (intermittent)	
<u>50 %</u> cloud cover	<u>40 %</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: clear to bottom

Water Color: clear

Estimated Depth: 2-3 in

Visibility: 100%

Tide (if applicable): N/A

Notes: NA

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
myna	6	Forage	In stream
red-vented bulbul	4	forage	In vegetation next to stream
Norther cardinal	2	forage	In vegetation next to stream
Red-crested cardinal	1	forage	In stream

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: 5/20/2026 Site Name: Downstream Site # 1 Time: 1003-1008

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 type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>30</u> % cloud cover	<u>40</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: clear, sediment at bottom.

Water Color: clear

Estimated Depth: 2-5 in

Visibility: 100%

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: Small school tilapia swim upstream in shallow areas.

Species Observed	# of individuals	Behavior	Notes/Observations
Great crowned night heron	1	forage	In stream
Spotted dove	1	Fly	Fly over stream

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph # 1:
Downstream Site #
1.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 5/20/2026 Site Name: Downstream Site # 2 Time: 1013-1018

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 type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>30%</u> cloud cover	<u>40%</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: Clear, sediment at bottom

Water Color: clear

Estimated Depth: 5 in to 2 ft

Visibility: 100%

Tide (if applicable): NA

Notes: Rock sediment build up from previous Kona lows. Garbage present downstream. High water flow.

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: Noticeable lack of waterbirds

Species Observed	# of individuals	Behavior	Notes/Observations
warbling white-eye	2	fly	Over stream
Common waxbill	8	Forage	In stream
Red-vented bulbil	4	Loaf	In vegetation next to stream
Spotted dove	1	Fly	Over stream
myna	1	Fly	Over stream
White tern	1	fly	Over stream

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph # 1:
Downstream Site #
2.

Halawa Stream Monitoring Data Sheet

Observer/s:

Date: 5/20/2026 Site Name: Estuary Site # 1 Time: 1053-1058

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 type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>30%</u> cloud cover	<u>40%</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: slightly clear, lighter sediment mixed in water

Water Color: green

Estimated Depth: 6+ ft

Visibility: 6 ft

Tide (if applicable): 0.10

Notes: sediment build up in stream created a new islet.

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
Red-vented bulbul	1	fly	Over stream
Spotted dove	1	Fly	Over stream
Cattle egret	2	Fly	Over stream
myna		fly	Over stream
Hawaiian mallard	2	Forage	In stream
White-eye warbling	1	Fly	Over stream
House sparrow	1	Fly	Over stream

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph # 1:
Estuary Site # 1.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 5/20/2025 Site Name: Estuary Site # 2 Time: 1035-1100

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 type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>30%</u> cloud cover	<u>40%</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, sediment mixed in water

Water Color: brown

Estimated Depth: --

Visibility: none

Tide (if applicable): 0.09 ft

Notes: elevated trash and floating wreckage; water is brown, 0% vizibility. Water ≤ normal

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	fly	Over stream
Myna	7	Fly	Over stream
Red-vented bulbul	5	Fly	Over stream
Red-vented bulbul	1	loaf	In vegetation next to stream
Zebra dove	1	Fly	Over stream
CS	2	Fly	Over stream
Spotted dove	1	Fly	Over stream
Rose-rigged parakeet	1	Fly	Over stream

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph # 1:
Estuary Site # 2
looking upstream.

No photo in this direction on 5/20

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%	

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

Observers

Date 5/20/2026

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	3	0	0	NA	3	0	0	NA	3	0	0	NA	2	2	2	N/A
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	50	0	5		50	2	5		30	0	5		30	0	5	
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	0940		0945		0923		0928		1003		1008		1013		1015	
COOT adult																
subadult																
GALLINULE/MOORHEN adult																
subadult																
STILT adult																
subadult																
KOLOA adult																
subadult																
Koloa/Mallard Hybrid	3 (adult/fly)															
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.							

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 5-20-2026

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	ES 1				ES 2											
	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC
Condition	1	1	2	NA	1	1	2	NA								
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	30	0	5		30	0	5									
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	1053		1058		1035		1040									
COOT adult																
COOT subadult																
GALLINULE/MOORHEN adult																
GALLINULE/MOORHEN subadult																
STILT adult																
STILT subadult																
KOLOA adult																
KOLOA subadult																
Koloa/Mallard Hybrid	1 (adult female/ 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																
Comments																

No WB/SB