

Homework #5
ECNS 204
Snowmester 2020

1.) Suppose a lake is publicly owned, i.e., a “common property” with “free” fishing for all. The number of fish caught varies with the number of people fishing as follows:

| L (i.e., # of people fishing) | Total Product (i.e., number of fish caught) |
|-------------------------------|---|
| 1 | 13 |
| 2 | 23 |
| 3 | 30 |
| 4 | 36 |
| 5 | 40 |
| 6 | 42 |
| 7+ | 42 |

Assume the market price of these fish is \$10 per fish, and this price is unaffected by the total number of fish caught in this lake. Assume all fisherman can earn \$100 per day in their next best alternative. Assume for the moment that there is no depletion of the stock of fish in the lake, for any level of fishing.

a.) Under a common property regime, how many fishermen will choose to fish the lake? Explain why common property is socially inefficient and leads to “too much” fishing.

b.) Instead of common property, suppose the lake is privately owned and the owner decides how much fishing to allow. How many fishermen will fish the lake in this case? Is this a socially efficient outcome?

2.) When I was in graduate school at the University of Washington, I would come home to Montana frequently to visit my girlfriend at the time (and now my wife). During the winter months, one of my favorite outdoor activities is ice climbing, which there is much more of in MT than WA.

If I was home for a short trip (e.g., a weekend), I would spend all of my time with my girlfriend. If I was home for a medium-length trip, say one week, then I would spend 5-6 days with my girlfriend and the other 1-2 days ice climbing. If I was home for the entire winter break, then I might spend a week or more ice climbing. Give an economic argument, based on the concepts from Chapter 7, that explains my pattern of behavior.