Expected changes in climate (precipitation, air temperature, snowpack, etc.)

Data sources

Expected changes in hydrology and stream temperature

Data sources

Indirect effects: e.g. changes in fire, invasive species, disease

Direct Effects e.g. habitat, species tolerances

Mitigating factors e.g. regulated flows, groundwater resources, etc.

Example Design Strategies:
- Remove barriers and ensure connectivity at a range of elevations/flows
- Design for future flood regimes
- Reconnect floodplain and increase shade to offset temp increase
- Identify opportunities and needs to maintain and/or modernize hatchery infrastructure
The Climate Toolbox

A collection of web tools for visualizing past and projected climate and hydrology of the contiguous United States of America.

Applications

A collection of tools for addressing questions relating to Agriculture, Climate, Fire Conditions, and Water.

Tools

- Climate Mapper: Maps of historical and future climate information across multiple sectors
- Historical Climate Dashboard: Dashboard of real-time climate monitoring over the contiguous US
- Historical Water Watcher: Maps of real-time water monitoring over the contiguous US
- Historical Climate Tracker: Graphs of historical climate variability for a location
- Historical Climate Scatter: Compare years for two variables for a location
- Future Boxplots: Compare projections for future time periods for a location
- Future Climate Dashboard: Dashboard of future climate projections for a location
- Future Climate Scatter: Compare model projections for two variables for a location
- Future Streamflows: Graphs of future streamflow projections for a stream
- Future Time Series: Graphs of future time series projections for a location
- Historical Climate Dashboard: Dashboard of real-time climate for a location

Find Your Variable

Future Tribal Climate
Maps/graphs of future climate projections for a tribal region
Launch Tool

Future Streamflows
Graphs of future streamflow projections for a stream
Launch Tool
Projected change in Jul.-Sept. minimum daily non-regulated streamflow is calculated as percent change of the average value from 1971-2000 for the stream location at Grand Ronde River At Troy, OR, based on an average over 10 models.

**2070-2099 (Higher Emissions):**

In 2070-2099 (higher emissions), the Jul.-Sept. minimum daily non-regulated streamflow is projected to be decreased by 21% of the 1971-2000 value.