

1) List five things that can destroy salmon eggs.

- Disturbance of gravel (such as by movements of adult salmon, animals crossing the stream, and so on)
- Predation
- High water temperatures
- Freezing
- Suffocation by being covered with silt
- Pollution
- Flooding that washes them downstream
- Disease

2) List four ways that urban development can harm wild salmon.

- Clearing trees and shrubs from stream corridors (which can increase water temperatures in rearing areas)
- Increasing water runoff by increasing the amount of pavement
- Reducing water flows in waterways by diverting water for human use
- Releasing pesticides, fertilizers, oil, coolants, road deicers, and other chemicals into waterways
- Filling in wetlands
- Putting dikes in estuaries

3) List two natural predators of wild salmon in each stage of development.

Egg

fish, raccoons, ducks

Alevin

large aquatic insects, fish

Fry

fish, minks, otters, fish-eating birds

Smolt

fish, minks, otters, fish-eating birds

Adult

humans, seals, sea lions, orcas, sharks

Spawner

bears, eagles

4) List two ways each of the following can harm wild salmon.

Dams

- Block salmon movement both upstream and downstream
- Alter water flow
- Slow movement of young fish to ocean and thus increase their risk of predation and disease
- Affect stream and river habitat by retaining sediments (such as gravel and cobbles) that would serve as spawning habitat
- Kill salmon in the turbines

Forestry

- Increase water temperatures by clearing vegetation and removing shade

- Reduce woody debris, which serves as fish habitat in streams
- Introduce pesticides to waterways
- Increase amount of sediment in waterways that may cover nests or cover stream bottoms and thus eliminate the habitat adults need to spawn

Farming/Ranching

- Increase soil erosion by washing silt into waterways
- Introduce fertilizers and pesticides into waterways
- Degrade streams when cattle have access to them
- Reduce amount of water in stream by diverting water for irrigation
- Channel streams
- Remove large trees and woody debris from waterways

Fish Farms and Hatcheries

- Fish from farms and hatcheries may interbreed with wild fish and reduce the genetic fitness of the offspring.
- Fish from farms and hatcheries may introduce diseases to wild fish and compete with wild fish for food.
- These operations use up limited spawning habitat.
- They expose wild fish to antibiotics and other chemicals and may decrease oxygen supplies by increasing the amount of wastes in waterways.

5) List two other potential threats to wild salmon.

- invasive species
- climate changes
- changes in ocean conditions caused by global warming
- overfishing

6) What are three steps people are taking to help wild salmon?

- Leaving wide vegetation buffers along streams
- Keeping oil and other pollutants out of storm drains
- Removing dams that have outlived their usefulness and improving other dams so that fish can get past them
- Keeping livestock away from stream banks to prevent erosion and keep animal droppings out of the water
- Restricting the number of fish people are allowed to catch
- Reducing runoff and soil erosion
- Using cover crops between plant rows to absorb extra fertilizer and reduce runoff and erosion
- Reducing pesticide and fertilizer use
- Reducing the use of water and electricity
- Participating in stream restoration projects
- Educating others about the threats salmon face
- Writing letters to elected officials and fisheries managers to encourage them to take specific actions that will help salmon recover

7) What are three things you can do to protect wild salmon?

- Reduce use of water and electricity

- Participate in stream restoration projects
- Educate others about the threats salmon face
- Contact elected officials and fisheries managers to let them know how you feel about protecting wild salmon and their freshwater habitats