

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

Miller and Spoolman's Living in the Environment 16<sup>th</sup> ed.

## Chapter 11 Reading Guide – Sustaining Aquatic Biodiversity

### Case Study – A Biological Roller Coaster Ride in Lake Victoria

1. As an example of the rule of unintended consequences (i.e. everything is connected to everything else), describe the many economic and ecological effects of introducing Nile Perch into Lake Victoria.

### Section 11-1 – What Are the Major Threats to Aquatic Biodiversity?

2. Explain how the H, I, and P of HIPPCO threatens aquatic biodiversity.
3. Explain how the P, C, and O of HIPPCO threatens aquatic biodiversity.
4. Explain what was learned about sustaining aquatic biodiversity by studying carp and Lake Wingra. (Science Focus)
5. Explain how protecting and restoring mangroves can sustain ecosystem services. (Science Focus)

### Section 11-2 – How Can We Protect and Sustain Marine Biodiversity?

6. Explain the role of laws and economic incentives in protecting and sustaining biodiversity. Provide examples.
7. Explain how sanctuaries and reserves can be used to sustain biodiversity. Provide examples.

### Section 11-3 – How Should We Manage and Sustain Marine Fisheries?

8. Explain the role of science (MSY), cooperation, government subsidies, the marketplace, and consumer choice in managing marine fisheries sustainably.

### Section 11-4 – How Should We Protect and Sustain Wetlands?

9. Explain why wetlands need to be restored.
10. Explain how wetlands can be and are being restored, including the Florida everglades.

### Section 11-5 – How Can We Protect and Sustain Freshwater Lakes, Rivers, and Fisheries?

11. Explain the challenges and importance of protecting lakes and their watersheds.

12. Explain the challenges and importance of protecting river-basins and their watersheds.

Section 11-6 – What Should Be Our Priorities for Sustaining Biodiversity and Ecosystem Services?

13. Identify the priorities needed to sustain biodiversity and ecosystem services.

List any questions you have after reading this chapter.