

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 2/3/2025 Site Name: Upstream Site Time: 0941

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>20%</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: 1"

Visibility: 100% to the bottom

Tide (if applicable): N/A

Notes:

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-crested cardinal	2	Foraging	Foraging in the channel.
Warbling white-eye	5	Foraging	Foraging in the trees above the stream.
White-rumped shama thrush	1	Loafing	Calling from the trees above the stream.
Red-vented bulbul	2	Foraging	Foraging and calling from the trees above the stream.
Common myna	1	Loafing	Calling from the trees above the stream.
Zebra dove	1	Loafing	Calling from the trees 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: 2/3/2025 Site Name: Discharge 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 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>100%</u> cloud cover	<u>20%</u> cloud cover or less	
<input 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: 2.5"

Visibility: 100%, to the bottom

Tide (if applicable): N/A

Notes: Discharge pipes were on at 9am but off at the time of survey. Stream flowing on both sides of channel; center remains dry.

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
Warbling white-eye	4	Foraging	Foraging in the trees above the stream.
Common myna	4	Flying	Flew in the trees above the stream.
Northern cardinal	1	Loafing	Calling from the trees above the stream.
Red-vented bulbul	2	Foraging	Foraging in the trees above the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Downstream
Site # 1.



Photograph #
2:
Downstream
Site # 1.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 2/3/2025

Site Name: Downstream Site # 1

Time: 1020

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>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 the bottom

Water Color: clear

Estimated Depth: 3"

Visibility: 100% to the bottom

Tide (if applicable): N/A

Notes:

SPECIES OBSERVATIONS

Fish Kill? Yes No # Dead Fish 0

Fish Breathing Stress/Gulping None Yes

Fish Abnormal Behavior None Yes

Notes: 100+ small fish foraging in the stream

Species Observed	# of individuals	Behavior	Notes/Observations
Ruddy turnstone	6	Foraging	Foraging in the streambed.
Red-vented bulbul	2	Foraging	Foraging in the trees next to the stream.
Warbling white-eye	3	Loafing	Calling from the trees above the stream.
Spotted dove	2	Flying	Flew over the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:
Downstream
Site # 1.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 2/3/2025 Site Name: Downstream Site # 2 Time: 1009

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>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: light sediment mixed in water; some surface foam
 Water Color: brown/green
 Estimated Depth: 3'
 Visibility: 100% to the bottom
 Tide (if applicable): N/A

Notes: Observed high flow during rainstorm on 1/30/2025; no visible changes to vegetation/debris.

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
Pacific golden plover	1	Foraging	Foraging in the streambed.
Black-crowned night heron	2	Foraging	Foraging in the streambed.
Zebra dove	5	Foraging	Foraging in the streambed.
Hybrid mallard	2	Loafing	Adult and juvenile sleeping on streambank.
Hybrid mallard	3	Foraging	Foraging in the stream.
Common myna	3	Foraging	Foraging and calling from the trees next to the stream.
Tilapia	80+	Loafing	Swimming in the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS

Photo unavailable	Photograph # 1: Downstream Site # 2.
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Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 2/3/2025 Site Name: Estuary Site # 1 Time: 1105

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 checked="" type="checkbox"/> showers (intermittent)	
<u>10</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: slightly clear, lighter sediment mixed in water

Water Color: light brown

Estimated Depth: 3'

Visibility: 100% to the bottom

Tide (if applicable): +0.45

Notes: lots of homeless stuff under bridge and on shoreline, bike, wagon, crab traps.

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
Mallard hybrid	5	Foraging	Foraging in the stream.
Red-vented bulbul	2	Flying	Flew into the trees next to the stream.
Rock dove	11	Flying	Flew over the stream as a flock.
Tilapia	80+	Loafing	Swimming in the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:

Estuary Site #
1.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 3/3/2025

Site Name: Estuary Site # 2

Time: 1047

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 checked="" type="checkbox"/> showers (intermittent)	
<u>40%</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: cloudy, light sediment mixed in water (wave action)

Water Color: brown

Estimated Depth: 3'

Visibility: 90%

Tide (if applicable): +0.54 ft

Notes: Lots of floating vegetation/debris.

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
Warbling white-eye	2	Flying	Flew into the trees next to the stream.
Common myna	8	Foraging	Foraging in the grass field next to the stream.
Pacific golden plover	2	Loafing	Sitting in the grass field next to the stream.
Common Waxbill	~30	Foraging	Foraging in the grass field next to the stream.
Scaly-breasted Munia	~30	Foraging	Foraging in the grass field next to the stream.
Zebra dove	1	Foraging	Foraging in the grass field next to the stream.
Rose-rigged parakeet	1	Loafing	Calling from the trees next to the stream.
Tilapia	12	Loafing	Swimming along the shoreline.

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 2/3/2025
 Island O'ahu

REMINDERS: If site 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 XXXXXXXXXX

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	0	1	NA	2	0	1	NA	2	0	1	NA	2	0	1	NA
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	20	0	0		100	0	0		0	0	3		50	0	3	
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	0941		0946		0922		0929		1020		1025		1009		1014	
COOT	adult															
	subadult															
GALLINULE/MOORHEN	adult															
	subadult															
STILT	adult															
	subadult															
KOLOA	adult															
	subadult															
Koloa/Mallard Hybrid													4 (adult/foraging and loafing)		1 (juvenile/loafing)	
Mallard (domestic/feral)																
Other Domestic Duck																
Black-cr. Night Heron													2 (adult/foraging)			
Cattle Egret																
Pacific Golden Plover													1 (adult/foraging)			
Ruddy Turnstone									6 (adult/foraging)							
Sanderling																
Wandering Tattler																
Northern Pintail																
Mallard (migratory)																
Lesser scaup																
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 2/3/ 2025

Island O'ahu

REMINDEERS: if site it not accessible, include wetland name and write 'no access'
 if no birds observed, fill out top portion and write 'no birds'

Observers [REDACTED]

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	1	1								
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	10	0	3		40	0	3									
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	1105		1110		1047		1051									
COOT adult																
subadult																
GALLINULE/MOORHEN adult																
subadult																
STILT adult																
subadult																
KOLOA adult																
subadult																
Koloa/Mallard Hybrid	1 (adult/foraging); 4 (juvenile/foraging)															
Mallard (domestic/feral)																
Other Domestic Duck																
Black-cr. Night Heron																
Cattle Egret																
Pacific Golden Plover	2 (adult/loafing)															
Ruddy Turnstone																
Sanderling																
Wandering Tattler																
Northern Pintail																
Mallard (migratory)																
Lesser scaup																
White Tern																
Comments																