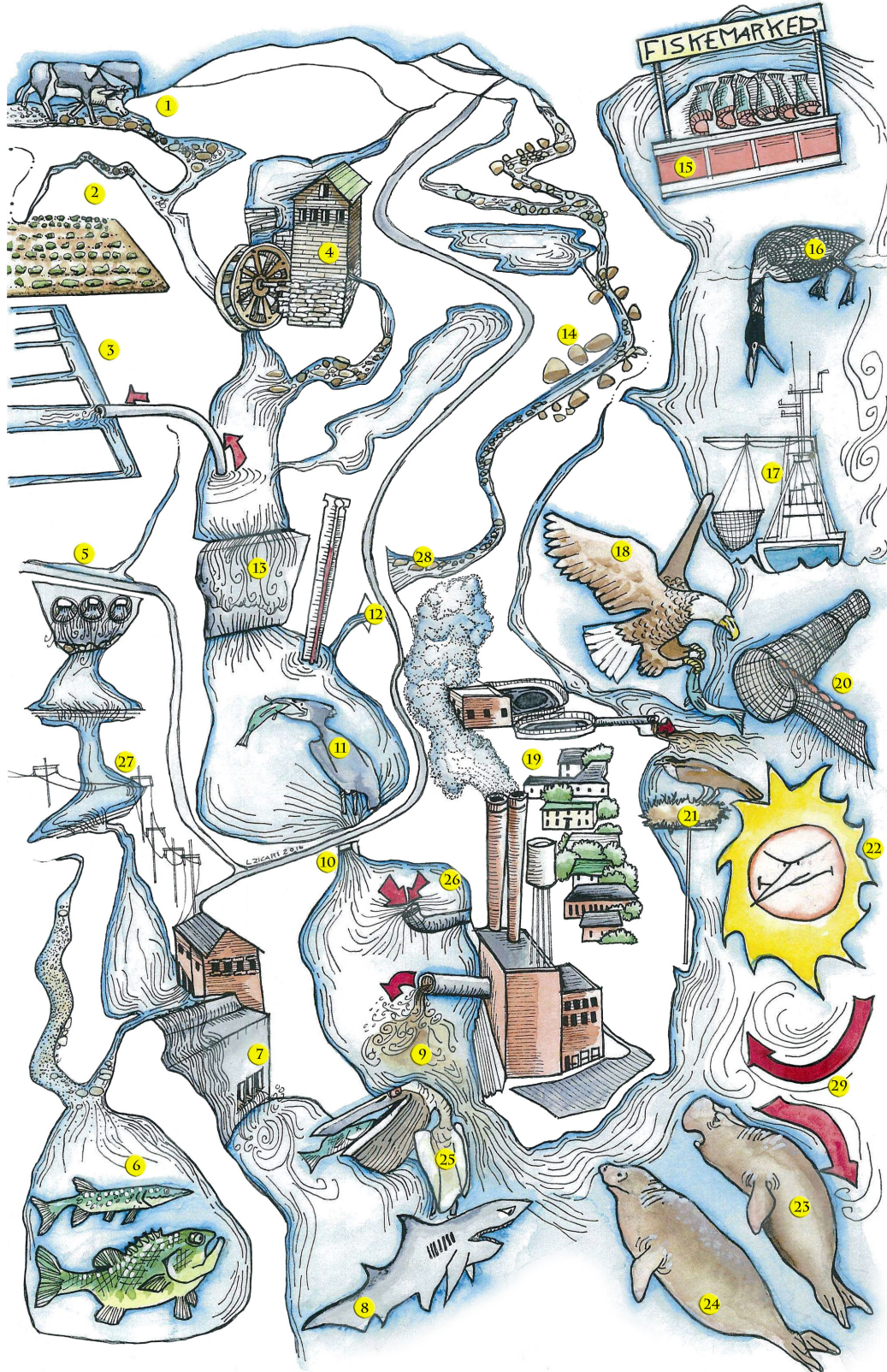


WHAT MAKES MIGRATION TOUGH FOR FISH?

Identify the obstacles and check your answers!

1. Grazing cattle can damage river banks and degrade water quality.
2. Runoff from fertilizers can degrade water quality.
3. Irrigation can reduce water levels; remaining water can then become too warm for native fishes.
4. Historic mill dams can affect the natural flow of rivers and prevent fish from migrating.
5. Traditional round culverts tend to hinder or totally block fish movement.
6. Non-native fish prey on juvenile migratory fish and disrupt the food chain.
7. Dams may delay or totally prevent migration and altered flow may favor non-migratory and/or non-native fish.
8. Predators intercept migrating fish in coastal waters.
9. Waste water discharge may degrade water quality.
10. See 5.
11. Fish trapped below culverts can be easy prey for birds.
12. See 5.
13. See 4. Abandoned dams are also unsafe.
14. Years ago, rivers were straightened so logs could get to mills. This degraded fish habitat.



15. Migratory fish may be legally harvested in other countries; here they are sold in a fish market.
16. Many species of birds eat migratory fish.
17. Some migratory fish are intercepted at sea en route to and from spawning habitat.
18. Migratory fish are an important food source for birds like bald eagles.
19. Air pollution from factories and sewage treatment plants can degrade water quality.
20. Migratory fish may be an unintended bycatch in fisheries targeting other species.
21. Migratory fish are an important natural food source for birds like ospreys.
22. Warming of rivers and oceans can impact fish survival.
23. A west coast elephant seal may prey on migratory fish.
24. An east coast harbor seal may prey on migratory fish.
25. The brown pelican is a natural predator of migratory fish.
26. Intake pipes can suck juvenile fish into the industrial plant's cooling process.
27. Abandoned dams used during the log drive days continue to block fish migration.
28. See 5. Undersized culverts also disrupt natural flow and sediment transfer.
29. A changing climate can alter oceanic currents vital to migratory fish.

