

## Distinguishing Direct Threats, Stresses, and Biophysical Factors

Teams commonly confuse direct threats and stresses. While the difference may seem minor, it can affect threat ratings and subsequent strategy development. Here is some guidance to help you use the concepts consistently.

**Direct threat:** An action taken by a human that degrades a conservation or resource management target. A direct threat has at least one actor associated with it. *Example: residential development*

**Stress:** Attributes of a conservation target's ecology that are impaired directly or indirectly by human activities. *Examples: reduced population size, forest habitat fragmentation*

Direct Threat	Example Stress(es)	Example Target Affected
Dams	Altered stream flows Reduced reproductive success of fish	Rivers and streams Migratory fish
Unsustainable Logging	Sedimentation Habitat destruction Habitat fragmentation	Rivers and streams, Estuaries Forests, Monkeys Forests
Illegal Hunting	Altered population structure	Monkeys, Rhinos
Unsustainable Agriculture	Sedimentation Habitat destruction Habitat fragmentation	Rivers and streams, Estuaries Forests, Grasslands, Wetlands Forests, Grasslands, Wetlands
Climate Change (GHG Emissions)	Coral bleaching Altered hydrologic regime (due to rising sea levels) Altered species composition	Coral reefs Mangroves Forests, Grasslands, Deserts

In some cases (e.g., to clarify all the effects of climate change), a team may wish to show a string of factors that connect a direct threat to a conservation target. For example, consider the following figure. A certain flow regime might be a key ecological attribute for the San Juan River target. Reduced flows represent an altered KEA and, therefore, a stress to that target. Yet, this team found it useful to develop more factors to clarify how fire and forest management practices caused this stress. We use the general term of “**biophysical factor**” to represent any factor (including a stress) that connects a direct threat to a conservation target.

