Public Goods and Common Property

Public Goods have two characteristics:
1. Non-excludable good – If a good is consumed by one person, it is automatically available to others
2. Non-rivalrous good – Consumption by one person has no impact on the consumption of another

Examples:
1. National Defense
2. Clean air
3. Museum?? – Here consumption by others can impact my consumption as it gets more crowded
4. Sharing the bill versus splitting the bill in large groups (incentive to run up bar bill or order deserts)

Other Definitions

Common Property – Property without well-defined owner

Tragedy of the Commons – The elimination of social gains due to overuse of common property. The museum is an example of this.

Free riding – Reaping benefits from the actions of others and consequently refusing to bear the full costs of those actions.

A Case Study: Buffalo in the American West

In the 19th century there were approximately 30M buffalo roaming the plains (see descriptions by Lewis and Clark)
By 1886 there were less than 1,000 in US and Canada (200 in Yellowstone, others on private ranches and small herds…one in TX)
Meat left rotting on the field

Why did this happen?
No hunter had incentive to protect scarcity by restricting hunting efforts
No property rights to buffalo populations might have led to over hunting
Technological innovation in tanning bison hides around 1870 provided value for buffalo hides

Native Americans had different incentives since they had informal property rights

What about cattle producers moving from the south?
Opportunity cost to buffalo eating grass was lost production for cattle
Cattle were more productive and more docile

Was this a tragedy of the commons or just economic decisions regarding land usage?