Welcome to the **SEPTEMBER 2011** edition of the WDFW Climate News Digest. Here you will find highlights of climate change news, events and resources for WDFW staff. Feedback or suggestions for items to include in future editions are much appreciated – please send them along! Thanks to all who forwarded suggestions for this issue.

WHAT'S HAPPENING AT WDFW?

Selected climate-related projects, agency resources and initiatives

Western Governors Association - Crucial Habitats Project

WDFW is actively engaged in a Western Governors regional initiative to identify, map and display *crucial habitat* in an interactive online mapping tool that will help at the early planning stages of landscape projects – such as development, project siting, environmental review, and identifying strategic conservation opportunities. The online tool will be continually updated with new information, and will also integrate *climate analyses* developed collaboratively by the University of Washington. Once fully operational, the tool will identify crucial areas that are most likely to provide fish and wildlife connectivity as climate changes, and help resource managers to accommodate climate-driven shifts in species' range. Development of all aspects of the online planning tool is underway over the next several months, with the goal of public access by the year 2013. A report on the climate change framework is attached to this email.
Link to WGA corridors initiative: http://www.westgov.org/wildlife. For more information contact WDFW staff lead Audrey Hatch (541) 207-1038 (home office phone) or audrey.hatch@dfw.wa.gov.

OTHER NEWS

Wildlife responding to climate change 3x faster than previously thought

New research by scientists at the University of York shows that species have responded to climate change up to three times faster than previously appreciated. Species have moved towards the poles (further north in the northern hemisphere, to locations where conditions are cooler) at three times the rate previously accepted in the scientific literature, and they have moved to cooler, higher altitudes at twice the rate previously realized. These results are published in the latest issue of the journal Science

Climate Impacts Group publishes study on the efficacy of climate models

One way of testing whether regional climate models (RCMs) accurately represent weather and climate patterns in a region (and therefore test the utility of RCMs for projecting changes in climate) is looking at how well regional climate models can replicate observations. In a recent study by CIG researchers, models designed to simulate regional climate were successfully applied to characterize extreme weather events in the Pacific Northwest. The results of this study were published in the April issue of Journal of Climate. The results from the models were similar to the observed datasets, which has promising implications for the ability of forthcoming models to capture extreme events. Boosting the capability of regional climate models to accurately represent extreme weather events will increase our ability to anticipate and withstand the impacts to natural resources.

Study: Changing climate could cut Western trout habitat in half

A new study shows a changing climate could reduce suitable trout habitat in the western U.S. by about 50 percent over the next 70 years, with some trout species experiencing greater declines than others. The results were reported by a team of 11 scientists from Trout Unlimited, the U.S. Forest Service Rocky Mountain Research Station, Colorado State University, the U.S. Geological Survey and the University of

Washington Climate Impacts Group. The study, published Aug. 15 in the peer-reviewed science journal Proceedings of the National Academy of Sciences, predicts native cutthroat throughout the West could decline by as much as 58 percent, while introduced brook trout could decline by as much as 77 percent. Rainbow and brown trout populations, according to the study, would also decline by an estimated 35 percent and 48 percent respectively. The link below provides an overview and also access to the research report.
http://www.tu.org/press_releases/2011/study-changing-climate-could-cut-western-trout-habitat-in-half

RESOURCES

Rolling Easements Primer - The EPA Climate Ready Estuaries (CRE) Program

This primer examines rolling easements as an alternative adaptation measure to sea level rise in areas where traditional protective measures may prove economically or environmentally unviable. The rolling easements are a series of approaches that would allow wetlands and beaches to migrate inland as the sea levels rise in the future. These plans are provide a framework for coastal development by the private sector, state and local governments in anticipation of beach migration inland. The full primer is available at the following website: http://www.epa.gov/CRE/downloads/rollingeasementsprimer.pdf

NatureServe's Climate Change Vulnerability Index Webinar -- September 21, 2011

Increasing focus on assessment of vulnerability to climate change has highlighted the need for tools that integrate a vast scientific literature into accessible approaches. NatureServes Climate Change Vulnerability Index is a popular tool that allows fairly quick screening of plant and animal species for vulnerability to climate change. The Index allows input on exposure to changing climates, sensitivity to climate change, and documented or modeled responses to climate change. Assessment output allows comparison among species vulnerability and rapid identification of causal factors. During the webinar, we will describe when to use the Index, show how it works, and review results of completed assessments. To learn more, visit http://www.natureserve.org/prodServices/climatechange/ccvi.jsp.
Presenter: Bruce Young, Ph.D., Director, Species Science, NatureServe
Event Website: http://training.fws.gov/CSP/Resources/climate_change/description.html

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