

CHARLIE ENDRIS

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EDUCATION

Moss Landing Marine Labs, Moss Landing, CA M.S. – Geological Oceanography August 2009
Hamilton College, Clinton, NY B.A. – Geology May 1998

SKILLS

GIS Habitat Analysis and Conservation Management

- Lead project manager on contracts totaling over \$1M. Responsible for interagency coordination and planning, oversight of data collection efforts, database creation, and deliverable preparation.

Geographic Information Systems/Software

- ESRI *ArcGIS 10.3*, including *Spatial Analyst*, *3D Analyst*, *ArcCatalog*, *ArcGIS Pro*, *ArcReader*, *ModelBuilder*, and *Python*, *Google Earth*, *Trimble RealWorks Advanced*, *SYSTAT*, *Microsoft Office*, and all *Adobe software platforms*.

Cartographic Publications

- Lead author or co-author on 23 USGS Open File Reports covering nearly 30% of CA state waters.

Fieldwork and Data Collection

- Differential GPS, RTK surveying, Trimble VX Spatial Station, Surface Elevation Tables (SETs), and NASBLA Boat Certified.

PROFESSIONAL EXPERIENCE

Elkhorn Slough National Estuarine Research Reserve *and* Elkhorn Slough Foundation,
Watsonville, CA December 2012 – Present

GIS Specialist

- Work closely with both the Foundation Land Acquisitions Manager and Land Steward to develop and organize a GIS database library of county parcels, land holdings, land use, trails, roads, and vegetation.
- Develop conservation strategies based on GIS metrics that integrate groundwater recharge zones, wildlife corridors, biodiversity, agriculture, and recreation.
- Perform habitat classification and change characterization of coastal environments using aerial imagery, LiDAR digital elevation models, and other remote sensing data.
- Involved in the planning, mapping, and monitoring of a 32-acre salt-marsh restoration project, including vegetation communities, tidal elevations, tidal wetland topography, and sediment dynamics.

Central Coast Wetlands Group, Moss Landing, CA April 2011 – Present

GIS Analyst

- GIS subject-matter expert at CCWG with responsibility for planning, executing, and managing multiple projects focused on enhancing the geospatial capabilities of CCWG.
- Developed GIS-based methodology for assessing sea level rise (SLR) impacts on coastal infrastructure.
- Identify stream networks and characterize wetland habitats as part of the EPA-funded California Status and Trends Monitoring program.
- Developed custom models and toolsets for delineating current and historic coastal watersheds, estuaries, and riparian corridors.
- Query spatial datasets and extract vector and raster data for the compilation of bioassessment studies.

Center for Habitat Studies, Moss Landing, CA

January 2004 – January 2015

GIS Lab Project Manager

- Oversight and review of staff work, maintenance of lab software and hardware, proposal and report writing, budgeting, and presentations to stakeholders.
- Led a team of researchers on coastal habitat and geologic mapping projects funded by the National Park Service, including Golden Gate National Recreation Area, Point Reyes NP, and the Channel Islands NP; deliverable products included ArcGIS databases, ArcReader Published Map Files, metadata, and reports.
- Partnered with the USGS to lead a team of researchers on the compilation, interpretation, and delivery of 1:24,000 marine benthic habitat maps for the California Seafloor Mapping Program (CSMP).

Elkhorn Slough National Estuarine Research Reserve, Watsonville, CA

July 2010 – January 2012

Geomorphologist/Terrestrial Mapping Consultant

- Collection, processing, management and analysis of high resolution spatial datasets using a terrestrial laser scanner for monitoring mudbank erosion in the wetland environments of Elkhorn Slough.
- Write reports, prepare maps, present results at conferences, etc.

Integrated Ocean Drilling Program, College Station, TX

Oct. 1998 – Jan. 2002

Marine Lab Specialist

- Participated in 12 two-month expeditions as a marine technician onboard the *JOIDES Resolution*, a scientific ocean drilling vessel specialized in the recovery and analysis of core samples for research.
- Primary duties included the supervision, maintenance, and repair of all instrumentation and equipment in the Paleomagnetism, X-ray Diffraction, and Thin Section laboratories onboard vessel.

TEACHING EXPERIENCE

Assistant Instructor at Moss Landing Marine Labs and Friday Harbor Labs, Sept. 2005 – Dec. 2008

- Graduate Level Courses Taught (Labs): GIS and Benthic Marine Habitat Mapping, GIS Applications in Marine Science, Fish Ecology and Marine Benthic Habitats, Geology of Monterey Bay.

PUBLICATIONS

Wasson, K., Hughes, B., Berriman, J., Chang, A., Deck, A., Dinnel, P., **Endris, C.**, Espinoza, M., Dudas, S., Ferner, M., Grosholz, E., Kimbro, D., Ruesink, J., Trimble, A., Vander Schaaf, D., Zabin, C., Zacherl, D., 2016, Coast-wide recruitment dynamics of Olympia oysters reveal limited synchrony and multiple predictors of failure, *Ecology* (*in review*).

Endris, C.A., Greene, H.G., Dieter, B.E., and Erdey, M.D., 2015, Potential marine benthic habitats, Offshore of San Francisco map area, California, *sheet 7* in Cochrane, G.R., Johnson, S.Y., Dartnell, P., Greene, H.G., Erdey, M.D., Golden, N.E., Hartwell, S.R., Endris, C.A., Manson, M.W., Sliter, R.W., Kvitek, R.G., Watt, J.T., Ross, S.L., and Bruns, T.R. (G.R. Cochrane and S.A. Cochran, eds.), California State Waters Map Series—Offshore of San Francisco, California: U.S. Geological Survey Open-File Report 2015–1068, pamphlet 39 p., 10 sheets, scale 1:24,000, <http://dx.doi.org/10.3133/ofr20151068>.

Dieter, B.E., **Endris, C.A.**, Greene, H.G., and Erdey, M.D., 2015, Potential marine benthic habitats, Offshore of Pigeon Point map area, California, sheet 7 in Cochrane, G.R., Watt, J.T., Dartnell, P., Greene, H.G., Erdey, M.D., Dieter, B.E., Golden, N.E., Johnson, S.Y., Endris, C.A., Hartwell, S.R., Kvitek, R.G., Davenport, C.W., Krigsman, L.M., Ritchie, A.C., Sliter, R.W., Finlayson, D.P., Maier, K.L., (G.R. Cochrane and S.A. Cochran, eds.), California State Waters Map Series—Offshore of Pigeon Point, California: U.S. Geological Survey data release, pamphlet 66 p., 10 sheets, scale 1:24,000, <http://dx.doi.org/10.5066/F7RV0KRZ>.

- Dieter, B.E., Greene, H.G., **Endris, C.A.**, Erdey, M.D., and Lowe, E.N., 2015, Potential marine benthic habitats, Drakes Bay and Vicinity map area, California, sheet 7 in Watt, J.T., Dartnell, P., Golden, N.E., Greene, H.G., Erdey, M.D., Cochran, G.R., Johnson, S.Y., Hartwell, S.R., Kvitek, R.G., Manson, M.W., Endris, C.A., Dieter, B.E., Sliter, R.W., Krigsman, L.M., Lowe, E.N., and Chin, J.L. (J.T. Watt and S.A. Cochran, eds.), California State Waters Map Series—Drakes Bay and Vicinity, California: U.S. Geological Survey Open-File Report 2015–1041, pamphlet 36 p., 10 sheets, scale 1:24,000, <http://dx.doi.org/10.3133/ofr20151041>
- Heady, W.N., K. O'Connor, J. Kassakian, K. Doiron, **C. Endris**, D. Hudgens, R. P. Clark, J. Carter, and M. G. Gleason. 2014. An Inventory and Classification of U.S. West Coast Estuaries. The Nature Conservancy, Arlington, VA. 81 pp.
- Endris, C.A.**, Greene, H.G., Dieter, B.E., Erdey, M.D., and Lowe, E.N., 2015, Potential marine benthic habitats, Offshore of Salt Point map area, California, sheet 7 in Johnson, S.Y., Dartnell, P., Golden, N.E., Hartwell, S.R., Erdey, M.D., Greene, H.G., Cochran, G.R., Kvitek, R.G., Manson, M.W., Endris, C.A., Dieter, B.E., Watt, J.T., Krigsman, L.M., Sliter, R.W., Lowe, E.N., and Chin, J.L. (S.Y. Johnson and S.A. Cochran, eds.), California State Waters Map Series—Offshore of Salt Point, California: U.S. Geological Survey Open-File Report 2015–1098, pamphlet 37 p., 10 sheets, scale 1:24,000, <http://dx.doi.org/10.3133/ofr20151098>.
- Endris, C.A.**, Greene, H.G., Dieter, B.E., Erdey, M.D., Golden, N.E., and Edwards, B.D., 2014, Potential marine benthic habitats, Offshore of Pacifica map area, California, *sheet 7 in* Edwards, B.D., Phillips, E.L., Dartnell, P., Greene, H.G., Bretz, C.K., Kvitek, R.G., Hartwell, S.R., Johnson, S.Y., Cochran, G.R., Dieter, B.E., Sliter, R.W., Ross, S.L., Golden, N.E., Watt, J.T., Chin, J.L., Erdey, M.D., Krigsman, L.M., Manson, M.W., and Endris, C.A. (S.A. Cochran and B.D. Edwards, eds.), California State Waters Map Series—Offshore of Pacifica, California: U.S. Geological Survey Open-File Report 2014–1260, pamphlet 38 p., 10 sheets, scale 1:24,000, <http://dx.doi.org/10.3133/ofr20141260>.
- Endris, C.A.**, Greene, H.G., Dieter, B.E., and Erdey, M.D., 2014, Potential marine benthic habitats, Offshore of San Gregorio map area, California, sheet 7 in Cochran, G.R., Dartnell, P., Greene, H.G., Watt, J.T., Golden, N.E., Endris, C.A., Phillips, E.L., Hartwell, S.R., Johnson, S.Y., Kvitek, R.G., Erdey, M.D., Bretz, C.K., Manson, M.W., Sliter, R.W., Ross, S.L., Dieter, B.E., and Chin, J.L. (G.R. Cochran and S.A. Cochran, eds.), California State Waters Map Series—Offshore of San Gregorio, California: U.S. Geological Survey Scientific Investigations Map 3306, pamphlet 38 p., 10 sheets, scale 1:24,000, <http://dx.doi.org/10.3133/sim3306>
- Greene, H.G., **Endris, C.**, Vallier, T., Golden, N., Cross, J., Ryan, H., Dieter, B., and Niven, E., 2013, Sub-tidal benthic habitats of central San Francisco Bay and offshore Golden Gate area — A review, *Marine Geology*, Volume 345, pp 31-46.
- Endris, C.A.**, Greene, H.G., and Golden, N.E., 2013, Potential marine benthic habitats, Offshore of Carpinteria map area, California, *sheet 7 in* Johnson, S.Y., Dartnell, P., Cochran, G.R., Golden, N.E., Phillips, E.L., Ritchie, A.C., Kvitek, R.G., Greene, H.G., Endris, C.A., Seitz, G.G., Sliter, R.W., Erdey, M.D., Wong, F.L., Gutierrez, C.I., Krigsman, L.M., Draut, A.E., and Hart, P.E. (S.Y. Johnson and S.A. Cochran, eds.), California State Waters Map Series—Offshore of Carpinteria, California: U.S. Geological Survey Scientific Investigations Map 3261, pamphlet 42 p., 10 sheets, scale 1:24,000, <http://pubs.usgs.gov/sim/3261/>.
- Endris, C.A.**, Greene, H.G., and Golden, N.E., 2013, Potential marine benthic habitats, Offshore of Ventura map area, California, *sheet 7 in* Johnson, S.Y., Dartnell, P., Cochran, G.R., Golden, N.E., Phillips, E.L., Ritchie, A.C., Kvitek, R.G., Greene, H.G., Krigsman, L.M., Endris, C.A., Seitz, G.G., Gutierrez, C.I., Sliter, R.W., Erdey, M.D., Wong, F.L., Yoklavich, M.M., Draut, A.E., and Hart, P.E. (S.Y. Johnson and S.A. Cochran, eds.), California State Waters Map Series—Offshore of Ventura, California: U.S. Geological Survey Scientific Investigations Map 3254, pamphlet 42 p., 11 sheets, scale 1:24,000, <http://pubs.usgs.gov/sim/3254/>.

- Endris, C.A.**, Greene, H.G., and Golden, N.E., 2012, Potential marine benthic habitats, Hueneme Canyon and vicinity, California, *sheet 7 in* Johnson, S.Y., Dartnell, P., Cochrane, G.R., Golden, N.E., Phillips, E.L., Ritchie, A.C., Kvitek, R.G., Greene, H.G., Krigsman, L.M., Endris, C.A., Clahan, K.B., Sliter, R.W., Wong, F.L., Yoklavich, M.M., and Normark, W.R. (S.Y. Johnson, ed.), California State Waters Map Series—Hueneme Canyon and vicinity, California: U.S. Geological Survey Scientific Investigations Map 3225, pamphlet 41 p., 12 sheets, <http://pubs.usgs.gov/sim/3225/>.
- Endris, C.**, Picard, K., Greene, H.G., and Barrie, J.V., 2010, Potential marine benthic habitats and shaded seafloor relief, southern Gulf Islands and San Juan Archipelago, Canada and U.S.A.; Geological Survey of Canada, Open File 6625, scale 1:50,000, <http://seadocsociety.org/50k-seafloor-maps>.
- Endris, C.**, Picard, K., Greene, H.G., and Barrie, J.V., 2010, Shaded seafloor relief, southern Gulf Islands and San Juan Archipelago, Canada and U.S.A.; Geological Survey of Canada, Open File 6627, scale 1:50,000.
- Picard, K., **Endris, C.**, Greene, H.G., and Barrie, J.V., 2010, Backscatter strength and shaded seafloor relief, southern Gulf Islands and San Juan Archipelago, Canada and U.S.A.; Geological Survey of Canada, Open File 6626, scale 1:50,000.
- Breaker, L.C., Armstrong, E.M., **Endris, C.A.**, 2008, Establishing an Objective Basis for Image Compositing in Satellite Oceanography, Remote Sensing of Environment.