# NECHAKO WHITE STURGEON WHEEL OF LIFE

NECHAKO WHITE STURGEON
RECOVERY INITIATIVE

Artwork by Michael Jess

| Stage | Outcome | Age | Length | Weight | Description |
|---|---|---|---|---|---|
| EGG | YOU DIE | 0 hours old | 3 mm | <0.01 g | The river conditions for spawning are not suitable. Your mother re-absorbs her eggs. You are not released. |
| EGG | YOU DIE | 0 hours old | 3 mm | <0.01 g | There are too few males at the spawning grounds. Your mother does not find a mate. You are not released. |
| EGG | YOU DIE | 1 hour old | 3 mm | <0.01 g | You are not fertilized. |
| EGG | YOU DIE | 2 hours old | 3 mm | <0.01 g | You are unable to adhere to the gravel substrate because the spawning bed is covered in sand. |
| EGG | YOU DIE | 3 hours old | 3 mm | <0.01 g | You are caught in a strong current and carried downstream. |
| EGG | YOU DIE | 4 hours old | 3 mm | <0.01 g | You are exposed to a pathogen. |
| EGG | YOU DIE | 1 days old | 3 mm | <0.01 g | You die from inbreeding due to the lack of genetic diversity in the population. |
| EGG | YOU DIE | 1 days old | 3 mm | <0.01 g | Water flow was slow during spawning and sand deposited in the spawning gravel. You are smothered and suffocate. |
| EGG | YOU DIE | 1 days old | 3 mm | <0.01 g | You are eaten by a rainbow trout. |
| EGG | YOU DIE | 2 days old | 3 mm | <0.01 g | Excess sediment enters the Nechako from poor farming practices along a tributary stream. You are smothered in sand and silt. |
| EGG | YOU DIE | 2 days old | 3 mm | <0.01 g | You are eaten by a stone-fly larvae. |
| EGG | YOU DIE | 2 days old | 3 mm | <0.01 g | The rock you were stuck to was kicked over by a person walking through the river. You are squished. |
| EGG | YOU DIE | 3 days old | 3 mm | <0.01 g | You are eaten by a rainbow trout. |
| EGG | YOU DIE | 3 days old | 3 mm | <0.01 g | A jet boat stirs up the substrate and you are dislodged from the gravel. |
| EGG | YOU DIE | 3 days old | 3 mm | <0.01 g | The turbidity in the river is low. You are spotted by a predator and eaten. |
| EGG | YOU LIVE | 4 days old | 3 mm | <0.01 g | The gravel you settled into remains clear of silt and sand and the river temperature is ideal for proper development. |
| EGG | YOU DIE | 4 days old | 3 mm | <0.01 g | You are eaten by a juvenile sturgeon. |
| EGG | YOU DIE | 5 days old | 3 mm | <0.01 g | You are crushed by gravel and cobble shifting during a high flow event. |
| EGG | YOU DIE | 6 days old | 3 mm | <0.01 g | You are eaten by a megaloper. |
| EGG | YOU DIE | 7 days old | 3 mm | <0.01 g | A boat speeding through the spawning area stirs up the substrate and you are dislodged from your resting place. |
| EGG | YOU DIE | 7 days old | 3 mm | <0.01 g | Due to poor water quality you get covered in saprolegnia fungus and it kills you. |
| EGG | YOU DIE | 7 days old | 3 mm | <0.01 g | Turbidity is low and you are spotted by a juvenile chinook salmon and eaten. |
| EGG | YOU DIE | 7 days old | 3 mm | <0.01 g | Pollution enters the river from a storm drain upstream of you. It kills you. |
| LARVAE (YOLK-SAC) | YOU DIE | 7 days old | 4 mm | <0.25 g | Your yolk sac is not properly formed due to a genetic anomoly. |
| LARVAE (YOLK-SAC) | YOU DIE | 10 days old | 5 mm | <0.25 g | Aquatic plants growing in the river deplete the oxygen in the water. You suffocate. |
| LARVAE (YOLK-SAC) | YOU DIE | 12 days old | 6 mm | <0.25 g | You are eaten by a sculpin. |
| LARVAE (YOLK-SAC) | YOU DIE | 17 days old | 8 mm | <0.25 g | The gravel you need to hide in is full of sand. You are washed downstream and eaten by a trout. |
| LARVAE (FREE SWIMMING) | YOU DIE | 19 days old | 1 cm | <0.25 g | You leave the gravel and are exposed for too long and get eaten by a great blue heron. |
| LARVAE (FREE SWIMMING) | YOU DIE | 20 days old | 1 cm | <0.25 g | You are infected by a disease. |
| LARVAE (FREE SWIMMING) | YOU DIE | 22 days old | 1.25 cm | <0.25 g | Smoothing of the river banks from development makes the flow too fast and you are swept downstream and eaten by a trout. |
| LARVAE (FREE SWIMMING) | YOU DIE | 25 days old | 1.5 cm | <0.25 g | Excess algae growth in the river from high temperatures forces you downstream. You get eaten by a trout. |
| LARVAE (FREE SWIMMING) | YOU DIE | 27 days old | 1.75 cm | <0.25 g | You leave the spawning beds and drift downstream to an area with large substrate and in-stream hiding places. |
| LARVAE (FREE SWIMMING) | YOU DIE | 29 days old | 2 cm | <0.25 g | River temperature is too warm for proper development. |
| LARVAE (FREE SWIMMING) | YOU DIE | 30 days old | 2 cm | <0.25 g | Chemicals sprayed onto a field next to the river leach into the water and poison you. |
| LARVAE (FREE SWIMMING) | YOU DIE | 31 days old | 2.25 cm | <0.25 g | You begin to drift downstream and are eaten by a white fish. |
| LARVAE (FREE SWIMMING) | YOU DIE | 32 days old | 2.25 cm | <0.25 g | You leave the substrate and are washed downstream in the current and are eaten by a peamouth chub. |
| LARVAE (FREE SWIMMING) | YOU DIE | 35 days old | 2.5 cm | <0.25 g | The turbidity is lower than normal and you are easily spotted by a trout and get eaten. |
| LARVAE (FREE SWIMMING) | YOU DIE | 38 days old | 2.75 cm | <0.25 g | The river temperature spikes because there is too little water in the river. You die from high water temperature. |
| LARVAE (FREE SWIMMING) | YOU DIE | 40 days old | 3 cm | 0.25 g | There is not enough food for you to survive in the area in which you settled. You starve. |
| JUVENILE | YOU LIVE | 6 months old | 10 cm | 15 g | You elude predators by hiding under fallen logs in the river. |
| JUVENILE | YOU DIE | 1 years old | 30 cm | 150 g | You are caught and eaten by a river otter. |
| JUVENILE | YOU DIE | 2 years old | 50 cm | 400 g | You choke on garbage that has settled on the river bottom. |
| JUVENILE | YOU DIE | 5 years old | 70 cm | 2.5 kg | Rainbow trout entering the Nechako from small streams is limited due to human impacts in the stream. Your food supply is low. You starve. |
| JUVENILE | YOU DIE | 10 years old | 90 cm | 4 kg | You are caught in a gill-net. You die from your injuries. |
| SUB-ADULT | YOU DIE | 13 years old | 1 m | 6 kg | You are captured illegally by poachers. |
| SUB-ADULT | YOU LIVE | 18 years old | 1.25 m | 10 kg | Enough rainbow trout and young salmon are entering the Nechako from healthy tributary streams. |
| SUB-ADULT | YOU DIE | 20 years old | 1.4 m | 13 kg | You are caught in a fishing net during the salmon run. You die from exhaustion and your injuries. |
| ADULT | YOU DIE | 25 years old | 1.5 m | 15 kg | You are infected by a parasite. |
| ADULT | YOU LIVE | 40 years old | 2 m | 40 kg | You have survived to spawning age! |
| ADULT | YOU DIE | 70 years old | 2.5 m | 85 kg | A propeller from a boat cuts into your back while you warm yourself in Stuart Lake. You die from your injury. |
| | YOU LIVE TO 100 years old | | 3 m | 150 kg | |