

Thorne Abbott

Goals

Keeping people and structures out of harm's way by avoiding erosion and flood prone areas through the planning, permitting and redevelopment process.

Helping communities build back *safer, stronger, and smarter!*

Experience

Two decades of coastal permitting experience in Hawaii and Maui.

Proficient permitting requirements for coastal properties:

- MCC 19 Zoning:
 - 19.35 Accessory Dwellings
 - 19.48 Historic Districts
 - 19.62 Flood Hazard Areas & Flood Development Permits
- MCC 20.08 Environmental Protection; Grading Ordinance
- Special Management Area Permits
- Shoreline Setback Permits
- Environmental Assessments
- Maui Automated Planning & Permitting & Planning (MAPPS)
- State Conservation District Use Permits & Right of Entry Permits

Experienced super typhoon Pongsona (2002), Saipan, Northern Mariana Islands.

Mr. Abbott is an experienced coastal manager and environmental planner. His efforts improved developments by capitalizing on the natural interest created by conserving environmental resources and improving their quality. He has internationally in Vietnam, Singapore, Thailand, Japan, Indonesia, Australia, Turkey, and the Northern Mariana Islands. Mr. Abbott has worked in the government, non-profit, education, research, and private sectors. Based on that experience, he has served as a shoreline and coastal resources expert developing cross-jurisdictional, multi-sector approaches to solving complex coastal and environmental problems.

Mr. Abbott co-chaired seminars on shoreline law in Hawaii and has published articles on using historic erosion trends to determine appropriate construction setbacks from the shoreline. He serves on the Hawaiian Islands Humpback Whale National Marine Sanctuary Advisory Committee, the Northwestern Hawaiian Island Coral Reef Ecosystem Research Advisory Council, and the State Natural Area Reserves Commission. He also served on the Hawaii Audubon Society Board of Directors, the Maui Nui Marine Resource Council Coral Reef Recovery Team, and Chaired the Legacy Land Conservation Commission to which two Governor's appointed him.

Recent projects include recommendations for streamlining the coastal permitting process for the Maui County Planning Department and devising a state-wide Regional Shoreline Management strategy for the State Office of Planning and Sustainable Development.

Post-Disaster Reconstruction Guidelines and Protocols for Maui County.

Developed a series of guidelines and protocols to facilitate expeditious reconstruction after a major coastal storm while protecting and conserving important community cultural and natural coastal resources. The project developed locally sensitive strategies based on community input in focused workshops and meetings with stakeholders. A Project Advisory Group representing a cross section of federal, state and county officials, and deliberation of the project with academics and experts at PRiMO Conferences and ORMP meetings refined messaging and ideas.

Serving over 100
satisfied Clients
since 2013

- > Coastal Management
- > Protected Species
- > Conservation Areas
- > Policy Formation
- > Public Participation
- > Stakeholder Inclusion
- > Erosion Response
- > Managed Retreat
- > Adaptive Realignment
- > Shoreline & Coastal Permitting
- > Environmental Assessments
- > SMA Permits
- > Shoreline Permits
- > **Flood Development Permits**

20+

2005 / Doctoral Studies
University of Hawaii
Department of Urban &
Regional Planning

2000 / Post-Masters
Coastal Planning
University of Maryland
Solomon's Island
Research Lab

1998 / Masters of
Science Environmental
Management
James Cook University
Townsville, Australia

1993 / Bachelors of Arts
Environmental Studies
West Virginia University
Morgantown, WV

33 peer-reviewed publications and presentations in various forums such as:

International Journal of Ocean and Coastal Management

Journal of Environmental Design Research

American Society of Civil Engineers

Managed Realignment, Springer Books (contributing author)

The Beach Management Plan for Maui, 2008 (co-author)

Maui Coral Reef Recovery Plan (contributing author)

NOAA Coastlines

Coastal Zone Conferences 1999 – 2011

IUCN/WWF publications

Pacific Islands Fishery News

Presentations to WESTPac and the US Coral Reef Task Force.

WEF/WERF Conferences and Journals

Publications may be viewed online at <http://>

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Coastal Planning & Permitting

Beach Management Plan for the Island of Maui, HI. Co-author of best practices for managing and conserving beaches, shoreline access, dunes, and discerning appropriate response to coastal and episodic erosional events. The Plan addresses sea level rise, reef ecosystems, beach nourishment and coastal erosion and hazard data. The Plan offers practical, integrated recommendations and tools to solve coastal erosion and oceanfront development issues.

Kapalua Public Access Trail Planning and Permitting, West Maui, HI. Provided planning and permitting assistance for a new coastal trail on West Maui. The 3.5-mile coastal trail connects five beach areas, expanded parking lots, improved comfort facilities, and areas with stunning oceanic views. Helped the landowner obtain coastal, shoreline and conservation district use permits, and obtained authorization through public hearings and outreach meetings.

SAND Alt - Sea Level Rise Risk Management. Obtained \$87,500 in competitive federal funding for a GIS-based oceanfront development and shoreline hardening risk model (SAND-Alt). The model is intended to incorporate sea level rise and flood inundation based on LiDAR, coastal erosion rate data, cultural preservation and ocean recreational sites, and a priority planning tool to determine which areas may harden the shoreline and which should be required to retreat from coastal hazards.

Shoreline Setback Ordinance, Kauai, HI. Developed an innovative shoreline setback ordinance for the island of Kauai that incorporates building lifespan, footprint, and site-specific coastal erosion rates with incentives to encourage managed retreat from the shoreline for oceanfront developments. The multi-year collaboration included multiple presentations to the Kauai County Council and Planning Commission, radio talk shows, and training workshops.

Managed Retreat at the Maui Lu, Kaanapali Ali'i, Maui Palms, & Royal Lahaina, by implementing site-specific avoidance strategies.

Beach Restoration & Nourishment. Obtained high-quality, clean sand to help restore eroded beaches. Developed water quality monitoring plans, processed necessary permits, and obtained government approvals. Gained community involvement in eight volunteer-based beach nourishment and dune restoration projects, adding dune walkovers, native plant restoration, educational signage, and beach conservation outreach activities.

Coastal Adaptive Redevelopment Planning, Wailea, HI. Responsible for gaining Commission approval of a \$19 million renovation to the **Wailea Marriott Resort**, including renovating a 552-room hotel, cluster development and managed retreat from the shoreline including relocation of a 3-story building and a sewer trunk line.

Managed Retreat Planning and Permitting, Maui County, HI. Responsible for coastal and environmental permitting of the 439-acre **Ukumehame subdivision**. The action resulted in 45 agricultural lots, a 77-acre protected riparian lot, and a 100-acre 1.4-mile lineal coastal park. Land was also allocated for the inland relocation of a major highway out of the erosion hazard and tsunami inundation zone.

Seawall Repairs, Various West Maui Condominiums, Maui, HI. Facilitated federal, state and/or county government approvals for repairs to failing seawalls for seven 1970s era condominiums facing erosion crisis along West Maui's changing coastline. Garnered government approval for drainage enhancements, created new public access paths to the shoreline and developed best management practices accepted by the US Army Corps of Engineers, Department of Land and Natural Resources, and County authorities. Authored compliance reports and assembled teams of professionals to develop sound strategies for erosion response.

Co-Chair, Hawaii's
Shoreline: Legal &
Regulatory Issues, Sea
Level Rise and
Adaptation

Hawaiian Island
Humpback Whale
National Marine
Sanctuary Advisory
Council

Papahānaumokuākea
Marine National
Monument Research
Advisory Council

Maui Nui Marine
Resource Council Coral
Reef Recovery Team

Governor's appointments
– Natural Area Reserves
System Commission

– Chair, Legacy Land
Conservation
Commission

– Hawaii Ocean &
Coastal Council

Board of Directors,
Hawaii Audubon Society

U.S. Delegate, World
Parks Congress

Board of Trustee's,
MCLT / HILT

Hawaii Coastal and
Estuarine Land
Conservation Plan
Advisory Committee

Hawaii Ocean Resource
Management Plan
Working Group

Maui County Marine
Mammal Stranding
Network

US Coral Reef Initiative
Navigator

Utility, Site & Transportation Planning

Dry Dock Boat Repair, Inspection and Storage Facility, Kahului, Maui, HI.

Analyzed the feasibility of a boat maintenance facility with long-term trailered vessel parking and dry dock services for repairs and inspections of vessels up to 75 feet long. Analyzed land use, environmental issues, drainage and landscaping, permitting plan, community and agency concerns, and requisite studies. Presently developing an Environmental Assessment and Conservation District Use permits.

Kauai Fuel Terminal SMA and Zoning Permit Approval. Authored applications to obtain various approval for renovations and improvements to a fuel terminal at Nawiliili Harbor, including installation of new impervious liners, ecology block retaining walls, new fuel conveyance system, and restoration of the existing fuel tanks to enhance resiliency to coastal hazards.

Solar Utility-Grade Production Facilities, Oahu, Maui, Big Island, HI. Developed various City, County and State land use and Special Use applications and supporting cultural and environmental information to facilitate utility scale energy production from PV, Concentrated PV, and PV with on-demand storage system projects in Oahu, the Island of Hawaii and Maui County. Worked closely with the DBEDT Energy Division and State Land Use Commission office to facilitate expeditious approval of these innovative renewable energy projects.

Ferry System (Inter-Island) and Small Boat Harbor Improvements for Maui, Lanai, & Molokai Islands, HI. Lead Planner responsible for processing Special Management Area Permit, Shoreline Variance, and an Environmental Assessment for major facility improvements at the County's small boat harbors and its inter-island ferry system. Seven separate projects, each with its own coastal and environmental review and approval process, updated and improved commercial vessel operations and ocean recreational facilities at Lahaina Harbor, Mala Wharf, Maalaea Harbor, Kihei Boat Ramp, Hana Boat Ramp, Manele Bay, Lanai, and Kaunakakai, Molokai. Coordinated public input and presented each project to the respective island Planning Commission during public hearings where the merits, mitigation strategies, best management practices and conditions of approval were discussed, debated, and voted upon. Facilitated incorporation of lighting restrictions, sewage pump out facilities, refueling limitations, architectural review and improved public and trailer-vessel parking facilities at Maalaea and Manele Bay. Minimized concerns about dredging operations and contaminants at Mala and Kihei locations by recommending conditions to implement site-specific best management practices and protocols.

Community Planning & Public Outreach

Walk Story, Maui Island Plan 2030. Facilitator for a 2-day workshop where 60+ participants established urban growth boundaries through charrettes, interactive density and mapping exercises, and delineated growth centers for year 2030.

Maui Island Plan (MIP), 2030. Jointly-authored coastal, recreation, habitat, watershed and natural resource sections of the MIP developing goals, objectives, strategies, and benchmarks, plus funding needs to achieve the Island's sustainable growth to 2030. Collaborated with General Plan Advisory Committee members to vet the documents and revise the document to address GPAC member concerns and needs.

Public Involvement Plan, Tinian, CNMI. Developed a public involvement plan (PIP) and sensitivity workshop for the US Marine Corp and Navy. The PIP supported scoping exercises for a NEPA-based Overseas EIS. The PIP helps engage the CNMI residents in decision making on live fire training of troops from overseas. Issues addressed in the PIP include environmental, coastal, marine, socio-economic, cultural, water, public safety, transportation, and shoreline access issues.

Easements in Hawaii
(The Seminar Group)

NEPA & Section 7
Updates

(USCOE)

Water Quality Permitting
(USCOE)

Ethics in Planning

(HI APA)

Watershed Planning
(USEPA)

Comprehensive
Conservation Plans
(USFWS)

Community Profiling &
Identity (USEPA)

Effective Presentation
Skills (AMA)

Negotiation & Mediation
Techniques (AMA)

Coral Reef Histology
(George Wash. Univ.)

East West Center
Affiliate

Environmental Impact Assessment

Honolulu Seawater Air Conditioning, HI. Developed and facilitated the approval and processing of the project's Special Management Area, Shoreline Variance, Community Development and Conservation District Use permits, and supporting environmental assessment through public hearings, discourse, and engaging decision makers. Co-authored and completed Coastal Zone Consistency Determinations and State and Federal Environmental Impact Statements for the project. This innovative, private utility-scale, energy conservation project uses cold seawater to cool a closed-loop air-conditioning system that will serve up to 65 high-rise buildings in downtown Honolulu, Hawaii, substantially reducing potable water use and wastewater generation, as well as saving considerable energy.

Hawaii Environmental Assessment (HEPA) – Marine Research Center Relocation Pier 34/35, Oahu, HI. Managed agency and public comments, responses, revisions of the Draft EA, public notification, dissemination and distribution of the Final EA, and issuance of the FONSI by the Hawaii Department of Transportation in order to relocate and expand the University of Hawaii's Marine Research Center in Honolulu Harbor, Oahu, HI.

Hawaii Environmental Assessment (HEPA) - Barber's Point Redevelopment, Kapolei, HI. Assisted the Hawaii Army National Guard with relocating troops, equipment and personnel to Kalaeloa as part of the Barber's Point redevelopment efforts. Served as the contributing author to the federal and state environmental assessment (EA) for which a Finding of No Significant Impact was issued. Additionally, I wrote a traffic assessment in support of the EA, which was accepted by local and state transportation agencies, as well as the National Guard Bureau in Alexandria, VA. I arranged and facilitated public outreach, Neighborhood Board and agencies meetings, was responsible for the publication and production of the EA, gathering and responding to public / agency comments and coordination with the National Guard personnel.

NEPA - Federal EIS - Guam and CNMI Military Relocation from Okinawa, Japan. Facilitated the development of specific mitigation measures and best management practices for the EIS. Ensured that each measure was consistent between the four separate proposed actions and internally consistent between and across resources. Internal and intra-resource consistency was of critical importance since the measures became part of the Record of Decision and are legally enforceable.

NEPA – Federal Supplemental EIS (SEIS) – Department of Defense (DOD) Military Relocation from Okinawa, Japan to Guam. Contributing team author for the cumulative impact section. The SEIS evaluated the proposed action in light of past, present and reasonably foreseeable actions. Evaluated the potential impacts of collective actions by DOD and non-DOD parties and their additive effects relative to each of 13 alternatives considered in the SEIS. Required evaluating all currently permitted and proposed projects, their location and effect, and cumulative effect on natural, coastal, recreational, and environmental resources and public infrastructure.

NEPA - Federal Overseas EIS - Marine Corps Live Fire Training, CNMI. Socioeconomic analysis of the proposed action including developing questionnaires, lists of interviewees, and creating primary and secondary data sources. Facilitated stakeholder, agency, political actors, and decision maker interviews, topical research, and assessments of the potential impact of the proposed action and its alternatives on social and economic viability, environmental justice, public health, welfare and growth, particularly on the islands of Pagan, Tinian and Saipan.

Conservation & Protected Areas

He'eia State Park, Traditional Canoe Hale and Education Pavilion, Oahu, HI. Obtained Special Management Area and Shoreline Management permits. Facilitated Land Board and agency acceptance of an Environmental Assessment Exemption for the construction of new education center by the Pukea Foundation, in collaboration with Kama'aina Kids. The facility encourages sharing by kupuna of traditional Koa canoe and paddle making techniques while educating participants in cultural, coastal and environmental issues and sustainable practices.

Natural Resource Planning, Kahana Beach Park, Maui, HI. Authored a natural resources report that identified environmental constraints and opportunities at Kahana Beach Park as part of a master plan. Created GIS-based maps illustrating natural resources, sand dunes, wetlands, flood inundation and erosion prone areas. Identified areas for native species restoration, established opportunities for easily maintained interventions to prevent habitat degradation from human use, laid out appropriate pedestrian trails, bike paths, and educational opportunities. Developed human use areas, as well as areas needing greater protection, management, and conservation actions. Presented findings and facilitated public discourse on identified resources, proposed management plans, and strategies for balanced use and ecological conservation activities with stakeholders and Park staff.

Conservation Area Planning, Lipoa Point & Honolua Bay, Maui, HI. Authored a Natural Environment Coastal Report for this newly acquired 244-acre site in West Maui. The report identified natural and environmental resources, constraints, opportunities, and land use entitlements. It evaluated permitting requirements and regulatory frameworks for a range of potential improvements identified by agencies, stakeholders, and the public. Recommendations for the long-term sustainable use of this unique, undeveloped property were provided to serve as a basis for master planning by the State Department of Land & Natural Resources.

Wetland & Biological Resources Evaluation, Guam. In support of an EIS for proposed military expansion on Guam, assisted with reporting on the quality, type, diversity, species richness and abundance, and threats to wetlands, flora and fauna.

Kagman Wetland Educational Exhibit, CNMI. Lead consultant for the design and content of four interpretive wetland signs, funded by the National Resource Conservation Service. The multi-lingual signs target student audiences to inform them of the importance of wetlands within the landscape. Responsibilities included text, graphics, indigenous language translation, integrating and formatting high-resolution photographs, use of local names, places and native species, and writing in Chamorro, Carolinian and English languages.

Endangered Species Mitigation Bank, CNMI. Co-author of an innovative, adaptive management Plan for the long-term protection of the Nightingale Reed Warbler, a federally listed endangered species. The U.S. Fish & Wildlife Service approved the plan that serves as mitigation for the incidental take of critical habitat and/or wildlife and presented the Plan at the National Mitigation Banking Conference.

Legislative & Regulatory Amendments. Facilitated two significant amendments to the Hawaii Coastal Zone Management Act, Hawaii Revised Statutes Chapter 205A and prevented a third from passage. Contributed to revisions of Hawaii's Environmental Review law (HRS 343) and regulations (HAR 11-200). Routinely advised the public, developers and the Maui, Lanai and Molokai Planning Commissions on coastal and environmental issues, and conducted annual training for each Commission and County Council. Served as an expert witness in legal proceedings, depositions and lawsuits and frequent guest speaker / lecturer on coastal issues. Authored seven amendments of county shoreline and SMA rules to strengthen coastal management and streamline project permitting.

Coastal Planners, LLC
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Wailuku, HI 96793
2013-current

Cardno TEC, Inc,
Honolulu, HI
2009 - 2013

Maui County Planning
Department, Wailuku, HI
2004-2009

CNMI Division of Fish &
Wildlife, Saipan, CNM
2001-2004

University College /
College of Southern
Maryland, College Park
La Plata, MD
1999 - 2002

Water Environment
Research Foundation,
Alexandria, VA
1996 - 1999

CRC Reef Research
Center, Townsville,
Queensland, Australia
1994 -1995

provided upon request