

## Drought, water shortages and wildfires can be reversed and prevented with ecosystem restoration, says Bio4Climate

Land mismanagement is causing the rise in frequency and intensity of drought, water shortages and wildfires. These can be reversed through eco-restoration.

LOS ANGELES, CALIFORNIA, UNITED STATES OF AMERICA, August 23, 2022 /EINPresswire.com/ --

We're learning that while plants require rain, they also help create rain. We can think of a plant as a water pump, drawing up moisture that can later fall as precipitation." Judith Schwartz, author,

'Water In Plain Sight: Hope for a Thirsty World' Recent water shortages have put a strain on many U.S. residents due to wasteful water management practices putting reservoir levels at all-time lows. Water restrictions range from reduced outdoor watering, to loss of production of hydroelectricity due to shortage of water in dams, to farmers forced to limit crop production by up to 20%.

Environmental journalist Judith D. Schwartz, author of Water In Plain Sight: Hope for a Thirsty World, says, "despite the water crisis, we have much more agency than we think—particularly once we understand how water cycles work: how water flows across the landscape and

through the atmosphere."

We can think of earth's hydrological system as consisting of the large and small water cycles. The large water cycle is an exchange of water between the oceans and land. Small water cycles take place entirely over land, where plants take up water from the soil which is then transpired through leaves into water vapor that rises into the atmosphere. The vapor condenses and forms clouds, which release the water as rain and snow onto and into the ground, where it's taken up by the plants and the process starts all over again.

Healthy water cycles are integral to healthy ecosystems. "When people degrade vegetation and soil, we destroy local water cycles, leading to less rain in a region," explains Michal Kravčík, Slovakian hydrologist and co-author of Water for the Recovery of the Climate - A New Water Paradigm. "The destruction of vegetation and soil also diminishes the land's ability to absorb rainwater, which accelerates runoff, erosion, flooding risk, and further depletes our aquifers and reservoirs of water. The good news is that this can be reversed." There are many examples of rivers and creeks restored and wildfires prevented. Take Maggie Creek in Elko, Nevada, where biologist Carol Evans, rancher Jon Griggs, and beavers worked together to restore the creek and raise the water table. Or Matthew and Terces Englehart of Be Love Farm near Vacaville, California, which reduced the impacts of drought and wildfires through regenerative agricultural practices. Their neighbors lost most of their crops during a wildfire; the Engleharts crops were not affected and they had an abundant harvest thanks to practices that prioritize soil health and water absorption.

In these examples, when vegetation, soil health, and local water cycles have been restored, the benefits are apparent. Wildlife, plants, and biodiversity multiplied. Rivers were restored, aquifers replenished, and wildfires reduced.

"To rehydrate the land and fully restore the water cycles, we need to retain rainwater on the land where it falls," says Kravčík. "The current water infrastructure, which diverts rainwater away from the land into storm drains and rivers, further contributes to diminishing water reserves, increasing drought and heat island effects."

Accelerating water shortages this summer are a painful reminder of the urgent need to change unsustainable land management practices and restore ecosystems.

\* Learn how to restore ecosystems by watching our <u>Introductory Playlist on Eco-Restoration</u>. \* To understand more about water cycles and the important role of healthy soil, read <u>Our</u> <u>Underrated Climate Ally: The Small Water Cycle</u>.

\* Discover how to reduce drought and wildfires in any community in this <u>citizen's guide</u> to protecting and restoring watersheds by the Occidental Arts and Ecology Center.

Biodiversity for a Livable Climate is a non-profit dedicated to changing the mainstream climate conversation by demonstrating the power of ecosystem restoration to restore and rehydrate lands and waterways to cool communities and the planet. Everyone has a role to play. Join us today to become involved in regeneration efforts. Inquiries welcome.

Tania Roa Biodiversity for a Livable Climate +1 714-829-8073 staff@bio4climate.org Visit us on social media: Facebook Twitter LinkedIn Other

This press release can be viewed online at: https://www.einpresswire.com/article/587348929

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2022 Newsmatics Inc. All Right Reserved.