The health priority planning area assessment focuses on how changes to water quantity and quality may impact Tribal members' health. Eight diseases were selected for this assessment; in every case we found an increased risk due to climate change.

In the table below, diseases are grouped into three categories: Water Resources, Mental Health, and Subsistence Diet. In most cases, not all Tribal members will be affected equally. Population groups at increased risk are identified on the left side of the table. Each row highlights the diseases likely to affect that group.

<table>
<thead>
<tr>
<th>Affected Tribal Population Groups</th>
<th>Water Resources</th>
<th>Mental Health</th>
<th>Subsistence Diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants and Children</td>
<td>![Waterborne Pathogens]</td>
<td>![Rashes]</td>
<td>![Shellfish]</td>
</tr>
<tr>
<td>Adults</td>
<td>![Waterborne Pathogens]</td>
<td>![Rashes]</td>
<td>![Shellfish]</td>
</tr>
<tr>
<td>Subsistence/Commercial Fishers</td>
<td>![Waterborne Pathogens]</td>
<td>![Rashes]</td>
<td>![Shellfish]</td>
</tr>
<tr>
<td>Ceremonial Participants</td>
<td>![Waterborne Pathogens]</td>
<td>![Rashes]</td>
<td>![Shellfish]</td>
</tr>
</tbody>
</table>
The Yurok Tribe Climate Change Adaptation Plan for Water and Aquatic Resources was supported by funding from the U.S. Environmental Protection Agency’s Science to Achieve Results (STAR) program. The Yurok Climate Change Health Assessment, a part of the overall Plan, was the result of a collaboration with Adaptation International, the Institute for Tribal Environmental Professionals, and the Yurok Tribe Environmental Program. For more information about these projects, contact Louisa McCovey, Director (lomccovey@yuroktribe.nsn.us).

EIGHT HEALTH PATHWAY SUMMARIES

To tell the story of how changing climate conditions can affect health, pathway diagrams were developed for each of the eight diseases. These diagrams describe how climate change could positively or negatively impact health risk and connect the many social and environmental exposures that influence this risk. To help lessen the impacts of these diseases, each pathway diagram is accompanied by a list of institutional and individual adaptation strategies. These strategies recognize the important physical and cultural connections to the Klamath River and the natural resources of the region that are intimately intertwined with the lifeways and wellbeing of the Tribe.

CLIMATE CHANGE PROJECTIONS RELATED TO HEALTH

Of the many changes expected to occur across the region, increasing temperatures, changing precipitation patterns, and ocean changes are all particularly important in determining the overall health risk for Tribal members. Both primary and secondary impacts from these changes may increase the risk and prevalence of each of these diseases. A few examples are provided below.

**Waterborne Pathogens**
Heavier downpours will increase run-off and move bacteria such as E.Coli from the land into creeks, streams, and rivers.

**Rashes**
Warmer water temperatures increase the likelihood for freshwater Harmful Algal Blooms.

**Shellfish**
Warming stream, river, and ocean temperatures, will increase the likelihood of harmful algal blooms that make it unsafe to consume shellfish.

**Diabetes**
Ocean acidification may undermine the marine food web and further decrease the abundance of salmon and other subsistence species.

**Cancer**
Warming stream, river, and ocean temperatures degrades water quality and may limit important habitat for subsistence species, making them less available for consumption.

**Heart Disease**
Increasing frequency and intensity of wildfires can increase air pollution and exacerbate heart disease.

**Mental Health & Extreme Weather Events**
Heavier precipitation events can increase flooding, destroy property, and limit access to important natural and cultural resources.

**Multi-Generational Trauma**
All changing climate conditions disrupt the Yurok way of life continuing and worsening depression and alcoholism.