

# Northwestern Hawaiian Islands National Marine Monument

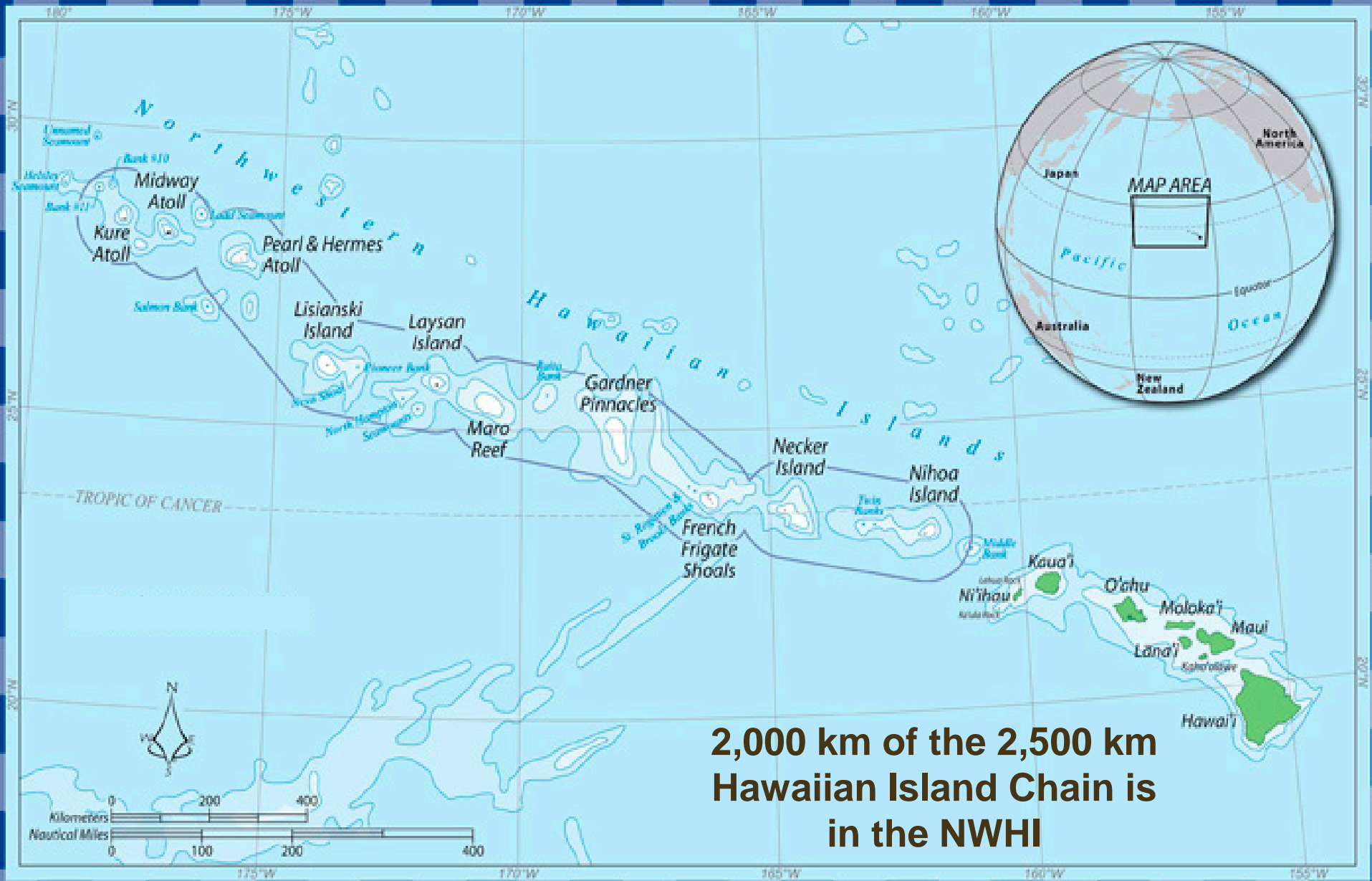
*“The Unintended Consequences”*

Western Pacific Regional Fishery Management Council



# NWHI Marine National Monument

- Established by Presidential Proclamation No. 8031 on June 15, 2006
- Assigned primary management over marine areas to the Secretary of Commerce in Consultation with the Secretary of the Interior.
- State waters, including submerged ceded lands withdrawn and included the Monument
- Memorandum of Agreement to be developed



**Western Pacific Regional Fishery Management Council**



# Regarding Fishing

Directs the Secretaries to:

- Ensure any lobster permit is issued a zero harvest quota;
- Ensure commercial fishing is conducted only with a valid bottomfish permit in effect on June 15, 2006;
- Ensure that the total annual landing of bottomfish species by commercial bottomfish permit holders does not exceed 350,000 lbs.;
- Ensure that the total annual landing of pelagic species by commercial bottomfish permit holders does not exceed 180,000 lbs.;

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# Regarding Fishing (cont).

Directs the Secretaries to:

- Ensure commercial fishing does not take place within any Ecological Reserve or Special Preservation Area;
- Prohibit vessels from anchoring in the Monument;
- Require VMS on all vessels operating in the Monument;
- Allow sustenance fishing for bottomfish and pelagic species by anyone with a Monument permit.
- Allow commercial fishing to continue only until June 15, 2011.

# Northwestern Hawaiian Islands Marine National Monument

## Legend

 Marine National Monument Boundary

 100 Fathom Contours

 Special Preservation Area

100fm: Kure Atoll, Pearl and Hermes Atoll

50fm: Laysan Island

25fm: Lisianski Island, Maro Reef, Gardner Pinnacles, Necker Island

3nm: Nihoa

French Frigate Shoals Boundary Coordinates:

(166° 45' W, 24° 10' N) (165° 35' W, 24° N)

(166° 45' W, 24° 2' N) (166° 55' W, 23° 41' N)

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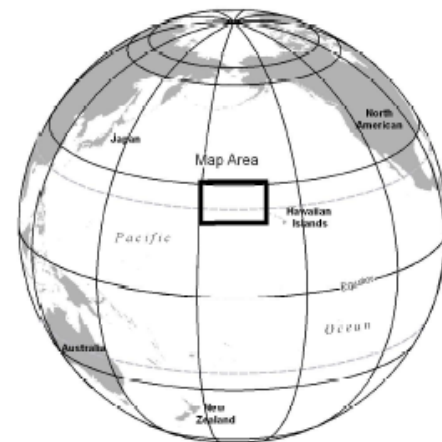
 Ecological Reserves

 Commercial Fishing Phase-Out Area  
Managed as Ecological Reserve following phase-out

 Special Management Area  
Boundary extends 12nm from land

 Emergent Land Features

Source: Data provided by NOAA, State of Hawaii and ESRI



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# NWHI Bottomfish Fishery

- **Bottomfish FMP (1986)**
- **Limited-entry with 17 permits (8 active)**
- **Hook and Line fishery**
- **Vessels limited to 60 ft. in length**
- **Healthy stock with no impact to habitat, sessile benthos or protected species**



# Primary NWHI Bottomfish



**Uku**  
*Grey Jobfish*

Generally caught  
15 to 25 fathoms



**Opakapaka**  
*Ruby Snapper*

Generally caught  
30-80 fathoms



**Ehu**  
*Red Snapper*

Generally caught  
40-90 fathoms



**Onaga**  
*Long-tail snapper*

Generally caught  
80-100 + fathoms



# The Issues

- **No Anchoring provision**
- Ecological Reserves and Special Preservation Areas
- Native Hawaiian Access and Cultural Practices
- Future Availability of Hawaiian Bottomfish

# No Anchoring Provision

- Anchoring is a common practice in bottomfishing and is done to maintain vessel position over fishing grounds
- It is an essential component of bottomfishing in NWHI, where currents are very strong

# Typical Structure of a NWHI Bank

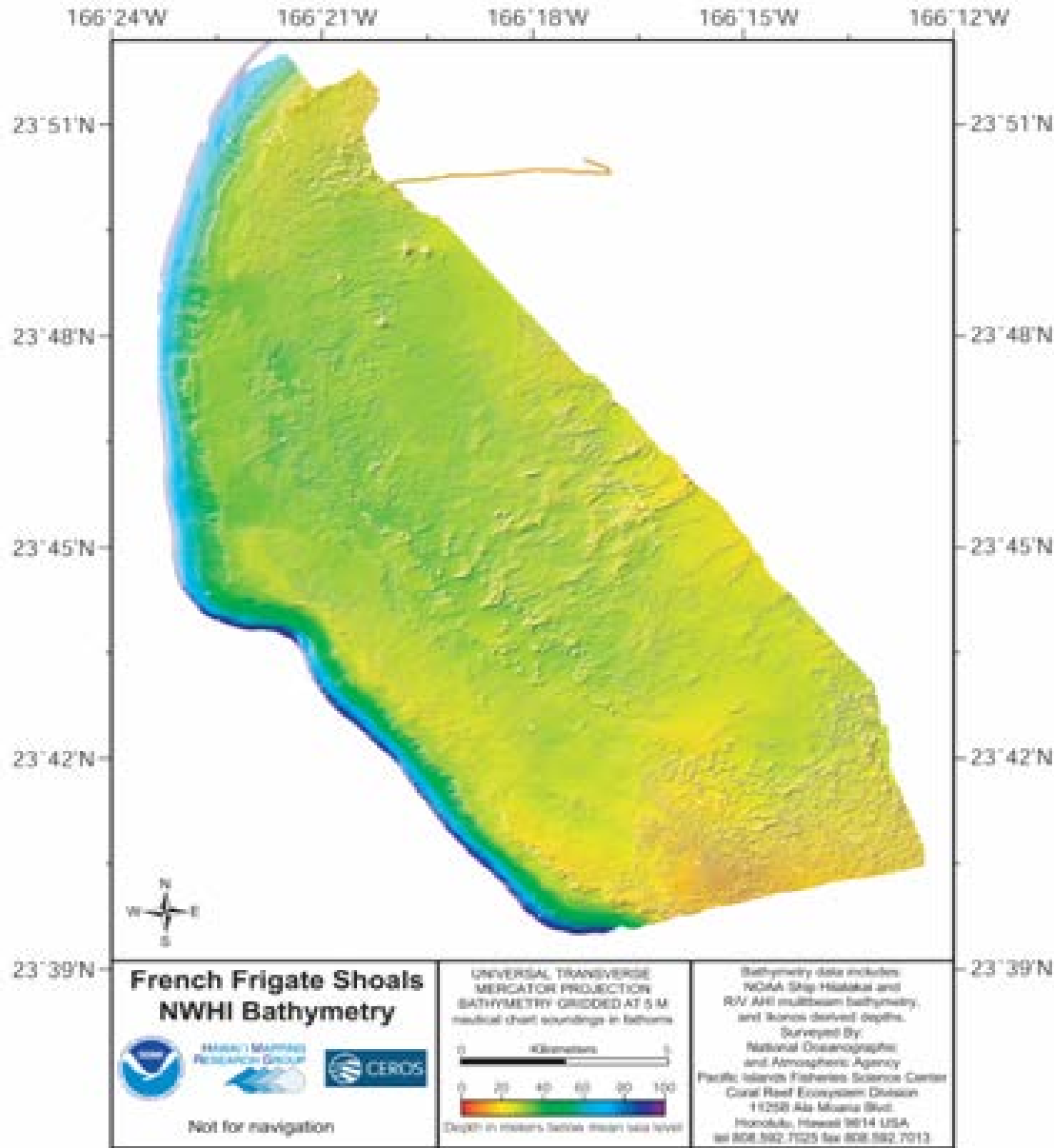
Universal Transverse Mercator  
Projection Bathymetry GRID at 5 m

Nautical chart soundings in fathoms

0 Km 5



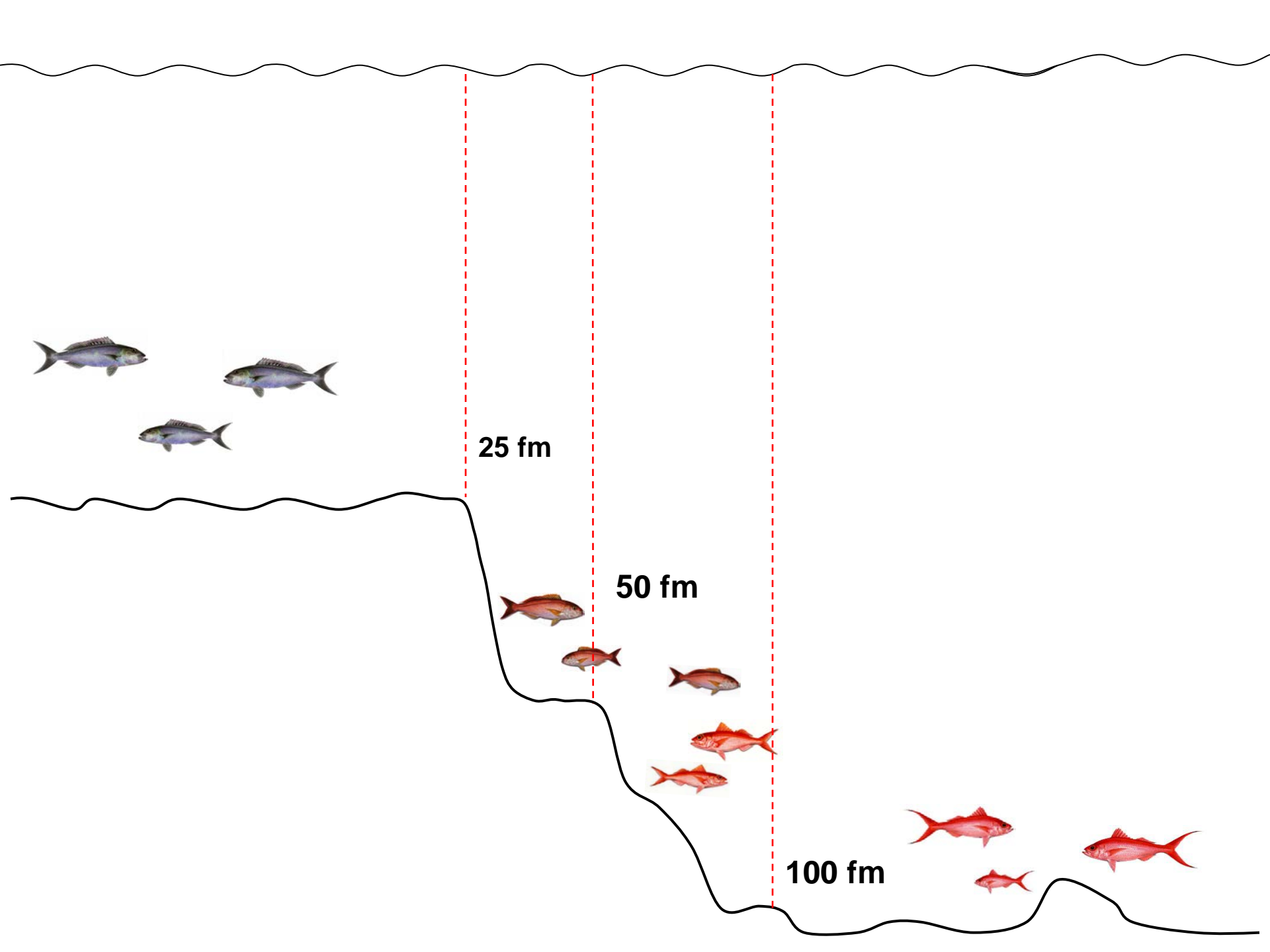
Depth in meters below mean sea level



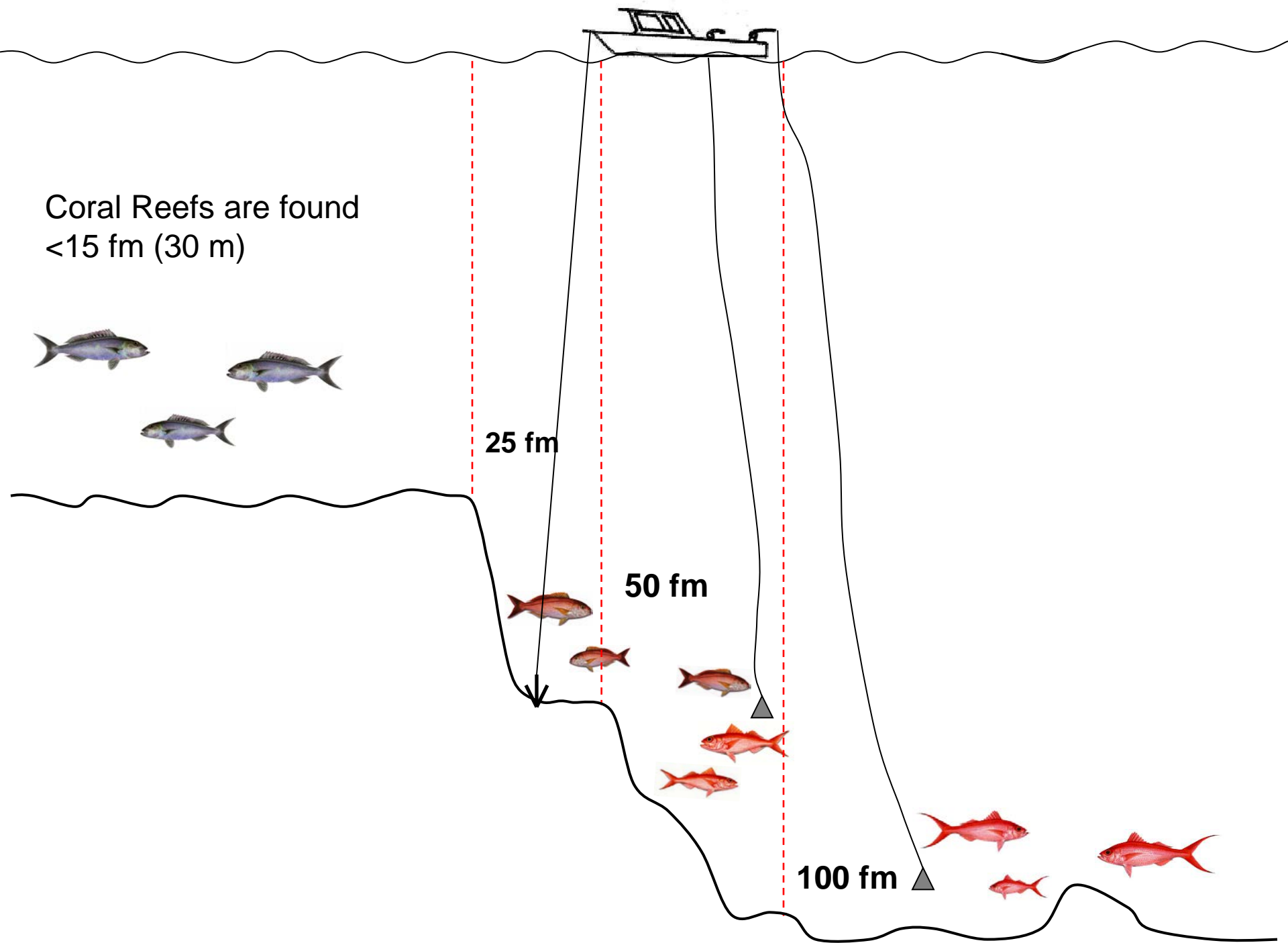
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Coral Reefs are found  
<15 fm (30 m)



Coral Reefs are found  
<15 fm (30 m)



25 m

100 fm












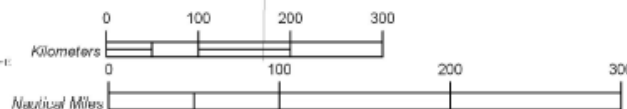
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- **Ecological Reserves and Special Preservation Areas**
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- Future Availability of Hawaiian Bottomfish

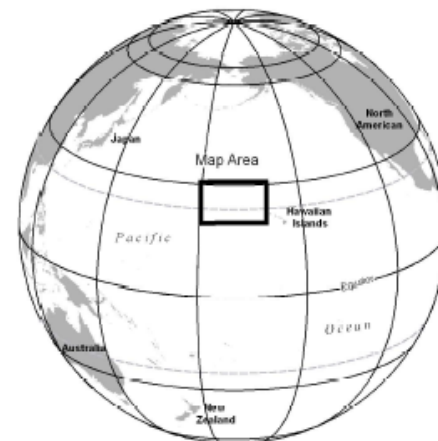
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## Legend

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-  Commercial Fishing Phase-Out Area  
*Managed as Ecological Reserve following phase-out*
-  Special Management Area  
*Boundary extends 12nm from land*
-  Emergent Land Features



Source: Data provided by NOAA, State of Hawaii and ESRI



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# Ecological Reserves and Special Preservation Areas

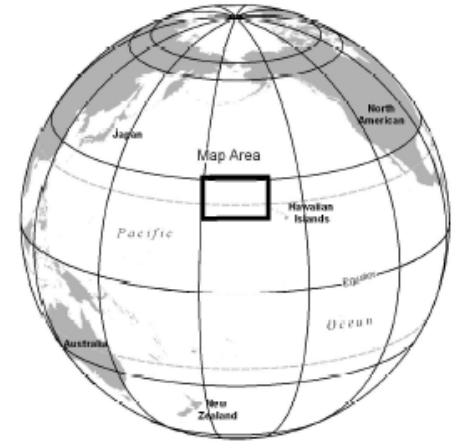
- Both Ecological Reserves are in the Hoomalu Zone
- 7 of 9 Sanctuary Preservation Areas are also in Hoomalu Zone;
- Encompass the majority of historical bottomfishing grounds



# Ecological Reserves and Special Preservation Areas

- Uku caught trolling 15-25 fathoms
- Nearly 100% of uku grounds are within SPAs (Maro, Gardner Pinnacles, Necker)
- Uku makes up **15%** of total BMUS landings (2002 Annual Report)

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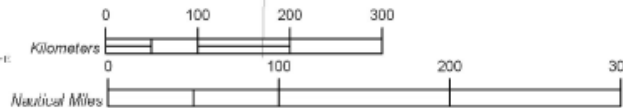
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**48.4% of Hoomalu Catch**

**11.8%**

**18.3% of Mau Zone**

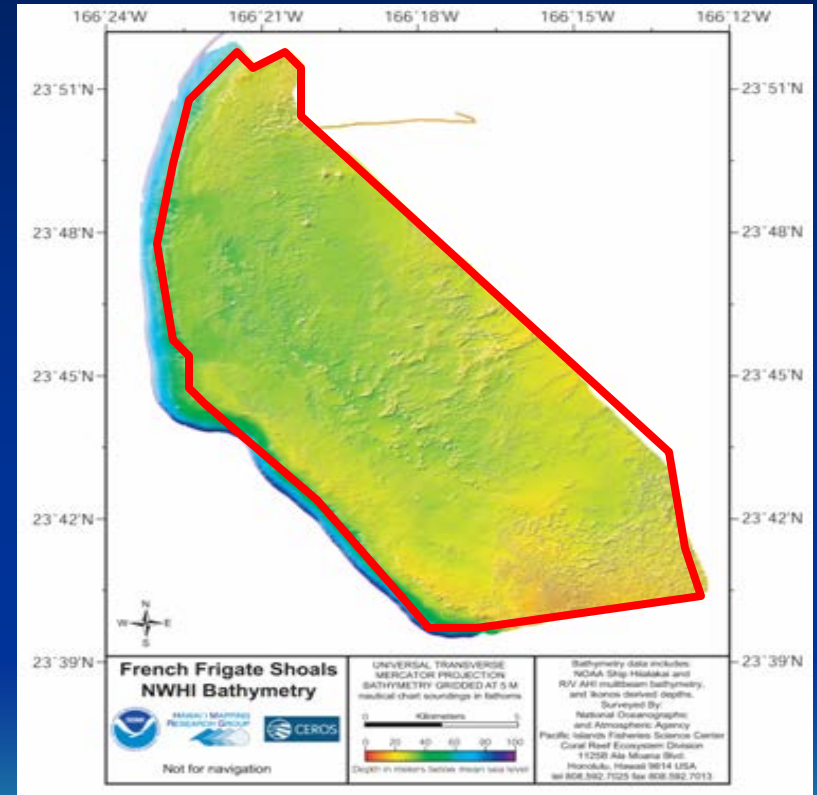


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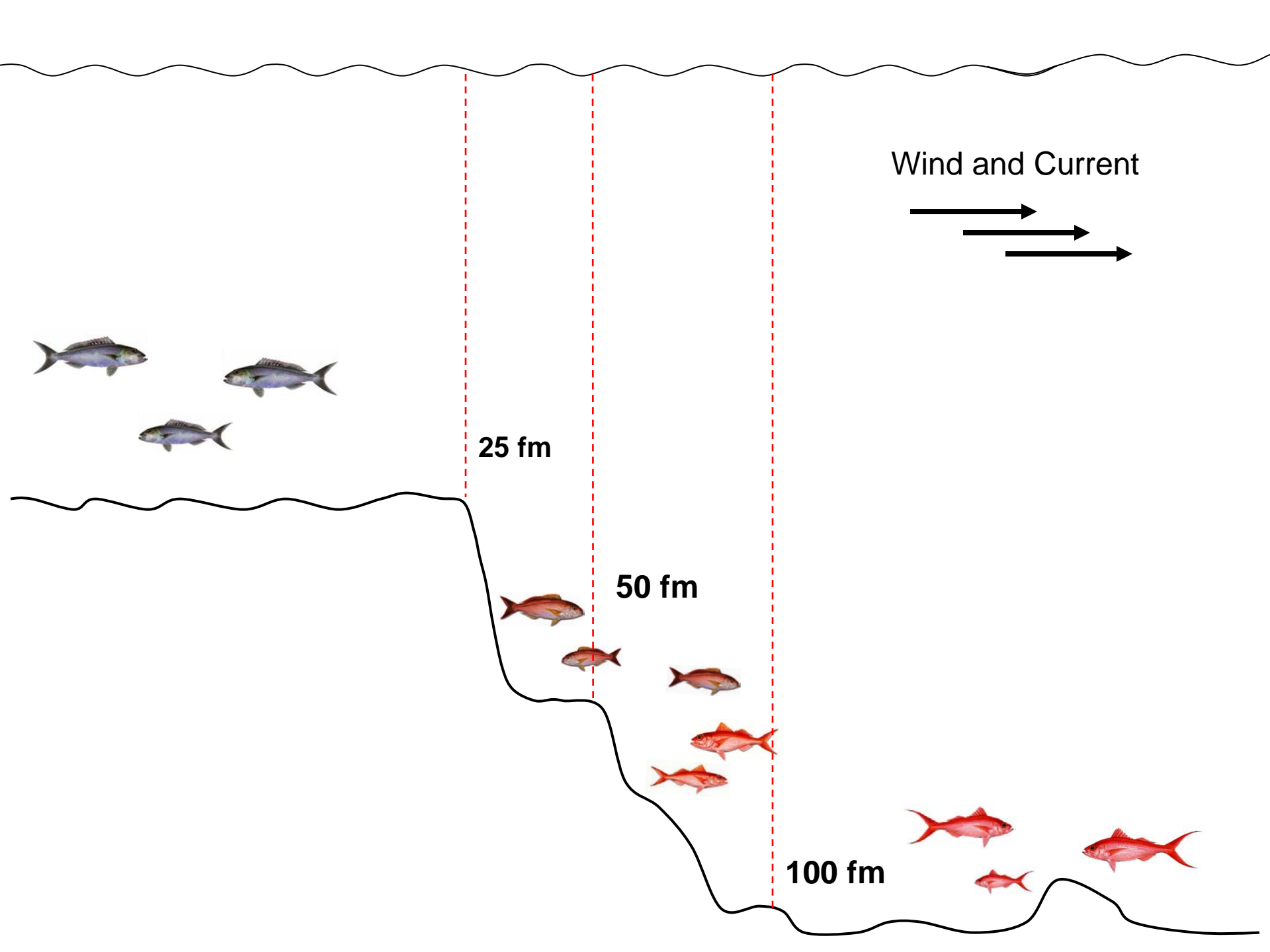
# Fishing the Line

- Accuracy of latitude and longitude closures in relation to true bathymetry
- Likelihood of having to enter SPAs to get to target bottomfish depths

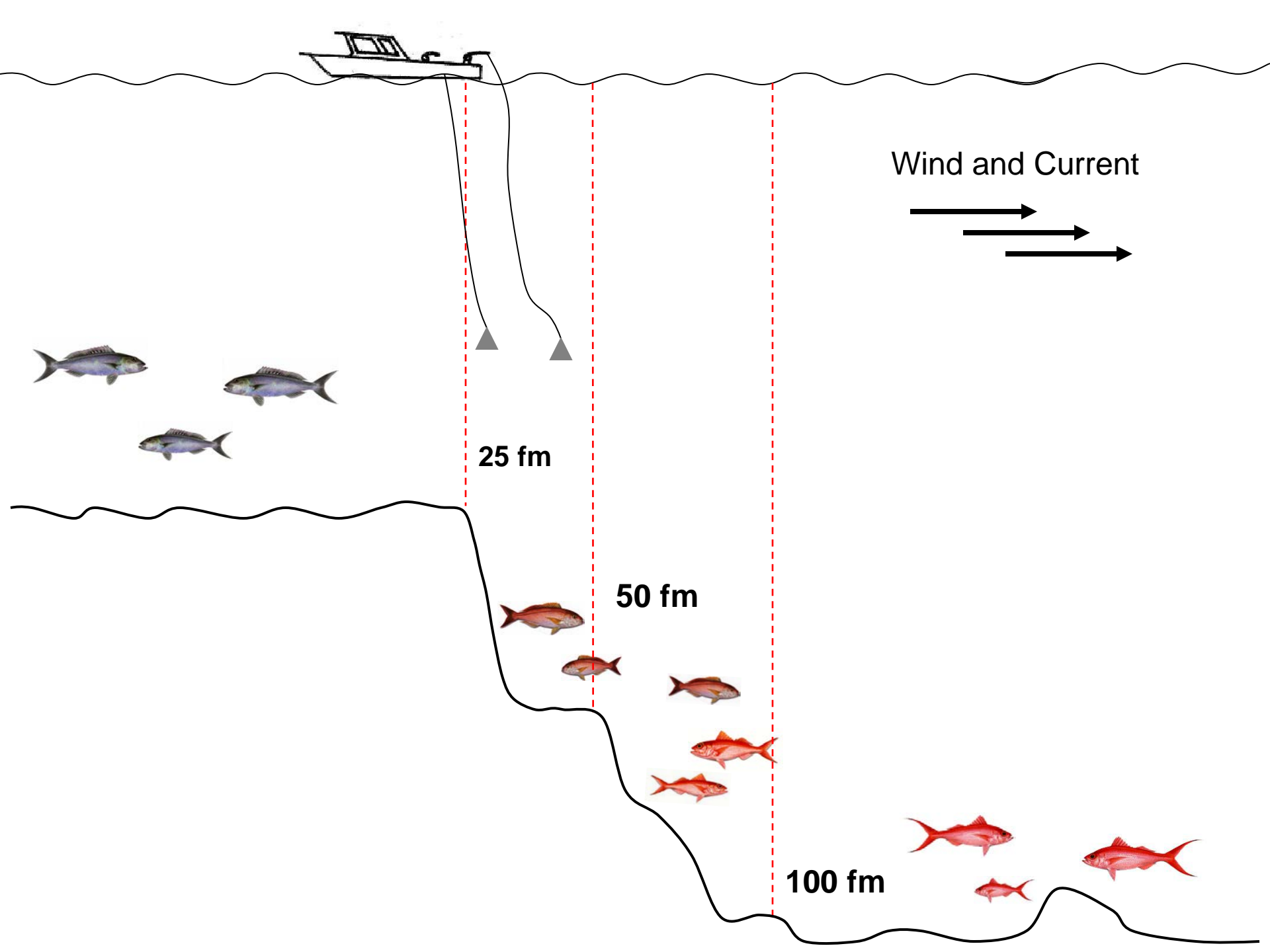


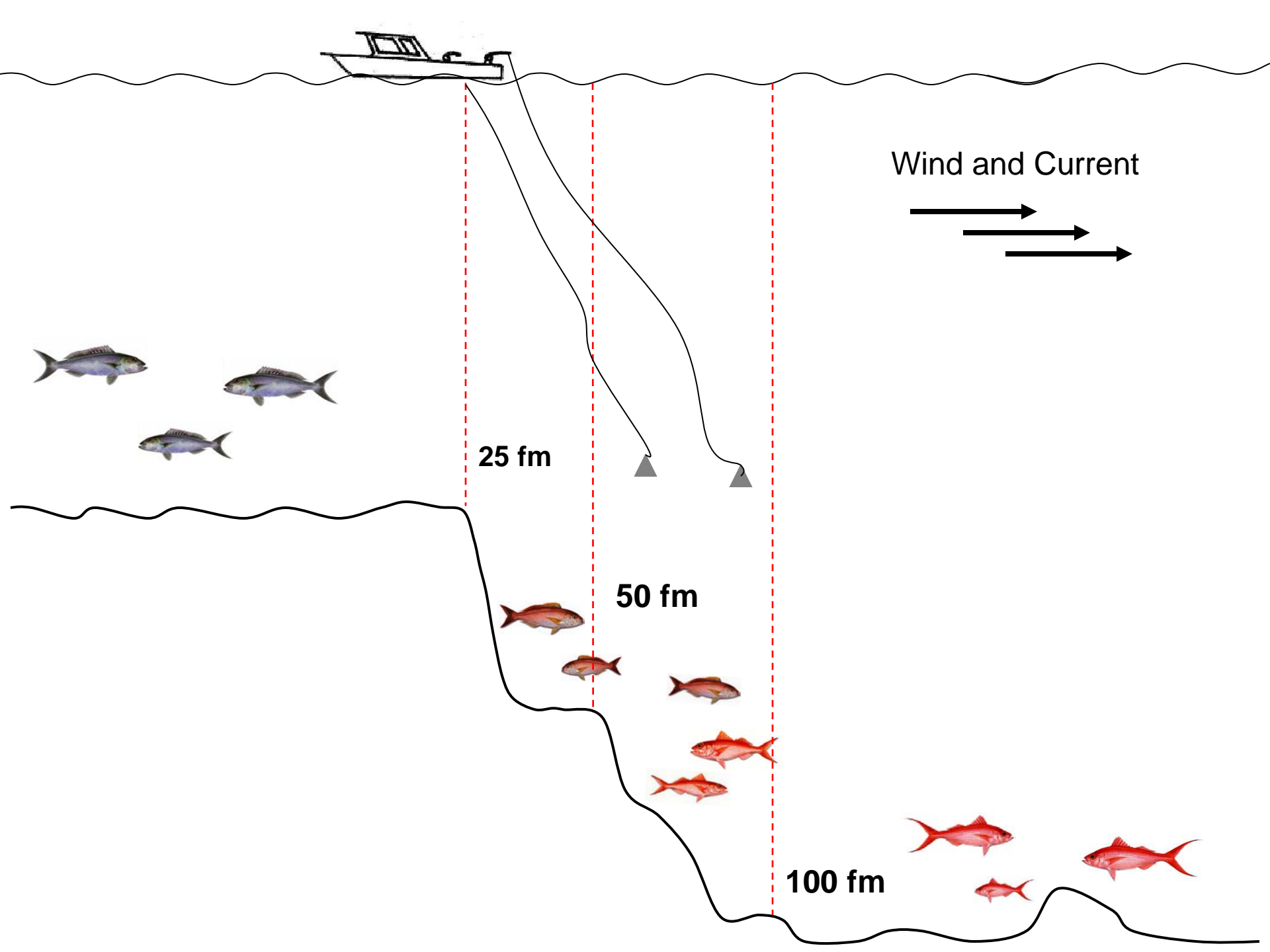
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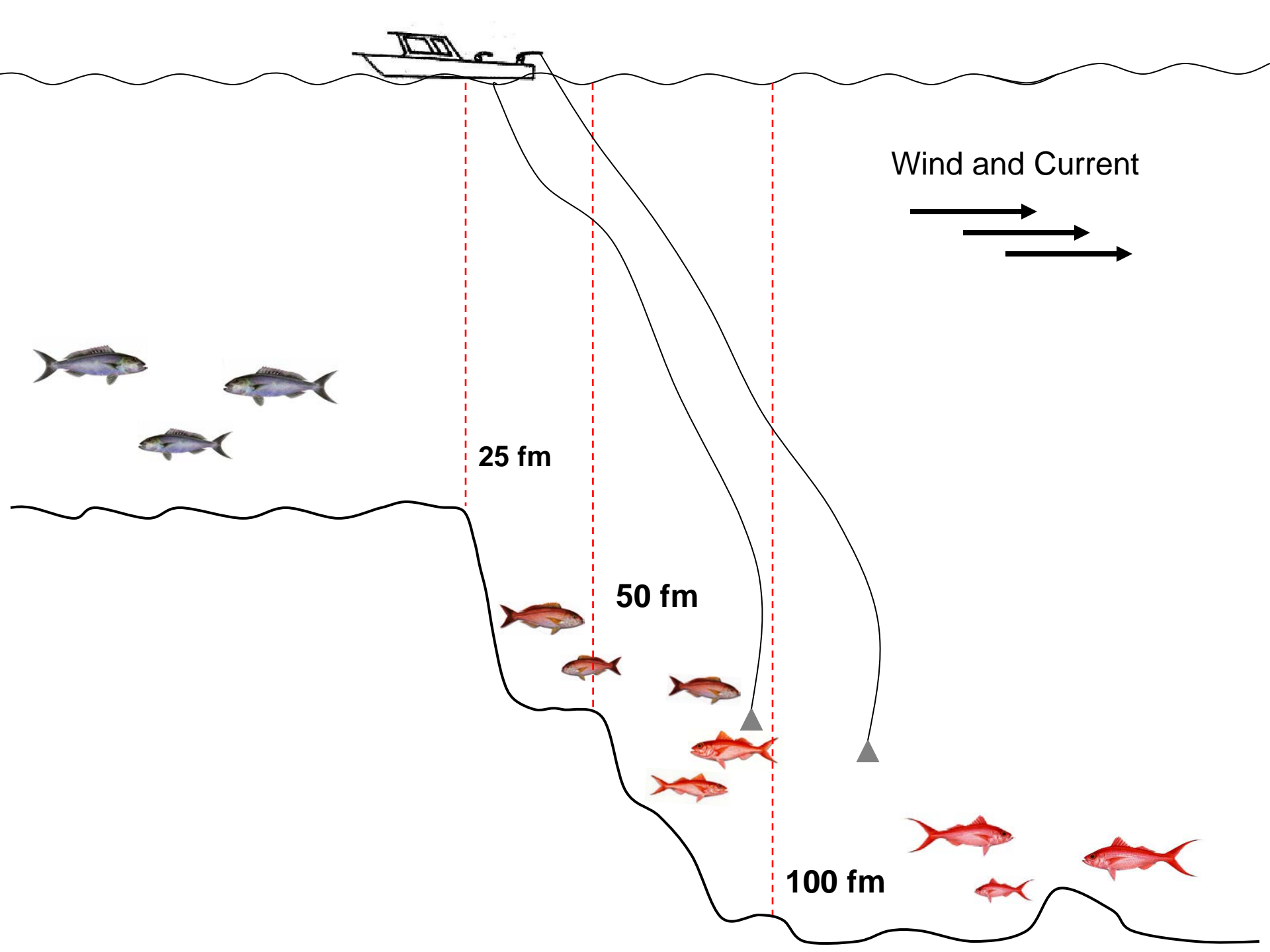


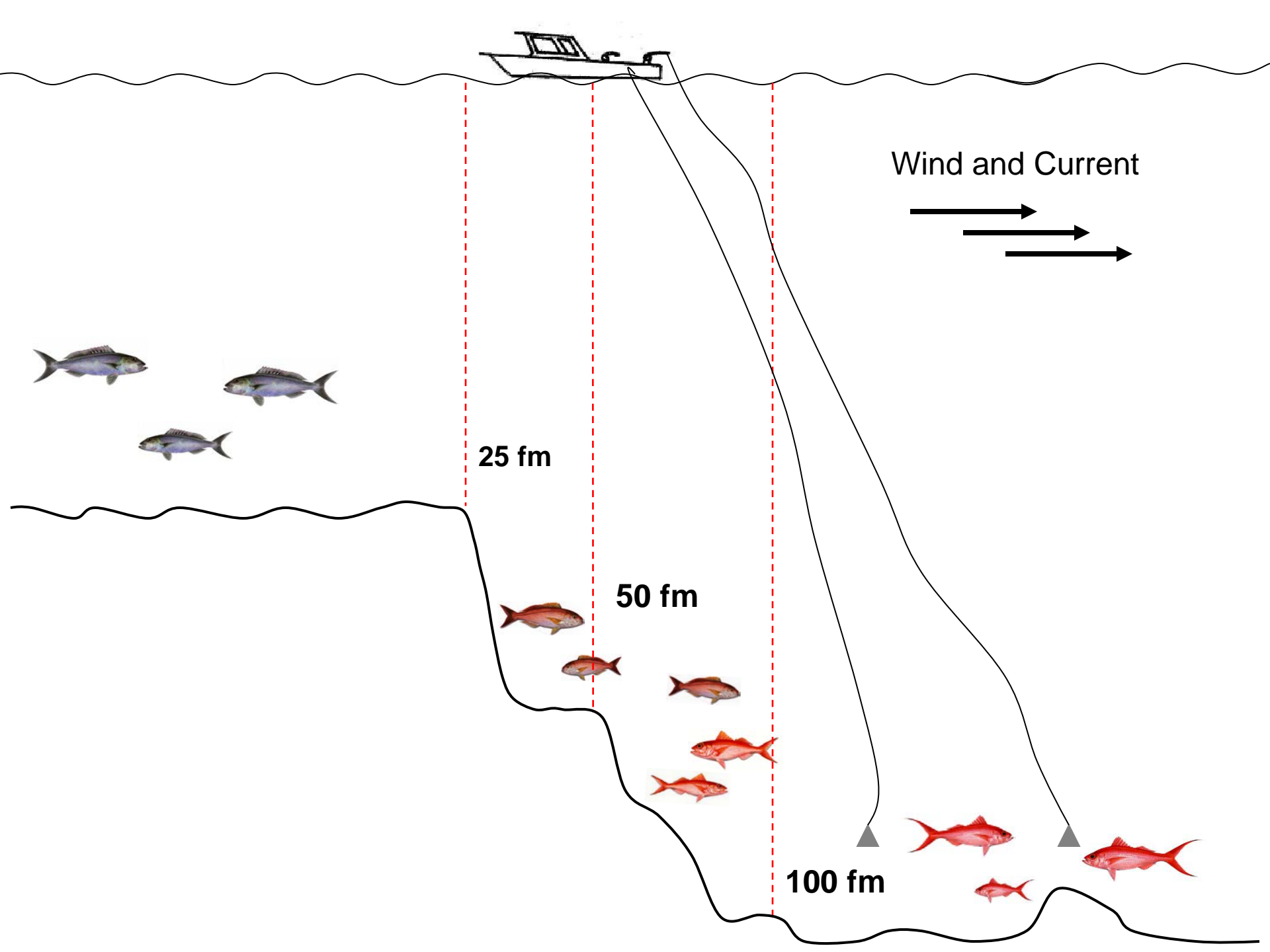




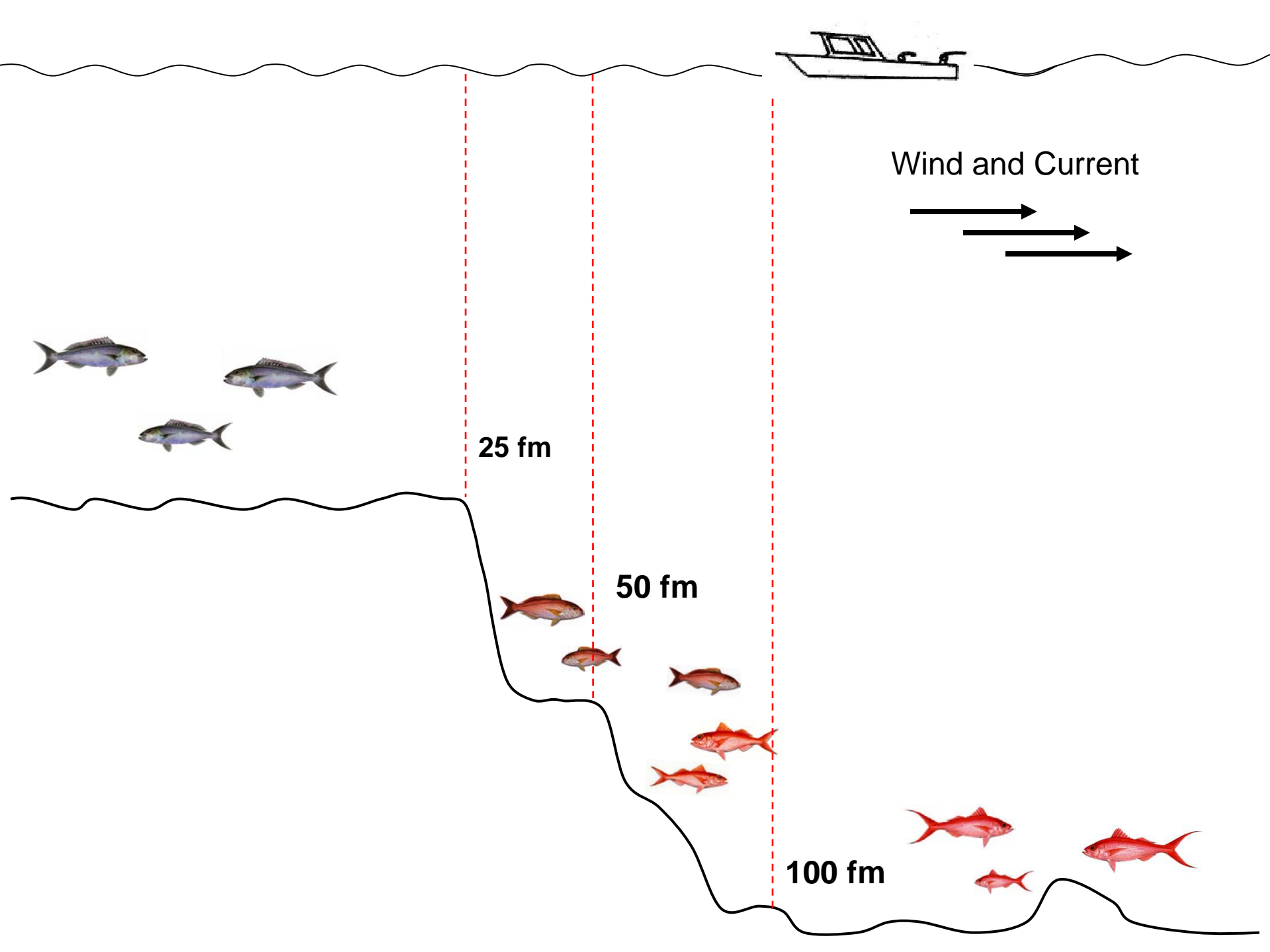












Wind and Current

25 fm

50 fm

100 fm

# The Issues

- No Anchoring provision
- Ecological Reserves and Special Preservation Areas
- **Native Hawaiian Access and Cultural Practices**
- Future Availability of Hawaiian Bottomfish

# Native Hawaiian Issues

- Issue of “taking” and “withdrawal” of islands and waters surrounding NWHI or the “kupuna islands” (Ancestors)
- Viewed by many in the context of the 1893 overthrow of the Kingdom of Hawaii
- Requirement to obtain “permits” and “approval” from Federal government to conduct Native Hawaiian Cultural Activities

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# Commercial Bottomfish Landings

MHI and NWHI 2000–2003 (1,000 lbs)

Year	Mau	Hoomalu	Total NWHI	MHI
2000	49	213	262	497
2001	50	236	286	367
2002	108	120	228	362
2003	77	145	222	273

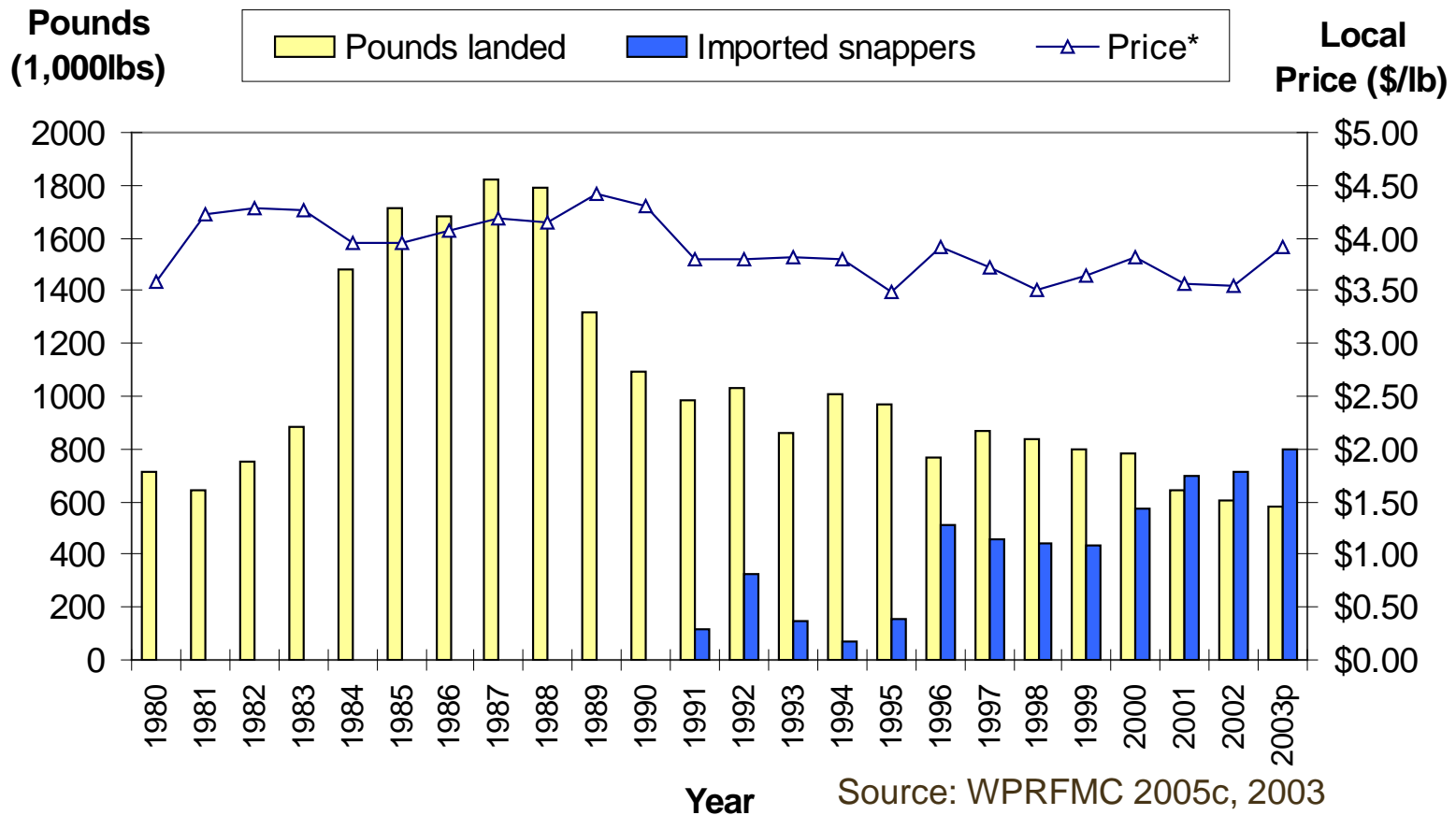
Source: NMFS PIFSC 2006

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# Hawaii Bottomfish Demand

(Annual, Inflation-Adjusted Ex-Vessel Price, and Supplies [Domestic Landings and Imported Fresh Snapper]), 1980–2003



Source: WPRFMC 2005c, 2003  
Bottomfish Annual Report

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# Overfishing ?





# What does an island community do for food?



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# Issue 1: Anchoring

## **Provide for bottomfishers to anchor**

- It is essential to bottomfishing
- Anchor much smaller than R/V
- Use break away anchors
- No impact to habitat or sessile benthos



# Issue 2: ERs and SPAs

## **Allow fishers to fish in these areas**

- No impact to any ecosystem parameters
- Contains majority of the historical bottomfish fishing grounds
- Without access, fishing cannot go on

# Issue 3: Native Hawaiian

- **Allow taking of resources for community sharing**
- **Consider setting islands aside for future Native Hawaiian entity (similar to Kahoolawe)**

# Issue 4: Future Availability

## **Consider allowing limited take of bottomfish to continue in the NWHI**

- MHI will continue to experience depletion even as more areas in MHI are closed