FISHERIES MANAGEMENT
INDOOR LAB

Section 1. Case Study Analysis

Work with your table partner to examine the fishing regulations for the two lakes below.

Fishing Regulation	Bony Lake	Lower Eau Claire Lake
Panfish (bluegill, pumpkinseed, yellow perch, crappie)	Only 10 panfish can be kept	25 panfish can be kept
Walleye	**Five** total can be kept: Fish must be **less than 14"** except **one fish over 18"** may be kept	**Five** total can be kept: Fish must **be over 18"** to keep
Bass – largemouth (LMB) and smallmouth (SMB)	-Five total LMB and SMB LMB-can be caught between **May 4-March 1**, **must be 14**" SMB- May 4th-June 14th **catch and release only**. June 15-March 1, can keep if they are **over 14"**	-Five total LMB and SMB LMB- can be caught between **May 4-March 1** SMB- May 4th-June 14th **catch and release only**. June 15-March 1, can keep only one if **over 18"**

* Example above is from 2019 regulations

1. What are three regulations that you notice are different between the two lakes?

(10 pts)_____

2. Brainstorm three reasons why the fishing regulations differ between Bony Lake and Lower Eau Claire Lake.

(5 pts)_____

Section 2. Fish Ecology Model

Work with your table partner to make a conceptual model of different factors that affect the population size of **panfish, walleye, or bass** (circle which one you choose).

Used all the words listed **(5 pts)_____**
Showed relationship between the factors and the fish **(5 pts)_____**

Section 3. Fisheries Management: Balancing Fish Populations for Today and The Future

1. What is the main job a fishery manager is expected to do? **(5 pts)_____**

2. Draw a line from the fishing regulation to the matching management strategy:

Fishing regulation type	**Management strategy**
Bag Limits	Keeps larger fish in the lake to reproduce
Size limits (you can only keep big fish)	Makes sure that fish aren't being caught or disturbed during the months that they reproduce
Size limits (you can only keep small fish)	Allows anglers to catch fish, but the fish can continue to grow and reproduce in the lake
Open Seasons	Limits the number of fish taken out of a lake. Keeps population numbers at a good level.
Catch and release	Reduces the number of big fish in the lake. Could be used if there are too many fish.

(5 pts)_____

3. Why do fisheries managers have to **make sure there are enough** fish in the lake? What would happen if there **were too many** fish in the lake?

(5 pts) _____

TOTAL FISH MANAGEMENT POINTS (40 pts)_____