

# ENVIRONMENTAL RISKS OF ROADS

## 1. Roads threaten biodiversity and ecosystem services

- ◆ Vehicles kill many wildlife species
- ◆ Certain birds, tree-dwelling species, and large animals avoid roads
- ◆ Hunting often increases sharply near roads
- ◆ Increased deforestation near roads reduces the benefits of forests for storing carbon, regulating the climate, and purifying water

## 2. Roads in wet environments increase erosion and flooding

- ◆ Road construction increases soil erosion by up to 1,000 times
- ◆ Soil erosion is especially heavy in steep terrain and wet environments
- ◆ Soil erosion can severely pollute streams and rivers, killing fish and other aquatic species
- ◆ Roads impede natural water movements, causing localized flooding and killing vegetation
- ◆ It is very expensive to provide effective drainage for roads in high-rainfall environments



## 3. Roads promote forest loss and fragmentation

- ◆ In the tropics, 95% of all deforestation typically occurs within 5 kilometers of a road
- ◆ Many roads in developing nations are constructed illegally
- ◆ Roads lead to sharp increases in illegal forest fires
- ◆ Globally, roads are the number 1 threat to nature
- ◆ Roads fragment habitats, increasing illegal logging, mining, and poaching
- ◆ Roads can be serious barriers to animal migration and plant dispersal

## 4. Roads sharply increase landslides in steep terrain

- ◆ In steep terrain, roaded areas have 10-15 times more landslides than areas with intact forest
- ◆ Landslides can destroy roads, homes, and human property, creating large financial risks
- ◆ Steep areas near roads can have up to 30 landslides per square kilometer



**THE GREATEST ENVIRONMENTAL RISKS  
ARISE FROM PUTTING ROADS INTO INTACT  
FORESTS**