

LEADERSHIP IN NATURAL RESOURCE MANAGEMENT FOR A CHANGING CLIMATE

Oregon has an abundance of natural resources that provide Oregonians benefits such as clean air and water and a wealth of recreational opportunities. These resources are also a major driver of Oregon's economy.



The Oregon Department of Fish and Wildlife's mission is to protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations.

Climate change threatens fish and wildlife

It is vital that the Department respond to the current and future challenges posed by climate change and ocean acidification to be successful in meeting the mission. The Department is focusing on these issues as part of implementation of ODFW's strategic plan.

Because the fate of fish and wildlife is intricately linked to the health of their habitats, success will be dependent on a holistic approach that recognizes and balances the demands on these resources.

NATURAL RESOURCES UNDER PRESSURE

Oregon has a wealth of natural resources, including fish and wildlife. The health of these resources is intertwined and many are already under pressure from human development and changes in climate. Future climate change will only increase the challenges in meeting all the needs.



We will see more extreme weather (drought and floods), hotter water in Oregon's streams, and less snow in Oregon's mountains. Snowpack is the lifeblood of many rivers without it, more rivers will go dry in summer.



We will see more frequent and intense "Megafires" and more disease that threatens our forests. A changing climate also means that the types of plants/trees that can grow in Oregon will change.

WILDLIFE

OCEAN

Our ocean will continue to acidify and warm. The pattern of upwelling that sustains many of our fisheries will change. Harmful algal blooms and hypoxic "dead zones" will likely become more frequent and cover larger parts of the coast.



Warming water and low summer flows will challenge many of Oregon's iconic salmon and trout. In the ocean, changing currents, acidification, and hypoxia will have a largely negative effect on the species that our coastal fisheries depend on.



Fire, drought, and changes in temperature and rainfall will affect the ability of Oregon's wildlife to find the water, habitat, and other resources they need. These changes will also impact Oregonian's ability to access and recreate outdoors.



Drought and reduced summer water flows will impact farming. Invasive grasses and fire will impact rangelands. Changing climate will impact the types of crops that can grow. On the coast, sea level rise threatens low lying dairy lands.

WHAT IS AT STAKE?

The impacts of climate change on Oregon's natural resources threaten the things that make Oregon a great place to live

CLEAN AIR & WATER

More frequent and intense fires, droughts, and toxic algal blooms will affect the air we breath and the water we drink

JOBS

Tens of thousands of jobs in the recreation, tourism, forestry, fishing, and agricultural sectors rely on Oregon's natural resources

RECREATION

Fires put a damper on summer camping, droughts drain lakes and reservoirs, hot temperatures mean more days closed to fishing

INFRASTRUCTURE

More frequent and intense fires and flooding as well as sea level rise pose risks to houses, roads, and infrastructure.

INVESTING WISELY

Oregon has an opportunity to lead the world in building the resiliency of its natural resources in the face of these challenges.

KNOW

Invest in the science needed to understand where and how climate change will impact Oregon.

Invest in the science to understand what we can do about it



Use the science to inform how we best spend limited funds for the conservation and sustainable utilization of our natural resources among all natural resource agencies.

DO

Use the planning to guide the prioritization and application of funding to implement adaptation actions

Random acts of kindness will not be enough. We need a portfolio approach that includes long term stable investment in Natural Resource Agency programs to lay the science foundation and coordinate planning and prioritization; complemented by strategic investment in priority on the ground projects



THIS IS WHAT "DOING" LOOKS LIKE

ADAPTATION ACTIONS TO SECURE A BETTER FUTURE

RESILIENT FORESTS

- Reduce fire fuel loads
- Plant resilient seed lines
- Develop market approaches to balance harvest and ecosystem services

RESILIENT COAST

- Restore eelgrass
- Replace tidegates
- Planting for erosion control

OUTCOMES

- Clean air & water
- Ensure access to the outdoors
- Protected property and infrastructure
- Healthy fish and wildlife
- Healthy economy

RESILIENT LANDSCAPES

- Invest in highway overpasses for wildlife
- Invest in water conservation technology
- Control non-native plants
 on rangeland

RESILIENT RIVERS

- Upgrade culverts
- Shade our streams (tree planting)
- River restoration to reduce flood damage

PRESERVING THE OREGON WAY OF LIFE

There is a lot we can do to minimize the impact of climate change on our natural resources. By taking care of these resources, we also protect our communities and economy from the worst impacts.