For an Emerald Green, Ocean Blue Coronado

## WARMER AND WETTER



he atmospheric river that dumped nearly 4 inches of rain on Coronado last Monday, flooding homes and cars, is a stark reminder that our weather patterns are changing.

Storms like the one last week are no longer isolated incidents; early forecasts call for lots more rain — up to 6 inches— over the next couple of days.

These wet and relatively warm rain events are a direct result of climate change.

Global temperatures have risen nearly 2 degrees Fahrenheit since 1901. This increase in temperatures has far-reaching effects including sea-level rise and changes in weather patterns, increasing the risk of both drought and flooding.

"Things that we depend upon and value — water, energy, transportation, wildlife, agriculture, ecosystems, and human health — are experiencing the effects of a changing climate," the National Oceanic and Atmospheric Administration (NOAA) reports.

While many people associate increases in temperatures with droughts, the opposite is happening in many parts of the world,

including the United States.

## WHY MORE RAIN?

Warmer temperatures create warmer oceans; warmer oceans increase the amount of water that evaporates into the air, and a warmer atmosphere can hold more water vapor. Ninety percent of global warming is occurring in the ocean. Studies show the ocean's surface layer (the layer from the surface to a depth of 2,300 feet) has warmed approximately 1.5 degrees Fahrenheit since 1901.

Streams of water vapors fueled by wind turn into moisture-laden atmospheric rivers that start dumping rain after coming ashore. According to National Geographic, the average atmospheric river measures about 500 miles wide and 1,200 miles long. Last January, California experienced a series of nine atmospheric rivers, and the San Diego region received 300 percent more rain than average for the

## WHAT CAN WE DO?

Experts believe there is still time to avoid the most negative of outcomes of climate change by limiting warming. This means reducing green-house gas emissions



to zero as quickly as possible. The largest source of greenhouse gasses in the U.S.? Burning fossil fuels for electricity, heat, and transportation.

Carbon dioxide levels — the most prevalent greenhouse gas — peaked at 424 parts per million last May at NOAA's Mauna Loa Atmospheric Baseline Observatory, which is more than 50% higher than before the industrial era. If immediate action is not taken, carbon dioxide will hit a new high every year, and each year will be hotter than the previous one. To date, 2023 is the hottest year on record. Every city around the world, regardless of size, must do its part to cut greenhouse gas emissions. Locally, citizens should advocate for immediate implementation of Coronado's Climate Action Plan.

## **BE PREPARED**

• Find out if your residence is in a low-lying, flood-prone area. Even if you were spared last week, more

rain and clogged storm drain can cause damage in other areas.

- Move your car on regular street cleaning day so gutters can be cleared, reducing the chance of backed-up storm drains. Many cities in San Diego County ticket vehicles not moved because they understand the importance of clear storm drains and flushing toxins from the gutters.
- Place sandbags to protect entry points for water. For free sandbag locations, go to coronado.ca.us/ civicalerts.
- Learn how you can reduce your carbon footprint by visiting EmeraldKeepers.org.

By reducing your carbon emissions and advocating for the City of Coronado to do the same, we can help keep Coronado Emerald Green, Ocean Blue and help reduce increased atmospheric-river rain events.

