

Fisheries Management in a Changing Climate



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Fisheries Management in Idaho

- Goals:
 - Sustain fish and wildlife, and the habitats upon which they depend
 - Meet demand for fish and wildlife recreation



Fisheries Management in Idaho

- Major challenges:
 - Water (quantity, quality)
 - Introduced/invasive species
- Climate patterns influence both
 - Warmer temperatures
 - More extreme weather events



2015: The New Normal?

- Record drought
 - Low streamflows, warm water temperatures
 - Wildfires
 - Water demands an issue
- Extreme weather events
 - Fall floods and winter windstorm



Fish Responses to Climate

- Differs by species
 - Coldwater species most vulnerable
 - Warmwater species more resilient
- Differs by water and location
 - High vs. low elevation streams
 - Lake depth



Westslope Cutthroat and Bull Trout

- Native species, valued sportfish
- Reduced distribution is predicted
 - Less suitable habitat
 - Expanded range of nonnative fishes
- Less recreational fishing



Smallmouth Bass

- Nonnative species, valued sportfish
- Increased distribution is predicted
- Negative interactions with native species
- Improved growth rates
- Improved recreational fishing



Management Response

- Adaptive management
 - Research and monitoring important
 - Identify areas of resiliency
 - Prioritize management actions
- Manage social expectations

