UC Santa Barbara

Newsletters

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NCOS News - October 2021

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UC SANTA BARBARA North Campus Open Space Restoration Project

NCOS NEWS

October 2021



Black-necked stilts feeding in the slough channel next to Venoco bridge on September 24, 2021.

UPDATES

Swallow Structure Construction Begins!

In order to reduce impacts to the surrounding houses, CCBER has started construction of artificial nesting structures for cliff swallows in the northwest of NCOS. We have utilized some of the excellent information reported by the Cliff Swallow Project to build structures similar to those at Fort Carson, Colorado (see images below). Rick Mexico, Nature Guide and volunteer, helped work out the design details and mentored staff in building the mini-roof structures to be installed.





A Cliff Swallow nesting structure at Fort Carson, Colorado. Photo obtained from https://www.cliffswallow.org/faq.html

We plan to finish construction by the end of October, and while the swallows may not use them for this year's nesting season, we hope to familiarize them with the structure by placing it along their major flyway to the wetland. To help attract the swallows to build nests on the new structure, we would like to glue some nests or parts of nests onto the structure. If you have an abandoned nest on your home and we can figure out how to get it off, please send an email to ncos@ccber.ucsb.edu. The goal is to continue to support these unique and beautiful birds without impacting homeowners.

Outdoor Classroom Goes to bid!

Construction of the outdoor classroom will start at the beginning of November. This project is funded by California's <u>Wildlife Conservation Board's</u> Public Access grant program and a generous contribution from Linda Duttenhaver for the classroom portion of the project. We anticipate that visiting school groups will get to do the planting at the classroom later this fall and early winter.



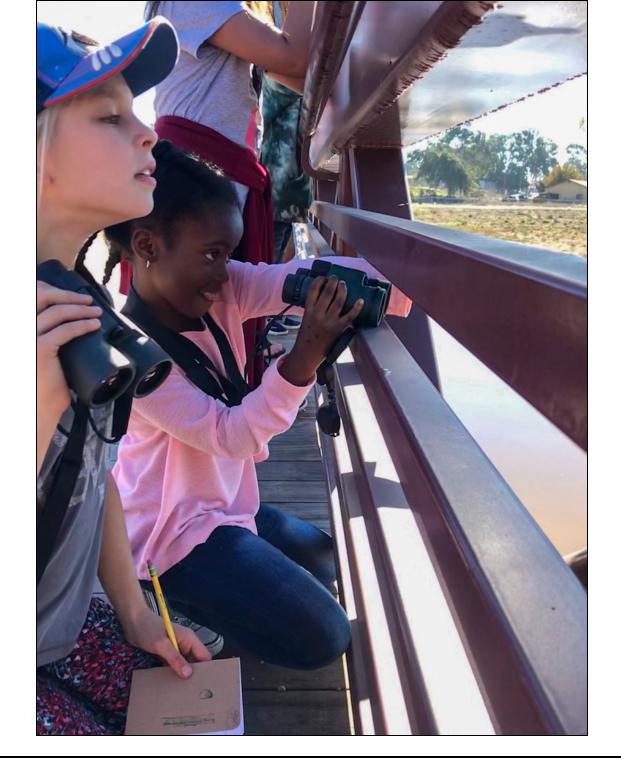
October 17th! First nature guide public tour! 9:30 - 11. Spread the word!

Public Tours for NCOS will be on the 3rd Saturday of every month at 9:30 am and will meet at the Whittier Entrance. Please RSVP to ncos@ccber.ucsb.edu.



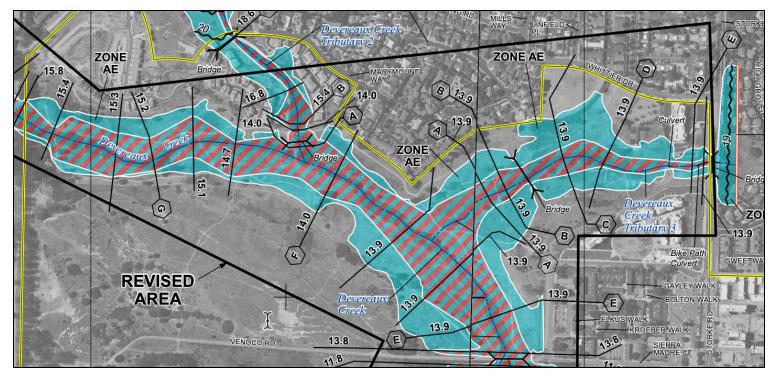
Kids In Nature

Kids in Nature K-12 visits to NCOS are BACK! With recently awarded funding from the <u>Coastal Ranches</u> <u>Conservancy</u> CCBER has funds to pay for bus trips for students from further afield to visit NCOS. Please contact <u>ncos@ccber.ucsb.edu</u> if you are interested in setting up a visit!



FEATURE STORY

NCOS flood reduction benefits recognized by FEMA



Flood hazard map showing the flood reduction benefits of the NCOS project.

Breaking news! The Federal Emergency Management Agency (FEMA) has issued what is called a LOMR or Letter of Map Revision, which formally documents a change to the flood hazard zone of an area. The flood hazard zone is the extent of a particular landscape subject to a 1% chance of flooding in a year. Structures within the Flood Hazard Zone are required to secure flood insurance if they have federally backed mortgages. One of the more practical goals of the North Campus Open Space restoration project was to restore the extent of the wetland to reduce localized flooding by creating a means for flood waters to be conveyed away from structures and homes and into wetlands and the ocean. Initial studies had modeled a 1.5 to 2 foot drop in local flood elevations and this LOMR documents how that reduction plays out on the landscape. This feature story is continued on page 13.

VOLUNTEER OPPORTUNITIES



"Second Saturdays" at NCOS

This month: October 9, 9-12

Please RSVP to ncos@ccber.ucsb.edu

Help us restore and create NCOS with plants and more! Meet at 6969 Whittier Drive at 9am. Bring water, sunscreen, and wear a hat, clothes and shoes that are suitable for outdoor work.

Thursdays - CCBER Greenhouse Associates



COMMUNITY FORUM & PHOTOS

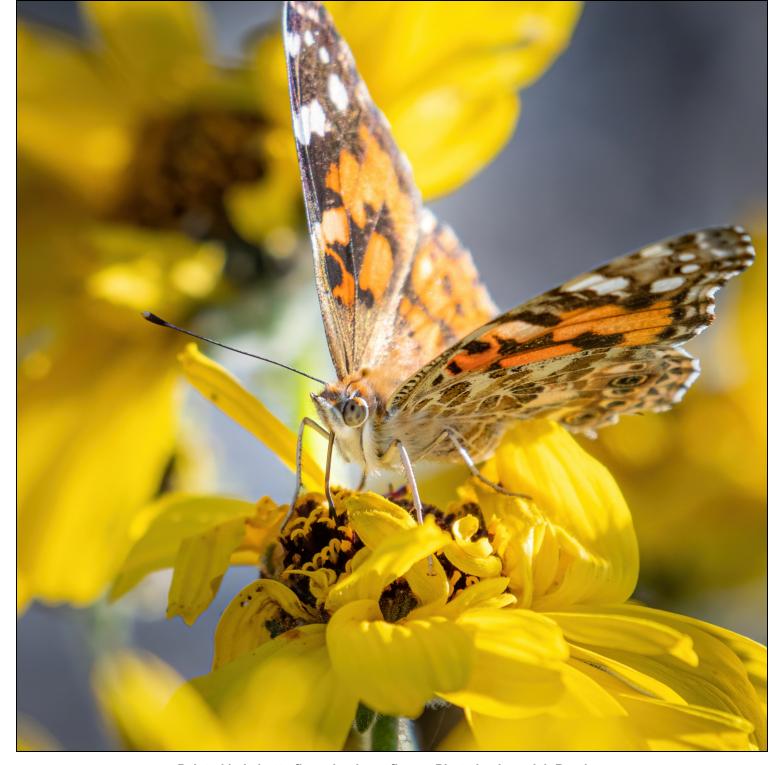
We are interested in any observations of wildlife activity on NCOS, as well as plants and landscapes. Please send your observations, with or without photos, to ncos@ccber.ucsb.edu. Thank you!



Tropical Kingbird at Whittier Pond. Photo by Susan Cook.



Juvenile Red-tailed Hawk. Photo by Susan Cook.



Painted lady butterfly on bush sunflower. Photo by Jeremiah Bender.



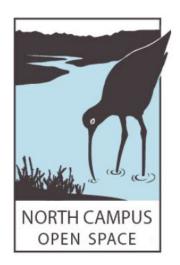
Pickleweed flowers. Photo by Jeremiah Bender.

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For more information on the North Campus Open Space Restoration Project, Click here, or email ncos@ccber.ucsb.edu





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NCOS FLOOD REDUCTION BENEFITS RECOGNIZED BY FEMA

UCSB Natural History Collections ▼

Breaking news! The Federal Emergency Management Agency (FEMA) has issued what is called a LOMR or Letter of Map Revision, which formally documents a change to the flood hazard zone of an area. The flood hazard zone is the extent of a particular landscape subject to a 1% chance of flooding in a year. Structures within the Flood Hazard Zone are required to secure flood insurance if they have federally backed mortgages. One of the more practical goals of the North Campus Open Space restoration project was to reduce localized flooding by restoring the wetland and creating a means for flood waters to be conveyed away from structures and homes and into wetlands and the ocean. Thanks to our partnership with County Flood Control and Stantec hydrogeology, FEMA has formally recognized this project. Initial studies had modeled a 1.5 to 2 foot drop in local flood elevations and this LOMR documents how that reduction plays out on the landscape.

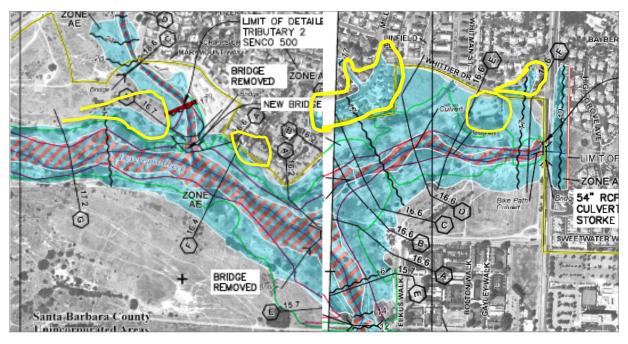


Figure 1. This is the pre-project flood hazard map and shows the proposed revision as a faint green line with the yellow zones highlighting residential areas to be removed.

In the map above you see the pre-project flood hazard zone in blue. The faint green line is the proposed revision, which is made crystal clear in the revised map seen below (effective January 2022). You may notice that in some cases the "Floodway," shown with red hatches is wider in the revised map. This is because the restoration project increased the low elevation, flood conveyance area by excavating the wetland and removing the fill that formerly constrained the flow of water, causing it to back up in to neighborhoods.

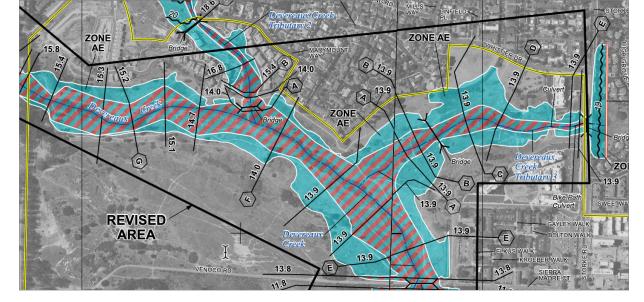


Figure 2. This revised flood hazard map illustrates the flood reduction benefits of the NCOS project.

Some take away messages from these revised flood risk maps are that homes along Whittier and East Scripps Crescent and eastern Mills Way that were formerly in the flood hazard zone are no longer and may be able to re-negotiate their homeowner's insurance. Flood reduction benefits in the western portion of NCOS are not as significant for two reasons: The majority of those benefits were secured back in 2010 when Phelps Creek was widened and the 'pre project map' (Figure 1) reflects the benefits of that restoration already and secondly, less soil was excavated from the western arm of the project in order to be adaptive to sea level rise by providing a refugia for salt marsh habitats that might otherwise be under water under future scenarios.



Figure 3. Satellite imagery showing the estimated area of land removed from the flood hazard zone.

The perpendicular cross section lines – like F in the revised map (Figure 2) in the western arm has the number "14.0" by it. Note that in the pre-project map that same line has 16.4 next to it. As you compare these cross sectional lines between the maps they illustrate the feet above sea level of the flood hazard zone and you will notice that they are almost all 2+ feet lower in the revised maps. So, not only is the aerial extent subject to flooding reduced but the elevation of the flooded area is lower as well. An estimated 24 acres were removed from the flood hazard zone as shown by the purple zone in figure 3.

This restoration clearly reveals how these projects can address flooding issues created by the past filling of wetlands. In addition, wetland restoration projects can help reduce the risks associated with the increased storm intensity predicted to come with climate change. Benefits to our health and well-being through public trails and community are complemented by the complex benefits provided by the support for biodiversity which help stabilize our world in ways we may not even understand yet.

Date:

Tuesday, September 28, 2021 - 14:45

Contact Us

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