



Climate Adaptive Inland Angling Policy Framework

Directors Report: April 23rd 2021

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Purpose of Climate Angling Policy:



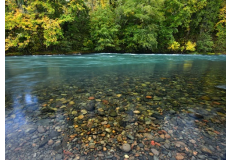
To ensure the Department takes a proactive approach to developing regulations that will reduce angling associated stressors on inland native fish populations.

Photos: ODFW Flickr account



Climate Change and Inland Habitat:

Warming Water



- Affects feeding, growth, and reproduction of fish
- Can intensify low-oxygen areas
- Reduce habitat suitability for cold water fish

Shifting Streamflow



- Alters fish movement patterns and biological events such as emergence and migration
- Alters fish behavior through aggregation and dispersal

Drying Wetlands



- Reduces habitat quality and connectivity

Photos: OR stream coalition, WA Dept. of Ecology, USGS



Climate Impacts on Oregon Fish:



Photo: The Bulletin, Bend Oregon

Fish Kills

Acute and Chronic Stress

Changes in Behavior

- Emigration
- Migration
- Feeding
- Aggregation

Changes in Health

- Pathogen loads
- Growth rates
- Reproduction
- Development rates



Past Regulations to Limit Stressors:

Low Flow Closers



- During times of extreme low flow, sections of fisheries were closed to protect aggregating fish
- *Examples:*
Tillamook Area

Hoot Owl Regulations



- Used to limit angling to only the coolest times of the day, generally closed angling after 2pm
- *Examples:*
Used throughout the State

Thermal Refuge



- Thermal angling sanctuaries where angling is prohibited during Summer months
- *Examples:*
Columbia, Deschutes, Umpqua Rivers

Photos: GoTillamook, Bandon Oregon, ODFW Flicker account



Climate Angling Policy Sideboards:

HIGH LEVEL GUIDING FRAMEWORK



- *Long Term Policy Relevance*
- *Integrated with Existing Policies and Procedures*
- *Adapt to New Science and Data*
- *Support Social and Environmental Needs*
- *Dealing with Uncertainty through Flexibility*



Climate Angling Policy Framework:

PROPOSED VISION

The impacts of a changing climate on inland native fish populations are anticipated to continue to increase.

Through science informed management the Department seeks to:

- Develop a set of regulations that can be proactively implemented to reduce angling associated stressors and support climate change resiliency of inland native fish populations.
- Implement regulations to ensure inland native fish conservation and optimize fishing access in light of changing environmental conditions across the ecoregions of Oregon.



Climate Angling Policy Framework:

PROPOSED POLICY COMPONENTS

Climate Change Indicators

Considerations include:

- Thermal Thresholds
- Flow Levels
- Other Environmental Parameters

Climate Refuge

Considerations include:

- Geospatial: Key areas and locations?
- Frequency: How often are they needed?
- Duration: How long will they persist?

Angling Restrictions

Considerations include:

- Geospatial: Designations of Areas?
- Duration: How long will they persist and will they be seasonal?
- Implementation: Can regulations be phased?



Climate Angling Policy Framework:

PROPOSED IMPLIMENTATION



Example: Permanent Rule

Thermal refuge criteria and thresholds placed in regulation for annual implementation.



Example: Temporary Rule

Low flow/high temperature conditions used to implement 180 day hoot owl regulations seasonally.

Photos: ODFW Flickr account



Policy Development:

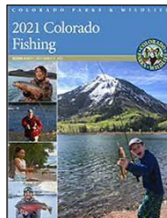
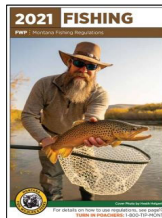
INITIAL STAFF PLANNING

Agency Workgroup Meetings

- Staff working group to scope out initial policy options and further understand small scale variations in Oregon’s climate and angling regions.

Cross State Informational Meetings

- Staff have had initial conversations with Montana, Colorado, and California fish managers to gain insight into other similar State processes.



Policy Development: COMMUNITY OUTREACH PLANING



The Department is dedicated providing opportunities for community awareness and consultation in ongoing policy development and implementation.

GENERAL TIMELINE:

Summer 2021

Community Outreach

Tribal Government Outreach

Fall 2021

Public Informational and Comment

Winter 2021/2022

Commission Informational

Photo: Oregon Fly Fishing



ODFW Staff Working Group:

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