SALTON SEA ENVIRONMENTAL TIMESERIES

IN PARTNERSHIP WITH ALIANZA CV, LOMA LINDA UNIVERSITY & THRIVING EARTH EXCHANGE

WHAT'S GOING ON INSIDE THE SALTON SEA?

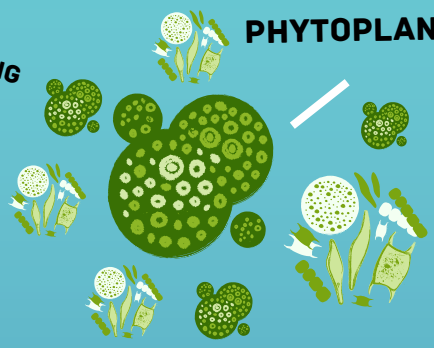
NUTRIENTS

NITRATES, AMMONIA, SULFIDE, SULFATE, PHOSPHATE

A SIGNIFICANT SOURCE OF NUTRIENT CONTAMINATION COMES FROM WASTE WATER & AGRICULTURAL RUNOFF

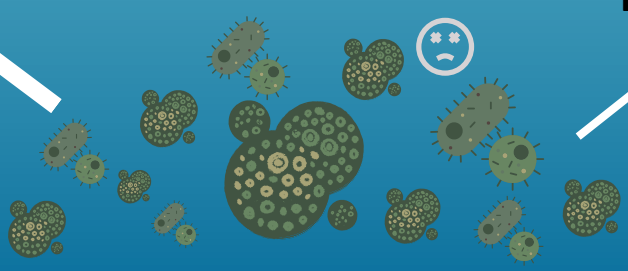
EXCESSIVELY FEED EXISTING ALGAE +PHOTOSYNTHETIC ORGANISMS

ALGAE, PHYTOPLANKTON



WHEN PHYTOPLANKTON CELLS DIE, THEY SINK TO THE BOTTOM AND ARE EATEN BY BACTERIA, WHICH ALSO CONSUME OXYGEN, RESULTING IN AN ANOXIC ENVIRONMENT

BACTERIA + ALGAE



DECOMPOSITION

O_2

EUTROFICATION (HIGH NUTRIENT LEVELS) DECREASE OXYGEN LEVELS, RESULTING IN HYPOXIA OR ANOXIC ENVIRONMENTS

H_2S

SULFIDE RISES = DEAD FISH, ROTTEN EGG SMELL

HIGH LEVELS OF NUTRIENT RICH WATER INCREASE HYDROGEN SULFIDE LEVELS, RESULTING IN SMELLY SULFIDE BLOOMS

VISIT OUR DASHBOARD!

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FACT SHEET

1. THE SALTON SEA (SS) WATER LEVEL HAS DECREASED BY ABOUT A FOOT PER YEAR SINCE AROUND 2005, LEADING TO INCREASED SALINITY (SS HAS MORE THAN TWICE THE SALINITY OF THE OCEAN) AND MORE EXPOSED PLAYA.

2. NITRATE IS A COMMON NUTRIENT IN MANY FERTILIZERS. ACCORDING TO OUR MEASUREMENTS, THE SALTON SEA NITRATE CONCENTRATION CAN EXCEED 8 TIMES THAT OF THE DEEP OCEAN, LEADING TO ALGAE GROWTH.

3. THE SALTON SEA HAS A HIGH CONCENTRATION OF FECAL BACTERIA, ABOVE EPA RECREATIONAL STANDARDS (ABOVE WHAT YOU CAN SAFELY SWIM IN) IN THE AREAS CLOSE TO AGRICULTURAL DRAINS AND RIVER INFLOWS.

4. THE ABUNDANT SULFATE IN THE SALTON SEA MEANS THAT HYDROGEN SULFIDE CAN BE CREATED AT THE BOTTOM OF THE SALTON SEA AFTER LARGE BLOOMS OF ALGAE.

5. THE SS HAS HIGHER LEVELS OF CHLOROPHYLL (AN INDICATOR OF ALGAE) THAN MOST OF THE LAKES ACROSS THE UNITED STATES.

VISIT OUR DASHBOARD!

FLYER BY CONSUELO MARQUEZ