Sea Level Rise Will Drown Most Wetlands Along Oregon and Washington Coasts by 2110

Tidal marshes provide habitat for endangered wildlife and protect coastal communities from flooding. A new Open-File Report from USGS Western Ecological Research Center scientist Karen Thorne and others suggests that Oregon and Washington may lose most of these habitats in the next century. Researchers collected a suite of data including information on current and historical rates of sediment build-up, tidal flooding, and plant types. While their models showed most marshlands will remain over the next 50-70 years, the scientists predict that none of the wetlands will build up enough sediment to outpace sea level rise and consequently will convert to mudflats by 2110.

http://www.werc.usgs.gov/thorne
http://pubs.er.usgs.gov/publication/ofr20151204

NEW OPEN-FILE REPORTS


AWARDS

Kevin Lafferty has been awarded a place on Thomson Reuters’ 2015 list of Highly Cited Researchers. Awards go to researchers whose work has had significant impacts in their fields, including those whose papers rank in the top 1% of citations by field.
http://www.news.ucsb.edu/2015/015996/citations-excellence

Emily Perkins received the Most Technologically Integrated Award for her 2015 ESRI Conference poster, which showcased a new interactive map that identifies and locates species vulnerable to disturbances in San Diego, CA.

EVENTS

November 2-3 and 4-5, 2015 (Ridgecrest, CA) Kristin Berry held two workshops at the November Desert Tortoise Council. Her workshops introduced audiences to field techniques for studying desert tortoises, threats facing tortoises today, and more.
http://www.deserttortoise.org/

December 8, 2015 (Las Vegas, NV) Todd Esque presented at the Desert Tortoise Managers Oversight Group (MOG) meeting in Las Vegas, NV, 8 December on USGS research on habitat quality and restoration and threats to the desert tortoise such as disease and predation. The MOG is dedicated to the restoration of viable populations of the desert tortoise in the desert SW.

December 13-18, 2015 (San Francisco, CA) WERC scientists including Tim Tinker, Liz Bowen, Brian Hatfield, and Joseph Tomoleoni will have their research presented at the 21st Biennial Conference on the Biology of Marine Mammals.

This update is produced as a service to USGS/WERC staff, colleagues, partners and the interested public. To add your email address to the mailing list or to report errors/suggestions, please contact xrojas-rocha@usgs.gov.
NEW BOOK REVIEWS/CHAPTERS

http://www.werc.usgs.gov/ProductDetails.aspx?id=5400

http://www.werc.usgs.gov/ProductDetails.aspx?id=5399

NEW JOURNAL ARTICLES

http://www.werc.usgs.gov/ProductDetails.aspx?id=5410

http://www.werc.usgs.gov/ProductDetails.aspx?id=5386

http://www.werc.usgs.gov/ProductDetails.aspx?id=5296

http://www.werc.usgs.gov/ProductDetails.aspx?id=5421

http://www.werc.usgs.gov/ProductDetails.aspx?id=5436


Ackerman, JT, CA Eagles-Smith, MP Herzog, JL Yee, CA Hartman. 2015. Egg laying sequence influences egg mercury concentrations and egg size in three bird species: Implications for contaminant monitoring programs. Environmental Toxicology and Chemistry. In press. doi:10.1002/etc.3291
http://www.werc.usgs.gov/ProductDetails.aspx?id=5434

http://www.werc.usgs.gov/ProductDetails.aspx?id=5419

IN THE NEWS

As The Sea Rises So Should the Urgency to Tackle the Problem Locally, Officials Agree (The Daily News)
This feature story on approaches to studying sea level rise in San Francisco Bay quotes Laura Valoppi on salt marshes’ potential to protect local communities.

Adam Backlin Presents to ARMI in Washington, D.C.
Adam Backlin presented to the heads of Department of the Interior agencies, other Federal agencies, and partners at the 15th Annual Amphibian Research Monitoring Initiative (ARMI) Meeting in Washington, D.C. Backlin spoke on USGS-led recovery efforts to remove and create barriers to invasive fish and restore the habitat of the Federally endangered Mountain Yellow-Legged Frog (Rana muscosa).

OUTREACH NEWS

“CSUN’s Biology Careers Outside of Academia Symposium”
California State University, Northridge hosted Erin Boydston (background left) as a speaker at the Biology Careers Outside of Academia Symposium on December 2. Boydston spoke to over 50 students about her path to USGS and her current research on the behavior of bobcats, deer, and other animals near urban, southern California.