

Problems Facing Our Rivers

TEACHER Make a symbol for each item listed below. On the back, write
DIRECTIONS: the related question the student teams must research.

1. **RIVER DAM:** What are two negative impacts of a dam on river water?
(Possible answers include increasing water temperature, slowing and/or increasing water speed, inhibiting species movement,...)
2. **CITY:** What are two negative impacts of urban sprawl/city dweller behavior on rivers?
(Possible answers include polluted water runoff from pavement, increasing water temperatures, septic water draining into the river,...)
3. **FARM:** What are two negative impacts of farmland/farming activity on rivers?
(Possible answers: pesticide runoff, erosion due to destruction of vegetation,...)
4. **PREAMBLE TO THE CONSTITUTION:** What are two phrases in the preamble that might relate to government's role in protecting our waterways?
(Possible answers: "to form a more perfect union," "to promote the general welfare," and "to secure the blessings of liberty.")
5. **HOUSEHOLD:** What are two negative impacts of families on river water quality?
(Possible answers: oil leaks from cars drain into the river, a family drops trash in the river while canoeing)
6. **INDUSTRY:** What are two negative impacts of factories on river water quality?
(Possible answers: factories use a lot of electricity, burning coal which pollutes the air and rains into the river; factories often drain warmed water into a river, raising its temperature,...)
7. **DEPARTMENT OF ENVIRONMENTAL QUALITY/DEPARTMENT OF NATURAL RESOURCES:** What is one negative and one positive impact this department has had on our river?
Hint: see <http://www.rivernetwork.org/partners/partnerlist.cfm> and select your state.
(possible answers: the DEQ has not enforced the "pay to pollute" laws of our state; has



been involved in implementing some of the regulations in the Clean Water Act; the DNR has regularly patrolled the rivers for polluters)

8. **THE STATE CONSTITUTION:** What agencies have been created under the state constitution designed to protect our waters?
(possible answers: Department of Natural Resources, Department of Environmental Quality,...)
9. **YOUR CITY COUNCIL or Commission:** What are two laws the city council enforces (through the city manager) to maintain water quality?
(possible answers: septic systems are not allowed in city limits; water and sewer fees must be paid monthly to maintain the system)
10. **LUMBERING:** What were two negative effects of lumbering on our waterways?
(possible answers: erosion; sedimentation,...)
11. **FISHING FROM A BOAT:** What are two negative effects of fishing our rivers?
(possible answers: engine runoff; over fishing of species, lead weights, tangled fishing line,...)
12. **COAL-BURNING POWER PLANT:** What are two negative effects of power plants on our rivers?
(possible answers: acid rain drains into the river, heated water is poured into the river,...)

