Sentinel Vision SED-1181 14 November 2022



## California projects to use storm water to recharge aquifers, USA

Sentinel-1 CSAR IW acquired on 21 October 2022 at 14:00:23 UTC Sentinel-2 MSI acquired on 23 October 2022 at 18:44:29 UTC Sentinel-1 CSAR IW acquired on 02 November 2022 at 14:00:23 UTC Sentinel-1 CSAR IW acquired on 14 November 2022 at 14:00:23 UTC

Author(s): Sentinel Vision team, VisioTerra, France - svp@visioterra.fr

<u>Keyword(s)</u>: Land, climate change, drought, irrigation, agriculture, infrastructure, cyclone, hurricane, drainage, hydrology, flood, risk prevention, Unites States

Fig. 1 - S1 (21.10.2022->14.11.2022) - California Central Valley, the breadbasket of the United States, is vulnerable to both drought and floods. 2D



A number of Californian residents ran out of potable water during the state's last big drought, which lasted from 2012 through 2016. The Californian irrigation system relied on damming and diverting rivers, and flooding canyons, damaging their ecosystems. Some areas have become too dry to farm some years and dangerously flooded in others.

Fig. 2 - S2 (23.10.2022) - In the case of the Huron pond, it will be located on fallowed farmland.

VisioTerra



About 340 recharge systems have been proposed by water agencies in California. They will turn unused fields into large ponds to hold water so that it can percolate into the porous rock and earth below, creating or restoring an aquifer rather than rushing to the sea. Recharge systems will help to guide water underground to store it for residents as well as agriculture. Capturing runoff will also help protect the city from catastrophic floods and make water more affordable.

The views expressed herein can in no way be taken to reflect the official opinion of the European Space Agency or the European Union. Contains modified Copernicus Sentinel data 2022, processed by VisioTerra.

More on European Commission space:		7	You Tube				
More on ESA:	€	7	You Tube	<u>S-1 website</u>	<u>S-2 website</u>	<u>S-3 website</u>	
More on Copernicus program:	€	7	You Tube	<u>Scihub portal</u>	<u>Cophub portal</u>	<u>Inthub portal</u>	<u>Colhub portal</u>
More on VisioTerra:	€€	<b>y</b>	You Tube	Sentinel Vision Portal	Envisat+ERS portal	Swarm+GOCE portal	<u>CryoSat portal</u>
			Fund	Funded by the EU and ESA		SED-1181-SentinelVision	