# CURT DARON STORLAZZI

U.S. Geological Survey Pacific Science Center 400 Natural Bridges Drive Santa Cruz, CA 95060 Office: (831) 427 - 4721 Fax: (831) 427 - 4748 E-mail: cstorlazzi@usgs.gov

#### **EDUCATION:**

2000 Ph.D.	University of California at Santa Cruz, Santa Cruz, CA Earth Sciences Department, Concentrations: Coastal Geology and Oceanography
1996 B.Sc.	University of Delaware, Newark, DE Geology Department, Concentrations: Geomorphology and Sedimentology
RESEARCH EXPERIENCE:	
	Research Geologist and Oceanographer (GS-13) Coastal and Marine Geology Program, US Geological Survey
2002-present	Research Associate Institute for Marine Sciences, University of California at Santa Cruz
2002-2004	Research Fellow Partnership for Interdisciplinary Studies of Coastal Oceans Consortium
2000-2002	Post-doctoral Researcher, Institute for Marine Sciences, University of California at Santa Cruz
1996-2000	Graduate Student Researcher Earth Sciences Department, University of California at Santa Cruz

#### **RESEARCH INTERESTS:**

- Coral reef and rocky shoreface morphology, hydrodynamics, sediment distribution and the resulting modes of sediment transport
- The influence of coastal hydrodynamics on nearshore rock and reef biologic communities
- The interplay between geologic structure, climatic fluctuations and coastal processes
- The influence of extreme storm events on the geomorphic evolution of coastlines
- High-resolution oceanographic instrumentation and coastal mapping techniques

#### **SPECIALTY COURSES:**

Leadership Intensive Course, US Geological Survey, 2004 Water Wave Modeling short course, American Society of Civil Engineers, 2001 SWAN Wave Model Application short course, Delft Hydraulics, 2001

#### **QUALIFICATIONS:**

- Master Scuba Diver with Advanced Open-water and Nitrox Certifications (NAUI)
- Scientific/Research Scuba Diver (AAUS, US-DOI); >300 scientific dives
- Class-A and Class-1 Motorboat Operator Certifications (US-DOI)
- First Aid, CPR-Pro, AED and DAN Oxygen Administration Certifications
- Basic Helicopter/Airplane Safety Certification (US-DOI)

### **PROFESSIONAL AFFILIATIONS:**

- American Geophysical Union (AGU), 1994-present
- Coastal Education and Research Foundation (CERC), 1996-present
- American Shore and Beach Preservation Association (ASBPA), 1999-2002
- American Academy of Underwater Sciences (AAUS), 2000-present
- International Society for Reef Studies (ISRS), 2003-present
- American Society of Limnology and Oceanography (ASLO), 2004-present

# JOURNAL AND REPORT REVIEW:

- Journal of Geophysical Research-Oceans, Continental Shelf Research, Coral Reefs, Marine Geology, Sedimentary Geology, Journal of Sedimentary Research, Marine Ecology Progress Series, Earth Science and Planetary Letters, Climate Research journals (4-6 per year)
- "Fall 2005 Inner Santa Cruz Harbor Dredge Disposal Monitoring Program", report for the Monterey Bay National Marine Sanctuary, 2006
- "Hydrodynamics and Sediment Dynamics in Elkhorn Slough", report for the Monterey Bay National Marine Sanctuary, 2005
- "Hawaii's Local Action Strategy to Address Land-based Pollution Threats to Coral Reefs", report for the US Coral Reef Task Force, 2004
- Coastal Storms Initiative, Pacific Northwest Pilot Project's "Oregon Coastal Inundation Tool" real-time storm and inundation model for NOAA's Coastal Services Center, 2004
- "A Sediment Trend Analysis (STA) of Santa Cruz and its Vicinity: Implications to Dredge Disposal Operations", report for the Monterey Bay National Marine Sanctuary, 2000
- Seawall engineering proposal for the City of Pacific Grove, CA, 2000

# **SCIENTIFIC REVIEW PANELS:**

- NOAA, Monterey Bay National Marine Sanctuary, Research Activities Panel, 2005-present
- US Coral Reef Task Force (USGS/EPA/NOAA/others), Hawaii's Local Action Strategy to Reduce Land-based Pollution Threats to Coral Reefs, 2004-present
- CenCOOS, Central California Ocean Observing System Program, 2004-present
- NOAA, Undersea Research Program, Undersea Research on Tropical and Subtropical Marine Ecosystems, 2005
- Hawaiian Department of Natural Resources/Hawaiian Department of Aquatic Resources/University of Hawaii, Hawaii Coral Reef Initiative Research Program, 2004
- Natural Environment Research Council, Physical Oceanography Programme (U.K.), 2004
- National Parks Service, Pacific Islands Coral Reef Program, 2003
- US Geological Survey, Bureau-wide Coral Reef Science 10-year Planning Meeting, 2002
- NOAA, Monterey Bay National Marine Sanctuary 5-year Planning Committee, 2000

### **MEETINGS OR WORKSHOPS CHAIRED:**

- 6<sup>th</sup> International Symposium on Coastal Sediments, Carbonate Beaches and Coral Reefs Session, 2007
- 13<sup>th</sup> AGU/ASLO/TOS Ocean Sciences Meeting, Environmental Change and Its Impact on Coral Reefs Session, 2006
- 10<sup>th</sup> International Coral Reef Symposium, The Influence of Storms and Floods on Coral Reef Development Session, 2004
- 11<sup>th</sup> Pacific Congress on Marine Science and Technology, Hydrodynamics of Coastal Waters Session, 2001

### HONORS AND AWARDS:

- USGS Star Award for outstanding performance of scientific duties, 2006
- USGS Star Award for service, leadership and team citizenship, 2006
- "Coral Reefs and Sea-Level Rise Don't Mix" presentation designated a USGS "Science Pick" of the month in March by the USGS National Center's Communication Office, 2006

- Pleasure Point Project noted as a Ocean Research highlight by Sea Technology (September 2006 issue, pg. 61), 2006
- USGS Star Award for developing partnerships with the State of California and Santa Cruz County, 2005
- USGS Star Award for service as USGS Pacific Science Center's Building Safety Officer, 2004
- USGS Star Award for RGE Panel service, 2004
- West Maui Coastal Circulation Experiment noted as a news highlight by the Marine Pollution Bulletin (vol. 46, pg. 931), 2003
- West Maui Coastal Circulation Experiment designated a USGS "Science Pick" of the month in July and August by the USGS National Center's Communication Office, 2003
- "USGS Help Monitor the USS Arizona Memorial" highlighted in the April issue of *People, Land and Water*, the news magazine of the US Department of the Interior, 2003
- American Geological Institute's "Highlight of the Year Issue" designation in Solid Earth (Geomorphology) Section for Storlazzi and Griggs (2000) *GSA Bulletin* paper, 2000
- David and Lucile Packard Foundation Postdoctoral Research Fellowship, 2000-2001
- Graduate Assistance in Areas of National Needs Fellowship, 1999
- Tuition Fellowship, University of California, Santa Cruz, 1996
- Regents' Fellowship, University of California, Santa Cruz, 1996
- National Collegiate Natural Science Award, 1994, 1995

### **TECHNICAL POSITIONS:**

- Building Safety Officer, US Geological Survey, Pacific Science Center, 2003-present
- Field Scuba Diving Safety Officer, US Geological Survey, Pacific Science Center, 2004present

### **OUTREACH:**

- Gave talk titled "Current Research by the USGS Coastal and Marine Geology Team in the Monterey Bay National Marine Sanctuary (MBNMS)", Monterey Bay National Marine Sanctuary Research Activities Panel, 2006
- Gave talk titled "U.S. Geological Survey: Who We Are, What We Do and Some Local Projects." Lions Club, Santa Cruz Chapter, 2006
- Participated in Mackay Whitsunday Australian Research Council (ARC) Historical Land Use Reef Connectivity Linkage Project, 2005-2006. See: <u>http://www.marine.uq.edu.au/mackayarc/people.htm</u>
- Participated in press conference on "Environmental Impacts to Coral Reefs" at the 13<sup>th</sup> AGU/ASLO/TOS Ocean Sciences Meeting; Associated Press story picked up by 6 newspapers in Hawaii and the continental US and one radio station in Germany
- Provided scientific information regarding wave processes and ocean safety to Outside Magazine. See: April, 2006 issue on "Killer Abs" (pg. 51-60).
- Provided scientific information regarding wave processes to the Gulf of the Farallones National Marine Sanctuary and Mavarick's Surf Productions. See: <u>http://www.sfgate.com/cgibin/article.cgi?f=/c/a/2006/02/07/BAGR2H41LF1.DTL</u>, 2006
- Provided scientific information regarding the Pleasure Point Study to the Monterey Bay National Marine Sanctuary. See: <u>http://www.mbnms-</u> simon.org/sections/geology/project\_info.php?pid=100284&sec=g, 2005
- Provided scientific information regarding the Central California Regional Synthesis Project to the Monterey Bay National Marine Sanctuary, 2005. See: <u>http://www.mbnms-</u> <u>simon.org/sections/oceanography/project\_info.php?pid=100252&sec=o</u>, 2005
- Provided scientific information regarding coastal erosion and engineering solutions for KQED's public television's "Coastal Clash" documentary and website. See: <u>http://www.kqed.org/w/coastalclash/solutions.html</u>, 2005
- Gave talk titled "Life and Death of Hawaiian Coral Reefs." U.S. Geological Survey's Western Region Public Lecture Series, 2004

- Designed the USGS Coastal and Marine Geology Team's outreach posters, "Studying Sediment Impacts on Hawaiian Coral Reefs" and "Drifters Track Hawaiian Coral Spawning", 2004
- Chaired Current Drifters display and was an Invitation and Publicity Coordinator for USGS's 125<sup>th</sup> Birthday Celebration/Pacific Science Center Open House, 2004
- Judged the poster sessions at Monterey Bay National Marine Sanctuary's Sanctuary Symposium, 2004
- Interviewed for the National Public Radio series, "Living on Earth" on coral spawning in Hawaii, 2003
- Wrote USGS SoundWaves August 2003 (No. 53) article, "West Maui Coastal Circulation Experiment: Understanding the Movement of Sediment, Coral Larvae and Contaminants along Coral Reefs"
- Interviewed for ABC television's Monterey Bay affiliate on coastal erosion along Santa Cruz, CA, 2003
- Staffed the USGS booth at the Monterey Bay National Marine Sanctuary's annual Shark Festival and Sanctuary Celebration, 2003
- Wrote USGS SoundWaves December 2002 (No. 47) article, "USGS Researchers Collaborate with National Park Service Archeologists to Better Predict the Life Expectancy of the USS Arizona"
- Gave talk titled "Cool Tools in Physical Oceanography" at the University of California's Seymour Marine Discovery Center, 2002
- Gave talk titled "Coastal Hazards and Processes along the Monterey Peninsula and Carmel Bay, CA" to the Carmel, CA, city council and land use planners, 2001
- Participated in Monterey Bay National Marine Sanctuary's Sanctuary Symposium, 1999present
- Interviewed for or research highlighted in 19 newspaper articles in California and Hawaii (2000-2006)

### **INVITED TALKS:**

"El Niño-Southern Oscillation (ENSO) Events and Coastal Erosion Processes Along Central California." California State University, Moss Landing Marine Laboratory, 02/2006

"Variability in Oceanographic and Meteorologic Forcing along Central California and its Implications on Nearshore Processes." University of California at Santa Cruz, Institute of Marine Sciences, 11/2004

"Variability in Oceanographic and Meteorologic Forcing along Central California and its Implications on Nearshore Physical and Biologic Processes." National Marine Fisheries Service, Pacific Fisheries Environmental Laboratory, 05/2004

"Life and Death of Hawaiian Coral Reefs." U.S. Geological Survey's Western Region Public Lecture Series, 02/2004

"The Influence of Physical Processes on Coral Reefs: Insights from West Maui, Hawaii." University of California at Santa Cruz, Earth Sciences Department, 11/2003

Presented USGS Coral Reef Project results to USGS Director Charles Groat, 10/2003

"Sediment Dynamics on Hawaiian Reefs: Insights from Southern Molokai, Hawaii." Stanford University, Department of Geological and Environmental Sciences, 03/2003

"Application of Mapping to Sediment Dynamics Studies and Habitat Analysis on Rocky Inner Shelves." U.S. Geological Survey, Western Region Coastal and Marine Geology Team, 07/2002 "Sediment Dynamics on Hawaiian Reefs: Insights from Southern Molokai, Hawaii." U.S. Geological Survey, Western Region Coastal and Marine Geology Team, 06/2002

"Wave Control on Coral Distribution and Fringing Reef Morphology: Southern Molokai, Hawaii." University of Delaware, Institute of Marine Sciences and Department of Geology, 05/2002

"Wave Control on Coral Distribution and Fringing Reef Morphology: Southern Molokai, Hawaii." University of California at Santa Cruz, Institute of Marine Sciences, 05/2002

"Cool Tools in Physical Oceanography" University of California's Seymour Marine Discovery Center, 04/2002

"Long-term High-frequency ADCP and Temperature Measurements Along Central California: Insights into Upwelling and Internal Waves on the Inner Shelf." University of California at Santa Cruz, Institute of Marine Sciences, 11/2001

"Coastal Hazards and Processes along the Monterey Peninsula and Carmel Bay, CA" Carmel, CA, city council and land use planners, 04/2001

"El Niño-Southern Oscillation (ENSO) Events and Coastal Erosion Processes along Central California." American Geophysical Union 2000 Fall Meeting, Ocean Sciences Section, Special Session OS-22: Linking Climate Variability and Coastal Processes, 12/2000

#### **PUBLICATIONS:**

Field, M.E., Storlazzi, C.D., Cochran-Marquez, S.A. and Logan, J.B., in review, "ATLAS OF A FRINGING CORAL REEF: Moloka'i, Hawai'i - The Longest Fringing Reef in the Hawaiian Chain" U.S. Geological Survey Geologic Investigation Series.

Piniak. G.A. and Storlazzi, C.D., submitted. "Diurnal variability in turbidity and coral fluorescence on a fringing reef flat: Southern Molokai, Hawaii" *Coral Reefs*.

Wingfield, D.K. and Storlazzi, C.D., in review. "Variability in oceanographic and meteorologic forcing along Central California and its implications on nearshore processes" *Journal of Marine Systems*.

Storlazzi, C.D., McManus, M.A., Logan, J.B., and McLaughlin, B.E., 2006. "Cross-shore velocity shear, eddies and heterogeneity in water column properties over fringing coral reefs: West Maui, Hawaii" *Continental Shelf Research*, v. 26, p. 401-421.

Storlazzi, C.D., Brown, E.K., and Field, M.E., 2006. "The application of acoustic Doppler current profilers to measure the timing and patterns of coral larval dispersal" *Coral Reefs*, v. 25, p. 369-381.

Bothner, M.H., Reynolds, R.L., Casso, M.A., Storlazzi, C.D. and Field, M.E., 2006. "Quantity, composition and source of sediment collected in sediment traps along the fringing coral reef off Molokai, Hawaii" *Marine Pollution Bulletin*, v. 52(9), p. 1034-1047.

Presto, M.K., Ogston, A.O., Storlazzi, C.D., Field, M.E., 2006. "Temporal and spatial variability in the flow and dispersal of suspended-sediment on a fringing reef flat, Molokai, Hawaii" *Estuarine Coastal and Shelf Science*, v. 67, p. 67-81.

Storlazzi, C.D., Presto, M.K., Logan, J.B. and Field, M.E., 2006. "Coastal Circulation and Sediment Dynamics in Hanalei Bay, Kauai. PART I: Measurements of waves, currents, temperature, salinity and turbidity: June – August, 2005." U.S. Geological Survey Open-File Report 2006-1085, 35 p.

Draut, A.E., Field, M.E., Bothner, M.H., Logan, J.B., Casso, M.A., Baldwin, S.M., and Storlazzi, C.D., 2006. "Coastal Circulation and Sediment Dynamics in Hanalei Bay, Kauai. PART II: Tracking recent fluvial sedimentation using isotope stratigraphy obtained in summer 2005." U.S. *Geological Survey Open-File Report 2006-1125*, 52 p.

Storlazzi, C.D., Field, M.E., Rogers, K., Jokiel, P.L., Brown, E., and Dykes, J.D., 2005. "A model for wave control on coral breakage and species distribution in the Hawaiian Islands" *Coral Reefs*, v. 24, p. 43-55.

Storlazzi, C.D. and Wingfield, D.K., 2005. "The Spatial and Temporal Variability in Oceanographic and Meteorologic Forcing along Central California: 1980-2002" U.S. Geological Survey Scientific Investigations Report 2005-5085, 39 pg.

Adams, P.N., Storlazzi, C.D., and Anderson, R.S., 2005. "Nearshore wave-induced cyclical flexing of seacliffs" *Journal of Geophysical Research-Earth Surface*, v. 110, F02002, DOI:10.1029/2004JF000217.

McManus, M.A., Cheriton, O.M., Drake, P.J., Holliday, D.V., Storlazzi, C.D., Greenlaw, C.E., and Donaghay, P.L., 2005. "Thin layers and the transport and retention of marine plankton in coastal systems" *Marine Ecology Progress Series*, v. 301, p. 199-215.

Drake, P., McManus, M.A., and Storlazzi, C.D., 2005. "Local wind forcing of the Monterey Bay area inner shelf" *Continental Shelf Research*, v. 25, p. 397-417.

Storlazzi, C.D., Russell, M.A., Presto, M.K. and Burbank, J.E., 2005. "Flow Patterns and Current Structure at the USS Arizona Memorial: April, 2005" U.S. Geological Survey Open-File Report 2005-1334, 24 p.

Storlazzi, C.D. and Presto, M.K., 2005. "Coastal Circulation and Water Column Properties along Kaloko-Honokohau National Historical Park, Hawaii. PART I: Measurements of waves, currents, temperature, salinity and turbidity: April-October 2004" U.S. Geological Survey Open-File Report 2005-1161, 30 p.

Storlazzi, C.D. and Presto, M.K., 2005. "Coastal Circulation and Sediment Dynamics along West Maui, Hawaii, PART IV: Measurements of waves, currents, temperature, salinity and turbidity in Honolua Bay, Northwest Maui: 2003-2004" U.S. Geological Survey Open-File Report 2005-1068, 34 p.

Storlazzi, C.D., Ogston, A.S., Bothner, M.H., Field, M.E., and Presto M.K., 2004. "Wave- and tidally-driven flow and sediment flux across a fringing coral reef: South-central Molokai, Hawaii" *Continental Shelf Research*, v. 24(12), p. 1397-1419.

Ogston, A.S., Storlazzi, C.D., Field, M.E. and Presto, M.K., 2004. "Currents and suspended sediment transport on a shallow reef flat: South-central Molokai, Hawaii" *Coral Reefs*, v. 23, p. 559-569.

Storlazzi, C.D., Field, M.E., Ogston, A.S., Logan, J.B., Presto, M.K. and Gonzales, D.G., 2004. "Coastal Circulation and Sediment Dynamics along West Maui, Hawaii, PART III: Flow and particulate dynamics during the 2003 summer coral spawning season" U.S. Geological Survey Open-File Report 2004-1287, 36 p.

Storlazzi, C.D., Russell, M.A., Owens, M.D., Field, M.E. and Murphy, L.E., 2004. "Dynamics of the Physical Environment at the USS *Arizona* Memorial: 2002-2004" U.S. Geological Survey *Open-File Report 2004-1353*, 28 p.

Engels, M.S., Fletcher, C.H., Field, M.E., Storlazzi, C.D., Grossman, E.E., Rooney, J.J.B., Conger, C.L., and Glenn, C., 2004. "Holocene reef accretion: southwest Molokai, Hawaii" *Journal of Sedimentary Research*, v. 74(2), p. 255-269.

Hatcher, G.A., Reiss, T.E. and Storlazzi, C.D., 2004. "Application of GPS drifters to track Hawaiian coral spawning" U.S. Geological Survey Open-File Report 2004-1309, 14 p.

Storlazzi, C.D., Logan, J.B., and Field, M.E., 2003. "Quantitative morphology of a fringing reef tract from high-resolution laser bathymetry: Southern Molokai, Hawaii" *Geological Society of America Bulletin*, v. 115, no. 11, p. 1344–1355.

Storlazzi, C.D., Logan, J.B., McManus, M.A., and McLaughlin, B.E., 2003. "Coastal Circulation and Sediment Dynamics along West Maui, Hawaii, PART II: Hydrographic Survey Cruises A-3-03-HW and A-4-03-HW Report on the spatial structure of currents, temperature, salinity and turbidity along Western Maui" *U.S. Geological Survey Open-File Report 03-430*, 50 p.

Storlazzi, C.D. and Jaffe, B.E., 2003. "Coastal Circulation and Sediment Dynamics along West Maui, Hawaii, PART I: Long-term measurements of currents, temperature, salinity and turbidity off Kahana, West Maui: 2001-2003" U.S. Geological Survey Open-File Report 03-482, 28 p.

Storlazzi, C.D., McManus, M.A., and Figurski, J.D., 2003. "Long-term high-frequency ADCP and temperature measurements along central California: Insights into upwelling and internal waves on the inner shelf" *Continental Shelf Research*, v. 23, p. 901-918.

Storlazzi, C.D., Field, M.E., Dykes, J.D., Jokiel, P.L., and Brown, E., 2002. "Wave Control on Reef Morphology and Coral Distribution: Molokai, Hawaii" *WAVES 2001 Conference Proceedings*, American Society of Civil Engineers, San Francisco, California, v. 1, p. 784-793.

Storlazzi, C.D., and Jaffe, B.E., 2002. "Flow and sediment suspension events on the inner shelf of central California" *Marine Geology*, v. 181, p. 195-213.

Storlazzi, C.D. and Field, M.E., 2000. "Sediment distribution and transport along a rocky, embayed coast: Monterey Peninsula and Carmel Bay, California" *Marine Geology*, v. 170, no. 3-4, p. 289-316.

Storlazzi, C.D. and Griggs, G.B., 2000. "The influence of El Niño-Southern Oscillation (ENSO) events on the evolution of central California's shoreline" *Geological Society of America Bulletin*, v. 112, no. 2, p. 236-249.

Storlazzi, C.D., Willis, C.M., and Griggs, G.B., 2000. "Comparative impacts of the 1982-83 and 1997-98 El Niño winters on the central California coast" *Journal of Coastal Research*, v. 17, no. 4, p. 1022-1036.

Storlazzi, C.D., 2000. "Hydrodynamics, sediment transport and El Niño-induced seacliff erosion along the coastline of central California" Ph.D. Thesis, University of California at Santa Cruz. 137+ p.

Benumof, B.T., Storlazzi, C.D., Seymour, R.J., and Griggs, G.B., 2000. "The relationship between incident wave energy and seacliff erosion rates: San Diego County, California" *Journal of Coastal Research*, v. 17, no. 4, p. 1162-1178.

Field, M.E., Storlazzi, C.D., Calhoun, R.S., and Cochran, S.A., 2000. "Sedimentation patterns on the fringing reef off southern Moloka'i, Hawai'i" *Proceedings of the National Beach Preservation Conference 2000*, American Shore and Beach Preservation Association, August 2000, Kaanapali, Maui, Hawai'i, p. 67-69.

Ogston, A.S., Storlazzi, C.D., and Field, M.E., 2000. "Observations of physical processes and sediment transport on a shallow reef flat: South-central Moloka'i, Hawai'i" *Proceedings of the National Beach Preservation Conference 2000*, American Shore and Beach Preservation Association, August 2000, Kaanapali, Maui, Hawai'i, p. 86-88.

Storlazzi, C.D., Field, M.E., Anima, R., and Tait, J.F., 1999. "The influence of tectonics and sea level fluctuations on sediment distribution and modes of littoral transport along the rocky inner shelf of central California" Proceedings of the International Geological Correlation Program #437 – Coastal Environmental Change During Sea-Level Highstands Conference, November 1999, Honolulu, Hawaii, p. 205-206.

Storlazzi, C.D. and Griggs, G.B., 1998. "The 1997-98 El Niño and erosion processes along the central coast of California" *Shore and Beach*, v. 66, no. 3, p. 12-17.

Hapke, C., Gibbs, A., Richmond, B., Hampton, M., Jaffe, B., Dingler, J., Sallenger, A., Benumof, B., Brown, K., Griggs, G., Moore, L., Scholar, D., Storlazzi, C., Krabill, W., Swift, R., Brock, J., 1998. "A Collaborative program to investigate the impacts of the 1997-98 El Niño winter along the California coast" *Shore and Beach*, v. 66, no. 3, p. 24-32.

Madsen, J.A., McGeary, S., Krantz, D.E., McIntire, S.S., Daniels, W.F., and Storlazzi, C.D., 1994. "Ground Penetrating Radar Investigation of a Wetlands Replacement Site" *GPR* '94, Proceedings of the Fifth International Conference on Ground Penetrating Radar, June 12-16, Kitchner, Ontario, p. 540-551.

#### **ABSTRACTS:**

Phillips, E., Storlazzi, C., Dartnell, P. and Edwards, B., 2007. "Exploring rippled scour depressions offshore of Huntington Beach, CA" Coastal Sediments 2007 Meeting.

Storlazzi, C.D., Reid, J.A. and Golden, N.E., 2006. "Spatial and temporal variability in wavedriven sediment mobility along central California" *Eos Transactions AGU*, v. XX, no. XX, Fall Meeting Supplement, Abstract OS33F-02.

Vitousek, S., Fletcher, C.H. and Storlazzi, C.D., 2006. "Modeling alongshore propagating tides and currents around West Maui, Hawaii, and implications for transport using Delft3D." *Eos Transactions AGU*, v. XX, no. XX, Fall Meeting Supplement, Abstract OS11C-1524.

Draut, A.E., Field, M.E., Bothner, M.E., Logan, J.B., Casso, M.A., Baldwin, S.M., Reynolds, R.L., and Storlazzi, C.D., 2006. "Seasonal flood deposits in Hanalei Bay, Kauai, Hawaii: Implications of fluvial sedimentation for coral-reef ecosystems." *Eos Transactions AGU*, v. XX, no. XX, Fall Meeting Supplement, Abstract OS23A-1616.

Storlazzi, C.D. and Presto, M.K., 2006. "The influence of sea-level rise on fringing reef hydrodynamics: Insights from Southern Molokai, Hawaii" Ocean Sciences Meeting Electronic Supplement, Abstract OS52O-05.

Storlazzi, C.D., 2006. "Why do winter storms during El Nino events cause heavy coastal erosion and storm damage along central California?" *Sanctuary Currents 2006*, Monterey Bay National Marine Sanctuary Symposium, March 2006, Santa Cruz, California.

Field, M.E., Ogston, A.S., Storlazzi, C.D., Cochran, S. and Chavez, P., 2006. "Turbidity and sedimentation on Hawaiian coral reefs: The "Residence-Time" factor" Ocean Sciences Meeting Electronic Supplement, Abstract OS52O-02.

Presto, M.K., Ogston, A.S., Storlazzi, C.D., and Field, M.E., 2006. "A comparison of sediment transport processes on a fringing reef flat: Southern Molokai, Hawaii" Ocean Sciences Meeting Electronic Supplement, Abstract OS46N-09.

Grossman, E.G., Logan, J.B., Storlazzi, C.D., Payton, A and Street, J., 2006. "Mapping groundwater discharge and nutrient flux across the fringing reefs of South Molokai and West Hawaii, Main Hawaiian Islands" Ocean Sciences Meeting Electronic Supplement, Abstract OS46N-13.

Jupiter, S.D., Marion, G.S., McCulloch, M.T., Storlazzi, C.D. and Hoegh-Guldberg, O., 2006. "Coral trace element records of terrestrial, agricultural and land-use change in a Great Barrier Reef catchment" Ocean Sciences Meeting Electronic Supplement, Abstract OS46N-08.

Gibbs, A., Cochran, S., Storlazzi, C., Grossman, E. and Field, M.E., 2006. "Coral habitat variability in the Kona Coast National Parks" Ocean Sciences Meeting Electronic Supplement, OS26I-02.

Storlazzi, C.D., 2005. "*Sou'westers* - Why winter storms during El Nino events cause heavy coastal erosion and storm damage along central California" East Pacific Oceans Conference, September, 2005.

Storlazzi, C.D., Grossman, E.G. and Basch, L., 2005. "Spatial and temporal oceanographic variability at Kaloko-Honokohau National Historic Park, Hawaii". George Wright Society 2005 Biennial Conference, Philadelphia, p. 18.

Storlazzi, C.D., Russell, M.A., Owens, M.D., Field, M.E. and Murphy, L.E., 2004. "Dynamics of the Physical Environment at the *USS Arizona* Memorial: 2002-2004" *U.S.S. Arizona Symposium*, National Park Service, Submerged Resources Center, Washington, DC, October 2004.

Storlazzi, C.D., Brown, E.K., and Field, M.E., 2004. "Timing, patterns and speed of inter-reef and inter-island coral larval dispersal as elucidated by acoustic profilers and radio-tracked GPS drifters" *10ICRS*, 10th International Coral Reef Symposium, June 2004, Okinawa, Japan, p. 227

Storlazzi, C.D., Logan, J.B., Field, M.E., Brown, E.K., and Jokiel, P.L., 2004 "The influence of waves on reef morphology and coral distribution: Molokai, Hawaii" *10ICRS*, 10th International Coral Reef Symposium, Okinawa, Japan, p. 195

Field, M.E., Bothner, M.H., Chavez, P., Cochran-Marquez, S.A., Jokiel, P.L., Ogston, A.S. and Storlazzi, C.D., 2004. "Fate of flood sediment on a fringing coral reef: Molokai, Hawaii" *10ICRS*, 10th International Coral Reef Symposium, Okinawa, Japan, p. 195

Storlazzi, C.D., Wingfield, D.K., McManus, M.A., Carr, M.H., 2004. "Variability in oceanographic and meteorologic forcing along Central California and its implications on nearshore physical and biological processes" 21<sup>st</sup> PACLIM Proceedings, p. 36.

Storlazzi, C.D., McManus, M.A., Jaffe, B.E., Ogston, A.S. and Field, M.E., 2004. "Flow and particulate flux along a complex coral reef shoreline: West Maui, Hawaii" *Eos Transactions AGU*, v. 84, no. 52, Ocean Sciences Meeting Supplement, Abstract OS22J-009.

Gibbs, A., Grossman, E., Logan, J., Cochran, S., Storlazzi, C., Field, M., Payton, A. and Street, J., 2004. "Understanding the offshore environment of the Kona Coast National Parks" Geological Society of America 2004 Meeting, Abstract 45-7.

Wingfield, D.K., Storlazzi, C.D., Reid, J.A. and Franco, O., 2004. "The spatial and temporal variability in oceanographic and meteorologic forcing along Central California" *Eos Transactions AGU*, v. 84, no. 52, Ocean Sciences Meeting Supplement, Abstract OS32D-009.

Rosman, J., Koseff, J., Monismith, S., Storlazzi, C., Shaw, W. and Gaylord, B., 2004. "Field observations of the flow field in and around Giant Kelp (*Macrocystsis pyrifera*) forests" *Eos Transactions AGU*, v. 84, no. 52, Ocean Sciences Meeting Supplement, Abstract OS42M-002.

Adams, P.N., Anderson, R.S., and Storlazzi, C.D., 2003. "Wave-induced cyclical strain on seacliffs" Geological Society of America 2003 Meeting, Abstract 116-13.

Presto, M.K., Ogston, A.S., Storlazzi, C.D., and Field, M.E., 2003. "Impacts of spatial sediment transport patterns on a fringing reef: Moloka'i, Hawai'i" Geological Society of America 2003 Meeting, Abstract 115-08.

Engels, M., Fletcher, C., Field, M., Storlazzi, C., 2003. "Rapid increase in relative sea level rate ca 7.9 kyrs BP recorded at southwest Molokai, Hawaii. European Geophysical Union, *Geophysical Research Abstracts*, v. 5, no. 02016.

McManus, M.A., Storlazzi, C.D., Carr, M.H., Raimondi, P.T., and Amman, A., 2003. "Linking the recruitment dynamics of temperate reef fish populations to coastal physical processes." *Opening the Black Box: Understanding Ecosystem Dynamics in Coastal Oceans*, American Academy for the Advancement of Science Symposium, February 2003, Denver, Colorado.

Storlazzi, C.D., Ogston, A.S., Field, M.E., Bothner, M.H., and Presto M.K., 2002 "Wave- and tidally-driven flow and sediment flux across a fringing coral reef: South-central Molokai, Hawaii" *Eos Transactions AGU*, v. 83, no. 47, Fall Meeting Supplement, Abstract OS71A-0266.

Storlazzi, C.D., Logan, J.B., and Field, M.E., 2002. "Quantitative morphology of a fringing reef using high-resolution laser bathymetry: Southern Moloka'i, Hawai'i" AGU Ocean Sciences 2002 Meeting, v. 83, no. 4, p. 108.

Jaffe, B.E., and Storlazzi, C.D., 2002 "Flow and sediment flux on a coral reef in west Maui" *Eos Transactions AGU*, v. 83, no. 47, Fall Meeting Supplement, Abstract OS71A-0267.

Field, M.E., Storlazzi, C.D., Jokiel, P.L., Ogston, A.S., Bothner, M.A., Calhoun, R.S., Cochran, S.A., Chavez, P.S., 2002. "Patterns and impact of sedimentation on a fringing coral reef, Molokai, Hawaii" AGU Ocean Sciences 2002 Meeting, v. 83, no. 4, p. 40.

Dekshenieks, M.M., Storlazzi, C.D., Carr, M.H., Raimondi, P.T., and Figurski, J.D., 2002. "Temporal and spatial variations of hydrography in Monterey Bay: Implications for larval transport and recruitment" AGU Ocean Sciences 2002 Meeting, v. 83, no. 4, p. 70.

Ogston, A.S., Storlazzi, C.D., Field, M.E., and Bothner, M., 2002. "Sediment resuspension and transport on a shallow fringing reef: Molokai, Hawaii" AGU Ocean Sciences 2002 Meeting, v. 83, no. 4, p. 40.

Storlazzi, C.D., Ogston, A.S., and Field, M.E., 2001. "Flow and sediment transport on a shallow reef flat: South-central Molokai, Hawaii" *Eos*, v. 82, no. 47 (supplement), American Geophysical Union 2000 Fall Meeting Abstracts, p. 601.

Storlazzi, C.D., Ogston, A.S., and Field, M.E., 2001. "Sedimentation and physical processes on a fringing reef flat: Southern Moloka'i Hawai'i" *PACON 2001*, The Tenth Pacific Congress on Marine Science and Technology, June 2000, Honolulu, Hawai'i.

Storlazzi, C.D., Jaffe, B.E., and Field, M.E., 2001. "Sediment suspension and transport on the inner shelf of central California." *MARGINS Chapman Conference*, American Geophysical Union, June 2001, Ponce, Puerto Rico.

Field, M.E., Gardner, J.V., Evans, K.R., Storlazzi, C.D., and Calhoun, R.S., 2001. "High frequency sea- level oscillations and landscape evolution in coral reef environments." *MARGINS Chapman Conference*, American Geophysical Union, June 2001, Ponce, Puerto Rico.

Field, M.E., Storlazzi, C.D., Cochran, S., Logan, J.B., Chavez, P., Jr., and Gardner, J.E., 2001. "High-resolution morphology of coral reef habitats in Hawai'i." Proceedings of the Second Symposium on Marine Conservation Biology, July 2001, San Francisco, CA.

Logan, J.B., Storlazzi, C.D., and Field, M.E., 2001. "Analysis of coral reef morphology using SHOALS data: Southern Moloka'i, Hawai'i." *GIS 2001*, U.S. Geological Survey 2001 GIS Conference, April 2001, Denver, Colorado.

Storlazzi, C.D., Dekshenieks, M., Figurski, J., Raimondi, P., Carr, M., and Syms, C., 2000. "Physical oceanography of the inner shelf of the California current system." *Dynamics of Pacific Coastal Upwelling Ecosystems*, 2000 PISCO Mellon Symposium, December 2000, Corvallis, Oregon.

Storlazzi, C.D., Field, M.E., Dykes, J.D., and Ogston, A.S., 2000. "Wave control on fringing reef architecture and physical processes: Southern Molokai, Hawaii." *Eos*, v. 81, no. 48 (supplement), American Geophysical Union 2000 Fall Meeting Abstracts, p. 683

Storlazzi, C.D., 2000. "El Niño-Southern Oscillation (ENSO) events and coastal erosion processes along central California." *Eos*, v. 81, no. 48 (supplement), American Geophysical Union 2000 Fall Meeting Abstracts, p. 659.

Field, M.E., Chavez, P., and Storlazzi, C.D., 2000. "Processes and sites of sand storage on Hawaiian reef tracts: SHOALS imagery, aerial photography, and field mapping." *Carbonate Beaches 2000*, The First International Symposium on Carbonate Sand Beaches, December 2000, Key Largo, Florida.

Ogston, A.S., Field, M.E., and Storlazzi, C.D., 2000. "Reef flat physical processes and sediment transport observations: Molokai, Hawaii." *9ICRS*, 9<sup>th</sup> International Coral Reef Symposium, October 2000, Bali, Indonesia.

D'Iorio, M., Field, M.E., and Storlazzi, C.D., 2000. "The effectiveness of mangroves as a buffer to reef siltation: South-central Molokai, Hawaii." *PACON 2000*, The Ninth Pacific Congress on Marine Science and Technology, June 2000, Honolulu, Hawaii.

Jaffe, B.E., Storlazzi, C.D., and Canestro, D., 2000. "Comparison of nearshore environmental conditions during the spring and fall near Davenport, California." *Sanctuary Currents 2000*, Monterey Bay National Marine Sanctuary Symposium, March 2000, Santa Cruz, California.

Storlazzi, C.D., and Jaffe, B.E., 1999. "Hydrodynamics and sediment suspension events off the rocky coastline of central California." *Eos*, v. 80, no. 46 (supplement), American Geophysical Union 1999 Fall Meeting Abstracts, p. 489

Storlazzi, C.D., Field, M.E., and Griggs, G.B., 1999. "The influence of antecedent topography, oceanographic forcing, and local tectonics on the distribution and transport of littoral sediments along the Monterey Peninsula and Carmel Bay, California." *Sanctuary Currents '99*, Monterey Bay National Marine Sanctuary Symposium, March 1999, Seaside, California.

Jaffe, B.E. and Storlazzi, C.D., 1999. "Flow and sediment transport offshore a pocket beach in central California." *Eos*, v. 80, no. 46 (supplement), American Geophysical Union 1999 Fall Meeting Abstracts, p. 517.

Jaffe, B.E., Storlazzi, C.D., Anima, R.J., and Canestro, D., 1999. "Investigation of hydrodynamics and sediment transport in the Monterey Bay National Marine Sanctuary." *Sanctuary Currents '99*, Monterey Bay National Marine Sanctuary Symposium, March 1999, Seaside, California.

Willis, C.M., Storlazzi, C.D., and Griggs, G.B., 1999. "Comparative impacts of the 1982-83 and the 1997-98 El Niño winters on the central California coast." *Sanctuary Currents '99*, Monterey Bay National Marine Sanctuary Symposium, March 1999, Seaside, California.

Lugosi, J.D., Field, M.E., Gardner, J.V., and Storlazzi, C.D., 1999. "Seafloor morphology from high resolution multi-beam mapping off southern Oahu, Hawaii." *GIS '99*, U.S. Geological Survey 1999 GIS Conference, April 1999, Denver, Colorado.

Storlazzi, C.D. and Field, M.E., 1998. "The role of antecedent topography and oceanographic forcing on the distribution and transport of littoral sediments along the Monterey Peninsula and Carmel Bay, California." *Eos*, v. 79, no. 45 (supplement), American Geophysical Union 1998 Fall Meeting Abstracts, p. 451.

Storlazzi, C.D. and Griggs, G.B., 1998. "The influence of El Niño-Southern Oscillation (ENSO) events on central California's shoreline." *Sanctuary Currents* '98, Monterey Bay National Marine Sanctuary Symposium, March 1998, Santa Cruz, California.

Griggs, G.B., Storlazzi, C.D., and Richmond, B.M., 1998. "Impact of the 1997-98 El Niño-Southern Oscillation (ENSO) winter on the coastline of central California." *Eos*, v. 79 no. 45 (supplement), American Geophysical Union 1998 Fall Meeting Abstracts, p. 28.

Storlazzi, C.D., 1994. "Cutoff channel evolution and bench formation at Powder River, S.E. Montana: 1979-1993." *Eos*, v. 75, no. 16 (supplement), American Geophysical Union 1994 Spring Meeting Abstracts, p. 183.