

# Wetlands Day February 2nd Wetlands Day February 2nd Wetlands on the Colville Reservation



# The Colville Reservation contains 20,441 acres of National Wetlands.





# **Wetlands and Biodiversity**

#### THE RICH BIODIVERSITY OF EARTH'S WETLANDS NURTURES HUMAN WELLBEING

- Wetland biodiversity is critical to sustainable human development.
- About 40% of the world's plant and animal species depend on wetlands.
- Wetland biodiversity supplies food, clean water and jobs, protects against storms and floods, and mitigates the impacts of climate change.
- · Biodiversity losses are rising and are tied to changes in land use.
- Plastic pollution is severely impacting wetlands and the species that depend on them. Ingestion, entanglement and other dangers posed by plastic pollution are affecting more than 800 marine and coastal species.
- · Climate change and biodiversity loss are linked.
- Meeting global biodiversity, climate and Sustainable Development Goals requires halting the loss of wetlands and rapidly scaling up restoration.
- Maintaining well-managed, intact ecosystems and native biodiversity by applying wise use and One Health principles – can help control emergent zoonotic diseases and bring health benefits to all.







Inland/non-tidal wetlands are most common on floodplains along rivers and streams (riparian wetlands), in isolated depressions surrounded by dry land (for example, playas, basins and "potholes"), along the margins of lakes and ponds, and in other low-lying areas where the groundwater intercepts the soil surface or where precipitation sufficiently saturates the soil (vernal pools and bogs).



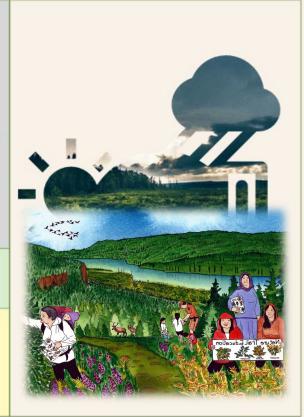
Inland wetlands include marshes and wet meadows dominated by herbaceous plants, swamps dominated by shrubs, and wooded swamps dominated by trees.



### **Wetlands and Climate**

#### WETLANDS ARE NATURAL GUARDIANS AGAINST POLLUTION AND CLIMATE CHANGE

- Wetlands capture CO<sub>2</sub> from the atmosphere and store more carbon than any other ecosystem on Earth.
- Peatlands store about 30% of land-based carbon twice the amount of all the world's forests.
- Coastal blue carbon ecosystems (mangroves, seagrass beds, salt marshes) capture and store carbon in their sediment up to 55 times faster than tropical rainforests.
- Wetlands safeguard the 60% of humanity along coastlines against storm surges, hurricanes and tsunamis.
- An acre of wetland can store up to 1.5 million gallons of floodwater.
- Wetlands are at high risk from climate change, severely impacting many economically marginalized people.
- Wetlands are integral components of resilient urban planning, restoration and vital contributors to One Health.
- Meeting the climate challenge requires ambitious wetland conservation and restoration across society.







In April 2023 floodwater from Owhi Lake Dam impacted nearby roads and the historical dam. The floodwater was diverted to wetlands downstream to protect the infrastructure while protecting life and property.



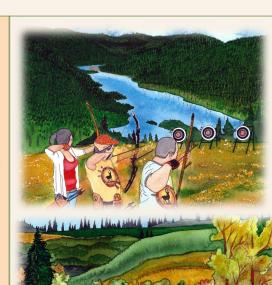




#### **Wetlands and Livelihoods**

#### WETLANDS PROVIDE JOBS AND HELP ERADICATE POVERTY

- Wetlands provide more than 1 billion livelihoods across the world delivering food, water supplies, transport and leisure.
- More than 660 million people depend on fishing and aquaculture for a living.
- Almost 1 billion households in Asia, Africa and the Americas rely on rice growing and processing for their main livelihoods.
- Half of international tourists seek relaxation in wetland areas, supporting 266 million jobs in the travel and tourism sectors – which is 8.9% of the world's total employment.
- Wetlands offer economic opportunities for indigenous populations, including traditional livelihoods that entail harvesting and processing medicinal plants, dyes, fruits, reeds and grasses.
- Farmers and herders look to wetlands for a consistent water supply for livestock grazing.
- Ongoing wetland loss is driving a vicious cycle of declining biodiversity and deepening poverty.
- The Sustainable Development Goals underline that we must protect and restore ecosystems such as wetlands to reduce poverty.







Destroying or degrading wetlands can lead to serious consequences, such as increased flooding, extinction of species, and decline in water quality. We can avoid these consequences by maintaining the valuable wetlands we still have and restoring lost or impaired wetlands where possible.



## Office of Environmental Trust Wetlands Program



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