

Chapter 11: Public Goods and Common Resources
Principles of Economics, 7th Edition
N. Gregory Mankiw
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1. Introduction
 - a. When goods are available free of charge, the market forces that normally allocate resources in our economy are absent.
2. The Different Kinds of Goods
 - a. Excludability is the property of a good whereby a person can be prevented from using it. P. 212.
 - b. Rivalry in consumption is the property of a good whereby one person's use diminishes other people's use. P. 212.
 - c. Private goods are goods that are both excludable and rival in consumption. P. 212.
 - d. Public goods are good that are neither excludable nor rival in consumption. P. 212.
 - e. Common resources are goods that are rival in consumption but not excludable. P. 213.
 - f. When a good is excludable but not rival in consumption, it is an example of a good produced by a natural monopoly.
 - i. Club goods are goods that are excludable but not rival in consumption. P. 2173.
 - ii. **Figure 1: Four Types of Goods. P. 213.**

	Rival in Consumption?		
		Yes	No
Excludable?	Yes	Private Goods	Club Goods
	No	Common Resources	Public Goods

3. Public Goods
 - a. The Free Rider Problem
 - i. Free rider is a person who receives the benefit of a good but avoids paying for it. P. 214.
 - b. Some important public goods
 - i. National defense
 - ii. Basic research
 - iii. Programs to fight poverty
 - c. **Case Study: Are Lighthouses Public Goods, P. 216.**
 - d. The Difficult Job of Cost Benefit Analysis
 - i. Cost benefit analysis is a study that compares the costs and benefits to society of providing a public good. P. 217.
 - e. **Case Study: How Much Is a Life Worth? P. 217.**

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4. Common Resources
 - a. The tragedy of the commons is a parable that illustrates why common resources get used more than is desirable from the standpoint of society as a whole. P. 218.
 - i. It arises because of externalities.
 - b. Some important common resources:
 - i. Clean air and water
 - ii. Congested roads and
 - iii. Fish, whales, and other wildlife
 - c. Ask the Experts: Congestion Pricing, P. 219**
 - i. Economists like congestion taxes coupled with lower taxes elsewhere.
 - d. In the News: The Case for Toll Roads. P. 220.**
 - e. Case Study: Why the Cow Is Not Extinct, P. 222.**
5. Conclusion: The Importance of Property Rights
 - a. In all cases, the market fails to allocate resources efficiently because property rights are not well established.
6. Summary