

Halawa Stream Monitoring Data Sheet

Observer/s: \_\_\_\_\_

Date: 04-13-26 Site Name: Upstream Site Time: 1133

**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 checked="" type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>100</u> % cloud cover	<u>100</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- no sediment

Water Color: clear

Estimated Depth: 5"-6"

Visibility: 100% to the bottom

Tide (if applicable): N/A

Notes: None

**SPECIES OBSERVATIONS**

Fish Kill?  Yes  No # Dead Fish 0

Fish Breathing Stress/Gulping  None  Yes

Fish Abnormal Behavior  None  Yes

Notes: Pig activity upstream could impact stream results.

Species Observed	# of individuals	Behavior	Notes/Observations
common waxbill	2	Flying	Flew over the stream.
red-vented bulbul	3	Flying	Flew over the stream.
common myna	2	Foraging	In the trees above the stream.
white-rumped shawma	1	Loafing	In the trees above the stream.
red-vented bulbul	2	Foraging	In 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: 4-13-2026 Site Name: Discharge Site Time: 1110

**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 checked="" type="checkbox"/> rain (steady rain)	<input checked="" type="checkbox"/> rain (steady rain)	
<input type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>100</u> % cloud cover	<u>100</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, no sediment

Water Color: clear

Estimated Depth: 5"-6"

Visibility: 100% to bottom

Tide (if applicable): N/A

Notes: More water flowing in the stream than normal.

**SPECIES OBSERVATIONS**

Fish Kill? Yes  No # Dead Fish 0

Fish Breathing Stress/Gulping  None  Yes

Fish Abnormal Behavior  None  Yes

Notes: None

Species Observed	# of individuals	Behavior	Notes/Observations
red-whiskered bulbul	1	Foraging	In the vegetation above the stream.
red-vented bulbul	4	Foraging	In the vegetation above the stream.
common waxbill	2	Foraging	In the vegetation above the stream.
spotted dove	1	Flying	Flew over the stream.
red-vented bulbul	1	Flying	Flew over the 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: 04-13-26 Site Name: Downstream Site 1 Time: 1207

**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 checked="" type="checkbox"/> rain (steady rain)	<input checked="" type="checkbox"/> rain (steady rain)	
<input type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>100</u> % cloud cover	<u>100</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: lighter sediment mixed in the water.

Water Color: clear to green

Estimated Depth: 4"-5"

Visibility: 100% to the bottom

Tide (if applicable): N/A

Notes: More water flowing in the stream than 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
common waxbill	9	Foraging	In the vegetation above the stream.
spotted dove	4	Flying	Flew over the stream.
rock dove	4	Flying	Flew over the stream.

Halawa Stream Monitoring Data Sheet

**PHOTOGRAPHS**



Photograph #  
1:  
Downstream  
Site 1 looking  
upstream.

Halawa Stream Monitoring Data Sheet

Observer/s: \_\_\_\_\_

Date: 04-13-26

Site Name: Downstream Site 2

Time: 1157

**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 checked="" type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>100</u> % cloud cover	<u>100</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

Water Color: light brown

Estimated Depth: 1'-4'

Visibility: 1"

Tide (if applicable): N/A

Notes: Trash present. Water turbidity in the stream was high. There is a rock buildup on the left side of the stream that makes the water flow to the center.

**SPECIES OBSERVATIONS**

Fish Kill?  Yes  No # Dead Fish 0

Fish Breathing Stress/Gulping  None  Yes

Fish Abnormal Behavior  None  Yes

Notes: None

Species Observed	# of individuals	Behavior	Notes/Observations
black-crown night heron	3	Hunting	In the stream.
chestnut munia	2	Flying	Flew over the stream.
spotted dove	1	Flying	Flew over the stream.
common myna	3	Foraging	In the stream and vegetation above the stream.
spotted dove	1	Foraging	In the stream.
common myna	1	Loafing	In the vegetation above the stream.
red-whiskered bulbul	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: 04-13-26 Site Name: Estuary Site 1 Time: 1253

**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 checked="" type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>100</u> % cloud cover	<u>100</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: 6'-8'

Visibility: 0%

Tide (if applicable): 1.69 ft

Notes: None

**SPECIES OBSERVATIONS**

Fish Kill?  Yes  No # Dead Fish 0

Fish Breathing Stress/Gulping  None  Yes

Fish Abnormal Behavior  None  Yes

Notes: None

Species Observed	# of individuals	Behavior	Notes/Observations
spotted dove	4	Flying	Flew over the stream.
common myna	4	Flying	Flew over the stream.
warbling white-eye	1	Foraging	In the vegetation above the stream.

Halawa Stream Monitoring Data Sheet

**PHOTOGRAPHS**



Photograph #  
1:  
Estuary Site 1  
looking  
upstream.

Halawa Stream Monitoring Data Sheet

Observer/s: \_\_\_\_\_

Date: 04-13-26 Site Name: Estuary Site 2 Time: 1229

**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 checked="" type="checkbox"/> rain (steady rain)	
<input checked="" type="checkbox"/> showers (intermittent)	<input type="checkbox"/> showers (intermittent)	
<u>100</u> % cloud cover	<u>100</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: 1' - 6'  
 Visibility: 0%  
 Tide (if applicable): 1.75 ft

Notes: High turbidity.

**SPECIES OBSERVATIONS**

Fish Kill?  Yes  No # Dead Fish 0  
 Fish Breathing Stress/Gulping  None  Yes  
 Fish Abnormal Behavior  None  Yes

Notes: None

Species Observed	# of individuals	Behavior	Notes/Observations
rose-ringed parakeet	8	Flying	Flew over the stream.
red-vented bulbul	2	Flying	Flew over the stream.
common myna	3	Flying	Flew over the stream.
common house sparrow	2	Flying	Flew over the stream.
red-vented bulbul	3	Loafing	In the vegetation above the stream.

Halawa Stream Monitoring Data Sheet

chestnut munia	4	Flying	Flew over the stream.
spotted dove	1	Flying	Flew over the stream.

**PHOTOGRAPHS**



Photograph #  
1:  
Estuary Site 2  
looking  
upstream.

Halawa Stream Monitoring Data Sheet



Photograph #  
2:  
Estuary Site 2  
looking  
downstream.

### WATERBIRD SURVEY DATASHEET

WETLAND CONDITION CODES				WEATHER CODES			
<b>Water Level (WL)</b> 0 = dry 1 = lower than normal 2 = normal 3 = higher than normal	<b>Human Impact (HI)</b> 0 = indirect (little garbage, few people) 1 = moderate 2 = heavy (many people present; e.g., wading, boating, fishing, etc)	<b>Rainfall (RF)</b> 0 = no rain 1 = mist or fog 2 = drizzle 3 = light rain 4 = heavy rain 5 = snow or hail	<b>Wind</b> 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				
<b>Vegetation Cover (VC)</b> 0 = open water (<25% veg) 1 = 26-50% veg cover 2 = 51-75% veg cover 3 = >75% cover	<b>Shoreline Condition of Tidal Wetlands (SC)</b> 0 = water at high tide mark <span style="float: right;">N/A=not applicable</span> 1 = water 25 ft from high tide mark 2 = water 50 ft from high tide mark 3 = water >50 ft from high tide mark	<b>Cloud Cover (CC) = Estimate to the nearest 10%</b>					

Date 04-13-26

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

**Observers** ██████████

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
<b>Condition</b>	3	0	0	N/A	3	0	0	N/A	3	0	0	N/A	3	0	1	N/A
<b>Weather</b>	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	100	3	1		100	3	1		100	3	1		100	3	1	
<b>Time</b>	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	1133		1138		1110		1115		1207		1212		1157		1202	
COOT adult																
COOT subadult																
GALLINULE/MOORHEN adult																
GALLINULE/MOORHEN subadult																
STILT adult																
STILT subadult																
KOLOA adult																
KOLOA subadult																
Koloa/Mallard Hybrid																
Mallard (domestic/feral)																
Other Domestic Duck																
Black-cr. Night Heron																3 (adult/hunting)
Cattle Egret																
Pacific Golden Plover																
Ruddy Turnstone																
Sanderling																
Wandering Tattler																
Northern Pintail																
Mallard (migratory)																
Lesser scaup																
White tern																
<b>Comments</b>	No water/shorebirds observed.				No water/shorebirds observed.				No water/shorebirds observed.							

## WATERBIRD SURVEY DATASHEET

WETLAND CONDITION CODES		WEATHER CODES	
<b>Water Level (WL)</b> 0 = dry 1 = lower than normal 2 = normal 3 = higher than normal	<b>Human Impact (HI)</b> 0 = indirect (little garbage, few people) 1 = moderate 2 = heavy (many people present; e.g., wading, boating, fishing, etc)	<b>Rainfall (RF)</b> 0 = no rain 1 = mist or fog 2 = drizzle 3 = light rain 4 = heavy rain 5 = snow or hail	<b>Wind</b> 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
<b>Vegetation Cover (VC)</b> 0 = open water (<25% veg) 1 = 26-50% veg cover 2 = 51-75% veg cover 3 = >75% cover	<b>Shoreline Condition of Tidal Wetlands (SC)</b> 0 = water at high tide mark <span style="float: right;">N/A=not applicable</span> 1 = water 25 ft from high tide mark 2 = water 50 ft from high tide mark 3 = water >50 ft from high tide mark	<b>Cloud Cover (CC) = Estimate to the nearest 10%</b>	

Date 04-13-26

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

Observers ██████████

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
<b>Condition</b>	3	0	2	0	3	0	2	0								
<b>Weather</b>	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	100	2	1		100	3	1									
<b>Time</b>	Start		Stop		Start		Stop		Start		Stop		Start		Stop	
	1253		1258		1229		1234									
COOT adult																
COOT subadult																
GALLINULE/MOORHEN adult																
GALLINULE/MOORHEN subadult																
STILT adult																
STILT subadult																
KOLOA adult																
KOLOA 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 Tern																
<b>Comments</b>	No water/shore birds observed.				No water/shore birds observed.											