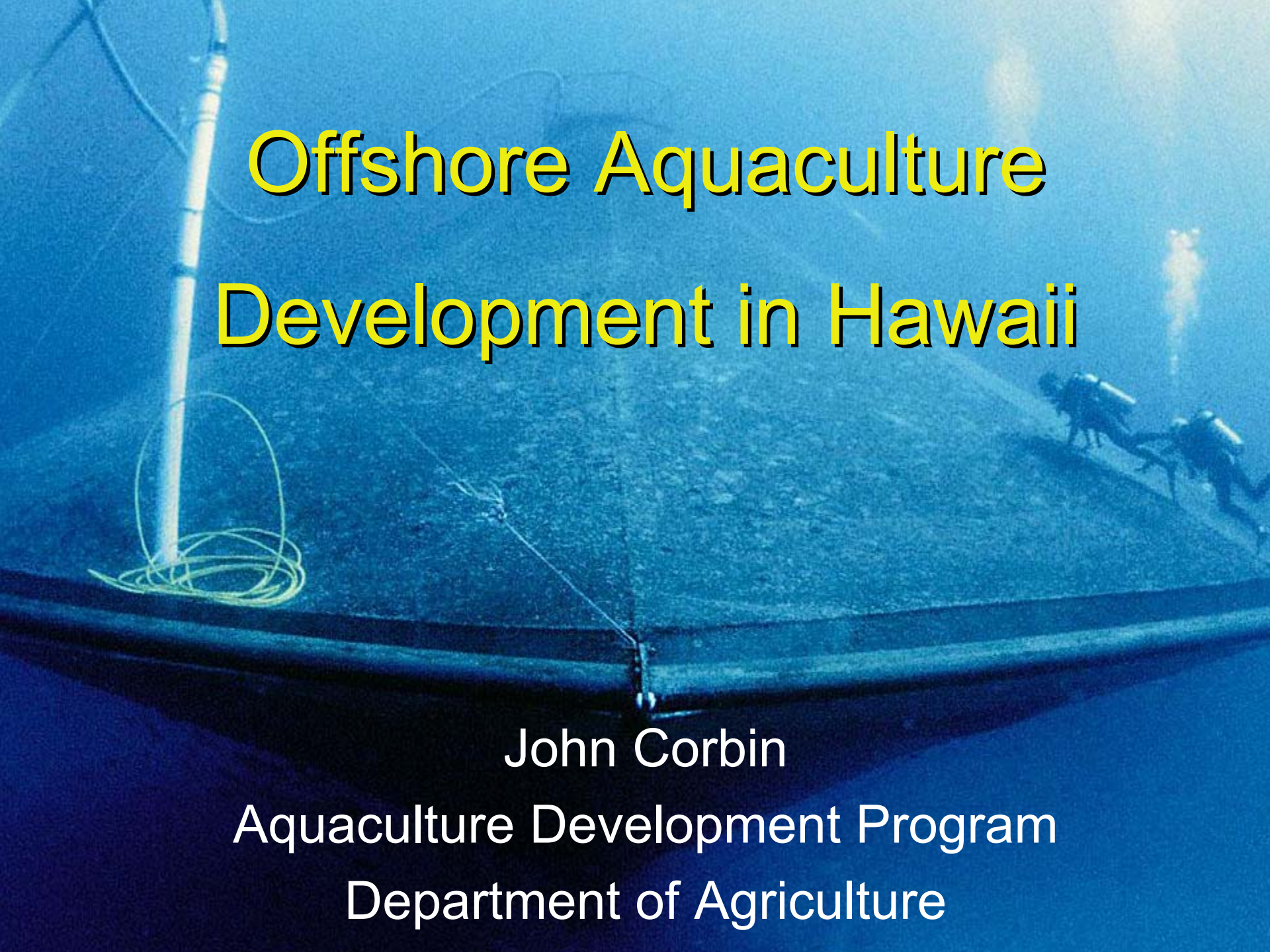


An underwater photograph showing two divers working with a large net. A coiled yellow rope is visible on the left. The scene is set in clear blue water.

Offshore Aquaculture Development in Hawaii

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Topics for Discussion

- Legislative background
- Permitting and lease process
- Current approved leases
- Important lessons

OCEAN LEASING for HAWAII



DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

Ocean Leasing for Hawaii 1981

Study Impacts

- Resulted from House Resolution 474, SLH 1979 to examine the State of Hawaii law
- Looked at ocean leasing for mariculture and OTEC
- Comparative analysis of leasing in 10 coastal states
- Model legislation for a leasing law
- Chapter 190D HRS, SLH 1986, Ocean and Submerged Lands Leasing, for R&D, limited area

Hawaii Ocean Leasing Law 1999

- Act 176, SLH 1999 (DOA, Administration bill)
- Chapter 190D HRS, Ocean and Submerged Lands Leasing, as amended, for commercial mariculture
- Established policy of the State to lease state marine waters for commercial aquaculture
- Includes surface, water column and substrate

Reasons the Law Was Finally Changed

- State supports aquaculture development
- Hatchery technology for mass rearing a local species available
- Growout technology (cage culture) available suitable for the Hawaii open ocean regime
- Federally funded cage demonstration project underway gathering real data
- Experienced ocean interests were ready to develop commercial projects
- A coalition of State, University of Hawaii, Oceanic Institute and the private sector supported amendments

Ocean Jurisdiction in Hawaii

- Hawaii has State-level land use zoning – Urban, Agriculture, Rural and Conservation
- Conservation District has 4 subzones – Protected, Limited, Resource, and General
- All State marine waters are in the Resource subzone (2.8M acres)
- Aquaculture is a permitted use in the Resource subzone (by rule)

Overview:

Aquaculture Permitting/Leasing In State Marine Waters

- Approach-use existing statutes and rules
- Currently applicant is responsible for finding a site
- Aquaculture Development Program role – site and process counseling, Scoping Meeting, facilitation
- Law requires Conservation District Use Permit first then a lease
- Major Permits
 - Conservation District Use Permit, OCCL, DLNR
 - Section 10 Permit, US COE
 - NPDES/ZOM Permits, CWB, DOH
- Lease disposition, LD, DLNR

Conservation District Use Permit Highlights

- The major permit to gain approval of use
- EA required attach to application (Chapter 343, HRS)
 - Follow OEQC Guidelines content and community outreach
- Acceptance of application as complete starts 180-day clock
- Circulated to agencies and public for comment, Libraries
- Public hearing required (nearest venue)
- DLNR receives EA comments, accepts or requires EIS – advise comprehensive EA
- Board of Land and Natural Resources makes final decision on detailed submittal summarizing findings and comments

Conservation District Use Permit Highlights (continued)

- Law specifies certain information in CDUP application
 - Species name (native)
 - Location
 - Use profile
 - Nature of exclusive use
 - Impacts on public and private activity
 - Financial capability
- In addition all applications require:
 - Location/Area Plan
 - Site Plan
 - Emergency Response Plan
 - Business Plan
 - Management Plan

Conservation District Use Permit Highlights (continued)

- Resulting CDUP is a conditioned permit
- Contains both “boiler plate” and specific conditions
- Example boiler plate
 - The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state and county governments...
- Example specific conditions
 - Any culture of fish species, besides the moi fish, shall be approved by Chairperson’s of DLNR and DOA

U.S. Army Corps of Engineers

Section 10 Permit

- The major federal permit
- Required for structures or work in navigable waters of the U.S. (e.g., cage anchors and mooring lines)
- Project description and plans and drawings required
- EA not required – advised to attached EA
- Public announcement of request
- Consultations required
 - U.S. Fish and Wildlife Service
 - NOAA – Fisheries
 - Section 106, Review Historic Preservation
 - CZM Consistency Review
- Review goes beyond navigation and includes conservation, historic values, water quality recreation, general environmental concerns, community welfare, et al.
- District Engineer makes final decision

County Involvement Special Management Area Permit

- SMA boundaries range inland from shoreline.
Vary County to County
- County involvement in ocean leasing process is limited
- SMA Application submitted because required by CDUP – attached EA recommended
- Written waiver is obtained from Planning Office

Ocean Lease Disposition

- Lease is requested by CDUP application submittal
- Lease is authorized by CDUP approval
- Lease includes “boiler plate” and specific provisions
- Law requires certain provisions
 - Option of direct lease or public auction – assurances
 - Term of lease
 - Minimal site size
 - Annual rent – fixed cost and percentage gross
 - Performance bond – removal
 - Escapes become common property
 - Eradication of escapes
 - Appropriate marking of site
 - Assignment of lease
 - Statement of degree of exclusivity
 - Revenues to Special Fund
- Board of Land and Natural Resources makes final decision

NPDES/ZOM Permits, Clean Water Branch, Department of Health Highlights

- Cage aquaculture is treated as point source discharge
- When facility has 100,000 pounds biomass, needs NPDES/ZOM permits
- Protect water quality by regulating discharge of wastewater into waters of U.S.
- Zone of Mixing Permit provides a variance to meet receiving water standards
- EA not required – attached EA advised
- NPDES application includes plans, descriptions, characterization of the effluent, and baseline tests.
- NPDES and ZOM Permits processed concurrently

NPDES/ZOM Permits, Clean Water Branch, Department of Health Highlights (continued)

- The NPDES/ZOM Permits include “boiler plate” (31 pp. standard conditions) and special conditions
- Monitoring requirements (locations, frequency, parameters) are described – negotiated, revisited
- Numerical limitations based on receiving water standards are listed for pH, Nitrogen, Phosphorus, and Turbidity
- ZOM boundaries are described and extend from surface to ocean floor – meet standards at boundaries
- Substrate monitoring procedures and frequency described
- Best management practices are listed

Existing Ocean Lease Authorizations

	<u>CII</u>	<u>BPI</u>	<u>KBWF</u>
Size	28 acres	75 acres	90 acres
Cages/Type	4/submerged	NA	6/submerged 2/surface
Species	Moi (Pacific Threadfin)	Black Pearl Oysters (native)	Kahala (Amberjack)
Term	15 years 10-year option	TBD	20 years

Some Lessons Why the Process Is Working

- Exceptional entrepreneurs – good sites, community issues
- EA required – comprehensive document, Scoping Meeting
- Detailed permit applications – full disclosure
- Important issues addressed up front
 - Exclusivity – spelled out
 - Multiple use – advanced profile
 - Native species
 - Performance bond – removal
 - Reasonable terms and rents
- Extensive community outreach required – information meetings, website, engage the interested public
- Transparency – public hearing, public decision making
- Extensive monitoring-water quality and substrate
 - Adaptive management

Process Improvement GIS-Based Siting for Open Ocean Aquaculture

- Individual sites
- Preferred sites
- Designated sites
- Aquaculture parks

The Beginning

