

WETLAND CONDITION CODES				WATERBIRD SURVEY DATASHEET								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 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%											

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

Observers: [REDACTED]

3/27/2024

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				ES 1				ES 2							
	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC	WL	VC	HI	SC
Condition	2	0	0	NA	2	0	0	NA	2	0	0	NA	2	1	0	NA	2	0	0	1	2	0	0	1	2	0	0	1
Weather	CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind		CC	RF	Wind	
	100%	1	1		50%	0	2		70%	0	2		70%	0	2		100%	2	3		80%	0	2					
Time	Start		Stop		Start		Stop		Start		Stop		Start		Stop		Start		Stop		Start		Stop					
	946		951		957		1002		924		929		918		923		908		913		1017		1022					
COOT adult																												
subadult																												
GALLINULE/MOORHE N adult																												
subadult																												
STILT adult																												
subadult																												
KOLOA adult																												
subadult																												
Koloa/Mallard Hybrid													1 loafing, 6 foraging															
Mallard (domestic/feral)																												
Other Domestic Duck																												
Black-cr. Night Heron																												
Cattle Egret																												
Pacific Golden Plover					1 foraging				1 foraging																			
Ruddy Turnstone																												
Sanderling																												
Wandering Tattler																												
Northern Pintail																												
Mallard (migratory)																												
Lesser scaup																												
Comments																												

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #1:
Upstream Site
looking
upstream.



Photograph #2:
Upstream Site
looking
downstream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #1:
Discharge Site
looking
upstream.



Photograph #2:
Discharge Site
looking
downstream.

Wattle present
but not
reaching
channel edges.

Halawa Stream Monitoring Data Sheet

Observer/s: [REDACTED]

Date: 3/27/2024

Site Name: Downstream Site #1

Time: 924

WEATHER CONDITIONS

NOW	Past 24 Hrs	Has there been a heavy rain in the past 7 days No
<input type="checkbox"/> Storm (heavy rain)	<input type="checkbox"/> Storm (heavy rain)	
<input type="checkbox"/> Rain (steady rain)	<input type="checkbox"/> Rain (steady rain)	
<input checked="" type="checkbox"/> Showers (intermittent)	<input type="checkbox"/> Showers (intermittent)	Wind Speed: 4-7 mph
<input type="checkbox"/> Clear/sunny	<input type="checkbox"/> Clear/sunny	Air Temp: 75 °F
70% Cloud Cover	50% Cloud Cover	

WATER QUALITY

Observed Turbidity/Sedimentation:
 On bottom.
 Water Color: Clear.
 Estimated Depth: ~ 3-5"
 Visibility: To bottom.
 Tide (if applicable): N/A

Water level:
 dry
 wet
 standing water
 flowing water
 sheen visible

Notes:

SPECIES OBSERVATIONS

Fish Kill? No #Dead Fish: 0

Fish Breathing Stress/Gulping? No

Fish Abnormal Behavior? No

Notes:

Species Observed	# of indiv	Behavior	Notes/Observations
unknown fish species	500	Foraging	In streambed.
Pacific golden plover	1	Foraging	In streambed.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph:
Downstream
Site #1 looking
upstream.

Halawa Stream Monitoring Data Sheet

Observer/s: [REDACTED]

Date: 3/27/2024

Site Name: Downstream Site #2

Time: 918

WEATHER CONDITIONS

NOW	Past 24 Hrs	Has there been a heavy rain in the past 7 days No
<input type="checkbox"/> Storm (heavy rain)	<input type="checkbox"/> Storm (heavy rain)	
<input type="checkbox"/> Rain (steady rain)	<input type="checkbox"/> Rain (steady rain)	
<input checked="" type="checkbox"/> Showers (intermittent)	<input type="checkbox"/> Showers (intermittent)	Wind Speed: 4-7 mph
<input type="checkbox"/> Clear/sunny	<input type="checkbox"/> Clear/sunny	Air Temp: 75 °F
70% Cloud Cover	50% Cloud Cover	

WATER QUALITY

Observed Turbidity/Sedimentation:
Throughout stream water.

Water Color: Clear.

Estimated Depth: > 5' in deep portion of channel.

Visibility: ~ 1' in deep portion of channel.

Tide (if applicable): N/A

Water level:

- dry
- wet
- standing water
- flowing water
- sheen visible

Notes:

SPECIES OBSERVATIONS

Fish Kill? No #Dead Fish: 0

Fish Breathing Stress/Gulping? No

Fish Abnormal Behavior? No

Notes:

Species Observed	# of indiv	Behavior	Notes/Observations
unknown fish species	200	Foraging	In streambed.
koloa/mallard hybrid	1	Loafing	In streambed.
koloa/mallard hybrid	6	Foraging	In streambed.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph:
Downstream
Site #2 looking
downstream.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph:
Estuary Site #1
looking
upstream.

Halawa Stream Monitoring Data Sheet

Observer/s: [REDACTED]

Date: 3/27/2024

Site Name: Estuary Site #2

Time: 1017

WEATHER CONDITIONS

NOW	Past 24 Hrs	Has there been a heavy rain in the past 7 days No
<input type="checkbox"/> Storm (heavy rain)	<input type="checkbox"/> Storm (heavy rain)	
<input type="checkbox"/> Rain (steady rain)	<input type="checkbox"/> Rain (steady rain)	
<input checked="" type="checkbox"/> Showers (intermittent)	<input type="checkbox"/> Showers (intermittent)	Wind Speed: 4-7 mph
<input type="checkbox"/> Clear/sunny	<input type="checkbox"/> Clear/sunny	Air Temp: 75 °F
80% Cloud Cover	50% Cloud Cover	

WATER QUALITY

Observed Turbidity/Sedimentation:
Throughout water column.
Water Color: Greenish brown.
Estimated Depth: > 5'
Visibility: ~ 1'
Tide (if applicable): .01' Falling

Water level:
 dry
 wet
 standing water
 flowing water
 sheen visible

Notes:

SPECIES OBSERVATIONS

Fish Kill? No #Dead Fish: 0

Fish Breathing Stress/Gulping? No

Fish Abnormal Behavior? No

Notes:

Species Observed	# of indiv	Behavior	Notes/Observations
unknown fish species	1	Foraging	In streambed.
zebra dove	1	Transitioning	Flew out.

Halawa Stream Monitoring Data Sheet

PHOTOGRAPHS



Photograph #1:
Estuary Site #2
looking
upstream.



Photograph #2:
Estuary Site #2
looking
downstream.