

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 07-28-25

Site Name: Upstream Site

Time: 0812

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 checked="" type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>90</u> % cloud cover	<u>30</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 of stream

Water Color: clear

Estimated Depth: <1"

Visibility: 100% to the 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: N/A

Species Observed	# of individuals	Behavior	Notes/Observations
red-vented bulbul	8	Loafing	In the vegetation above the stream.
zebra dove	2	Flying	Flew over the stream.
white-eye warbler	3	Loafing	In the vegetation above the stream.
feral cat	1	Loafing	Kitten loafing in the vegetation above the stream.
red-vented bulbul	2	Flying	Flew over the stream.

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PHOTOGRAPHS



Photograph #
1:

Upstream Site
looking
upstream.



Photograph #
2:

Upstream Site
looking
downstream.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 07-28-25

Site Name: Discharge Site

Time: 0758

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 checked="" type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>90</u> % cloud cover	<u>30</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 of the stream

Water Color: clear

Estimated Depth: 1-3"

Visibility: 100% to the 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: Dogs barking loudly nearby.

Species Observed	# of individuals	Behavior	Notes/Observations
red-vented bulbul	3	Foraging	In the trees above the stream.
red-vented bulbul	2	Loafing	In the trees above the stream.
red-vented bulbul	2	Flying	Flew over the stream.
common myna	4	Flying	Flew over the stream.
zebra dove	1	Loafing	In the trees above the stream.
common myna	2	Loafing	In the dry part of the stream.
white-eye warbler	2	Loafing	In the trees above the stream.

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mongoose	2	Loafing	In the trees above the stream. Scraping with each other lol
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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: 07-28-25 Site Name: Downstream Site 1 Time: 0732

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 checked="" type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>100</u> % cloud cover	<u>30</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: 1-3"

Visibility: 100% to the 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: N/A

Species Observed	# of individuals	Behavior	Notes/Observations
black-crowned night heron	1	Foraging	Hunting in the stream.
spotted dove	2	Flying	Flew over the stream.
mosquito fish	~50	Swimming	In the stream.
red-vented bulbul	1	Flying	Flew over the stream.
white tern	2	Flying	Flew over the stream.

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PHOTOGRAPHS



Photograph #
1:

Downstream
Site 1 looking
upstream.

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Observer/s: _____

Date: 07-28-25

Site Name: Downstream Site 2

Time: 0723

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 checked="" type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>90</u> % cloud cover	<u>30</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: sediment lightly mixed in water.

Water Color: clear to light green

Estimated Depth: 3'

Visibility: 100% to the 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: N/A

Species Observed	# of individuals	Behavior	Notes/Observations
rose-ringed parakeet	5	Flying	Flew over the stream.
black-crowned night heron	3	Loafing	In the stream.
koloa/mallard hybrid	4	Swimming	In the stream.
common myna	2	Flying	Flew over the stream.
spotted dove	1	Flying	Flew over the stream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:

Downstream
Site 2 looking
downstream.

Halawa Stream Monitoring Data Sheet

Observer/s: _____

Date: 07-28-25 Site Name: Estuary Site 1 Time: 0700

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 checked="" type="checkbox"/> rain (steady rain)	
<input type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>80</u> % cloud cover	<u>30</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: Light green to dark green

Estimated Depth: 4-6'

Visibility: 6"

Tide (if applicable): 1.1 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: Boat docked in the water.

Species Observed	# of individuals	Behavior	Notes/Observations
spotted dove	4	Flying	Flew over the stream.
white tern	7	Flying	Flew over the stream.
rose-ringed parakeet	8	Flying	Flew over the stream.
red-vented bulbul	1	Flying	Flew over the stream.
common myna	3	Flying	Flew over the stream.
common waxbill	3	Flying	Flew over the stream.
cattle egret	1	Flying	Flew over the stream.
spotted dove	1	Loafing	In vegetation above the stream.
rock dove	2	Flying	Flew over the stream.

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red-vented bulbul	1	Loafing	In vegetation above the stream.
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PHOTOGRAPHS



Photograph #
1:

Estuary Site 1
looking
upstream.

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Observer/s: _____

Date: 07-28-25

Site Name: Estuary Site 2

Time: 0711

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 checked="" type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>80</u> % cloud cover	<u>30</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 on the bottom

Water Color: clear to light green

Estimated Depth: 1-3'

Visibility: 100% to bottom

Tide (if applicable): 1.1 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: N/A

Species Observed	# of individuals	Behavior	Notes/Observations
white-eye warbler	3	Flying	Flew over the stream.
common waxbill	3	Loafing	In vegetation above the stream.
rock dove	8	Flying	Flew over the stream.
tilapia	~20	Swimming	In the stream.
mullet	~10	Swimming	In the stream.
common myna	3	Flying	Flew over the stream.
red-crested cardinal	1	Loafing	In vegetation above the stream.
spotted dove	1	Flying	Flew over the stream.
zebra dove	1	Flying	Flew over the stream.

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rose-ringed parakeet	6	Flying	Flew over the stream.
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Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #
1:

Estuary Site 2
looking
upstream.



Photograph #
2:

Estuary Site 2
looking
downstream.

WATERBIRD SURVEY DATASHEET

WETLAND CONDITON 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 07-28-25

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'

KEEP A COPY FOR YOUR RECORDS

Subadult includes juveniles and chicks

Island O'ahu

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	0	N/A	2	0	0	N/A	2	0	0	N/A	2	0	0	N/A
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	90	1	1		90	1	1		100	1	1		90	1	1	
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	0812		0817		0758		0803		0732		0737		0723		0728	
COOT adult																
subadult																
GALLINULE/MOORHEN adult																
subadult																
STILT adult																
subadult																
KOLOA adult																
subadult																
Koloa/Mallard Hybrid													4 (adult/loafing)			
Mallard (domestic/feral)																
Other Domestic Duck																
Black-cr. Night Heron									1 (adult/foraging)				3 (adult/loafing)			
Cattle Egret																
Pacific Golden Plover																
Ruddy Turnstone																
Sanderling																
Wandering Tattler																
Northern Pintail																
Mallard (migratory)																
Lesser scaup																
White tern									2 (adults/flying)							
Comments																
	no waterbirds/shorebirds				no waterbirds/shorebirds											

WATERBIRD SURVEY DATASHEET

WETLAND CONDITON 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 07-28-25

Island O'ahu

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

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KEEP A COPY FOR YOUR RECORDS

Subadult includes juveniles and chicks

Observers [REDACTED]

Wetland Name	ES 1				ES 2											
	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC
	2	0	1	0	2	0	0	0								
Condition	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
Weather	80	0	1		80	0	1									
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	0700		0705		0711		0716									
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	1 (adult/flying)															
Pacific Golden Plover																
Ruddy Turnstone																
Sanderling																
Wandering Tattler																
Northern Pintail																
Mallard (migratory)																
Lesser scaup																
White Tern	7 (adult/flying)															
Comments					No water/shorebirds											