



Hawai'i Day-Use Mooring Program

Chronological History

Winter, 1981:

National Marine Sanctuary received authorization to install six experimental mooring pins and buoys off Key Largo, Florida. Since that time, 560 such pin-buoy systems have been installed off the shores of Florida and five Caribbean countries. The system is not only approved by the U.S. Government and the State of Florida, its use is required of boaters wherever the system is available.

September 20, 1985:

First correspondence to Hawai'i Sea Grant office from John Halas, developer of the Florida mooring buoy system. Follow up on a meeting with Dr. Jan Auyong when Halas delivered a paper on the mooring buoy system in May 1985 at the Tahiti Coral Reef Congress.

December, 1986:

First general discussion of application of mooring pin-buoy concept to protect Hawai'i's corals. Participants include Sea Grant (Jan Auyong and Ray Tabata), Hawai'i Institute of Geophysics (HIG, George Wilkins, senior scientist), and several Kona dive companies.

February, 1987:

Initial testing of hydraulic drilling system at Makai Range Pier, Makapu'u Point, Oahu. Volunteer support provided at no cost to the State by Hawai'i Sea Grant, HIG, Jack's Diving Locker, and three Oahu dive companies.

March, 1987:

Letter from Bill Paty, DLNR Chairperson, stating that Hawai'i Department of Transportation (DOT) Harbors Division has sole jurisdiction for granting of mooring buoy permits at this time.

March 31, 1987:

First fully documented meeting on the subject. Held in Kona. Kona TORCH (The Ocean Recreation Council of Hawai'i) and Ray Tabata of Hawai'i Sea Grant were present. Ian Birnie (DOT Harbors) attended to give informal background advice. Tabata reported on contacts already made by Senator Dick Matsuura with Henry Sakuda, DLNR-Division of Aquatic Resources (DAR) Administrator. Birnie suggested that the mooring buoy system be incorporated under the umbrella of Ocean Recreation Management Areas (ORMA) to expedite future applications for permits. The unanimous agreement was that Hawai'i had a system that would work and that only permits were needed to begin installations.

April 7, 1987:

Letter from Ray Tabata and George Wilkins requests that Hawai'i Sea Grant begin a formal program to support the Day Use Mooring pin-buoy Program. This letter was needed to support release of Hawai'i Sea Grant funds to pay 50% of the cost of the hydraulic drilling system.

May 4, 1987:

Memo from George Wilkins to HIG, asking for funding to cover 50% of the cost of the drilling system. Both requests were approved, and the \$6,279.00 cost was equally shared by Hawai'i Sea Grant and HIG. The purchase was further justified by the continuing need for such a system in University research projects.

May, 1987:

The drilling System was demonstrated in Kailua Bay and Honokōhau Harbor on the Kona Coast of Hawai'i Island to install swim buoy anchors and to replace existing permitted antiquated mooring/anchors. DOT Harbors Division gave full support, including the use of its Marine Patrol boat as the work boat.

May–December, 1987:

Spent marking time while DOT Harbors and DLNR worked out jurisdictional problems of responsibility between surface and substrata resources.

December, 1987:

Formal application made by Kona TORCH group to DOT asking for permission to install Day–Use Mooring pins at identified sites off the Kona Coast. Application included maps with location of buoy sites.

December, 1987:

Report to DLNR from Makai Ocean Engineering Company on feasibility and approach to installing mooring pins and buoys off of Molokini Island.

January 13, 1988:

DLNR news release announces plan to install "temporary moorings off of Molokini Island to protect the reef from anchor damage."

April 13, 1988:

Bill Paty testified to House Committees on Planning, Energy, Environmental Protection and Ocean and Marine Resources. Paty said that he totally supported the Day–Use Mooring pin–buoy system and its application to Hawai'i, and that he already had the

funds to pay for the hardware for at least 100 such installations (assuming that divers, boats and the drilling system were available at no cost to the State).

April, 1988:

Molokini operation is completed. Thirty mooring pins were installed around the inner rim of Molokini Island Crater. All were tested with a 4000 lb. load locker. DLNR provided the mooring pins and grout capsules. Except for Marc Rosen of HIG (Project Engineer), all dive time, boats, travel costs and per diem expenses were donated by Maui, O'ahu and Kona operators and volunteers. Note: Specific pin locations were chosen by HIG project coordinator (Marc Rosen). The choices were made according to a general plan previously checked with DLNR, but modified to fit the general condition of seafloor substrata. There was no onsite representation by DLNR or DOT.

October, 1988:

At a Hawai'i Sea Grant/HIG/TORCH meeting with DLNR (Henry Sakuda) and DOT Harbors (Dave Parsons), it became clear that no progress was being made to resolve the issue of jurisdiction over the permitting process for the Day-Use Mooring pin-buoy system.

George Wilkins reported that he had an opportunity to ship the drilling system free from Maui to Kona and that he planned to use it there to support installation, by DOT Harbors, of additional mooring pins for swim buoys in Kailua Bay, and for boat moorings in Honokōhau Small Boat Harbor.

He told Sakuda and Parsons that we needed long-term experience/ data on the holding power of the mooring pins in other substrates (especially lava and coral) and that experimental pins should be installed in such substrates.

He also said he was willing to wait for several months for DOT Harbors and DLNR to resolve the jurisdictional issues if a resolution was in sight. Once resolved he would:

- 1) Allow the drilling system to be used to install an unspecified number of bolts [pins? we should be consistent] off the Kona Coast. These pins would be tested for holding power and would not be rigged for use with buoys until testing was complete and permission granted.
- 2) Supply DLNR and DOT Harbors with information on location, water depth, substrate and test load for each pin.
- 3) Continue periodic testing until permits were finally granted.

May, 1989:

Six months after the October meeting ... and after the completion of free, volunteer-supported drilling and drilling and pin installation for DOT Harbors, permission was given by DLNR & DOT Harbors to install and test mooring pins at 46 sites along the Kona Coast. Site information was given to DOT Harbors and DLNR.

September, 1989:

Letter from Terry O'Halloran (TORCH President) to Bill Paty adding supplemental background information to DOT's after-the-fact application to DLNR for permits for Day-Use Moorings off the Kona Coast. Verbal permission given to install, although written permission was unaccounted for.

January, 1990:

Board of Land and Natural Resources hearing, requesting after-the-fact permit for installation of 46 Day-Use Mooring pins off the Kona Coast.

June 28, 1990:

Letter of permission to rig Day-Use Moorings given to George Wilkins, HIG, by Dave Parsons, DOT Harbors.

1990:

Malama Kai Foundation established.

\$10,000 donated by Grateful Dead to purchase materials for installation of buoys onto existing Day-Use Mooring Pins.

December 2, 1992:

Public Day-Use Mooring Workshop held by Hawai'i Sea Grant and Hawai'i Department of Business, Economic Development and Tourism (DBEDT).

The legislature transfers DOT Harbors-Boating Division, to DLNR becoming the Division of Boating and Ocean Recreation (DOBOR).

March, 1994:

Environmental Assessment for additional buoys prepared by DLNR and submitted as part of an application for a U.S. Army Corps permit. Public comment period started for 277 additional Day-Use Moorings statewide.

June 8, 1995:

General Permit is issued by the U.S. Army Corps of Engineers to Department of Land and Natural Resources (DLNR) to install additional 277 Day Use Moorings statewide.

July 14, 1995:

Chapter 13–257, Hawai‘i Administrative Rules, entitled “Day Use Mooring Rules”, is adopted. These moorings include all moorings at Molokini Island and the original 46 moorings off the Kona Coast of Hawai‘i Island.

2004:

Letter of request made by DLNR–DOBOR to the U.S. Army Corps of Engineers for installation of five moorings each off Kaua‘i, Maui, and the Kona Coast of Hawai‘i.

2005:

Letter of permission received from the U.S. Army Corps of Engineers to install 15 additional Day–Use Moorings statewide. This includes five moorings off Kaua‘i, five off Maui, and five off the Kona Coast of Hawai‘i.

Dive West Hawai‘i by Day–Use Moorings guidebook published by Malama Kai Foundation.

Malama Kai Foundation sponsored training session for Day–Use Mooring installation and maintenance on Maui. Installation of five Day–Use Moorings was completed off the Maui Coast. Additionally, one mooring was repaired on Molokini Island.

MKF fieldS numerous requests for additional Day–Use Moorings statewide, as well as receiving complaints that reefs are being destroyed due to slow progress on installation of moorings.

2009:

Public meetings conducted statewide to determine potential sites for additional Day–Use Moorings.

Malama Kai Foundation publishes Hawaii Day-Use Mooring Buoy System Background, Site Selection Criteria, Installation, and Maintenance Procedures Manual. The manual outlines statewide standards for day-use mooring materials, as well as installation and maintenance procedures.

DLNR-DOBOR submitted application to US Army Corps of Engineers for 52 additional moorings statewide.

Maui County Day-Use Moorings guidebook published by Malama Kai Foundation.

2010:

DLNR-DOBOR received Letter of Permission from US Army Corps of Engineers to install 52 new moorings statewide.

Hawaii Day-Use Mooring Program 10-Year Strategic Plan developed by Malama Kai Foundation, under contract from DLNR Division of Aquatic Resources.

Board of Land and Natural Resources provides \$60,000 to Malama Kai Foundation for help with installation of new moorings. Funds were provided from a coral reef damage settlement on Maui.

Malama Kai Foundation forms the Day-Use Mooring Working Group with representatives from Kaua'i, O'ahu, Maui, Lana'i, and Hawai'i to share information and coordinate mooring installation.

2011:

Grant received by Malama Kai Foundation from the Hawai'i Tourism Authority to create day-use mooring guidebooks for Kaua'i and O'ahu.

Malama Kai Foundation receives \$6,750 (cash and in-kind) from a Kona marine operation as a DLNR-approved settlement for coral reef damage.

On behalf of DLNR and working with HIRSA (Hawaiian Islands Recreational Scuba Association), dive businesses are installing new moorings.

Malama Kai Foundation creates a new website that will feature an on-line day-use moorings section for the general public, providing search capabilities and maps for all moorings. Also being developed is an access-protected maintenance and database feature that will allow maintenance data to be entered directly to the statewide database from the field.